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| APPLICATION NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 17/390,922         | 07/31/2021            | Lin Han               | 2390-022993            |

180741  
Cognition IP, P.C.  
50 California St  
Suite 1500  
San Francisco, CA 94111

## CONFIRMATION NO. 7201 POWER OF ATTORNEY NOTICE



Date Mailed: 03/31/2023

### NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 03/29/2023.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

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

/vostuart/



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P.O. Box 1450  
Alexandria, Virginia 22313-1450  
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| APPLICATION NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 17/390,922         | 07/31/2021            | Lin Han               | ZOOM-5019-A            |

**CONFIRMATION NO. 7201**

**POA ACCEPTANCE LETTER**

177453  
Zoom Video Communications, Inc. at Young Basile  
3001 West Big Beaver Rd., Ste. 624  
Troy, MI 48084



Date Mailed: 03/31/2023

## NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 03/29/2023.

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

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

/vostuart/

## TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

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

|                        |                                                                            |
|------------------------|----------------------------------------------------------------------------|
| Application Number     | 17/390,922                                                                 |
| Filing Date            | July 31, 2021                                                              |
| First Named Inventor   | Lin Han                                                                    |
| Title                  | Concurrent Screen Sharing by Multiple Users Within a Communication Session |
| Art Unit               | N/A                                                                        |
| Examiner Name          | Not Yet Assigned                                                           |
| Attorney Docket Number | ZOOM-5019-A                                                                |

### SIGNATURE of Applicant or Patent Practitioner

|                                                    |                      |                     |                |
|----------------------------------------------------|----------------------|---------------------|----------------|
| Signature                                          | /Kayvon Pourmirzaie/ | Date (Optional)     | March 29, 2023 |
| Name                                               | Kayvon Pourmirzaie   | Registration Number | 74,970         |
| Title (if Applicant is a juristic entity)          |                      |                     |                |
| Applicant Name (if Applicant is a juristic entity) |                      |                     |                |

**NOTE:** This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.

☐

\*Total of 1 forms are submitted.



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Alexandria, VA 22313 - 1450  
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## ELECTRONIC ACKNOWLEDGEMENT RECEIPT

APPLICATION #  
**17/390,922**

RECEIPT DATE / TIME  
**03/29/2023 03:10:19 PM ET**

ATTORNEY DOCKET #  
**2390-022993**

### Title of Invention

CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION

### Application Information

APPLICATION TYPE Utility - Nonprovisional Application  
under 35 USC 111(a)

PATENT # 11330026

CONFIRMATION # 7201

FILED BY Theresia Blasciuc

PATENT CENTER # 61834432

FILING DATE 07/31/2021

CUSTOMER # 180741

FIRST NAMED  
INVENTOR Lin Han

CORRESPONDENCE  
ADDRESS -

AUTHORIZED BY Kayvon Pourmirzaie

### Documents

**TOTAL DOCUMENTS: 2**

| DOCUMENT                       | PAGES | DESCRIPTION       | SIZE (KB) |
|--------------------------------|-------|-------------------|-----------|
| ZOOM5019A__PowerofAttorney.pdf | 1     | Power of Attorney | 25 KB     |
| ZoomPOA_Executed-USGeneral.pdf | 1     | Power of Attorney | 341 KB    |

### Digest

| DOCUMENT                       | MESSAGE DIGEST(SHA-512)                                                                            |
|--------------------------------|----------------------------------------------------------------------------------------------------|
| ZOOM5019A__PowerofAttorney.pdf | EF1F45BE37E29DDB1E94755D2190CB61593FD3C710204098E2794943E75E22FE6789323420F8CA19707DD250C2FADFF5E8 |

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D2E0570A5539B6AF204DB6E7862F75

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ZoomPOA\_Executed-  
USGeneral.pdf2DAAFFA9644B47E0D82F36531E10E99E81DA7908D409BD33E  
3D5D69D5FE01B182B900AB83FD5D84CD9B90AB7F813787A93  
8EC19CB177E7FF0ECB1339DACE9598

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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 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.

## POWER OF ATTORNEY BY APPLICANT

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

| Application Number | Filing Date |
|--------------------|-------------|
|                    |             |

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

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

177453

OR

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

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

☒ The address associated with the above-mentioned Customer Number

OR

☐ The address associated with Customer Number:

OR

☐ Firm or Individual Name

Address

City

State

Zip

Country

Telephone

Email

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

Zoom Video Communications, Inc.

☐ Inventor or Joint Inventor (title not required below)

☐ Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)

☒ Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)

☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

### SIGNATURE of Applicant for Patent

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

Signature

*Lopa Sengupta*

Date (Optional)

JANUARY 27, 2021

Name

Lopa Sengupta

Title

Senior Counsel, Patent Portfolio at Zoom Video Communications, Inc.

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

☐ Total of 1 forms are submitted.



| APPLICATION NO. | ISSUE DATE | PATENT NO. | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|------------|------------|---------------------|------------------|
| 17/390,922      | 05/10/2022 | 11330026   | 2390-022993         | 7201             |

180741 7590 04/20/2022  
Cognition IP, P.C.  
201 Mission Street  
Suite 1200  
San Francisco, CA 94105

## 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 0 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 Patents Stakeholder Experience (OPSE), Stakeholder Support Division (SSD) at (571)-272-4200.

**INVENTOR(s)** (Please see PAIR WEB site <http://pair.uspto.gov> for additional inventors):

Lin Han, Los Altos, CA;  
Bo Ling, Saratoga, CA;  
Hailei Sheng, San Jose, CA;  
Nitasha Walia, Sunnyvale, CA;

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

Zoom Video Communications, Inc., San Jose, CA;

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](http://SelectUSA.gov).

Document Description: Issue Fee Payment (PTO-85B)

**Issue Fee Transmittal Form**

| Application Number | Filing Date | First Named Inventor | Atty. Docket No. | Confirmation No. |
|--------------------|-------------|----------------------|------------------|------------------|
| 17390922           | 31-Jul-2021 | Lin Han              | 2390-022993      | 7201             |

**TITLE OF INVENTION :**

CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION

| Entity Status        | Application Type            | Art Unit         | Class - Subclass | EXAMINER       |
|----------------------|-----------------------------|------------------|------------------|----------------|
| Regular Undiscounted | Utility under 35 USC 111(a) | 2171             | 751000           |                |
| Issue Fee Due        | Publication Due             | Total Fee(s) Due | Date Due         | Prev. Paid Fee |
| \$1200               | \$0                         | \$1200           | 11-Apr-2022      | \$0            |

**1.Change of Correspondence Address and/or Indication Of Fee Address (37 CFR 1.33 & 1.363)**

| Current Correspondence Address:                                                                                                                                                  | Current Indicated Fee Address :                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| 180741<br>Cognition IP, P.C.<br><br>201 Mission Street<br>Suite 1200<br>San Francisco CA 94105<br>UNITED STATES<br>408-504-4718<br><del>PAIR-notifications@cognitionip.com</del> |                                                                                                     |
| <input type="checkbox"/> Change of correspondence address requested, system generated AIA/122-EFS form attached                                                                  | <input type="checkbox"/> Fee Address indication requested, system generated SB/47-EFS form attached |

**2.Entity Status****Change in Entity Status**

- ☐ Applicant certifying micro entity status; system generated Micro Entity certification form attached. See 37 CFR 1.29.  
Note: Absent a valid certification of micro entity status, issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.  
If this box is checked, you will be prompted to choose a micro entity status on the gross income basis (37 CFR 1.29(a)) or the institution of higher education basis (37 CFR 1.29(d)), and make the applicable certification online.
- ☐ Applicant asserting small entity status. See 37 CFR 1.27.  
Note: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ☒ Applicant changing to regular undiscounted fee status.  
Note: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

Document Description: Issue Fee Payment (PTO-85B)

3.The Following Fee(s) Are Submitted:

☒ Issue Fee

☐ I authorize USPTO to apply my previously paid issue fee to the current fees due

☐ Publication Fee

☐ The Director is hereby authorized to apply my previously paid issue fee to the current fee due and to charge deficient fees to Deposit Account Number \_\_\_\_\_

☐ Advance Order - # of copies \_\_\_\_\_

☐ If in **addition** to the payment of the issue fee amount submitted with this form, there are any discrepancies in any amount(s) due, the Director is authorized to charge any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_.  
The **issue fee must be submitted** with this form. **If payment of the issue fee does not accompany this form, checking this box and providing a deposit account number will NOT be effective to satisfy full payment of the fee(s) due.**

4.Firm and/or Attorney Names To Be Printed

**NOTE: If no name is listed, no name will be printed**  
For printing on the patent front page, list to be displayed as entered

1. Cognition IP, P.C.

2. Edward Steakley

3.

5.Assignee Name(s) and Residence Data To Be Printed

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.

| Name                            | City     | State      | Country       | Category    |
|---------------------------------|----------|------------|---------------|-------------|
| Zoom Video Communications, Inc. | San Jose | CALIFORNIA | UNITED STATES | corporation |

6.Signature

I certify, in accordance with 37 CFR 1.4(d)(4) that I am an attorney or agent registered to practice before the Patent and Trademark Office who has filed and has been granted power of attorney in this application. I also certify that this Fee(s) Transmittal form is being transmitted to the USPTO via EFS-WEB on the date indicated below.

|           |                      |                     |            |
|-----------|----------------------|---------------------|------------|
| Signature | /Edward Steakley/    | Date                | 04-07-2022 |
| Name      | Edward Dale Steakley | Registration Number | 47964      |

| Electronic Patent Application Fee Transmittal |          |                                                                            |        |                      |
|-----------------------------------------------|----------|----------------------------------------------------------------------------|--------|----------------------|
| Application Number:                           |          | 17390922                                                                   |        |                      |
| Filing Date:                                  |          | 31-Jul-2021                                                                |        |                      |
| Title of Invention:                           |          | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |        |                      |
| First Named Inventor/Applicant Name:          |          | Lin Han                                                                    |        |                      |
| Filer:                                        |          | Edward Dale Steakley/Kayla Adkins                                          |        |                      |
| Attorney Docket Number:                       |          | 2390-022993                                                                |        |                      |
| Filed as Large Entity                         |          |                                                                            |        |                      |
| Filing Fees for Utility under 35 USC 111(a)   |          |                                                                            |        |                      |
| Description                                   | Fee Code | Quantity                                                                   | Amount | Sub-Total in USD(\$) |
| Basic Filing:                                 |          |                                                                            |        |                      |
| UTILITY APPL ISSUE FEE                        | 1501     | 1                                                                          | 1200   | 1200                 |
| PUBL. FEE- EARLY, VOLUNTARY, OR NORMAL        | 1504     | 1                                                                          | 0      | 0                    |
| Pages:                                        |          |                                                                            |        |                      |
| Claims:                                       |          |                                                                            |        |                      |
| Miscellaneous-Filing:                         |          |                                                                            |        |                      |
| Petition:                                     |          |                                                                            |        |                      |
| Patent-Appeals-and-Interference:              |          |                                                                            |        |                      |

| Description                              | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
|------------------------------------------|----------|----------|--------|----------------------|
| <b>Post-Allowance-and-Post-Issuance:</b> |          |          |        |                      |
| <b>Extension-of-Time:</b>                |          |          |        |                      |
| <b>Miscellaneous:</b>                    |          |          |        |                      |
| <b>Total in USD (\$)</b>                 |          |          |        | <b>1200</b>          |

## Electronic Acknowledgement Receipt

|                                             |                                                                            |
|---------------------------------------------|----------------------------------------------------------------------------|
| <b>EFS ID:</b>                              | 45423808                                                                   |
| <b>Application Number:</b>                  | 17390922                                                                   |
| <b>International Application Number:</b>    |                                                                            |
| <b>Confirmation Number:</b>                 | 7201                                                                       |
| <b>Title of Invention:</b>                  | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |
| <b>First Named Inventor/Applicant Name:</b> | Lin Han                                                                    |
| <b>Customer Number:</b>                     | 180741                                                                     |
| <b>Filer:</b>                               | Edward Dale Steakley/Kayla Adkins                                          |
| <b>Filer Authorized By:</b>                 | Edward Dale Steakley                                                       |
| <b>Attorney Docket Number:</b>              | 2390-022993                                                                |
| <b>Receipt Date:</b>                        | 11-APR-2022                                                                |
| <b>Filing Date:</b>                         | 31-JUL-2021                                                                |
| <b>Time Stamp:</b>                          | 18:10:37                                                                   |
| <b>Application Type:</b>                    | Utility under 35 USC 111(a)                                                |

### Payment information:

|                                          |                  |
|------------------------------------------|------------------|
| Submitted with Payment                   | yes              |
| Payment Type                             | CARD             |
| Payment was successfully received in RAM | \$ 1200          |
| RAM confirmation Number                  | E20224AI10320803 |
| Deposit Account                          |                  |
| Authorized User                          |                  |

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

| <b>File Listing:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                             |              |                                          |                  |                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------|------------------------------------------|------------------|------------------|
| Document Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Document Description        | File Name    | File Size(Bytes)/<br>Message Digest      | Multi Part /.zip | Pages (if appl.) |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Issue Fee Payment (PTO-85B) | Web85b.pdf   | 62452                                    | no               | 2                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                             |              | 3492d84053839238dc043cf5c024c9c79c82b41  |                  |                  |
| <b>Warnings:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                             |              |                                          |                  |                  |
| <b>Information:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                             |              |                                          |                  |                  |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Fee Worksheet (SB06)        | fee-info.pdf | 40092                                    | no               | 2                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                             |              | 5003787e91a863b10349bc3521e29dc520e6744f |                  |                  |
| <b>Warnings:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                             |              |                                          |                  |                  |
| <b>Information:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                             |              |                                          |                  |                  |
| <b>Total Files Size (in bytes):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                             |              | 102544                                   |                  |                  |
| <p><b>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.</b></p> <p><b><u>New Applications Under 35 U.S.C. 111</u></b><br/> 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.</p> <p><b><u>National Stage of an International Application under 35 U.S.C. 371</u></b><br/> 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.</p> <p><b><u>New International Application Filed with the USPTO as a Receiving Office</u></b><br/> 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.</p> |                             |              |                                          |                  |                  |



UNITED STATES PATENT AND TRADEMARK OFFICE

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| 17/390,922         | 07/31/2021            | Lin Han               | 2390-022993            |

180741  
Cognition IP, P.C.  
201 Mission Street  
Suite 1200  
San Francisco, CA 94105

**CONFIRMATION NO. 7201**  
**37 CFR 1.48(f)**  
**ACKNOWLEDGEMENT LETTER**



Date Mailed: 01/25/2022

**NOTICE OF ACCEPTANCE OF REQUEST UNDER 37 CFR 1.48(f)**

This is in response to the applicant's request under 37 CFR 1.48(f) submitted on 01/21/2022.

The request under 37 CFR 1.48(f) to correct the inventorship, to correct or update the name of an inventor, or to correct the order of names of joint inventors is accepted.

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

/hsarwari/



# UNITED STATES PATENT AND TRADEMARK OFFICE

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Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION<br>NUMBER | FILING or<br>371(c) DATE | GRP ART<br>UNIT | FIL FEE REC'D | ATTY. DOCKET NO | TOT CLAIMS | IND CLAIMS |
|-----------------------|--------------------------|-----------------|---------------|-----------------|------------|------------|
| 17/390,922            | 07/31/2021               | 2171            | 1980          | 2390-022993     | 20         | 2          |

**CONFIRMATION NO. 7201**  
**UPDATED FILING RECEIPT**

180741  
Cognition IP, P.C.  
201 Mission Street  
Suite 1200  
San Francisco, CA 94105



Date Mailed: 01/25/2022

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

**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 corrected Filing Receipt, including a properly marked-up ADS showing the changes with strike-through for deletions and underlining for additions. If you received a "Notice to File Missing Parts" or other Notice requiring a response for this application, please submit any request for correction 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 provided that the request is grantable.

## Inventor(s)

Lin Han, Los Altos, CA;  
Bo Ling, Saratoga, CA;  
Hailei Sheng, San Jose, CA;  
Nitasha Walia, Sunnyvale, CA;

## Applicant(s)

Zoom Video Communications, Inc., San Jose, CA;

**Power of Attorney:** The patent practitioners associated with Customer Number 180741

## Domestic Applications for which benefit is claimed - None.

*A proper domestic benefit claim must be provided in an Application Data Sheet in order to constitute a claim for domestic benefit. See 37 CFR 1.76 and 1.78.*

## 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 Application via Priority Document Exchange:** Yes

**Permission to Access Search Results:** Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

**Projected Publication Date:** 02/02/2023

**Non-Publication Request:** No

**Early Publication Request:** No

**Title**

CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION

**Preliminary Class**

715

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

## **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 (1-866-999-4258).

**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).

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**REQUEST FOR CORRECTION IN A  
PATENT APPLICATION RELATING TO  
INVENTORSHIP OR AN INVENTOR  
NAME, OR ORDER OF NAMES, OTHER  
THAN IN A REISSUE APPLICATION (37  
CFR 1.48)**

|                            |               |
|----------------------------|---------------|
| Application Number         | 17/390,922    |
| Filing Date                | 2021-07-31    |
| First Named Inventor       | Lin Han       |
| Art Unit                   | 2171          |
| Examiner Name              | Jordany Nunez |
| Practitioner Docket Number | 2390-022993   |

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

Applicant hereby requests that the inventorship be corrected or changed, or that the name of the inventor or a joint inventor, or the order of the names of joint inventors, be changed, in the above-identified application. **Note:** 37 CFR 1.48 applies to any request to correct inventorship filed on or after September 16, 2012, regardless of the application filing date. **Do not submit this form after payment of the issue fee or if the application has been patented.** See 37 CFR 1.324 for correction of inventorship in a patent.

Please check the applicable box(es) below.

**For a nonprovisional application:**

- ☐ 1. This request is to correct or change the inventorship in a **nonprovisional** application (under 37 CFR 1.48(a)) and includes:
- ☐ An application data sheet (ADS) in accordance with 37 CFR 1.76(c) with the corrected or updated information shown with markings (e.g., underlining for insertions, strikethrough for deletions). See the Manual of Patent Examining Procedure (MPEP) section 601.05(a) for information about filing an ADS in an application filed on/after September 16, 2012. For information about filing a Supplemental ADS in an application filed before September 16, 2012, see MPEP 601.05(b).
- ☐ The processing fee set forth in 37 CFR 1.17(i). \$ \_\_\_\_\_
- ☐ An inventor is being added. An inventor's oath or declaration by any actual inventor who has not yet executed an oath or declaration is required (see 37 CFR 1.48(b)). See MPEP 602.01(a) for information about an inventor's oath or declaration for an application filed on/after September 16, 2012 (e.g., form **PTO/AIA/01**). For information about an inventor's oath or declaration for an application filed before September 16, 2012 (e.g., form **PTO/SB/01**), see MPEP 602.01(b).
- ☐ This request is being filed after the first Office action on the merits has been given or mailed (see 37 CFR 1.48(c) and 1.17(d)). Check one of the following:
- ☐ This request to correct or change the inventorship is due solely to the cancellation of claims in the application.
- OR
- ☐ The fee set forth in 37 CFR 1.17(d) is due (in addition to the fee set forth in 37 CFR 1.17(i)). \$ \_\_\_\_\_

[Page 1 of 2]

This collection of information is required by 37 CFR 1.48. 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 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.**

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

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.

## REQUEST FOR CORRECTION IN A PATENT APPLICATION RELATING TO INVENTORSHIP OR AN INVENTOR NAME, OR ORDER OF NAMES, OTHER THAN IN A REISSUE APPLICATION (37 CFR 1.48)

- ☒ 2. This request is to correct or update the name of the inventor or a joint inventor, or the order of names of joint inventors, in a **nonprovisional** application (under 37 CFR 1.48(f)) and includes:

- ☒ An application data sheet in accordance with 37 CFR 1.76(c) identifying the complete inventive entity, including the corrected or updated name of the inventor, or the new order of names shown with markings (e.g., underlining for insertions, strikethrough for deletions). See the MPEP 601.05(a) for information about filing an ADS in an application filed on/after September 16, 2012. For information about filing a Supplemental ADS in an application filed before September 16, 2012, see MPEP 601.05(b).

- ☒ The processing fee set forth in 37 CFR 1.17(i). \$ 140.00

**For a provisional application:**

- ☐ This request is to change or correct the inventorship, or correct or update the name of the inventor or a joint inventor, in a **provisional** application (under 37 CFR 1.48(d)) and includes:

- ☐ **Attached hereto** is a document that is signed by a party set forth in 37 CFR 1.33(b) and identifies each inventor by his or her legal name, in the preferred order. Note: the document may be an application data sheet in accordance with 37 CFR 1.76(c) that identifies the changes with markings (underlining for insertions, strikethrough for deletions).

- ☐ The processing fee set forth in 37 CFR 1.17(q). \$ \_\_\_\_\_

**Fee Payment Information:**

- ☐ 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 is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. \_\_\_\_\_.
- ☒ 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      ☐ attorney or agent acting under 37 CFR 1.34
- Registration number 68335      Registration number \_\_\_\_\_

Signature /Aroon Karuna/

Typed or printed name Aroon Karuna

Date January 11, 2022

**NOTE:** This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. \*Juristic entities must be represented by a patent practitioner (See 37 CFR 1.31, applicable to any paper filed on or after September 16, 2012 that is presented on behalf of a juristic entity, regardless of application filing date). Submit multiple forms if more than one signature is required, see below\*\*.

- ☐ \*\* Total of \_\_\_\_\_ forms are submitted.

## 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.

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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                            |                        |             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                            | Attorney Docket Number | 2390-022993 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                            | Application Number     |             |
| Title of Invention                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |
| <p>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.</p> <p>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.</p> |                                                                            |                        |             |

**Secrecy Order 37 CFR 5.2:**

|                          |                                                                                                                                                                                                                                       |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.) |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Inventor Information:**

|                                                                                                                                                                          |            |                |             |                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|-------------|-------------------------|
| Inventor 1 <span style="float: right;">Remove</span>                                                                                                                     |            |                |             |                         |
| Legal Name                                                                                                                                                               |            |                |             |                         |
| Prefix                                                                                                                                                                   | Given Name | Middle Name    | Family Name | Suffix                  |
|                                                                                                                                                                          | Lin        |                | Han         |                         |
| Residence Information (Select One) <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service |            |                |             |                         |
| City                                                                                                                                                                     | Los Altos  | State/Province | CA          | Country of Residence US |

**Mailing Address of Inventor:**

|             |                                 |                |    |  |
|-------------|---------------------------------|----------------|----|--|
| Address 1   | 55 Almaden Boulevard, 6th Floor |                |    |  |
| Address 2   |                                 |                |    |  |
| City        | San Jose                        | State/Province | CA |  |
| Postal Code | 95113                           | Country        | US |  |

|                                                                                                                                                                          |            |                |             |                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|-------------|-------------------------|
| Inventor 2 <span style="float: right;">Remove</span>                                                                                                                     |            |                |             |                         |
| Legal Name                                                                                                                                                               |            |                |             |                         |
| Prefix                                                                                                                                                                   | Given Name | Middle Name    | Family Name | Suffix                  |
|                                                                                                                                                                          | Bo         |                | Ling        |                         |
| Residence Information (Select One) <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service |            |                |             |                         |
| City                                                                                                                                                                     | Saratoga   | State/Province | CA          | Country of Residence US |

**Mailing Address of Inventor:**

|             |                                 |                |    |  |
|-------------|---------------------------------|----------------|----|--|
| Address 1   | 55 Almaden Boulevard, 6th Floor |                |    |  |
| Address 2   |                                 |                |    |  |
| City        | San Jose                        | State/Province | CA |  |
| Postal Code | 95113                           | Country        | US |  |

|                                                                                                                                                                          |                       |             |             |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------|-------------|--------|
| Inventor 3 <span style="float: right;">Remove</span>                                                                                                                     |                       |             |             |        |
| Legal Name                                                                                                                                                               |                       |             |             |        |
| Prefix                                                                                                                                                                   | Given Name            | Middle Name | Family Name | Suffix |
|                                                                                                                                                                          | <del>Sam</del> Hailei |             | Sheng       |        |
| Residence Information (Select One) <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service |                       |             |             |        |

|                                           |                                                                            |                        |             |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                                                            | Attorney Docket Number | 2390-022993 |
|                                           |                                                                            | Application Number     |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |

|      |          |                |    |                      |    |
|------|----------|----------------|----|----------------------|----|
| City | San Jose | State/Province | CA | Country of Residence | US |
|------|----------|----------------|----|----------------------|----|

**Mailing Address of Inventor:**

|             |                                 |                |    |  |  |
|-------------|---------------------------------|----------------|----|--|--|
| Address 1   | 55 Almaden Boulevard, 6th Floor |                |    |  |  |
| Address 2   |                                 |                |    |  |  |
| City        | San Jose                        | State/Province | CA |  |  |
| Postal Code | 95113                           | Country        | US |  |  |

|            |                        |
|------------|------------------------|
| Inventor 4 | <a href="#">Remove</a> |
| Legal Name |                        |

|                                                                                                                                                                          |            |             |             |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|-------------|--------|
| Prefix                                                                                                                                                                   | Given Name | Middle Name | Family Name | Suffix |
|                                                                                                                                                                          | Nitasha    |             | Walia       |        |
| Residence Information (Select One) <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service |            |             |             |        |

|      |           |                |    |                      |    |
|------|-----------|----------------|----|----------------------|----|
| City | Sunnyvale | State/Province | CA | Country of Residence | US |
|------|-----------|----------------|----|----------------------|----|

**Mailing Address of Inventor:**

|             |                                 |                |    |  |  |
|-------------|---------------------------------|----------------|----|--|--|
| Address 1   | 55 Almaden Boulevard, 6th Floor |                |    |  |  |
| Address 2   |                                 |                |    |  |  |
| City        | San Jose                        | State/Province | CA |  |  |
| Postal Code | 95113                           | Country        | US |  |  |

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button.

[Add](#)**Correspondence Information:**

|                                                                                                                                       |                                    |                           |                              |
|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------|------------------------------|
| Enter either Customer Number or complete the Correspondence Information section below.<br>For further information see 37 CFR 1.33(a). |                                    |                           |                              |
| <input type="checkbox"/> An Address is being provided for the correspondence Information of this application.                         |                                    |                           |                              |
| Customer Number                                                                                                                       | 180741                             |                           |                              |
| Email Address                                                                                                                         | PAIR-notifications@cognitionip.com | <a href="#">Add Email</a> | <a href="#">Remove Email</a> |

**Application Information:**

|                                         |                                                                            |                                           |                          |
|-----------------------------------------|----------------------------------------------------------------------------|-------------------------------------------|--------------------------|
| Title of the Invention                  | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                                           |                          |
| Attorney Docket Number                  | 2390-022993                                                                | Small Entity Status Claimed               | <input type="checkbox"/> |
| Application Type                        | Nonprovisional                                                             |                                           |                          |
| Subject Matter                          | Utility                                                                    |                                           |                          |
| Total Number of Drawing Sheets (if any) | 13                                                                         | Suggested Figure for Publication (if any) |                          |

|                                           |                                                                            |                        |             |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                                                            | Attorney Docket Number | 2390-022993 |
|                                           |                                                                            | Application Number     |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |

## Filing By Reference:

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

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

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

## Publication Information:

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

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

## Representative Information:

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

|                    |                                                  |                                              |                                                         |
|--------------------|--------------------------------------------------|----------------------------------------------|---------------------------------------------------------|
| Please Select One: | <input checked="" type="radio"/> Customer Number | <input type="radio"/> US Patent Practitioner | <input type="radio"/> Limited Recognition (37 CFR 11.9) |
| Customer Number    | 180741                                           |                                              |                                                         |

## Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.

When referring to the current application, please leave the "Application Number" field blank.

|                          |                 |                          |                                    |
|--------------------------|-----------------|--------------------------|------------------------------------|
| Prior Application Status |                 | <a href="#">Remove</a>   |                                    |
| Application Number       | Continuity Type | Prior Application Number | Filing or 371(c) Date (YYYY-MM-DD) |
|                          |                 |                          |                                    |

Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button.

|                                           |                                                                            |                        |             |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                                                            | Attorney Docket Number | 2390-022993 |
|                                           |                                                                            | Application Number     |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |

## Foreign Priority Information:

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

| Application Number | Country <sup>i</sup> | Filing Date (YYYY-MM-DD) | Access Code <sup>i</sup> (if applicable) |
|--------------------|----------------------|--------------------------|------------------------------------------|
|                    |                      |                          |                                          |

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button.

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

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

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

|                                           |                                                                            |                        |             |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                                                            | Attorney Docket Number | 2390-022993 |
|                                           |                                                                            | Application Number     |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |

## Authorization or Opt-Out of Authorization to Permit Access:

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

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

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

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

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

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

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

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

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

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

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

|                                           |                                                                            |                        |             |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                                                            | Attorney Docket Number | 2390-022993 |
|                                           |                                                                            | Application Number     |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |

## Applicant Information:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                 |                                                                |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------------------------------|-------|
| Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                 |                                                                |       |
| <b>Applicant 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                 |                                                                |       |
| <p>If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.</p> |                                 |                                                                |       |
| <input type="button" value="Clear"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                 |                                                                |       |
| <input checked="" type="radio"/> Assignee                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                 | <input type="radio"/> Legal Representative under 35 U.S.C. 117 |       |
| <input type="radio"/> Person to whom the inventor is obligated to assign.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                 | <input type="radio"/> Joint Inventor                           |       |
| <input type="radio"/> Person who shows sufficient proprietary interest                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                 |                                                                |       |
| If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                 |                                                                |       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                 |                                                                |       |
| Name of the Deceased or Legally Incapacitated Inventor: <input type="text"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                 |                                                                |       |
| If the Applicant is an Organization check here. <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                 |                                                                |       |
| Organization Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Zoom Video Communications, Inc. |                                                                |       |
| <b>Mailing Address Information For Applicant:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                 |                                                                |       |
| Address 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 55 Almaden Boulevard, 6th Floor |                                                                |       |
| Address 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                 |                                                                |       |
| City                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | San Jose                        | State/Province                                                 | CA    |
| Country                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | US                              | Postal Code                                                    | 95113 |
| Phone Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                 | Fax Number                                                     |       |
| Email Address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                 |                                                                |       |
| Additional Applicant Data may be generated within this form by selecting the Add button.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                 |                                                                |       |

## Assignee Information including Non-Applicant Assignee Information:

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

|                                           |                                                                            |                        |             |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                                                            | Attorney Docket Number | 2390-022993 |
|                                           |                                                                            | Application Number     |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |             |                |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|----------------|--------|
| <b>Assignee 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                      |            |             |                |        |
| Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication. |            |             |                |        |
| If the Assignee or Non-Applicant Assignee is an Organization check here. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                      |            |             |                |        |
| Prefix                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Given Name | Middle Name | Family Name    | Suffix |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |             |                |        |
| <b>Mailing Address Information For Assignee including Non-Applicant Assignee:</b>                                                                                                                                                                                                                                                                                                                                                                      |            |             |                |        |
| Address 1                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |             |                |        |
| Address 2                                                                                                                                                                                                                                                                                                                                                                                                                                              |            |             |                |        |
| City                                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |             | State/Province |        |
| Country <sup>i</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                   |            |             | Postal Code    |        |
| Phone Number                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |             | Fax Number     |        |
| Email Address                                                                                                                                                                                                                                                                                                                                                                                                                                          |            |             |                |        |
| Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.                                                                                                                                                                                                                                                                                                                                      |            |             |                |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |             |                |        |

## Signature:

**NOTE:** This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). However, if this Application Data Sheet is submitted with the INITIAL filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).

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

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

2022-01-11

|                                                                                     |                                                 |           |                   |                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------|-----------|-------------------|-----------------------|
| Signature                                                                           | <del>/Aroon Karuna/</del> <u>/Aroon Karuna/</u> |           | Date (YYYY-MM-DD) | <del>2021-07-27</del> |
| First Name                                                                          | Aroon                                           | Last Name | Karuna            | Registration Number   |
| 68335                                                                               |                                                 |           |                   |                       |
| Additional Signature may be generated within this form by selecting the Add button. |                                                 |           |                   |                       |

|                                           |                                                                            |             |
|-------------------------------------------|----------------------------------------------------------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> | Attorney Docket Number                                                     | 2390-022993 |
|                                           | Application Number                                                         |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |             |

This collection of information is required by 37 CFR 1.76. 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 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet 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.

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.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
APPLICATION DATA SHEET (37 CFR 1.76)****Title of  
Invention****CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A  
COMMUNICATION SESSION**

As the below named inventor, I hereby declare that:

This declaration ☒ The attached application, or  
is directed to:☐ United States application or PCT international application number \_\_\_\_\_  
filed on \_\_\_\_\_.

The above-identified application was made or authorized to be made by me.

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

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

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

**LEGAL NAME OF INVENTOR**Inventor: Lin Han Date (Optional) : \_\_\_\_\_Signature: Lin Han

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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 1 minute 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.*

Zoom Communications, Inc. v. Ricoh Company, Ltd.

IPR2015-00407 | EX2005 | Page 30 of 246

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**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
APPLICATION DATA SHEET (37 CFR 1.76)****Title of  
Invention****CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A  
COMMUNICATION SESSION**

As the below named inventor, I hereby declare that:

This declaration ☐ The attached application, or  
is directed to:☒ United States application or PCT international application number 17/390,922  
filed on July 31, 2021.

The above-identified application was made or authorized to be made by me.

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

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

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

**LEGAL NAME OF INVENTOR**Inventor: Hailei Sheng Date (Optional) : \_\_\_\_\_Signature: Hailei Sheng

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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 1 minute 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.

Zoom Communications, Inc. v. Ricoh Company, Ltd.

IPR2025-00407 | EX2005 | Page 31 of 246

| Electronic Patent Application Fee Transmittal |          |                                                                            |        |                      |
|-----------------------------------------------|----------|----------------------------------------------------------------------------|--------|----------------------|
| Application Number:                           |          | 17390922                                                                   |        |                      |
| Filing Date:                                  |          | 31-Jul-2021                                                                |        |                      |
| Title of Invention:                           |          | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |        |                      |
| First Named Inventor/Applicant Name:          |          | Lin Han                                                                    |        |                      |
| Filer:                                        |          | Edward Dale Steakley/Kayla Adkins                                          |        |                      |
| Attorney Docket Number:                       |          | 2390-022993                                                                |        |                      |
| Filed as Large Entity                         |          |                                                                            |        |                      |
| Filing Fees for Utility under 35 USC 111(a)   |          |                                                                            |        |                      |
| Description                                   | Fee Code | Quantity                                                                   | Amount | Sub-Total in USD(\$) |
| Basic Filing:                                 |          |                                                                            |        |                      |
| Pages:                                        |          |                                                                            |        |                      |
| Claims:                                       |          |                                                                            |        |                      |
| Miscellaneous-Filing:                         |          |                                                                            |        |                      |
| PROCESSING FEE, EXCEPT PROV. APPLS.           | 1830     | 1                                                                          | 140    | 140                  |
| Petition:                                     |          |                                                                            |        |                      |
| Patent-Appeals-and-Interference:              |          |                                                                            |        |                      |
| Post-Allowance-and-Post-Issuance:             |          |                                                                            |        |                      |

| Description        | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
|--------------------|----------|----------|--------|----------------------|
| Extension-of-Time: |          |          |        |                      |
| Miscellaneous:     |          |          |        |                      |
| Total in USD (\$)  |          |          |        | 140                  |

## Electronic Acknowledgement Receipt

|                                             |                                                                            |
|---------------------------------------------|----------------------------------------------------------------------------|
| <b>EFS ID:</b>                              | 44784850                                                                   |
| <b>Application Number:</b>                  | 17390922                                                                   |
| <b>International Application Number:</b>    |                                                                            |
| <b>Confirmation Number:</b>                 | 7201                                                                       |
| <b>Title of Invention:</b>                  | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |
| <b>First Named Inventor/Applicant Name:</b> | Lin Han                                                                    |
| <b>Customer Number:</b>                     | 180741                                                                     |
| <b>Filer:</b>                               | Edward Dale Steakley/Kayla Adkins                                          |
| <b>Filer Authorized By:</b>                 | Edward Dale Steakley                                                       |
| <b>Attorney Docket Number:</b>              | 2390-022993                                                                |
| <b>Receipt Date:</b>                        | 21-JAN-2022                                                                |
| <b>Filing Date:</b>                         | 31-JUL-2021                                                                |
| <b>Time Stamp:</b>                          | 18:00:38                                                                   |
| <b>Application Type:</b>                    | Utility under 35 USC 111(a)                                                |

### Payment information:

|                                          |                  |
|------------------------------------------|------------------|
| Submitted with Payment                   | yes              |
| Payment Type                             | CARD             |
| Payment was successfully received in RAM | \$ 140           |
| RAM confirmation Number                  | E20221KI00523228 |
| Deposit Account                          |                  |
| Authorized User                          |                  |

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

|                                                 |                                               |                                    |                                          |                  |                  |
|-------------------------------------------------|-----------------------------------------------|------------------------------------|------------------------------------------|------------------|------------------|
|                                                 |                                               |                                    |                                          |                  |                  |
| File Listing:                                   |                                               |                                    |                                          |                  |                  |
| Document Number                                 | Document Description                          | File Name                          | File Size(Bytes)/ Message Digest         | Multi Part /.zip | Pages (if appl.) |
| 1                                               | Request under Rule 48 correcting inventorship | 2390-022993_Inventorship.pdf       | 1184865                                  | no               | 3                |
|                                                 |                                               |                                    | e32c27112333954dde2e18edc81d413a8efad62c |                  |                  |
| Warnings:                                       |                                               |                                    |                                          |                  |                  |
| Information:                                    |                                               |                                    |                                          |                  |                  |
| 2                                               | Application Data Sheet                        | 2390-022993_Corrected_ADS_.pdf     | 1505288                                  | no               | 9                |
|                                                 |                                               |                                    | 0928f65ee274bf169930bf97e0c26ee9ac60cd36 |                  |                  |
| Warnings:                                       |                                               |                                    |                                          |                  |                  |
| Information:                                    |                                               |                                    |                                          |                  |                  |
| This is not an USPTO supplied ADS fillable form |                                               |                                    |                                          |                  |                  |
| 3                                               | Oath or Declaration filed                     | 2390-022993_Declaration_Lin_.pdf   | 378209                                   | no               | 1                |
|                                                 |                                               |                                    | 3f2964d75b497e697be19465182519877256ada0 |                  |                  |
| Warnings:                                       |                                               |                                    |                                          |                  |                  |
| Information:                                    |                                               |                                    |                                          |                  |                  |
| 4                                               | Oath or Declaration filed                     | 2390-022993_Declaration_She ng.pdf | 381037                                   | no               | 1                |
|                                                 |                                               |                                    | 2e098f3d296529d8291131ee8526d06fdc969e7f |                  |                  |
| Warnings:                                       |                                               |                                    |                                          |                  |                  |
| Information:                                    |                                               |                                    |                                          |                  |                  |
| 5                                               | Fee Worksheet (SB06)                          | fee-info.pdf                       | 38061                                    | no               | 2                |
|                                                 |                                               |                                    | fddab51924dc13434d1a6fb79cfb84690946a6a2 |                  |                  |
| Warnings:                                       |                                               |                                    |                                          |                  |                  |
| Information:                                    |                                               |                                    |                                          |                  |                  |
| Total Files Size (in bytes):                    |                                               |                                    | 3487460                                  |                  |                  |

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

**New Applications Under 35 U.S.C. 111**

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

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

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

**New International Application Filed with the USPTO as a Receiving Office**

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

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Cognition IP, P.C.  
201 Mission Street  
Suite 1200  
San Francisco, CA 94105



**Courtesy Reminder for  
Application Serial No: 17/390,922**

Attorney Docket No: 2390-022993  
Customer Number: 180741  
Date of Electronic Notification: 01/10/2022

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

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

esteakley@cognitionip.com  
PAIR-notifications@cognitionip.com

To view your correspondence online or update your email addresses, please visit us anytime at **<https://ppair-my.uspto.gov/pair/PrivatePair>**.

If you have any questions, please email the Electronic Business Center (EBC) at [EBC@uspto.gov](mailto:EBC@uspto.gov) or call 1-866-217-9197.



# UNITED STATES PATENT AND TRADEMARK OFFICE

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## NOTICE OF ALLOWANCE AND FEE(S) DUE

180741 7590 01/10/2022  
Cognition IP, P.C.  
201 Mission Street  
Suite 1200  
San Francisco, CA 94105

EXAMINER

NUNEZ, JORDANY

ART UNIT

PAPER NUMBER

2171

DATE MAILED: 01/10/2022

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 17/390,922      | 07/31/2021  | Lin Han              | 2390-022993         | 7201             |

TITLE OF INVENTION: CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION

| APPLN. TYPE    | ENTITY STATUS | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|---------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | UNDISCOUNTED  | \$1200        | \$0.00              | \$0.00               | \$1200           | 04/11/2022 |

**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. 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: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at [www.uspto.gov/PatentMaintenanceFees](http://www.uspto.gov/PatentMaintenanceFees).**

# PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

By fax, send to: (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)

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.

180741 7590 01/10/2022  
Cognition IP, P.C.  
201 Mission Street  
Suite 1200  
San Francisco, CA 94105

## 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 transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

|                         |
|-------------------------|
| (Typed or printed name) |
| (Signature)             |
| (Date)                  |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 17/390,922      | 07/31/2021  | Lin Han              | 2390-022993         | 7201             |

TITLE OF INVENTION: CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION

| APPLN. TYPE    | ENTITY STATUS | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|---------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | UNDISCOUNTED  | \$1200        | \$0.00              | \$0.00               | \$1200           | 04/11/2022 |

| EXAMINER       | ART UNIT | CLASS-SUBCLASS |
|----------------|----------|----------------|
| NUNEZ, JORDANY | 2171     | 715-751000     |

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/AIA/122 or PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or 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,

1 \_\_\_\_\_

(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.

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 must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

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

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

4a. Fees submitted: ☐ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Method of Payment: (Please first reapply any previously paid fee shown above)

☐ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. \_\_\_\_\_

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 \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_



# UNITED STATES PATENT AND TRADEMARK OFFICE

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| APPLICATION NO.                                                                   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 17/390,922                                                                        | 07/31/2021  | Lin Han              | 2390-022993         | 7201             |
| 180741                                                                            | 7590        | 01/10/2022           | EXAMINER            |                  |
| Cognition IP, P.C.<br>201 Mission Street<br>Suite 1200<br>San Francisco, CA 94105 |             |                      | NUNEZ, JORDANY      |                  |
|                                                                                   |             |                      | ART UNIT            | PAPER NUMBER     |
|                                                                                   |             |                      | 2171                |                  |
| DATE MAILED: 01/10/2022                                                           |             |                      |                     |                  |

## 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.

|                                                               |                               |                         |  |
|---------------------------------------------------------------|-------------------------------|-------------------------|--|
| <b><i>Notice Requiring Inventor's Oath or Declaration</i></b> | Application No.<br>17/390,922 | Applicant(s)<br>Lin Han |  |
|                                                               | Examiner<br>NUNEZ, JORDANY    | Art Unit<br>2171        |  |

This notice is an attachment to the Notice of Allowability (PTOL-37), or the Notice of Allowability For A Design Application (PTOL-37D).

An inventor's oath or declaration in compliance with 37 CFR 1.63 or 1.64 executed by or with respect to each inventor has not yet been submitted.

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 inventor (for any inventor for which a compliant oath, declaration, or substitute statement has not yet been submitted) **MUST** be filed no later than the date on which the issue fee is paid. See 35 U.S.C. 115(f). Failure to timely comply will result in ABANDONMENT of this application.

A properly executed inventor's oath to declaration has not been received for the following inventor(s):

If applicant previously filed one or more oaths, declarations, or substitute statements, applicant may have received an informational notice regarding deficiencies therein.

The following deficiencies are noted:

#### INFORMAL ACTION PROBLEMS

- A properly executed inventor's oath or declaration has not been received for the following inventor(s): **Lin Han** and **Sam Sheng**.

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.

Questions relating to this Notice should be directed to the Application Assistance Unit at 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 30 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 of the Patent and Trademark Act of 1980.

|                               |                                      |                                   |                                 |
|-------------------------------|--------------------------------------|-----------------------------------|---------------------------------|
| <b>Notice of Allowability</b> | <b>Application No.</b><br>17/390,922 | <b>Applicant(s)</b><br>Han et al. |                                 |
|                               | <b>Examiner</b><br>Jordany Núñez     | <b>Art Unit</b><br>2171           | <b>AIA (FITF) Status</b><br>Yes |

**-- 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 the response of 12/27/2021.  
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on \_\_\_\_\_.

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

3. ☒ The allowed claim(s) is/are 1,3,5-14 and 17-20. 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](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto: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. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                       | 5. <input type="checkbox"/> Examiner's Amendment/Comment                  |
| 2. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____.          | 6. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| 3. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material _____. | 7. <input type="checkbox"/> Other _____.                                  |
| 4. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date. _____.                |                                                                           |

|                                                    |  |
|----------------------------------------------------|--|
| /JORDANY NUNEZ/<br>Primary Examiner, Art Unit 2171 |  |
|----------------------------------------------------|--|

|                                                     |                                      |                                   |                                                   |                       |
|-----------------------------------------------------|--------------------------------------|-----------------------------------|---------------------------------------------------|-----------------------|
| <b><i>Applicant-Initiated Interview Summary</i></b> | <b>Application No.</b><br>17/390,922 | <b>Applicant(s)</b><br>Han et al. |                                                   |                       |
|                                                     | <b>Examiner</b><br>Jordany Núñez     | <b>Art Unit</b><br>2171           | <b>AIA (First Inventor to File) Status</b><br>Yes | <b>Page</b><br>1 of 1 |

| <b>All Participants</b> (applicant, applicants representative, PTO personnel) | <b>Title</b>     | <b>Type</b> |
|-------------------------------------------------------------------------------|------------------|-------------|
| Jordany Núñez                                                                 | Primary Examiner | Telephonic  |
| Aaron Karuna                                                                  | Attorney         |             |

**Date of Interview:** 03 January 2022

#### Issues Discussed:

#### 35 U.S.C. 103

Applicant and Examiner discussed the allowable subject matter of claims 4 and 16. Applicant indicated willingness to amend independent claims 1 and 14 to incorporate the allowable subject matter from claims 4 and 16. Agreement was reached.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| /JORDANY NUNEZ/<br>Primary Examiner, Art Unit 2171                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| <p><b>Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicants responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04</b></p> <p>Please further see:<br/>MPEP 713.04<br/>Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b)<br/>37 CFR § 1.2 Business to be transacted in writing</p> |  |

**Applicant recordation instructions:** The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview.

**Examiner recordation instructions:** Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

|                                   |                                       |  |                                                          |             |
|-----------------------------------|---------------------------------------|--|----------------------------------------------------------|-------------|
| <b>Notice of References Cited</b> | Application/Control No.<br>17/390,922 |  | Applicant(s)/Patent Under<br>Reexamination<br>Han et al. |             |
|                                   | Examiner<br>Jordany Núñez             |  | Art Unit<br>2171                                         | Page 1 of 1 |

| U.S. PATENT DOCUMENTS |   |                                                  |                 |                  |                    |                   |
|-----------------------|---|--------------------------------------------------|-----------------|------------------|--------------------|-------------------|
| *                     |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Name             | CPC Classification | US Classification |
| *                     | A | US-10403050-B1                                   | 09-2019         | Beall; Andrew C. | G06F3/04817        | 1/1               |
|                       | B |                                                  |                 |                  |                    |                   |
|                       | C |                                                  |                 |                  |                    |                   |
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| FOREIGN PATENT DOCUMENTS |   |                                                  |                 |         |      |                    |
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| NON-PATENT DOCUMENTS |   |                                                                                           |
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| *                    |   | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
|                      | U |                                                                                           |
|                      | V |                                                                                           |
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\*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.

|                                                                                                                 |                                              |                                                              |
|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------------------|
| <b><i>Search Notes</i></b><br> | <b>Application/Control No.</b><br>17/390,922 | <b>Applicant(s)/Patent Under Reexamination</b><br>Han et al. |
|                                                                                                                 | <b>Examiner</b><br>Jordany Núñez             | <b>Art Unit</b><br>2171                                      |

| CPC - Searched*                |            |          |
|--------------------------------|------------|----------|
| Symbol                         | Date       | Examiner |
| H04L65/403 with keyword search | 11/29/2021 | JN       |
| G06F3/1454 with keyword search | 11/29/2021 | JN       |
| G06F3/0481 with keyword search | 11/29/2021 | JN       |

| CPC Combination Sets - Searched* |      |          |
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| Symbol                           | Date | Examiner |
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| US Classification - Searched* |          |      |          |
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| Class                         | Subclass | Date | Examiner |
|                               |          |      |          |

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

| Search Notes                                                  |            |          |
|---------------------------------------------------------------|------------|----------|
| Search Notes                                                  | Date       | Examiner |
| USPAT, US PGPUB, EPO, JPO, Derwent, IBM-IDB                   | 11/29/2021 | JN       |
| inventor and assignee search                                  | 11/29/2021 | JN       |
| plus                                                          | 11/29/2021 | JN       |
| <a href="https://scholar.google.com/">scholar.google.com/</a> | 11/29/2021 | JN       |
| search updated                                                | 01/03/2022 | JN       |

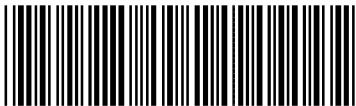
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| /JORDANY NUNEZ/<br>Primary Examiner, Art Unit 2171 |  |
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| <b><i>Search Notes</i></b><br><br> | <b>Application/Control No.</b><br><br>17/390,922 | <b>Applicant(s)/Patent Under Reexamination</b><br><br>Han et al. |
|                                                                                                                     | <b>Examiner</b><br><br>Jordany Núñez             | <b>Art Unit</b><br><br>2171                                      |

| Interference Search |                                         |            |          |
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|                     | See SEARCH interference search attached | 01/03/2022 | JN       |

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| /JORDANY NUNEZ/<br>Primary Examiner, Art Unit 2171 |  |
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| <b>Issue Classification</b><br> | <b>Application/Control No.</b><br>17/390,922 | <b>Applicant(s)/Patent Under Reexamination</b><br>Han et al. |
|                                                                                                                  | <b>Examiner</b><br>Jordany Núñez             | <b>Art Unit</b><br>2171                                      |

| CPC    |   |    |   |      |      |            |
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| Symbol |   |    |   |      | Type | Version    |
| H04L   | / | 65 | / | 403  | F    | 2013-01-01 |
| G06F   | / | 3  | / | 1454 | I    | 2013-01-01 |
| G06F   | / | 3  | / | 0481 | A    | 2013-01-01 |

| CPC Combination Sets |   |  |   |      |         |
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| NONE                                               |                 | <b>Total Claims Allowed:</b> |                   |
| (Assistant Examiner)                               | (Date)          | 16                           |                   |
| /JORDANY NUNEZ/<br>Primary Examiner, Art Unit 2171 | 03 January 2022 | O.G. Print Claim(s)          | O.G. Print Figure |
| (Primary Examiner)                                 | (Date)          | 1                            | 5B                |

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| <b><i>Issue Classification</i></b><br> | <b>Application/Control No.</b><br>17/390,922 | <b>Applicant(s)/Patent Under Reexamination</b><br>Han et al. |  |
|                                                                                                                         | <b>Examiner</b><br>Jordany Núñez             | <b>Art Unit</b><br>2171                                      |  |

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| <b>INTERNATIONAL CLASSIFICATION</b> |   |    |        |
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| G06F                                | / | 3  | / 033  |
| G06F                                | / | 3  | / 0481 |
| G04L                                | / | 12 | / 18   |
| <b>NON-CLAIMED</b>                  |   |    |        |
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| <b>US ORIGINAL CLASSIFICATION</b> |                 |
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| <b>CROSS REFERENCES(S)</b> |                                          |  |  |  |  |
| <b>CLASS</b>               | <b>SUBCLASS (ONE SUBCLASS PER BLOCK)</b> |  |  |  |  |
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| NONE                                                                     |                           | <b>Total Claims Allowed:</b> |                         |
| (Assistant Examiner)                                                     | (Date)                    | 16                           |                         |
| /JORDANY NUNEZ/<br>Primary Examiner, Art Unit 2171<br>(Primary Examiner) | 03 January 2022<br>(Date) | O.G. Print Claim(s)<br>1     | O.G. Print Figure<br>5B |

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| <b>Issue Classification</b><br> | <b>Application/Control No.</b><br>17/390,922 | <b>Applicant(s)/Patent Under Reexamination</b><br>Han et al. |
|                                                                                                                  | <b>Examiner</b><br>Jordany Núñez             | <b>Art Unit</b><br>2171                                      |

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| <input checked="" type="checkbox"/> Claims renumbered in the same order as presented by applicant <input type="checkbox"/> CPA <input type="checkbox"/> T.D. <input type="checkbox"/> R.1.47 |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |
| <b>CLAIMS</b>                                                                                                                                                                                |          |       |          |       |          |       |          |       |          |       |          |       |          |       |          |
| Final                                                                                                                                                                                        | Original | Final | Original | Final | Original | Final | Original | Final | Original | Final | Original | Final | Original | Final | Original |
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| NONE<br><br>(Assistant Examiner) _____ (Date) _____                                                   |  | <b>Total Claims Allowed:</b><br>16 |                         |
| /JORDANY NUNEZ/<br>Primary Examiner, Art Unit 2171<br>(Primary Examiner) _____ (Date) 03 January 2022 |  | O.G. Print Claim(s)<br>1           | O.G. Print Figure<br>5B |

## PE2E SEARCH - Search History (Prior Art)

| Ref # | Hits | Search Query                                                                                                            | DBs                                         | Default Operator | Plurals | British Equivalents | Time Stamp          |
|-------|------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------------|---------|---------------------|---------------------|
| L1    | 15   | ((("ZOOM") near3 ("VIDEO") near3 ("COMMUNICATIONS") near3 ("INC"))).AS,AANM.                                            | (USPAT)                                     | OR               | ON      | ON                  | 2021/11/27 02:36 PM |
| L2    | 7569 | (H04L65/403 OR G06F3/1454).cpc.                                                                                         | (USPAT)                                     | OR               | ON      | ON                  | 2021/11/27 02:37 PM |
| L3    | 2373 | ((("HAN") near3 ("Lin")) OR (("LING") near3 ("Bo")) OR (("SHENG") near3 ("Sam")) OR (("WALIA") near3 ("Nitasha"))).INV. | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:37 PM |
| L4    | 1    | 1 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near4 (display\$4)                                            | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:38 PM |
| L5    | 1    | 1 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near4 (display\$4)                                            | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:38 PM |
| L6    | 3230 | 2 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near4 (display\$4)                                            | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:39 PM |
| L7    | 9    | 3 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near4 (display\$4)                                            | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:39 PM |
| L8    | 1331 | 2 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near8 (display\$4) near8 (users participants)                 | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:49 PM |
| L9    | 297  | 2 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near8 (display\$4) near8 (users participants) SAME (shar\$4)  | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:49 PM |
| L10   | 2    | ("20140240445").pn.                                                                                                     | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:54 PM |
| L11   | 0    | (14/190318).APP.                                                                                                        | (USPAT; USOCR)                              | OR               | ON      | ON                  | 2021/11/27 02:54 PM |
| L12   | 3    | "20120274728"                                                                                                           | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 03:07 PM |

|     |        |                                                                                                                                                                                                                                                   |                          |    |    |    |                     |
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| L13 | 11     | ("5432525"   "5915091"   "6008809"   "6025871"   "8467509"   "8527907"   "20100287496"   "20120030616").pn. OR ("8848022").urpn. AND (PGPB   USPT   USOC).dbnm.                                                                                   | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/11/27 03:07 PM |
| L14 | 1      | (15/637006).APP.                                                                                                                                                                                                                                  | (USPAT; USOCR)           | OR | ON | ON | 2021/11/27 03:12 PM |
| L15 | 6      | ("8140997"   "9699411"   "20020026323"   "20040236830"   "20120278738"   "20150134737").pn. OR ("10397520").urpn. AND (PGPB   USPT   USOC).dbnm.                                                                                                  | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/11/27 03:12 PM |
| L16 | 287    | 2 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near8 (display\$4) near8 (users participants) SAME (shar\$4)                                                                                                                            | (US-PGPUB; USPAT)        | OR | ON | ON | 2021/11/27 08:22 PM |
| L17 | 0      | (13/672383).APP.                                                                                                                                                                                                                                  | (USPAT; USOCR)           | OR | ON | ON | 2021/11/27 08:24 PM |
| L18 | 4      | ("20030115200" "20140033049" "6973432" "20080081601" "6636803" "20130217330" "8433650" "20090083637" "20110193788" "20070271234" "20120246024" "20110055247" "4870576" "20130097554" "20100111410" "20110197147" "20120084672" "20140082079").PN. | (USPAT; USOCR)           | OR | ON | ON | 2021/11/27 08:25 PM |
| L19 | 18     | ("20030115200" "20140033049" "6973432" "20080081601" "6636803" "20130217330" "8433650" "20090083637" "20110193788" "20070271234" "20120246024" "20110055247" "4870576" "20130097554" "20100111410" "20110197147" "20120084672" "20140082079").PN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/11/27 08:25 PM |
| L20 | 178935 | (conferenc\$4 videoconferenc\$4).ti,ab, bsum,clm.                                                                                                                                                                                                 | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/11/27 08:42 PM |
| L21 | 180    | 20 AND (concurrent\$4 simultaneous\$4                                                                                                                                                                                                             | (US-PGPUB; USPAT)        | OR | ON | ON | 2021/11/27 08:44 PM |

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|     |     | ("same" near4 time))<br>near8 (display\$4) near8<br>(users participants)<br>SAME<br>(shar\$4).ti,ab,bsum,clm.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |    |    |    |                        |
| L22 | 160 | 20 AND (concurrent\$4<br>simultaneous\$4<br>("same" near4 time))<br>near8 (display\$4) near8<br>(users participants)<br>SAME<br>(shar\$4).ti,ab,bsum,clm.<br>AND (click\$4 select\$4<br>choos\$4) near4 (user\$4<br>participant\$4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | (US-PGPUB; USPAT) | OR | ON | ON | 2021/11/27<br>08:53 PM |
| L23 | 160 | ((US-20190272510-A1<br>OR US-20110271211-<br>A1 OR US-<br>20150172335-A1 OR<br>US-20020016861-A1<br>OR US-20160216933-<br>A1 OR US-<br>20110225039-A1 OR<br>US-20120284642-A1<br>OR US-20170302887-<br>A1 OR US-<br>20120284635-A1 OR<br>US-20120284634-A1<br>OR US-20190147402-<br>A1 OR US-<br>20120284605-A1 OR<br>US-20160231888-A1<br>OR US-20200371968-<br>A1 OR US-<br>20120284645-A1 OR<br>US-20120284644-A1<br>OR US-20200027062-<br>A1 OR US-<br>20120284197-A1 OR<br>US-20120284643-A1<br>OR US-20100293035-<br>A1 OR US-<br>20180254067-A1 OR<br>US-20210318786-A1<br>OR US-20160119388-<br>A1 OR US-<br>20190014159-A9 OR<br>US-20120284633-A1<br>OR US-20190325014-<br>A1 OR US-<br>20160283456-A1 OR<br>US-20190005011-A9<br>OR US-20120284606-<br>A1 OR US-<br>20120284641-A1 OR<br>US-20150149929-A1<br>OR US-20130024418- | (US-PGPUB; USPAT) | OR | ON | ON | 2021/11/27<br>08:54 PM |

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|  |  | A1 OR US-<br>20200371967-A1 OR<br>US-20200210350-A1<br>OR US-20150263905-<br>A1 OR US-<br>20150089395-A1 OR<br>US-20170177511-A1<br>OR US-20130067121-<br>A1 OR US-<br>20140240445-A1 OR<br>US-20210336859-A1<br>OR US-20210357169-<br>A1 OR US-<br>20150326522-A1 OR<br>US-20140082227-A1<br>OR US-20150154126-<br>A2 OR US-<br>20140201400-A1 OR<br>US-20140351462-A1<br>OR US-20120284646-<br>A1 OR US-<br>20210099488-A1 OR<br>US-20150121466-A1<br>OR US-20150169477-<br>A1 OR US-<br>20170351621-A9 OR<br>US-20200250110-A1<br>OR US-20180323988-<br>A1 OR US-<br>20180349011-A1 OR<br>US-20180254066-A1<br>OR US-20210120053-<br>A1 OR US-<br>20130198795-A1 OR<br>US-20160269684-A1<br>OR US-20090327448-<br>A1 OR US-<br>20170116581-A1 OR<br>US-20100002069-A1<br>OR US-20020016821-<br>A1 OR US-<br>20180249113-A1 OR<br>US-20190028667-A1<br>OR US-20180083978-<br>A1 OR US-<br>20140317660-A1 OR<br>US-20160029094-A1<br>OR US-20200142548-<br>A1 OR US-<br>20180316941-A1 OR<br>US-20210117053-A1<br>OR US-20140223333-<br>A1 OR US-<br>20100192107-A1 OR<br>US-20190354335-A1<br>OR US-20050198578-<br>A1 OR US-<br>20190324704-A1 OR |  |  |  |  |  |
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|  |  | US-20160050395-A1<br>OR US-20130182914-A1).did. AND<br>PGPB.dbnm.) OR ((US-<br>10909506-B2 OR US-<br>10554728-B2 OR US-<br>10120541-B2 OR US-<br>9225755-B2 OR US-<br>6351777-B1 OR US-<br>5442788-A OR US-<br>10127003-B2 OR US-<br>8806352-B2 OR US-<br>9189143-B2 OR US-<br>10387836-B2 OR US-<br>8826147-B2 OR US-<br>10397520-B2 OR US-<br>9699411-B2 OR US-<br>8918722-B2 OR US-<br>10796282-B2 OR US-<br>10802703-B2 OR US-<br>9880718-B1 OR US-<br>6463460-B1 OR US-<br>8875011-B2 OR US-<br>10303347-B1 OR US-<br>10104355-B1 OR US-<br>9224129-B2 OR US-<br>8924859-B2 OR US-<br>8918724-B2 OR US-<br>9330366-B2 OR US-<br>7043529-B1 OR US-<br>8918723-B2 OR US-<br>7024456-B1 OR US-<br>9398059-B2 OR US-<br>9852398-B1 OR US-<br>11003842-B2 OR US-<br>8918721-B2 OR US-<br>8990677-B2 OR US-<br>9195965-B2 OR US-<br>10402485-B2 OR US-<br>7478129-B1 OR US-<br>8756348-B2 OR US-<br>10354226-B1 OR US-<br>10339501-B1 OR US-<br>10585814-B2 OR US-<br>10860981-B1 OR US-<br>11151060-B2 OR US-<br>10050800-B2 OR US-<br>10282752-B2 OR US-<br>5796396-A OR US-<br>9846859-B1 OR US-<br>10904103-B2 OR US-<br>9083769-B2 OR US-<br>11132643-B1 OR US-<br>8914735-B2 OR US-<br>10789574-B1 OR US-<br>9722986-B2 OR US-<br>10320857-B2 OR US-<br>10762002-B2 OR US- |  |  |  |  |  |
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|     |       | 5107443-A OR US-10795832-B2 OR US-11112949-B2 OR US-10965480-B2 OR US-9852399-B1 OR US-7162528-B1 OR US-10685327-B1 OR US-8421840-B2 OR US-9071883-B2 OR US-9749587-B2 OR US-11074555-B2 OR US-8285812-B2 OR US-11074552-B1 OR US-10070093-B1 OR US-10908783-B2 OR US-5764277-A OR US-9299061-B2 OR US-10931676-B2 OR US-9621958-B2 OR US-5767850-A OR US-6011552-A OR US-5990932-A OR US-7458029-B2 OR US-9674488-B2 OR US-9171199-B2 OR US-4974173-A OR US-7533146-B1 OR US-9065972-B1 OR US-9531995-B1).did. AND USPT.dbnm.) |                          |    |    |    |                     |
| L24 | 160   | 23 AND (click\$4 select\$4 choos\$4) near4 (user\$4 participant\$4)                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (US-PGPUB; USPAT)        | OR | ON | ON | 2021/11/27 08:54 PM |
| L25 | 18609 | (H04L65/403 OR G06F3/1454 OR G06F3/0481).cpc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (USPAT)                  | OR | ON | ON | 2021/11/29 08:37 PM |
| L26 | 135   | 25 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near8 (display\$4) near8 (users participants) SAME (shar\$4).ti,ab,bsum,clm. AND (click\$4 select\$4 choos\$4) near4 (user\$4 participant\$4)                                                                                                                                                                                                                                                                                                                        | (US-PGPUB; USPAT)        | OR | ON | ON | 2021/11/29 08:38 PM |
| L27 | 1     | "20160378417".pn.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | (US-PGPUB; USPAT)        | OR | ON | ON | 2021/12/01 02:27 PM |
| L28 | 1     | (14/747486).APP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (USPAT; USOCR)           | OR | ON | ON | 2021/12/01 04:00 PM |
| L29 | 29    | ("5634057"   "6901275"   "8576750"   "8832785"   "9832314"   "10474416"                                                                                                                                                                                                                                                                                                                                                                                                                                                         | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 05:50 PM |

|     |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                             |    |    |    |                        |
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|     |      | "10789035"  <br>"20020090914"  <br>"20060208871"  <br>"20070115346"  <br>"20070198141"  <br>"20090217177"  <br>"20110276900"  <br>"20110307571"  <br>"20130066974"  <br>"20130271403"  <br>"20130309648"  <br>"20140143672"  <br>"20150019694"  <br>"20150201023"  <br>"20150230047"  <br>"20150253938"  <br>"20150286816"  <br>"20150304484"  <br>"20150309765"  <br>"20150334245"  <br>"20160210006"  <br>"20160378417"  <br>"20170118258").pn. OR<br>("11106417").urpn.<br>AND (PGPB   USPT  <br>USOC).dbnm. |                             |    |    |    |                        |
| L30 | 1846 | (multiple plurality<br>several many) near4<br>presenters                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (US-PGPUB; USPAT;<br>USOCR) | OR | ON | ON | 2021/12/01<br>05:55 PM |
| L31 | 674  | 30 AND (conferenc\$4<br>videoconferenc\$4).ti,ab,<br>bsum,clm.                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (US-PGPUB; USPAT;<br>USOCR) | OR | ON | ON | 2021/12/01<br>05:56 PM |
| L33 | 674  | ((US-20140362165-A1<br>OR US-20100037151-<br>A1 OR US-<br>20040230651-A1 OR<br>US-20210014074-A1<br>OR US-20090213205-<br>A1 OR US-<br>20110307550-A1 OR<br>US-20120004940-A1<br>OR US-20170237788-<br>A1 OR US-<br>20080133769-A1 OR<br>US-20200106813-A1<br>OR US-20100293226-<br>A1 OR US-<br>20170262774-A1 OR<br>US-20130080560-A1<br>OR US-20080183808-<br>A1 OR US-<br>20080133660-A1 OR<br>US-20080133661-A1<br>OR US-20080183807-<br>A1 OR US-<br>20040080504-A1 OR<br>US-20160149968-A1               | (US-PGPUB; USPAT)           | OR | ON | ON | 2021/12/01<br>05:57 PM |

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|  |  | OR US-20150009278-A1 OR US-20190158565-A1 OR US-20140232814-A1 OR US-20090055240-A1 OR US-20080215680-A1 OR US-20080195704-A1 OR US-20080195703-A1 OR US-20120102111-A1 OR US-20100306674-A1 OR US-20140258406-A1 OR US-20030134260-A1 OR US-20080183820-A1 OR US-20100223320-A1 OR US-20150309766-A1 OR US-20130258042-A1 OR US-20160234269-A1 OR US-20050169197-A1 OR US-20050080850-A1 OR US-20050163062-A1 OR US-20130246529-A1 OR US-20080195955-A1 OR US-20160072863-A1 OR US-20070083597-A1 OR US-20090164876-A1 OR US-20090300519-A1 OR US-20080016156-A1 OR US-20160094355-A1 OR US-20120110196-A1 OR US-20170150099-A1 OR US-20160173823-A1 OR US-20180145840-A1 OR US-20130328998-A1 OR US-20120102110-A1 OR US-20080168137-A1 OR US-20160182580-A1 OR US-20130238618-A1 OR US-20030078970-A1 OR US-20150200982-A1 OR US-20210368135-A1 OR US-20060182249-A1 OR US-20120200658-A1 OR US-20110283008-A1 OR US-20100325561-A1 OR US- |  |  |  |  |  |
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|  |  | 20110300841-A1 OR<br>US-20210058439-A1<br>OR US-20020169831-<br>A1 OR US-<br>20030208536-A9 OR<br>US-20130239180-A1<br>OR US-20160094354-<br>A1 OR US-<br>20150326824-A1 OR<br>US-20180077205-A1<br>OR US-20140122588-<br>A1 OR US-<br>20180070049-A1 OR<br>US-20030098819-A1<br>OR US-20200145617-<br>A1 OR US-<br>20210126915-A1 OR<br>US-20210352245-A1<br>OR US-20190373039-<br>A1 OR US-<br>20130311177-A1 OR<br>US-20140362163-A1<br>OR US-20130238705-<br>A1 OR US-<br>20140247319-A1 OR<br>US-20130238725-A1<br>OR US-20130238704-<br>A1 OR US-<br>20130238703-A1 OR<br>US-20080307105-A1<br>OR US-20160103200-<br>A1 OR US-<br>20160094593-A1 OR<br>US-20130239013-A1<br>OR US-20110249954-<br>A1 OR US-<br>20040088168-A1 OR<br>US-20070223539-A1<br>OR US-20170085606-<br>A1 OR US-<br>20150106227-A1 OR<br>US-20130019186-A1<br>OR US-20160277345-<br>A1 OR US-<br>20160065625-A1 OR<br>US-20190007556-A1<br>OR US-20180211660-<br>A1 OR US-<br>20190244616-A1 OR<br>US-20190244615-A1<br>OR US-20090282339-<br>A1 OR US-<br>20200389334-A1 OR<br>US-20200021453-A1<br>OR US-20050068442-<br>A1 OR US-<br>20090164875-A1 OR<br>US-20190068670-A1 |  |  |  |  |  |
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|  |  | OR US-20190289198-A1 OR US-20130185356-A1 OR US-20160073054-A1 OR US-20150039688-A1 OR US-20150369783-A1 OR US-20190222891-A1 OR US-20190182063-A1 OR US-20190379712-A1 OR US-20120133727-A1 OR US-20150082194-A1 OR US-20050043973-A1 OR US-20140059010-A1 OR US-20090094532-A1 OR US-20170003927-A1 OR US-20160034111-A1 OR US-20030085922-A1 OR US-20020174181-A1 OR US-20080034085-A1 OR US-20050091579-A1 OR US-20200228359-A1 OR US-20200380468-A1 OR US-20100218120-A1 OR US-20090241033-A1 OR US-20210076002-A1 OR US-20100333175-A1 OR US-20090254839-A1 OR US-20090083639-A1 OR US-20120265815-A1 OR US-20160070534-A1 OR US-20100058410-A1 OR US-20130305167-A1 OR US-20050132408-A1 OR US-20070080892-A1 OR US-20100211823-A1 OR US-20160080436-A1 OR US-20060235927-A1 OR US-20050033817-A1 OR US-20120306993-A1 OR US-20140033133-A1 OR US-20080091838-A1 OR US-20020165922-A1 OR US-20200349429-A1 OR US-20090187935-A1 OR US- |  |  |  |  |  |
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|  |  | 20210211603-A1 OR<br>US-20030182375-A1<br>OR US-20090138554-A1 OR US-<br>20120011452-A1 OR<br>US-20070192785-A1<br>OR US-20150187076-A1 OR US-<br>20160036873-A1 OR<br>US-20210185276-A1<br>OR US-20210176429-A1 OR US-<br>20200026535-A1 OR<br>US-20200169693-A1<br>OR US-20110271129-A1 OR US-<br>20130093832-A1 OR<br>US-20030224807-A1<br>OR US-20180041639-A1 OR US-<br>20130073965-A1 OR<br>US-20210297562-A1<br>OR US-20140282089-A1 OR US-<br>20170201387-A1 OR<br>US-20150113367-A1<br>OR US-20120209906-A1 OR US-<br>20130201209-A1 OR<br>US-20150163259-A1<br>OR US-20080059583-A1 OR US-<br>20080008458-A1 OR<br>US-20150172335-A1<br>OR US-20140244754-A1 OR US-<br>20170034231-A1 OR<br>US-20080209330-A1<br>OR US-20120197991-A1 OR US-<br>20160350585-A1 OR<br>US-20160350058-A1<br>OR US-20110295392-A1 OR US-<br>20030090506-A1 OR<br>US-20070263082-A1<br>OR US-20180103233-A1 OR US-<br>20190179892-A1 OR<br>US-20160344780-A1<br>OR US-20070044017-A1 OR US-<br>20160234265-A1 OR<br>US-20160283456-A1<br>OR US-20190005011-A9 OR US-<br>20050276270-A1 OR<br>US-20060161623-A1 |  |  |  |  |  |
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|  |  | OR US-20130297696-A1 OR US-20190364083-A1 OR US-20080263010-A1 OR US-20080040187-A1 OR US-20160011845-A1 OR US-20120284645-A1 OR US-20160216933-A1 OR US-20070220162-A1 OR US-20030220973-A1 OR US-20070022159-A1 OR US-20130346881-A1 OR US-20090287790-A1 OR US-20160179456-A1 OR US-20060161624-A1 OR US-20100238262-A1 OR US-20150113369-A1 OR US-20060161622-A1 OR US-20100186056-A1 OR US-20060041687-A1 OR US-20170278415-A1 OR US-20120284197-A1 OR US-20090089379-A1 OR US-20180376035-A1 OR US-20080240684-A1 OR US-20020087496-A1 OR US-20070177115-A1 OR US-20130212490-A1 OR US-20100318916-A1 OR US-20160011729-A1 OR US-20140369405-A1 OR US-20120284643-A1 OR US-20180122254-A1 OR US-20080291119-A1 OR US-20080320080-A1 OR US-20190212968-A1 OR US-20040252185-A1 OR US-20080005244-A1 OR US-20120284646-A1 OR US-20190325014-A1 OR US-20100064010-A1 OR US-20100076861-A1 OR US-20120284634-A1 OR US-20120284642-A1 OR US- |  |  |  |  |  |
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|  |  | 20030227479-A1 OR<br>US-20120284606-A1<br>OR US-20150095802-<br>A1 OR US-<br>20080288890-A1 OR<br>US-20170289225-A1<br>OR US-20160028789-<br>A1 OR US-<br>20150112676-A1 OR<br>US-20160274855-A1<br>OR US-20100223179-<br>A1 OR US-<br>20100188477-A1 OR<br>US-20150310338-A1<br>OR US-20140068463-<br>A1 OR US-<br>20150195517-A1 OR<br>US-20160198136-A1<br>OR US-20120284635-<br>A1 OR US-<br>20170214720-A1 OR<br>US-20120284633-A1<br>OR US-20120284641-<br>A1 OR US-<br>20120290259-A1 OR<br>US-20100245532-A1<br>OR US-20140208211-<br>A1 OR US-<br>20050234811-A1 OR<br>US-20150318938-A1<br>OR US-20110214074-<br>A1 OR US-<br>20160073052-A1 OR<br>US-20180213013-A1<br>OR US-20100268694-<br>A1 OR US-<br>20120284605-A1 OR<br>US-20160119388-A1<br>OR US-20190014159-<br>A9 OR US-<br>20140310017-A1 OR<br>US-20060252547-A1<br>OR US-20140038725-<br>A1 OR US-<br>20060044517-A1 OR<br>US-20120284644-A1<br>OR US-20070299982-<br>A1 OR US-<br>20060168538-A1 OR<br>US-20210036879-A1<br>OR US-20100063756-<br>A1 OR US-<br>20200351435-A1 OR<br>US-20100318940-A1<br>OR US-20130036168-<br>A1 OR US-<br>20160134690-A1 OR<br>US-20100253621-A1 |  |  |  |  |  |
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|  |  | OR US-20180091450-A1 OR US-20100091987-A1 OR US-20060041686-A1 OR US-20180091448-A1 OR US-20170249729-A1 OR US-20110238808-A1 OR US-20100315994-A1 OR US-20060044522-A1 OR US-20160378417-A1 OR US-20160378422-A1 OR US-20110311073-A1 OR US-20140032771-A1 OR US-20160164968-A1 OR US-20130314421-A1 OR US-20200242151-A1 OR US-20020055892-A1 OR US-20100325574-A1 OR US-20100325576-A1 OR US-20100325577-A1 OR US-20160142453-A1 OR US-20210342574-A1 OR US-20210342575-A1 OR US-20050174547-A1 OR US-20170011745-A1 OR US-20170308904-A1 OR US-20110196928-A1 OR US-20200393909-A1 OR US-20020113950-A1 OR US-20130019187-A1 OR US-20130091244-A1 OR US-20210319403-A1 OR US-20200243095-A1 OR US-20190362312-A1 OR US-20050091302-A1 OR US-20170212869-A1 OR US-20090113278-A1 OR US-20080270541-A1 OR US-20150117626-A1 OR US-20100328465-A1 OR US-20120324323-A1 OR US-20210211745-A1 OR US-20100061659-A1 OR US-20190303655-A1 OR US- |  |  |  |  |  |
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|  |  | 20050091359-A1 OR<br>US-20070033528-A1<br>OR US-20150033140-<br>A1 OR US-<br>20120323704-A1 OR<br>US-20150230025-A1<br>OR US-20190147402-<br>A1 OR US-<br>20200027062-A1 OR<br>US-20120260158-A1<br>OR US-20120159356-<br>A1 OR US-<br>20130024418-A1 OR<br>US-20160050245-A1<br>OR US-20160378728-<br>A1 OR US-<br>20150301625-A1 OR<br>US-20160188001-A1<br>OR US-20100036664-<br>A1 OR US-<br>20060031779-A1 OR<br>US-20050102356-A1<br>OR US-20190158586-<br>A1 OR US-<br>20160134670-A1 OR<br>US-20200382618-A1<br>OR US-20180157340-<br>A1 OR US-<br>20200125183-A1 OR<br>US-20070048715-A1<br>OR US-20100045879-<br>A1 OR US-<br>20120226646-A1 OR<br>US-20150286942-A1<br>OR US-20060002315-<br>A1 OR US-<br>20180254067-A1 OR<br>US-20080313544-A1<br>OR US-20180121816-<br>A1 OR US-<br>20200320415-A1 OR<br>US-20150033102-A1<br>OR US-20150100525-<br>A1 OR US-<br>20040113934-A1 OR<br>US-20200326846-A1<br>OR US-20200279567-<br>A1 OR US-<br>20170195374-A1 OR<br>US-20180254066-A1<br>OR US-20090307575-<br>A1 OR US-<br>20170032377-A1 OR<br>US-20170308905-A1<br>OR US-20190043252-<br>A1 OR US-<br>20200090658-A1 OR<br>US-20210074058-A1 |  |  |  |  |  |
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|  |  | OR US-20190045157-A1 OR US-20210248819-A1 OR US-20190043266-A1 OR US-20200013217-A1 OR US-20210209850-A1 OR US-20190042832-A1 OR US-20210110604-A1 OR US-20190303087-A1 OR US-20190215486-A1 OR US-20140282013-A1 OR US-20140125697-A1 OR US-20160266864-A1 OR US-20160328204-A1 OR US-20170102912-A1 OR US-20210081161-A1 OR US-20160074480-A1).did. AND PGPB.dbnm.) OR ((US-9525711-B2 OR US-10505998-B1 OR US-8325216-B2 OR US-6760749-B1 OR US-10237411-B2 OR US-9721215-B2 OR US-10382498-B2 OR US-10630738-B1 OR US-7454460-B2 OR US-11076127-B1 OR US-8527588-B2 OR US-9584564-B2 OR US-8091029-B1 OR US-6343313-B1 OR US-8782534-B2 OR US-7369515-B2 OR US-10187435-B2 OR US-9019337-B2 OR US-7426191-B2 OR US-8982177-B2 OR US-7813304-B2 OR US-7715331-B2 OR US-10237324-B1 OR US-7822859-B2 OR US-8396923-B2 OR US-10547663-B2 OR US-7716344-B2 OR US-9342267-B2 OR US-8750472-B2 OR US-7836163-B2 OR US-9558235-B1 OR US-9253442-B1 OR US-8909702-B2 OR US-10673911-B2 OR US-9077776-B1 OR US- |  |  |  |  |  |
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|  |  | 9992245-B2 OR US-<br>9049272-B2 OR US-<br>11082661-B1 OR US-<br>7593987-B2 OR US-<br>7310675-B2 OR US-<br>9571660-B2 OR US-<br>8370516-B2 OR US-<br>8924862-B1 OR US-<br>7418476-B2 OR US-<br>7877489-B2 OR US-<br>8965975-B2 OR US-<br>8682972-B2 OR US-<br>7934002-B2 OR US-<br>8904293-B2 OR US-<br>9602771-B2 OR US-<br>10321093-B2 OR US-<br>9462227-B2 OR US-<br>9992243-B2 OR US-<br>9344469-B2 OR US-<br>9602670-B2 OR US-<br>7809124-B2 OR US-<br>7627663-B2 OR US-<br>8005203-B2 OR US-<br>8161113-B2 OR US-<br>9449305-B2 OR US-<br>9349119-B2 OR US-<br>8661355-B1 OR US-<br>8537195-B2 OR US-<br>7016935-B2 OR US-<br>7830866-B2 OR US-<br>9524491-B2 OR US-<br>9578285-B1 OR US-<br>8194841-B2 OR US-<br>8813196-B2 OR US-<br>7197535-B2 OR US-<br>9325940-B2 OR US-<br>9679331-B2 OR US-<br>10079866-B2 OR US-<br>9374232-B2 OR US-<br>7953795-B2 OR US-<br>7006055-B2 OR US-<br>10554931-B1 OR US-<br>11108991-B2 OR US-<br>10389657-B1 OR US-<br>8135045-B1 OR US-<br>8559469-B1 OR US-<br>6621834-B1 OR US-<br>7533146-B1 OR US-<br>10084987-B2 OR US-<br>10139917-B1 OR US-<br>10015214-B2 OR US-<br>9282285-B2 OR US-<br>9225936-B2 OR US-<br>7236926-B2 OR US-<br>8994781-B2 OR US-<br>6411988-B1 OR US-<br>10419511-B1 OR US-<br>10574713-B2 OR US- |  |  |  |  |  |
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|  |  | 10218521-B2 OR US-<br>10674016-B2 OR US-<br>9445048-B1 OR US-<br>10868849-B2 OR US-<br>10170113-B2 OR US-<br>10535350-B2 OR US-<br>10904025-B2 OR US-<br>10542126-B2 OR US-<br>9177285-B2 OR US-<br>10939033-B2 OR US-<br>9426421-B2 OR US-<br>8909704-B2 OR US-<br>9741257-B1 OR US-<br>6356295-B1 OR US-<br>10979671-B1 OR US-<br>10735481-B2 OR US-<br>7734802-B1 OR US-<br>8321796-B2 OR US-<br>9549006-B2 OR US-<br>11157229-B2 OR US-<br>10708206-B2 OR US-<br>9680659-B2 OR US-<br>9015570-B2 OR US-<br>7765257-B2 OR US-<br>9118940-B2 OR US-<br>8516105-B2 OR US-<br>9734485-B2 OR US-<br>7911495-B2 OR US-<br>10021152-B2 OR US-<br>7991163-B2 OR US-<br>9201527-B2 OR US-<br>7966371-B2 OR US-<br>8904267-B2 OR US-<br>8990706-B2 OR US-<br>7636754-B2 OR US-<br>8842158-B2 OR US-<br>9032441-B2 OR US-<br>7653705-B2 OR US-<br>11122240-B2 OR US-<br>8803991-B2 OR US-<br>10868999-B2 OR US-<br>5801754-A OR US-<br>10771631-B2 OR US-<br>9654521-B2 OR US-<br>10608831-B2 OR US-<br>9465803-B2 OR US-<br>10097598-B2 OR US-<br>9354697-B2 OR US-<br>9414016-B2 OR US-<br>9225755-B2 OR US-<br>7607097-B2 OR US-<br>8670018-B2 OR US-<br>9473449-B2 OR US-<br>7102643-B2 OR US-<br>10306181-B2 OR US-<br>7290204-B1 OR US-<br>10657202-B2 OR US-<br>10241736-B2 OR US- |  |  |  |  |  |
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|  |  | 10230848-B2 OR US-<br>9122444-B2 OR US-<br>10127003-B2 OR US-<br>10402485-B2 OR US-<br>8918722-B2 OR US-<br>7213051-B2 OR US-<br>7464137-B2 OR US-<br>10831835-B2 OR US-<br>9826006-B2 OR US-<br>9185150-B2 OR US-<br>8112490-B2 OR US-<br>9330366-B2 OR US-<br>9740916-B2 OR US-<br>8379150-B2 OR US-<br>10366622-B2 OR US-<br>10887549-B1 OR US-<br>9852376-B2 OR US-<br>10360808-B2 OR US-<br>11153465-B2 OR US-<br>RE48494-E OR US-<br>5930473-A OR US-<br>7092821-B2 OR US-<br>8166109-B2 OR US-<br>7641348-B2 OR US-<br>8239905-B2 OR US-<br>9510004-B2 OR US-<br>10609098-B1 OR US-<br>9299061-B2 OR US-<br>11003842-B2 OR US-<br>9178957-B2 OR US-<br>11016728-B2 OR US-<br>9270713-B2 OR US-<br>9881207-B1 OR US-<br>8990677-B2 OR US-<br>8914735-B2 OR US-<br>9224129-B2 OR US-<br>8826147-B2 OR US-<br>8204935-B2 OR US-<br>8819136-B1 OR US-<br>8274544-B2 OR US-<br>7966370-B1 OR US-<br>9917871-B2 OR US-<br>9837077-B2 OR US-<br>8390663-B2 OR US-<br>8237771-B2 OR US-<br>9110521-B2 OR US-<br>11134111-B2 OR US-<br>10931850-B2 OR US-<br>10187429-B2 OR US-<br>8266209-B2 OR US-<br>9319622-B2 OR US-<br>10051251-B2 OR US-<br>8918724-B2 OR US-<br>8806352-B2 OR US-<br>8924859-B2 OR US-<br>9516267-B2 OR US-<br>8918721-B2 OR US-<br>10200422-B1 OR US- |  |  |  |  |  |
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|  |  | 8875011-B2 OR US-<br>7364307-B2 OR US-<br>9664508-B2 OR US-<br>8019824-B2 OR US-<br>7421069-B2 OR US-<br>11159336-B2 OR US-<br>8224596-B2 OR US-<br>8549076-B2 OR US-<br>9925466-B2 OR US-<br>11128793-B2 OR US-<br>8918723-B2 OR US-<br>10269457-B2 OR US-<br>8533268-B1 OR US-<br>9871832-B1 OR US-<br>8477936-B2 OR US-<br>9306686-B2 OR US-<br>10205688-B2 OR US-<br>9262050-B2 OR US-<br>7797645-B2 OR US-<br>7599989-B2 OR US-<br>8775516-B2 OR US-<br>7329005-B2 OR US-<br>10237213-B2 OR US-<br>11106417-B2 OR US-<br>11132166-B2 OR US-<br>10963505-B2 OR US-<br>9721257-B2 OR US-<br>11163370-B2 OR US-<br>9294291-B2 OR US-<br>8171423-B2 OR US-<br>8356256-B2 OR US-<br>8671360-B2 OR US-<br>10163111-B2 OR US-<br>6454415-B1 OR US-<br>9565249-B2 OR US-<br>10997558-B2 OR US-<br>9064238-B2 OR US-<br>9843768-B1 OR US-<br>11176949-B2 OR US-<br>9049299-B2 OR US-<br>8286070-B2 OR US-<br>8918708-B2 OR US-<br>6037943-A OR US-<br>7716273-B2 OR US-<br>10403050-B1 OR US-<br>7689898-B2 OR US-<br>10387836-B2 OR US-<br>10796282-B2 OR US-<br>10832038-B2 OR US-<br>9195965-B2 OR US-<br>6397036-B1 OR US-<br>8019815-B2 OR US-<br>9641947-B2 OR US-<br>9733736-B2 OR US-<br>9910517-B2 OR US-<br>10540025-B2 OR US-<br>11029770-B2 OR US-<br>8538084-B2 OR US- |  |  |  |  |  |
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|     |      | 7739116-B2 OR US-8155969-B2 OR US-11140222-B2 OR US-10733513-B2 OR US-11170308-B2 OR US-9628529-B2 OR US-9935988-B2 OR US-8260857-B2 OR US-11003353-B2 OR US-10560499-B2 OR US-7434165-B2 OR US-8046359-B2 OR US-9727874-B2 OR US-10152719-B2 OR US-11024078-B2 OR US-10997786-B2 OR US-10460515-B2 OR US-10984589-B2 OR US-11004264-B2 OR US-11095854-B2 OR US-9477380-B2 OR US-10275203-B2 OR US-10705784-B2 OR US-10877714-B2).did. AND USPT.dbnm.) |                          |    |    |    |                     |
| L34 | 327  | 33 AND (select\$4 choos\$4 click\$4) near4 presenter                                                                                                                                                                                                                                                                                                                                                                                                   | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 05:57 PM |
| L35 | 327  | 33 AND (select\$4 choos\$4 click\$4) near4 presenter                                                                                                                                                                                                                                                                                                                                                                                                   | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 05:59 PM |
| L36 | 53   | 33 AND (select\$4 choos\$4 chos\$4 click\$4) near4 (multiple plurality several many list) near4 presenters                                                                                                                                                                                                                                                                                                                                             | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 06:06 PM |
| L37 | 2601 | (multiple plurality several many list\$4) near4 presenters                                                                                                                                                                                                                                                                                                                                                                                             | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 06:06 PM |
| L38 | 954  | 37 AND (conferenc\$4 videoconferenc\$4).ti,ab, bsum,clm.                                                                                                                                                                                                                                                                                                                                                                                               | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 06:07 PM |
| L39 | 72   | 38 AND (select\$4 choos\$4 chos\$4 click\$4) near4 (multiple plurality several many list\$4) near4 presenters                                                                                                                                                                                                                                                                                                                                          | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 06:07 PM |
| L40 | 72   | ((US-8091029-B1 OR US-8325216-B2 OR US-8982177-B2 OR US-8321796-B2 OR US-11157229-B2 OR US-9465803-B2 OR US-8661355-B1 OR US-7636754-B2 OR                                                                                                                                                                                                                                                                                                             | (USPAT; US-PGPUB)        | OR | ON | ON | 2021/12/01 06:07 PM |

|  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |  |  |
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|  |  | US-9445048-B1 OR<br>US-9525711-B2 OR<br>US-7016935-B2 OR<br>US-10084987-B2 OR<br>US-8185828-B2 OR<br>US-10505998-B1 OR<br>US-8803991-B2 OR<br>US-8924862-B1 OR<br>US-6454415-B1 OR<br>US-10139917-B1 OR<br>US-7290204-B1 OR<br>US-7765257-B2 OR<br>US-9942287-B2 OR<br>US-8887063-B2 OR<br>US-9787738-B2 OR<br>US-9167040-B2 OR<br>US-6037943-A OR US-<br>9473449-B2 OR US-<br>10832038-B2 OR US-<br>7733366-B2 OR US-<br>8286070-B2 OR US-<br>8918708-B2 OR US-<br>9837077-B2 OR US-<br>7689898-B2).did. AND<br>USPT.dbnm.) OR ((US-<br>20030134260-A1 OR<br>US-20090213205-A1<br>OR US-20130080560-<br>A1 OR US-<br>20150009278-A1 OR<br>US-20130073965-A1<br>OR US-20090094532-<br>A1 OR US-<br>20170003927-A1 OR<br>US-20050183022-A1<br>OR US-20100262925-<br>A1 OR US-<br>20180070049-A1 OR<br>US-20140244754-A1<br>OR US-20030182375-<br>A1 OR US-<br>20070044017-A1 OR<br>US-20140362165-A1<br>OR US-20020169831-<br>A1 OR US-<br>20030208536-A9 OR<br>US-20100037151-A1<br>OR US-20020113950-<br>A1 OR US-<br>20130093832-A1 OR<br>US-20150033102-A1<br>OR US-20150149532-<br>A1 OR US-<br>20090292999-A1 OR<br>US-20150142925-A1<br>OR US-20200267195-<br>A1 OR US-<br>20150134957-A1 OR |  |  |  |  |  |
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|     |     | US-20180034877-A1<br>OR US-20070299982-A1 OR US-20120209906-A1 OR US-20090228801-A1 OR US-20060010392-A1 OR US-20080065996-A1 OR US-20130132862-A1 OR US-20170034231-A1 OR US-20200349429-A1 OR US-20190303655-A1 OR US-20040002049-A1 OR US-20150112676-A1 OR US-20100328465-A1 OR US-20120324323-A1 OR US-20070033528-A1).did.<br>AND PGPB.dbnm.) |                             |    |    |    |                        |
| L41 | 72  | 40 AND (select\$4<br>choos\$4 chos\$4<br>click\$4) near4 (multiple<br>plurality several many<br>list\$4) near4 presenters                                                                                                                                                                                                                           | (US-PGPUB; USPAT;<br>USOCR) | OR | ON | ON | 2021/12/01<br>06:07 PM |
| L42 | 970 | (multiple plurality<br>several many list\$4)<br>near4<br>presenters.ti,ab,bsum,cl<br>m.                                                                                                                                                                                                                                                             | (US-PGPUB; USPAT;<br>USOCR) | OR | ON | ON | 2021/12/01<br>06:19 PM |
| L43 | 174 | 42 AND (select\$4<br>choos\$4 chos\$4<br>click\$4) near4<br>presenter.ti,ab,bsum,cl<br>m.                                                                                                                                                                                                                                                           | (US-PGPUB; USPAT;<br>USOCR) | OR | ON | ON | 2021/12/01<br>06:20 PM |
| L44 | 174 | ((US-20110057878-A1<br>OR US-20120203844-A1 OR US-20030134260-A1 OR US-20130073965-A1 OR US-20090094532-A1 OR US-20100238179-A1 OR US-20210097875-A1 OR US-20150113411-A1 OR US-20150381932-A1 OR US-20140172585-A1 OR US-20030014373-A1 OR US-20090213205-A1 OR US-20210174691-A1 OR US-20120155828-A1 OR US-20210021440-A1 OR                     | (US-PGPUB; USPAT;<br>USOCR) | OR | ON | ON | 2021/12/01<br>06:20 PM |

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|  |  | US-20020085030-A1<br>OR US-20150009278-A1 OR US-20100161384-A1 OR US-20110019810-A1 OR US-20160381095-A1 OR US-20100037151-A1 OR US-20120159331-A1 OR US-20120300080-A1 OR US-20140362165-A1 OR US-20180070049-A1 OR US-20070005695-A1 OR US-20090063945-A1 OR US-20150058748-A1 OR US-20170003927-A1 OR US-20020113950-A1 OR US-20100241448-A1 OR US-20150178044-A1 OR US-20140207684-A1 OR US-20130110941-A1 OR US-20130305167-A1 OR US-20130106888-A1 OR US-20100026901-A1 OR US-20140365365-A1 OR US-20200349429-A1 OR US-20100057756-A1 OR US-20050138560-A1 OR US-20100257449-A1 OR US-20160072863-A1 OR US-20090282339-A1 OR US-20150379094-A1 OR US-20170075656-A1 OR US-20100257456-A1 OR US-20150200979-A1 OR US-20120317487-A1 OR US-20200019588-A1 OR US-20040002049-A1 OR US-20050118560-A1 OR US-20160094355-A1 OR US-20080033721-A1 OR US-20080288404-A1 OR US-20190236842-A1 OR US-20200160604-A1 OR US-20100279266-A1 OR US-20060002315- |  |  |  |  |  |
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|  |  | A1 OR US-<br>20190286388-A1 OR<br>US-20060031779-A1<br>OR US-20030048291-<br>A1 OR US-<br>20130276139-A1 OR<br>US-20020169831-A1<br>OR US-20030208536-<br>A9 OR US-<br>20100318916-A1 OR<br>US-20040080528-A1<br>OR US-20040205478-<br>A1 OR US-<br>20020140724-A1 OR<br>US-20040153421-A1<br>OR US-20100053341-<br>A1 OR US-<br>20090241033-A1 OR<br>US-20150199350-A1<br>OR US-20020023055-<br>A1 OR US-<br>20050033690-A1 OR<br>US-20030122863-A1<br>OR US-20090247235-<br>A1 OR US-<br>20180366308-A1 OR<br>US-20060070036-A1<br>OR US-20200019594-<br>A1 OR US-<br>20030222890-A1 OR<br>US-20040051703-A1<br>OR US-20140282089-<br>A1 OR US-<br>20170201387-A1 OR<br>US-20110161821-A1<br>OR US-20200050624-<br>A1 OR US-<br>20030144907-A1 OR<br>US-20160179456-A1<br>OR US-20170097359-<br>A1 OR US-<br>20180252726-A1 OR<br>US-20180259535-A1<br>OR US-20210285955-<br>A1).did. AND<br>PGPB.dbnm.) OR ((US-<br>8669936-B2 OR US-<br>8321796-B2 OR US-<br>5477892-A OR US-<br>10382498-B2 OR US-<br>8977965-B1 OR US-<br>9386272-B2 OR US-<br>6155840-A OR US-<br>8091029-B1 OR US-<br>9535578-B2 OR US-<br>8904293-B2 OR US-<br>9665575-B2 OR US-<br>7734802-B1 OR US- |  |  |  |  |  |
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|  |  | 9077776-B1 OR US-<br>6287125-B1 OR US-<br>7266779-B2 OR US-<br>8982177-B2 OR US-<br>8661355-B1 OR US-<br>9311618-B2 OR US-<br>8520821-B2 OR US-<br>10403050-B1 OR US-<br>7418476-B2 OR US-<br>9525711-B2 OR US-<br>10386933-B2 OR US-<br>10084987-B2 OR US-<br>7800582-B1 OR US-<br>9235312-B2 OR US-<br>10979598-B2 OR US-<br>7599989-B2 OR US-<br>11157229-B2 OR US-<br>7765257-B2 OR US-<br>10505998-B1 OR US-<br>6454415-B1 OR US-<br>7903117-B2 OR US-<br>6317777-B1 OR US-<br>9185150-B2 OR US-<br>9342207-B1 OR US-<br>10445060-B2 OR US-<br>9818112-B2 OR US-<br>9465803-B2 OR US-<br>7290204-B1 OR US-<br>8462108-B2 OR US-<br>8484291-B1 OR US-<br>8949352-B2 OR US-<br>9230247-B2 OR US-<br>9471694-B2 OR US-<br>9811594-B2 OR US-<br>9501258-B2 OR US-<br>8831505-B1 OR US-<br>7945848-B2 OR US-<br>9571660-B2 OR US-<br>8725638-B2 OR US-<br>9116989-B1 OR US-<br>9489432-B2 OR US-<br>8021164-B2 OR US-<br>8473850-B2 OR US-<br>9612730-B2 OR US-<br>8782534-B2 OR US-<br>8875008-B2 OR US-<br>9177285-B2 OR US-<br>7562288-B2 OR US-<br>10438414-B2 OR US-<br>5634018-A OR US-<br>8325216-B2 OR US-<br>7299418-B2 OR US-<br>7016935-B2 OR US-<br>6157364-A OR US-<br>7356763-B2 OR US-<br>7240287-B2 OR US-<br>8125540-B2 OR US-<br>8151179-B1 OR US- |  |  |  |  |  |
|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|

|     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                      |    |    |    |                     |
|-----|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|---------------------|
|     |     | 7254780-B2 OR US-11023652-B2 OR US-10707064-B2 OR US-7606401-B2 OR US-10740542-B2 OR US-9654521-B2 OR US-10608831-B2 OR US-7733366-B2 OR US-9989535-B2 OR US-10466249-B2 OR US-10948495-B2).did. AND USPT.dbnm.) OR ((US-3376900-A).did. AND USOC.dbnm.)                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                      |    |    |    |                     |
| L45 | 174 | 44 AND (select\$4 choos\$4 chos\$4 click\$4) near4 presenter.ti,ab,bsum,cl m.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | (US-PGPUB; USPAT; USOCR)                                                                                                                                                                                                                                                                                             | OR | ON | ON | 2021/12/01 06:20 PM |
| L46 | 32  | ((US-20140240445-A1 OR US-20120274728-A1).did. AND DWPI.dbnm.) OR ((US-20140240445-A1 OR US-20120319927-A1 OR US-20170302887-A1 OR US-20120274728-A1 OR US-20140129948-A1 OR US-20120084672-A1 OR US-20080048975-A1 OR US-20110271211-A1 OR US-20210120053-A1 OR US-20160231888-A1 OR US-20180254067-A1 OR US-20200333994-A1 OR US-20160378417-A1 OR US-20090213205-A1 OR US-20090094532-A1 OR US-20120203844-A1 OR US-20210365231-A1).did. AND PGPB.dbnm.) OR ((US-10645137-B2 OR US-10397520-B2 OR US-10768803-B2 OR US-9282167-B2 OR US-10931676-B2 OR US-4974173-A OR US-9189143-B2 OR US-11132643-B1 OR US-5107443-A OR US-8091029-B1 OR US- | (USPAT; US-PGPUB; FPRS; USOCR; IBM_TDB; EPO; JPO; DERWENT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN)) | OR | ON | ON | 2021/12/01 09:06 PM |

|     |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                      |    |    |    |                     |
|-----|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|---------------------|
|     |    | 10139917-B1 OR US-9077776-B1 OR US-5796396-A).did. AND USPT.dbnm.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                      |    |    |    |                     |
| L47 | 7  | 46 AND annotat\$4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (US-PGPUB; USPAT)                                                                                                                                                                                                                                                                                                    | OR | ON | ON | 2021/12/01 09:07 PM |
| L48 | 7  | 46 AND annotat\$4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (US-PGPUB; USPAT)                                                                                                                                                                                                                                                                                                    | OR | ON | ON | 2021/12/01 09:07 PM |
| L49 | 3  | 46 AND record\$4 SAME later                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | (US-PGPUB; USPAT)                                                                                                                                                                                                                                                                                                    | OR | ON | ON | 2021/12/01 10:53 PM |
| L50 | 32 | ((US-20140240445-A1 OR US-20120274728-A1).did. AND DWPI.dbnm.) OR ((US-20140240445-A1 OR US-20120319927-A1 OR US-20170302887-A1 OR US-20120274728-A1 OR US-20140129948-A1 OR US-20120084672-A1 OR US-20080048975-A1 OR US-20110271211-A1 OR US-20210120053-A1 OR US-20160231888-A1 OR US-20180254067-A1 OR US-20200333994-A1 OR US-20160378417-A1 OR US-20090213205-A1 OR US-20090094532-A1 OR US-20120203844-A1 OR US-20210365231-A1).did. AND PGPB.dbnm.) OR ((US-10645137-B2 OR US-10397520-B2 OR US-10768803-B2 OR US-9282167-B2 OR US-10931676-B2 OR US-4974173-A OR US-9189143-B2 OR US-11132643-B1 OR US-5107443-A OR US-8091029-B1 OR US-10139917-B1 OR US-9077776-B1 OR US-5796396-A).did. AND USPT.dbnm.) | (USPAT; US-PGPUB; FPRS; USOCR; IBM_TDB; EPO; JPO; DERWENT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN)) | OR | ON | ON | 2021/12/01 11:46 PM |
| L52 | 16 | ((("ZOOM") near3 ("VIDEO") near3 ("COMMUNICATIONS") near3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | (USPAT)                                                                                                                                                                                                                                                                                                              | OR | ON | ON | 2022/01/03 06:45 PM |

|     |      |                                                                                                                      |                                             |    |    |    |                     |
|-----|------|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------|----|----|----|---------------------|
|     |      | ("INC"))).AS,AANM.                                                                                                   |                                             |    |    |    |                     |
| L53 | 7640 | (H04L65/403 OR G06F3/1454).cpc.                                                                                      | (USPAT)                                     | OR | ON | ON | 2022/01/03 06:45 PM |
| L54 | 2418 | ((("HAN") near3 ("Lin")) OR ("LING") near3 ("Bo")) OR ("SHENG") near3 ("Sam")) OR ("WALIA") near3 ("Nitasha"))).INV. | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR | ON | ON | 2022/01/03 06:45 PM |
| L55 | 3275 | (52 53 54) AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near4 (display\$4)                                | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR | ON | ON | 2022/01/03 06:45 PM |
| L56 | 872  | (52 53 54) AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near4 (display\$4).ti,ab,clm.                     | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR | ON | ON | 2022/01/03 06:46 PM |

## PE2E SEARCH - Search History (Interference)

| Ref # | Hits  | Search Query                                                                | DBs               | Default Operator | Plurals | British Equivalents | Time Stamp          |
|-------|-------|-----------------------------------------------------------------------------|-------------------|------------------|---------|---------------------|---------------------|
| N1    | 20526 | (conferenc\$4 videoconferenc\$4).clm.                                       | (US-PGPUB; USPAT) | OR               | ON      | ON                  | 2022/01/03 05:33 PM |
| N2    | 35    | 1 AND (select\$4 choos\$4 chos\$4 click\$4) near4 presenter.clm.            | (US-PGPUB; USPAT) | OR               | ON      | ON                  | 2022/01/03 05:34 PM |
| N3    | 40054 | (concurrent\$4 simultaneous\$4 ("same" near4 time)) near4 (display\$4).clm. | (US-PGPUB; USPAT) | OR               | ON      | ON                  | 2022/01/03 06:43 PM |
| N4    | 11    | 3 AND (select\$4 choos\$4 chos\$4 click\$4) near4 presenter.clm. NOT 2      | (US-PGPUB; USPAT) | OR               | ON      | ON                  | 2022/01/03 06:44 PM |

PLUS Search Results for S/N 17390922, Searched Tue Jan 04 07:18:54 EST 2022  
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.

|                |                |
|----------------|----------------|
| 10382506 99    | 20140040765 84 |
| 20050114241 99 |                |
| 4758887 98     |                |
| 5675374 98     |                |
| 8125509 98     |                |
| 20040155956 98 |                |
| 20070188597 98 |                |
| 20120007794 98 |                |
| 5627978 84     |                |
| 6859784 84     |                |
| 7106360 84     |                |
| 7119829 84     |                |
| 7317791 84     |                |
| 7668907 84     |                |
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| 7768543 84     |                |
| 7853273 84     |                |
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| 8582743 84     |                |
| 8756653 84     |                |
| 8881027 84     |                |
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| 20020002072 84 |                |
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| 20050024484 84 |                |
| 20070055535 84 |                |
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| 20090132925 84 |                |
| 20090143126 84 |                |
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| 20110157298 84 |                |
| 20120204118 84 |                |
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| 20120297320 84 |                |
| 20130055112 84 |                |
| 20130271560 84 |                |
| 20130276055 84 |                |
| 20130321566 84 |                |

PLUS Search Results for S/N 17390922, Searched Tue Jan 04 07:19:22 EST 2022  
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.

|                |            |
|----------------|------------|
| 6208373 99     | 4758887 75 |
| 4826245 98     |            |
| 6104424 98     |            |
| 6149157 98     |            |
| 6329994 98     |            |
| 6331861 98     |            |
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| 8533029 98     |            |
| 8542266 98     |            |
| 8947495 98     |            |
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| 9369666 98     |            |
| 9952751 98     |            |
| 10140459 98    |            |
| 10152985 98    |            |
| 10810797 98    |            |
| 10891639 98    |            |
| 11003335 98    |            |
| 11093210 98    |            |
| 20080162635 98 |            |
| 20100292006 98 |            |
| 20110047478 98 |            |
| 20110090302 98 |            |
| 20110090302 98 |            |
| 20130006671 98 |            |
| 20130141519 98 |            |
| 20140002585 98 |            |
| 20140108032 98 |            |
| 20140333713 98 |            |
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| 20150264306 98 |            |
| 20150301694 98 |            |
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| 20150304376 98 |            |
| 20160098575 98 |            |
| 20160189180 98 |            |
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| 20170123755 98 |            |
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| 20190095641 98 |            |
| 20190102054 98 |            |
| 20190205777 98 |            |
| 20200117820 98 |            |
| 4355814 75     |            |
| 4357014 75     |            |

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.

|                                                                                   |                                            |                           |                                       |
|-----------------------------------------------------------------------------------|--------------------------------------------|---------------------------|---------------------------------------|
| <b>PATENT APPLICATION FEE DETERMINATION RECORD</b><br>Substitute for Form PTO-875 | Application or Docket Number<br>17/390,922 | Filing Date<br>07/31/2021 | <input type="checkbox"/> To be Mailed |
|-----------------------------------------------------------------------------------|--------------------------------------------|---------------------------|---------------------------------------|

**ENTITY:** ☒ LARGE ☐ SMALL ☐ MICRO

**APPLICATION AS FILED - PART I**

| FOR                                                                        | (Column 1)<br>NUMBER FILED                                                                                                                                                                                                    | (Column 2)<br>NUMBER EXTRA | RATE (\$) | FEE (\$) |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------|----------|
| <input type="checkbox"/> BASIC FEE<br>(37 CFR 1.16(a), (b), or (c))        | N/A                                                                                                                                                                                                                           | N/A                        | N/A       |          |
| <input type="checkbox"/> SEARCH FEE<br>(37 CFR 1.16(k), (i), or (m))       | N/A                                                                                                                                                                                                                           | N/A                        | N/A       |          |
| <input type="checkbox"/> EXAMINATION FEE<br>(37 CFR 1.16(o), (p), or (q))  | N/A                                                                                                                                                                                                                           | N/A                        | N/A       |          |
| TOTAL CLAIMS<br>(37 CFR 1.16(i))                                           | minus 20 = *                                                                                                                                                                                                                  |                            | x \$100 = |          |
| INDEPENDENT CLAIMS<br>(37 CFR 1.16(h))                                     | minus 3 = *                                                                                                                                                                                                                   |                            | x \$480 = |          |
| <input type="checkbox"/> 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). |                            |           |          |
| <input type="checkbox"/> 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**

|                                                                                                                                 | 12/27/2021                                                                               | (Column 1)<br>CLAIMS REMAINING AFTER AMENDMENT |       | (Column 2)<br>HIGHEST NUMBER PREVIOUSLY PAID FOR | (Column 3)<br>PRESENT EXTRA | RATE (\$)           | ADDITIONAL FEE (\$) |
|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------|-------|--------------------------------------------------|-----------------------------|---------------------|---------------------|
| <b>AMENDMENT</b>                                                                                                                | Total<br>(37 CFR 1.16(i))                                                                | * 16                                           | Minus | ** 20                                            | = 0                         | x \$100 =           | 0                   |
|                                                                                                                                 | Independent<br>(37 CFR 1.16(h))                                                          | * 2                                            | Minus | *** 3                                            | = 0                         | x \$480 =           | 0                   |
|                                                                                                                                 | <input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))                           |                                                |       |                                                  |                             |                     |                     |
|                                                                                                                                 | <input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) |                                                |       |                                                  |                             |                     |                     |
|                                                                                                                                 |                                                                                          |                                                |       |                                                  |                             | TOTAL ADD'L FEE     | 0                   |
| <b>AMENDMENT</b>                                                                                                                |                                                                                          | (Column 1)<br>CLAIMS REMAINING AFTER AMENDMENT |       | (Column 2)<br>HIGHEST NUMBER PREVIOUSLY PAID FOR | (Column 3)<br>PRESENT EXTRA | RATE (\$)           | ADDITIONAL FEE (\$) |
|                                                                                                                                 | Total<br>(37 CFR 1.16(i))                                                                | *                                              | Minus | **                                               | =                           | x \$0 =             |                     |
|                                                                                                                                 | Independent<br>(37 CFR 1.16(h))                                                          | *                                              | Minus | ***                                              | =                           | x \$0 =             |                     |
|                                                                                                                                 | <input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))                           |                                                |       |                                                  |                             |                     |                     |
| <input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))                                        |                                                                                          |                                                |       |                                                  |                             |                     |                     |
|                                                                                                                                 |                                                                                          |                                                |       |                                                  |                             | TOTAL ADD'L FEE     |                     |
| * If the entry in column 1 is less than the entry in column 2, write "0" in column 3.                                           |                                                                                          |                                                |       |                                                  |                             | LIE                 |                     |
| ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".                                       |                                                                                          |                                                |       |                                                  |                             | /LAVINIA D JOHNSON/ |                     |
| *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".                                        |                                                                                          |                                                |       |                                                  |                             |                     |                     |
| The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1. |                                                                                          |                                                |       |                                                  |                             |                     |                     |

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

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

## Electronic Acknowledgement Receipt

|                                             |                                                                            |
|---------------------------------------------|----------------------------------------------------------------------------|
| <b>EFS ID:</b>                              | 44608255                                                                   |
| <b>Application Number:</b>                  | 17390922                                                                   |
| <b>International Application Number:</b>    |                                                                            |
| <b>Confirmation Number:</b>                 | 7201                                                                       |
| <b>Title of Invention:</b>                  | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |
| <b>First Named Inventor/Applicant Name:</b> | Lin Han                                                                    |
| <b>Customer Number:</b>                     | 180741                                                                     |
| <b>Filer:</b>                               | Edward Dale Steakley/Kayla Adkins                                          |
| <b>Filer Authorized By:</b>                 | Edward Dale Steakley                                                       |
| <b>Attorney Docket Number:</b>              | 2390-022993                                                                |
| <b>Receipt Date:</b>                        | 27-DEC-2021                                                                |
| <b>Filing Date:</b>                         | 31-JUL-2021                                                                |
| <b>Time Stamp:</b>                          | 13:00:01                                                                   |
| <b>Application Type:</b>                    | Utility under 35 USC 111(a)                                                |

### Payment information:

|                        |    |
|------------------------|----|
| Submitted with Payment | no |
|------------------------|----|

### File Listing:

| Document Number | Document Description                                  | File Name                                          | File Size(Bytes)/<br>Message Digest                | Multi Part /.zip | Pages (if appl.) |
|-----------------|-------------------------------------------------------|----------------------------------------------------|----------------------------------------------------|------------------|------------------|
| 1               | Amendment/Req. Reconsideration-After Non-Final Reject | ZOOM-8500423_Response_Office_Action_2021-12-26.pdf | 109751<br>ec68b3d7549c280e78fc5003a75843c92ab2a06a | no               | 8                |

### Warnings:

Zoom Communications, Inc. v. Ricoh Company, Ltd.

IPR2026-00407 | EX2005 | Page 84 of 246

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| <b>Information:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |        |
| <b>Total Files Size (in bytes):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 109751 |
| <p><b>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.</b></p> <p><b><u>New Applications Under 35 U.S.C. 111</u></b><br/> <b>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.</b></p> <p><b><u>National Stage of an International Application under 35 U.S.C. 371</u></b><br/> <b>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.</b></p> <p><b><u>New International Application Filed with the USPTO as a Receiving Office</u></b><br/> <b>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.</b></p> |        |

## RESPONSE TO OFFICE ACTION

In re application of: Han, Lin  
Application No.: 17/390,922  
Filed: July 31, 2021  
For: CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN  
A COMMUNICATION SESSION  
Confirmation No.: 7201  
Examiner: Jordany Nunez  
Attorney Docket No.: 2390-022993

Via EFS-Web  
Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Director:

In response to the Non-Final Office Action mailed December 7, 2021, please enter the following amendments and remarks, which are timely filed. Reconsideration and allowance of the pending claims, as amended, in light of the remarks presented herein are respectfully requested.

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

**Remarks** begin on page 7 of this paper.

Respectfully submitted,

/Aroon Karuna/

Aroon Karuna

Reg. No. 68,335

December 26, 2021

### **Amendments to the Claims:**

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

### **Listing of Claims:**

1. (Currently Amended) A method for providing multiple participants of a communication session with the ability to share screen elements simultaneously, comprising:
  - connecting a plurality of participants of a communication session to a live communication stream, wherein the communication session comprises a communication interface for each participant;
  - receiving, from a first participant of the communication session, a request to initiate sharing of one or more screen elements from a user device associated with the first participant;
  - in response to the request, capturing and displaying the one or more screen elements from the user device of the first participant to the communication interfaces of the plurality of participants;
  - receiving, from one or more additional participants of the communication session, additional requests to initiate sharing of one or more additional screen elements from the user devices associated with the additional participants[.];
  - in response to the additional requests, capturing and displaying the one or more additional screen elements from the user devices of the additional participants to the communication interfaces of the plurality of participants, such that a plurality of screen elements are displayed concurrently[.];
  - providing one or more of the participants with control over configuration of the screen elements and the additional screen elements via the communication interfaces for the participants;
  - determining that at least one of the participants is using multiple displays connected to a user device; and
  - configuring separate screen elements to be viewed on the multiple screens, such that each screen element is viewable on a separate screen of the user device.

2. (Canceled)
3. (Currently Amended) The method of claim [[2]]1, wherein the screens are configured to be viewed adjacent to one another on a single screen of a user device for the participant.
4. (Canceled)
5. (Original) The method of claim 1, further comprising:  
receiving a request from a participant to remotely control a screen element of another participant; and  
based on the request, providing the ability for the participant to remotely control the screen element of the other participant.
6. (Original) The method of claim 1, wherein one of the participants is the host, and the host is granted permission to configure sharing privileges of screen elements for the other participants.
7. (Original) The method of claim 1, wherein at least one of the participants is a host of the communication session, and the host is granted permission to configure which screen is viewed by all participants as a primary screen within the communication session.
8. (Original) The method of claim 1, wherein the displayed screen elements comprise one or more of: an application, a whiteboard, a window, a desktop interface, a presentation, or any combination thereof.
9. (Original) The method of claim 1, wherein each participant is provided with the ability to provide annotations within screen elements displayed by the participant and/or other participants.
10. (Original) The method of claim 1, wherein the session is recorded and stored for later viewing, and at least the host is granted permission to configure which of the screen elements

end up within the recording.

11. (Original) The method of claim 10, wherein upon playback of the recorded session, the user viewing the recording can switch between screen elements that are shared or configure how screen elements are viewed.

12. (Original) The method of claim 1, wherein each participant has the ability to maximize, minimize, resize, and/or position the displayed screen element as a window within the communication interface of the participant.

13. (Original) The method of claim 1, wherein there is no limitation to the number of screen elements which can be displayed simultaneously, such that an arbitrary number of participants can concurrently display an arbitrary number of screen elements.

14. (Currently Amended) A non-transitory computer-readable medium containing instructions for providing multiple participants of a communication session with the ability to share screen elements simultaneously, comprising:

instructions for connecting a plurality of participants of a communication session to a live communication stream, wherein the communication session comprises a communication interface for each participant;

instructions for receiving, from a first participant of the communication session, a request to initiate sharing of one or more screen elements from a user device associated with the first participant;

in response to the request, instructions for capturing and displaying the one or more screen elements from the user device of the first participant to the communication interfaces of the plurality of participants;

instructions for receiving, from one or more additional participants of the communication session, additional requests to initiate sharing of one or more additional screen elements from the user devices associated with the additional participants[.];

in response to the additional requests, instructions for capturing and displaying the one or more additional screen elements from the user devices of the additional participants to the

communication interfaces of the plurality of participants, such that a plurality of screen elements are displayed concurrently[.];

instructions for providing one or more of the participants with control over configuration of the screen elements and the additional screen elements via the communication interfaces for the participants;

instructions for determining that at least one of the participants is using multiple displays connected to a user device; and

instructions for configuring separate screen elements to be viewed on the multiple screens, such that each screen element is viewable on a separate screen of the user device.

15. (Canceled)

16. (Canceled)

17. (Original) The non-transitory computer-readable medium of claim 14, further comprising:

instructions to receive a request from a participant to remotely control a screen element of another participant; and

based on the request, instructions to provide the ability for the participant to remotely control the screen element of the other participant.

18. (Original) The non-transitory computer-readable medium of claim 14, wherein at least one of the participants is a host of the communication session, and the host is granted permission to configure sharing privileges of screen elements for the other participants.

19. (Original) The non-transitory computer-readable medium of claim 14, wherein the displayed screen elements comprise one or more of: an application, a whiteboard, a window, a desktop interface, a presentation, or any combination thereof.

20. (Original) The non-transitory computer-readable medium of claim 14, wherein each

participant is provided with the ability to provide annotations within screen elements displayed by the participant and/or other participants.

## **REMARKS**

Prior to this amendment, claims 1-20 were pending in this application. By this Amendment, claims 1, 3, and 14 are amended, and claims 2, 4, 15, and 16 are canceled. Claims 1, 3, 5-14, and 17-20 are now pending in this application. No new matter is added. Withdrawal of the rejections in view of the above amendments and following remarks is respectfully requested.

### **I. Allowable Subject Matter**

Applicants thank the Examiner for the telephonic conversation with Applicants' representative (Aroon Karuna, Reg. No. 68,335) on December 14, 2021. Applicants' representative discussed the allowable subject matter of Claims 4 and 16, and indicated willingness to amend the independent claims 1 and 14 in order to incorporate the allowable subject matter from claims 4 and 16. The Examiner indicated that doing so would result in an allowance.

Applicant thus amends the claims accordingly.

### **II. Claim Rejections Under 35 USC 102**

The Office Action rejected claims 1, 2, 3, 5, 8, 12-15, 17, and 19 as being anticipated by Jaynes.

As described above, Applicants have amended the claims to incorporate the allowable subject matter from 4 and 16 into independent claims 1 and 14. Since claim 4 depends on claim 2, both claims 2 and 4 have been incorporated into independent claim 1. Similarly, since claim 16 depends on claim 15, both claims 15 and 16 have been incorporated into independent claim 14. Claims 2, 4, 15, and 16 have been canceled due to these amendments.

Since the rejected dependent claims depend on the currently amended independent claims 1 and 14, Applicants submit that all claims under 35 USC 102 are currently in condition for allowance.

### **III. Claim Rejections Under 35 USC 103**

The Office Action rejected claims 6, 7, and 18 as being unpatentable over Jaynes in view of Kenjalkar. Claims 9 and 20 have been rejected as being unpatentable over Jaynes in view of Nelson. Claim 10 and 11 have been rejected as being unpatentable over Jaynes in view of Jones.

As described above, Applicants have amended the claims to incorporate the allowable subject matter from 4 and 16 into independent claims 1 and 14. Since claim 4 depends on claim 2, both claims 2 and 4 have been incorporated into independent claim 1. Similarly, since claim 16 depends on claim 15, both claims 15 and 16 have been incorporated into independent claim 14. Claims 2, 4, 15, and 16 have been canceled due to these amendments.

Since the rejected claims 6, 7, 9-11, 18, and 20 depend on currently amended independent claims 1 and 14, Applicants submit that all claims rejected under 35 USC 103 are currently in condition for allowance.

### **IV. Conclusion**

For all of the above reasons, Applicant submits that all pending claims are in condition for allowance and respectfully requests favorable action on this Application. In order to efficiently prosecute this Application, the Applicant has presented only a selection of arguments regarding the pending claims. The fact that Applicant has chosen not to raise any particular argument at this time should not be deemed a waiver or an acquiescence to any position. Applicant reserves the right to raise arguments at a later date in order to maintain efficient prosecution.

Respectfully Submitted,

/Aroon Karuna/

Reg. No. 68,335

December 26, 2021

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**Courtesy Reminder for  
Application Serial No: 17/390,922**

Attorney Docket No: 2390-022993  
Customer Number: 180741  
Date of Electronic Notification: 12/08/2021

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

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

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| APPLICATION NO.                                                                   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 17/390,922                                                                        | 07/31/2021  | Lin Han              | 2390-022993         | 7201             |
| 180741                                                                            | 7590        | 12/07/2021           | EXAMINER            |                  |
| Cognition IP, P.C.<br>201 Mission Street<br>Suite 1200<br>San Francisco, CA 94105 |             |                      | NUNEZ, JORDANY      |                  |
|                                                                                   |             |                      | ART UNIT            | PAPER NUMBER     |
|                                                                                   |             |                      | 2171                |                  |
|                                                                                   |             |                      | NOTIFICATION DATE   | DELIVERY MODE    |
|                                                                                   |             |                      | 12/07/2021          | ELECTRONIC       |

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

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

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

PAIR-notifications@cognitionip.com  
esteakley@cognitionip.com



***Notice of Pre-AIA or AIA Status***

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

***Allowable Subject Matter***

Claims 4, 16 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.

***Claim Rejections - 35 USC § 102***

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

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

(a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

Claims 1, 2, 3, 5, 8, 12-15, 17, 19 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Jaynes (US20140240445, Jaynes).

As to claims 1, 14, Jaynes shows:

A method, and corresponding non-transitory computer-readable medium, for providing multiple participants of a communication session with the ability to share screen elements simultaneously, comprising:

connecting a plurality of participants of a communication session to a live communication stream (¶ [0039]) (e.g., shared display session with live updates),

wherein the communication session comprises a communication interface for each participant (¶ [0037]) (e.g., user interface on client display);

receiving, from a first participant of the communication session, a request to initiate sharing of one or more screen elements from a user device associated with the first participant (¶ [0052]) (e.g., initiating a publish command);

in response to the request, capturing and displaying the one or more screen elements from the user device of the first participant to the communication interfaces of the plurality of participants (¶ [0053], [0045]) (e.g., capturing a media frame and publishing it on display 510; a client may display its own media post and the media posts from other clients);

receiving, from one or more additional participants of the communication session, additional requests to initiate sharing of one or more additional screen elements from the user devices associated with the additional participants (¶ [0052]) (e.g., initiating a publish command by another client 106);

in response to the additional requests, capturing and displaying the one or more additional screen elements from the user devices of the additional participants to the communication interfaces of the plurality of participants, such that a plurality of screen elements are displayed concurrently (¶ [0053], [0045]) (e.g., capturing a media frame and publishing it on display 510; a client may display its own media post and the media posts from other clients).

As to claims 2, 15, Jaynes shows:

further comprising:

providing one or more of the participants with control over configuration of the screen elements and the additional screen elements via the communication interfaces for the participants (¶ [0043]) (a client 106(1) may move, resize, and zoom in on another client's window).

As to claim 3, Jaynes shows:

The method of claim 2, wherein the screens are configured to be viewed adjacent to one another on a single screen of a user device for the participant (figs. 5a, 5b, el. 408).

As to claims 5, 17, Jaynes shows:

The method of claim 1, further comprising:

receiving a request from a participant to remotely control a screen element of another participant;

and based on the request, providing the ability for the participant to remotely control the screen element of the other participant (¶ [0043]) (a client 106(1) may move, resize, and zoom in on another client's window).

As to claims 8, 19, Jaynes shows:

wherein the displayed screen elements comprise one or more of: an application, a whiteboard, a window, a desktop interface, a presentation, or any combination thereof (¶ [0052]).

As to claim 12, Jaynes shows:

The method of claim 1, wherein each participant has the ability to maximize, minimize, resize, and/or position the displayed screen element as a window within the communication interface of the participant (¶ [0043]) (a client 106(1) may move, resize, and zoom in on another client's window).

As to claim 13, Jaynes shows:

The method of claim 1, wherein there is no limitation to the number of screen elements which can be displayed simultaneously, such that an arbitrary number of participants can concurrently display an arbitrary number of screen elements (¶ [0039]) (e.g., the number of shaded boxes may arbitrarily be set by a user, based on how many published media posts the user wants to be notified of).

It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

### ***Claim Rejections - 35 USC § 103***

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

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims the examiner presumes that the subject matter of the various claims was commonly owned as of the effective filing date of the claimed invention(s) absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and effective filing dates of each claim that

Art Unit: 2171

was not commonly owned as of the effective filing date of the later invention in order for the examiner to consider the applicability of 35 U.S.C. 102(b)(2)(C) for any potential 35 U.S.C. 102(a)(2) prior art against the later invention.

Note: In order to better show what is and is not taught by the references, Examiner shows some words ~~stricken through~~ and some others underlined. Words that are ~~stricken through~~ are claim limitations not specifically taught in the reference. Words that are underlined indicate teachings of the cited reference, and may not specifically be claimed.

Claims 6, 7, 18 are rejected under 35 U.S.C. 103 as being unpatentable over Jaynes (US20140240445, Jaynes) in view of Kenjalkar (US20160378417).

As to claims 6, 7, 18:

Jaynes shows a method substantially as claimed, as specified above.

Jaynes fails to specifically show: wherein one of the participants is the host, and the host is granted permission to configure sharing privileges of screen elements for the other participants; wherein at least one of the participants is a host of the communication session, and the host is granted permission to configure which screen is viewed by all participants as a primary screen within the communication session.

In the same field of invention, Kenjalkar teaches: collaboration system with managed screen sharing. Kenjalkar further teaches: wherein one of the participants is the host, and the host is granted permission to configure sharing privileges of screen elements for the other participants; wherein at least one of the participants is a host of the communication session, and the host is granted permission to

Art Unit: 2171

configure which screen is viewed by all participants as a primary screen within the communication session (¶ [0086]) (e.g., e orchestrator can select at least one participant device to pair as a source with at least one receiver device. In this example, Steve's user device has been selected as a source for a receiver called Unity 1. As a result, both Steve and Unity 1 are visually highlighted to indicate the pairing).

Thus, it would have been obvious to one of ordinary skill in the art, having the teachings of Jaynes and Kenjalkar before the effective filing date of the invention, to have combined the teachings of Kenjalkar with the method as taught by Jaynes.

One would have been motivated to make such combination because a way to allow a meeting orchestrator to manage a meeting would have been obtained and desired, as expressly taught by Kenjalkar (¶ [0004]).

Claims 9, 20 are rejected under 35 U.S.C. 103 as being unpatentable over Jaynes (US20140240445, Jaynes) in view of Nelson et al. (US20170302887, Nelson).

As to claims 9, 20:

Jaynes shows a method substantially as claimed, as specified above.

Jaynes fails to specifically show:

wherein each participant is provided with the ability to provide annotations within screen elements displayed by the participant and/or other participants.

In the same field of invention, Nelson teaches: integration of video conferencing with interactive whiteboard. Nelson further teaches:

each participant being provided with the ability to provide annotations within screen elements displayed by the participant and/or other participants (¶ [0048]) (e.g., interactive whiteboard controls

Art Unit: 2171

308 allows a user to perform various functions with respect to interactive whiteboard session window 302, such as rotate, zoom and start annotation).

Thus, it would have been obvious to one of ordinary skill in the art, having the teachings of Jaynes and Nelson before the effective filing date of the invention, to have combined the teachings of Nelson with the method as taught by Jaynes.

One would have been motivated to make such combination because a way to allow a user to perform various functions with respect to interactive whiteboard session window would have been obtained and desired, as expressly taught by Nelson (¶ [0004]).

Claims 10, 11 are rejected under 35 U.S.C. 103 as being unpatentable over Jaynes (US20140240445, Jaynes) in view of Jones et al. (US9189143, Jones).

As to claims 10, 11:

Jaynes shows a method substantially as claimed, as specified above.

Jaynes fails to specifically show:

wherein the session is recorded and stored for later viewing, and at least the host is granted permission to configure which of the screen elements end up within the recording;

wherein upon playback of the recorded session, the user viewing the recording can switch between screen elements that are shared or configure how screen elements are viewed.

In the same field of invention, Nelson teaches: integration of video conferring with interactive whiteboard. Nelson further teaches:

A session being recorded and stored for later viewing, and at least the host is granted permission to configure which of the screen elements end up within the recording (col. 69, l. 37-41) (e.g., the conference interface may present a record/playback navigation controller);

upon playback of the recorded session, the user viewing the recording can switch between screen elements that are shared or configure how screen elements are viewed (col. 68, l. 23-36) (e.g., the component may appear to be raised from a bottom portion of the conference interface 11900 and the participant objects 11902 may be automatically rearranged in the remaining available screen space).

Thus, it would have been obvious to one of ordinary skill in the art, having the teachings of Jaynes and Jones before the effective filing date of the invention, to have combined the teachings of Jones with the method as taught by Jaynes.

One would have been motivated to make such combination because a way to facilitate various record and playback features and to improve the method and systems for conference and meetings would have been obtained and desired, as expressly taught by Jones (col. 69, l. 37-41; col. 2, l. 29-33).

It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

|            |                 |
|------------|-----------------|
| Pell       | [U.S. 10645137] |
| Pantazelos | [U.S. 10931676] |
| Jo et al.  | [U.S. 9282167]  |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordany Núñez whose telephone number is (571)272-2753. The examiner can normally be reached on M-F 8:30 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Abdullah Kawsar can be reached on 5712703264. 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).

/JORDANY NUNEZ/  
Primary Examiner, Art Unit 2171  
12/1/2021

|                                          |                                       |  |                                                          |             |
|------------------------------------------|---------------------------------------|--|----------------------------------------------------------|-------------|
| <b><i>Notice of References Cited</i></b> | Application/Control No.<br>17/390,922 |  | Applicant(s)/Patent Under<br>Reexamination<br>Han et al. |             |
|                                          | Examiner<br>Jordany Núñez             |  | Art Unit<br>2171                                         | Page 1 of 3 |

**U.S. PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Name                         | CPC Classification | US Classification |
|---|---|--------------------------------------------------|-----------------|------------------------------|--------------------|-------------------|
| * | A | US-20140240445-A1                                | 08-2014         | Jaynes; Christopher O.       | H04N21/431         | 348/14.07         |
| * | B | US-20120274728-A1                                | 11-2012         | Yasoshima; Mizuho            | H04L67/1074        | 348/14.07         |
| * | C | US-10645137-B2                                   | 05-2020         | Pell; Oliver                 | H04N7/15           | 1/1               |
| * | D | US-20120319927-A1                                | 12-2012         | KHATIB; IMTIYAZ ALTAFHUSSAIN | G06F3/1446         | 345/2.1           |
| * | E | US-20170302887-A1                                | 10-2017         | Nelson; Steven               | H04L65/403         | 1/1               |
| * | F | US-10397520-B2                                   | 08-2019         | Nelson; Steven               | H04M7/0027         | 1/1               |
| * | G | US-20140129948-A1                                | 05-2014         | Jones; Alicia C.             | G06F3/048          | 715/733           |
| * | H | US-20120084672-A1                                | 04-2012         | Vonog; Stanislav             | H04L12/1827        | 715/756           |
| * | I | US-10768803-B2                                   | 09-2020         | Van Der Zaag; Bert           | G06F9/451          | 1/1               |
| * | J | US-9282167-B2                                    | 03-2016         | Jo; Sun-haeng                | G06F3/1454         | 1/1               |
| * | K | US-20080048975-A1                                | 02-2008         | Leibow; Michael              | G06F3/1454         | 345/156           |
| * | L | US-20110271211-A1                                | 11-2011         | JONES; BOLAND T.             | H04M3/567          | 715/753           |
| * | M | US-20210120053-A1                                | 04-2021         | SHIN; Hwang Kyu              | H04L67/1068        | 1/1               |

**FOREIGN PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Country | Name | CPC Classification |
|---|---|--------------------------------------------------|-----------------|---------|------|--------------------|
|   | N |                                                  |                 |         |      |                    |
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|   | 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.

|                                          |                                       |  |                                                          |             |
|------------------------------------------|---------------------------------------|--|----------------------------------------------------------|-------------|
| <b><i>Notice of References Cited</i></b> | Application/Control No.<br>17/390,922 |  | Applicant(s)/Patent Under<br>Reexamination<br>Han et al. |             |
|                                          | Examiner<br>Jordany Núñez             |  | Art Unit<br>2171                                         | Page 2 of 3 |

**U.S. PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Name                  | CPC Classification | US Classification |
|---|---|--------------------------------------------------|-----------------|-----------------------|--------------------|-------------------|
| * | A | US-20160231888-A1                                | 08-2016         | Govindraj; Rohith     | G06F3/0485         | 1/1               |
| * | B | US-20180254067-A1                                | 09-2018         | ELDER; Lloyd John     | G06F3/0488         | 1/1               |
| * | C | US-10931676-B2                                   | 02-2021         | Pantazelos; George    | G06F21/6263        | 1/1               |
| * | D | US-4974173-A                                     | 11-1990         | Stefik; Mark J.       | G06F9/451          | 715/751           |
| * | E | US-9189143-B2                                    | 11-2015         | Jones; Boland T.      | G06F3/0488         | 1/1               |
| * | F | US-11132643-B1                                   | 09-2021         | Casale; Robert        | G06F3/0481         | 1/1               |
| * | G | US-20200333994-A1                                | 10-2020         | Sepulveda; Raymond S. | G06F3/0416         | 1/1               |
| * | H | US-5107443-A                                     | 04-1992         | Smith; Randall B.     | G06Q10/10          | 713/166           |
| * | I | US-20160378417-A1                                | 12-2016         | Kenjalkar; Avanti     | H04L65/1089        | 345/2.2           |
| * | J | US-20090213205-A1                                | 08-2009         | Ivashin; Victor       | H04L67/125         | 348/14.08         |
| * | K | US-20090094532-A1                                | 04-2009         | Lyle; Ruthie D.       | G06Q10/109         | 715/753           |
| * | L | US-8091029-B1                                    | 01-2012         | Gay; Jonathan         | G06F9/451          | 715/734           |
| * | M | US-10139917-B1                                   | 11-2018         | Nariyawala; Mehul     | H04N7/15           | 1/1               |

**FOREIGN PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Country | Name | CPC Classification |
|---|---|--------------------------------------------------|-----------------|---------|------|--------------------|
|   | N |                                                  |                 |         |      |                    |
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**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.

|                                   |                                       |  |                                                          |             |
|-----------------------------------|---------------------------------------|--|----------------------------------------------------------|-------------|
| <b>Notice of References Cited</b> | Application/Control No.<br>17/390,922 |  | Applicant(s)/Patent Under<br>Reexamination<br>Han et al. |             |
|                                   | Examiner<br>Jordany Núñez             |  | Art Unit<br>2171                                         | Page 3 of 3 |

U.S. PATENT DOCUMENTS

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Name            | CPC Classification | US Classification |
|---|---|--------------------------------------------------|-----------------|-----------------|--------------------|-------------------|
| * | A | US-20120203844-A1                                | 08-2012         | WANG; Sherman   | H04L12/189         | 709/206           |
| * | B | US-9077776-B1                                    | 07-2015         | Salesky; Joseph | G06F3/04842        | 1/1               |
| * | C | US-5796396-A                                     | 08-1998         | Rich; Charles   | G06F3/038          | 715/741           |
| * | D | US-20210365231-A1                                | 11-2021         | BJORK; M RTEN   | G06F3/0481         | 1/1               |
|   | E |                                                  |                 |                 |                    |                   |
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FOREIGN PATENT DOCUMENTS

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NON-PATENT DOCUMENTS

| * |   | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
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\*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.

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|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------|--------------------------------------------------------------|
| <b><i>Search Notes</i></b><br> | <b>Application/Control No.</b><br>17/390,922 | <b>Applicant(s)/Patent Under Reexamination</b><br>Han et al. |
|                                                                                                                 | <b>Examiner</b><br>Jordany Núñez             | <b>Art Unit</b><br>2171                                      |

| CPC - Searched*                |            |          |
|--------------------------------|------------|----------|
| Symbol                         | Date       | Examiner |
| H04L65/403 with keyword search | 11/29/2021 | JN       |
| G06F3/1454 with keyword search | 11/29/2021 | JN       |
| G06F3/0481 with keyword search | 11/29/2021 | JN       |

| CPC Combination Sets - Searched* |      |          |
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| US Classification - Searched* |          |      |          |
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| Class                         | Subclass | Date | Examiner |
|                               |          |      |          |

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

| Search Notes                                |            |          |
|---------------------------------------------|------------|----------|
| Search Notes                                | Date       | Examiner |
| USPAT, US PGPUB, EPO, JPO, Derwent, IBM-IDB | 11/29/2021 | JN       |
| inventor and assignee search                | 11/29/2021 | JN       |
| plus                                        | 11/29/2021 | JN       |
| scholar.google.com/                         | 11/29/2021 | JN       |

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

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| /JORDANY NUNEZ/<br>Primary Examiner, Art Unit 2171 |  |
|----------------------------------------------------|--|

|                                                                                                                    |                                              |                                                              |
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| <b><i>Index of Claims</i></b><br> | <b>Application/Control No.</b><br>17/390,922 | <b>Applicant(s)/Patent Under Reexamination</b><br>Han et al. |
|                                                                                                                    | <b>Examiner</b><br>Jordany Núñez             | <b>Art Unit</b><br>2171                                      |

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|---|-----------------|---|-------------------|---|---------------------|---|-----------------|
| ✓ | <b>Rejected</b> | - | <b>Cancelled</b>  | N | <b>Non-Elected</b>  | A | <b>Appeal</b>   |
| = | <b>Allowed</b>  | ÷ | <b>Restricted</b> | I | <b>Interference</b> | O | <b>Objected</b> |

| CLAIMS                                                                                                                                                                            |          |            |      |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------|------|--|--|--|--|--|--|--|
| <input type="checkbox"/> Claims renumbered in the same order as presented by applicant <input type="checkbox"/> CPA <input type="checkbox"/> T.D. <input type="checkbox"/> R.1.47 |          |            |      |  |  |  |  |  |  |  |
| CLAIM                                                                                                                                                                             |          |            | DATE |  |  |  |  |  |  |  |
| Final                                                                                                                                                                             | Original | 11/29/2021 |      |  |  |  |  |  |  |  |
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## PE2E SEARCH - Search History (Prior Art)

| Ref # | Hits | Search Query                                                                                                            | DBs                                         | Default Operator | Plurals | British Equivalents | Time Stamp          |
|-------|------|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------------|---------|---------------------|---------------------|
| L1    | 15   | ((("ZOOM") near3 ("VIDEO") near3 ("COMMUNICATIONS") near3 ("INC"))).AS,AANM.                                            | (USPAT)                                     | OR               | ON      | ON                  | 2021/11/27 02:36 PM |
| L2    | 7569 | (H04L65/403 OR G06F3/1454).cpc.                                                                                         | (USPAT)                                     | OR               | ON      | ON                  | 2021/11/27 02:37 PM |
| L3    | 2373 | ((("HAN") near3 ("Lin")) OR (("LING") near3 ("Bo")) OR (("SHENG") near3 ("Sam")) OR (("WALIA") near3 ("Nitasha"))).INV. | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:37 PM |
| L4    | 1    | 1 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near4 (display\$4)                                            | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:38 PM |
| L5    | 1    | 1 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near4 (display\$4)                                            | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:38 PM |
| L6    | 3230 | 2 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near4 (display\$4)                                            | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:39 PM |
| L7    | 9    | 3 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near4 (display\$4)                                            | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:39 PM |
| L8    | 1331 | 2 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near8 (display\$4) near8 (users participants)                 | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:49 PM |
| L9    | 297  | 2 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near8 (display\$4) near8 (users participants) SAME (shar\$4)  | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:49 PM |
| L10   | 2    | ("20140240445").pn.                                                                                                     | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 02:54 PM |
| L11   | 0    | (14/190318).APP.                                                                                                        | (USPAT; USOCR)                              | OR               | ON      | ON                  | 2021/11/27 02:54 PM |
| L12   | 3    | "20120274728"                                                                                                           | (US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT) | OR               | ON      | ON                  | 2021/11/27 03:07 PM |

|     |        |                                                                                                                                                                                                                                                   |                          |    |    |    |                     |
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| L13 | 11     | ("5432525"   "5915091"   "6008809"   "6025871"   "8467509"   "8527907"   "20100287496"   "20120030616").pn. OR ("8848022").urpn. AND (PGPB   USPT   USOC).dbnm.                                                                                   | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/11/27 03:07 PM |
| L14 | 1      | (15/637006).APP.                                                                                                                                                                                                                                  | (USPAT; USOCR)           | OR | ON | ON | 2021/11/27 03:12 PM |
| L15 | 6      | ("8140997"   "9699411"   "20020026323"   "20040236830"   "20120278738"   "20150134737").pn. OR ("10397520").urpn. AND (PGPB   USPT   USOC).dbnm.                                                                                                  | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/11/27 03:12 PM |
| L16 | 287    | 2 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near8 (display\$4) near8 (users participants) SAME (shar\$4)                                                                                                                            | (US-PGPUB; USPAT)        | OR | ON | ON | 2021/11/27 08:22 PM |
| L17 | 0      | (13/672383).APP.                                                                                                                                                                                                                                  | (USPAT; USOCR)           | OR | ON | ON | 2021/11/27 08:24 PM |
| L18 | 4      | ("20030115200" "20140033049" "6973432" "20080081601" "6636803" "20130217330" "8433650" "20090083637" "20110193788" "20070271234" "20120246024" "20110055247" "4870576" "20130097554" "20100111410" "20110197147" "20120084672" "20140082079").PN. | (USPAT; USOCR)           | OR | ON | ON | 2021/11/27 08:25 PM |
| L19 | 18     | ("20030115200" "20140033049" "6973432" "20080081601" "6636803" "20130217330" "8433650" "20090083637" "20110193788" "20070271234" "20120246024" "20110055247" "4870576" "20130097554" "20100111410" "20110197147" "20120084672" "20140082079").PN. | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/11/27 08:25 PM |
| L20 | 178935 | (conferenc\$4 videoconferenc\$4).ti,ab, bsum,clm.                                                                                                                                                                                                 | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/11/27 08:42 PM |
| L21 | 180    | 20 AND (concurrent\$4 simultaneous\$4                                                                                                                                                                                                             | (US-PGPUB; USPAT)        | OR | ON | ON | 2021/11/27 08:44 PM |

|     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                   |    |    |    |                        |
|-----|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----|----|----|------------------------|
|     |     | ("same" near4 time))<br>near8 (display\$4) near8<br>(users participants)<br>SAME<br>(shar\$4).ti,ab,bsum,clm.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   |    |    |    |                        |
| L22 | 160 | 20 AND (concurrent\$4<br>simultaneous\$4<br>("same" near4 time))<br>near8 (display\$4) near8<br>(users participants)<br>SAME<br>(shar\$4).ti,ab,bsum,clm.<br>AND (click\$4 select\$4<br>choos\$4) near4 (user\$4<br>participant\$4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | (US-PGPUB; USPAT) | OR | ON | ON | 2021/11/27<br>08:53 PM |
| L23 | 160 | ((US-20190272510-A1<br>OR US-20110271211-<br>A1 OR US-<br>20150172335-A1 OR<br>US-20020016861-A1<br>OR US-20160216933-<br>A1 OR US-<br>20110225039-A1 OR<br>US-20120284642-A1<br>OR US-20170302887-<br>A1 OR US-<br>20120284635-A1 OR<br>US-20120284634-A1<br>OR US-20190147402-<br>A1 OR US-<br>20120284605-A1 OR<br>US-20160231888-A1<br>OR US-20200371968-<br>A1 OR US-<br>20120284645-A1 OR<br>US-20120284644-A1<br>OR US-20200027062-<br>A1 OR US-<br>20120284197-A1 OR<br>US-20120284643-A1<br>OR US-20100293035-<br>A1 OR US-<br>20180254067-A1 OR<br>US-20210318786-A1<br>OR US-20160119388-<br>A1 OR US-<br>20190014159-A9 OR<br>US-20120284633-A1<br>OR US-20190325014-<br>A1 OR US-<br>20160283456-A1 OR<br>US-20190005011-A9<br>OR US-20120284606-<br>A1 OR US-<br>20120284641-A1 OR<br>US-20150149929-A1<br>OR US-20130024418- | (US-PGPUB; USPAT) | OR | ON | ON | 2021/11/27<br>08:54 PM |

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|  |  | A1 OR US-<br>20200371967-A1 OR<br>US-20200210350-A1<br>OR US-20150263905-<br>A1 OR US-<br>20150089395-A1 OR<br>US-20170177511-A1<br>OR US-20130067121-<br>A1 OR US-<br>20140240445-A1 OR<br>US-20210336859-A1<br>OR US-20210357169-<br>A1 OR US-<br>20150326522-A1 OR<br>US-20140082227-A1<br>OR US-20150154126-<br>A2 OR US-<br>20140201400-A1 OR<br>US-20140351462-A1<br>OR US-20120284646-<br>A1 OR US-<br>20210099488-A1 OR<br>US-20150121466-A1<br>OR US-20150169477-<br>A1 OR US-<br>20170351621-A9 OR<br>US-20200250110-A1<br>OR US-20180323988-<br>A1 OR US-<br>20180349011-A1 OR<br>US-20180254066-A1<br>OR US-20210120053-<br>A1 OR US-<br>20130198795-A1 OR<br>US-20160269684-A1<br>OR US-20090327448-<br>A1 OR US-<br>20170116581-A1 OR<br>US-20100002069-A1<br>OR US-20020016821-<br>A1 OR US-<br>20180249113-A1 OR<br>US-20190028667-A1<br>OR US-20180083978-<br>A1 OR US-<br>20140317660-A1 OR<br>US-20160029094-A1<br>OR US-20200142548-<br>A1 OR US-<br>20180316941-A1 OR<br>US-20210117053-A1<br>OR US-20140223333-<br>A1 OR US-<br>20100192107-A1 OR<br>US-20190354335-A1<br>OR US-20050198578-<br>A1 OR US-<br>20190324704-A1 OR |  |  |  |  |  |
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|  |  | US-20160050395-A1<br>OR US-20130182914-A1).did. AND<br>PGPB.dbnm.) OR ((US-<br>10909506-B2 OR US-<br>10554728-B2 OR US-<br>10120541-B2 OR US-<br>9225755-B2 OR US-<br>6351777-B1 OR US-<br>5442788-A OR US-<br>10127003-B2 OR US-<br>8806352-B2 OR US-<br>9189143-B2 OR US-<br>10387836-B2 OR US-<br>8826147-B2 OR US-<br>10397520-B2 OR US-<br>9699411-B2 OR US-<br>8918722-B2 OR US-<br>10796282-B2 OR US-<br>10802703-B2 OR US-<br>9880718-B1 OR US-<br>6463460-B1 OR US-<br>8875011-B2 OR US-<br>10303347-B1 OR US-<br>10104355-B1 OR US-<br>9224129-B2 OR US-<br>8924859-B2 OR US-<br>8918724-B2 OR US-<br>9330366-B2 OR US-<br>7043529-B1 OR US-<br>8918723-B2 OR US-<br>7024456-B1 OR US-<br>9398059-B2 OR US-<br>9852398-B1 OR US-<br>11003842-B2 OR US-<br>8918721-B2 OR US-<br>8990677-B2 OR US-<br>9195965-B2 OR US-<br>10402485-B2 OR US-<br>7478129-B1 OR US-<br>8756348-B2 OR US-<br>10354226-B1 OR US-<br>10339501-B1 OR US-<br>10585814-B2 OR US-<br>10860981-B1 OR US-<br>11151060-B2 OR US-<br>10050800-B2 OR US-<br>10282752-B2 OR US-<br>5796396-A OR US-<br>9846859-B1 OR US-<br>10904103-B2 OR US-<br>9083769-B2 OR US-<br>11132643-B1 OR US-<br>8914735-B2 OR US-<br>10789574-B1 OR US-<br>9722986-B2 OR US-<br>10320857-B2 OR US-<br>10762002-B2 OR US- |  |  |  |  |  |
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|     |       | 5107443-A OR US-10795832-B2 OR US-11112949-B2 OR US-10965480-B2 OR US-9852399-B1 OR US-7162528-B1 OR US-10685327-B1 OR US-8421840-B2 OR US-9071883-B2 OR US-9749587-B2 OR US-11074555-B2 OR US-8285812-B2 OR US-11074552-B1 OR US-10070093-B1 OR US-10908783-B2 OR US-5764277-A OR US-9299061-B2 OR US-10931676-B2 OR US-9621958-B2 OR US-5767850-A OR US-6011552-A OR US-5990932-A OR US-7458029-B2 OR US-9674488-B2 OR US-9171199-B2 OR US-4974173-A OR US-7533146-B1 OR US-9065972-B1 OR US-9531995-B1).did. AND USPT.dbnm.) |                          |    |    |    |                     |
| L24 | 160   | 23 AND (click\$4 select\$4 choos\$4) near4 (user\$4 participant\$4)                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (US-PGPUB; USPAT)        | OR | ON | ON | 2021/11/27 08:54 PM |
| L25 | 18609 | (H04L65/403 OR G06F3/1454 OR G06F3/0481).cpc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (USPAT)                  | OR | ON | ON | 2021/11/29 08:37 PM |
| L26 | 135   | 25 AND (concurrent\$4 simultaneous\$4 ("same" near4 time)) near8 (display\$4) near8 (users participants) SAME (shar\$4).ti,ab,bsum,clm. AND (click\$4 select\$4 choos\$4) near4 (user\$4 participant\$4)                                                                                                                                                                                                                                                                                                                        | (US-PGPUB; USPAT)        | OR | ON | ON | 2021/11/29 08:38 PM |
| L27 | 1     | "20160378417".pn.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | (US-PGPUB; USPAT)        | OR | ON | ON | 2021/12/01 02:27 PM |
| L28 | 1     | (14/747486).APP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (USPAT; USOCR)           | OR | ON | ON | 2021/12/01 04:00 PM |
| L29 | 29    | ("5634057"   "6901275"   "8576750"   "8832785"   "9832314"   "10474416"                                                                                                                                                                                                                                                                                                                                                                                                                                                         | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 05:50 PM |

|     |      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                             |    |    |    |                        |
|-----|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----|----|----|------------------------|
|     |      | "10789035"  <br>"20020090914"  <br>"20060208871"  <br>"20070115346"  <br>"20070198141"  <br>"20090217177"  <br>"20110276900"  <br>"20110307571"  <br>"20130066974"  <br>"20130271403"  <br>"20130309648"  <br>"20140143672"  <br>"20150019694"  <br>"20150201023"  <br>"20150230047"  <br>"20150253938"  <br>"20150286816"  <br>"20150304484"  <br>"20150309765"  <br>"20150334245"  <br>"20160210006"  <br>"20160378417"  <br>"20170118258").pn. OR<br>("11106417").urpn.<br>AND (PGPB   USPT  <br>USOC).dbnm. |                             |    |    |    |                        |
| L30 | 1846 | (multiple plurality<br>several many) near4<br>presenters                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (US-PGPUB; USPAT;<br>USOCR) | OR | ON | ON | 2021/12/01<br>05:55 PM |
| L31 | 674  | 30 AND (conferenc\$4<br>videoconferenc\$4).ti,ab,<br>bsum,clm.                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (US-PGPUB; USPAT;<br>USOCR) | OR | ON | ON | 2021/12/01<br>05:56 PM |
| L32 | 674  | ((US-20140362165-A1<br>OR US-20100037151-<br>A1 OR US-<br>20040230651-A1 OR<br>US-20210014074-A1<br>OR US-20090213205-<br>A1 OR US-<br>20110307550-A1 OR<br>US-20120004940-A1<br>OR US-20170237788-<br>A1 OR US-<br>20080133769-A1 OR<br>US-20200106813-A1<br>OR US-20100293226-<br>A1 OR US-<br>20170262774-A1 OR<br>US-20130080560-A1<br>OR US-20080183808-<br>A1 OR US-<br>20080133660-A1 OR<br>US-20080133661-A1<br>OR US-20080183807-<br>A1 OR US-<br>20040080504-A1 OR<br>US-20160149968-A1               | (US-PGPUB; USPAT)           | OR | ON | ON | 2021/12/01<br>05:56 PM |

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|  |  | OR US-20150009278-A1 OR US-20190158565-A1 OR US-20140232814-A1 OR US-20090055240-A1 OR US-20080215680-A1 OR US-20080195704-A1 OR US-20080195703-A1 OR US-20120102111-A1 OR US-20100306674-A1 OR US-20140258406-A1 OR US-20030134260-A1 OR US-20080183820-A1 OR US-20100223320-A1 OR US-20150309766-A1 OR US-20130258042-A1 OR US-20160234269-A1 OR US-20050169197-A1 OR US-20050080850-A1 OR US-20050163062-A1 OR US-20130246529-A1 OR US-20080195955-A1 OR US-20160072863-A1 OR US-20070083597-A1 OR US-20090164876-A1 OR US-20090300519-A1 OR US-20080016156-A1 OR US-20160094355-A1 OR US-20120110196-A1 OR US-20170150099-A1 OR US-20160173823-A1 OR US-20180145840-A1 OR US-20130328998-A1 OR US-20120102110-A1 OR US-20080168137-A1 OR US-20160182580-A1 OR US-20130238618-A1 OR US-20030078970-A1 OR US-20150200982-A1 OR US-20210368135-A1 OR US-20060182249-A1 OR US-20120200658-A1 OR US-20110283008-A1 OR US-20100325561-A1 OR US- |  |  |  |  |  |
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|  |  | 20110300841-A1 OR<br>US-20210058439-A1<br>OR US-20020169831-<br>A1 OR US-<br>20030208536-A9 OR<br>US-20130239180-A1<br>OR US-20160094354-<br>A1 OR US-<br>20150326824-A1 OR<br>US-20180077205-A1<br>OR US-20140122588-<br>A1 OR US-<br>20180070049-A1 OR<br>US-20030098819-A1<br>OR US-20200145617-<br>A1 OR US-<br>20210126915-A1 OR<br>US-20210352245-A1<br>OR US-20190373039-<br>A1 OR US-<br>20130311177-A1 OR<br>US-20140362163-A1<br>OR US-20130238705-<br>A1 OR US-<br>20140247319-A1 OR<br>US-20130238725-A1<br>OR US-20130238704-<br>A1 OR US-<br>20130238703-A1 OR<br>US-20080307105-A1<br>OR US-20160103200-<br>A1 OR US-<br>20160094593-A1 OR<br>US-20130239013-A1<br>OR US-20110249954-<br>A1 OR US-<br>20040088168-A1 OR<br>US-20070223539-A1<br>OR US-20170085606-<br>A1 OR US-<br>20150106227-A1 OR<br>US-20130019186-A1<br>OR US-20160277345-<br>A1 OR US-<br>20160065625-A1 OR<br>US-20190007556-A1<br>OR US-20180211660-<br>A1 OR US-<br>20190244616-A1 OR<br>US-20190244615-A1<br>OR US-20090282339-<br>A1 OR US-<br>20200389334-A1 OR<br>US-20200021453-A1<br>OR US-20050068442-<br>A1 OR US-<br>20090164875-A1 OR<br>US-20190068670-A1 |  |  |  |  |  |
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|  |  | OR US-20190289198-A1 OR US-20130185356-A1 OR US-20160073054-A1 OR US-20150039688-A1 OR US-20150369783-A1 OR US-20190222891-A1 OR US-20190182063-A1 OR US-20190379712-A1 OR US-20120133727-A1 OR US-20150082194-A1 OR US-20050043973-A1 OR US-20140059010-A1 OR US-20090094532-A1 OR US-20170003927-A1 OR US-20160034111-A1 OR US-20030085922-A1 OR US-20020174181-A1 OR US-20080034085-A1 OR US-20050091579-A1 OR US-20200228359-A1 OR US-20200380468-A1 OR US-20100218120-A1 OR US-20090241033-A1 OR US-20210076002-A1 OR US-20100333175-A1 OR US-20090254839-A1 OR US-20090083639-A1 OR US-20120265815-A1 OR US-20160070534-A1 OR US-20100058410-A1 OR US-20130305167-A1 OR US-20050132408-A1 OR US-20070080892-A1 OR US-20100211823-A1 OR US-20160080436-A1 OR US-20060235927-A1 OR US-20050033817-A1 OR US-20120306993-A1 OR US-20140033133-A1 OR US-20080091838-A1 OR US-20020165922-A1 OR US-20200349429-A1 OR US-20090187935-A1 OR US- |  |  |  |  |  |
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|  |  | 20210211603-A1 OR<br>US-20030182375-A1<br>OR US-20090138554-A1 OR US-<br>20120011452-A1 OR<br>US-20070192785-A1<br>OR US-20150187076-A1 OR US-<br>20160036873-A1 OR<br>US-20210185276-A1<br>OR US-20210176429-A1 OR US-<br>20200026535-A1 OR<br>US-20200169693-A1<br>OR US-20110271129-A1 OR US-<br>20130093832-A1 OR<br>US-20030224807-A1<br>OR US-20180041639-A1 OR US-<br>20130073965-A1 OR<br>US-20210297562-A1<br>OR US-20140282089-A1 OR US-<br>20170201387-A1 OR<br>US-20150113367-A1<br>OR US-20120209906-A1 OR US-<br>20130201209-A1 OR<br>US-20150163259-A1<br>OR US-20080059583-A1 OR US-<br>20080008458-A1 OR<br>US-20150172335-A1<br>OR US-20140244754-A1 OR US-<br>20170034231-A1 OR<br>US-20080209330-A1<br>OR US-20120197991-A1 OR US-<br>20160350585-A1 OR<br>US-20160350058-A1<br>OR US-20110295392-A1 OR US-<br>20030090506-A1 OR<br>US-20070263082-A1<br>OR US-20180103233-A1 OR US-<br>20190179892-A1 OR<br>US-20160344780-A1<br>OR US-20070044017-A1 OR US-<br>20160234265-A1 OR<br>US-20160283456-A1<br>OR US-20190005011-A9 OR US-<br>20050276270-A1 OR<br>US-20060161623-A1 |  |  |  |  |  |
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|  |  | OR US-20130297696-A1 OR US-20190364083-A1 OR US-20080263010-A1 OR US-20080040187-A1 OR US-20160011845-A1 OR US-20120284645-A1 OR US-20160216933-A1 OR US-20070220162-A1 OR US-20030220973-A1 OR US-20070022159-A1 OR US-20130346881-A1 OR US-20090287790-A1 OR US-20160179456-A1 OR US-20060161624-A1 OR US-20100238262-A1 OR US-20150113369-A1 OR US-20060161622-A1 OR US-20100186056-A1 OR US-20060041687-A1 OR US-20170278415-A1 OR US-20120284197-A1 OR US-20090089379-A1 OR US-20180376035-A1 OR US-20080240684-A1 OR US-20020087496-A1 OR US-20070177115-A1 OR US-20130212490-A1 OR US-20100318916-A1 OR US-20160011729-A1 OR US-20140369405-A1 OR US-20120284643-A1 OR US-20180122254-A1 OR US-20080291119-A1 OR US-20080320080-A1 OR US-20190212968-A1 OR US-20040252185-A1 OR US-20080005244-A1 OR US-20120284646-A1 OR US-20190325014-A1 OR US-20100064010-A1 OR US-20100076861-A1 OR US-20120284634-A1 OR US-20120284642-A1 OR US- |  |  |  |  |  |
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|  |  | 20030227479-A1 OR<br>US-20120284606-A1<br>OR US-20150095802-<br>A1 OR US-<br>20080288890-A1 OR<br>US-20170289225-A1<br>OR US-20160028789-<br>A1 OR US-<br>20150112676-A1 OR<br>US-20160274855-A1<br>OR US-20100223179-<br>A1 OR US-<br>20100188477-A1 OR<br>US-20150310338-A1<br>OR US-20140068463-<br>A1 OR US-<br>20150195517-A1 OR<br>US-20160198136-A1<br>OR US-20120284635-<br>A1 OR US-<br>20170214720-A1 OR<br>US-20120284633-A1<br>OR US-20120284641-<br>A1 OR US-<br>20120290259-A1 OR<br>US-20100245532-A1<br>OR US-20140208211-<br>A1 OR US-<br>20050234811-A1 OR<br>US-20150318938-A1<br>OR US-20110214074-<br>A1 OR US-<br>20160073052-A1 OR<br>US-20180213013-A1<br>OR US-20100268694-<br>A1 OR US-<br>20120284605-A1 OR<br>US-20160119388-A1<br>OR US-20190014159-<br>A9 OR US-<br>20140310017-A1 OR<br>US-20060252547-A1<br>OR US-20140038725-<br>A1 OR US-<br>20060044517-A1 OR<br>US-20120284644-A1<br>OR US-20070299982-<br>A1 OR US-<br>20060168538-A1 OR<br>US-20210036879-A1<br>OR US-20100063756-<br>A1 OR US-<br>20200351435-A1 OR<br>US-20100318940-A1<br>OR US-20130036168-<br>A1 OR US-<br>20160134690-A1 OR<br>US-20100253621-A1 |  |  |  |  |  |
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|  |  | OR US-20180091450-A1 OR US-20100091987-A1 OR US-20060041686-A1 OR US-20180091448-A1 OR US-20170249729-A1 OR US-20110238808-A1 OR US-20100315994-A1 OR US-20060044522-A1 OR US-20160378417-A1 OR US-20160378422-A1 OR US-20110311073-A1 OR US-20140032771-A1 OR US-20160164968-A1 OR US-20130314421-A1 OR US-20200242151-A1 OR US-20020055892-A1 OR US-20100325574-A1 OR US-20100325576-A1 OR US-20100325577-A1 OR US-20160142453-A1 OR US-20210342574-A1 OR US-20210342575-A1 OR US-20050174547-A1 OR US-20170011745-A1 OR US-20170308904-A1 OR US-20110196928-A1 OR US-20200393909-A1 OR US-20020113950-A1 OR US-20130019187-A1 OR US-20130091244-A1 OR US-20210319403-A1 OR US-20200243095-A1 OR US-20190362312-A1 OR US-20050091302-A1 OR US-20170212869-A1 OR US-20090113278-A1 OR US-20080270541-A1 OR US-20150117626-A1 OR US-20100328465-A1 OR US-20120324323-A1 OR US-20210211745-A1 OR US-20100061659-A1 OR US-20190303655-A1 OR US- |  |  |  |  |  |
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|  |  | 20050091359-A1 OR<br>US-20070033528-A1<br>OR US-20150033140-<br>A1 OR US-<br>20120323704-A1 OR<br>US-20150230025-A1<br>OR US-20190147402-<br>A1 OR US-<br>20200027062-A1 OR<br>US-20120260158-A1<br>OR US-20120159356-<br>A1 OR US-<br>20130024418-A1 OR<br>US-20160050245-A1<br>OR US-20160378728-<br>A1 OR US-<br>20150301625-A1 OR<br>US-20160188001-A1<br>OR US-20100036664-<br>A1 OR US-<br>20060031779-A1 OR<br>US-20050102356-A1<br>OR US-20190158586-<br>A1 OR US-<br>20160134670-A1 OR<br>US-20200382618-A1<br>OR US-20180157340-<br>A1 OR US-<br>20200125183-A1 OR<br>US-20070048715-A1<br>OR US-20100045879-<br>A1 OR US-<br>20120226646-A1 OR<br>US-20150286942-A1<br>OR US-20060002315-<br>A1 OR US-<br>20180254067-A1 OR<br>US-20080313544-A1<br>OR US-20180121816-<br>A1 OR US-<br>20200320415-A1 OR<br>US-20150033102-A1<br>OR US-20150100525-<br>A1 OR US-<br>20040113934-A1 OR<br>US-20200326846-A1<br>OR US-20200279567-<br>A1 OR US-<br>20170195374-A1 OR<br>US-20180254066-A1<br>OR US-20090307575-<br>A1 OR US-<br>20170032377-A1 OR<br>US-20170308905-A1<br>OR US-20190043252-<br>A1 OR US-<br>20200090658-A1 OR<br>US-20210074058-A1 |  |  |  |  |  |
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|  |  | OR US-20190045157-A1 OR US-20210248819-A1 OR US-20190043266-A1 OR US-20200013217-A1 OR US-20210209850-A1 OR US-20190042832-A1 OR US-20210110604-A1 OR US-20190303087-A1 OR US-20190215486-A1 OR US-20140282013-A1 OR US-20140125697-A1 OR US-20160266864-A1 OR US-20160328204-A1 OR US-20170102912-A1 OR US-20210081161-A1 OR US-20160074480-A1).did. AND PGPB.dbnm.) OR ((US-9525711-B2 OR US-10505998-B1 OR US-8325216-B2 OR US-6760749-B1 OR US-10237411-B2 OR US-9721215-B2 OR US-10382498-B2 OR US-10630738-B1 OR US-7454460-B2 OR US-11076127-B1 OR US-8527588-B2 OR US-9584564-B2 OR US-8091029-B1 OR US-6343313-B1 OR US-8782534-B2 OR US-7369515-B2 OR US-10187435-B2 OR US-9019337-B2 OR US-7426191-B2 OR US-8982177-B2 OR US-7813304-B2 OR US-7715331-B2 OR US-10237324-B1 OR US-7822859-B2 OR US-8396923-B2 OR US-10547663-B2 OR US-7716344-B2 OR US-9342267-B2 OR US-8750472-B2 OR US-7836163-B2 OR US-9558235-B1 OR US-9253442-B1 OR US-8909702-B2 OR US-10673911-B2 OR US-9077776-B1 OR US- |  |  |  |  |  |
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|  |  | 9992245-B2 OR US-<br>9049272-B2 OR US-<br>11082661-B1 OR US-<br>7593987-B2 OR US-<br>7310675-B2 OR US-<br>9571660-B2 OR US-<br>8370516-B2 OR US-<br>8924862-B1 OR US-<br>7418476-B2 OR US-<br>7877489-B2 OR US-<br>8965975-B2 OR US-<br>8682972-B2 OR US-<br>7934002-B2 OR US-<br>8904293-B2 OR US-<br>9602771-B2 OR US-<br>10321093-B2 OR US-<br>9462227-B2 OR US-<br>9992243-B2 OR US-<br>9344469-B2 OR US-<br>9602670-B2 OR US-<br>7809124-B2 OR US-<br>7627663-B2 OR US-<br>8005203-B2 OR US-<br>8161113-B2 OR US-<br>9449305-B2 OR US-<br>9349119-B2 OR US-<br>8661355-B1 OR US-<br>8537195-B2 OR US-<br>7016935-B2 OR US-<br>7830866-B2 OR US-<br>9524491-B2 OR US-<br>9578285-B1 OR US-<br>8194841-B2 OR US-<br>8813196-B2 OR US-<br>7197535-B2 OR US-<br>9325940-B2 OR US-<br>9679331-B2 OR US-<br>10079866-B2 OR US-<br>9374232-B2 OR US-<br>7953795-B2 OR US-<br>7006055-B2 OR US-<br>10554931-B1 OR US-<br>11108991-B2 OR US-<br>10389657-B1 OR US-<br>8135045-B1 OR US-<br>8559469-B1 OR US-<br>6621834-B1 OR US-<br>7533146-B1 OR US-<br>10084987-B2 OR US-<br>10139917-B1 OR US-<br>10015214-B2 OR US-<br>9282285-B2 OR US-<br>9225936-B2 OR US-<br>7236926-B2 OR US-<br>8994781-B2 OR US-<br>6411988-B1 OR US-<br>10419511-B1 OR US-<br>10574713-B2 OR US- |  |  |  |  |  |
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|  |  | 10218521-B2 OR US-<br>10674016-B2 OR US-<br>9445048-B1 OR US-<br>10868849-B2 OR US-<br>10170113-B2 OR US-<br>10535350-B2 OR US-<br>10904025-B2 OR US-<br>10542126-B2 OR US-<br>9177285-B2 OR US-<br>10939033-B2 OR US-<br>9426421-B2 OR US-<br>8909704-B2 OR US-<br>9741257-B1 OR US-<br>6356295-B1 OR US-<br>10979671-B1 OR US-<br>10735481-B2 OR US-<br>7734802-B1 OR US-<br>8321796-B2 OR US-<br>9549006-B2 OR US-<br>11157229-B2 OR US-<br>10708206-B2 OR US-<br>9680659-B2 OR US-<br>9015570-B2 OR US-<br>7765257-B2 OR US-<br>9118940-B2 OR US-<br>8516105-B2 OR US-<br>9734485-B2 OR US-<br>7911495-B2 OR US-<br>10021152-B2 OR US-<br>7991163-B2 OR US-<br>9201527-B2 OR US-<br>7966371-B2 OR US-<br>8904267-B2 OR US-<br>8990706-B2 OR US-<br>7636754-B2 OR US-<br>8842158-B2 OR US-<br>9032441-B2 OR US-<br>7653705-B2 OR US-<br>11122240-B2 OR US-<br>8803991-B2 OR US-<br>10868999-B2 OR US-<br>5801754-A OR US-<br>10771631-B2 OR US-<br>9654521-B2 OR US-<br>10608831-B2 OR US-<br>9465803-B2 OR US-<br>10097598-B2 OR US-<br>9354697-B2 OR US-<br>9414016-B2 OR US-<br>9225755-B2 OR US-<br>7607097-B2 OR US-<br>8670018-B2 OR US-<br>9473449-B2 OR US-<br>7102643-B2 OR US-<br>10306181-B2 OR US-<br>7290204-B1 OR US-<br>10657202-B2 OR US-<br>10241736-B2 OR US- |  |  |  |  |  |
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|  |  | 10230848-B2 OR US-<br>9122444-B2 OR US-<br>10127003-B2 OR US-<br>10402485-B2 OR US-<br>8918722-B2 OR US-<br>7213051-B2 OR US-<br>7464137-B2 OR US-<br>10831835-B2 OR US-<br>9826006-B2 OR US-<br>9185150-B2 OR US-<br>8112490-B2 OR US-<br>9330366-B2 OR US-<br>9740916-B2 OR US-<br>8379150-B2 OR US-<br>10366622-B2 OR US-<br>10887549-B1 OR US-<br>9852376-B2 OR US-<br>10360808-B2 OR US-<br>11153465-B2 OR US-<br>RE48494-E OR US-<br>5930473-A OR US-<br>7092821-B2 OR US-<br>8166109-B2 OR US-<br>7641348-B2 OR US-<br>8239905-B2 OR US-<br>9510004-B2 OR US-<br>10609098-B1 OR US-<br>9299061-B2 OR US-<br>11003842-B2 OR US-<br>9178957-B2 OR US-<br>11016728-B2 OR US-<br>9270713-B2 OR US-<br>9881207-B1 OR US-<br>8990677-B2 OR US-<br>8914735-B2 OR US-<br>9224129-B2 OR US-<br>8826147-B2 OR US-<br>8204935-B2 OR US-<br>8819136-B1 OR US-<br>8274544-B2 OR US-<br>7966370-B1 OR US-<br>9917871-B2 OR US-<br>9837077-B2 OR US-<br>8390663-B2 OR US-<br>8237771-B2 OR US-<br>9110521-B2 OR US-<br>11134111-B2 OR US-<br>10931850-B2 OR US-<br>10187429-B2 OR US-<br>8266209-B2 OR US-<br>9319622-B2 OR US-<br>10051251-B2 OR US-<br>8918724-B2 OR US-<br>8806352-B2 OR US-<br>8924859-B2 OR US-<br>9516267-B2 OR US-<br>8918721-B2 OR US-<br>10200422-B1 OR US- |  |  |  |  |  |
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|  |  | 8875011-B2 OR US-<br>7364307-B2 OR US-<br>9664508-B2 OR US-<br>8019824-B2 OR US-<br>7421069-B2 OR US-<br>11159336-B2 OR US-<br>8224596-B2 OR US-<br>8549076-B2 OR US-<br>9925466-B2 OR US-<br>11128793-B2 OR US-<br>8918723-B2 OR US-<br>10269457-B2 OR US-<br>8533268-B1 OR US-<br>9871832-B1 OR US-<br>8477936-B2 OR US-<br>9306686-B2 OR US-<br>10205688-B2 OR US-<br>9262050-B2 OR US-<br>7797645-B2 OR US-<br>7599989-B2 OR US-<br>8775516-B2 OR US-<br>7329005-B2 OR US-<br>10237213-B2 OR US-<br>11106417-B2 OR US-<br>11132166-B2 OR US-<br>10963505-B2 OR US-<br>9721257-B2 OR US-<br>11163370-B2 OR US-<br>9294291-B2 OR US-<br>8171423-B2 OR US-<br>8356256-B2 OR US-<br>8671360-B2 OR US-<br>10163111-B2 OR US-<br>6454415-B1 OR US-<br>9565249-B2 OR US-<br>10997558-B2 OR US-<br>9064238-B2 OR US-<br>9843768-B1 OR US-<br>11176949-B2 OR US-<br>9049299-B2 OR US-<br>8286070-B2 OR US-<br>8918708-B2 OR US-<br>6037943-A OR US-<br>7716273-B2 OR US-<br>10403050-B1 OR US-<br>7689898-B2 OR US-<br>10387836-B2 OR US-<br>10796282-B2 OR US-<br>10832038-B2 OR US-<br>9195965-B2 OR US-<br>6397036-B1 OR US-<br>8019815-B2 OR US-<br>9641947-B2 OR US-<br>9733736-B2 OR US-<br>9910517-B2 OR US-<br>10540025-B2 OR US-<br>11029770-B2 OR US-<br>8538084-B2 OR US- |  |  |  |  |  |
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|     |     | 7739116-B2 OR US-8155969-B2 OR US-11140222-B2 OR US-10733513-B2 OR US-11170308-B2 OR US-9628529-B2 OR US-9935988-B2 OR US-8260857-B2 OR US-11003353-B2 OR US-10560499-B2 OR US-7434165-B2 OR US-8046359-B2 OR US-9727874-B2 OR US-10152719-B2 OR US-11024078-B2 OR US-10997786-B2 OR US-10460515-B2 OR US-10984589-B2 OR US-11004264-B2 OR US-11095854-B2 OR US-9477380-B2 OR US-10275203-B2 OR US-10705784-B2 OR US-10877714-B2).did. AND USPT.dbnm.)                                                                    |                   |    |    |    |                     |
| L33 | 674 | ((US-20140362165-A1 OR US-20100037151-A1 OR US-20040230651-A1 OR US-20210014074-A1 OR US-20090213205-A1 OR US-20110307550-A1 OR US-20120004940-A1 OR US-20170237788-A1 OR US-20080133769-A1 OR US-20200106813-A1 OR US-20100293226-A1 OR US-20170262774-A1 OR US-20130080560-A1 OR US-20080183808-A1 OR US-20080133660-A1 OR US-20080133661-A1 OR US-20080183807-A1 OR US-20040080504-A1 OR US-20160149968-A1 OR US-20150009278-A1 OR US-20190158565-A1 OR US-20140232814-A1 OR US-20090055240-A1 OR US-20080215680-A1 OR | (US-PGPUB; USPAT) | OR | ON | ON | 2021/12/01 05:57 PM |

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|  |  | US-20080195704-A1<br>OR US-20080195703-A1 OR US-20120102111-A1 OR US-20100306674-A1 OR US-20140258406-A1 OR US-20030134260-A1 OR US-20080183820-A1 OR US-20100223320-A1 OR US-20150309766-A1 OR US-20130258042-A1 OR US-20160234269-A1 OR US-20050169197-A1 OR US-20050080850-A1 OR US-20050163062-A1 OR US-20130246529-A1 OR US-20080195955-A1 OR US-20160072863-A1 OR US-20070083597-A1 OR US-20090164876-A1 OR US-20090300519-A1 OR US-20080016156-A1 OR US-20160094355-A1 OR US-20120110196-A1 OR US-20170150099-A1 OR US-20160173823-A1 OR US-20180145840-A1 OR US-20130328998-A1 OR US-20120102110-A1 OR US-20080168137-A1 OR US-20160182580-A1 OR US-20130238618-A1 OR US-20030078970-A1 OR US-20150200982-A1 OR US-20210368135-A1 OR US-20060182249-A1 OR US-20120200658-A1 OR US-20110283008-A1 OR US-20100325561-A1 OR US-20110300841-A1 OR US-20210058439-A1 OR US-20020169831-A1 OR US-20030208536-A9 OR US-20130239180-A1 OR US-20160094354- |  |  |  |  |  |
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|  |  | A1 OR US-<br>20150326824-A1 OR<br>US-20180077205-A1<br>OR US-20140122588-<br>A1 OR US-<br>20180070049-A1 OR<br>US-20030098819-A1<br>OR US-20200145617-<br>A1 OR US-<br>20210126915-A1 OR<br>US-20210352245-A1<br>OR US-20190373039-<br>A1 OR US-<br>20130311177-A1 OR<br>US-20140362163-A1<br>OR US-20130238705-<br>A1 OR US-<br>20140247319-A1 OR<br>US-20130238725-A1<br>OR US-20130238704-<br>A1 OR US-<br>20130238703-A1 OR<br>US-20080307105-A1<br>OR US-20160103200-<br>A1 OR US-<br>20160094593-A1 OR<br>US-20130239013-A1<br>OR US-20110249954-<br>A1 OR US-<br>20040088168-A1 OR<br>US-20070223539-A1<br>OR US-20170085606-<br>A1 OR US-<br>20150106227-A1 OR<br>US-20130019186-A1<br>OR US-20160277345-<br>A1 OR US-<br>20160065625-A1 OR<br>US-20190007556-A1<br>OR US-20180211660-<br>A1 OR US-<br>20190244616-A1 OR<br>US-20190244615-A1<br>OR US-20090282339-<br>A1 OR US-<br>20200389334-A1 OR<br>US-20200021453-A1<br>OR US-20050068442-<br>A1 OR US-<br>20090164875-A1 OR<br>US-20190068670-A1<br>OR US-20190289198-<br>A1 OR US-<br>20130185356-A1 OR<br>US-20160073054-A1<br>OR US-20150039688-<br>A1 OR US-<br>20150369783-A1 OR |  |  |  |  |  |
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|  |  | US-20190222891-A1<br>OR US-20190182063-A1 OR US-20190379712-A1 OR US-20120133727-A1 OR US-20150082194-A1 OR US-20050043973-A1 OR US-20140059010-A1 OR US-20090094532-A1 OR US-20170003927-A1 OR US-20160034111-A1 OR US-20030085922-A1 OR US-20020174181-A1 OR US-20080034085-A1 OR US-20050091579-A1 OR US-20200228359-A1 OR US-20200380468-A1 OR US-20100218120-A1 OR US-20090241033-A1 OR US-20210076002-A1 OR US-20100333175-A1 OR US-20090254839-A1 OR US-20090083639-A1 OR US-20120265815-A1 OR US-20160070534-A1 OR US-20100058410-A1 OR US-20130305167-A1 OR US-20050132408-A1 OR US-20070080892-A1 OR US-20100211823-A1 OR US-20160080436-A1 OR US-20060235927-A1 OR US-20050033817-A1 OR US-20120306993-A1 OR US-20140033133-A1 OR US-20080091838-A1 OR US-20020165922-A1 OR US-20200349429-A1 OR US-20090187935-A1 OR US-20210211603-A1 OR US-20030182375-A1 OR US-20090138554-A1 OR US-20120011452-A1 OR US-20070192785-A1 OR US-20150187076- |  |  |  |  |  |
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|  |  | A1 OR US-<br>20160036873-A1 OR<br>US-20210185276-A1<br>OR US-20210176429-<br>A1 OR US-<br>20200026535-A1 OR<br>US-20200169693-A1<br>OR US-20110271129-<br>A1 OR US-<br>20130093832-A1 OR<br>US-20030224807-A1<br>OR US-20180041639-<br>A1 OR US-<br>20130073965-A1 OR<br>US-20210297562-A1<br>OR US-20140282089-<br>A1 OR US-<br>20170201387-A1 OR<br>US-20150113367-A1<br>OR US-20120209906-<br>A1 OR US-<br>20130201209-A1 OR<br>US-20150163259-A1<br>OR US-20080059583-<br>A1 OR US-<br>20080008458-A1 OR<br>US-20150172335-A1<br>OR US-20140244754-<br>A1 OR US-<br>20170034231-A1 OR<br>US-20080209330-A1<br>OR US-20120197991-<br>A1 OR US-<br>20160350585-A1 OR<br>US-20160350058-A1<br>OR US-20110295392-<br>A1 OR US-<br>20030090506-A1 OR<br>US-20070263082-A1<br>OR US-20180103233-<br>A1 OR US-<br>20190179892-A1 OR<br>US-20160344780-A1<br>OR US-20070044017-<br>A1 OR US-<br>20160234265-A1 OR<br>US-20160283456-A1<br>OR US-20190005011-<br>A9 OR US-<br>20050276270-A1 OR<br>US-20060161623-A1<br>OR US-20130297696-<br>A1 OR US-<br>20190364083-A1 OR<br>US-20080263010-A1<br>OR US-20080040187-<br>A1 OR US-<br>20160011845-A1 OR |  |  |  |  |  |
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|  |  | US-20120284645-A1<br>OR US-20160216933-A1 OR US-20070220162-A1 OR US-20030220973-A1 OR US-20070022159-A1 OR US-20130346881-A1 OR US-20090287790-A1 OR US-20160179456-A1 OR US-20060161624-A1 OR US-20100238262-A1 OR US-20150113369-A1 OR US-20060161622-A1 OR US-20100186056-A1 OR US-20060041687-A1 OR US-20170278415-A1 OR US-20120284197-A1 OR US-20090089379-A1 OR US-20180376035-A1 OR US-20080240684-A1 OR US-20020087496-A1 OR US-20070177115-A1 OR US-20130212490-A1 OR US-20100318916-A1 OR US-20160011729-A1 OR US-20140369405-A1 OR US-20120284643-A1 OR US-20180122254-A1 OR US-20080291119-A1 OR US-20080320080-A1 OR US-20190212968-A1 OR US-20040252185-A1 OR US-20080005244-A1 OR US-20120284646-A1 OR US-20190325014-A1 OR US-20100064010-A1 OR US-20100076861-A1 OR US-20120284634-A1 OR US-20120284642-A1 OR US-20030227479-A1 OR US-20120284606-A1 OR US-20150095802-A1 OR US-20080288890-A1 OR US-20170289225-A1 OR US-20160028789- |  |  |  |  |  |
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|  |  | A1 OR US-<br>20150112676-A1 OR<br>US-20160274855-A1<br>OR US-20100223179-<br>A1 OR US-<br>20100188477-A1 OR<br>US-20150310338-A1<br>OR US-20140068463-<br>A1 OR US-<br>20150195517-A1 OR<br>US-20160198136-A1<br>OR US-20120284635-<br>A1 OR US-<br>20170214720-A1 OR<br>US-20120284633-A1<br>OR US-20120284641-<br>A1 OR US-<br>20120290259-A1 OR<br>US-20100245532-A1<br>OR US-20140208211-<br>A1 OR US-<br>20050234811-A1 OR<br>US-20150318938-A1<br>OR US-20110214074-<br>A1 OR US-<br>20160073052-A1 OR<br>US-20180213013-A1<br>OR US-20100268694-<br>A1 OR US-<br>20120284605-A1 OR<br>US-20160119388-A1<br>OR US-20190014159-<br>A9 OR US-<br>20140310017-A1 OR<br>US-20060252547-A1<br>OR US-20140038725-<br>A1 OR US-<br>20060044517-A1 OR<br>US-20120284644-A1<br>OR US-20070299982-<br>A1 OR US-<br>20060168538-A1 OR<br>US-20210036879-A1<br>OR US-20100063756-<br>A1 OR US-<br>20200351435-A1 OR<br>US-20100318940-A1<br>OR US-20130036168-<br>A1 OR US-<br>20160134690-A1 OR<br>US-20100253621-A1<br>OR US-20180091450-<br>A1 OR US-<br>20100091987-A1 OR<br>US-20060041686-A1<br>OR US-20180091448-<br>A1 OR US-<br>20170249729-A1 OR |  |  |  |  |  |
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|  |  | US-20110238808-A1<br>OR US-20100315994-A1 OR US-20060044522-A1 OR US-20160378417-A1 OR US-20160378422-A1 OR US-20110311073-A1 OR US-20140032771-A1 OR US-20160164968-A1 OR US-20130314421-A1 OR US-20200242151-A1 OR US-20020055892-A1 OR US-20100325574-A1 OR US-20100325576-A1 OR US-20100325577-A1 OR US-20160142453-A1 OR US-20210342574-A1 OR US-20210342575-A1 OR US-20050174547-A1 OR US-20170011745-A1 OR US-20170308904-A1 OR US-20110196928-A1 OR US-20200393909-A1 OR US-20020113950-A1 OR US-20130019187-A1 OR US-20130091244-A1 OR US-20210319403-A1 OR US-20200243095-A1 OR US-20190362312-A1 OR US-20050091302-A1 OR US-20170212869-A1 OR US-20090113278-A1 OR US-20080270541-A1 OR US-20150117626-A1 OR US-20100328465-A1 OR US-20120324323-A1 OR US-20210211745-A1 OR US-20100061659-A1 OR US-20190303655-A1 OR US-20050091359-A1 OR US-20070033528-A1 OR US-20150033140-A1 OR US-20120323704-A1 OR US-20150230025-A1 OR US-20190147402- |  |  |  |  |  |
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|  |  | A1 OR US-<br>20200027062-A1 OR<br>US-20120260158-A1<br>OR US-20120159356-<br>A1 OR US-<br>20130024418-A1 OR<br>US-20160050245-A1<br>OR US-20160378728-<br>A1 OR US-<br>20150301625-A1 OR<br>US-20160188001-A1<br>OR US-20100036664-<br>A1 OR US-<br>20060031779-A1 OR<br>US-20050102356-A1<br>OR US-20190158586-<br>A1 OR US-<br>20160134670-A1 OR<br>US-20200382618-A1<br>OR US-20180157340-<br>A1 OR US-<br>20200125183-A1 OR<br>US-20070048715-A1<br>OR US-20100045879-<br>A1 OR US-<br>20120226646-A1 OR<br>US-20150286942-A1<br>OR US-20060002315-<br>A1 OR US-<br>20180254067-A1 OR<br>US-20080313544-A1<br>OR US-20180121816-<br>A1 OR US-<br>20200320415-A1 OR<br>US-20150033102-A1<br>OR US-20150100525-<br>A1 OR US-<br>20040113934-A1 OR<br>US-20200326846-A1<br>OR US-20200279567-<br>A1 OR US-<br>20170195374-A1 OR<br>US-20180254066-A1<br>OR US-20090307575-<br>A1 OR US-<br>20170032377-A1 OR<br>US-20170308905-A1<br>OR US-20190043252-<br>A1 OR US-<br>20200090658-A1 OR<br>US-20210074058-A1<br>OR US-20190045157-<br>A1 OR US-<br>20210248819-A1 OR<br>US-20190043266-A1<br>OR US-20200013217-<br>A1 OR US-<br>20210209850-A1 OR |  |  |  |  |  |
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|  |  | US-20190042832-A1<br>OR US-20210110604-A1 OR US-20190303087-A1 OR US-20190215486-A1 OR US-20140282013-A1 OR US-20140125697-A1 OR US-20160266864-A1 OR US-20160328204-A1 OR US-20170102912-A1 OR US-20210081161-A1 OR US-20160074480-A1).did. AND PGPB.dbnm.) OR ((US-9525711-B2 OR US-10505998-B1 OR US-8325216-B2 OR US-6760749-B1 OR US-10237411-B2 OR US-9721215-B2 OR US-10382498-B2 OR US-10630738-B1 OR US-7454460-B2 OR US-11076127-B1 OR US-8527588-B2 OR US-9584564-B2 OR US-8091029-B1 OR US-6343313-B1 OR US-8782534-B2 OR US-7369515-B2 OR US-10187435-B2 OR US-9019337-B2 OR US-7426191-B2 OR US-8982177-B2 OR US-7813304-B2 OR US-7715331-B2 OR US-10237324-B1 OR US-7822859-B2 OR US-8396923-B2 OR US-10547663-B2 OR US-7716344-B2 OR US-9342267-B2 OR US-8750472-B2 OR US-7836163-B2 OR US-9558235-B1 OR US-9253442-B1 OR US-8909702-B2 OR US-10673911-B2 OR US-9077776-B1 OR US-9992245-B2 OR US-9049272-B2 OR US-11082661-B1 OR US-7593987-B2 OR US-7310675-B2 OR US-9571660-B2 OR US-8370516-B2 OR US- |  |  |  |  |  |
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|  |  | 8924862-B1 OR US-<br>7418476-B2 OR US-<br>7877489-B2 OR US-<br>8965975-B2 OR US-<br>8682972-B2 OR US-<br>7934002-B2 OR US-<br>8904293-B2 OR US-<br>9602771-B2 OR US-<br>10321093-B2 OR US-<br>9462227-B2 OR US-<br>9992243-B2 OR US-<br>9344469-B2 OR US-<br>9602670-B2 OR US-<br>7809124-B2 OR US-<br>7627663-B2 OR US-<br>8005203-B2 OR US-<br>8161113-B2 OR US-<br>9449305-B2 OR US-<br>9349119-B2 OR US-<br>8661355-B1 OR US-<br>8537195-B2 OR US-<br>7016935-B2 OR US-<br>7830866-B2 OR US-<br>9524491-B2 OR US-<br>9578285-B1 OR US-<br>8194841-B2 OR US-<br>8813196-B2 OR US-<br>7197535-B2 OR US-<br>9325940-B2 OR US-<br>9679331-B2 OR US-<br>10079866-B2 OR US-<br>9374232-B2 OR US-<br>7953795-B2 OR US-<br>7006055-B2 OR US-<br>10554931-B1 OR US-<br>11108991-B2 OR US-<br>10389657-B1 OR US-<br>8135045-B1 OR US-<br>8559469-B1 OR US-<br>6621834-B1 OR US-<br>7533146-B1 OR US-<br>10084987-B2 OR US-<br>10139917-B1 OR US-<br>10015214-B2 OR US-<br>9282285-B2 OR US-<br>9225936-B2 OR US-<br>7236926-B2 OR US-<br>8994781-B2 OR US-<br>6411988-B1 OR US-<br>10419511-B1 OR US-<br>10574713-B2 OR US-<br>10218521-B2 OR US-<br>10674016-B2 OR US-<br>9445048-B1 OR US-<br>10868849-B2 OR US-<br>10170113-B2 OR US-<br>10535350-B2 OR US-<br>10904025-B2 OR US- |  |  |  |  |  |
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|  |  | 10542126-B2 OR US-<br>9177285-B2 OR US-<br>10939033-B2 OR US-<br>9426421-B2 OR US-<br>8909704-B2 OR US-<br>9741257-B1 OR US-<br>6356295-B1 OR US-<br>10979671-B1 OR US-<br>10735481-B2 OR US-<br>7734802-B1 OR US-<br>8321796-B2 OR US-<br>9549006-B2 OR US-<br>11157229-B2 OR US-<br>10708206-B2 OR US-<br>9680659-B2 OR US-<br>9015570-B2 OR US-<br>7765257-B2 OR US-<br>9118940-B2 OR US-<br>8516105-B2 OR US-<br>9734485-B2 OR US-<br>7911495-B2 OR US-<br>10021152-B2 OR US-<br>7991163-B2 OR US-<br>9201527-B2 OR US-<br>7966371-B2 OR US-<br>8904267-B2 OR US-<br>8990706-B2 OR US-<br>7636754-B2 OR US-<br>8842158-B2 OR US-<br>9032441-B2 OR US-<br>7653705-B2 OR US-<br>11122240-B2 OR US-<br>8803991-B2 OR US-<br>10868999-B2 OR US-<br>5801754-A OR US-<br>10771631-B2 OR US-<br>9654521-B2 OR US-<br>10608831-B2 OR US-<br>9465803-B2 OR US-<br>10097598-B2 OR US-<br>9354697-B2 OR US-<br>9414016-B2 OR US-<br>9225755-B2 OR US-<br>7607097-B2 OR US-<br>8670018-B2 OR US-<br>9473449-B2 OR US-<br>7102643-B2 OR US-<br>10306181-B2 OR US-<br>7290204-B1 OR US-<br>10657202-B2 OR US-<br>10241736-B2 OR US-<br>10230848-B2 OR US-<br>9122444-B2 OR US-<br>10127003-B2 OR US-<br>10402485-B2 OR US-<br>8918722-B2 OR US-<br>7213051-B2 OR US-<br>7464137-B2 OR US- |  |  |  |  |  |
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|  |  | 10831835-B2 OR US-<br>9826006-B2 OR US-<br>9185150-B2 OR US-<br>8112490-B2 OR US-<br>9330366-B2 OR US-<br>9740916-B2 OR US-<br>8379150-B2 OR US-<br>1036622-B2 OR US-<br>10887549-B1 OR US-<br>9852376-B2 OR US-<br>10360808-B2 OR US-<br>11153465-B2 OR US-<br>RE48494-E OR US-<br>5930473-A OR US-<br>7092821-B2 OR US-<br>8166109-B2 OR US-<br>7641348-B2 OR US-<br>8239905-B2 OR US-<br>9510004-B2 OR US-<br>10609098-B1 OR US-<br>9299061-B2 OR US-<br>11003842-B2 OR US-<br>9178957-B2 OR US-<br>11016728-B2 OR US-<br>9270713-B2 OR US-<br>9881207-B1 OR US-<br>8990677-B2 OR US-<br>8914735-B2 OR US-<br>9224129-B2 OR US-<br>8826147-B2 OR US-<br>8204935-B2 OR US-<br>8819136-B1 OR US-<br>8274544-B2 OR US-<br>7966370-B1 OR US-<br>9917871-B2 OR US-<br>9837077-B2 OR US-<br>8390663-B2 OR US-<br>8237771-B2 OR US-<br>9110521-B2 OR US-<br>11134111-B2 OR US-<br>10931850-B2 OR US-<br>10187429-B2 OR US-<br>8266209-B2 OR US-<br>9319622-B2 OR US-<br>10051251-B2 OR US-<br>8918724-B2 OR US-<br>8806352-B2 OR US-<br>8924859-B2 OR US-<br>9516267-B2 OR US-<br>8918721-B2 OR US-<br>10200422-B1 OR US-<br>8875011-B2 OR US-<br>7364307-B2 OR US-<br>9664508-B2 OR US-<br>8019824-B2 OR US-<br>7421069-B2 OR US-<br>11159336-B2 OR US-<br>8224596-B2 OR US- |  |  |  |  |  |
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|  |  | 8549076-B2 OR US-<br>9925466-B2 OR US-<br>11128793-B2 OR US-<br>8918723-B2 OR US-<br>10269457-B2 OR US-<br>8533268-B1 OR US-<br>9871832-B1 OR US-<br>8477936-B2 OR US-<br>9306686-B2 OR US-<br>10205688-B2 OR US-<br>9262050-B2 OR US-<br>7797645-B2 OR US-<br>7599989-B2 OR US-<br>8775516-B2 OR US-<br>7329005-B2 OR US-<br>10237213-B2 OR US-<br>11106417-B2 OR US-<br>11132166-B2 OR US-<br>10963505-B2 OR US-<br>9721257-B2 OR US-<br>11163370-B2 OR US-<br>9294291-B2 OR US-<br>8171423-B2 OR US-<br>8356256-B2 OR US-<br>8671360-B2 OR US-<br>10163111-B2 OR US-<br>6454415-B1 OR US-<br>9565249-B2 OR US-<br>10997558-B2 OR US-<br>9064238-B2 OR US-<br>9843768-B1 OR US-<br>11176949-B2 OR US-<br>9049299-B2 OR US-<br>8286070-B2 OR US-<br>8918708-B2 OR US-<br>6037943-A OR US-<br>7716273-B2 OR US-<br>10403050-B1 OR US-<br>7689898-B2 OR US-<br>10387836-B2 OR US-<br>10796282-B2 OR US-<br>10832038-B2 OR US-<br>9195965-B2 OR US-<br>6397036-B1 OR US-<br>8019815-B2 OR US-<br>9641947-B2 OR US-<br>9733736-B2 OR US-<br>9910517-B2 OR US-<br>10540025-B2 OR US-<br>11029770-B2 OR US-<br>8538084-B2 OR US-<br>7739116-B2 OR US-<br>8155969-B2 OR US-<br>11140222-B2 OR US-<br>10733513-B2 OR US-<br>11170308-B2 OR US-<br>9628529-B2 OR US-<br>9935988-B2 OR US- |  |  |  |  |  |
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|     |      | 8260857-B2 OR US-11003353-B2 OR US-10560499-B2 OR US-7434165-B2 OR US-8046359-B2 OR US-9727874-B2 OR US-10152719-B2 OR US-11024078-B2 OR US-10997786-B2 OR US-10460515-B2 OR US-10984589-B2 OR US-11004264-B2 OR US-11095854-B2 OR US-9477380-B2 OR US-10275203-B2 OR US-10705784-B2 OR US-10877714-B2).did. AND USPT.dbnm.) |                          |    |    |    |                     |
| L34 | 327  | 33 AND (select\$4 choos\$4 click\$4) near4 presenter                                                                                                                                                                                                                                                                         | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 05:57 PM |
| L35 | 327  | 33 AND (select\$4 choos\$4 click\$4) near4 presenter                                                                                                                                                                                                                                                                         | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 05:59 PM |
| L36 | 53   | 33 AND (select\$4 choos\$4 chos\$4 click\$4) near4 (multiple plurality several many list) near4 presenters                                                                                                                                                                                                                   | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 06:06 PM |
| L37 | 2601 | (multiple plurality several many list\$4) near4 presenters                                                                                                                                                                                                                                                                   | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 06:06 PM |
| L38 | 954  | 37 AND (conferenc\$4 videoconferenc\$4).ti,ab, bsum,clm.                                                                                                                                                                                                                                                                     | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 06:07 PM |
| L39 | 72   | 38 AND (select\$4 choos\$4 chos\$4 click\$4) near4 (multiple plurality several many list\$4) near4 presenters                                                                                                                                                                                                                | (US-PGPUB; USPAT; USOCR) | OR | ON | ON | 2021/12/01 06:07 PM |
| L40 | 72   | ((US-8091029-B1 OR US-8325216-B2 OR US-8982177-B2 OR US-8321796-B2 OR US-11157229-B2 OR US-9465803-B2 OR US-8661355-B1 OR US-7636754-B2 OR US-9445048-B1 OR US-9525711-B2 OR US-7016935-B2 OR US-10084987-B2 OR US-8185828-B2 OR US-10505998-B1 OR US-8803991-B2 OR                                                          | (USPAT; US-PGPUB)        | OR | ON | ON | 2021/12/01 06:07 PM |

|  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |  |  |  |  |
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|  |  | US-8924862-B1 OR<br>US-6454415-B1 OR<br>US-10139917-B1 OR<br>US-7290204-B1 OR<br>US-7765257-B2 OR<br>US-9942287-B2 OR<br>US-8887063-B2 OR<br>US-9787738-B2 OR<br>US-9167040-B2 OR<br>US-6037943-A OR US-<br>9473449-B2 OR US-<br>10832038-B2 OR US-<br>7733366-B2 OR US-<br>8286070-B2 OR US-<br>8918708-B2 OR US-<br>9837077-B2 OR US-<br>7689898-B2).did. AND<br>USPT.dbnm.) OR ((US-<br>20030134260-A1 OR<br>US-20090213205-A1<br>OR US-20130080560-<br>A1 OR US-<br>20150009278-A1 OR<br>US-20130073965-A1<br>OR US-20090094532-<br>A1 OR US-<br>20170003927-A1 OR<br>US-20050183022-A1<br>OR US-20100262925-<br>A1 OR US-<br>20180070049-A1 OR<br>US-20140244754-A1<br>OR US-20030182375-<br>A1 OR US-<br>20070044017-A1 OR<br>US-20140362165-A1<br>OR US-20020169831-<br>A1 OR US-<br>20030208536-A9 OR<br>US-20100037151-A1<br>OR US-20020113950-<br>A1 OR US-<br>20130093832-A1 OR<br>US-20150033102-A1<br>OR US-20150149532-<br>A1 OR US-<br>20090292999-A1 OR<br>US-20150142925-A1<br>OR US-20200267195-<br>A1 OR US-<br>20150134957-A1 OR<br>US-20180034877-A1<br>OR US-20070299982-<br>A1 OR US-<br>20120209906-A1 OR<br>US-20090228801-A1<br>OR US-20060010392-<br>A1 OR US- |  |  |  |  |  |
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|     |     | 20080065996-A1 OR<br>US-20130132862-A1<br>OR US-20170034231-<br>A1 OR US-<br>20200349429-A1 OR<br>US-20190303655-A1<br>OR US-20040002049-<br>A1 OR US-<br>20150112676-A1 OR<br>US-20100328465-A1<br>OR US-20120324323-<br>A1 OR US-<br>20070033528-A1).did.<br>AND PGPB.dbnm.)                                                                                                                                                                                                                                                       |                             |    |    |    |                        |
| L41 | 72  | 40 AND (select\$4<br>choos\$4 chos\$4<br>click\$4) near4 (multiple<br>plurality several many<br>list\$4) near4 presenters                                                                                                                                                                                                                                                                                                                                                                                                            | (US-PGPUB; USPAT;<br>USOCR) | OR | ON | ON | 2021/12/01<br>06:07 PM |
| L42 | 970 | (multiple plurality<br>several many list\$4)<br>near4<br>presenters.ti,ab,bsum,cl<br>m.                                                                                                                                                                                                                                                                                                                                                                                                                                              | (US-PGPUB; USPAT;<br>USOCR) | OR | ON | ON | 2021/12/01<br>06:19 PM |
| L43 | 174 | 42 AND (select\$4<br>choos\$4 chos\$4<br>click\$4) near4<br>presenter.ti,ab,bsum,cl<br>m.                                                                                                                                                                                                                                                                                                                                                                                                                                            | (US-PGPUB; USPAT;<br>USOCR) | OR | ON | ON | 2021/12/01<br>06:20 PM |
| L44 | 174 | ((US-20110057878-A1<br>OR US-20120203844-<br>A1 OR US-<br>20030134260-A1 OR<br>US-20130073965-A1<br>OR US-20090094532-<br>A1 OR US-<br>20100238179-A1 OR<br>US-20210097875-A1<br>OR US-20150113411-<br>A1 OR US-<br>20150381932-A1 OR<br>US-20140172585-A1<br>OR US-20030014373-<br>A1 OR US-<br>20090213205-A1 OR<br>US-20210174691-A1<br>OR US-20120155828-<br>A1 OR US-<br>20210021440-A1 OR<br>US-20020085030-A1<br>OR US-20150009278-<br>A1 OR US-<br>20100161384-A1 OR<br>US-20110019810-A1<br>OR US-20160381095-<br>A1 OR US- | (US-PGPUB; USPAT;<br>USOCR) | OR | ON | ON | 2021/12/01<br>06:20 PM |

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|  |  | 20100037151-A1 OR<br>US-20120159331-A1<br>OR US-20120300080-<br>A1 OR US-<br>20140362165-A1 OR<br>US-20180070049-A1<br>OR US-20070005695-<br>A1 OR US-<br>20090063945-A1 OR<br>US-20150058748-A1<br>OR US-20170003927-<br>A1 OR US-<br>20020113950-A1 OR<br>US-20100241448-A1<br>OR US-20150178044-<br>A1 OR US-<br>20140207684-A1 OR<br>US-20130110941-A1<br>OR US-20130305167-<br>A1 OR US-<br>20130106888-A1 OR<br>US-20100026901-A1<br>OR US-20140365365-<br>A1 OR US-<br>20200349429-A1 OR<br>US-20100057756-A1<br>OR US-20050138560-<br>A1 OR US-<br>20100257449-A1 OR<br>US-20160072863-A1<br>OR US-20090282339-<br>A1 OR US-<br>20150379094-A1 OR<br>US-20170075656-A1<br>OR US-20100257456-<br>A1 OR US-<br>20150200979-A1 OR<br>US-20120317487-A1<br>OR US-20200019588-<br>A1 OR US-<br>20040002049-A1 OR<br>US-20050118560-A1<br>OR US-20160094355-<br>A1 OR US-<br>20080033721-A1 OR<br>US-20080288404-A1<br>OR US-20190236842-<br>A1 OR US-<br>20200160604-A1 OR<br>US-20100279266-A1<br>OR US-20060002315-<br>A1 OR US-<br>20190286388-A1 OR<br>US-20060031779-A1<br>OR US-20030048291-<br>A1 OR US-<br>20130276139-A1 OR<br>US-20020169831-A1 |  |  |  |  |  |
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|  |  | 10403050-B1 OR US-<br>7418476-B2 OR US-<br>9525711-B2 OR US-<br>10386933-B2 OR US-<br>10084987-B2 OR US-<br>7800582-B1 OR US-<br>9235312-B2 OR US-<br>10979598-B2 OR US-<br>7599989-B2 OR US-<br>11157229-B2 OR US-<br>7765257-B2 OR US-<br>10505998-B1 OR US-<br>6454415-B1 OR US-<br>7903117-B2 OR US-<br>6317777-B1 OR US-<br>9185150-B2 OR US-<br>9342207-B1 OR US-<br>10445060-B2 OR US-<br>9818112-B2 OR US-<br>9465803-B2 OR US-<br>7290204-B1 OR US-<br>8462108-B2 OR US-<br>8484291-B1 OR US-<br>8949352-B2 OR US-<br>9230247-B2 OR US-<br>9471694-B2 OR US-<br>9811594-B2 OR US-<br>9501258-B2 OR US-<br>8831505-B1 OR US-<br>7945848-B2 OR US-<br>9571660-B2 OR US-<br>8725638-B2 OR US-<br>9116989-B1 OR US-<br>9489432-B2 OR US-<br>8021164-B2 OR US-<br>8473850-B2 OR US-<br>9612730-B2 OR US-<br>8782534-B2 OR US-<br>8875008-B2 OR US-<br>9177285-B2 OR US-<br>7562288-B2 OR US-<br>10438414-B2 OR US-<br>5634018-A OR US-<br>8325216-B2 OR US-<br>7299418-B2 OR US-<br>7016935-B2 OR US-<br>6157364-A OR US-<br>7356763-B2 OR US-<br>7240287-B2 OR US-<br>8125540-B2 OR US-<br>8151179-B1 OR US-<br>7254780-B2 OR US-<br>11023652-B2 OR US-<br>10707064-B2 OR US-<br>7606401-B2 OR US-<br>10740542-B2 OR US-<br>9654521-B2 OR US-<br>10608831-B2 OR US- |  |  |  |  |  |
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|     |     | 7733366-B2 OR US-9989535-B2 OR US-10466249-B2 OR US-10948495-B2).did. AND USPT.dbnm.) OR ((US-3376900-A).did. AND USOC.dbnm.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                      |    |    |    |                     |
| L45 | 174 | 44 AND (select\$4 choos\$4 chos\$4 click\$4) near4 presenter.ti,ab,bsum,cl m.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | (US-PGPUB; USPAT; USOCR)                                                                                                                                                                                                                                                                                             | OR | ON | ON | 2021/12/01 06:20 PM |
| L46 | 32  | ((US-20140240445-A1 OR US-20120274728-A1).did. AND DWPI.dbnm.) OR ((US-20140240445-A1 OR US-20120319927-A1 OR US-20170302887-A1 OR US-20120274728-A1 OR US-20140129948-A1 OR US-20120084672-A1 OR US-20080048975-A1 OR US-20110271211-A1 OR US-20210120053-A1 OR US-20160231888-A1 OR US-20180254067-A1 OR US-20200333994-A1 OR US-20160378417-A1 OR US-20090213205-A1 OR US-20090094532-A1 OR US-20120203844-A1 OR US-20210365231-A1).did. AND PGPB.dbnm.) OR ((US-10645137-B2 OR US-10397520-B2 OR US-10768803-B2 OR US-9282167-B2 OR US-10931676-B2 OR US-4974173-A OR US-9189143-B2 OR US-11132643-B1 OR US-5107443-A OR US-8091029-B1 OR US-10139917-B1 OR US-9077776-B1 OR US-5796396-A).did. AND USPT.dbnm.) | (USPAT; US-PGPUB; FPRS; USOCR; IBM_TDB; EPO; JPO; DERWENT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN)) | OR | ON | ON | 2021/12/01 09:06 PM |
| L47 | 7   | 46 AND annotat\$4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (US-PGPUB; USPAT)                                                                                                                                                                                                                                                                                                    | OR | ON | ON | 2021/12/01 09:07 PM |

|     |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                      |    |    |    |                     |
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| L48 | 7  | 46 AND annotat\$4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (US-PGPUB; USPAT)                                                                                                                                                                                                                                                                                                    | OR | ON | ON | 2021/12/01 09:07 PM |
| L49 | 3  | 46 AND record\$4<br>SAME later                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | (US-PGPUB; USPAT)                                                                                                                                                                                                                                                                                                    | OR | ON | ON | 2021/12/01 10:53 PM |
| L50 | 32 | ((US-20140240445-A1 OR US-20120274728-A1).did. AND DWPI.dbnm.) OR ((US-20140240445-A1 OR US-20120319927-A1 OR US-20170302887-A1 OR US-20120274728-A1 OR US-20140129948-A1 OR US-20120084672-A1 OR US-20080048975-A1 OR US-20110271211-A1 OR US-20210120053-A1 OR US-20160231888-A1 OR US-20180254067-A1 OR US-20200333994-A1 OR US-20160378417-A1 OR US-20090213205-A1 OR US-20090094532-A1 OR US-20120203844-A1 OR US-20210365231-A1).did. AND PGPB.dbnm.) OR ((US-10645137-B2 OR US-10397520-B2 OR US-10768803-B2 OR US-9282167-B2 OR US-10931676-B2 OR US-4974173-A OR US-9189143-B2 OR US-11132643-B1 OR US-5107443-A OR US-8091029-B1 OR US-10139917-B1 OR US-9077776-B1 OR US-5796396-A).did. AND USPT.dbnm.) | (USPAT; US-PGPUB; FPRS; USOCR; IBM_TDB; EPO; JPO; DERWENT; FIT (AU, AP, AT, BE, BG, BR, BY, CA, CH, CN, CS, CU, CZ, DD, DE, DK, EA, EE, EP, ES, FI, FR, GB, HR, HU, ID, IE, IL, IS, IT, JP, KR, LT, LU, LV, MA, OA, RU, SU, WO, MC, MD, MY, NL, NO, NZ, PH, PL, PT, RO, RS, SE, SG, SI, SK, TH, TN, TR, TW, UA, VN)) | OR | ON | ON | 2021/12/01 11:46 PM |

## PE2E SEARCH - Search History (Interference)

There are no Interference searches to show.

## On the predictability of talk attendance at academic **conferences**

C Scholz, J Illig, M Altmueller, G Stumme - ... of the 25th ACM conference ..., 2014 - dl.acm.org  
 ... Furthermore, we analyzed whether a face-to-face contact **during** the coffee break will influence the ... The probability to **choose** the coffee-break network is then defined as 1-xy ... the predictability-results, without merging the **presenter** nodes, in (b) we merge the **presenter** nodes ...  
 ☆ Save  Cite Cited by 16 Related articles All 7 versions

## Firm communication and investor response: A framework and discussion integrating social media

E Blankespoor - Accounting, Organizations and Society, 2018 - Elsevier  
 ... After observing investors' response, management can **choose** to ignore the statements or ... to adjust their information selection, information presentation attributes, information **presenter**, and dissemination ... lack of response from management to a question **during** their **conference** ...  
 ☆ Save  Cite Cited by 60 Related articles All 5 versions

## Association of Leadership Educators 2006 Annual **Conference** Practice Presentation Proposal 1. **Presenter** Information

CA McBryde, S Edwards - leadershipeducators.org  
 ... 1. **Presenter** Information: Carol A. McBryde Coordinator, Leadership and Service Center Texas A&M ... 6,000 students through participation in student organizations and academic courses that **choose** to use ... **During** this activity, find 10 people who have one signature theme that is ...  
 ☆ Save  Cite Related articles All 2 versions 

## Using unobtrusive wearable sensors to measure the physiological synchrony between presenters and audience members

S Gashi, E Di Lascio, S Santini - Proceedings of the ACM on Interactive ..., 2019 - dl.acm.org  
 ... We do not **choose** a fixed window size, as in [15, 21], to prevent further data ... to use wearable physiological sensors for tracking the audience and presenters **during** a natural ... Overall, our results show that physiological synchrony between **presenter** and audience is associated to ...  
 ☆ Save  Cite Cited by 19 Related articles

## Scalable and Reliable Multi Session Document Sharing System

R Sureswaran, S Noori, R Sudiarfo... - ... international conference ..., 2004 - eprints.usm.my  
 ... A **presenter** might want to preview the file locally before sharing it with other users. To allow this the users can **choose** the view document locally option ... documents so that an option should be added for sharing important files to prevent participants from saving them **during** or at ...  
 ☆ Save  Cite Cited by 4 Related articles All 2 versions 

## The **conference** assistant: Combining context-awareness with wearable computing

AK Dey, D Salber, GD Abowd... - Digest of Papers. Third ..., 1999 - ieeeexplore.ieee.org  
 ... The context is used to control the **presenter's** display, changing to a particular slide for which the user had a ... This information is used for two purposes **during** a **conference** ... is attending one of the presentations and can provide information about it later, a user can **choose** to attend ...  
 ☆ Save  Cite Cited by 532 Related articles All 22 versions 

## Automatic camera control for tracking a **presenter** **during** a talk

MB Winkler, KM Höver, A Hadjakos... - 2012 IEEE ..., 2012 - ieeeexplore.ieee.org  
 Automatic camera control for tracking a **presenter** **during** a talk ... to the Kinect(s) and to the DLH infrastructure controlling the cameras, as well as the modularity requirement, we decided to **choose** a distributed ... **During** actual lectures, we noticed a robust capturing of the lecturer ...  
 ☆ Save  Cite Cited by 14 Related articles All 5 versions

## The backchannel: how audiences are using Twitter and social media and changing presentations forever

C Atkinson - 2009 - books.google.com

... like Whitney develop a reputation for the topics and events they **choose** to report ... organizers that indicated 58 percent more blogging and Twittering was happening **during conferences** than three ... members who want to communicate with one another while a **presenter** is speaking ...

☆ Save  Cite Cited by 107 Related articles All 2 versions 

## RSNA diagnosis live: a novel web-based audience response tool to promote evidence-based learning

QA Awan, F Shaikh, B Kalbfleisch, EL Siegel... - Radiographics, 2017 - pubs.rsna.org

... Participants can also **choose** which team to join if the **presenter** permits this ... between Diagnosis Live and Nearpod is the option of automatically synchronizing the actual PowerPoint presentation to the learner's electronic media device in real time **during** the presentation itself ...

☆ Save  Cite Cited by 12 Related articles All 4 versions 

## Trends in IADMS Conference Presentations.

NF Durfee, TM Welsh, J Dunn - Journal of Dance Medicine & ..., 2004 - search.ebscohost.com

... Methodological Approach (**Choose** best fit) Intervention Research Descriptive Study , Practitioner Wisdom Movement Session ... major presence in the **presenter** pool throughout IADMS's history ... two groups made an average of 13 presentations per **conference during** the entire ...

☆ Save  Cite Cited by 6 Related articles All 3 versions

## Bibliographic Data

Application No: 17/390,922

Foreign Priority claimed: ☐ Yes ☒ No

35 USC 119 (a-d) conditions met: ☐ Yes ☒ No ☐ Met After Allowance

Verified and Acknowledged: /JORDANY NUNEZ/

Examiner's Signature

Initials

Title:

CONCURRENT SCREEN SHARING BY MULTIPLE USERS  
WITHIN A COMMUNICATION SESSION

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| FILING or 371(c) DATE | CLASS | GROUP ART UNIT | ATTORNEY DOCKET NO. |
|-----------------------|-------|----------------|---------------------|
| 07/31/2021            | 715   | 2171           |                     |
| RULE                  |       |                |                     |

### APPLICANTS

Zoom Video Communications, Inc., San Jose, CA,

### INVENTORS

Lin Han, Los Altos, CA, UNITED STATES

Bo Ling, Saratoga, CA, UNITED STATES

Sam Sheng, San Jose, CA, UNITED STATES

Nitasha Walia, Sunnyvale, CA, UNITED STATES

### CONTINUING DATA

### FOREIGN APPLICATIONS

### IF REQUIRED, FOREIGN LICENSE GRANTED\*\*

08/12/2021

### STATE OR COUNTRY

UNITED STATES

### ADDRESS

### FILING FEE RECEIVED

\$6,160

PLUS Search Results for S/N 17390922, Searched Mon Nov 29 07:41:55 EST 2021

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.

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| APPLICATION NO.                                                                   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 17/390,922                                                                        | 07/31/2021  | Lin Han              | 2390-022993         | 7201             |
| 180741                                                                            | 7590        | 11/02/2021           | EXAMINER            |                  |
| Cognition IP, P.C.<br>201 Mission Street<br>Suite 1200<br>San Francisco, CA 94105 |             |                      | ART UNIT            | PAPER NUMBER     |
|                                                                                   |             |                      | 2656                |                  |
|                                                                                   |             |                      | MAIL DATE           | DELIVERY MODE    |
|                                                                                   |             |                      | 11/02/2021          | 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.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                        |                                   |                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------|---------------------------------|
| <b><i>Decision Granting Request for Prioritized Examination (Track I)</i></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Application No.</b><br>17/390,922   | <b>Applicant(s)</b><br>Han et al. |                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Examiner</b><br>KIMBERLY A INABINET | <b>Art Unit</b><br>OPET           | <b>AIA (FITF) Status</b><br>Yes |
| <p>1. THE REQUEST FILED <u>31 July 2021</u> IS <b>GRANTED</b> .</p> <p>The above-identified application has met the requirements for prioritized examination</p> <p>A. <input checked="" type="checkbox"/> for an original nonprovisional application (Track I).</p> <p>B. <input type="checkbox"/> for an application undergoing continued examination (RCE).</p> <p>2. <b>The above-identified application will undergo prioritized examination.</b> The application will be accorded special status throughout its entire course of prosecution until one of the following occurs:</p> <p>A. filing a <b><u>petition for extension of time</u></b> to extend the time period for filing a reply;</p> <p>B. filing an <b><u>amendment to amend the application to contain more than four independent claims, more than thirty total claims</u></b>, or a multiple dependent claim;</p> <p>C. filing a <b><u>request for continued examination</u></b> ;</p> <p>D. filing a notice of appeal;</p> <p>E. filing a request for suspension of action;</p> <p>F. mailing of a notice of allowance;</p> <p>G. mailing of a final Office action;</p> <p>H. completion of examination as defined in 37 CFR 41.102; or</p> <p>I. abandonment of the application.</p> <p>Telephone inquiries with regard to this decision should be directed to KIMBERLY INABINET at (571) 272-4618. In his/her absence, calls may be directed to Petition Help Desk at (571) 272-3282.</p> |                                        |                                   |                                 |
| /KIMBERLY A INABINET/<br>Paralegal Specialist, OPET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |                                   |                                 |



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| APPLICATION<br>NUMBER | FILING or<br>371(c) DATE | GRP ART<br>UNIT | FIL FEE REC'D | ATTY. DOCKET NO | TOT CLAIMS | IND CLAIMS |
|-----------------------|--------------------------|-----------------|---------------|-----------------|------------|------------|
| 17/390,922            | 07/31/2021               | 2656            | 1980          | 2390-022993     | 20         | 2          |

180741  
Cognition IP, P.C.  
201 Mission Street  
Suite 1200  
San Francisco, CA 94105

**CONFIRMATION NO. 7201**  
**UPDATED FILING RECEIPT**



Date Mailed: 10/13/2021

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

**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 corrected Filing Receipt, including a properly marked-up ADS showing the changes with strike-through for deletions and underlining for additions. If you received a "Notice to File Missing Parts" or other Notice requiring a response for this application, please submit any request for correction 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 provided that the request is grantable.

## Inventor(s)

Lin Han, Los Altos, CA;  
Bo Ling, Saratoga, CA;  
Sam Sheng, San Jose, CA;  
Nitasha Walia, Sunnyvale, CA;

## Applicant(s)

Zoom Video Communications, Inc., San Jose, CA;

**Power of Attorney:** The patent practitioners associated with Customer Number 180741

## Domestic Applications for which benefit is claimed - None.

*A proper domestic benefit claim must be provided in an Application Data Sheet in order to constitute a claim for domestic benefit. See 37 CFR 1.76 and 1.78.*

## 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 Application via Priority Document Exchange:** Yes

**Permission to Access Search Results:** Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

**If Required, Foreign Filing License Granted:** 08/12/2021

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 17/390,922**

**Projected Publication Date:** 02/02/2023

**Non-Publication Request:** No

**Early Publication Request:** No

**Title**

CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION

**Preliminary Class**

348

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

## **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

page 2 of 4

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 (1-866-999-4258).

**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).

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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.

| <b>PATENT APPLICATION FEE DETERMINATION RECORD</b><br>Substitute for Form PTO-875                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                               |                                    |               |                    |                    | Application or Docket Number<br>17/390,922 |                    |                               |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------|--------------------|--------------------|--------------------------------------------|--------------------|-------------------------------|--|
| <b>APPLICATION AS FILED - PART I</b>                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                               |                                    |               |                    |                    |                                            |                    |                               |  |
| (Column 1)                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                               | (Column 2)                         |               | SMALL ENTITY       |                    | OR<br>OTHER THAN SMALL ENTITY              |                    |                               |  |
| FOR                                                                                                                                                                                                                                                                                                                                                                                                        | NUMBER FILED                                                                                                                                                                                                                  | NUMBER EXTRA                       | RATE(\$)      | FEE(\$)            |                    | RATE(\$)                                   | FEE(\$)            |                               |  |
| BASIC FEE<br>(37 CFR 1.16(a), (b), or (c))                                                                                                                                                                                                                                                                                                                                                                 | N/A                                                                                                                                                                                                                           | N/A                                | N/A           |                    |                    | N/A                                        | 320                |                               |  |
| SEARCH FEE<br>(37 CFR 1.16(k), (l), or (m))                                                                                                                                                                                                                                                                                                                                                                | N/A                                                                                                                                                                                                                           | N/A                                | N/A           |                    |                    | N/A                                        | 700                |                               |  |
| EXAMINATION FEE<br>(37 CFR 1.16(o), (p), or (q))                                                                                                                                                                                                                                                                                                                                                           | N/A                                                                                                                                                                                                                           | N/A                                | N/A           |                    |                    | N/A                                        | 800                |                               |  |
| TOTAL CLAIMS<br>(37 CFR 1.16(j))                                                                                                                                                                                                                                                                                                                                                                           | 20                                                                                                                                                                                                                            | minus 20 = *                       |               |                    | OR                 | x 100 =                                    | 0.00               |                               |  |
| INDEPENDENT CLAIMS<br>(37 CFR 1.16(h))                                                                                                                                                                                                                                                                                                                                                                     | 2                                                                                                                                                                                                                             | minus 3 = *                        |               |                    |                    | x 480 =                                    | 0.00               |                               |  |
| APPLICATION SIZE FEE<br>(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               |                               |  |
| * If the difference in column 1 is less than zero, enter "0" in column 2.                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                               |                                    |               | TOTAL              |                    | TOTAL                                      | 1820               |                               |  |
| <b>APPLICATION AS AMENDED - PART II</b>                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                               |                                    |               |                    |                    |                                            |                    |                               |  |
| (Column 1)                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                               | (Column 2)                         |               | (Column 3)         |                    | SMALL ENTITY                               |                    | OR<br>OTHER THAN SMALL ENTITY |  |
| AMENDMENT A                                                                                                                                                                                                                                                                                                                                                                                                | CLAIMS REMAINING AFTER AMENDMENT                                                                                                                                                                                              | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE(\$)           | ADDITIONAL FEE(\$) |                                            | RATE(\$)           | ADDITIONAL FEE(\$)            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | Total<br>(37 CFR 1.16(i))                                                                                                                                                                                                     | *                                  | Minus **      | =                  | x =                | OR                                         | x =                |                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | Independent<br>(37 CFR 1.16(h))                                                                                                                                                                                               | *                                  | Minus ***     | =                  | x =                | OR                                         | x =                |                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | Application Size Fee (37 CFR 1.16(s))                                                                                                                                                                                         |                                    |               |                    |                    | OR                                         |                    |                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))                                                                                                                                                               |                                    |               |                    |                    | OR                                         |                    |                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                               |                                    |               | TOTAL<br>ADD'L FEE |                    | OR                                         | TOTAL<br>ADD'L FEE |                               |  |
| AMENDMENT B                                                                                                                                                                                                                                                                                                                                                                                                | CLAIMS REMAINING AFTER AMENDMENT                                                                                                                                                                                              | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE(\$)           | ADDITIONAL FEE(\$) |                                            | RATE(\$)           | ADDITIONAL FEE(\$)            |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | Total<br>(37 CFR 1.16(i))                                                                                                                                                                                                     | *                                  | Minus **      | =                  | x =                | OR                                         | x =                |                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | Independent<br>(37 CFR 1.16(h))                                                                                                                                                                                               | *                                  | Minus ***     | =                  | x =                | OR                                         | x =                |                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | Application Size Fee (37 CFR 1.16(s))                                                                                                                                                                                         |                                    |               |                    |                    | OR                                         |                    |                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))                                                                                                                                                               |                                    |               |                    |                    | OR                                         |                    |                               |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                               |                                    |               | TOTAL<br>ADD'L FEE |                    | OR                                         | TOTAL<br>ADD'L FEE |                               |  |
| * If the entry in column 1 is less than the entry in column 2, write "0" in column 3.<br>** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".<br>*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".<br>The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1. |                                                                                                                                                                                                                               |                                    |               |                    |                    |                                            |                    |                               |  |



UNITED STATES PATENT AND TRADEMARK OFFICE

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Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 17/390,922         | 07/31/2021            | Lin Han               | 2390-022993            |

**CONFIRMATION NO. 7201**

**INFORMAL NOTICE**



180741  
Cognition IP, P.C.  
201 Mission Street  
Suite 1200  
San Francisco, CA 94105

Date Mailed: 10/13/2021

**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):  
Lin Han  
Sam Sheng

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

/ltaba/

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

In re application of: Zoom Video Communications, Inc.  
Application No.: 17/390,922  
Filed: July 31, 2021  
For: CONCURRENT SCREEN SHARING BY MULTIPLE USERS  
WITHIN A COMMUNICATION SESSION  
Confirmation No.: 7201

**RESPONSE TO NOTICE TO FILE MISSING PARTS**

Via EFS-Web  
Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Commissioner:

In response to the Notice to File Missing Parts mailed August 12, 2021, Applicant respectfully submits the late submission of the declaration surcharge in the amount of \$160.00. No new matter has been added.

Please charge any additional fees due or credit any overpayment in connection with the filing of this concurrent and future replies, including extension of time fees, to Deposit Account 506189.

Respectfully submitted,

/Edward Steakley/

Edward Steakley

Reg. No. 47,964

October 7, 2021

| Electronic Patent Application Fee Transmittal |          |                                                                            |        |                      |
|-----------------------------------------------|----------|----------------------------------------------------------------------------|--------|----------------------|
| Application Number:                           |          | 17390922                                                                   |        |                      |
| Filing Date:                                  |          | 31-Jul-2021                                                                |        |                      |
| Title of Invention:                           |          | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |        |                      |
| First Named Inventor/Applicant Name:          |          | Lin Han                                                                    |        |                      |
| Filer:                                        |          | Edward Dale Steakley/Kayla Adkins                                          |        |                      |
| Attorney Docket Number:                       |          | 2390-022993                                                                |        |                      |
| Filed as Large Entity                         |          |                                                                            |        |                      |
| Filing Fees for Utility under 35 USC 111(a)   |          |                                                                            |        |                      |
| Description                                   | Fee Code | Quantity                                                                   | Amount | Sub-Total in USD(\$) |
| Basic Filing:                                 |          |                                                                            |        |                      |
| Pages:                                        |          |                                                                            |        |                      |
| Claims:                                       |          |                                                                            |        |                      |
| Miscellaneous-Filing:                         |          |                                                                            |        |                      |
| LATE FILING FEE FOR OATH OR DECLARATION       | 1051     | 1                                                                          | 160    | 160                  |
| Petition:                                     |          |                                                                            |        |                      |
| Patent-Appeals-and-Interference:              |          |                                                                            |        |                      |
| Post-Allowance-and-Post-Issuance:             |          |                                                                            |        |                      |

| Description        | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
|--------------------|----------|----------|--------|----------------------|
| Extension-of-Time: |          |          |        |                      |
| Miscellaneous:     |          |          |        |                      |
| Total in USD (\$)  |          |          |        | 160                  |

## Electronic Acknowledgement Receipt

|                                             |                                                                            |
|---------------------------------------------|----------------------------------------------------------------------------|
| <b>EFS ID:</b>                              | 43980136                                                                   |
| <b>Application Number:</b>                  | 17390922                                                                   |
| <b>International Application Number:</b>    |                                                                            |
| <b>Confirmation Number:</b>                 | 7201                                                                       |
| <b>Title of Invention:</b>                  | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |
| <b>First Named Inventor/Applicant Name:</b> | Lin Han                                                                    |
| <b>Customer Number:</b>                     | 180741                                                                     |
| <b>Filer:</b>                               | Edward Dale Steakley/Kayla Adkins                                          |
| <b>Filer Authorized By:</b>                 | Edward Dale Steakley                                                       |
| <b>Attorney Docket Number:</b>              | 2390-022993                                                                |
| <b>Receipt Date:</b>                        | 12-OCT-2021                                                                |
| <b>Filing Date:</b>                         | 31-JUL-2021                                                                |
| <b>Time Stamp:</b>                          | 00:12:17                                                                   |
| <b>Application Type:</b>                    | Utility under 35 USC 111(a)                                                |

### Payment information:

|                                          |                  |
|------------------------------------------|------------------|
| Submitted with Payment                   | yes              |
| Payment Type                             | CARD             |
| Payment was successfully received in RAM | \$ 160           |
| RAM confirmation Number                  | E20210B112292220 |
| Deposit Account                          |                  |
| Authorized User                          |                  |

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

| <b>File Listing:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                   |                                                          |                                           |                  |                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------|-------------------------------------------|------------------|------------------|
| Document Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Document Description                              | File Name                                                | File Size(Bytes)/<br>Message Digest       | Multi Part /.zip | Pages (if appl.) |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Applicant Response to Pre-Exam Formalities Notice | 2390-022993_Response_to_Notice_to_File_Missing_Parts.pdf | 71858                                     | no               | 1                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                   |                                                          | 07d59e046733022e24a28a1d647214080594cc23  |                  |                  |
| <b>Warnings:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                   |                                                          |                                           |                  |                  |
| <b>Information:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                   |                                                          |                                           |                  |                  |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Fee Worksheet (SB06)                              | fee-info.pdf                                             | 37918                                     | no               | 2                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                   |                                                          | 02e8f503bcc0ebe6e68e526e1ced492f97e4dfa15 |                  |                  |
| <b>Warnings:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                   |                                                          |                                           |                  |                  |
| <b>Information:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                   |                                                          |                                           |                  |                  |
| <b>Total Files Size (in bytes):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                   |                                                          | 109776                                    |                  |                  |
| <p><b>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.</b></p> <p><b><u>New Applications Under 35 U.S.C. 111</u></b><br/> 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.</p> <p><b><u>National Stage of an International Application under 35 U.S.C. 371</u></b><br/> 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.</p> <p><b><u>New International Application Filed with the USPTO as a Receiving Office</u></b><br/> 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.</p> |                                                   |                                                          |                                           |                  |                  |

| <b>PATENT APPLICATION FEE DETERMINATION RECORD</b><br>Substitute for Form PTO-875                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                               |                                    |               |                    |                    | Application or Docket Number<br>17/390,922 |                    |                         |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------|--------------------|--------------------|--------------------------------------------|--------------------|-------------------------|--|
| <b>APPLICATION AS FILED - PART I</b>                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                               |                                    |               |                    |                    |                                            |                    |                         |  |
| (Column 1)                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                               | (Column 2)                         |               | SMALL ENTITY       |                    | OTHER THAN SMALL ENTITY                    |                    |                         |  |
| FOR                                                                                                                                                                                                                                                                                                                                                                                                        | NUMBER FILED                                                                                                                                                                                                                  | NUMBER EXTRA                       | RATE(\$)      | FEE(\$)            |                    | RATE(\$)                                   | FEE(\$)            |                         |  |
| BASIC FEE<br>(37 CFR 1.16(a), (b), or (c))                                                                                                                                                                                                                                                                                                                                                                 | N/A                                                                                                                                                                                                                           | N/A                                | N/A           |                    |                    | N/A                                        | 320                |                         |  |
| SEARCH FEE<br>(37 CFR 1.16(k), (l), or (m))                                                                                                                                                                                                                                                                                                                                                                | N/A                                                                                                                                                                                                                           | N/A                                | N/A           |                    |                    | N/A                                        | 700                |                         |  |
| EXAMINATION FEE<br>(37 CFR 1.16(o), (p), or (q))                                                                                                                                                                                                                                                                                                                                                           | N/A                                                                                                                                                                                                                           | N/A                                | N/A           |                    |                    | N/A                                        | 800                |                         |  |
| TOTAL CLAIMS<br>(37 CFR 1.16(j))                                                                                                                                                                                                                                                                                                                                                                           | 20                                                                                                                                                                                                                            | minus 20 = *                       |               |                    | OR                 | x 100 =                                    | 0.00               |                         |  |
| INDEPENDENT CLAIMS<br>(37 CFR 1.16(h))                                                                                                                                                                                                                                                                                                                                                                     | 2                                                                                                                                                                                                                             | minus 3 = *                        |               |                    |                    | x 480 =                                    | 0.00               |                         |  |
| APPLICATION SIZE FEE<br>(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               |                         |  |
| * If the difference in column 1 is less than zero, enter "0" in column 2.                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                               |                                    |               | TOTAL              |                    | TOTAL                                      | 1820               |                         |  |
| <b>APPLICATION AS AMENDED - PART II</b>                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                               |                                    |               |                    |                    |                                            |                    |                         |  |
| (Column 1)                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                               | (Column 2)                         |               | (Column 3)         |                    | SMALL ENTITY                               |                    | OTHER THAN SMALL ENTITY |  |
| AMENDMENT A                                                                                                                                                                                                                                                                                                                                                                                                | CLAIMS REMAINING AFTER AMENDMENT                                                                                                                                                                                              | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE(\$)           | ADDITIONAL FEE(\$) |                                            | RATE(\$)           | ADDITIONAL FEE(\$)      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | Total<br>(37 CFR 1.16(i))                                                                                                                                                                                                     | *                                  | Minus **      | =                  | x =                | OR                                         | x =                |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | Independent<br>(37 CFR 1.16(h))                                                                                                                                                                                               | *                                  | Minus ***     | =                  | x =                | OR                                         | x =                |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | Application Size Fee (37 CFR 1.16(s))                                                                                                                                                                                         |                                    |               |                    |                    | OR                                         |                    |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))                                                                                                                                                               |                                    |               |                    |                    | OR                                         |                    |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                               |                                    |               | TOTAL<br>ADD'L FEE |                    | OR                                         | TOTAL<br>ADD'L FEE |                         |  |
| AMENDMENT B                                                                                                                                                                                                                                                                                                                                                                                                | CLAIMS REMAINING AFTER AMENDMENT                                                                                                                                                                                              | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE(\$)           | ADDITIONAL FEE(\$) |                                            | RATE(\$)           | ADDITIONAL FEE(\$)      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | Total<br>(37 CFR 1.16(i))                                                                                                                                                                                                     | *                                  | Minus **      | =                  | x =                | OR                                         | x =                |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | Independent<br>(37 CFR 1.16(h))                                                                                                                                                                                               | *                                  | Minus ***     | =                  | x =                | OR                                         | x =                |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | Application Size Fee (37 CFR 1.16(s))                                                                                                                                                                                         |                                    |               |                    |                    | OR                                         |                    |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))                                                                                                                                                               |                                    |               |                    |                    | OR                                         |                    |                         |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                               |                                    |               | TOTAL<br>ADD'L FEE |                    | OR                                         | TOTAL<br>ADD'L FEE |                         |  |
| * If the entry in column 1 is less than the entry in column 2, write "0" in column 3.<br>** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".<br>*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".<br>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  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION<br>NUMBER | FILING or<br>371(c) DATE | GRP ART<br>UNIT | FIL FEE REC'D | ATTY. DOCKET NO | TOT CLAIMS | IND CLAIMS |
|-----------------------|--------------------------|-----------------|---------------|-----------------|------------|------------|
| 17/390,922            | 07/31/2021               | 2656            | 1820          | 2390-022993     | 20         | 2          |

CONFIRMATION NO. 7201

## FILING RECEIPT



0000000127686329

180741  
Cognition IP, P.C.  
201 Mission Street  
Suite 1200  
San Francisco, CA 94105

Date Mailed: 08/12/2021

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

**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 corrected Filing Receipt, including a properly marked-up ADS showing the changes with strike-through for deletions and underlining for additions. If you received a "Notice to File Missing Parts" or other Notice requiring a response for this application, please submit any request for correction 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 provided that the request is grantable.

### Inventor(s)

Lin Han, Los Altos, CA;  
Bo Ling, Saratoga, CA;  
Sam Sheng, San Jose, CA;  
Nitasha Walia, Sunnyvale, CA;

### Applicant(s)

Zoom Video Communications, Inc., San Jose, CA;

**Power of Attorney:** The patent practitioners associated with Customer Number 180741

### Domestic Applications for which benefit is claimed - None.

*A proper domestic benefit claim must be provided in an Application Data Sheet in order to constitute a claim for domestic benefit. See 37 CFR 1.76 and 1.78.*

**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 Application via Priority Document Exchange:** Yes

**Permission to Access Search Results:** Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

**If Required, Foreign Filing License Granted:** 08/12/2021

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 17/390,922**

**Projected Publication Date:** 02/02/2023

**Non-Publication Request:** No

**Early Publication Request:** No

**Title**

CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION

**Preliminary Class**

348

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

## **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

page 2 of 4

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 (1-866-999-4258).

**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).

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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

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# 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 |
|--------------------|-----------------------|-----------------------|------------------------|
| 17/390,922         | 07/31/2021            | Lin Han               | 2390-022993            |

**CONFIRMATION NO. 7201**

## FORMALITIES LETTER



180741  
Cognition IP, P.C.  
201 Mission Street  
Suite 1200  
San Francisco, CA 94105

Date Mailed: 08/12/2021

## NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

**FILED UNDER 37 CFR 1.53(b)**

*Filing Date Granted*

### Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing.

Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- Surcharge as set forth in 37 CFR 1.16(f) must be submitted.

The surcharge is due for any one of:

- late submission of the basic filing fee, search fee, or examination fee,
- late submission of inventor's oath or declaration,
- filing an application that does not contain at least one claim on filing, or
- submission of an application filed by reference to a previously filed application.

### SUMMARY OF FEES DUE:

The fee(s) required within **TWO MONTHS** from the date of this Notice to avoid abandonment is/are itemized below. No entity status discount is in effect. If applicant is qualified for small entity status, a written assertion of small entity status must be submitted to establish small entity status. (See 37 CFR 1.27). If applicant is qualified for micro entity status, an acceptable Certification of Micro Entity Status must be submitted to establish micro entity status. (See 37 CFR 1.29 and forms PTO/SB/15A and 15B.)

- \$ **160** surcharge.
- \$( **0** ) previous unapplied payment amount.
- \$ **160** TOTAL FEE BALANCE DUE.

### Items Required To Avoid Processing Delays:

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).

- A properly executed inventor's oath or declaration has not been received for the following inventor(s):  
Lin Han  
Sam Sheng

Replies must be received in the USPTO within the set time period or must include a proper Certificate of Mailing or Transmission under 37 CFR 1.8 with a mailing or transmission date within the set time period. For more information and a suggested format, see Form PTO/SB/92 and MPEP 512.

Replies should be mailed to:

Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web, including a copy of this Notice and selecting the document description "Applicant response to Pre-Exam Formalities Notice".  
<https://portal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at <http://www.uspto.gov/ebc>.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

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

/kgebremichael/

---

## TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

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

|                        |                                                                            |
|------------------------|----------------------------------------------------------------------------|
| Application Number     |                                                                            |
| Filing Date            |                                                                            |
| First Named Inventor   | Lin Han                                                                    |
| Title                  | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |
| Art Unit               |                                                                            |
| Examiner Name          |                                                                            |
| Attorney Docket Number | 2390-022993                                                                |

### SIGNATURE of Applicant or Patent Practitioner

|                                                    |                |                     |        |
|----------------------------------------------------|----------------|---------------------|--------|
| Signature                                          | /Aroon Karuna/ | Date (Optional)     |        |
| Name                                               | Aroon Karuna   | Registration Number | 68,335 |
| Title (if Applicant is a juristic entity)          |                |                     |        |
| Applicant Name (if Applicant is a juristic entity) |                |                     |        |

**NOTE:** This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.

☐

\*Total of \_\_\_\_\_ forms are submitted.

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

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

Zoom Communications, Inc. v. Ricoh Company, Ltd.

IPR2026-00407 | EX2005 | Page 177 of 246

## POWER OF ATTORNEY BY APPLICANT

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

| Application Number | Filing Date |
|--------------------|-------------|
|                    |             |

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

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

180741

OR

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

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

☒ The address associated with the above-mentioned Customer Number

OR

The address associated with Customer Number:

OR

|                         |  |       |  |     |
|-------------------------|--|-------|--|-----|
| Firm or Individual Name |  |       |  |     |
| Address                 |  |       |  |     |
| City                    |  | State |  | Zip |
| Country                 |  |       |  |     |
| Telephone               |  | Email |  |     |

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

Zoom Video Communications, Inc.

Inventor or Joint Inventor (title not required below)

Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)

☒ Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)

Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

### SIGNATURE of Applicant for Patent

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

|           |                    |                 |  |
|-----------|--------------------|-----------------|--|
| Signature | Lopamudra Sengupta | Date (Optional) |  |
| Name      | Lopamudra Sengupta |                 |  |
| Title     | Senior Counsel     |                 |  |

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

Total of forms are submitted.

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

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

Zoom Communications, Inc. v. Ricoh Company, Ltd.

IPR2026-00407 | EX2005 | Page 178 of 246

## 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.

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.

**DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN  
APPLICATION DATA SHEET (37 CFR 1.76)****Title of  
Invention****CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A  
COMMUNICATION SESSION**

As the below named inventor, I hereby declare that:

This declaration ☒ The attached application, or  
is directed to:☐ United States application or PCT international application number \_\_\_\_\_  
filed on \_\_\_\_\_.

The above-identified application was made or authorized to be made by me.

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

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

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

**LEGAL NAME OF INVENTOR**Inventor: Bo Ling Date (Optional) : \_\_\_\_\_Signature: Bo Ling

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

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IPR2026-00407 | EX2005 | Page 180 of 246

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

**Title of  
Invention**

**CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A  
COMMUNICATION SESSION**

As the below named inventor, I hereby declare that:

This declaration ☒ The attached application, or

☐ United States application or PCT international application number \_\_\_\_\_  
filed on \_\_\_\_\_.

The above-identified application was made or authorized to be made by me.

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

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

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### LEGAL NAME OF INVENTOR

Inventor: Nitasha Walia Date (Optional) : \_\_\_\_\_

Signature: Nitasha Walia

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IPR2026-00407 | EX2005 | Page 181 of 246

## **CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION**

### **FIELD OF INVENTION**

**[0001]** The present invention relates generally to digital communication, and more particularly, to systems and methods providing concurrent sharing of screen elements by multiple users within a communication session.

### **BACKGROUND**

**[0002]** Digital communication tools and platforms have been essential in providing the ability for people and organizations to communicate and collaborate remotely, e.g., over the internet. In particular, there has been massive adopted use of communication platforms allowing for remote video sessions between multiple participants. Communications applications for casual friendly conversation (“chat”), webinars, large group meetings, work meetings or gatherings, asynchronous work or personal conversation, and more have exploded in popularity.

**[0003]** One common use case for such communication platforms is to enable remote teams (of, e.g., employees or students) to work together and collaborate. This is often enabled by the ability within a communication session for a participant to “screen share”. Screen sharing, as discussed herein, relates to a participant’s ability to share their screen or elements of their screen, that is, share what they are currently working on at their particular device. For example, a participant of a communication session may be able to share their entire screen, including all windows or other elements that are open on their screen at the moment, or a participant may instead opt to share a single window or element within that screen. Other participants of the communication session will be able to see what is being shared by the participant on their own screen, such as within a window or browser tab dedicated to the communication platform.

**[0004]** While such screen or screen element sharing is highly useful and conducive to collaboration between participants, it has so far been the case on communication platforms that only one participant may share their screen or a screen element at a time. Thus, remote teams working together may be unable to see each other's screens simultaneously. In most cases, the participant sharing their screen will have to choose to stop sharing first before a second participant is able to share their screen or screen element, since only one single participant can share their screen at any given time.

**[0005]** Thus, there is a need in the field of digital communication to create a new and useful system and method for providing concurrent sharing of screen elements by multiple users within a communication session. The source of the problem, as discovered by the inventors, is a lack of ability for potentially multiple users to simultaneously share their screens or screen elements in order to collaborate during a live video session.

## SUMMARY

**[0006]** The invention overcomes the existing problems by allowing concurrent sharing of screens or screen elements (hereinafter, "screens or screen elements" will be simplified as "screen elements") within a communication session of a communication platform.

**[0007]** In one embodiment, a system connects multiple participants of a communication session with the ability to share screen elements simultaneously. The system then receives, from a first participant of the communication session, a request to initiate sharing of one or more screen elements from a user device associated with the first participant. In response to the request, the system captures and displays the one or more screen elements from the user device of the first participant to the communication interfaces of the other participants. The system then receives,

from one or more additional participants of the communication session, additional requests to initiate sharing of one or more additional screen elements from the user devices associated with the additional participants. Finally, in response to the additional requests, the system captures and displays the one or more additional screen elements from the user devices of the additional participants to the communication interfaces of the other participants, such that multiple screen elements from multiple users are displayed concurrently.

**[0008]** Further areas of applicability of the present disclosure will become apparent from the detailed description, the claims and the drawings. The detailed description and specific examples are intended for illustration only and are not intended to limit the scope of the disclosure.

#### BRIEF DESCRIPTION OF THE DRAWINGS

**[0009]** The present invention relates generally to digital communication, and more particularly, to systems and methods providing for containment of sensitive data within a communication or messaging platform.

**[0010]** The present disclosure will become better understood from the detailed description and the drawings, wherein:

**[0011]** FIG. 1A is a diagram illustrating an exemplary environment in which some embodiments may operate.

**[0012]** FIG. 1B is a diagram illustrating an exemplary computer system that may execute instructions to perform some of the methods herein.

**[0013]** FIG. 2 is a flow chart illustrating an exemplary method 200 that may be performed in some embodiments.

**[0014]** FIG. 3A is a diagram illustrating a communications interface with screen sharing elements, in accordance with some embodiments.

**[0015]** FIG. 3B is a diagram illustrating a communications interface with screen sharing settings, in accordance with some embodiments.

**[0016]** FIG. 4A is a diagram illustrating a communications interface with viewing options, in accordance with some embodiments.

**[0017]** FIG. 4B is a diagram illustrating a communications interface with viewing options for multiple screens, in accordance with some embodiments.

**[0018]** FIG. 4C is a diagram illustrating switching between multiple screens during a communication session, in accordance with some embodiments.

**[0019]** FIG. 5A is a diagram illustrating a communications interface with a dual monitor setting, in accordance with some embodiments.

**[0020]** FIG. 5B is a diagram illustrating multiple screens viewed on multiple monitors, in accordance with some embodiments.

**[0021]** FIG. 5C is a diagram illustrating multiple screens viewed side-by-side on a single monitor, in accordance with some embodiments.

**[0022]** FIG. 5D is a diagram illustrating multiple screens viewed on multiple monitors, in accordance with some embodiments.

**[0023]** FIG. 6 is a diagram illustrating an exemplary computer that may perform processing in some embodiments.

## DETAILED DESCRIPTION

**[0024]** In this specification, reference is made in detail to specific embodiments of the invention.

Some of the embodiments or their aspects are illustrated in the drawings.

**[0025]** For clarity in explanation, the invention has been described with reference to specific embodiments, however it should be understood that the invention is not limited to the described embodiments. On the contrary, the invention covers alternatives, modifications, and equivalents as may be included within its scope as defined by any patent claims. The following embodiments of the invention are set forth without any loss of generality to, and without imposing limitations on, the claimed invention. In the following description, specific details are set forth in order to provide a thorough understanding of the present invention. The present invention may be practiced without some or all of these specific details. In addition, well known features may not have been described in detail to avoid unnecessarily obscuring the invention.

**[0026]** In addition, it should be understood that steps of the exemplary methods set forth in this exemplary patent can be performed in different orders than the order presented in this specification. Furthermore, some steps of the exemplary methods may be performed in parallel rather than being performed sequentially. Also, the steps of the exemplary methods may be performed in a network environment in which some steps are performed by different computers in the networked environment.

**[0027]** Some embodiments are implemented by a computer system. A computer system may include a processor, a memory, and a non-transitory computer-readable medium. The memory and non-transitory medium may store instructions for performing methods and steps described herein.

**[0028]** By way of illustration, a team within an organization may wish to work together remotely, but are not able to see each other's screens simultaneously. Instead, only one screen at a time may be shared within a session of the communication platform being used. For example, in order for Anna to share a screen or screen elements after Michael has already started sharing, Michael must first stop sharing his screen. Once no screen is being shared, Anna can then share her screen.

**[0029]** In contrast, using the current approach, multiple participants can share their screen(s) or screen element(s) simultaneously at any given point in time during a communication session. Thus, Anna and Michael can both share their screens at the same time. Each can share multiple screens or screen elements, and each can view multiple shared screens or screen elements on their monitor or monitors. Each of them can individually choose which screen they would like to see on a monitor, view the screens side-by-side on a single monitor, or view different screens on two or potentially more monitors. In addition, an arbitrary number of screens can be shared within a communication session, and users can have control over which screen(s) they are viewing, and how the screens are presented (e.g., resizable window, full screen, and any other suitable form, size, position, or arrangement). No participant is required to stop sharing before others can share. This provides flexibility and increased collaboration across multiple screens and environments for the team, allowing them to work remotely more effectively.

**[0030]** Many other possibilities and options can be contemplated for this use case and others, as will be described in further detail throughout.

## I. Exemplary Environments

**[0031]** FIG. 1A is a diagram illustrating an exemplary environment in which some embodiments may operate. In the exemplary environment 100, one or more sending client device(s) 150 and

one or more receiving client device(s) 160 are connected to a processing engine 102 and, optionally, a communication platform 140. The processing engine 102 is connected to the communication platform 140, and optionally connected to one or more repositories and/or databases, including a participant repository 130, screen element repository 132, and/or a session repository 134. One or more of the databases may be combined or split into multiple databases. The sending client device(s) 150 and receiving client device(s) 160 in this environment may be computers, and the communication platform server 140 and processing engine 102 may be applications or software hosted on a computer or multiple computers which are communicatively coupled via remote server or locally.

**[0032]** The exemplary environment 100 is illustrated with only one sending client device, one receiving client device, one processing engine, and one communication platform, though in practice there may be more or fewer sending client devices, receiving client devices, processing engines, and/or communication platforms. In some embodiments, one or more of the sending client device(s) and receiving client device(s) may be the same or part of the same computer(s) or device(s). In some embodiments, one or more processing engines and/or communication platforms may additionally be the same or part of the same computer(s) or device(s).

**[0033]** In an embodiment, the processing engine 102 may perform the method 200 (FIG. 2A) or other method herein and, as a result, provide concurrent sharing of screen elements from multiple users within a communication session. In some embodiments, this may be accomplished via communication with the sending client device and receiving client device, additional sending or receiving client device(s), processing engine, communication platform, and/or other device(s) over a network between the device(s) and an application server or some other network server. In some

embodiments, the processing engine 102 is an application, browser extension, or other piece of software hosted on a computer or similar device, or is itself a computer or similar device configured to host an application, browser extension, or other piece of software to perform some of the methods and embodiments herein.

**[0034]** The sending client device 150 and receiving client device(s) 160 are devices with a display configured to present information to a user of the device. In some embodiments, the sending client device(s) 150 and receiving client device(s) 160 present information in the form of a user interface (UI) with UI elements or components. In some embodiments, the sending client device(s) 150 and receiving client device(s) 160 send and receive signals and/or information to the processing engine 102 and/or communication platform 140. The sending client device 150 is configured to perform functions related to presenting and playing back a screen, screen element(s), video, audio, documents, annotations, and other materials within a video presentation (e.g., a virtual class, lecture, webinar, or any other suitable video presentation) on a communication platform. The receiving client device(s) 160 are configured to receiving display of and displaying the screen, screen element(s), video presentation, and in some cases, presenting material and/or video as well. In some embodiments, the sending client device(s) 150 and/or receiving client device(s) 160 can include an embedded or connected camera which is capable of generating and transmitting video content in real time or substantially real time. For example, one or more of the client devices may be smartphones with built-in cameras, and the smartphone operating software or applications may provide the ability to display live streams based on the video generated by the built-in cameras. In some embodiments, the sending client device(s) 150 and receiving client device(s) 160 are computing devices capable of hosting and executing one or more applications or other programs capable of sending and/or receiving information. In some embodiments, the sending client

device(s) 150 and/or receiving client device(s) 160 may be a computer desktop or laptop, mobile phone, virtual assistant, virtual reality or augmented reality device, wearable, or any other suitable device capable of sending and receiving information. In some embodiments, the processing engine 102 and/or communication platform 140 may be hosted in whole or in part as an application or web service executed on the sending client device(s) 150 and/or receiving client device(s) 160. In some embodiments, one or more of the communication platform 140, processing engine 102, and sending client device(s) 150 or receiving client device(s) 160 may be the same device. In some embodiments, the sending client device(s) 150 is associated with a first user account on the communication platform, and the receiving client device(s) 160 are associated with additional user account(s) on the communication platform.

**[0035]** In some embodiments, optional repositories can include one or more of a participant repository 130, screen element repository 132, and/or session repository 134. The optional repositories function to store and/or maintain, respectively, user account information associated with the communication platform 140, video content received by the communication platform 140 for display within video presentations, and annotations, which may include media and/or messaging-based annotations. The optional database(s) may also store and/or maintain any other suitable information for the processing engine 102 or communication platform 140 to perform elements of the methods and systems herein. In some embodiments, the optional database(s) can be queried by one or more components of system 100 (e.g., by the processing engine 102), and specific stored data in the database(s) can be retrieved.

**[0036]** Communication platform 140 is a platform configured to facilitate presentations (e.g., video presentations) and/or communication between two or more parties, such as within, e.g., a video conference or virtual classroom.

**[0037]** FIG. 1B is a diagram illustrating an exemplary computer system 150 with software modules that may execute some of the functionality described herein.

**[0038]** Connecting module 152 functions to connect a number of participants of a communication session to a live communication stream, including a communication interface for each participant,

**[0039]** Receiving module 154 functions to receive from a first participant of the communication session and/or additional participants, a request to initiate sharing of one or more screen elements from a user device associated with each participant.

**[0040]** Displaying module 156 functions to capture and display the one or more screen elements from the user device of the first participant and/or additional participants to the communication interfaces of the participants.

**[0041]** Concurrency module 158 functions to provide screen elements from multiple users to be shared to the communication interfaces of the participants of the communication session, such that the screen elements are displayed concurrently to the participants.

**[0042]** The above modules and their functions will be described in further detail in relation to an exemplary method below.

## II. Exemplary Method

**[0043]** FIG. 2A is a flow chart illustrating an exemplary method that may be performed in some embodiments.

**[0044]** At step 202, the system connects participants of a communication session to a live communication stream. The communication session may be any “session” (such as an instance of a video conference, webinar, informal chat session, or any other suitable session) initiated and hosted via the communication platform, for remotely communicating with one or more users of the communication platform, i.e., participants within the communication session. Participants are connected on user devices, and are associated with user accounts within the communication platform.

**[0045]** In some embodiments, the communication session includes a communication interface for each participant. The communication interface is a user interface (“UI”) displayed on the client device that each participant is using. In some embodiments, the communication interface appears different for different participants, or has different UI elements included for different participants depending on their user permissions, access levels (e.g., a premium-tier business user account as compared to a free-tier user account), or other aspects that may differentiate one participant from another within the communication platform. In various embodiments, the communication interface is configured to allow the participant to, e.g., navigate within the communication session, engage or interact with one or more functional elements within the communication session, control one or more aspects of the communication session, and/or configure one or more settings or preferences within the communication session.

**[0046]** In some embodiments, the system receives a number of video feeds depicting imagery of a number of participants, the video feeds each having multiple video frames. In some embodiments, the video feeds are each generated via an external device, such as, e.g., a video camera or a smartphone with a built-in video camera, and then the video content is transmitted to

the system. In some embodiments, the video content is generated within the system, such as on a participant's client device. For example, a participant may be using her smartphone to record video of herself giving a lecture. The video can be generated on the smartphone and then transmitted to the processing system, a local or remote repository, or some other location. In some embodiments, one or more of the video feeds are pre-recorded and are retrieved from local or remote repositories. In various embodiments, the video content can be streaming or broadcasted content, pre-recorded video content, or any other suitable form of video content. The video feeds each have multiple video frames, each of which may be individually or collectively processed by the processing engine of the system.

**[0047]** In some embodiments, the video feeds are received from one or more video cameras connected to a client device associated with each participant. Thus, for example, rather than using a camera built into the client device, an external camera can be used which transmits video to the client device, or some combination of both.

**[0048]** In some embodiments, the participants are users of a communication platform, and are connected remotely within a virtual communication room generated by the communication platform. This virtual communication room may be, e.g., a virtual classroom or lecture hall, a group room, a breakout room for subgroups of a larger group, or any other suitable communication room which can be presented within a communication platform. In some embodiments, synchronous or asynchronous messaging may be included within the communication session, such that the participants are able to textually "chat with" (i.e., sends messages back and forth between) one another in real time.

**[0049]** At step 204, the system receives, from a first participant, a request to initiate sharing of one or more screen elements from a user device associated with the first participant. In some embodiments, the request can be received by the participant navigating within the communication interface provided for display on the client device the participant is using.

**[0050]** A screen element represents any element, subset, or superset of a screen or UI that may be displayed on a client device. A screen element may be, e.g., a “window” within a desktop UI containing multiple windows, each representing a container for an application or element of an application. A screen element may be a full screen displayed on a user device. A screen element may also be, e.g., a “tab” among multiple tabs within a browser, with each tab displaying a single page the user has navigated to. Many other such screen elements may be contemplated.

**[0051]** In one example, the communication interface for a participant may include a UI element labeled “Share Screen” for the user to share his screen(s) and/or one or more screen elements. One example of a communication interface with an interface element for the user sharing screen(s) or screen element(s) is illustrated in FIG. 3A, which will be described in further detail below. Upon engaging with the UI element (e.g., clicking on the element), the UI may allow the user to select between various screen elements. In some embodiments, one or more of the screen elements may represent a full screen, such as a desktop UI of a computer device. In some embodiments, multiple such screens may be selected between, for example, when a participant is using a multiple monitor setup with a different desktop configured to be displayed on each monitor. In some embodiments, the user can select multiple screen elements to be shared. For example, a user with four window elements open on a desktop may opt to share two of the window elements simultaneously. In

another example, a user with two desktop UIs (or “screens”) displayed across two monitors may opt to share both of the screens.

**[0052]** In some embodiments, a screen element may include or consist of any media or documents which can be accessed in a communications platform, such as e.g., video, audio, text, presentation documents consisting of a number of slides, or a game or other interactive interface or component. In some embodiments, a screen element may be, e.g., a collaborative or editable document, or shared presentation. In some embodiments, a user may download or otherwise retrieve a screen element from an external source, then import it into the communications platform. In some embodiments, a presentation including a number of slides may be selected as a screen element. The presentation can depict one slide at a time in a slideshow format, with the user clicking or performing some other action to progress to the next slide. In some embodiments, the screen element may be a video, such as a short movie which can be played back such that the video plays at the same time for all users participating in the video session. In some embodiments, the screen element may be, e.g., a word processor document or spreadsheet document, a web site, a PDF document, or any other suitable viewable material. In some embodiments, the screen element is dynamically generated in real time during the video session.

**[0053]** In some embodiments, screen elements may include audio playback. Such audio playback may include playback of audio elements which can be heard by the participant sharing the screen during normal operation of the screen, device, window, or other elements. In some embodiments, when multiple screen elements are shared simultaneously by multiple users, such screen elements can include playback of audio elements from multiple users simultaneously. In some embodiments, a user may be able to configure their experience by, e.g., selecting one or more audio elements to

be heard exclusively and/or muting one or more audio elements while playing other audio elements.

**[0054]** At step 206, in response to receiving the request to initiate sharing, the system captures and displays the screen element(s) from the user device to the communication interfaces of the participants. In some embodiments, the system captures the screen element(s) by deploying one or more algorithms for capturing elements of a screen, such as, e.g., algorithms for screen capture, window capture, desktop capture, sharing of documents, sharing of media, or any other suitable algorithms. In some embodiments, the system can display the screen element(s) via streaming or broadcasted video of the captured screen element(s) or any other suitable displaying technique. In some embodiments, the system captures the screen elements in segments, and displays the segments in real time as they are captured. In some embodiments, video and/or audio of the screen elements are captured. The capturing and displaying continue until there is no more of the screen elements to capture (for example, when the user has opted to stop sharing his or her screen or window).

**[0055]** At step 208, the system receives, from one or more additional participants, additional requests to initiate sharing of one or more additional screen elements from the user devices associated with the additional participants. In some embodiments, the additional requests may be received in a similar or identical fashion to the system receiving a request to initiate sharing in 204.

**[0056]** In some embodiments, requests from additional participants can be received at any time upon the request from the first request being received. In some cases, one or more participants can

request to share their screen immediately after a first participant shares the screen, or at the same time as the first participant.

**[0057]** At step 210, in response to receiving the additional requests to initiate sharing of additional screen elements, the system captures and displays the additional screen elements from the user devices of the additional participants to the communication interfaces of the participants. In some embodiments, the system may capture and display the additional screen elements in a similar or identical fashion to the system capturing and displaying the screen element(s) in step 208.

**[0058]** In some embodiments, the concurrent display of multiple screen elements from multiple users requires one or more techniques or steps which function to enable the concurrency to be possible for each participant of the communication session and/or each user device associated with each participant. Such techniques or steps may include or involve, for example, video compression in order to reduce the required bandwidth of the video stream, techniques for low latency encoding, decoding, and display of screens with interactive elements, streaming techniques, reduction of frame rate or setting of a maximum frame rate, lowering video resolution, parallel processing, performing operations on video content frames and data, image data extraction and processing, or any other suitable technique or combination thereof.

**[0059]** In some embodiments, the system provides to one or more participants, via the communication interface for the participant, control over configuration of the screen element(s) as well as the additional screen elements. In some embodiments, this control may include, e.g., size or orientation of each screen element within the participant's configuration interface. In some embodiments, this control may include a selection of which screen elements to display and which to not display. In some embodiments, only a participant with certain permissions or privileges

within the communication platform may be authorized to control certain configuration features with respect to the screen elements.

**[0060]** In some embodiments, a participant can configure the screens to be viewed adjacent to one another on a single screen of a user device for the participant. For example, if a given participant is only using a single monitor setup at their desk, the participant may opt to view two screen elements side by side within that single monitor's display. In some embodiments, the system first determines that at least one of the participants is using multiple displays connected to a user device (such as, e.g., a multi-monitor setup), and then configures separate screen elements to be viewed on the multiple screens, such that each screen element is viewable on a separate screen of the user device.

**[0061]** In some embodiments, the system can be configured to receive a request from a participant to remotely control a screen element of another participant; and based on the request, the system can provide the ability for the participant to remotely control the screen element of the other participant. In various embodiments, the system can deploy this remote control of the screen element via one or more remote control applications, algorithms or techniques, such as, e.g., remote desktop control, remote application control, remote window control, or any other suitable technique.

**[0062]** In some embodiments, where at least one of the participants is a host or administrator for the communication session, the host or administrator can be granted permission by the system to configure sharing privileges of screen elements for the other participants. In some embodiments, the host or administrator can access a permissions interface by navigating the communications interface and interacting with one or more interface elements. The permissions interface can allow

the host or administrator to configure one or more permissions or privileges with respect to a communication session or sessions and/or one or more participants within the communication session. One example of a host or administrator having the ability to configure sharing privileges for the other participants is illustrated in FIG. 3B, as will be discussed in further detail below.

**[0063]** In some embodiments, where at least one of the participants is a host or administrator of the communication session, the host can be granted permission to configure which screen is viewed by all participants as a primary screen within the communication session. For example, the host can figure his or her own shared screen as a primary screen that is prominently displayed to participants, and one or more additional shared screens from additional participants as secondarily displayed, e.g., displayed next to the primary screen but less prominently. In some embodiments, different participants can view the screens and/or screen elements differently depending on the participant's user device and configuration (e.g., one monitor or multiple monitors).

**[0064]** In some embodiments, the session can be recorded and stored for later viewing, and at least the host is granted permission to configure which of the screen elements end up within the recording. The host may be able to configure such permissions within a communication interface, as described above. In some embodiments, upon playback of the recorded session, the user viewing the recording can switch between screen elements that are shared or configure how screen elements are viewed. Thus, in some embodiments, rather than the recording having a fixed view which cannot be altered, the recording can be dynamic in terms of the view(s) that a user can select when playing back the recording. In other embodiments, the recording can have a static, fixed view. In some embodiments, an administrator or host can configure the screen arrangement that appears within the static, fixed view.

**[0065]** In some embodiments, each participant has the ability to maximize, minimize, resize, and/or position each displayed screen element within the participant's communication interface. Each screen element can therefore be positioned as if it is a "window" UI element, to provide the participant with the ability to arrange the screen elements flexibly for optimum viewing and working space on the screen of the user device.

**[0066]** In various embodiments, the displayed screen elements can include one or more of an application, a whiteboard, a window, a desktop interface, a presentation, or any combination thereof. In some embodiments, any of these formats can be combined among multiple screens or screen elements. For example, multiple screens or screen elements shared from multiple different users may take the form of an application and a whiteboard; a window and an application; a desktop and an application; two different applications as well as a whiteboard, browser tab, and desktop; or any other combination. A variety of different formats and combinations can be contemplated.

**[0067]** In some embodiments, each participant is provided with the ability to provide annotations within screen elements displayed by the participant and/or other participants. The system receives annotation inputs corresponding to screen(s) and/or screen element(s) that are being displayed. In some embodiments, the annotation inputs may be provided via touch or stylus input from one or more client devices. For example, a user may use a stylus to sketch notes on the screen of a client device which is showing a presentation from a participant. As the participant sketches notes while displaying, the notes are received by the system. In some embodiments, annotation inputs may include, e.g., touch-based annotations, messaging-based annotations (including, e.g., emojis and

other symbols), or media-based annotations (such as video, audio, documents, images, drawings, or any other suitable media).

**[0068]** In some embodiments, the participants are provided with the ability to switch the view on the client device to any one of the shared screen or screen elements from the participants. For example, a participant may be able to jump between four different screens or screen elements shared by multiple participants. In some embodiments, the participant may opt to view two, three, or all four screens or screen elements simultaneously. In some embodiments, where multiple displayed screens or screen elements include audio playback simultaneously, the participant may be able to select between them in order to only hear one audio signal at a time.

**[0069]** In some embodiments, there may be no limitation to the number of screen elements which can be displayed simultaneously, such that an arbitrary number of participants can concurrently display an arbitrary number of screen elements. For example, in a large conference session with 100 users participating, it may be possible for all 100 users to share their screens. Users can choose which screens to view, including multiple screens side-by-side or split in various configurations across multiple monitors.

**[0070]** FIG. 3A is a diagram illustrating a communications interface with screen sharing elements, in accordance with some embodiments.

**[0071]** In the illustrated example, the communication interface for a participant includes a number of UI elements along the bottom of the interface, such as elements for, e.g.: inviting a user to the session; managing participants; polling participants; sharing screen, chatting, recording, and coordinating breakout rooms for participants. A UI element 302 labeled “Share Screen” is provided for the user to share his screen(s) and/or one or more screen elements. Upon engaging with the UI

element (e.g., clicking on the element), the UI may allow the user to select between various screen elements that the user has present, open, or accessible within their environment. In some embodiments, one or more of the screen elements may represent a full screen, such as a desktop UI of a computer device. In some embodiments, multiple such screens may be selected between, for example, when a participant is using a multiple monitor setup with a different desktop configured to be displayed on each monitor. In some embodiments, the user can select multiple screen elements to be shared. For example, a user with four window elements open on a desktop may opt to share two of the window elements simultaneously. In another example, a user with two desktop UIs (or “screens”) displayed across two monitors may opt to share both of the screens.

**[0072]** Sharing options 304 are also displayed when the user interacts with the up arrow element to the right of the screen sharing UI element 302. The displayed sharing options include switching between one participant being able to share at a given time, and multiple participants being able to share simultaneously. In the illustrated example, the setting for only one participant being able to share at a time is enabled. An option is also present for the user to navigate to an “Advanced Sharing Options” window, as illustrated in FIG. 3B and described below.

**[0073]** FIG. 3B is a diagram illustrating a communications interface with screen sharing settings, in accordance with some embodiments. The example illustrated in FIG. 3B represents what the user viewing the communication interface of FIG. 3A would see if the user clicked on the “Advanced Sharing Options” menu option. A window titled “Advanced Sharing Options” is shown, with a series of option buttons a user can select between. In some embodiments, this window is only accessible for administrators or hosts of a communication session, and allows the administrator or host to configure permissions for sharing with respect to the other participants

within the communication session. In some embodiments, the administrator or host is granted permission by the system (via, e.g., an account administrator) to configure sharing privileges of screen elements for the other participants. In some embodiments, the host or administrator can access a permissions interface by navigating the communications interface and interacting with one or more interface elements. In the illustrated example, the permissions interface takes the form of a window element with a series of option buttons to select between. In other embodiments, the permissions interface can take other forms.

**[0074]** A first sharing option presented reads, “How many participants can share at the same time?” and provides a choice between “one participant can share at a time” and “multiple participants can share simultaneously (dual monitors recommended)”. This is similar or identical to the choice presented in the menu shown in FIG. 3A.

**[0075]** A second sharing option presented reads, “Who can share?” and provides a choice between “only host” and “all participants”. Thus, the host or administrator can configure a particular communication session so that only he is able to share screen(s) or screen element(s), or can configure the session so that all participants are permitted to do so.

**[0076]** A third sharing option presented reads, “Who can start sharing when someone else is sharing?” and provides a choice between “only host” and “all participants”. The host can thus configure the communication session so that only the host is able to start sharing after someone else initially shares screen(s) and/or screen element(s). Alternatively, the host can configure the communication session so that any participant of the session can start sharing after someone else initially shares screen(s) and/or screen element(s).

**[0077]** Many other such sharing options can be contemplated.

**[0078]** FIG. 4A is a diagram illustrating a communications interface with viewing options, in accordance with some embodiments. The example illustrates a communication session which is currently active, with a communications interface for the session displayed on the screen of one of the participants' user devices. The communications interface shows a shared screen 402 from another participant. At the top of the communications interface, a message 404 reads "You are viewing Zak Pierce's screen". To the right of the message 404, a selectable drop down menu 406 can reveal a set of viewing options.

**[0079]** FIG. 4B is a diagram illustrating a communications interface with viewing options for multiple screens, in accordance with some embodiments. If the user from FIG. 4A clicks on the selectable drop down menu 406 to reveal the viewing options, the drop down menu illustrated in FIG. 4B appears.

**[0080]** A first option, "request remote control" can be selected. In some embodiments, the system can be configured to receive a request from a participant to remotely control a screen element of another participant; and based on the request, the system can provide the ability for the participant to remotely control the screen element of the other participant. The option present allows the user to request remote control of another participant's screen or screen element.

**[0081]** A second option, "annotate" can also be selected. In some embodiments, each participant is provided with the ability to provide annotations within screen elements displayed by the participant and/or other participants. This can allow the participant to, for example, sketch or take notes directly on the screen or screen element shared by another participant, or shared by the annotating participant himself.

**[0082]** Third, a list of shared screens and/or screen elements is presented in the drop-down menu. The user is currently viewing Zak Peirce's shared screen, as designated by the checkmark next to the name. The option to also show Brad Whitlock's screen in addition to Zak Peirce's screen can be selected by clicking on Brad Whitlock's name. Checkmarks would then appear on both names, and both shared screens would be shown side-by-side.

**[0083]** FIG. 4C is a diagram illustrating switching between multiple screens during a communication session, in accordance with some embodiments.

**[0084]** In the illustrated example, the user from FIG. 4B is viewing the "View Options" drop-down menu. The user wishes to switch from the currently displayed shared screen of Zak Peirce to the shared screen of Brad Whitlock. If the user wishes to switch from Zak Peirce's screen to Brad Whitlock's screen with only a single screen displayed, then the user would first click Zak Peirce's name to uncheck the name and disable viewing of his shared screen, then click Brad Whitlock's name to view Brad Whitlock's shared screen. As shown in the example, a different shared screen is now displayed, representing Brad Whitlock's shared screen.

**[0085]** FIG. 5A is a diagram illustrating a communications interface with a dual monitor setting, in accordance with some embodiments.

**[0086]** In some embodiments, participants of a communication session may navigate within the communications interface to a settings interface, where a number of settings can be viewed and selected. In the illustrated settings interface, a number of meeting options are displayed. The first option is "Use dual monitors", which is currently selected. If the user within the communication session is using a device with two monitors connected, then this option allows the user to view multiple shared screens from users simultaneously, with one screen displayed on each of the

monitors. In some embodiments, this option is unavailable (such as, e.g., appearing as greyed out and non-interactive within the settings interface, or not appearing at all) if the system detects that only one monitor is connected to the user device. In some embodiments, rather than just two monitors, the option can allow for three monitors or more to display shared screens or screen elements.

**[0087]** FIG. 5B is a diagram illustrating multiple screens viewed on multiple monitors, in accordance with some embodiments.

**[0088]** If the settings interface of FIG. 5A has the “Use dual monitors” option enabled, then a user with two monitors connected to his user device would be able to view multiple shared screens. For example, the user would be able to view two shared screens from participants, with one screen dedicated to each monitor. The illustrated example shows two monitors within a user’s desk setup. The left monitor screen 502 displays the communication interface within the communication session, and within the communication interface, the second shared screen is shown (with “Share #2” displayed). The right monitor screen 504 displays the first shared screen in full screen view (with “Share #1” displayed). The user can thus view the communications interface, shared screen #1, and shared screen #2 side-by-side without needing to switch between multiple screens on a single monitor, or viewing both screens side-by-side in smaller windows on a single monitor.

**[0089]** FIG. 5C is a diagram illustrating multiple screens viewed side-by-side on a single monitor, in accordance with some embodiments.

**[0090]** If the user only has a single monitor, rather than two or more monitors, then the user may still wish to view multiple screens side-by-side on the single monitor display. The illustrated example shows both shared screen #1 and shared screen #2 viewable within a single screen. The

communications interface is also visible on the single screen, with a number of participants displaying video displayed. The communications interface and shared screen #2 are visible within a single window taking up the left 2/3rds of the screen, while shared screen #1 is visible within a second, smaller window on the right half of the screen. The user has the ability to maximize, minimize, resize, and/or position the displayed screens or screen elements in the windows, and arrange them such that one may overlap the other fully or partially. This provides flexibility in terms of how shared screens can be displayed. For example, the user may wish to enlarge a more important screen or a screen with smaller text, while decreasing the size of a less important screen or one that rarely needs to be consulted. Many other such configurations can be contemplated depending on the user's needs.

**[0091]** In some embodiments, more than two shared screens can be viewed simultaneously on a single monitor or single video session interface. For example, in some embodiments, three shared screens can be viewed side-by-side. In other embodiments, a 4x4 grid of shared screens may be viewable simultaneously. In yet other embodiments, a “gallery view” setting or other setting may enable a user to view a 5x5 grid of shared screens, or potentially a larger grid of shared screens. In some embodiments, an arbitrary number of shared screens may be viewable in any of a number of configurations.

**[0092]** FIG. 5D is a diagram illustrating multiple screens viewed on multiple monitors, in accordance with some embodiments.

**[0093]** If the settings interface of FIG. 5A has the “Use dual monitors” option enabled, then a user with two monitors connected to his user device would be able to view multiple shared screens. In the illustrated embodiment, a first monitor shows a number of video feeds of participants. Four

smaller, thumbnail-size video feeds are displayed at the top of the video session interface, while a large primary video feed is displayed in the remaining area of the video session interface. The large primary video feed pertain to a participant who is sharing content. On the second monitor, the shared screen associated with that participant from the primary video feed is displayed in the full area of the video session interface. In this setup, the user is able to view the shared screen's content in full view on one monitor, and the sharing participant's video in full view on the other monitor.

**[0094]** FIG. 6 is a diagram illustrating an exemplary computer that may perform processing in some embodiments. Exemplary computer 600 may perform operations consistent with some embodiments. The architecture of computer 600 is exemplary. Computers can be implemented in a variety of other ways. A wide variety of computers can be used in accordance with the embodiments herein.

**[0095]** Processor 601 may perform computing functions such as running computer programs. The volatile memory 602 may provide temporary storage of data for the processor 601. RAM is one kind of volatile memory. Volatile memory typically requires power to maintain its stored information. Storage 603 provides computer storage for data, instructions, and/or arbitrary information. Non-volatile memory, which can preserve data even when not powered and including disks and flash memory, is an example of storage. Storage 603 may be organized as a file system, database, or in other ways. Data, instructions, and information may be loaded from storage 603 into volatile memory 602 for processing by the processor 601.

**[0096]** The computer 600 may include peripherals 605. Peripherals 605 may include input peripherals such as a keyboard, mouse, trackball, video camera, microphone, and other input devices. Peripherals 605 may also include output devices such as a display. Peripherals 605 may

include removable media devices such as CD-R and DVD-R recorders / players. Communications device 606 may connect the computer 100 to an external medium. For example, communications device 606 may take the form of a network adapter that provides communications to a network. A computer 600 may also include a variety of other devices 604. The various components of the computer 600 may be connected by a connection medium such as a bus, crossbar, or network.

**[0097]** Some portions of the preceding detailed descriptions have been presented in terms of algorithms and symbolic representations of operations on data bits within a computer memory. These algorithmic descriptions and representations are the ways used by those skilled in the data processing arts to most effectively convey the substance of their work to others skilled in the art. An algorithm is here, and generally, conceived to be a self-consistent sequence of operations leading to a desired result. The operations are those requiring physical manipulations of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, combined, compared, and otherwise manipulated. It has proven convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like.

**[0098]** It should be borne in mind, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities. Unless specifically stated otherwise as apparent from the above discussion, it is appreciated that throughout the description, discussions utilizing terms such as "identifying" or "determining" or "executing" or "performing" or "collecting" or "creating" or "sending" or the like, refer to the action and processes of a computer system, or similar electronic computing device, that manipulates and transforms data represented as physical (electronic) quantities within the

computer system's registers and memories into other data similarly represented as physical quantities within the computer system memories or registers or other such information storage devices.

**[0099]** The present disclosure also relates to an apparatus for performing the operations herein. This apparatus may be specially constructed for the intended purposes, or it may comprise a general purpose computer selectively activated or reconfigured by a computer program stored in the computer. Such a computer program may be stored in a computer readable storage medium, such as, but not limited to, any type of disk including floppy disks, optical disks, CD-ROMs, and magnetic-optical disks, read-only memories (ROMs), random access memories (RAMs), EPROMs, EEPROMs, magnetic or optical cards, or any type of media suitable for storing electronic instructions, each coupled to a computer system bus.

**[0100]** Various general purpose systems may be used with programs in accordance with the teachings herein, or it may prove convenient to construct a more specialized apparatus to perform the method. The structure for a variety of these systems will appear as set forth in the description above. In addition, the present disclosure is not described with reference to any particular programming language. It will be appreciated that a variety of programming languages may be used to implement the teachings of the disclosure as described herein.

**[0101]** The present disclosure may be provided as a computer program product, or software, that may include a machine-readable medium having stored thereon instructions, which may be used to program a computer system (or other electronic devices) to perform a process according to the present disclosure. A machine-readable medium includes any mechanism for storing information in a form readable by a machine (e.g., a computer). For example, a machine-readable (e.g.,

computer-readable) medium includes a machine (e.g., a computer) readable storage medium such as a read only memory (“ROM”), random access memory (“RAM”), magnetic disk storage media, optical storage media, flash memory devices, etc.

**[0102]** In the foregoing disclosure, implementations of the disclosure have been described with reference to specific example implementations thereof. It will be evident that various modifications may be made thereto without departing from the broader spirit and scope of implementations of the disclosure as set forth in the following claims. The disclosure and drawings are, accordingly, to be regarded in an illustrative sense rather than a restrictive sense.

## CLAIMS

### WHAT IS CLAIMED IS:

1. A method for providing multiple participants of a communication session with the ability to share screen elements simultaneously, comprising:

connecting a plurality of participants of a communication session to a live communication stream, wherein the communication session comprises a communication interface for each participant;

receiving, from a first participant of the communication session, a request to initiate sharing of one or more screen elements from a user device associated with the first participant;

in response to the request, capturing and displaying the one or more screen elements from the user device of the first participant to the communication interfaces of the plurality of participants;

receiving, from one or more additional participants of the communication session, additional requests to initiate sharing of one or more additional screen elements from the user devices associated with the additional participants.

in response to the additional requests, capturing and displaying the one or more additional screen elements from the user devices of the additional participants to the communication interfaces of the plurality of participants, such that a plurality of screen elements are displayed concurrently.

2. The method of claim 1, further comprising:

providing one or more of the participants with control over configuration of the screen elements and the additional screen elements via the communication interfaces for the participants.

3. The method of claim 2, wherein the screens are configured to be viewed adjacent to one another on a single screen of a user device for the participant.

4. The method of claim 2, further comprising:

determining that at least one of the participants is using multiple displays connected to a user device; and

configuring separate screen elements to be viewed on the multiple screens, such that each screen element is viewable on a separate screen of the user device.

5. The method of claim 1, further comprising:

receiving a request from a participant to remotely control a screen element of another participant; and

based on the request, providing the ability for the participant to remotely control the screen element of the other participant.

6. The method of claim 1, wherein one of the participants is the host, and the host is granted permission to configure sharing privileges of screen elements for the other participants.

7. The method of claim 1, wherein at least one of the participants is a host of the communication session, and the host is granted permission to configure which screen is viewed by all participants as a primary screen within the communication session.

8. The method of claim 1, wherein the displayed screen elements comprise one or more of: an application, a whiteboard, a window, a desktop interface, a presentation, or any combination thereof.

9. The method of claim 1, wherein each participant is provided with the ability to provide annotations within screen elements displayed by the participant and/or other participants.

10. The method of claim 1, wherein the session is recorded and stored for later viewing, and at least the host is granted permission to configure which of the screen elements end up within the recording.

11. The method of claim 10, wherein upon playback of the recorded session, the user viewing the recording can switch between screen elements that are shared or configure how screen elements are viewed.

12. The method of claim 1, wherein each participant has the ability to maximize, minimize, resize, and/or position the displayed screen element as a window within the communication interface of the participant.

13. The method of claim 1, wherein there is no limitation to the number of screen elements which can be displayed simultaneously, such that an arbitrary number of participants can concurrently display an arbitrary number of screen elements.

14. A non-transitory computer-readable medium containing instructions for providing multiple participants of a communication session with the ability to share screen elements simultaneously, comprising:

instructions for connecting a plurality of participants of a communication session to a live communication stream, wherein the communication session comprises a communication interface for each participant;

instructions for receiving, from a first participant of the communication session, a request to initiate sharing of one or more screen elements from a user device associated with the first participant;

in response to the request, instructions for capturing and displaying the one or more screen elements from the user device of the first participant to the communication interfaces of the plurality of participants;

instructions for receiving, from one or more additional participants of the communication session, additional requests to initiate sharing of one or more additional screen elements from the user devices associated with the additional participants.

in response to the additional requests, instructions for capturing and displaying the one or more additional screen elements from the user devices of the additional participants to the communication interfaces of the plurality of participants, such that a plurality of screen elements are displayed concurrently.

15. The non-transitory computer-readable medium of claim 14, further comprising:

instructions to provide one or more of the participants with control over configuration of the screen elements and the additional screen elements via the communication interfaces for the participants.

16. The non-transitory computer-readable medium of claim 15, further comprising:

instructions to determine that at least one of the participants is using multiple displays connected to a user device; and

instructions to configure separate screen elements to be viewed on the multiple screens, such that each screen element is viewable on a separate screen of the user device.

17. The non-transitory computer-readable medium of claim 14, further comprising:

instructions to receive a request from a participant to remotely control a screen element of another participant; and

based on the request, instructions to provide the ability for the participant to remotely control the screen element of the other participant.

18. The non-transitory computer-readable medium of claim 14, wherein at least one of the participants is a host of the communication session, and the host is granted permission to configure sharing privileges of screen elements for the other participants.

19. The non-transitory computer-readable medium of claim 14, wherein the displayed screen elements comprise one or more of: an application, a whiteboard, a window, a desktop interface, a presentation, or any combination thereof.

20. The non-transitory computer-readable medium of claim 14, wherein each participant is provided with the ability to provide annotations within screen elements displayed by the participant and/or other participants.

## ABSTRACT

Methods and systems relate to a method for providing concurrent sharing of screen elements by multiple users within a communication session. First, a system connects multiple participants of a communication session. The system receives, from a first participant, a request to initiate sharing of one or more screen elements from a user device associated with the first participant. In response to the request, the system captures and displays the one or more screen elements from the user device of the first participant to the communication interfaces of the other participants. The system then receives, from one or more additional participants of the communication session, additional requests to initiate sharing of one or more additional screen elements. In response, the system captures and displays the additional screen elements of the additional participants to the communication interfaces of the other participants, such that multiple screen elements from multiple users are displayed concurrently.

| Electronic Patent Application Fee Transmittal                                                    |          |                                                                            |        |                      |
|--------------------------------------------------------------------------------------------------|----------|----------------------------------------------------------------------------|--------|----------------------|
| Application Number:                                                                              |          |                                                                            |        |                      |
| Filing Date:                                                                                     |          |                                                                            |        |                      |
| Title of Invention:                                                                              |          | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |        |                      |
| First Named Inventor/Applicant Name:                                                             |          | Lin Han                                                                    |        |                      |
| Filer:                                                                                           |          | Edward Dale Steakley/Kayla Adkins                                          |        |                      |
| Attorney Docket Number:                                                                          |          | 2390-022993                                                                |        |                      |
| Filed as Large Entity                                                                            |          |                                                                            |        |                      |
| Filing Fees for Track I Prioritized Examination - Nonprovisional Application under 35 USC 111(a) |          |                                                                            |        |                      |
| Description                                                                                      | Fee Code | Quantity                                                                   | Amount | Sub-Total in USD(\$) |
| Basic Filing:                                                                                    |          |                                                                            |        |                      |
| UTILITY APPLICATION FILING                                                                       | 1011     | 1                                                                          | 320    | 320                  |
| UTILITY SEARCH FEE                                                                               | 1111     | 1                                                                          | 700    | 700                  |
| UTILITY EXAMINATION FEE                                                                          | 1311     | 1                                                                          | 800    | 800                  |
| REQUEST FOR PRIORITIZED EXAMINATION                                                              | 1817     | 1                                                                          | 4200   | 4200                 |
| Pages:                                                                                           |          |                                                                            |        |                      |
| Claims:                                                                                          |          |                                                                            |        |                      |
| Miscellaneous-Filing:                                                                            |          |                                                                            |        |                      |

| Description                              | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
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| PUBL. FEE- EARLY, VOLUNTARY, OR NORMAL   | 1504     | 1        | 0      | 0                    |
| PROCESSING FEE, EXCEPT PROV. APPLS.      | 1830     | 1        | 140    | 140                  |
| <b>Petition:</b>                         |          |          |        |                      |
| <b>Patent-Appeals-and-Interference:</b>  |          |          |        |                      |
| <b>Post-Allowance-and-Post-Issuance:</b> |          |          |        |                      |
| <b>Extension-of-Time:</b>                |          |          |        |                      |
| <b>Miscellaneous:</b>                    |          |          |        |                      |
| <b>Total in USD (\$)</b>                 |          |          |        | <b>6160</b>          |

## Electronic Acknowledgement Receipt

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| <b>EFS ID:</b>                              | 43395579                                                                   |
| <b>Application Number:</b>                  | 17390922                                                                   |
| <b>International Application Number:</b>    |                                                                            |
| <b>Confirmation Number:</b>                 | 7201                                                                       |
| <b>Title of Invention:</b>                  | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |
| <b>First Named Inventor/Applicant Name:</b> | Lin Han                                                                    |
| <b>Customer Number:</b>                     | 180741                                                                     |
| <b>Filer:</b>                               | Edward Dale Steakley/Kayla Adkins                                          |
| <b>Filer Authorized By:</b>                 | Edward Dale Steakley                                                       |
| <b>Attorney Docket Number:</b>              | 2390-022993                                                                |
| <b>Receipt Date:</b>                        | 31-JUL-2021                                                                |
| <b>Filing Date:</b>                         |                                                                            |
| <b>Time Stamp:</b>                          | 18:01:35                                                                   |
| <b>Application Type:</b>                    | Utility under 35 USC 111(a)                                                |

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| Submitted with Payment                   | yes              |
| Payment Type                             | CARD             |
| Payment was successfully received in RAM | \$6160           |
| RAM confirmation Number                  | E20217UI01490914 |
| Deposit Account                          |                  |
| Authorized User                          |                  |

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

|                                               |                                                     |                                     |                                           |                  |                  |
|-----------------------------------------------|-----------------------------------------------------|-------------------------------------|-------------------------------------------|------------------|------------------|
|                                               |                                                     |                                     |                                           |                  |                  |
| File Listing:                                 |                                                     |                                     |                                           |                  |                  |
| Document Number                               | Document Description                                | File Name                           | File Size(Bytes)/ Message Digest          | Multi Part /.zip | Pages (if appl.) |
| 1                                             | TrackOne Request                                    | 2390-022993_Track_One_Request.pdf   | 121249                                    | no               | 2                |
|                                               |                                                     |                                     | 53f82654411aae59d7464cd589b32364409ab485  |                  |                  |
| Warnings:                                     |                                                     |                                     |                                           |                  |                  |
| Information:                                  |                                                     |                                     |                                           |                  |                  |
| 2                                             | Application Data Sheet                              | 2390-022993_ADS.pdf                 | 1256146                                   | no               | 9                |
|                                               |                                                     |                                     | 43c38f0c03780e5beb72a4453cef4741b0e8a7ad  |                  |                  |
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| Information:                                  |                                                     |                                     |                                           |                  |                  |
| 3                                             | Drawings-only black and white line drawings         | 2390-022993_Figures.pdf             | 8167960                                   | no               | 13               |
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| 4                                             | Power of Attorney                                   | 2390-022993_POA_Zoom.pdf            | 1811354                                   | no               | 3                |
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| Information:                                  |                                                     |                                     |                                           |                  |                  |
| 5                                             | Oath or Declaration filed                           | 2390-022993_Decs.pdf                | 654003                                    | no               | 2                |
|                                               |                                                     |                                     | 23e8359a3c6a832b4fbad8d8ec7806a719dc2562  |                  |                  |
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| 6                                             |                                                     | 2390-022993_Specification_FINAL.pdf | 165849                                    | yes              | 35               |
|                                               |                                                     |                                     | 6640f1ec3bfb88b342165bba5edb731ca3609bb2  |                  |                  |
|                                               | Multipart Description/PDF files in .zip description |                                     |                                           |                  |                  |
|                                               | Document Description                                | Start                               | End                                       |                  |                  |
| Zoom Communications, Inc. v. Ricoh Company, L |                                                     |                                     |                                           |                  |                  |

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|  | Specification | 1  | 30 |
|  | Claims        | 31 | 34 |
|  | Abstract      | 35 | 35 |

**Warnings:**

**Information:**

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| 7 | Fee Worksheet (SB06) | fee-info.pdf | 50750                                   | no | 2 |
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| <b>Total Files Size (in bytes):</b> | 12227311 |
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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.**

**CERTIFICATION AND REQUEST FOR PRIORITIZED EXAMINATION  
UNDER 37 CFR 1.102(e) (Page 1 of 1)**

|                       |                                                                            |                                               |  |
|-----------------------|----------------------------------------------------------------------------|-----------------------------------------------|--|
| First Named Inventor: | Lin Han                                                                    | Nonprovisional Application Number (if known): |  |
| Title of Invention:   | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                                               |  |

**APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS PRIORITIZED EXAMINATION FOR THE ABOVE-IDENTIFIED APPLICATION.**

1. The processing fee set forth in 37 CFR 1.17(i)(1) and the prioritized examination fee set forth in 37 CFR 1.17(c) have been filed with the request. The publication fee requirement is met because that fee, set forth in 37 CFR 1.18(d), is currently \$0. The basic filing fee, search fee, and examination fee are filed with the request or have been already been paid. I understand that any required excess claims fees or application size fee must be paid for the application.
2. I understand that the application may not contain, or be amended to contain, more than four independent claims, more than thirty total claims, or any multiple dependent claims, and that any request for an extension of time will cause an outstanding Track I request to be dismissed.
3. The applicable box is checked below:

**I. ☒ Original Application (Track One) - Prioritized Examination under § 1.102(e)(1)**

- i. (a) The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a). This certification and request is being filed with the utility application via EFS-Web.  
---OR---  
(b) The application is an original nonprovisional plant application filed under 35 U.S.C. 111(a). This certification and request is being filed with the plant application in paper.
- ii. An executed inventor's oath or declaration under 37 CFR 1.63 or 37 CFR 1.64 for each inventor, or the application data sheet meeting the conditions specified in 37 CFR 1.53(f)(3)(i) is filed with the application.

**II. ☐ Request for Continued Examination - Prioritized Examination under § 1.102(e)(2)**

- i. A request for continued examination has been filed with, or prior to, this form.
- ii. If the application is a utility application, this certification and request is being filed via EFS-Web.
- iii. The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a), or is a national stage entry under 35 U.S.C. 371.
- iv. This certification and request is being filed prior to the mailing of a first Office action responsive to the request for continued examination.
- v. No prior request for continued examination has been granted prioritized examination status under 37 CFR 1.102(e)(2).

|                                                                                                                                                                                                       |                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Signature <u>/Aroon Karuna/</u>                                                                                                                                                                       | Date <u>2021-07-30</u>                         |
| Name (Print/Typed) <u>Aroon Karuna</u>                                                                                                                                                                | Practitioner Registration Number <u>68,335</u> |
| <b>Note:</b> This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required.* |                                                |
| <input type="checkbox"/> *Total of _____ forms are submitted.                                                                                                                                         |                                                |

## 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.

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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                            |                        |             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                            | Attorney Docket Number | 2390-022993 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                            | Application Number     |             |
| Title of Invention                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |
| <p>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.</p> <p>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.</p> |                                                                            |                        |             |

**Secrecy Order 37 CFR 5.2:**

|                          |                                                                                                                                                                                                                                       |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.) |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Inventor Information:**

|                                                                                                                                                                          |            |                |             |                      |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|-------------|----------------------|--------|
| Inventor                                                                                                                                                                 | 1          |                |             |                      | Remove |
| Legal Name                                                                                                                                                               |            |                |             |                      |        |
| Prefix                                                                                                                                                                   | Given Name | Middle Name    | Family Name | Suffix               |        |
|                                                                                                                                                                          | Lin        |                | Han         |                      |        |
| Residence Information (Select One) <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service |            |                |             |                      |        |
| City                                                                                                                                                                     | Los Altos  | State/Province | CA          | Country of Residence | US     |

**Mailing Address of Inventor:**

|             |                                 |                |    |  |  |
|-------------|---------------------------------|----------------|----|--|--|
| Address 1   | 55 Almaden Boulevard, 6th Floor |                |    |  |  |
| Address 2   |                                 |                |    |  |  |
| City        | San Jose                        | State/Province | CA |  |  |
| Postal Code | 95113                           | Country        | US |  |  |

|                                                                                                                                                                          |            |                |             |                      |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|-------------|----------------------|--------|
| Inventor                                                                                                                                                                 | 2          |                |             |                      | Remove |
| Legal Name                                                                                                                                                               |            |                |             |                      |        |
| Prefix                                                                                                                                                                   | Given Name | Middle Name    | Family Name | Suffix               |        |
|                                                                                                                                                                          | Bo         |                | Ling        |                      |        |
| Residence Information (Select One) <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service |            |                |             |                      |        |
| City                                                                                                                                                                     | Saratoga   | State/Province | CA          | Country of Residence | US     |

**Mailing Address of Inventor:**

|             |                                 |                |    |  |  |
|-------------|---------------------------------|----------------|----|--|--|
| Address 1   | 55 Almaden Boulevard, 6th Floor |                |    |  |  |
| Address 2   |                                 |                |    |  |  |
| City        | San Jose                        | State/Province | CA |  |  |
| Postal Code | 95113                           | Country        | US |  |  |

|                                                                                                                                                                          |            |             |             |        |        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-------------|-------------|--------|--------|
| Inventor                                                                                                                                                                 | 3          |             |             |        | Remove |
| Legal Name                                                                                                                                                               |            |             |             |        |        |
| Prefix                                                                                                                                                                   | Given Name | Middle Name | Family Name | Suffix |        |
|                                                                                                                                                                          | Sam        |             | Sheng       |        |        |
| Residence Information (Select One) <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service |            |             |             |        |        |

|                                           |                                                                            |                        |             |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                                                            | Attorney Docket Number | 2390-022993 |
|                                           |                                                                            | Application Number     |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |

|      |          |                |    |                      |    |
|------|----------|----------------|----|----------------------|----|
| City | San Jose | State/Province | CA | Country of Residence | US |
|------|----------|----------------|----|----------------------|----|

**Mailing Address of Inventor:**

|             |                                 |                |    |  |                        |
|-------------|---------------------------------|----------------|----|--|------------------------|
| Address 1   | 65 Almaden Boulevard, 6th Floor |                |    |  |                        |
| Address 2   |                                 |                |    |  |                        |
| City        | San Jose                        | State/Province | CA |  |                        |
| Postal Code | 95113                           | Country        | US |  |                        |
| Inventor    | 4                               |                |    |  | <a href="#">Remove</a> |
| Legal Name  |                                 |                |    |  |                        |

|                                                                                                                                                                          |            |                |             |                      |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|-------------|----------------------|----|
| Prefix                                                                                                                                                                   | Given Name | Middle Name    | Family Name | Suffix               |    |
|                                                                                                                                                                          | Nitasha    |                | Walia       |                      |    |
| Residence Information (Select One) <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service |            |                |             |                      |    |
| City                                                                                                                                                                     | Sunnyvale  | State/Province | CA          | Country of Residence | US |

**Mailing Address of Inventor:**

|                                                                                                                                                      |                                 |                |    |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------|----|--|--|
| Address 1                                                                                                                                            | 65 Almaden Boulevard, 6th Floor |                |    |  |  |
| Address 2                                                                                                                                            |                                 |                |    |  |  |
| City                                                                                                                                                 | San Jose                        | State/Province | CA |  |  |
| Postal Code                                                                                                                                          | 95113                           | Country        | US |  |  |
| All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the <a href="#">Add</a> button. |                                 |                |    |  |  |

**Correspondence Information:**

|                                                                                                                                       |                                    |                           |                              |
|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------------------------|------------------------------|
| Enter either Customer Number or complete the Correspondence Information section below.<br>For further information see 37 CFR 1.33(a). |                                    |                           |                              |
| <input type="checkbox"/> An Address is being provided for the correspondence information of this application.                         |                                    |                           |                              |
| Customer Number                                                                                                                       | 180741                             |                           |                              |
| Email Address                                                                                                                         | PAIR-notifications@cognitionip.com | <a href="#">Add Email</a> | <a href="#">Remove Email</a> |

**Application Information:**

|                                         |                                                                            |                                           |                          |
|-----------------------------------------|----------------------------------------------------------------------------|-------------------------------------------|--------------------------|
| Title of the Invention                  | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                                           |                          |
| Attorney Docket Number                  | 2390-022993                                                                | Small Entity Status Claimed               | <input type="checkbox"/> |
| Application Type                        | Nonprovisional                                                             |                                           |                          |
| Subject Matter                          | Utility                                                                    |                                           |                          |
| Total Number of Drawing Sheets (if any) | 13                                                                         | Suggested Figure for Publication (if any) |                          |

|                                           |                                                                            |                        |             |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                                                            | Attorney Docket Number | 2390-022993 |
|                                           |                                                                            | Application Number     |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |

## Filing By Reference:

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

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

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

## Publication Information:

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

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

## Representative Information:

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

|                    |                                                  |                        |                                                         |
|--------------------|--------------------------------------------------|------------------------|---------------------------------------------------------|
| Please Select One: | <input checked="" type="radio"/> Customer Number | US Patent Practitioner | <input type="radio"/> Limited Recognition (37 CFR 11.9) |
| Customer Number    | 180741                                           |                        |                                                         |

## Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.

When referring to the current application, please leave the "Application Number" field blank.

|                                                                                                                       |                 |                          |                                    |
|-----------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------|------------------------------------|
| Prior Application Status                                                                                              | <div></div>     | <div>Remove</div>        |                                    |
| Application Number                                                                                                    | Continuity Type | Prior Application Number | Filing or 371(c) Date (YYYY-MM-DD) |
| <div></div>                                                                                                           | <div></div>     |                          |                                    |
| Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the <b>Add</b> button. |                 |                          |                                    |

|                                           |                                                                            |                        |             |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                                                            | Attorney Docket Number | 2390-022993 |
|                                           |                                                                            | Application Number     |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |

## Foreign Priority Information:

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

| Application Number | Country <sup>i</sup> | Filing Date (YYYY-MM-DD) | Access Code <sup>i</sup> (if applicable) |
|--------------------|----------------------|--------------------------|------------------------------------------|
|                    |                      |                          |                                          |

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button.

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

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

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

|                                           |                                                                            |             |
|-------------------------------------------|----------------------------------------------------------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> | Attorney Docket Number                                                     | 2390-022993 |
|                                           | Application Number                                                         |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |             |

## Authorization or Opt-Out of Authorization to Permit Access:

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

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

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

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

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

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

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

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

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

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

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

|                                           |                                                                            |                        |             |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                                                            | Attorney Docket Number | 2390-022993 |
|                                           |                                                                            | Application Number     |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |

## Applicant Information:

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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                          |                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------|
| <b>Applicant</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1                                        | <a href="#">Remove</a>                           |
| <p>If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.</p> <p style="text-align: right;"><a href="#">Clear</a></p> |                                          |                                                  |
| <input checked="" type="radio"/> Assignee                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Legal Representative under 35 U.S.C. 117 | Joint Inventor                                   |
| Person to whom the inventor is obligated to assign.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                          | Person who shows sufficient proprietary interest |
| If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                          |                                                  |
| <div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |                                                  |
| Name of the Deceased or Legally Incapacitated Inventor: <div style="border: 1px solid black; height: 20px; width: 100%;"></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                          |                                                  |
| If the Applicant is an Organization check here. <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                          |                                                  |
| Organization Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Zoom Video Communications, Inc.          |                                                  |
| <b>Mailing Address Information For Applicant:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                          |                                                  |
| Address 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 55 Almaden Boulevard, 6th Floor          |                                                  |
| Address 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                          |                                                  |
| City                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | San Jose                                 | State/Province                                   |
| Country                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | US                                       | Postal Code                                      |
| Phone Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                          | Fax Number                                       |
| Email Address                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                          |                                                  |
| Additional Applicant Data may be generated within this form by selecting the Add button. <a href="#">Add</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                          |                                                  |

## Assignee Information including Non-Applicant Assignee Information:

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

|                                           |                                                                            |                        |             |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                                                            | Attorney Docket Number | 2390-022993 |
|                                           |                                                                            | Application Number     |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                      |                      |                      |                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|----------------------|----------------------|
| <b>Assignee</b>   1                                                                                                                                                                                                                                                                                                                                                                                                                                    |                      |                      |                      |                      |
| Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication. |                      |                      |                      |                      |
| <input type="button" value="Remove"/>                                                                                                                                                                                                                                                                                                                                                                                                                  |                      |                      |                      |                      |
| If the Assignee or Non-Applicant Assignee is an Organization check here. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                      |                      |                      |                      |                      |
| Prefix                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Given Name           | Middle Name          | Family Name          | Suffix               |
| <input type="text"/>                                                                                                                                                                                                                                                                                                                                                                                                                                   | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| <b>Mailing Address Information For Assignee including Non-Applicant Assignee:</b>                                                                                                                                                                                                                                                                                                                                                                      |                      |                      |                      |                      |
| Address 1                                                                                                                                                                                                                                                                                                                                                                                                                                              |                      | <input type="text"/> |                      |                      |
| Address 2                                                                                                                                                                                                                                                                                                                                                                                                                                              |                      | <input type="text"/> |                      |                      |
| City                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <input type="text"/> | State/Province       | <input type="text"/> |                      |
| Country <sup>i</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                   | <input type="text"/> | Postal Code          | <input type="text"/> |                      |
| Phone Number                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="text"/> | Fax Number           | <input type="text"/> |                      |
| Email Address                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input type="text"/> |                      |                      |                      |
| Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button. <input type="button" value="Add"/>                                                                                                                                                                                                                                                                                                   |                      |                      |                      |                      |

**Signature:**

**NOTE:** This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). However, if this Application Data Sheet is submitted with the **INITIAL** filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).

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

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

|                                                                                                                        |                |           |                   |                     |
|------------------------------------------------------------------------------------------------------------------------|----------------|-----------|-------------------|---------------------|
| Signature                                                                                                              | /Aroon Karuna/ |           | Date (YYYY-MM-DD) | 2021-07-27          |
| First Name                                                                                                             | Aroon          | Last Name | Karuna            | Registration Number |
|                                                                                                                        |                |           |                   | 68335               |
| Additional Signature may be generated within this form by selecting the Add button. <input type="button" value="Add"/> |                |           |                   |                     |

|                                           |                                                                            |                        |             |
|-------------------------------------------|----------------------------------------------------------------------------|------------------------|-------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                                                            | Attorney Docket Number | 2390-022993 |
|                                           |                                                                            | Application Number     |             |
| Title of Invention                        | CONCURRENT SCREEN SHARING BY MULTIPLE USERS WITHIN A COMMUNICATION SESSION |                        |             |

This collection of information is required by 37 CFR 1.76. 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 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet 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 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.

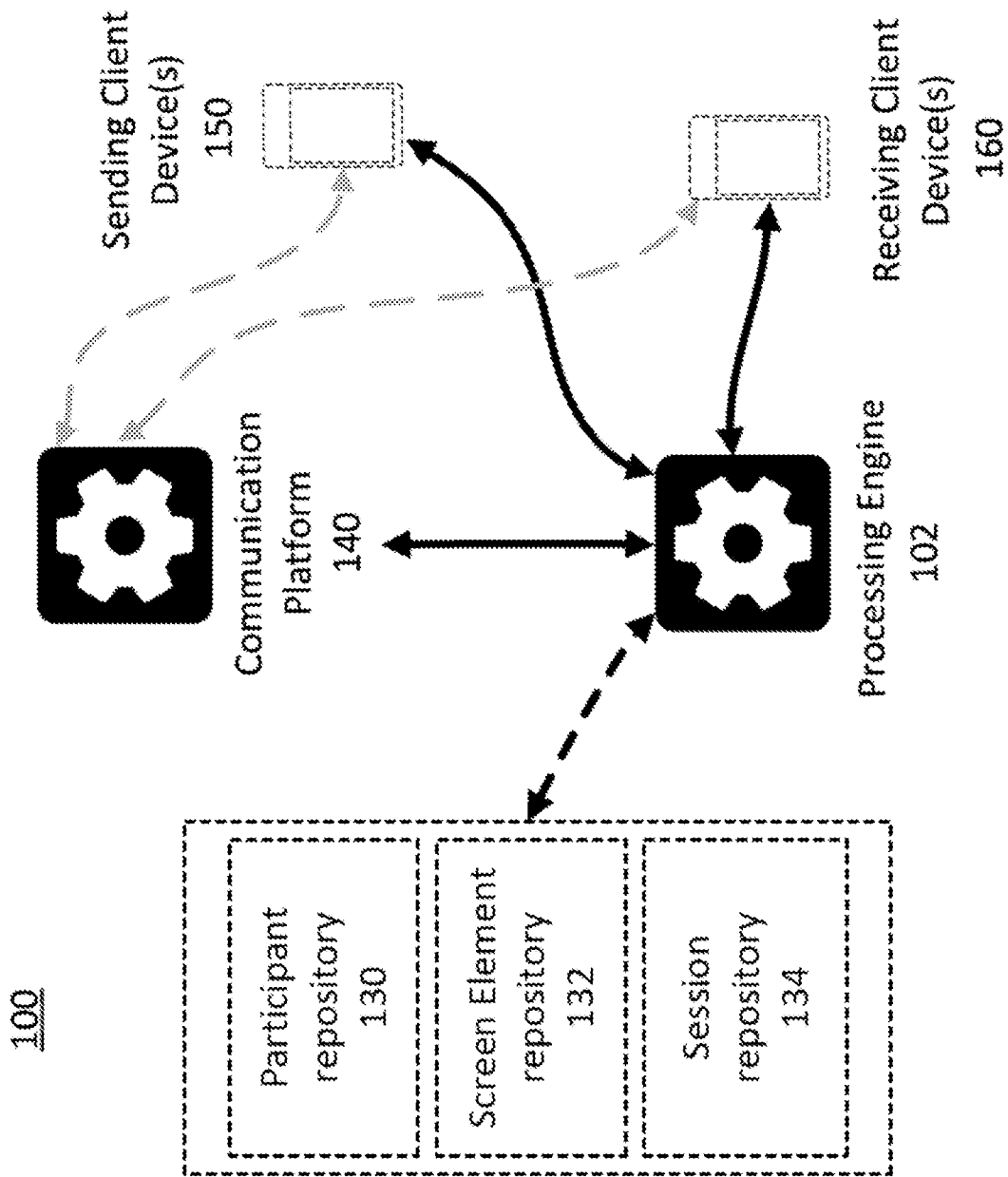


Figure 1A

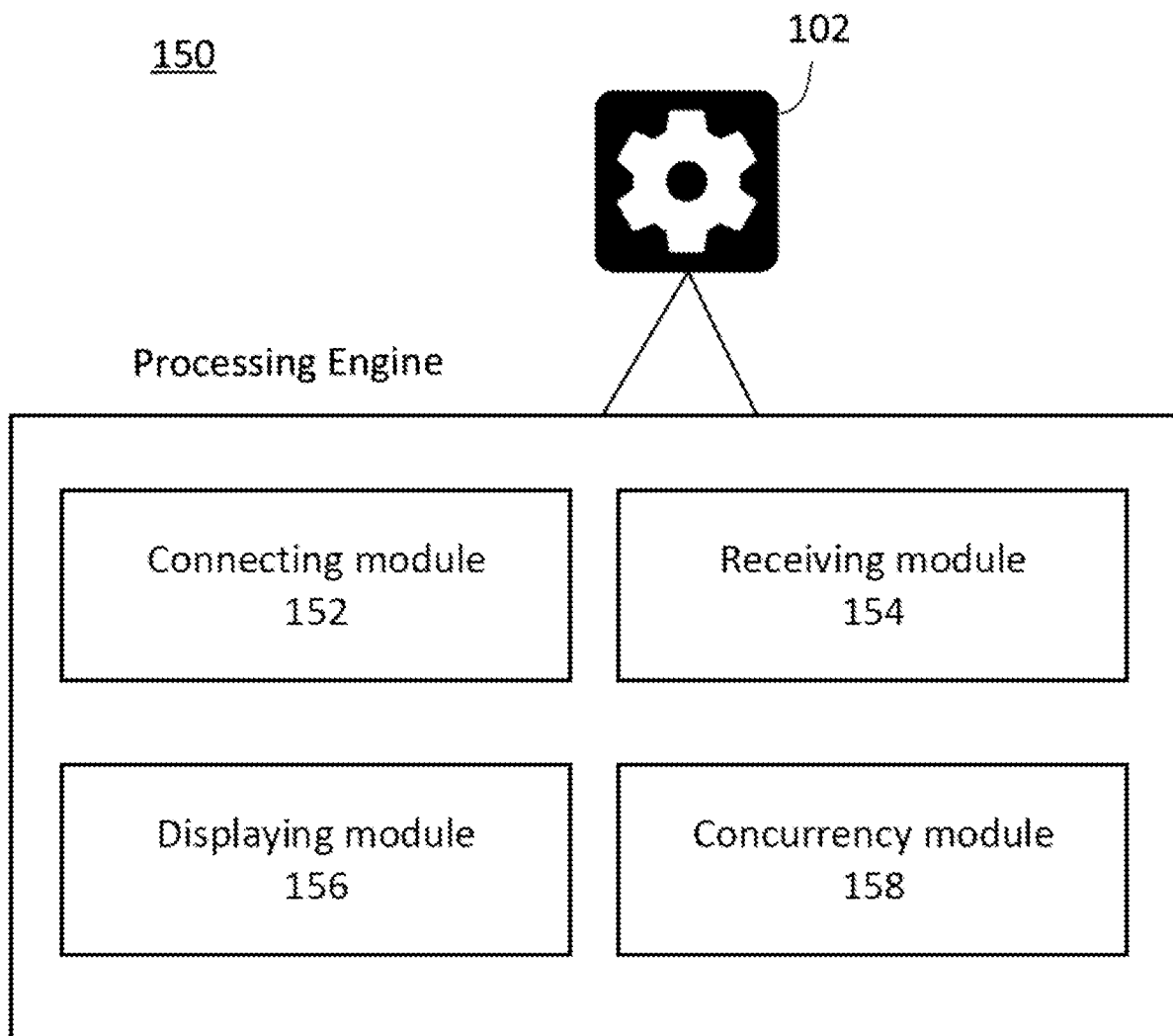


**Figure 1B**

200

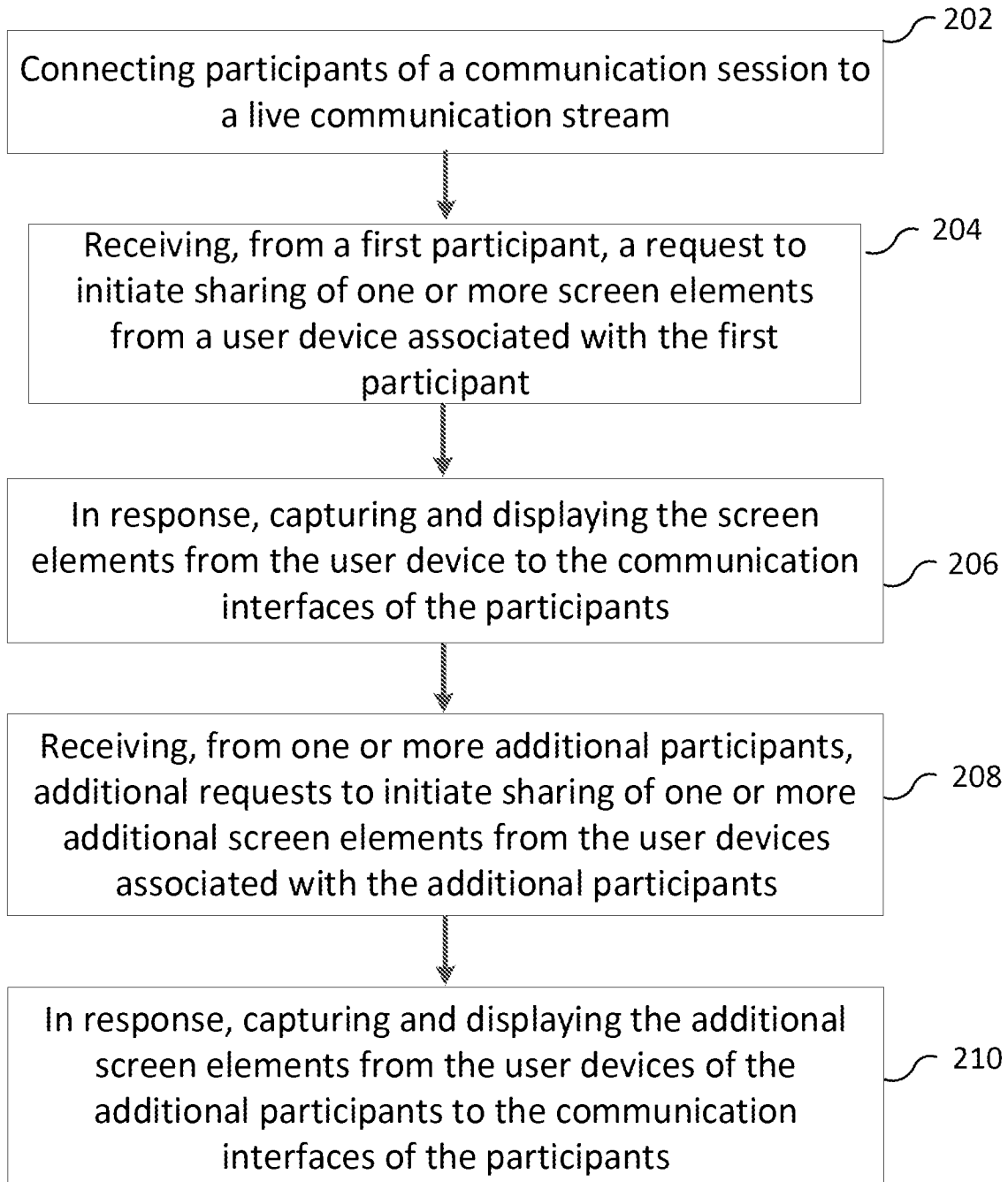


**Figure 2**

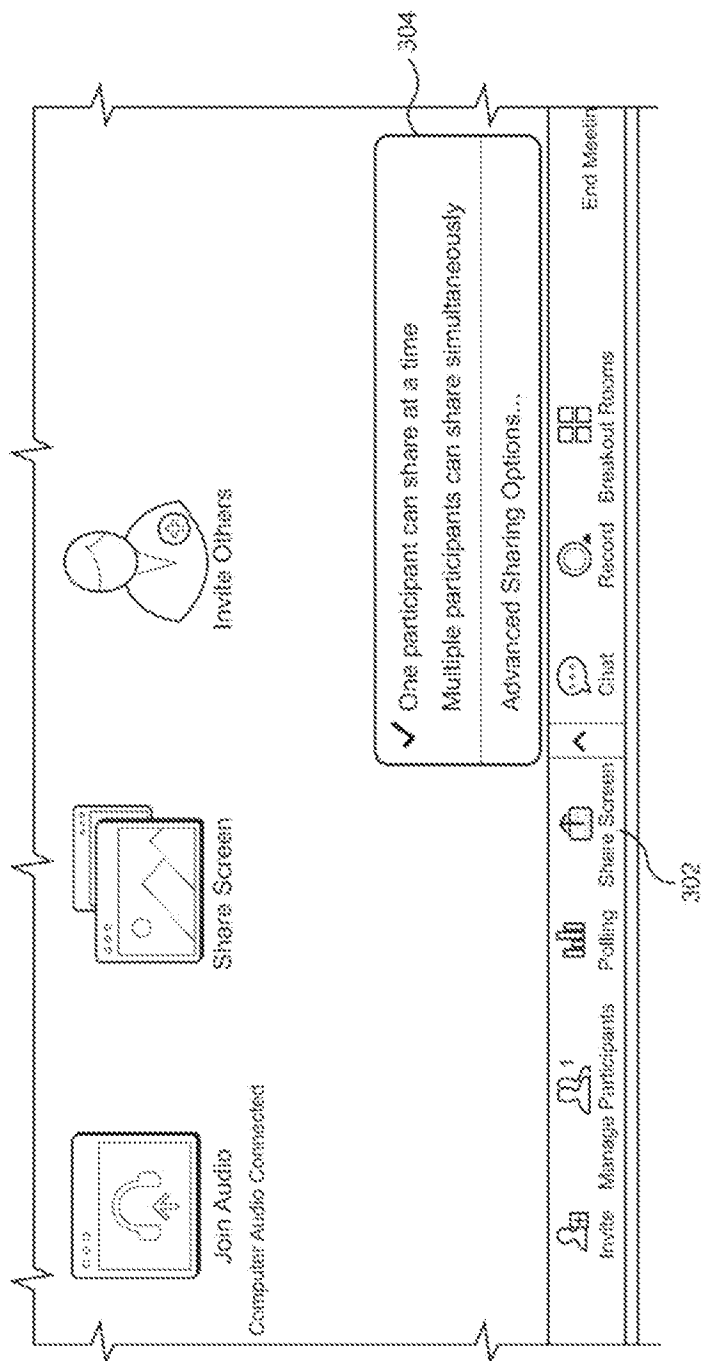


Figure 3A

Advanced Sharing Options

How many participants can share at the same time?

☒ One participant can share at a time

☐ Multiple participants can share simultaneously (dual monitors recommended)

Who can share?

☐ Only host

☒ All participants

Who can start sharing when someone else is sharing?

☒ Only host

☐ All participants

Figure 3B

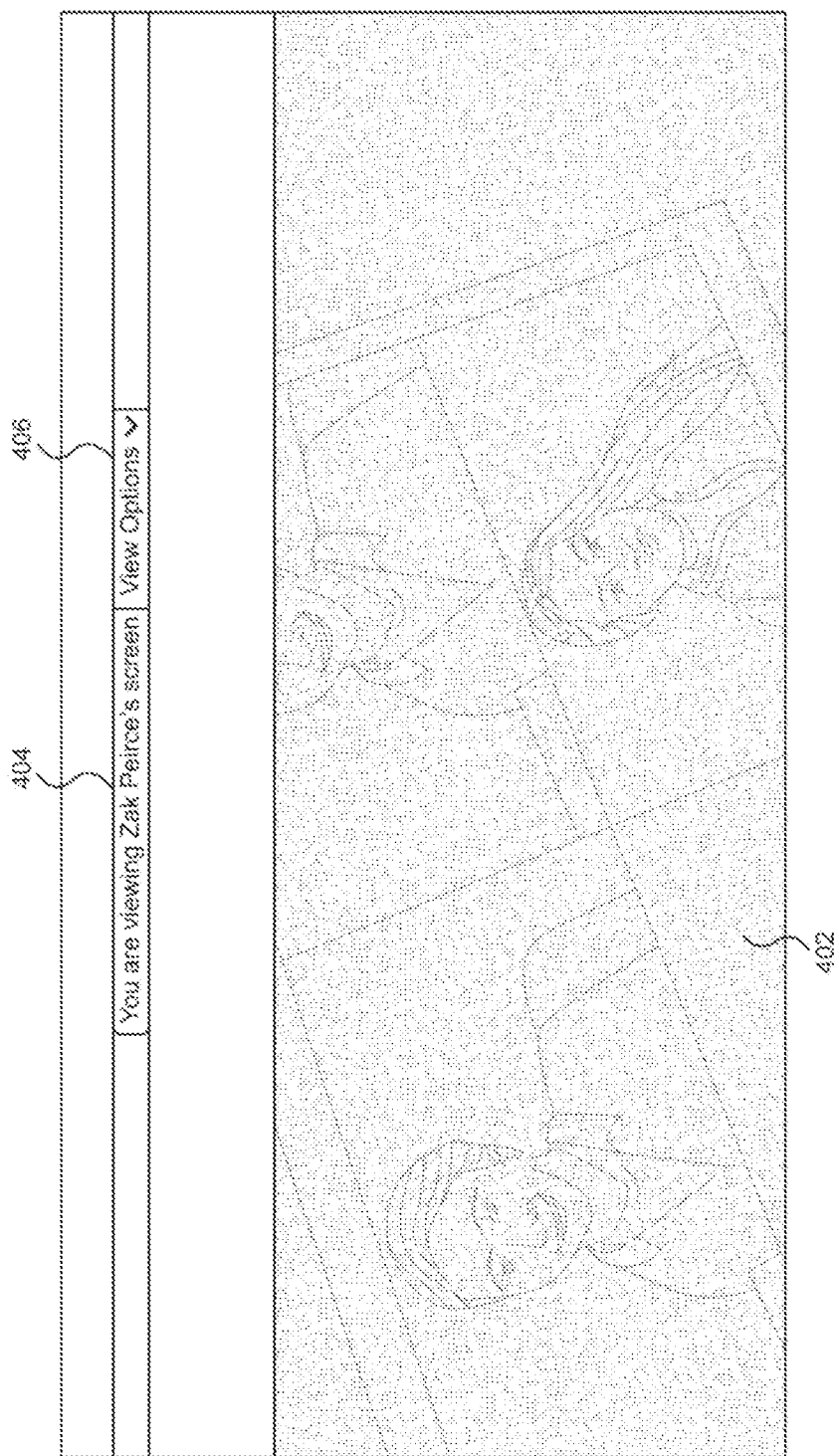


**Figure 4A**

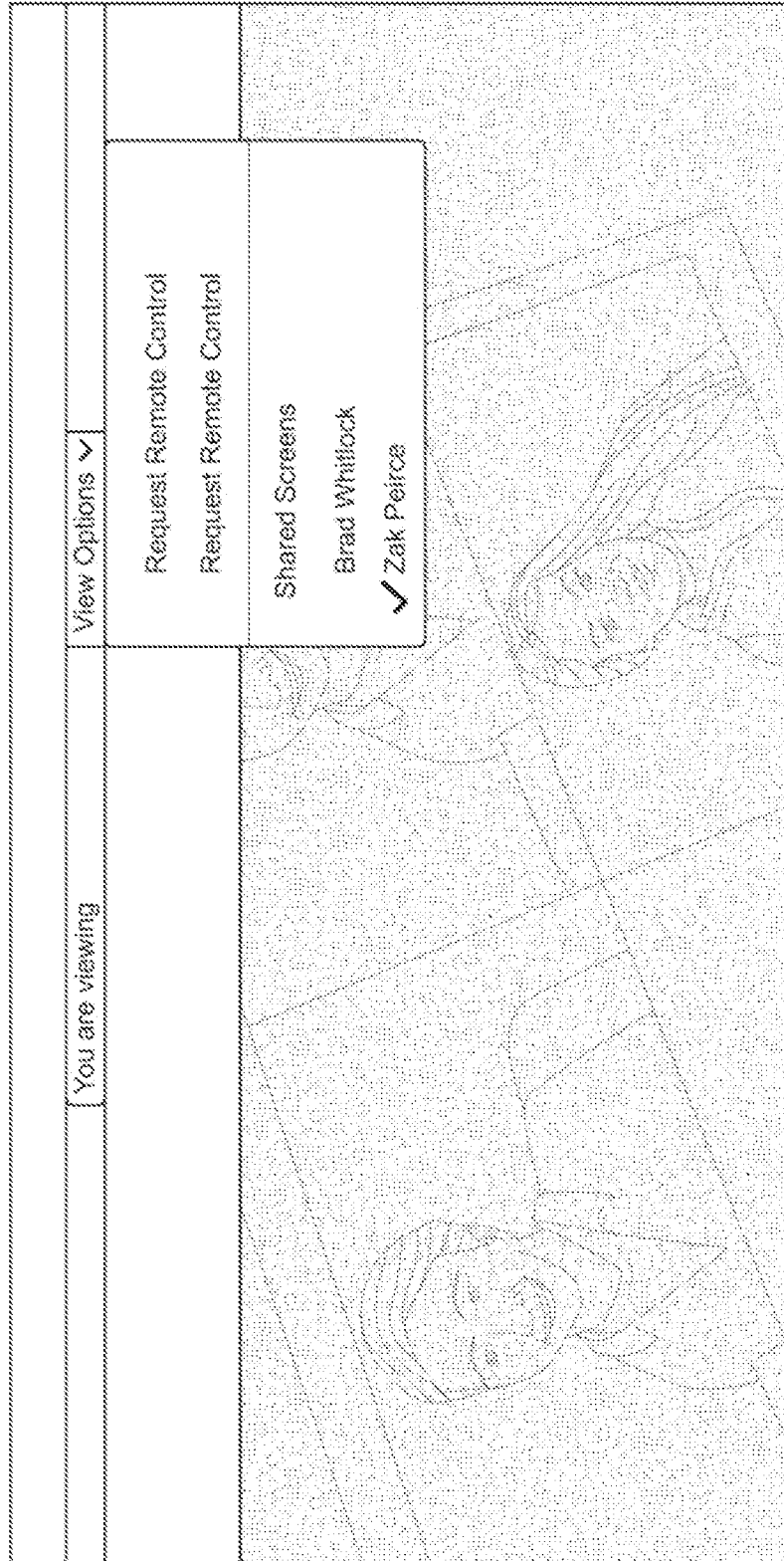


**Figure 4B**

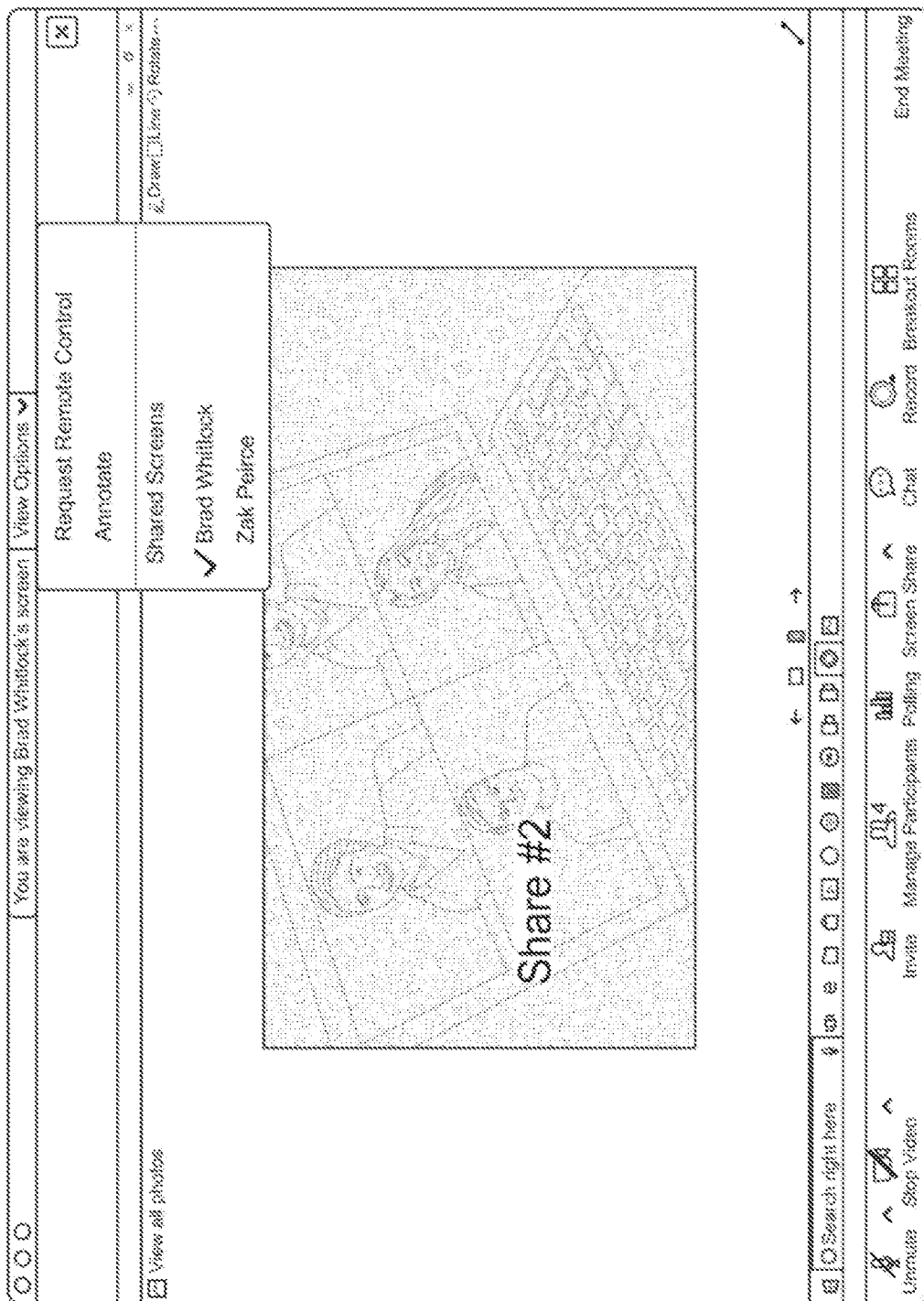


**Figure 4C**

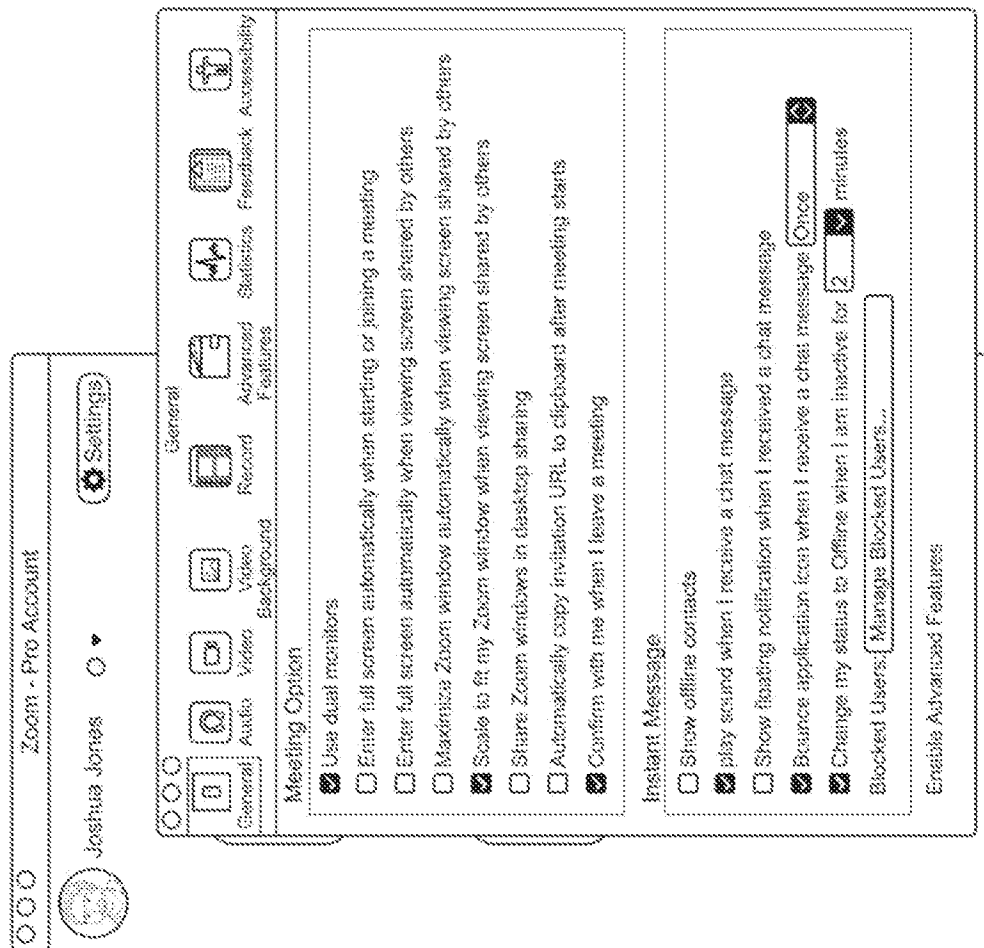


Figure 5A

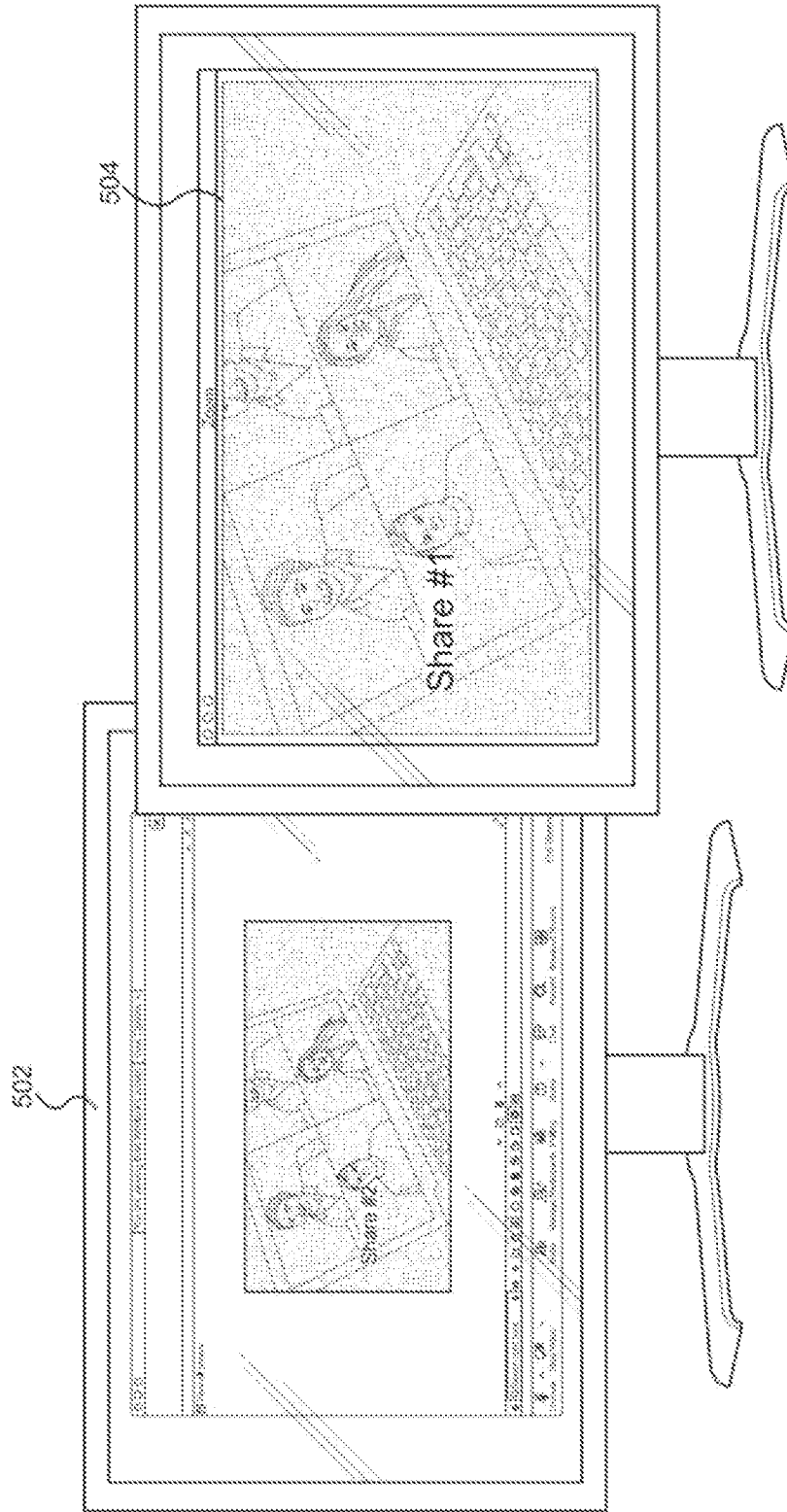


**Figure 5B**

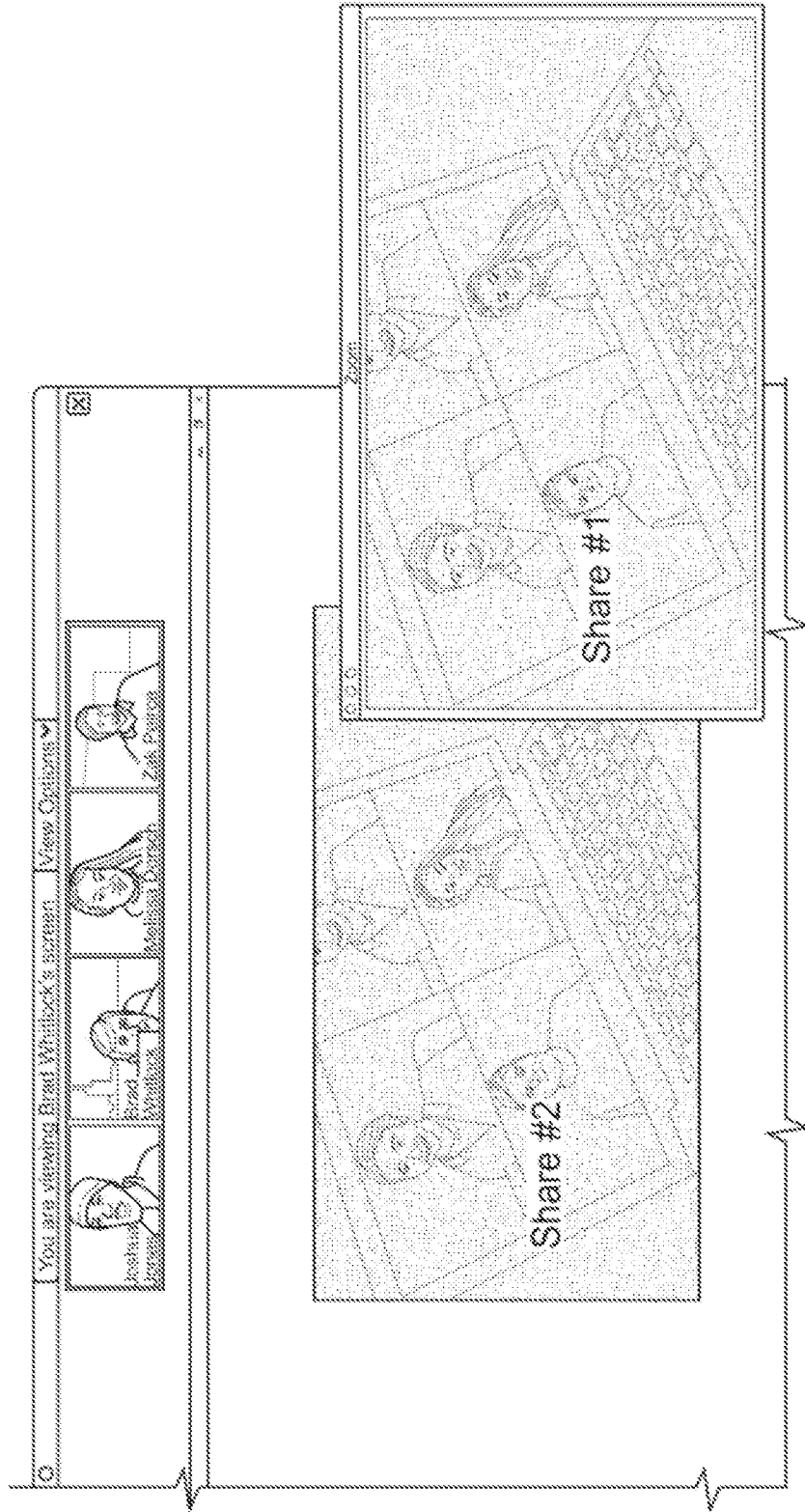


**Figure 5C**

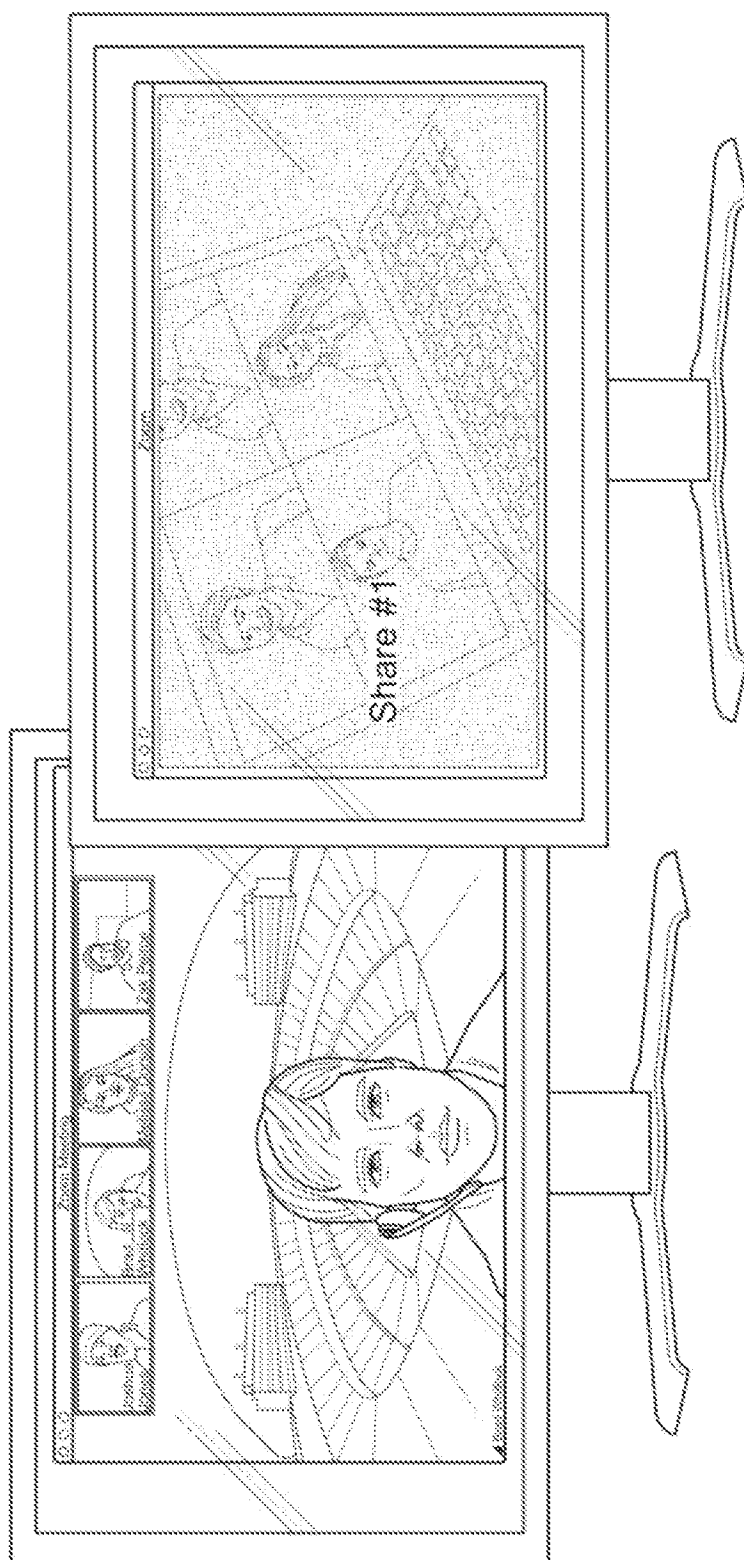


**Figure 5D**

System 600

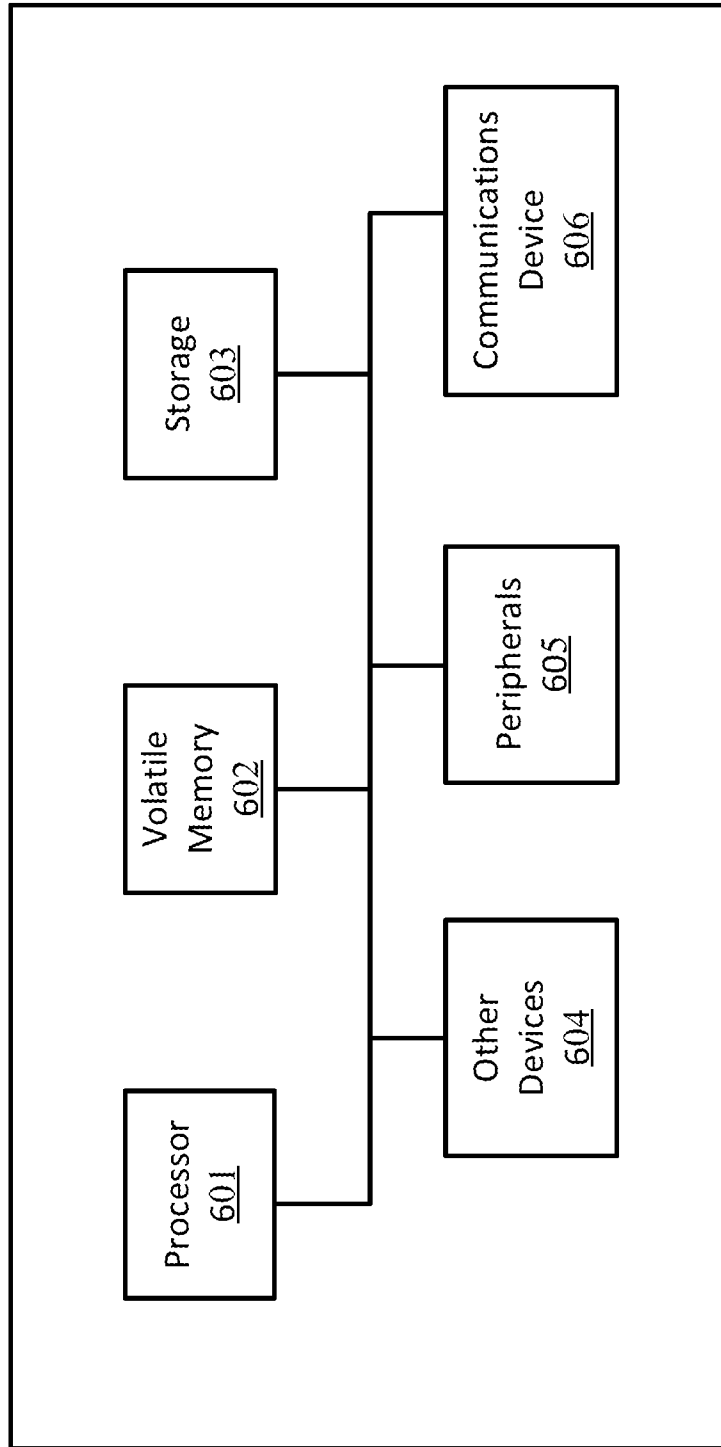


**Figure 6**

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Application Number: 17390922

Document Date: 07/31/2021

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