UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/975,227	08/23/2013	John Albert Kembel	0416-001C

CONFIRMATION NO. 7642

POWER OF ATTORNEY NOTICE

133759
Sheppard Mullin Richter & Hampton LLP
650 Town Center Drive, 10th Floor
Costa Mesa, CA 92626

OC000000134359419

Date Mailed: 06/08/2022

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 06/02/2022.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71.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**.

/tmwilliams/

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/975,227	08/23/2013	John Albert Kembel	0416-001C

CONFIRMATION NO. 7642

41200
PK PATENT LAW
213 S. Payne Street
Alexandria, VA 22314

POA ACCEPTANCE LETTER

OC000000134359518

Date Mailed: 06/08/2022

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 06/02/2022.

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**.

/tmwilliams/

Doc Code: PA..
Document Description: Power of Attorney

PTO/AIA/82A (07-13)
Approved for use through 03/31/2021. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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	13975227
Filing Date	8/23/2013
First Named Inventor	Kembel
Title	ACCESSING AND DISPLAYING NETWORK CONTENT
Art Unit	2416
Examiner Name	LIN
Attorney Docket Number	0416-001C

SIGNATURE of Applicant or Patent Practitioner

Signature	/Peter G Korytnyk/	Date (Optional)	May 12, 2022
Name	Peter G Korytnyk	Registration Number	43400
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.

GENERAL POWER OF ATTORNEY BY APPLICANT AND/OR ASSIGNEE FOR UNITED STATES PATENT

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

I hereby revoke all previous powers of attorney given in the application identified in the attached transmittal letter (form PTO/AIA/82A or equivalent).

I hereby appoint Practitioner(s) associated with the following Customer Number for **PK Patent Law, LLC:**

41200

as my attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office in connection with for the application referenced in the attached transmittal letter (form PTO/AIA/82A or equivalent). Please recognize or change the **correspondence address** for the application identified in the attached transmittal letter to the address associated with the above-mentioned **Customer Number**.

I am the:

Inventor or Joint Inventor.

Legal Representative of a Deceased or Legally Incapacitated Inventor

Assignee or Person to Whom the Inventor is Under an Obligation to Assign and am authorized to act on behalf of all assignees.

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)

Assignee Name & Address:
DoDots Licensing Solutions, LLC
1701 Directors Blvd., Suite 300
Austin, TX 78744-1044

Signature of Applicant and/or Assignee:

Signature: _____ Date: May 6, 2022

Name (printed): David White

Telephone: (949) 939-0775

Title and Company: Sole Member, DoDots Licensing Solutions, LLC

PTO/AIA/96 (08-12)
Approved for use through 01/31/2013. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(c)

Applicant/Patent Owner: DoDots Licensing Solutions, LLC

Application No./Patent No.: 9,369,545 Filed/Issue Date: 06-14-2016

Titled: ACCESSING AND DISPLAYING NETWORK CONTENT

DoDots Licensing Solutions, LLC, a limited liability company

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose **one** of options 1, 2, 3 or 4 below):

1. ☑ The assignee of the entire right, title, and interest.

2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):

☐ The extent (by percentage) of its ownership interest is _____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.

☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (*e.g.*, bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose **one** of options A or B below):

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

B. ☑ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: Inventors To: DODOTS, INC.

The document was recorded in the United States Patent and Trademark Office at Reel 039760, Frame 0513, or for which a copy thereof is attached.

2. From: DODOTS, INC. To: SHERWOOD PARTNERS, INC.

The document was recorded in the United States Patent and Trademark Office at Reel 039760, Frame 0850, or for which a copy thereof is attached.

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: 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.

PTO/AIA/96 (08-12)
Approved for use through 01/31/2013. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(c)

3. From: SHERWOOD PARTNERS, INC. To: INNOVATION MANAGEMENT SCIENCES

The document was recorded in the United States Patent and Trademark Office at
Reel 039760, Frame 0935, or for which a copy thereof is attached.

4. From: INNOVATION MANAGEMENT SCIENCES To: MAINSTREAM SCIENTIFIC, LLC

The document was recorded in the United States Patent and Trademark Office at
Reel 039760, Frame 0988, or for which a copy thereof is attached.

5. From: MAINSTREAM SCIENTIFIC, LLC To: STRATEGIC INTELLECTUAL SOLUTIONS, LLC

The document was recorded in the United States Patent and Trademark Office at
Reel 044474, Frame 0829, or for which a copy thereof is attached.

6. From: STRATEGIC INTELLECTUAL SOLUTIONS, LLC To: DODOTS LICENSING SOLUTIONS, LLC

The document was recorded in the United States Patent and Trademark Office at
Reel 044474, Frame 0836, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☐ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/Peter G. Korytnyk/	June 2, 2022
Signature	Date
Peter G. Korytnyk	43400
Printed or Typed Name	Title or Registration Number

[Page 2 of 2]

Privacy Act Statement

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

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

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether 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.

Electronic Acknowledgement Receipt

EFS ID:	45860061
Application Number:	13975227
International Application Number:	
Confirmation Number:	7642
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Customer Number:	133759
Filer:	Peter George Korytnyk
Filer Authorized By:	
Attorney Docket Number:	0416-001C
Receipt Date:	02-JUN-2022
Filing Date:	23-AUG-2013
Time Stamp:	14:19:33
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	POA0416_001C.pdf	1966610 35d9efa929a7a364aa86db2c538144232628 5867	no	2

Warnings:

Information:					
2	Assignee showing of ownership per 37 CFR 3.73	POA373STMT0416_001C.pdf	125055 af966309ddb68572297176e0b8fd06c0811dd424	no	3
Warnings:					
Information:					
			Total Files Size (in bytes):	2091665	

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

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/975,227	08/23/2013	John Albert Kembel	0416-001C	7642

133759 7590 05/25/2022
Sheppard Mullin Richter & Hampton LLP
650 Town Center Drive, 10th Floor
Costa Mesa, CA 92626

EXAMINER
LIN, KENNY S

ART UNIT	PAPER NUMBER
2416	

NOTIFICATION DATE	DELIVERY MODE
05/25/2022	ELECTRONIC

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

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

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

SheppardMullin_Pair@firsttofile.com
dmipdocketing@sheppardmullin.com

PTOL-90A (Rev. 04/07)

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

In re Patent No.: 9,369,545		
Issue Date: 14 June 2016	:	
Application No. 13/975,227	:	
Filed: 23 Aug 2013	:	DECISION ON PETITION
For: ACCESSING AND DISPLAYING	:	
NETWORK CONTENT	:	

This is a decision on the petition under 37 CFR 1.378(b), filed May 6, 2022, as an ePetition, to accept the unintentionally delayed payment of a maintenance fee for the above-identified patent. While the ePetition has now been placed into the Image File Wrapper, no decision was rendered with the ePetition filed May 6, 2022.

The petition is **GRANTED**.

With this decision, the maintenance fee records and the application file of the above-identified patent have been updated to reflect that the ePetition to accept the unintentionally delayed payment of the 3.5 year maintenance fee under 37 CFR 1.378(b) filed on May 6, 2022 has been granted.

The rules and statutory provisions governing the operations of the U.S. Patent and Trademark Office require payment of a fee on filing each petition under 37 CFR § 1.378(b). In this instance, the fees required are $2,000 for the maintenance fee due at 3.5 years and $2,100 for the delayed payment of the fee due at 3.5 years. The total fees owed are $4,100. Petitioner submitted a payment of $4,100 on May 6, 2022.

It is not apparent whether the person signing the statement of unintentional delay was in a position to have firsthand or direct knowledge of the facts and circumstances of the delay at issue. Nevertheless, such statement is being treated as having been made as the result of a reasonable inquiry into the facts and circumstances of such delay. See 37 CFR 11.18 and Changes to Representation of Others Before the United States Patent and Trademark Office; Final Rule Notice, 73 Fed. Reg. 47650 (August 14, 2008), 1334 Off. Gaz. Pat. Office 338 (September 9, 2008). In the event that such an inquiry has not been made, petitioner must make such an inquiry. If such inquiry results in the discovery that it is not correct that the entire delay

in filing the required reply from the due date for the reply until the filing of a grantable petition pursuant to 37 CFR 1.378 was unintentional, petitioner must notify the Office.

Telephone inquiries concerning this matter may be directed to Vanitha Elgart at 571.272.7395.

/VANITHA M ELGART/
Petitions Examiner, OPET

AO 120 (Rev. 08/10)

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

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

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-00535	May 24, 2022	Western District of Texas - Waco Division

PLAINTIFF	DEFENDANT
DoDots Licensing Solutions LLC	Samsung Electronics Co., LTD., Samsung Electronics America, Inc., Best Buy Stores, L.P., BestBuy.com, LLC, and Best Buy Texas.com, LLC

PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 9,369,545	June 14, 2016	DoDots Licensing Solutions LLC
2 8,020,083	September 13, 2011	DoDots Licensing Solutions LLC
3 8,510,407	August 13, 2013	DoDots Licensing Solutions LLC
4		
5		

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

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

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

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

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

AO 120 (Rev. 08/10)

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

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

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
6:22-cv-00533	May 24, 2022	Western District of Texas - Waco Division

PLAINTIFF	DEFENDANT
DoDots Licensing Solutions LLC	Apple Inc., Best Buy Stores, L.P., BestBuy.com, LLC, and Best Buy Texas.com, LLC

PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 9369545	June 15, 2016	DoDots Licensing Solutions LLC
2 8020083	September 13, 2011	DoDots Licensing Solutions LLC
3 8510407	August 13, 2013	DoDots Licensing Solutions LLC
4		
5		

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

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

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

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

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

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/975,227	08/23/2013	John Albert Kembel	0416-001C

CONFIRMATION NO. 7642

IMPROPER CPOA LETTER

133759
Sheppard Mullin Richter & Hampton LLP
650 Town Center Drive, 10th Floor
Costa Mesa, CA 92626

OC000000133934578

Date Mailed: 05/19/2022

NOTICE REGARDING POWER OF ATTORNEY

This is in response to the power of attorney filed 05/12/2022. The power of attorney in this application is not accepted for the reason(s) listed below:

The power of attorney filed 05/12/2022 has not been accepted because the power of attorney must be signed by the applicant for patent. See 37 CFR 1.32(b)(4).

- The person or entity attempting the change to power of attorney is not the applicant of record in the application. Any request to change the applicant once the applicant has been specified must include (1) an application data sheet (ADS) specifying the new applicant in the Applicant Information section, and (2) a statement under 37 CFR 3.73(c) (USPTO Form PTO/AIA/96 or an equivalent) to show chain of title to the new applicant. The ADS must contain markings to show the information that is being changed, with underlining for insertions and strike-through or brackets for text removed. See 37 CFR 1.76(c)(2).

Because the request to change or update the applicant cannot be accepted, the power of attorney is not properly signed by the applicant and cannot be accepted. The change to applicant must be acceptable before the new applicant can appoint power of attorney.

/sltorres/

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

41200
PK PATENT LAW
213 S. Payne Street
Alexandria, VA 22314
UNITED STATES

Doc Code: PA..
Document Description: Power of Attorney

PTO/AIA/82A (07-13)
Approved for use through 03/31/2021. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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	13975227
Filing Date	8/23/2013
First Named Inventor	Kembel
Title	ACCESSING AND DISPLAYING NETWORK CONTENT
Art Unit	2416
Examiner Name	LIN
Attorney Docket Number	0416-001C

SIGNATURE of Applicant or Patent Practitioner

Signature	/Peter G Korytnyk/	Date (Optional)	May 12, 2022
Name	Peter G Korytnyk	Registration Number	43400
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.

GENERAL POWER OF ATTORNEY BY APPLICANT AND/OR ASSIGNEE FOR UNITED STATES PATENT

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

I hereby revoke all previous powers of attorney given in the application identified in the attached transmittal letter (form PTO/AIA/82A or equivalent).

I hereby appoint Practitioner(s) associated with the following Customer Number for **PK Patent Law, LLC:**

41200

as my attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office in connection with for the application referenced in the attached transmittal letter (form PTO/AIA/82A or equivalent). Please recognize or change the **correspondence address** for the application identified in the attached transmittal letter to the address associated with the above-mentioned **Customer Number**.

I am the:

Inventor or Joint Inventor.

Legal Representative of a Deceased or Legally Incapacitated Inventor

Assignee or Person to Whom the Inventor is Under an Obligation to Assign and am authorized to act on behalf of all assignees.

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)

Assignee Name & Address:
DoDots Licensing Solutions, LLC
1701 Directors Blvd., Suite 300
Austin, TX 78744-1044

Signature of Applicant and/or Assignee:

Signature: _____ Date: May 6, 2022

Name (printed): David White

Telephone: (949) 939-0775

Title and Company: Sole Member, DoDots Licensing Solutions, LLC

Electronic Acknowledgement Receipt

EFS ID:	45702731
Application Number:	13975227
International Application Number:	
Confirmation Number:	7642
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Customer Number:	133759
Filer:	Peter George Korytnyk
Filer Authorized By:	
Attorney Docket Number:	45SN-259692
Receipt Date:	12-MAY-2022
Filing Date:	23-AUG-2013
Time Stamp:	20:42:28
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	13975227POA.pdf	1966610 35d9efa929a7a364aa86db2c538144232628 5867	no	2

Warnings:

Information:	
Total Files Size (in bytes):	1966610

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.

Electronic Patent Application Fee Transmittal

Application Number:	13975227
Filing Date:	23-Aug-2013
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Filer:	Peter George Korytnyk
Attorney Docket Number:	45SN-259692

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
MAINTENANCE FEE DUE AT 3.5 YEARS	1551	1	2000	2000
PET. DELAY PYMT MAINTAIN PATENT IN FORCE	1558	1	2100	2100
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**4100**

PETITION TO ACCEPT UNINTENTIONALLY DELAYED PAYMENT OF MAINTENANCE FEE IN AN EXPIRED PATENT (37 CFR 1.378(b))

Patent Number	Issue Date	Application Number	Filing Date	Docket Number (if applicable)
9369545	14-Jun-2016	13975227	23-Aug-2013	

CAUTION: Maintenance fee (and surcharge, if any) payment must correctly identify: (1) the patent number and (2) the application number of the actual U.S. application leading to issuance of that patent to ensure the fee(s) is/are associated with the correct patent. 37 CFR 1.366(c) and (d).

Applicants claims the following fee status:

○ Small Entity

○ Micro Entity

◉ Regular Undiscounted

Applicants selects the following :

◉ 3 1/2	○ 7 1/2	○ 11 1/2

PETITION FEE
The petition fee required by 37 CFR 1.17(m) (Fee Code 1558/2558) must be paid as a condition of accepting unintentionally delayed payment of the maintenance fee.

MAINTENANCE FEE (37 CFR 1.20(e)-(g))
The appropriate maintenance fee must be submitted with this petition.

STATEMENT

The delay in payment of the maintenance fee for this patent was unintentional.

Petitioner is reminded that a delay resulting from a deliberately chosen course of action or a change in circumstance is not an unintentional delay.

Petitioner is further reminded that a person seeking reinstatement of an expired patent should not make a statement that the delay in payment of the maintenance fee was unintentional unless the entire delay was unintentional, including the period from discovery that the maintenance fee was not timely paid until payment of the maintenance fee. For example, a statement that the delay in payment of the maintenance fee was unintentional would not be proper when the patentee becomes aware of an unintentional failure to timely pay the maintenance fee and then intentionally delays filing a petition for reinstatement of the patent under 37 CFR 1.378. See MPEP 2590.

NOTE: Where the petition under 37 CFR 1.378 is filed more than two years after the date the patent expired for nonpayment of the maintenance fee, the United States Patent and Trademark Office requires an additional explanation of the circumstances surrounding the delay that establishes the entire delay was unintentional. This requirement is in addition to the requirement to provide a statement that the entire delay was unintentional. See *Clarification of the Practice for Requiring Additional Information in Petitions Filed in Patent Applications and Patents Based on Unintentional Delay*, 85 FR 12222 (March 2, 2020). See MPEP 711.03(c)(II)(C)-(F) for additional guidance on the information required to establish that the entire delay was unintentional.

PETITIONER(S) REQUEST THAT THE DELAYED PAYMENT OF THE MAINTENANCE FEE BE ACCEPTED AND THE PATENT REINSTATED

THIS PORTION MUST BE COMPLETED BY THE SIGNATORY OR SIGNATORIES

37 CFR 1.378(c) states: "Any petition under this section must be signed in compliance with 37 CFR 1.33(b) ."

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 been given power of attorney in this application.
- ◉ An attorney or agent registered to practice before the Patent and Trademark Office
- ○ A sole patentee
- ○ A joint patentee; I certify that I am authorized to sign this submission on behalf of all the other patentees as evidenced by the power of attorney in the application
- ○ A joint patentee; all of whom are signing this c petition
- ○ The assignee of record of the entire interest that qualifies as an authorized party under 37 CFR 1.33(b)

Patent Practitioner			
A signature of the applicant or representative is required in accordance with 37 CFR 1.33 and 10.18. Please see 37 CFR 1.4(d) for the form of the signature			
Signature	/Peter G Korytnyk/		
Name	Peter G Korytnyk	Registration Number	43400

AO 120 (Rev. 08/10)

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

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

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
	1/16/2018	District of Delaware

PLAINTIFF	DEFENDANT
DoDots Licensing Solutions LLC	Lenovo Holding Co., Inc., Lenovo (United States) Inc., and Motorola Mobility LLC

PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 US 9,369,545 B2	6/14/2016	DoDots Licensing Solutions LLC
2		
3		
4		
5		

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

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

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

DECISION/JUDGEMENT
Dismissed - see attached

CLERK	(BY) DEPUTY CLERK	DATE
John A. Cerino	/s/ Mark D. Buckson, Jr.	1/14/2022

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

Trials@uspto.gov
571-272-7822

Paper 37
Date: September 9, 2020

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LENOVO HOLDING COMPANY, INC., LENOVO (UNITED STATES) INC., and MOTOROLA MOBILITY LLC,
Petitioner,

v.

DODOTS LICENSING SOLUTIONS LLC,
Patent Owner.

IPR2019-00988
Patent 9,369,545 B2

Before GRACE KARAFFA OBERMANN, JAMES A. WORTH, and PAUL J. KORNICZKY, *Administrative Patent Judges*.

KORNICZKY, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining No Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

Lenovo Holding Company, Inc., Lenovo (United States) Inc., and Motorola Mobility LLC ("Petitioner") filed a Petition for an *inter partes* review of claims 1–10 and 12–15 of U.S. Patent No. 9,369,545 B2 (Ex. 1001, "the '545 patent"). Paper 1 ("Pet."). We issued a decision to institute an *inter partes* review of these claims. Paper 7 ("Inst. Dec."). After institution, Patent Owner filed a Patent Owner Response (Paper 15, "PO Resp."), Petitioner filed a Reply (Paper 24, "Reply"), and Patent Owner filed a Redacted Sur-Reply to Petitioner's Reply[1] (Paper 35, "Sur-reply").

Oral argument was held on June 10, 2020, and the transcript of the hearing has been entered as Paper 36 ("Tr.").

We have jurisdiction under 35 U.S.C. § 6. This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73.

Petitioner bears the burden of proving unpatentability of the challenged claims, and the burden of persuasion never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). To prevail, Petitioner must prove unpatentability by a preponderance of the evidence. *See* 35 U.S.C. § 316(e) (2016); 37 C.F.R. § 42.1(d). For the reasons that follow, we determine that Petitioner has not shown by a preponderance of the evidence that claims 1–10 and 12–15 of the '545 patent are unpatentable. *See* 35 U.S.C. § 316(e).

---

[1] In our Order dated June 9, 2020 (Paper 34), we granted Petitioner's motion to strike (Paper 29) certain portions of Patent Owner's Sur-Reply (Paper 26). In response to our Order, Patent Owner filed its Redacted Sur-Reply.

II. BACKGROUND AND SUMMARY

A. Real Parties in Interest

According to Petitioner, Lenovo Holding Company, Inc., Lenovo (United States) Inc., and Motorola Mobility LLC are the real parties-in-interest. Pet. 64. According to Patent Owner, DoDots Licensing Solutions LLC is the real party-in-interest. Paper 4, 2.

B. Related Matters

According to Petitioner, the '545 patent as well as U.S. Patent Nos. 8,020,083 and 8,510,407 are at issue in *DoDots Licensing Solutions LLC v. Lenovo Holding Company, Inc. et al.*, Case No. 18-098-MN (D. Del.). Pet. 64; *see also* Paper 4, 2 (Patent Owner identifies the district court action).

C. The '545 Patent (Ex. 1001)

The title of the '545 patent is "Accessing and Displaying Network Content." Ex. 1001, code (54). The '545 patent discloses, among other things, a method for accessing and displaying network content in a graphic user interface ("GUI"). *Id.* at code (57).

According to the '545 patent, conventional web browsers are limited in the "aggregation" and "presentation" of content. *Id.* at 1:48–51. As to the aggregation of content, the '545 patent states that a user may use conventional web pages to view content sources in a single web page, such as stock, weather and sports information (*id.* at 1:27–38), and because the user is not in a position to separately aggregate the content at a client computer, the user is constrained to view the content that has been delivered

in the manner provided by the server computer hosting the web page (*id.* at 1:45–48). As to the presentation of content, the '545 patent states that conventional content was divided into regions on a single web page. *Id.* at 1:27–38. The '545 patent identified a purported problem, noting that when disparate content was aggregated, it was "reassembled into a full web page and [] served through a full-screen browser." *Id.*

In contrast to conventional web pages, the '545 patent discloses a method for accessing and displaying network content in a GUI. *Id.* at code (57). It is capable of processing distributable computer readable media. *Id.* at 4:29–30. Distributable computer readable media includes, but is not limited to, standard web content, such as HTML, dHTML, images, imbedded ActiveX and Java applications, JavaScript, CSS, Pen scripts, Streaming Media, and/or Flash. *Id.* at 4:31–34.

According to the '545 patent, a user logs into a server by providing a login identifier, which is used to obtain the user's profile. *Id.* at 4:44–47. The user profile includes references to networked information monitors (NIMs). *Id.* at 4:54–56. In the '545 patent, the term "networked information monitor" refers to a fully configurable frame with one or more controls, which stands in contrast to conventional web browsers, which have limited means to alter the browser controls. *Id.* at 4:56–63. A "NIM template" defines the characteristics of a specific NIM, including fully configurable frame characteristics, viewer and control characteristics, and NIM content references. *Id.* at 6:34–37; *see id.* at 2:30–32 (referred "a definition of a Networked Information Monitor (NIM)" which defines a "NIM frame"). After the user accesses the user profile and the NIM template defines the

characteristics of the NIM frame, the content is placed in the NIM viewer defined by the frame. *Id.* at 2:30–34.

D. Illustrative Claim

As mentioned above, the challenged claims are claims 1–10 and 12–15. Claim 1 is the only independent claim among the challenged claims, and is reproduced below:[2]

> 1. [1.preamble] A computer-implemented method of obtaining content over a network and displaying the content to a user, the method being implemented in a client computing device in operative communication with a server over a network, the client computing device including electronic storage, a display, and one or more processors configured to execute one or more computer program modules, the method comprising:
>
> [1.A] transmitting a request to the server over the network, the request requesting network information monitor template;
>
> [1.B]: receiving the requested networked information monitor template from the server over the internet, the requested networked information monitor template having been transmitted from the server over the network responsive to the transmitted request, the networked information monitor template comprising:
>
> [1.C]: a definition of a viewer graphical user interface within which content in a web browser-readable language may be presented on the display of the client computing device; and
>
> [1.D]: a definition of a first content element for the networked information monitor template, the definition of the first content element referencing a first network location from which the first content element for the networked information monitor template is served over the network;

[2] For ease of reference, claim 1 includes Petitioner's bracketed limitation designations. *See* Pet. 17–19.

> [1.E]: responsive to instructions included in the requested *networked information monitor template*, presenting the viewer graphical user interface defined by the networked information monitor on the display of the client computing device separate from and outside of any other graphical viewer user interface that includes user controls for specifying the first network location from which the first content element for the networked information monitor is served over the network;
>
> [1.F]: responsive to instructions included in the requested networked information monitor template, transmitting over the network a first content request to the first network location referenced by the definition of the first content element for the networked information monitor template;
>
> [1.G]: receiving, over the network, the first content element transmitted responsive to the first content request; presenting the received the first content element in the viewer graphical user interface defined by the networked information monitor template,
>
> [1.I]: wherein the definition of the viewer graphical user interface and/or the first content element define all controls for enabling a user to interact with the first content element through the viewer graphical user interface.

Ex. 1001, 42:22–43:4 (emphasis added).

E. Prior Art References

Petitioner relies on the following references:

Reference	Description	Date	Exhibit
Hoff[3]	US 5,919,247	Issued July 6, 1999	Ex. 1006
Berg	Cliff Berg, *How Do I Create a Signed Castanet Channel?*, DR. DOBB'S JOURNAL, January 1, 1998	Published Jan. 1, 1998	Ex. 1007
Razavi	US 6,401,134 B1	Issued June 4, 2002	Ex. 1008
Banthia	US 5,922,044	Issued July 13, 1999	Ex. 1009
Berry	US 5,586,244	Issued Dec. 17, 1996	Ex. 1010
Dang	US 7,216,300 B2	Issued May 8, 2007	Ex. 1011
Cordell	US 5,778,372	Issued July 7, 1998	Ex. 1013

F. Asserted Grounds

Petitioner asserts that claims 1–10 and 12–15 are unpatentable on the following grounds:

Ground	Claim(s)	35 U.S.C. §[4]	Reference(s)
1	1, 2, 10, 14	103	Hoff, Berg
2	2–5, 9	103	Hoff, Berg, Dang, Berry
3	6, 7, 12, 13, 15	103	Hoff, Berg, Razavi, Banthia
4	8	103	Hoff, Berg, Razavi, Banthia, Cordell
5	1, 6, 7, 10, 12–15	103	Razavi, Banthia

[3] The first-named inventor is Arthur Van Hoff, but, for consistency with the Petition, we refer to the patent as "Hoff."

[4] The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (September 16, 2011) ("AIA"), included revisions to 35 U.S.C. §103 that became effective on March 16, 2013. Because the '545 patent issued from an application filed before March 16, 2013, we apply the pre-AIA version of the statutory basis for unpatentability.

Ground	Claim(s)	35 U.S.C. §[4]	Reference(s)
6	2–5, 9	103	Razavi, Banthia, Dang, Berry
7	8	103	Razavi, Banthia, Cordell

Pet. 1. Petitioner relies on the testimony from Dr. Vijay K. Madisetti (Ex. 1005). Based on his statement of qualifications and experience, we find Dr. Madisetti qualified to opine about the understanding of a person of ordinary skill in the art at the time of the invention. *See* Ex. 1005 ¶¶ 6–30 (statement of qualifications and experience).

III. ANALYSIS

A. Legal Standards

A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved based on underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in the record, objective evidence of nonobviousness, such as commercial success. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). In that regard, an obviousness analysis "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR*, 550 U.S.

at 418. Further, "[t]o satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness." *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016). We analyze the asserted grounds with these principles in mind.

B. Level of Ordinary Skill in the Art

Petitioner asserts that a person of ordinary skill in the art would have a "bachelor's degree in Electrical or Computer Engineering, Computer Science, or a related field and have three or more years of experience in the field." Pet. 8 (citing Ex. 1005 ¶¶ 38–41). Patent Owner does present evidence regarding the education and experience of a person of ordinary skill in the art.

Petitioner's proposal appears to be consistent with the prior art of record and with the '545 patent. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (explaining that specific findings regarding ordinary skill level are not required where the prior art itself reflects an appropriate level and a need for testimony is not shown) (internal quotation marks and citation omitted). We adopt Petitioner's asserted level of ordinary skill in the art.

C. Claim Construction

In an *inter partes* review based on a petition filed after November 13, 2018, the claims are construed

> using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with

> the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.

See Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340, 51,340, 51,358 (Oct. 11, 2018) (amending 37 C.F.R. § 42.100(b) effective November 13, 2018) (now codified at 37 C.F.R. § 42.100(b). (2019)); *see Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005). Any special definitions for claim terms must be set forth in the specification with reasonable clarity, deliberateness, and precision. *See In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

To resolve Petitioner's challenge, the parties assert that two claim terms need to be construed: network information monitor (NIM) and network information monitor template (NIM template).

1. Network Information Monitor (NIM)

Patent Owner asserts that the "inventors defined NIMs in the specification as follows: 'As used herein, the term networked information monitor or NIM refers to a fully configurable frame with one or more controls; the frame through which content is optionally presented.'" PO Resp. 8 (citing Ex. 1001, 4:56–59). Petitioner agrees that the Specification defines "a NIM as 'a fully configurable frame with one or more controls' through which content is presented to the user." Reply 2 (citing Ex. 1001, 2:28–30; 4:56–67). We agree that the Specification defines a NIM as "a fully configurable frame with one or more controls through which content is presented to the user," and this is the interpretation we apply here. Ex. 1001, 4:56–63.

2. Network Information Monitor Template (NIM template)

a) The Parties' Contentions

Patent Owner asserts that "the NIM template (a.k.a., NIM definition) is a data structure that defines the NIM; it is not the NIM and it is not an executable program (i.e., compiled code)." PO Resp. 8 (citing Ex. 2001 ¶¶ 20 36); *id.* at 2 ("NIM templates are 'data structures,' not applications"). According to Patent Owner, the Specification states that "NIMs are extremely flexible, because the definition of the NIM is **content, rather than compiled code**." *Id.* at 8 (citing Ex. 1001, 21:58–60 (emphasis added), 6:33–37 ("NIM templates database 74 includes a large number of NIM templates. Each **NIM template defines the characteristics of a specific NIM**, including fully configurable frame characteristics, view and control characteristics, and NIM content references.") (emphasis added), 3:31-33 ("FIG. 13 illustrates a **data structure** for a NIM definition, stored in the NIM application server's template database or user profile database.") (emphasis added)). Patent Owner also argues that "NIM templates are significantly smaller than the NIMs they define." *Id.* at 9 (citing Ex. 2001 ¶ 24; Ex. 1001, 33:47–55 ("Each NIM definition contains just enough information to define and initialize the NIM's components (NIM frame, controls, etc.). For example, this information may contain data to configure the skeleton or frame that is filled in by NIM content from a developer's server. The NIM definition is therefore fairly small in size (~2K), and is therefore easily distributable as an XML file or Blob (binary large object), which is communicated using the same mechanisms (HTTP/ HTTPS requests) as regular Web pages.")).

Petitioner does not present a construction for a "NIM template," but criticizes Patent Owner's proposed construction and argues that a NIM template should encompass executable programs and compiled code. Reply 2–4. Petitioner argues that "nothing in the claims or specification limits a NIM template to a data structure excluding an executable program, as Patent Owner proposes." *Id.* at 2. Petitioner argues that Patent Owner's examples of NIM templates in the Specification, which exclude compiled code and executable applications, are merely "non-limiting examples of NIM templates" (*id.* at 3), while certain other embodiments disclose NIM templates that are executable code (*id.* at 5). Petitioner also argues that extrinsic evidence—statements in another related patent and in related litigation—evidence that NIM templates may contain executable code. As discussed in our analysis below, Petitioner's arguments are not persuasive.

b) Construction of "NIM Template"

After considering the usage of "NIM template" in the claims, the Specification, the prosecution history, and the parties' contentions, we determine that a NIM template is a data structure which defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and which excludes executable applications/compiled code.

Turning to the usage of NIM template in the claims, claim 1, in relevant part, states:

> the networked information monitor template comprising:
>
> [1.C]: a definition of a viewer graphical user interface within which content in a web browser-readable language may be presented on the display of the client computing device; and

> [1.D]: a definition of a first content element for the networked information monitor template, the definition of the first content element referencing a first network location from which the first content element for the networked information monitor template is served over the network.

Ex. 1001, 42:36–47. From claim 1, we understand that the NIM template defines the characteristics of the viewer and the content on the viewer.

As to the prosecution history of the '545 patent, the parties did not identify, and we did not find, any portion of the prosecution history that is helpful in determining the meaning of NIM template.

The Specification of the '545 patent does address the meaning of NIM template. The Specification states the "NIMs allow a developer to provide an application feel without developing custom client applications" (Ex. 1001, 26:33–35), and the "NIM template defines the characteristics of a specific NIM, including fully configurable frame characteristics, viewer and control characteristics, and NIM content references" (*id.* at 6:34–37). *See also id.* at 21:21–23 ("The NIM definitions, as discussed above, includes the NIM frame definition and the definition of the controls for filling the viewer within the frame with content.").

Figure 13 of the '545 patent is reproduced below.

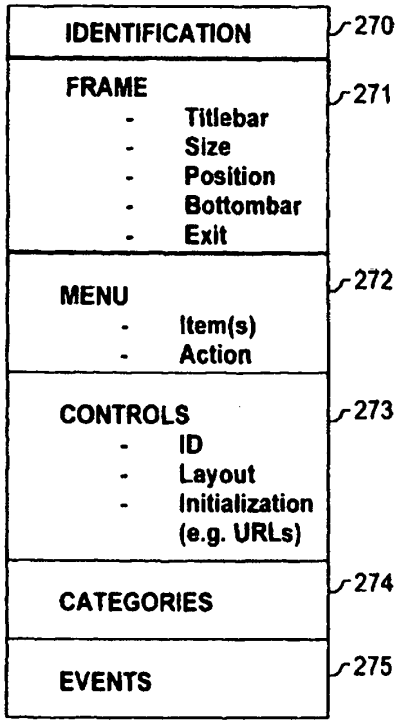


FIG. 13

Figure 13 "illustrates a data structure for a NIM definition." *Id.* at 21:42, 3:31. According to the Specification, in the exemplary embodiment of Figure 13, "the definition of a NIM includes tags that identify the NIM 270, define and configure the NIM frame 271, specify and layout the controls 273 in the NIM viewer, and specify parameters to initialize all the NIM's components with content or data." *Id.* at 22:4–8. This disclosure does not indicate that the data structure for the NIM template contains compiled code.

The Specification states that "a NIM is defined as a frame that contains a collection of controls, or functional units, such as a web rendering control or a GIF rendering control," and the NIM definitions "include all the

information needed to build a NIM frame and fill the NIM with NIM content." *Id.* at 21:42–53. The Specification further states:

> In one embodiment, the NIM definitions are defined using Extensible Markup Language (XML), so that the NIM as a whole–the frame and the content within the viewer—is advantageously as flexible as standard web content. NIMs are extremely flexible, because ***the definition of the NIM is content, rather than compiled code.*** The NIM definition defines the structure of the NIM, and everything that is visible in a NIM is based on standard Internet content, such as HTML, dHTML, or GIFs, and is referenced or pointed to by the NIM definition. An "application"–type NIM, such as a web calendar or web mail, may be changed by the user, by the content provider, or by other content, ***while advantageously avoiding*** the need to distribute and support a ***hard-coded compiled application***. The definition of a NIM thus includes everything that is needed for the NIM to be rendered and filled with Internet content.

Id. at 21:55–22:3 (emphasis added). From this disclosure, we understand that the Specification prohibits the NIM template from using compiled code or an executable application. Our review of the Specification did not identify use of compiled code or an executable application by the NIM template.

Petitioner argues that the data structure illustrated in Figure 13 and the related discussion of Figure 13 is merely one non-limiting embodiment, and that the Figure 13 embodiment merely describes implementing a NIM template as XML rather than compiled code. Reply 3–4 (citing *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004) ("particular embodiments appearing in the written description will not be used to limit claim language that has broader effect")). Petitioner's argument is not persuasive. While we agree with Petitioner that the XML is one possible embodiment of a NIM template, the Specification

distinguishes the XML embodiment from embodiments using other languages for data structures, rather than distinguishing the XML embodiment from embodiments in which the template is compiled code. The Specification's broad statement that a NIM template does not use compiled code or executable applications applies to all NIM templates, not just one particular embodiment. The Specification does not describe any NIM template that uses compiled code or executable applications.

Petitioner argues that the Specification provides several examples of a NIM template which uses executable code. First, Petitioner references the Specification's statement that "[t]he NIM definition is . . . fairly small in size (~2K), and is therefore easily distributable as an XML file or Blob (binary large object) . . . ." Reply 4–5 (citing Ex. 1001, 33:51–53). Petitioner argues that a "binary large object" "might contain any binary content, including executable code." *Id.* at 4. Petitioner's argument is not persuasive. The Specification refers to an "XML file" and an "XML Blob." *See, e.g.*, Ex. 1001, 34:21 (referring to "XML Blob"). In addition, Petitioner's contention is attorney argument unsupported by persuasive expert testimony. *In re Geisler*, 116 F.3d 1465, 1470–1471 (Fed. Cir. 1997) (argument by counsel cannot take the place of evidence); *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) ("Attorney's arguments in a brief cannot take the place of evidence."). Unlike Patent Owner, Petitioner provided no declarant testimony probative to the issue of how the ordinary artisan would understand and interpret the relevant Specification passages and the limitation in dispute.

Second, Petitioner argues that the "second executable module" described in the specification is an embodiment of a "NIM template."

Reply 5. According to Petitioner, the Specification states a "second ***executable module defines a NIM frame*** for the NIM using the definition," and because "the 'second executable module' defines a NIM frame, the 'second executable module' is a NIM template under its plain and ordinary meaning." *Id.* (citing Ex. 1001, 2:38–30, 2:44–45). Petitioner further argues that the "NIM definition modules" are "executable code as distinct from data." *Id.* at 6. Petitioner's argument is not persuasive because Petitioner does not identify, and we do not find, any portion of the Specification which discloses that the second executable module contains compiled code. In the context of the Specification, the second executable module and the NIM definition module contains the "data structure" for a NIM definition, and appears to mean that the content in the modules are used with the specified operation. *See* Ex. 1001, 3:31. In addition, Petitioner's contentions about the meaning of NIM template, second executable module, and NIM definition module are attorney argument unsupported by persuasive expert testimony. *In re Geisler*, 116 F.3d at 1470–1471 (argument by counsel cannot take the place of evidence). The Specification does not describe any NIM template that uses compiled code or executable applications.

Third, Petitioner argues that, during prosecution of a related '874 application,[5] Patent Owner admitted that the NIM template can be executed. Reply 6. According to Petitioner, "the '874 Application includes claims reciting 'executing the first networked information monitor template,' and

[5] According to Petitioner, the'545 patent indirectly claims priority to U.S. Patent No. 7,660,868 (the "'868 patent"), and the'545 and '868 patents share essentially the same specifications. Reply 6–7. U.S. Patent Application No. 13/215,874 (the "'874 application") also claims priority to and shares a specification with the '868 patent. *Id.*

during prosecution, Patent Owner differentiated the claims from a prior art reference on the basis that the prior art did not 'teach or suggest executing' the claimed NIM template." *Id.* at 7 (citing Ex. 1019, 6–7, 14). Petitioner argues that Patent Owner's attempt to define NIM template differently in this proceeding is improper. *Id.* at 6 (citing *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1334 (Fed. Cir. 2003)). As an initial matter, Exhibit 1019 is the Second Amended Complaint in a litigation, not the prosecution history of the '874 patent application. In addition, Petitioner's contentions about the meaning of the disputed terms are attorney argument unsupported by citations to persuasive intrinsic evidence or testimony from a witness competent to opine about how an ordinarily skilled artisan would understand the terms. *In re Geisler*, 116 F.3d at 1470–1471 (argument by counsel cannot take the place of evidence). Petitioner's argument is not persuasive.

Fourth, Petitioner argues that "Patent Owner's assertion that an application could never be a NIM template (i.e., that a NIM template cannot be executable) is further contradicted by its infringement allegations against the Petitioners in the underlying district court action, where Patent Owner has contended that each step of Claim 1 is performed by the use of 'a stocks (finance) ***app***, MSN weather ***app***, sports team ***app***, a podcast ***app*** and numerous other ***apps*** . . . .'" Reply 7 (citing Ex. 1020, 6–7). Petitioner's argument is not persuasive because it does not present any evidence about how the "apps" work and how they apply to the disputed NIM template, compiled code, and executable applications. In addition, Petitioner's contentions about the meaning of the disputed terms and apps are attorney argument unsupported by persuasive evidence. *In re Geisler*, 116 F.3d at 1470–1471 (argument by counsel cannot take the place of evidence). A

parties' infringement allegations do not override the meaning of the claims based on the intrinsic evidence. To the extent Petitioner is contending that Patent Owner is taking inconsistent claim construction positions in an effort to establish infringement in the related litigation, Petitioner can, of course, present that argument to the court should litigation continue.

For the reasons above, we determine that a NIM template is a data structure which defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and which excludes executable applications/compiled code.

D. Ground 1– Obviousness over Hoff and Berg

Petitioner contends that the subject matter of claims 1, 2, 10, and 14 would have been obvious over the combined teachings of Hoff and Berg. Pet. 22–29. We first describe the prior art that Petitioner seeks to combine to show that independent claim 1 is obvious, and then turn to the merits of the combination.

1. Overview of Hoff (Ex. 1006)

Hoff is a patent titled "Method for the Distribution of Code and Data Updates," and issued on July 6, 1999. Ex. 1006, codes (54), (45). Petitioner contends Hoff is prior art under 35 U.S.C. § 102(e). Pet. 10.

Hoff discloses a system and method for distributing software applications and data to thousands of clients over a network. Ex. 1006, code (57). In Hoff, the applications are called "channels," the server is called the "transmitter," and the client is called the "tuner." *Id.* The end-user needs to subscribe to a channel before it can be executed. *Id.* When the end-user subscribes to a channel, the associated code and data is downloaded to the

local hard-disk and, once downloaded, the channel can be executed many times without requiring further network access. *Id.* Because the channel's software and data updates can be automatically downloaded and installed in the background at regular intervals by the tuner, Hoff states that the end-user is not required to manually install software updates. *Id.* Hoff asserts that this method of automatic downloading of updates achieves for the client the same result as the broadcast distribution of software over a connection based network, but wherein the client initiates each update request without requiring any special broadcast networking infrastructure. *Id.*

2. Overview of Berg[6] (Ex. 1007)

Berg is an article titled "How Do I Create a Signed Castanet Channel?" Ex. 1007, 1. Berg discloses using Marimba's Castanet, the "Java-centric (but not limited to Java) push technology," to distribute content from Marimba. Berg, 1. Castanet is "a technology for deploying highly scalable applications, with centralized update and administration capabilities." *Id.* at 2. Berg states that:

> Castanet consists of a client called the "tuner" and a server called the "transmitter." Channels are published by an administrator on a transmitter. A workstation that has a tuner installed can subscribe to any number of channels on any number of transmitters. The tuner updates the channel's content, which may consist of Java code, media, and other

[6] The parties dispute whether Berg was publicly accessible as of the critical date (April 26, 1999), and, therefore, available as a prior art printed publication. PO Resp. 12–14; Reply 9–11. We do not reach the dispute regarding the prior art status of Berg because it is not necessary to our ultimate decision. Even if we accept Petitioner's view that Berg qualifies as prior art, we find that Petitioner has not established the unpatentability of any challenged patent claim.

> files, including binary code (signed channels can load native methods supported by DLLs). The tuner presents a user interface for managing channels. The tuner interface is set apart from the interface constructed by any given channel (if the channel even has a user interface). This is unlike a browser, which imposes a user interface frame around any application that runs within it. Channels construct their own frames if and when they need them.

Id.

Berg discloses a HotJavaBean component, which is an HTML renderer, used in a Castanet channel to render full "style-sheets, applets, and frames" in a GUI, such that "by deploying an application via Castanet, you do not have to forego the web capabilities of a browser." Ex. 1007, 3. Berg discloses that the channel application contains parameters defining a GUI, including (1) the location of the viewing window to display the selected webpage; (2) the size of the GUI; (3) a drop-down menu for selecting a webpage; and (4) an "X" for closing the GUI. *Id.*, 2–4. The channel application can "provide users with a customized selection of URLs to view" and the "viewing window can be placed anywhere within the Java application, just like any other component." *Id.*, 3. For example, Berg discloses an exemplary channel—*BigCorporateApp*—as a Java application that can be downloaded to a client. *Id.*, 3–5. When the user initiates that channel, the application opens a GUI and presents the user with a menu selection of three URLs. *Id.* Once the user selects a URL, the application fetches that webpage over the Internet via the corresponding address and displays the webpage within a portion of the GUI. *Id*; Ex. 1005 ¶¶ 93–95.

3. Claims 1, 2, 10, 14 —Obviousness Over Hoff and Berg

In support of Petitioner's contention that claims 1, 2, 10, and 14 are obvious over the combined teachings of Hoff and Berg, Petitioner provides an element-by-element analysis showing where each element of the challenged claims is in Hoff or Berg. Pet. 22–29. Petitioner also provides supporting testimony by Dr. Madisetti (Ex. 1005). Patent Owner, relying on supporting testimony by Dr. Sacerdoti (Ex. 2001), argues that Petitioner does not show that claims 1, 2, 10, and 14 are unpatentable because, in part: (1) Hoff and Berg do not have a NIM template, (2) Hoff and Berg do not have a separate NIM and NIM template, and (3) objective evidence of non-obviousness such as commercial success undermines Petitioner's arguments of unpatentability.[7] For reasons set forth below, we determine that Petitioner has not shown that Hoff and Berg teach or suggest the limitations of claims 1, 2, 10, and 14.

a) Claim 1—The NIM Template Limitation

Claim 1, the only challenged independent claim, recites, in part (emphasis added):

[7] Patent Owner asserts that objective evidence of non-obviousness — commercial success — supports a finding of non-obviousness of the '545 patent. PO Resp. 17–18. We do not assess the objective evidence of non-obviousness because we find that Petitioner fails to carry its burden of demonstrating the unpatentability of any challenged claim based on the asserted prior art. *See, e.g.*, *Hamilton Beach Brands, Inc. v. f'real Foods, LLC*, 908 F.3d 1328, 1343 (Fed. Cir. 2018) (holding, in affirming Board decision determining that petitioner had not shown unpatentability, that "objective indicia of nonobviousness" "need not [be] addressed" because the court "affirmed the Board's findings regarding the failure of the prior art to teach or suggest all [claim] limitations").

> [1.A] transmitting a request to the server over the network, the request requesting *network information monitor template*;
>
> [1.B]: receiving the requested *networked information monitor template* from the server over the internet, the requested *networked information monitor template* having been transmitted from the server over the network responsive to the transmitted request, the ne*tworked information monitor template* comprising:
>
> [1.C]: a definition of a viewer graphical user interface within which content in a web browser-readable language may be presented on the display of the client computing device; and
>
> [1.D]: a definition of a first content element for the *networked information monitor template*, the definition of the first content element referencing a first network location from which the first content element for the *networked information monitor template* is served over the network.

Petitioner asserts that Hoff and Berg teach the "NIM" recited in claim 1 by disclosing a channel application. Pet. 23 (citing Ex. 1006, Abstract, 2:45–48, 2:56–67, 3:1–5 ("[A] request is made to the transmitter hosting the channel."), 4:47–49; Ex. 1007, 2; Ex. 1005 ¶¶ 113–115).

Petitioner also asserts that "the 'channel' applications disclosed in *Hoff* and *Berg* contain the claimed NIM template." Pet. 23 (citing Ex. 1005 ¶¶ 116–118), 24–25. According to Petitioner, "*Hoff* discloses that the client receives the code and data (NIM template) necessary to implement a channel (NIM) from the transmitter (located on the server) in response to a request from the tuner (located on the client)." Reply 8. Petitioner explains that Hoff discloses, "in response to a transmitted request from the tuner, the client receives the requested channel from the transmitter, which is located on the server." Pet. 23–24 (citing Ex. 1006, code (57), 2:45–48, 2:64–66, 3:2–5 ("[C]ode and data for the channel is downloaded and stored in a local

persistent storage."), 4:49–57). Petitioner also asserts that the "communication between the client and the server occurs over 'a network 101 such as the Internet.'" *Id.* at 24 (citing Ex. 1006, 3:34–36). As to Berg, Petitioner asserts that Berg "discloses that the tuner can be used to 'subscribe to any number of channels on any number of transmitters.'" *Id.* (citing Ex. 1007, 2). Relying on Dr. Madisetti's testimony, Petitioner asserts that the "channel downloaded from the transmitter and stored on the client computer in *Hoff* and *Berg* includes the claimed NIM template" and "the channel contains instructions and data used to create a GUI and display content therein." *Id.* (citing Ex. 1005 ¶ 118).

Petitioner's arguments are not persuasive because Petitioner does not show persuasively that Hoff's and Berg's channel application containing the alleged NIM template comprises a data structure which defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and which excludes executable applications/compiled code. Indeed, Petitioner admits that the asserted "NIM template" in Hoff and Berg contains compiled "code and data." Reply 8; Pet. 23–24. Hoff discloses that its invention

> consists of a system and method for the large scale distribution of *application code* and data. The system consists of a client-side component, which the user uses to download *applications*, as well as a server-side component, which is used by a content provider or developer to make *applications* available for distribution. The system also allows for the automatic updating, personalization, and usage monitoring of *applications*. In addition it is possible to use the application even when the host computer is not always connected to the network.

Ex. 1006, 2:43–53 (emphasis added). Hoff also discloses that a channel, which Petitioner argues contains the NIM template, is a "named application consisting of *code and data* which can be subscribed to by an end-user," and "[o]nce delivered to the end-user[,] a channel behaves much like a normal application." *Id.* at 2:56–59 (emphasis added). Dr. Madisetti, for example, testifies that Hoff and Berg's channel contains compiled code or executable applications. *See, e.g.*, Ex. 1005 ¶ 114 (citing Ex. 1006, 3:1–5 ("The [Hoff] end-user uses the tuner to subscribe to channels. When the user first subscribes to a channel a request is made to the transmitter hosting the channel. As a result of this request, *the code and data for the channel* is downloaded and stored in a local persistent storage, usually a hard disk.") (emphasis added)), ¶ 113 ("channels . . . are the downloaded applications"), ¶ 119 (stating "*in the provided code* and description of the exemplary channel application, Berg discloses that the channel application contains parameters that define a GUI" (citing Ex. 1007, 2–5) (emphasis added)). We also credit Dr. Sacerdoti's testimony that Hoff's and Berg's channels contain compiled code or executable applications, as consistent with the other evidence of record. *See, e.g.*, Ex. 2001 ¶¶ 56 ("[T]he petition identifies or references *Berg* discussing the source code of an application. One of skill in the art would understand that the Java source code defining the channel disclosed in *Berg* was compiled into byte codes (likely on a device different from the server disclosed by *Berg*) prior to the channel being downloaded from a server to a client."). Like Hoff, Berg concerns itself with applets and applications. *See, e.g.*, Ex. 1007, 2 ("Using [Castanet] . . . you can now create full-featured client applications . . . ."). In contrast, the claimed NIM templates use data structures rather than applets or applications.

Further, both Petitioner and Patent Owner agree that the NIM and the NIM template are separate and distinct elements. Reply 2; PO Resp. 8. However, neither Petitioner nor Dr. Madisetti identify what in Hoff and Berg might be a NIM template separate and distinct from the NIM. To the contrary, Petitioner argues that the channel applications (i.e., the NIM) contain the NIM template. *See, e.g.*, Pet. 23–24; Ex. 1005 ¶ 118 ("The channel downloaded from the transmitter and stored on the client computer in *Hoff* and *Berg* includes the claimed NIM template."). We also credit Dr. Sacerdoti's testimony that, under Petitioner's interpretation, Hoff's and Berg's channel application (NIM) contains the claimed NIM template, but do not disclose a NIM and a NIM template that are separate and distinct elements. Ex. 2001 ¶¶ 50 ("The petition does not identify any entity disclosed by *Hoff* operating on the client that is responsive to instructions included in a NIM template, presents a viewer graphical user interface defined by a NIM, and presents content within that interface, that is distinct from the NIM template."), 55 ("As with *Hoff*, neither Madisetti nor the petition asserts what in *Berg* might be the NIM template (channel template) that is distinct from the NIM (channel).").

Thus, for the reasons discussed above, we conclude that Petitioner has not demonstrated by a preponderance of the evidence that claim 1 would have been obvious over the asserted prior art.

b) Claims 2, 10, and 14

Each of claims 2, 10, and 14 depend from independent claim 1, and, therefore, require a "NIM template." Ex. 1001, 43:5–44:31. Thus, for the same reasons discussed above with respect to Petitioner's challenge of claim

1, we also conclude that Petitioner has not demonstrated by a preponderance of the evidence that claims 2, 10, and 14 would have been obvious over the asserted prior art.

c) Summary of Claims 1, 2, 10, and 14

For the reasons above, Petitioner has not shown that Hoff and Berg, either singly or in combination with each other, disclose a NIM template comprising a data structure which defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and which excludes executable applications/compiled code. Thus, Petitioner has not shown by the preponderance of the evidence that claims 1, 2, 10, and 14 are unpatentable over Hoff and Berg.

E. Grounds 2–4: Claims 2–9, 12, 13, 15

As mentioned above, Petitioner also challenges the patentability of (1) claims 2–5 and 9 over the combination of Hoff, Berg, Dang, and Berry, (2) claims 6, 7, 12, 13, and 15 over the combination of Hoff, Berg, Razavi, and Banthia, and (3) claim 8 over the combination of Hoff, Berg, Razavi, Banthia, and Cordell. Pet. 29–44. Each of claims 2–9, 12, 13, and 15 depend, directly or indirectly, from independent claim 1, and, therefore, require a "NIM template." Ex. 1001, 43:5–44:31. Petitioner does not argue that Dang, Berry, Razavi, Banthia, or Cordell remedy the deficiencies of Hoff and Berg. Thus, for the same reasons discussed above with respect to Petitioner's challenge of claim 1, we also conclude that Petitioner has not demonstrated by a preponderance of the evidence that claims 2–9, 12, 13, and 15 would have been obvious over the asserted prior art.

F. Ground 5– Obviousness over Razavi and Banthia

Petitioner contends that the subject matter of claims 1, 6, 7, 10, and 12–15 would have been obvious over the combined teachings of Razavi and Banthia. Pet. 44–57. We first describe the prior art that Petitioner seeks to combine to show that independent claim 1 is obvious, and then turn to the merits of the combination.

1. Overview of Razavi (Ex. 1008)

Razavi is a patent titled "Detachable Java Applets," and was filed on July 25, 1997. Ex. 1008, codes (54), (22). Petitioner contends Razavi is prior art under 35 U.S.C. § 102(e). Pet. 13.

Razavi discloses a system and method for "detaching Java applets from the constraints of the application such as a browser." Ex. 1008, code (57). Razavi's applets run "without regard to the graphical interface limits of the [browser] application." *Id.* Razavi discloses conventional applets presented in a browser that were constrained by "a window size that the applet must execute within." *Id.* at 1:35–44. Razavi discloses a method to "detach Java applets from the constraints of the application so that they can be GUI-controlled directly" and "not be limited by the state of the application in which the applets are spawned." *Id.* at 3:5–10. Razavi discloses Java source code for a Jukebox streaming audio applet in Appendix A. *Id.* at 4:18–25. Razavi discloses that when "an applet is defined/created, its source code can be modified to include methods for detaching the applet." *Id.*

2. Overview of Banthia (Ex. 1009)

Banthia is a patent titled "System and Method for Providing Information to Applets in a Virtual Machine," and was filed on June 12, 1997. Ex. 1009, codes (54), (22). Petitioner contends Banthia is prior art under 35 U.S.C. § 102(e). Pet. 15.

Banthia discloses a system and method for simultaneously displaying a set of display applets while optimizing the number of server connections. Ex. 1009, code (57). Banthia discloses displaying multiple applets—i.e., a "controlling applet" and "display applets"—in communication with a server and one another. *Id.* at 3:35–44. The controlling applet establishes a connection from a client to a server and sends data to the display applets. *Id.* at 3:51–56; 3:64–4:6. Banthia's display applets may be "torn off" from the browser window and moved to a portion of the display, while being "continually updated by the controlling applet." *Id.* at 2:44–49; 5:7–20.

3. Claims 1, 6, 7, 10, 12–15—Obviousness Over Razavi and Banthia

In support of Petitioner's contention that claims 1, 6, 7, 10, and 12–15 are obvious over the combined teachings of Razavi and Banthia, Petitioner provides an element-by-element analysis showing where each element of the challenged claims allegedly appears in Razavi and Banthia. Pet. 44–57. Petitioner also provides supporting testimony by Dr. Madisetti (Ex. 1005). Patent Owner, relying on supporting testimony by Dr. Sacerdoti (Ex. 2001), argues that Petitioner does not show that the challenged are unpatentable because, in part: (1) Razavi and Banthia do not have a NIM template, (2) Razavi and Banthia do not have a separate NIM and NIM template, and (3) objective evidence of non-obviousness such as commercial success

undermines Petitioner's arguments of unpatentability. For reasons set forth below, we determine that Petitioner has not shown that Razavi and Banthia teach or suggest the limitations of claims 1, 6, 7, 10, and 12–15.

a) Claim 1 — The NIM Template Limitation

Petitioner asserts that the Java applets disclosed in Razavi and Banthia contain the claimed NIM template. Pet. 47 (citing Ex. 1005 ¶ 204). According to Petitioner, "while the source code for the applets in Banthia is not disclosed, a POSA would understand that the functionality of the applets (i.e., generating a GUI and retrieving content over the network to be included in the GUI) indicates the applets contain instructions and data used to enable such functionality." *Id.* Petitioner explains that the "applets are written in Java, and Java GUIs are capable of presenting text and images, which are readable by web browsers, as well as HTML web pages (e.g., through the HotJavaBean)." *Id.* at 48 (citing Ex. 1005 ¶ 208).

Petitioner's arguments are not persuasive because Petitioner does not show persuasively that Razavi's and Banthia's Java applets containing the alleged NIM template comprise a data structure which defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and which excludes executable applications/compiled code. Indeed, Petitioner admits that the asserted "NIM template" in Razavi and Banthia contains compiled "instructions and data." Reply 11–12; Pet. 47–48. Razavi and Banthia both pertain to executable Java applets. Ex. 1008, 3:13–15 (explaining that Razavi's invention is a method and system "for detaching Java applets from the constraints of the application which provides the Java virtual machine for executing those applets"); Ex. 1009, 2:34–36 (explaining that Banthia's invention "provides systems and methods

for simultaneously displaying a set of applets while optimizing the number of server connections"). As Banthia explains, a Java "applet is a small program with a single purpose designed to be distributed across a network, . . . often to add extra functionality to some other program." Ex. 1009, 1:61–63. Finally, Dr. Sacerdoti's unrebutted testimony is that a person of ordinary skill in the art would understand that Razavi's and Banthia's Java applets are "compiled byte code, not a data structure that defines the characteristics of a specific NIM." Ex. 2001 ¶ 71; *see id.* at ¶ 63 ("Applets and applications were known in the art to be executable code, distinct from data structures such as a NIM template. One of skill in the art would understand that *Razavi* discloses no applet template or definition of an applet that is distinct from the applet itself.").

Both Petitioner and Patent Owner agree that the NIM and the NIM template are separate and distinct elements. Reply 2; PO Resp. 8. However, neither Petitioner nor Dr. Madisetti identify what in Razavi and Banthia might be a NIM template separate and distinct from the NIM. To the contrary, Petitioner argues that the Java applets (i.e., the NIM) contain the NIM template. *See, e.g.*, Pet. 13–14 (Razavi), 15 (Banthia), 46–47; Ex. 1005 ¶¶ 198 ("Razavi discloses . . . that webpage includes an applet ('NIM')."), 200 ("the applets disclosed in Razavi and Banthia contain the claimed NIM template"). We also credit Dr. Sacerdoti's testimony that, under Petitioner's interpretation, Razavi's and Banthia's Java applets (NIM) contain the claimed NIM template, but Razavi and Banthia do not disclose a NIM and a NIM template that are separate and distinct elements. *See, e.g.*, Ex. 2001 ¶¶ 63 ("*Razavi* discloses downloading applets, and nothing else, over the Internet. Applets and applications were known in the art to be executable

code, distinct from data structures such as a NIM template. One of skill in the art would understand that *Razavi* discloses no applet template or definition of an applet that is distinct from the applet itself."), 66 ("Because *Razavi* discloses Java applets, but discloses no separate definition of or template for Java applets, it cannot possibly disclose or render obvious claims that require both NIMs and distinct NIM templates.").

b) Claims 6, 7, 10, and 12–15

Each of claims 6, 7, 10, and 12–15 depend, directly or indirectly, from independent claim 1, and, therefore, require a "NIM template." Ex. 1001, 43:5–44:31. Thus, for the same reasons discussed above with respect to Petitioner's challenge of claim 1, we also conclude that Petitioner has not demonstrated by a preponderance of the evidence that claims 6, 7, 10, and 12–15 would have been obvious over the asserted prior art.

c) Summary of Claims 1, 6, 7, 10, and 12–15

For the reasons above, Petitioner has not shown that Razavi and Banthia, either singly or in combination with each other, disclose a NIM template comprising a data structure which defines the characteristics of a NIM, including the NIM frame, view and control characteristics, and which excludes executable applications/compiled code. Thus, Petitioner has not shown by the preponderance of the evidence that claims 1, 6, 7, 10, and 12–15 are unpatentable over Razavi and Banthia.

G. Grounds 6–7: Claims 2–5, 8, and 9

As mentioned above, Petitioner also challenges the patentability of (1) claims 2–5 and 9 over the combination of Razavi, Banthia, Dang, and Berry, and (2) claim 8 over the combination of Razavi, Banthia, and Cordell. Pet. 58–63. Each of claims 2–5, 8, and 9 depend, directly or indirectly, from independent claim 1, and, therefore, require a "NIM template." Ex. 1001, 43:5–44:31. Petitioner does not argue that Dang, Berry, or Cordell remedy the deficiencies of Razavi and Banthia. Thus, for the same reasons discussed above with respect to Petitioner's challenge of claim 1, we also conclude that Petitioner has not demonstrated by a preponderance of the evidence that claims 2–5, 8, and 9 would have been obvious over the asserted prior art.

H. Patent Owner's Secret Prior Art Argument

Patent Owner argues that, because Hoff, Razavi, Banthia, and Dang were published after the critical date for the '545 patent (April 26, 1999), they are "secret prior art" because they were not available to one of ordinary skill in the art as of the critical date. PO Resp. 14–15. Patent Owner acknowledges that under current Federal Circuit precedent these patents are considered prior art despite not being publicly accessible as of the critical date, but DoDots contends that the law should be changed. *Id.*

Because we must follow the law as it stands, we decline to address Patent Owner's arguments.

IV. CONCLUSION

For the reasons expressed above, we determine that Petitioner has not proven by a preponderance of the evidence that the challenged claims are unpatentable, as summarized in the following table:

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not shown Unpatentable
1, 2, 10, 14	103	Hoff, Berg		1, 2, 10, 14
2–5, 9	103	Hoff, Berg, Dang, Berry		2–5, 9
6, 7, 12, 13, 15	103	Hoff, Berg, Razavi, Banthia		6, 7, 12, 13, 15
8	103	Hoff, Berg, Razavi, Banthia, Cordell		8
1, 6, 7, 10, 12–15	103	Razavi, Banthia		1, 6, 7, 10, 12–15
2–5, 9	103	Razavi, Banthia, Dang, Berry		2–5, 9
8	103	Razavi, Banthia, Cordell		8
Overall Outcome				1–10, 12–15

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1–10 and 12–15 of the '545 patent have not been shown to be unpatentable; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

FOR PETITIONER:

John Alemanni
Matthew Meyer
KILPATRICK TOWNSEND
jalemanni@kilpatricktownsend.com
mmeyer@kilpatricktownsend.com

FOR PATENT OWNER:

Lewis Hudnell, III
HUDNELL LAW
lewis@hudnelllaw.com

Trials@uspto.gov
571-272-7822

Paper 41
Entered: September 9, 2019

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RPX CORPORATION,
Petitioner,

v.

PUBLISHING TECHNOLOGIES, LLC,
Patent Owner.

Case IPR2018-01131 (Patent 7,908,342 B2)
Case IPR2018-01132 (Patent 7,908,342 B2)[1]

Before DENISE M. POTHIER, JESSICA C. KAISER, and KAMRAN JIVANI, *Administrative Patent Judges*.

JIVANI, *Administrative Patent Judge*.

ORDER
Granting Petitioner's Motion to Withdraw Counsel
37 C.F.R. § 42.10(e)

---

[1] This Order addresses the same issue for the above-identified cases. Therefore, we exercise our discretion to issue one order to be filed in each case. The parties, however, are not authorized to use this style heading in any subsequent papers.

On May 21, 2019, pursuant to our authorization in an email dated May 17, 2019, Petitioner filed motions to withdraw Mr. Ming Hung Hung as back-up counsel in the above-identified proceedings (collectively "Motions"). Paper 21.[2]

In the Motions, Petitioner represents that Mr. Andrew R. Sommer will remain as lead counsel and Ms. Elana Minkoff will serve as back-up counsel. Motions 2. Petitioner further represents that counsel for Patent Owner does not oppose the Motions. Motions 3. Petitioner has filed updated mandatory notices identifying Ms. Minkoff as back-up counsel and as a registered practitioner. Paper 23, 2. Petitioner has also provided powers of attorney for Mr. Sommer and Ms. Minkoff. Paper 22, 2.

Having reviewed the Motions and updated mandatory notices, we determine that the Motions and notices satisfy the requirements of 37 C.F.R. § 42.10 and that good cause exists for granting the Motions.

It is therefore,

ORDERED that Petitioner's Motions are *granted*; and Ming Hung Hung is permitted to withdraw as counsel for Petitioner in the above-identified proceedings.

[2] The Papers filed in the two proceedings are substantively identical. For convenience, we cite only to the Papers filed in IPR2018-01131.

Case IPR2018-01131 (Patent 7,908,342 B2)
Case IPR2018-01132 (Patent 7,908,342 B2)

PETITIONER:

Andrew Sommer
sommera@gtlaw.com

Ming Hung
mhung@winston.com

PATENT OWNER:

Jeremy Pitcock
jpitcock@pitcocklawgroup.com

Bradley Liddle
bdliddle@gmail.com

AO 120 (Rev. 08/10)

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

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

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

DOCKET NO.	DATE FILED 1/16/2018	U.S. DISTRICT COURT District of Delaware
PLAINTIFF DoDots Licensing Solutions LLC		DEFENDANT Lenovo Holding Co., Inc., Lenovo (United States) Inc., and Motorola Mobility LLC

PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 US 9,369,545 B2	6/14/2016	DoDots Licensing Solutions LLC
2		
3		
4		
5		

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

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

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

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

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

AO 120 (Rev. 08/10)

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

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

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

DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
	1/16/2018	District of Delaware

PLAINTIFF	DEFENDANT
DoDots Licensing Solutions LLC	Lenovo Holding Co., Inc., Lenovo (United States) Inc., and Motorola Mobility LLC

PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 US 9,369,545 B2	6/14/2016	DoDots Licensing Solutions LLC
2		
3		
4		
5		

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

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

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

DECISION/JUDGEMENT

CLERK	(BY) DEPUTY CLERK	DATE

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

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/975,227	08/23/2013	John Albert Kembel	45SN-259692

CONFIRMATION NO. 7642

POWER OF ATTORNEY NOTICE

909
Pillsbury Winthrop Shaw Pittman, LLP
PO Box 10500
McLean, VA 22102

OC000000091646164

Date Mailed: 05/30/2017

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 05/23/2017.

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

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

/yteferra/

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/975,227	08/23/2013	John Albert Kembel	45SN-259692

CONFIRMATION NO. 7642

133759
Sheppard Mullin Richter & Hampton LLP
12275 El Camino Real, Suite 200
San Diego, CA 92130

POA ACCEPTANCE LETTER

OC000000091646182

Date Mailed: 05/30/2017

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 05/23/2017.

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**.

/yteferra/

Doc Code: PA..
Document Description: Power of Attorney

PTO/AIA/82A (07-13)
Approved for use through 11/30/2014. OMB 0651-0051
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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	13/975,227
Filing Date	August 23, 2013
First Named Inventor	John Albert Kembel
Title	ACCESSING AND DISPLAYING NETWORK CONTENT
Art Unit	3649
Examiner Name	KENNY S. LIN
Attorney Docket Number	45SN-259692

SIGNATURE of Applicant or Patent Practitioner

Signature	/D. Benjamin Esplin/	Date (Optional)	
Name	D. Benjamin Esplin	Registration Number	58297
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.

Doc Code: PA..
Document Description: Power of Attorney

PTO/AIA/82B (07-13)
Approved for use through 11/30/2014. OMB 0651-0051
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

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: 133759

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):

MAINSTREAM SCIENTIFIC, LLC

☐ 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	Rakesh Ramde	Date (Optional)	4/18/2017
Name	Rakesh Ramde		
Title	Officer		

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.

PTO/AIA/14 (03-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	~~-043311-0423953-~~ 45SN-259692
	Application Number	13/975,227
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

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

Secrecy Order 37 CFR 5.2

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

Inventor Information:

Inventor 1 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	John	Albert	Kembel	

Residence Information (Select One) ◉ US Residency ◯ Non US Residency ◯ Active US Military Service

City	Palo Alto	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	2334 Williams Street		
Address 2			
City	Palo Alto	State/Province	CA
Postal Code	94306	Country i	US

Inventor 2 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	George	Andrew	Kembel	

Residence Information (Select One) ◉ US Residency ◯ Non US Residency ◯ Active US Military Service

City	Menlo Park	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	1045 Santa Cruz Avenue, Apartment F		
Address 2			
City	Menlo Park	State/Province	CA
Postal Code	94025	Country i	US

Inventor 3 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Daniel	S.	Kim	

Residence Information (Select One) ◉ US Residency ◯ Non US Residency ◯ Active US Military Service

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.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	~~043311-0423953~~ 45SN-259692
	Application Number	13/975,227
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

City	Palo Alto	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	408 Pepper Avenue		
Address 2			
City	Palo Alto	State/Province	CA
Postal Code	94306	Country i	US

Inventor 4 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	John		Russell	

Residence Information (Select One) (•) US Residency ( ) Non US Residency ( ) Active US Military Service

City	Palo Alto	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	605 Colorado Avenue		
Address 2			
City	Palo Alto	State/Province	CA
Postal Code	94306	Country i	US

Inventor 5 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Jake		Wobbrock	

Residence Information (Select One) (•) US Residency ( ) Non US Residency ( ) Active US Military Service

City	Palo Alto	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	1091 Tanland Drive #201		
Address 2			
City	Palo Alto	State/Province	CA
Postal Code	94303	Country i	US

Inventor 6 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Geoffrey	S.	Kembel	

Residence Information (Select One) (•) US Residency ( ) Non US Residency ( ) Active US Military Service

City	Menlo Park	State/Province	CA	Country of Residence i	US

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	~~043311-0423953~~ 45SN-259692
	Application Number	13/975,227
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

Mailing Address of Inventor:

Address 1	1045 Santa Cruz Avenue, Apartment F		
Address 2			
City	Menlo Park	**State/Province**	CA
Postal Code	94025	**Country** i	US

Inventor 7 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Jeremy	L.	Kembel	

Residence Information (Select One) (•) US Residency ( ) Non US Residency ( ) Active US Military Service

City	Palo Alto	**State/Province**	CA	**Country of Residence** i	US

Mailing Address of Inventor:

Address 1	213 Fulton Street		
Address 2			
City	Palo Alto	**State/Province**	CA
Postal Code	94301	**Country** i	US

Inventor 8 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Lynn	D.	Gabbay	

Residence Information (Select One) (•) US Residency ( ) Non US Residency ( ) Active US Military Service

City	Sunnyvale	**State/Province**	CA	**Country of Residence** i	US

Mailing Address of Inventor:

Address 1	1249 Lakeside Drive #1064		
Address 2			
City	Sunnyvale	**State/Province**	CA
Postal Code	94085	**Country** i	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.
For further information see 37 CFR 1.33(a).

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

Customer Number	~~00909~~ 133759

EFS Web 2.2.6

PTO/AIA/14 (03-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	~~043311-0423953~~ 45SN-259692
	Application Number	13/975,227
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

Email Address	~~Docket_IP@Pillsburylaw.com~~ DMIPdocketing@sheppardmullin.com	Add Email	Remove Email

Application Information:

Title of the Invention	ACCESSING AND DISPLAYING NETWORK CONTENT		
Attorney Docket Number	~~043311-0423953~~ 45SN-259692	**Small Entity Status Claimed**	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	37	**Suggested Figure for Publication (if any)**	

Publication Information:

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

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

Representative Information:

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

Please Select One:	◉ Customer Number	◯ US Patent Practitioner	◯ Limited Recognition (37 CFR 11.9)
Customer Number	~~00909~~ - 133759		

Domestic Benefit/National Stage Information:

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

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	Continuation of	11932392	2007-10-31
Prior Application Status	Patented		Remove

Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
11932392	Continuation of	09558925	2000-04-26	7660868	2010-02-09
Prior Application Status	Expired		Remove		

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	~~043311-0423953~~ 45SN-259692
	Application Number	13/975,227
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
09558925	non provisional of	60131083	1999-04-26
Prior Application Status	Expired		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
09558925	non provisional of	60131114	1999-04-26
Prior Application Status	Expired		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
09558925	non provisional of	60131115	1999-04-26
Prior Application Status	Expired		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
09558925	non provisional of	60176687	2000-01-18
Prior Application Status	Expired		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
09558925	non provisional of	60176699	2000-01-18

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

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(d). When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX) [i] the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(h)(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).

Remove

Application Number	Country [i]	Filing Date (YYYY-MM-DD)	Access Code [i] (if applicable)

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

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	~~043311-0423953~~ 45SN-259692
	Application Number	13/975,227
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

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.

Authorization to Permit Access:

☒ Authorization to Permit Access to the Instant Application by the Participating Offices

If 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 World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the instant patent application is filed access to the instant patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the instant patent application is filed to have access to the instant patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the instant patent application with respect to: 1) the instant patent application-as-filed; 2) any foreign application to which the instant patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the instant patent application; and 3) any U.S. application-as-filed from which benefit is sought in the instant patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing this Authorization.

Applicant Information:

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

Applicant 1 Remove

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.

Clear

◉ 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	

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.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	~~043311-0423953~~ 45SN-259692
	Application Number	13/975,227
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

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 :

If the Applicant is an Organization check here. ☒

Organization Name	MAINSTREAM SCIENTIFIC, LLC		
Mailing Address Information:			
Address 1	650 CASTRO STREET, SUITE 120-333		
Address 2			
City	MOUNTAIN VIEW	**State/Province**	CA
Country [i]	US	Postal Code	94041
Phone Number		Fax Number	
Email Address			

Additional Applicant Data may be generated within this form by selecting the Add button. Add

Non-Applicant Assignee Information:

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

Assignee 1

Complete this section only if non-applicant assignee information is desired to be included on the patent application publication in accordance with 37 CFR 1.215(b). Do not include in this section 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), as the patent application publication will include the name of the applicant(s).

Remove

If the Assignee is an Organization check here. ☐

Prefix	**Given Name**	Middle Name	**Family Name**	Suffix

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	~~043311-0423953~~ -- 45SN-259692
	Application Number	13/975,227
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

Mailing Address Information:			
Address 1			
Address 2			
City		**State/Province**	
Country i		Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Assignee Data may be generated within this form by selecting the Add button. Add

Signature:

Remove

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

Signature	/D. Benjamin Esplin/			Date (YYYY-MM-DD)	~~2013-08-23~~ 2017-05-23
First Name	D. Benjamin	Last Name	Esplin	Registration Number	58297

Additional Signature may be generated within this form by selecting the Add button. Add

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.

Electronic Acknowledgement Receipt

EFS ID:	29287352
Application Number:	13975227
International Application Number:	
Confirmation Number:	7642
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Customer Number:	909
Filer:	D. Benjamin Esplin/Chelsea Pearsall
Filer Authorized By:	D. Benjamin Esplin
Attorney Docket Number:	043311-0423953
Receipt Date:	23-MAY-2017
Filing Date:	23-AUG-2013
Time Stamp:	13:59:59
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	POA_45SN-259692.pdf	176021 9066506a53304db029f30e4940cbd81c41d9e426	no	2

Warnings:

Information:					
2	Application Data Sheet	45SN-259692_Supplemental_ADS.pdf	318426 f48b1921afada25079cb39320951312d08e5526d	no	9
Warnings:					
Information:					
This is not an USPTO supplied ADS fillable form					
			Total Files Size (in bytes):	494447	

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

<u>New Applications Under 35 U.S.C. 111</u>
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
<u>National Stage of an International Application under 35 U.S.C. 371</u>
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
<u>New International Application Filed with the USPTO as a Receiving Office</u>
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/975,227	06/14/2016	9369545	043311-0423953	7642

909 7590 05/25/2016
Pillsbury Winthrop Shaw Pittman, LLP (NV)
PO Box 10500
McLean, VA 22102

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 320 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

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

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

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

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

Mainstream Scientific, LLC, Mountain View, CA;
John Albert Kembel, Palo Alto, CA;
George Andrew Kembel, Menlo Park, CA;
Daniel S. Kim, Palo Alto, CA;
John Russell, Palo Alto, CA;
Jake Wobbrock, Palo Alto, CA;
Geoffrey S. Kembel, Menlo Park, CA;
Jeremy L. Kembel, Palo Alto, CA;
Lynn D. Gabbay, Sunnyvale, 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.

IR103 (Rev. 10/09)

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	7A	7,222,303	05/22/2007	Oren et al.	715	744	
	7B	7,356,569	04/08/2008	Kembel et al.	709	217	
	7C	7,574,649	08/11/2009	Safars *et al.*	715	200	
	7D	7,756,967	07/13/2010	Kembel et al.	709	224	
	7E	7,660,868	02/09/2010	Kembel et al.	709	217	
	7F	7,792,947	09/07/2010	Kembel et al.	709	224	
	7G	8,020,083	~~09/13/2001~~ 09/20/01	Kembel et al.	715	201	
	7H	8,346,887	01/01/2013	Kembel et al.	709	217	
	7I	8,510,406	08/13/2013	Kembel et al.	709	217	
	7J	8,510,407	08/13/2013	Kembel et al.	709	217	
	7K	2001/0042107	11/15/2001	Palm	709	218	
	7L	2002/0065896	05/30/2002	Burakoff et al.	709	206	
	7M	2002/0078136	06/20/2002	Brodsky et al.	709	203	
	7N	2002/0089526	07/11/2002	Buxton et al.	345	700	
	7O	2002/0089536	07/11/2002	Dang	345	749	
	7P	2002/0091697	07/11/2002	Huang et al.	707	10	
	7Q	2002/0130900	09/19/2002	Davis	345	744	
	7R	2002/0161879	10/31/2002	Richard	709	223	
	7S	2003/0051027	03/13/2003	Aupperle et al.	709	224	
	7T	2003/0069944	04/10/2003	Barlock et al.	709	220	
	7U	2004/0041836	03/01/2004	Zaner et al.	345	751	
	7V	2004/0165007	08/26/2004	Shafron	715	781	
	7W	2005/0273718	12/08/2005	Naas	715	745	

Change(s) applied to document, /S.X.R./ 2/19/2016

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	7X	Online document; MindSpring, My Yahoo!; ©MindSpring Enterprises, Inc.; http://www.mindspring.com/myyahoo/contents.htm; December 1997, pages 1-16
	7Y	MORRISON, Michael, XML Unleashed, Sams Publishing, December 21, 1999, 5 pages.
	7Z	FLANAGAN, David, "JavaScript: The Definitive Guide", 3rd Edition, O'Reilly, June 1998, 6 pages.
	7AA	Microsoft Computer Dictionary, Fifth Edition, 2002, Definition of "Web Browser".
	7BB	WILLIAMS, Margot, "Cyberspace Calendars: The Web's Growing Date Base", November 30, 1998, The Washington Post, page 1.

EXAMINER	DATE CONSIDERED
/KENNY LIN/	09/24/2015

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/975,227	08/23/2013	John Albert Kembel	043311-0423953	7642

909 7590 05/17/2016
Pillsbury Winthrop Shaw Pittman, LLP (NV)
PO Box 10500
McLean, VA 22102

EXAMINER
LIN, KENNY S

ART UNIT	PAPER NUMBER
3649	

NOTIFICATION DATE	DELIVERY MODE
05/17/2016	ELECTRONIC

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

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

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

docket_ip@pillsburylaw.com
heather.marthers@pillsburylaw.com

PTOL-90A (Rev. 04/07)

UNITED STATES DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office
Address : COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
13/975,227	23 August, 2013	KEMBEL ET AL.	043311-0423953

		EXAMINER	
Pillsbury Winthrop Shaw Pittman, LLP (NV) PO Box 10500 McLean, VA 22102		KENNY LIN	
		ART UNIT	PAPER
		3649	20160512

DATE MAILED:

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

Commissioner for Patents

The IDS submited on 5/8/2016 is considered.	
	/KENNY LIN/ Primary Examiner, Art Unit 3649

PTO-90C (Rev.04-03)

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	13975227
Filing Date	2011-08-23
First Named Inventor	John Albert KEMBEL
Art Unit	3649
Examiner Name	LIN, KENNY S.
Attorney Docket Number	043311-0423953

U.S.PATENTS

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
/KL/	1	6584507		2003-06-24	BRADLEY et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] ¡	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

/KL/	1	Notice of Allowance mailed April 21, 2016 in corresponding U.S. Patent Application No. 13/215,874 (6 pages).	☒
/KL/	2	MARTIN-FLATIN, Jean-Philippe, "Push vs. Pull in Web-Based Network Management", Proceedings of the Sixth IFIP/ IEEE International Symposium on Integrated Network Management, May 1999, (16 pages).	☒

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

EXAMINER SIGNATURE

Examiner Signature	/Kenny Lin/	Date Considered	05/12/2016

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Ian C. Schick, Ph.D./	Date (YYYY-MM-DD)	2016-05-06
Name/Print	Ian C. Schick, Ph.D.	Registration Number	63293

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

Privacy Act Statement

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

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

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

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

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

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

TFW

OPAP AKIMA-16 MAY 0 9 2016 PATENT & TRADEMARK OFFICE

PART B - FEE(S) TRANSMITTAL

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

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

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

909 7590 02/17/2016
Pillsbury Winthrop Shaw Pittman, LLP (NV)
PO Box 10500
McLean, VA 22102

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

Certificate of Mailing or Transmission

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

HANNAH TRAN	(Depositor's name)
HTRAN	(Signature)
5/9/2016	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/975,227	08/23/2013	John Albert Kembel	043311-0423953	7642

TITLE OF INVENTION: ACCESSING AND DISPLAYING NETWORK CONTENT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	05/17/2016

EXAMINER	ART UNIT	CLASS-SUBCLASS
LIN, KENNY S	3649	709-203000

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

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

1 PILLSBURY WINTHROP SHAW PITTMAN, LLP
2
3

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

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

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

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

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

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

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

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

Authorized Signature _____ Date 5/9/16
Typed or printed name WILFRED LAM Registration No. _____

05/11/2016 HVUONG2 00000007 13975227
01 FC:2501 480.00 OP

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

PAGE 1/2 * RCVD AT 5/9/2016 5:33:20 PM [Eastern Daylight Time] * SVR:W-PTOFAX-002/2 * DNIS:2732885 * CSID: * DURATION (mm-ss):00-58

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	13975227
Filing Date	2011-08-23
First Named Inventor	John Albert KEMBEL
Art Unit	3649
Examiner Name	LIN, KENNY S.
Attorney Docket Number	043311-0423953

U.S.PATENTS

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	6584507		2003-06-24	BRADLEY et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

	1	Notice of Allowance mailed April 21, 2016 in corresponding U.S. Patent Application No. 13/215,874 (6 pages).	☒
	2	MARTIN-FLATIN, Jean-Philippe, "Push vs. Pull in Web-Based Network Management", Proceedings of the Sixth IFIP/ IEEE International Symposium on Integrated Network Management, May 1999, (16 pages).	☒

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

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Ian C. Schick, Ph.D./	Date (YYYY-MM-DD)	2016-05-06
Name/Print	Ian C. Schick, Ph.D.	Registration Number	63293

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

Privacy Act Statement

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

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

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

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

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

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	13975227
Filing Date:	23-Aug-2013
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Filer:	Ian Carl Schick/Monet Noel
Attorney Docket Number:	043311-0423953

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Submission- Information Disclosure Stmt	2806	1	90	90
		Total in USD ($)		**90**

Electronic Acknowledgement Receipt	
EFS ID:	25713219
Application Number:	13975227
International Application Number:	
Confirmation Number:	7642
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Customer Number:	909
Filer:	Ian Carl Schick/Monet Noel
Filer Authorized By:	Ian Carl Schick
Attorney Docket Number:	043311-0423953
Receipt Date:	08-MAY-2016
Filing Date:	23-AUG-2013
Time Stamp:	21:06:40
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$90
RAM confirmation Number	16943
Deposit Account	033975
Authorized User	SCHICK, IAN C.

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

Charge any Additional Fees required under 37 CFR 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 CFR 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 CFR 1.19 (Document supply fees)

Charge any Additional Fees required under 37 CFR 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		0423593_RNRIOD.pdf	1239215 e748a412206a82f8a800eb04d4b9b63a563055d5	yes	18
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Transmittal Letter		1	2	
	Oath or Declaration filed		3	18	
Warnings:					
Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	0423953_SB08.pdf	446735 d0945550a880eb69715015c31d64f2dd877e55c2	no	4
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
3	Non Patent Literature	0423953_NPL.pdf	718386 37cbb5efbae78925452f6be5432c37b408d2e9fc	no	16
Warnings:					
Information:					
4	Non Patent Literature	13215874NOA21APR2016.pdf	381492 d623a9567b35ffd29c43f8fbd4e6d49133577930	no	6
Warnings:					
Information:					
5	Fee Worksheet (SB06)	fee-info.pdf	30696 61faf53e147b3e6d56ca46386454d9a78d337c9b	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	2816524		

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.

Attorney Docket: 043311-0423953
Client Ref.: IMS 07-05-03 NEWDOTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	John Albert KEMBEL, et al.		
Application No.:	13/975,227	Confirmation No.:	7642
Filed:	August 23, 2013	Art Unit:	3649
		Examiner:	LIN, KENNY S.
For:	ACCESSING AND DISPLAYING NETWORK CONTENT		

RESPONSE TO NOTICE REQUIRING INVENTOR'S OATH OR DECLARATION

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

Commissioner:

In response to the Notice Requiring Inventor's Oath or Declaration dated April 26, 2016, Applicant herewith submits the following:

☒ Substitute Statement in Lieu of an Oath or Declaration for inventors **John Albert KEMBEL, George Andrew KEMBEL, Geoffrey S. KEMBEL, Jeremy L. KEMBEL**, **Daniel S. KIM, John RUSSELL, Jake WOBBROCK and Lynn D. GABBAY**.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Date: May 6, 2016

Respectfully submitted,

By: /Ian C. Schick, Ph.D./
Ian C. Schick, Ph.D.
Registration No. 63,293

Customer No.: 00909

Pillsbury Winthrop Shaw Pittman LLP
P.O. Box 10500
McLean, Virginia 22102
Main: (703) 770-7900
Fax: (703) 770-7901

4836-2170-1425.v1

Notice Requiring Inventor's Oath or Declaration	Application No. 13/975,227	Applicant(s) John Albert Kembel	
	Examiner LIN, KENNY S	Art Unit 3649	

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): **John Albert Kembel**, **George Andrew Kembel**, **Daniel S. Kim**, **John Russell**, **Jake Wobbrock**, **Geoffrey S. Kembel**, **Jeremy L. Kembel** , and **Lynn D. Gabbay**.
  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.

Doc code: Oath
Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT

This statement is directed to:

☐ The attached application,

OR

☒ United States application or PCT international application number 13/975,227 filed on August 23, 2013.

LEGAL NAME of inventor to whom this substitute statement applies:

(*E.g.*, Given Name (first and middle (if any)) and Family Name or Surname)

Jeremy L. Kembel

Residence (except for a deceased or legally incapacitated inventor):

City Palto Alto	State CA	Country United States

Mailing Address (except for a deceased or legally incapacitated inventor):

213 Fulton Street

City Palto Alto	State CA	Zip 94301	Country US

I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

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

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

Relationship to the inventor to whom this substitute statement applies:

- ☐ Legal Representative (for deceased or legally incapacitated inventor only),
- ☒ Assignee,
- ☐ Person to whom the inventor is under an obligation to assign,
- ☐ Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or
- ☐ Joint 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.

PTO/SB/AIA02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- [ ] Inventor is deceased,
- [ ] Inventor is under legal incapacity,
- [x] Inventor cannot be found or reached after diligent effort, or
- [ ] Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- [x] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- [ ] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

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.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Rakesh Ramde | Date (Optional):

Signature: Rakesh Ramde

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name: MAINSTREAM SCIENTIFIC, LLC

Title of Person Executing This Substitute Statement: President

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City Los Altos | State CA | Country United States

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

153 Second Street, Suite 105

City Los Altos | State CA | Zip 94022 | Country US

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

Doc code: Oath
Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT

This statement is directed to:

☐ The attached application,

OR

☒ United States application or PCT international application number 13/975,227 filed on August 23, 2013.

LEGAL NAME of inventor to whom this substitute statement applies:

(*E.g.*, Given Name (first and middle (if any)) and Family Name or Surname)

Geoffrey S. Kembel

Residence (except for a deceased or legally incapacitated inventor):

City Menlo Park	State CA	Country United States

Mailing Address (except for a deceased or legally incapacitated inventor):

1045 Santa Cruz Avenue, Apt. F

City Menlo Park	State CA	Zip 94025	Country US

I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

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

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

Relationship to the inventor to whom this substitute statement applies:

- ☐ Legal Representative (for deceased or legally incapacitated inventor only),
- ☒ Assignee,
- ☐ Person to whom the inventor is under an obligation to assign,
- ☐ Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or
- ☐ Joint 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.

PTO/SB/AIA02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- [ ] Inventor is deceased,
- [ ] Inventor is under legal incapacity,
- [x] Inventor cannot be found or reached after diligent effort, or
- [ ] Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- [x] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- [ ] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

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.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Rakesh Ramde | Date (Optional):

Signature: Rakesh Ramde

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name: MAINSTREAM SCIENTIFIC, LLC

Title of Person Executing This Substitute Statement: President

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City Los Altos | State CA | Country United States

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

153 Second Street, Suite 105

City Los Altos | State CA | Zip 94022 | Country US

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

Doc code: Oath
Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT

This statement is directed to:

☐ The attached application,

OR

☒ United States application or PCT international application number 13/975,227 filed on August 23, 2013.

LEGAL NAME of inventor to whom this substitute statement applies:

(*E.g.*, Given Name (first and middle (if any)) and Family Name or Surname)

Daniel S. Kim

Residence (except for a deceased or legally incapacitated inventor):

City	State	Country
Palo Alto	CA	United States

Mailing Address (except for a deceased or legally incapacitated inventor):

345 Sheridan Avenue, Apt. 211

City	State	Zip	Country
Palo Alto	CA	94306	US

I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

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

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

Relationship to the inventor to whom this substitute statement applies:

- ☐ Legal Representative (for deceased or legally incapacitated inventor only),
- ☒ Assignee,
- ☐ Person to whom the inventor is under an obligation to assign,
- ☐ Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or
- ☐ Joint 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.

PTO/SB/AIA02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- [ ] Inventor is deceased,
- [ ] Inventor is under legal incapacity,
- [x] Inventor cannot be found or reached after diligent effort, or
- [ ] Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- [x] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- [ ] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

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.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Rakesh Ramde | Date (Optional):

Signature: Rakesh Ramde

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name: MAINSTREAM SCIENTIFIC, LLC

Title of Person Executing This Substitute Statement: President

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City Los Altos | State CA | Country United States

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

153 Second Street, Suite 105

City Los Altos | State CA | Zip 94022 | Country US

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

Doc code: Oath
Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT

This statement is directed to:

☐ The attached application,

OR

☒ United States application or PCT international application number 13/975,227 filed on August 23, 2013.

LEGAL NAME of inventor to whom this substitute statement applies:

(*E.g.*, Given Name (first and middle (if any)) and Family Name or Surname)

Lynn D. Gabbay

Residence (except for a deceased or legally incapacitated inventor):

City	State	Country
Sunnyvale	CA	United States

Mailing Address (except for a deceased or legally incapacitated inventor):

1249 Lakeside Drive #1064

City	State	Zip	Country
Sunnyvale	CA	94085	US

I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

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

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

Relationship to the inventor to whom this substitute statement applies:

- ☐ Legal Representative (for deceased or legally incapacitated inventor only),
- ☒ Assignee,
- ☐ Person to whom the inventor is under an obligation to assign,
- ☐ Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or
- ☐ Joint 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.

PTO/SB/AIA02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- [ ] Inventor is deceased,
- [ ] Inventor is under legal incapacity,
- [x] Inventor cannot be found or reached after diligent effort, or
- [ ] Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- [x] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- [ ] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

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.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Rakesh Ramde | Date (Optional):

Signature: Rakesh Ramde

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name: MAINSTREAM SCIENTIFIC, LLC

Title of Person Executing This Substitute Statement: President

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City Los Altos | State CA | Country United States

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

153 Second Street, Suite 105

City Los Altos | State CA | Zip 94022 | Country US

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

Doc code: Oath
Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT

This statement is directed to:

☐ The attached application,

OR

☒ United States application or PCT international application number 13/975,227 filed on August 23, 2013.

LEGAL NAME of inventor to whom this substitute statement applies:

(*E.g.*, Given Name (first and middle (if any)) and Family Name or Surname)

John Russell

Residence (except for a deceased or legally incapacitated inventor):

City	State	Country
Palo Alto	CA	United States

Mailing Address (except for a deceased or legally incapacitated inventor):

605 Colorado Avenue

City	State	Zip	Country
Palo Alto	CA	94306	US

I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

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

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

Relationship to the inventor to whom this substitute statement applies:

- ☐ Legal Representative (for deceased or legally incapacitated inventor only),
- ☒ Assignee,
- ☐ Person to whom the inventor is under an obligation to assign,
- ☐ Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or
- ☐ Joint 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.

PTO/SB/AIA02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- ☐ Inventor is deceased,
- ☐ Inventor is under legal incapacity,
- ☒ Inventor cannot be found or reached after diligent effort, or
- ☐ Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- ☒ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- ☐ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

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.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Rakesh Ramde | Date (Optional):

Signature: Rakesh Ramde

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name: MAINSTREAM SCIENTIFIC, LLC

Title of Person Executing This Substitute Statement: President

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City Los Altos | State CA | Country United States

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

153 Second Street, Suite 105

City Los Altos | State CA | Zip 94022 | Country US

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

Doc code: Oath
Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT

This statement is directed to:

☐ The attached application,

OR

☒ United States application or PCT international application number 13/975,227 filed on August 23, 2013.

LEGAL NAME of inventor to whom this substitute statement applies:

(*E.g.*, Given Name (first and middle (if any)) and Family Name or Surname)

Jake Wobbrock

Residence (except for a deceased or legally incapacitated inventor):

City Palo Alto	State CA	Country United States

Mailing Address (except for a deceased or legally incapacitated inventor):

1091 Tanland Drive #201

City Palo Alto	State CA	Zip 94303	Country US

I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

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

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

Relationship to the inventor to whom this substitute statement applies:

☐ Legal Representative (for deceased or legally incapacitated inventor only),

☒ Assignee,

☐ Person to whom the inventor is under an obligation to assign,

☐ Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or

☐ Joint 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.

PTO/SB/AIA02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- [ ] Inventor is deceased,
- [ ] Inventor is under legal incapacity,
- [x] Inventor cannot be found or reached after diligent effort, or
- [ ] Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- [x] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- [ ] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

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.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Rakesh Ramde | Date (Optional):

Signature: Rakesh Ramde

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name: MAINSTREAM SCIENTIFIC, LLC

Title of Person Executing This Substitute Statement: President

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City Los Altos | State CA | Country United States

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

153 Second Street, Suite 105

City Los Altos | State CA | Zip 94022 | Country US

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

Doc code: Oath
Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT

This statement is directed to:

☐ The attached application,

OR

☒ United States application or PCT international application number 13/975,227 filed on August 23, 2013.

LEGAL NAME of inventor to whom this substitute statement applies:

(*E.g.*, Given Name (first and middle (if any)) and Family Name or Surname)

John Albert Kembel

Residence (except for a deceased or legally incapacitated inventor):

City	State	Country
Palo Alto	CA	United States

Mailing Address (except for a deceased or legally incapacitated inventor):

2334 Williams Street

City	State	Zip	Country
Palo Alto	CA	94306	US

I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

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

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

Relationship to the inventor to whom this substitute statement applies:

- ☐ Legal Representative (for deceased or legally incapacitated inventor only),
- ☒ Assignee,
- ☐ Person to whom the inventor is under an obligation to assign,
- ☐ Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or
- ☐ Joint 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.

PTO/SB/AIA02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- ☐ Inventor is deceased,
- ☐ Inventor is under legal incapacity,
- ☒ Inventor cannot be found or reached after diligent effort, or
- ☐ Inventor has refused to execute the oath or declaration under 37 CFR 1.63. and/or was not responsive

If there are joint inventors, please check the appropriate box below:

- ☒ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- ☐ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

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.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Rakesh Ramde | Date (Optional):

Signature: Rakesh Ramde

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name: MAINSTREAM SCIENTIFIC, LLC

Title of Person Executing This Substitute Statement: President

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City Los Altos | State CA | Country United States

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

153 Second Street, Suite 105

City Los Altos | State CA | Zip 94022 | Country US

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

Doc code: Oath
Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention ACCESSING AND DISPLAYING NETWORK CONTENT

This statement is directed to:

☐ The attached application,

OR

☒ United States application or PCT international application number 13/975,227 filed on August 23, 2013.

LEGAL NAME of inventor to whom this substitute statement applies:

(*E.g.*, Given Name (first and middle (if any)) and Family Name or Surname)

George Andrew Kembel

Residence (except for a deceased or legally incapacitated inventor):

City Menlo Park | State CA | Country United States

Mailing Address (except for a deceased or legally incapacitated inventor):

1045 Santa Cruz Avenue, Apt. F

City Menlo Park | State CA | Zip 94025 | Country US

I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.

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

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

Relationship to the inventor to whom this substitute statement applies:

☐ Legal Representative (for deceased or legally incapacitated inventor only),

☒ Assignee,

☐ Person to whom the inventor is under an obligation to assign,

☐ Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or

☐ Joint 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.

PTO/SB/AIA02 (07-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- [ ] Inventor is deceased,
- [ ] Inventor is under legal incapacity,
- [ ] Inventor cannot be found or reached after diligent effort, or
- [x] Inventor has refused to execute the oath or declaration under 37 CFR 1.63. and/or was not responsive

If there are joint inventors, please check the appropriate box below:

- [x] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- [ ] An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

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.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Rakesh Ramde | Date (Optional):

Signature: Rakesh Ramde

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name: MAINSTREAM SCIENTIFIC, LLC

Title of Person Executing This Substitute Statement: President

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City Los Altos | State CA | Country United States

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

153 Second Street, Suite 105

City Los Altos | State CA | Zip 94022 | Country US

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	13975227
Filing Date	2011-08-23
First Named Inventor	John Albert KEMBEL
Art Unit	3649
Examiner Name	LIN, KENNY S.
Attorney Docket Number	043311-0423953

U.S.PATENTS

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	6037935		2000-03-14	BATES et al.	
	2	5963950		1999-10-05	NIELSEN et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20020010768		2002-01-24	MARKS et al.	
	2	20030069944		2003-04-10	BARLOCK et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Final Office Action mailed January 15, 2016 in corresponding U.S. Patent Application No. 12/702,156 (37 pages).	☐
	2	Final Office Action mailed January 20, 2016 in corresponding U.S. Patent Application No. 13/965,093 (26 pages).	☐
	3	Final Office Action mailed January 25, 2016 in corresponding U.S. Patent Application No. 13/965,067 (35 pages).	☐
	4	Final Office Action mailed February 3, 2016 in corresponding U.S. Patent Application No. 14/104,370 (11 pages).	☐
	5	Notice of Allowance mailed March 28, 2016 in corresponding U.S. Patent Application No. 12/820,442 (6 pages).	☐
	6	NIELSEN, Jakob, "When to Open Web-Based Applications in a New Window", NN/g Nielsen Norman Group, October 15, 1997, downloaded from https://www.nngroup.com/articles/when-to-open-web-based-applications-in-a-new-window/ (5 pages).	☐

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

EXAMINER SIGNATURE

Examiner Signature	/Kenny Lin/	Date Considered	04/19/2016

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

EFS Web 2.1.17

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Ian C. Schick, Ph.D./	Date (YYYY-MM-DD)	2016-04-15
Name/Print	Ian C. Schick, Ph.D.	Registration Number	63293

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

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

Privacy Act Statement

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

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

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

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

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

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/975,227	08/23/2013	John Albert Kembel	043311-0423953	7642

909 7590 04/26/2016
Pillsbury Winthrop Shaw Pittman, LLP (NV)
PO Box 10500
McLean, VA 22102

EXAMINER
LIN, KENNY S

ART UNIT	PAPER NUMBER
3649	

NOTIFICATION DATE	DELIVERY MODE
04/26/2016	ELECTRONIC

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

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

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

docket_ip@pillsburylaw.com
heather.marthers@pillsburylaw.com

PTOL-90A (Rev. 04/07)

UNITED STATES DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office
Address : COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
13/975,227	23 August, 2013	KEMBEL ET AL.	043311-0423953

		EXAMINER	
Pillsbury Winthrop Shaw Pittman, LLP (NV) PO Box 10500 McLean, VA 22102		KENNY LIN	
		ART UNIT	PAPER
		3649	20160419

DATE MAILED:

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

Commissioner for Patents

The IDS submitted on 4/15/2016 is considered	
	/KENNY LIN/ Primary Examiner, Art Unit 3649

PTO-90C (Rev.04-03)

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	13975227
Filing Date	2011-08-23
First Named Inventor	John Albert KEMBEL
Art Unit	3649
Examiner Name	LIN, KENNY S.
Attorney Docket Number	043311-0423953

U.S.PATENTS

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	6037935		2000-03-14	BATES et al.	
	2	5963950		1999-10-05	NIELSEN et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20020010768		2002-01-24	MARKS et al.	
	2	20030069944		2003-04-10	BARLOCK et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Final Office Action mailed January 15, 2016 in corresponding U.S. Patent Application No. 12/702,156 (37 pages).	☐
	2	Final Office Action mailed January 20, 2016 in corresponding U.S. Patent Application No. 13/965,093 (26 pages).	☐
	3	Final Office Action mailed January 25, 2016 in corresponding U.S. Patent Application No. 13/965,067 (35 pages).	☐
	4	Final Office Action mailed February 3, 2016 in corresponding U.S. Patent Application No. 14/104,370 (11 pages).	☐
	5	Notice of Allowance mailed March 28, 2016 in corresponding U.S. Patent Application No. 12/820,442 (6 pages).	☐
	6	NIELSEN, Jakob, "When to Open Web-Based Applications in a New Window", NN/g Nielsen Norman Group, October 15, 1997, downloaded from https://www.nngroup.com/articles/when-to-open-web-based-applications-in-a-new-window/ (5 pages).	☐

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

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Ian C. Schick, Ph.D./	Date (YYYY-MM-DD)	2016-04-15
Name/Print	Ian C. Schick, Ph.D.	Registration Number	63293

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

Privacy Act Statement

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

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

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

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

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

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	13975227
Filing Date:	23-Aug-2013
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Filer:	Ian Carl Schick/Monet Noel
Attorney Docket Number:	043311-0423953

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Submission- Information Disclosure Stmt	2806	1	90	90
		Total in USD ($)		**90**

Electronic Acknowledgement Receipt	
EFS ID:	25509374
Application Number:	13975227
International Application Number:	
Confirmation Number:	7642
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Customer Number:	909
Filer:	Ian Carl Schick
Filer Authorized By:	
Attorney Docket Number:	043311-0423953
Receipt Date:	15-APR-2016
Filing Date:	23-AUG-2013
Time Stamp:	19:05:21
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$90
RAM confirmation Number	6600
Deposit Account	033975
Authorized User	SCHICK, IAN C.

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

Charge any Additional Fees required under 37 CFR 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 CFR 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 CFR 1.19 (Document supply fees)

Charge any Additional Fees required under 37 CFR 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	13975227_SB087642.pdf	447203 c330ebdee5b768080bdd25ec43f79faa0625409b	no	4
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
2	Non Patent Literature	12702156.pdf	1427982 80e12008c1b4069eea89af336f77bdbf3d62b57c	no	37
Warnings:					
Information:					
3	Non Patent Literature	13965093FOA012016.pdf	940737 f82e2ad432aa26fae86c06b4cf918647942ea71f	no	26
Warnings:					
Information:					
4	Non Patent Literature	13965067FOA012516.pdf	1266514 82a99db91e518c9a532e2fd735e1678417f8d6d9	no	35
Warnings:					
Information:					
5	Non Patent Literature	14104370NFOA020316.pdf	321731 f3a3287bb8935cac32755ef611cae5ed4a9ed055	no	11
Warnings:					
Information:					
6	Non Patent Literature	12820442NOA032816.pdf	379219 ccf5a3983d2795b93a3df5b6be223c57fedb893f	no	6
Warnings:					
Information:					
7	Non Patent Literature	NIELSEN.pdf	292523 7fd81ab1ae2e182d0e2a0cb0488a3c0e0b180923	no	5
Warnings:					
Information:					

8	Fee Worksheet (SB06)	fee-info.pdf	30696 e507d08dbf7dd8328e2fe4bad6a5d91b42e9c75d	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	5106605	

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

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

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

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

UNITED STATES PATENT AND TRADEMARK OFFICE

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

NOTICE OF ALLOWANCE AND FEE(S) DUE

909 7590 02/17/2016
Pillsbury Winthrop Shaw Pittman, LLP (NV)
PO Box 10500
McLean, VA 22102

EXAMINER
LIN, KENNY S

ART UNIT	PAPER NUMBER
3649	

DATE MAILED: 02/17/2016

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/975,227	08/23/2013	John Albert Kembel	043311-0423953	7642

TITLE OF INVENTION: ACCESSING AND DISPLAYING NETWORK CONTENT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	05/17/2016

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

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

HOW TO REPLY TO THIS NOTICE:

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

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

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

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

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

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

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

PART B - FEE(S) TRANSMITTAL

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

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

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

909 7590 02/17/2016
Pillsbury Winthrop Shaw Pittman, LLP (NV)
PO Box 10500
McLean, VA 22102

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

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

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/975,227	08/23/2013	John Albert Kembel	043311-0423953	7642

TITLE OF INVENTION: ACCESSING AND DISPLAYING NETWORK CONTENT

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	$480	$0	$0	$480	05/17/2016

EXAMINER	ART UNIT	CLASS-SUBCLASS
LIN, KENNY S	3649	709-203000

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

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

1_____
2_____
3_____

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

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

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

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

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

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

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

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

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/975,227	08/23/2013	John Albert Kembel	043311-0423953	7642

909 7590 02/17/2016
Pillsbury Winthrop Shaw Pittman, LLP (NV)
PO Box 10500
McLean, VA 22102

EXAMINER
LIN, KENNY S

ART UNIT	PAPER NUMBER
3649	

DATE MAILED: 02/17/2016

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.

Notice Requiring Inventor's Oath or Declaration	Application No. 13/975,227	Applicant(s) John Albert Kembel	
	Examiner LIN, KENNY S	Art Unit 3649	

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): **John Albert Kembel**, **George Andrew Kembel**, **Daniel S. Kim**, **John Russell**, **Jake Wobbrock**, **Geoffrey S. Kembel**, **Jeremy L. Kembel** , and **Lynn D. Gabbay**.
  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 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

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

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

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 13/975,227	Applicant(s) KEMBEL ET AL.	
	Examiner KENNY LIN	Art Unit 3649	AIA (First Inventor to File) Status No

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

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

1. ☒ This communication is responsive to *12/30/2015*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-21*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

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

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

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

Attachment(s)

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

/KENNY LIN/
Primary Examiner, Art Unit 3649

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	8178	G06F17/30899.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/01/25 16:03
L2	4568	G06F17/30861.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/01/25 16:03
L3	11737	G06F3/0484.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/01/25 16:03
L4	205	GUI same web near4 browser same template	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/01/25 16:04
L5	20	L4 and (@AD < "19990426" or @PRAD < "19990426")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/01/25 16:04
L6	1	L5 and network near6 location	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/01/25 16:08
L7	21097	709/219.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/01/25 16:09
L8	23	L7 and content near4 template and retriev$3 near6 content near4 web	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/01/25 16:09
L9	3	L8 and (@AD < "19990426" or @PRAD < "19990426")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/01/25 16:09
L10	17	server near4 portal and retriev$3 near6 web near6 content and content near3 template	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/01/25 16:54
L11	0	L10 and (@AD < "19990426" or @PRAD < "19990426")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/01/25 16:54

EAST Search History (Interference)

<This search history is empty>

1/ 25/ 2016 4:54:46 PM
C:\ Users\ klin1\ Documents\ EAST\ Workspaces\ 13975227.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13975227	KEMBEL ET AL.
	Examiner	**Art Unit**
	KENNY LIN	3649

CPC- SEARCHED		
Symbol	**Date**	**Examiner**

CPC COMBINATION SETS - SEARCHED		
Symbol	**Date**	**Examiner**

US CLASSIFICATION SEARCHED			
Class	**Subclass**	**Date**	**Examiner**

SEARCH NOTES		
Search Notes	**Date**	**Examiner**
IDS considered	9/24/15	KL
EAST keyword search	9/24/15	KL
limited CPC search G06F3/0484 17/30861 17/30899	9/24/15	KL
EAST update search	1/25/16	KL

INTERFERENCE SEARCH			
US Class/ CPC Symbol	**US Subclass / CPC Group**	**Date**	**Examiner**
G06F	3/0484 17/30861 17/30899	1/25/16	KL

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13975227	KEMBEL ET AL.
	Examiner	**Art Unit**
	KENNY LIN	3649

CPC						
Symbol					**Type**	**Version**
H04L		67	/	42	F	2013-01-01
G06F		17	/	30899	I	2013-01-01
G06F		3	/	0484	I	2013-01-01
H04L		41	/	22	I	2013-01-01
G06F		8	/	65	I	2013-01-01
H04L		65	/	60	I	2013-01-01
H04L		67	/	02	I	2013-01-01
H04L		67	/	10	I	2013-01-01
			/			
			/			
			/			
			/			
			/			
			/			
			/			

CPC Combination Sets							
Symbol				**Type**	**Set**	**Ranking**	**Version**
			/				
			/				

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 21	
/KENNY LIN/ Primary Examiner.Art Unit 3649 (Primary Examiner)	01/25/2016 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 11

U.S. Patent and Trademark Office

Part of Paper No. 20160125

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13975227	KEMBEL ET AL.
	Examiner	**Art Unit**
	KENNY LIN	3649

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION									
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED				
		G	0	6	F	15 / 16 (2006.01.01)					
CROSS REFERENCE(S)											
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)										

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 21	
/KENNY LIN/ Primary Examiner.Art Unit 3649 (Primary Examiner)	01/25/2016 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 11

U.S. Patent and Trademark Office

Part of Paper No. 20160125

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13975227	KEMBEL ET AL.
	Examiner	**Art Unit**
	KENNY LIN	3649

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

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		17												
	2		18												
	3		19												
	4		20												
	5		21												
	6														
	7														
	8														
	9														
	10														
	11														
	12														
	13														
	14														
	15														
	16														

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 21	
/KENNY LIN/ Primary Examiner.Art Unit 3649 (Primary Examiner)	01/25/2016 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 11

U.S. Patent and Trademark Office Part of Paper No. 20160125

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	5727175		1998-03-10	MALONE et al.	
	2	5948070		1999-09-07	FUJITA	
	3	5987454		1999-11-16	HOBBS	
	4	6141693		2000-10-31	PERLMAN et al.	
	5	6184878		2001-02-06	ALONSO et al.	
	6	6208335		2001-03-27	GORDON et al.	
	7	6618754		2003-09-09	GOSLING	
If you wish to add additional U.S. Patent citation information please click the Add button.						Add
U.S.PATENT APPLICATION PUBLICATIONS						Remove

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20010032220		2001-10-18	VEN HOFF	
	2	20020032709		2002-03-14	GESSNER	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] ¡	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Spencer, Steven, "JAVA Tip 66: Control browsers from your JAVA application," January 1, 1999, retrieved from http://javaworld.com/article/2077567/core-java/java-tip-66--control-browsers-from-your-java-application.html.	☐

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

EXAMINER SIGNATURE

Examiner Signature	/Kenny Lin/	Date Considered	01/25/2016

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

EFS Web 2.1.17

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

EFS Web 2.1.17

Doc Code: DIST.E.FILE **Document Description: Electronic Terminal Disclaimer - Filed**	PTO/SB/26 U.S. Patent and Trademark Office Department of Commerce

Electronic Petition Request	**TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT**
Application Number	13975227
Filing Date	23-Aug-2013
First Named Inventor	John Kembel
Attorney Docket Number	043311-0423953
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT

☒ Filing of terminal disclaimer does not obviate requirement for response under 37 CFR 1.111 to outstanding Office Action

☒ This electronic Terminal Disclaimer is not being used for a Joint Research Agreement.

Owner	Percent Interest
Mainstream Scientific, LLC	100%

The owner(s) with percent interest listed above in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of prior patent number(s)

8521833

as the term of said prior patent is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the prior patent, "as the term of said prior patent is presently shortened by any terminal disclaimer," in the event that said prior patent later:
- expires for failure to pay a maintenance fee;
- is held unenforceable;
- is found invalid by a court of competent jurisdiction;
- is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
- has all claims canceled by a reexamination certificate;
- is reissued; or
- is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

◉ Terminal disclaimer fee under 37 CFR 1.20(d) is included with Electronic Terminal Disclaimer request.

○	I certify, in accordance with 37 CFR 1.4(d)(4), that the terminal disclaimer fee under 37 CFR 1.20(d) required for this terminal disclaimer has already been paid in the above-identified application.

Applicant claims the following fee status:

◉ Small Entity

○ Micro Entity

○ Regular Undiscounted

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

THIS PORTION MUST BE COMPLETED BY THE SIGNATORY OR SIGNATORIES

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 is of record in this application

Registration Number 63293

○ A sole inventor

○ A joint inventor; I certify that I am authorized to sign this submission on behalf of all of the inventors as evidenced by the power of attorney in the application

○ A joint inventor; all of whom are signing this request

Signature	/Ian C. Schick, Ph.D./
Name	Ian C. Schick, Ph.D.

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

Electronic Patent Application Fee Transmittal

Application Number:	13975227
Filing Date:	23-Aug-2013
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Filer:	Ian Carl Schick
Attorney Docket Number:	043311-0423953

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Statutory or Terminal Disclaimer	2814	1	160	160
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

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

Doc Code: DISQ.E.FILE
Document Description: Electronic Terminal Disclaimer – Approved

Application No.: 13975227

Filing Date: 23-Aug-2013

Applicant/Patent under Reexamination: Kembel et al.

Electronic Terminal Disclaimer filed on December 30, 2015

☒ APPROVED

This patent is subject to a terminal disclaimer

☐ DISAPPROVED

Approved/Disapproved by: Electronic Terminal Disclaimer automatically approved by EFS-Web

U.S. Patent and Trademark Office

Electronic Acknowledgement Receipt	
EFS ID:	24495673
Application Number:	13975227
International Application Number:	
Confirmation Number:	7642
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Customer Number:	909
Filer:	Ian Carl Schick
Filer Authorized By:	
Attorney Docket Number:	043311-0423953
Receipt Date:	30-DEC-2015
Filing Date:	23-AUG-2013
Time Stamp:	16:33:43
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$160
RAM confirmation Number	4425
Deposit Account	033975
Authorized User	SCHICK, IAN C.

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

Charge any Additional Fees required under 37 CFR 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 CFR 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 CFR 1.19 (Document supply fees)

Charge any Additional Fees required under 37 CFR 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Electronic Terminal Disclaimer-Filed	eTerminal-Disclaimer.pdf	33510 b61648912cd2c8d531d4d880c82aeecadf2bfbba	no	2
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30477 af896a65c0915f5f6500bd952090f5b749d31162	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	63987		

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.

Attorney Docket No.: 043311-0423953

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE PATENT APPLICATION OF	:	John Albert KEMBEL *et al.*
SERIAL NO.	:	13/975,227
FILING DATE	:	August 23, 2013
ART UNIT	:	3649
EXAMINER	:	K.S. Lin
FOR	:	ACCESSING AND DISPLAYING NETWORK CONTENT

RESPONSE TO NON-FINAL OFFICE ACTION

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

Dear Commissioner:

In response to the Non-Final Office Action dated **September 30, 2015** ("Office Action"), please consider the following amendments and remarks in the above-identified application:

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

Remarks/Arguments begin on page **11** of this paper.

It is believed that no extensions of time or fees for net addition of claims are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned for under 37 C.F.R. § 1.136(a), and any fees required therefore (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 033975 (Ref. No. 043311-0423953).

4851-9193-8092.v1

AMENDMENTS TO THE CLAIMS

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

1. (***Original***) A computer-implemented method of obtaining content over a network and displaying the content to a user, the method being implemented in a client computing device in operative communication with a server over a network, the client computing device including electronic storage, a display, and one or more processors configured to execute one or more computer program modules, the method comprising:

transmitting a request to the server over the network, the request requesting networked information monitor template;

receiving the requested networked information monitor template from the server over the internet, the requested networked information monitor template having been transmitted from the server over the network responsive to the transmitted request, the networked information monitor template comprising:

a definition of a viewer graphical user interface within which content in a web browser-readable language may be presented on the display of the client computing device; and

a definition of a first content element for the networked information monitor template, the definition of the first content element referencing a first network location from which the first content element for the networked information monitor template is served over the network;

responsive to instructions included in the requested networked information monitor template, presenting the viewer graphical user interface defined by the networked information monitor on the display of the client computing device separate from and outside of any other graphical user interface that includes user controls for specifying the first network location from which the first content element for the networked information monitor is served over the network;

responsive to instructions included in the requested networked information monitor template, transmitting over the network a first content request to the first network location referenced by the definition of the first content element for the networked information monitor template;

receiving, over the network, the first content element transmitted responsive to the first content request;

presenting the received the first content element in the viewer graphical user interface defined by the networked information monitor template, wherein the definition of the viewer graphical user interface and/or the first content element define all controls for enabling a user to interact with the first content element through the viewer graphical user interface.

2. (***Original***) The method of claim 1, wherein the definition of the viewer graphical user interface includes a definition of at least one control effective for controlling an aspect of the viewer graphical user interface, and wherein presenting the viewer graphical user interface comprises presenting the at least one control.

3. (***Original***) The method of claim 2, wherein the aspect is the location at which the user interface is rendered on a display device.

4. (***Original***) The method of claim 2, wherein the aspect is the size of the user interface when presented on the display of the client computing device.

5. (***Original***) The method of claim 1, wherein the networked information monitor template includes instructions in extensible markup language (XML) format, and further wherein the method further comprises parsing the definition of the viewer graphical user interface.

6. (***Currently Amended***) The method of claim 1, wherein the definition of the viewer graphical user interface defined by the networked information monitor template comprises an image, and wherein presenting the viewer ~~viewere~~ graphical user interface defined by the networked information monitor template on the display of the client computing device comprises presenting the image included in the definition as part of the viewer graphical user interface.

7. (***Original***) The method claim 6, wherein presenting the received the first content element in the viewer graphical user interface defined by the networked information monitor template comprises presenting the received the first content element in

association with the image.

8. (***Original***) The method of claim 6, wherein presenting the received the first content element in the viewer graphical user interface defined by the networked information monitor template comprises presenting the received the first content element at least in part within the image.

9. (***Original***) The method of claim 1, wherein the definition of the viewer graphical user interface defines at least one control permitting the modification of the appearance of the viewer graphical user interface defined by the networked information monitor template, and wherein presenting the viewer graphical user interface defined by the networked information monitor template on the display of the client computing device comprises presenting the at least one control.

10. (***Original***) The method of claim 1, wherein the first content element includes audio content, video content, graphics content, still image content, textual content and/or interactive content.

11. (***Currently Amended***) The method of claim 1, further comprising:

executing a client parser application that is separate from the networked information monitor template, the client parser application being configured to present the viewer graphical user interface defined by the networked information monitor

template on the client computing device, to generate the request for the content that is transmitted to the first network location referenced by the definition ~~defintion~~ of the first content element for the networked information monitor template, and to present the first content element received from the first network location within the viewer graphical user interface defined by the networked information monitor template.

12. (***Original***) The method of claim 1, further comprising causing the networked information monitor to communicate with another networked information monitor.

13. (***Currently Amended***) The method of claim 1, wherein the networked information monitor is configured to cause the client computing device to periodically request the first content element from the first network location referenced by the definition ~~defintion~~ of the first content element for the networked information monitor template and to present the received first content element within the viewer graphical user interface in an ongoing manner.

14. (***Original***) The method of claim 1, wherein the network is the internet.

15. (***Currently Amended***) The method of claim 1, wherein the networked information ~~infomration~~ template further comprising a definition of a second content element for the networked information monitor template, the definition of the second content element referencing a second network location from which the second content element for the

networked information monitor template is served over the network, and wherein the method further ~~futher~~ comprises:

responsive to instructions included in the requested networked information monitor template, transmitting over the network a second content request to the second network location referenced by the definition ~~defintion~~ of the second content element for the networked information monitor template;

receiving, over the network, the second content element transmitted responsive to the second content request; and

presenting the received second content element in the viewer graphical user interface defined by the networked information monitor template, wherein the definition of the viewer graphical user interface and/or the second content element define all controls for enabling a user to interact with the second content element through the viewer graphical user interface.

16. (***Currently Amended***) A computer-implemented method of obtaining and displaying content obtained over a network to a user on a client computing device, the method being implemented in the client computing device, the client computing device including electronic storage, a display, and one or more processors configured to execute one or more computer program modules, the method comprising:

executing on the client computing device client parser, wherein the execution of the client parser results in the client computing device:

transmitting over the network a first content request to a first network

location referenced by a definition ~~defintion~~ of a first content element in a networked information monitor template that is readable by the client parser;

receiving, over the network, the first content element transmitted responsive to the first content request;

presenting a viewer graphical user interface defined by the networked information monitor template on the display of the client computing device and wherein the viewer graphical user interface defined by the networked information monitor template is presented separate from and outside of any other graphical user interface that includes user controls for specifying the first network location from which the first content element for the networked information monitor is served over the network; and

presenting the received content element within the viewer graphical user interface defined by the networked information monitor template, wherein the definition of the viewer graphical user interface and/or the first content element define all controls for enabling a user to interact with the first content element through the viewer graphical user interface.

17. (***Original***) The method of claim 16, wherein execution of the client parser further results in the client computing device determining that the first element content modifies the networked information monitor template and responsive to such determination, modifying the networked information monitor template prior to the step of presenting the graphical user interface.

18. (***Original***) The method of claim 16, further comprising presenting an icon representing networked information monitor associated with the networked information monitor template on the display of the client computing device, and wherein execution of the client parser to perform one or more of the transmitting operation, the presenting the viewer graphical user interface operation, or presenting the first content element operation is responsive to reception of selection by a user of the icon.

19. (***Original***) The method of claim 16, further comprising invoking the client parser and initiating one or more of the transmitting operation, the presenting the viewer graphical user interface operation, or presenting the first content element operation automatically during a start-up process of the client computing device.

20. (***Currently Amended***) The method of claim 19, wherein execution on the client computing device of the client parser further results in the client computing device:

transmitting over the network a second content request to a second network location referenced by a definition ~~defintion~~ of a second content element in a second networked information monitor template that is readable by the client parser;

receiving the second content element transmitted responsive to the second content request;

presenting a second viewer graphical user interface defined by the second networked information monitor template on the display of the client computing device, wherein the second viewer graphical user interface lacks user controls, wherein the

definition of the second viewer graphical user interface and/or the second content element define all controls for enabling a user to interact with the second content element through the second viewer graphical user interface; and

presenting the second content element within the viewer second graphical user interface,

wherein execution of the client parser to perform the transmitting the second content request, the presenting the second viewer graphical user interface operation, and the presenting the second content element is responsive to reception of a selection to initiate a second networked information monitor associated with the second networked information monitor template.

21. (***Original***) The method of claim 16, wherein the network is the internet.

REMARKS

By this paper, claims 6, 11, 13, 15, 16, and 20 are amended to correct typographical errors, while no claims are newly added or cancelled. Accordingly, claims 1-21 are all of the pending claims. Support for the amendments presented above is provided throughout the specification and claims as originally filed. Applicant expressly reserves the right to prosecute the subject matter of the unamended and/or cancelled claims, or any other subject matter supported by the specification, in one or more continuation applications. In view of the foregoing amendments and the following remarks, reconsideration and allowance of all the pending claims is anticipated.

Double Patenting Rejection

Claims 1-21 currently stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 8,521,833 to Kembel, *et al.* ("the '833 patent"). As suggested by the Office Action, a Terminal Disclaimer executed by the undersigned applicant's representative in compliance with 37 C.F.R. § 1.321(c) is submitted herewith to disclaim the term of a patent resulting from the present application from extending beyond that of the '833 patent. Accordingly, applicants respectfully requests that the above obviousness-type double patent rejection be withdrawn.

CONCLUSION

Having addressed all outstanding objections and rejections, it is respectfully submitted that a full and complete response has been made to the Office Action and, as such, the application is in condition for allowance. Notice to that effect is anticipated.

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

Date: December 30, 2015 Respectfully submitted,

By: / Ian C. Schick, Ph.D. /
Ian C. Schick, Ph.D.
Reg. No. 63,293

Customer No. 00909

PILLSBURY WINTHROP SHAW PITTMAN LLP
1650 Tysons Boulevard
McLean, Virginia 22102
619-234-5000

Electronic Acknowledgement Receipt

EFS ID:	24496846
Application Number:	13975227
International Application Number:	
Confirmation Number:	7642
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Customer Number:	909
Filer:	Ian Carl Schick/angelica zepeda
Filer Authorized By:	Ian Carl Schick
Attorney Docket Number:	043311-0423953
Receipt Date:	30-DEC-2015
Filing Date:	23-AUG-2013
Time Stamp:	17:33:55
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		043311-0423953_amendment.pdf	60284 fdd7feb2fa039f10de9a12ead9dc869851256af8	yes	12

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	10
	Applicant Arguments/Remarks Made in an Amendment	11	12
Warnings:			
Information:			
	Total Files Size (in bytes):	60284	

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

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

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

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

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/975,227	Filing Date 08/23/2013	☐ To be Mailed

ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT

12/30/2015	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	* 21	Minus	** 21	= 0	X $40 =	0
Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X $210 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	**0**

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/MOLIKI MAY/

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.

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	5727175		1998-03-10	MALONE et al.	
	2	5948070		1999-09-07	FUJITA	
	3	5987454		1999-11-16	HOBBS	
	4	6141693		2000-10-31	PERLMAN et al.	
	5	6184878		2001-02-06	ALONSO et al.	
	6	6208335		2001-03-27	GORDON et al.	
	7	6618754		2003-09-09	GOSLING	
If you wish to add additional U.S. Patent citation information please click the Add button.						Add
U.S.PATENT APPLICATION PUBLICATIONS						Remove

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20010032220		2001-10-18	VEN HOFF	
	2	20020032709		2002-03-14	GESSNER	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] ¡	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							☐

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Spencer, Steven, "JAVA Tip 66: Control browsers from your JAVA application," January 1, 1999, retrieved from http://javaworld.com/article/2077567/core-java/java-tip-66--control-browsers-from-your-java-application.html.	☐

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

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

EFS Web 2.1.17

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	13975227
	Filing Date	2011-08-23
	First Named Inventor	John Albert KEMBEL
	Art Unit	3649
	Examiner Name	LIN, KENNY S.
	Attorney Docket Number	043311-0423953

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☐ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Ian C. Schick, Ph.D./	Date (YYYY-MM-DD)	2015-10-14
Name/Print	Ian C. Schick, Ph.D.	Registration Number	63293

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

Privacy Act Statement

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

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

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

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

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

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt

EFS ID:	23793861
Application Number:	13975227
International Application Number:	
Confirmation Number:	7642
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Customer Number:	909
Filer:	Ian Carl Schick/Monet Noel
Filer Authorized By:	Ian Carl Schick
Attorney Docket Number:	043311-0423953
Receipt Date:	15-OCT-2015
Filing Date:	23-AUG-2013
Time Stamp:	14:15:00
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	0423953_SB08.pdf	640726 53cef03e3be12a328f3d4cbfa34a8491773b44a1	no	5

Warnings:

Information:

2	Non Patent Literature	NPL.pdf	204476 92e445c13bb0d725a5a5a31c3a2ef2d0fedbf430	no	6
Warnings:					
Information:					
			Total Files Size (in bytes):	845202	

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

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

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

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

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/975,227	08/23/2013	John Albert Kembel	043311-0423953	7642

909 7590 09/30/2015
Pillsbury Winthrop Shaw Pittman, LLP (NV)
PO Box 10500
McLean, VA 22102

EXAMINER
LIN, KENNY S

ART UNIT	PAPER NUMBER
3649	

NOTIFICATION DATE	DELIVERY MODE
09/30/2015	ELECTRONIC

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

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

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

docket_ip@pillsburylaw.com
heather.marthers@pillsburylaw.com

PTOL-90A (Rev. 04/07)

Office Action Summary	Application No. 13/975,227	Applicant(s) KEMBEL ET AL.	
	Examiner KENNY LIN	Art Unit 3649	AIA (First Inventor to File) Status No

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

Period for Reply

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

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

Status

1)☒ Responsive to communication(s) filed on 7/10/15.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

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

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

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

Disposition of Claims*

5)☒ Claim(s) 1-21 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) 1-21 is/are rejected.

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

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

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

Application Papers

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

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

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

Attachment(s)

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

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date 7/10/15 8/23/13.

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

4) ☐ Other: _____.

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

DETAILED ACTION

1. Claims 1-21 are presented for examination.

Information Disclosure Statement

2. The IDS filed on 8/23/2013 and 7/10/2015 are considered.

Double Patenting

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

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting

ground provided the reference application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file provisions of the AIA as explained in MPEP § 2159. See MPEP §§ 706.02(l)(1) - 706.02(l)(3) for applications not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

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

4. Claims 1-21 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 8,521,833. Although the claims at issue are not identical, they are not patentably distinct from each other because the claims contain the same scope and only differ in minor language usage or obvious in repeating the processing steps (i.e. claim 15).

Conclusion

5. A shortened statutory period for reply to this Office action is set to expire **Three MONTHS** from the mailing date of this action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darnell Jayne can be reached on (571) 272-7723. 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).

/Kenny S Lin/
Primary Examiner, Art Unit 3649
September 24, 2015

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	4	"8521833".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 13:09
L2	9910	G06F3/0484.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 13:48
L3	4312	G06F17/30861.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 13:49
L4	7831	G06F17/30899.cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 13:50
L5	9	present$3 near6 content near8 separat$3 near6 (window display interface) and server near7 (template format) near6 content	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 13:50
L6	57	browser same generat$3 near10 (separate different) near7 GUI	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 13:50
L7	0	L6 and (@AD < "19990426" or @PRAD < "19990426")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 13:50
L8	16	server near4 portal and retriev$3 near6	US-PGPUB;	OR	ON	2015/09/24

		web near6 content and content near3 template	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			14:06
L9	0	L8 and (@AD < "19990426" or @PRAD < "19990426")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 14:06
L11	27	server near4 portal and retriev$3 near6 (URL or URI) near6 content and content near3 template	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 14:06
L12	0	L11 and (@AD < "19990426" or @PRAD < "19990426")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 14:06
L13	203	GUI same web near4 browser same template	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 14:10
L14	20	L13 and (@AD < "19990426" or @PRAD < "19990426")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 14:10
L15	1	L14 and network near6 location	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 14:11
L16	64	("5774670" "5805829" "5818446" "5919247" "5922044" "5959621" "6034652" "6061695" "6061696" "6105063" "6240555" "6339826" "6401134" "6453348" "6476833" "6487663" "6510466" "6687745" "6718015" "6724403" "6766454" "7039857" "7574649" "8346887" "20010042107" "20120117479").pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 14:13
L17	26	("5774670" "5805829" "5818446" "5919247" "5922044" "5959621" "6034652" "6061695" "6061696" "6105063" "6240555" "6339826"	US-PGPUB; USPAT	OR	ON	2015/09/24 14:13

		"6401134" "6453348" "6476833" "6487663" "6510466" "6687745" "6718015" "6724403" "6766454" "7039857" "7574649" "8346887" "20010042107" "20120117479").pn.				
L18	2	L13 and L2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 14:13
L19	1	L13 and L3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 14:13
L20	3	L13 and L4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/24 14:13

EAST Search History (Interference)

<This search history is empty>

9/24/2015 2:16:12 PM
C:\Users\klin1\Documents\EAST\Workspaces\13975227.wsp

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

BIB DATA SHEET

CONFIRMATION NO. 7642

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
13/975,227	08/23/2013 RULE	709	3649	043311-0423953

APPLICANTS
Mainstream Scientific, LLC, Mountain View, CA;

INVENTORS
John Albert Kembel, Palo Alto, CA;
George Andrew Kembel, Menlo Park, CA;
Daniel S. Kim, Palo Alto, CA;
John Russell, Palo Alto, CA;
Jake Wobbrock, Palo Alto, CA;
Geoffrey S. Kembel, Menlo Park, CA;
Jeremy L. Kembel, Palo Alto, CA;
Lynn D. Gabbay, Sunnyvale, CA;

**** CONTINUING DATA ****************************
This application is a CON of 11/932,392 10/31/2007 PAT 8521833
which is a CON of 09/558,925 04/26/2000 PAT 7660868
which claims benefit of 60/131,083 04/26/1999
and claims benefit of 60/131,114 04/26/1999
and claims benefit of 60/131,115 04/26/1999
and claims benefit of 60/176,687 01/18/2000
and claims benefit of 60/176,699 01/18/2000

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

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED **** ** SMALL ENTITY **
09/12/2013

Foreign Priority claimed	☐ Yes ☑ No	☐ Met after Allowance	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
35 USC 119(a-d) conditions met	☐ Yes ☑ No		CA	37	21	2
Verified and Acknowledged	/ / Examiner's Signature	Initials				

ADDRESS
Pillsbury Winthrop Shaw Pittman, LLP (NV)
PO Box 10500
McLean, VA 22102
UNITED STATES

TITLE
ACCESSING AND DISPLAYING NETWORK CONTENT

FILING FEE RECEIVED		
1040	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____

BIB (Rev. 05/07).

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	13/975,227
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	August 23, 2013	2447

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	1A	5,297,250	03/22/1994	Leroy et al.	715	763	
	1B	5,761,071	06/02/1998	Bernstein et al.	364	479.07	
	1C	5,778,187	07/07/1998	Monteiro et al.	395	200.61	
	1D	5,793,964	08/11/1998	Rogers et al.	395	200.32	
	1E	5,892,905	04/06/1999	Brandt et al.	395	187.01	
	1F	5,915,001	06/22/1999	Uppaluru	379	88.22	
	1G	6,144,990	11/07/2000	Brandt et al.	709	203	
	1H	6,307,574	10/01/2001	Ashe et al.	715	765	
	1I	6,324,578	11/27/2001	Cox et al.	709	223	
	1J	6,421,694	07/16/2002	Nawaz et al.	707	526	
	1K	7,257,638	08/14/2007	Celik et al.	709	231	
	1L	7,290,217	10/30/2007	Jones et al.	715	764	
	1M	7,478,142	01/13/2009	Veditz	709	218	
	1N	8,521,833	08/27/2013	Kembel et al.	709	217	
	1O	8,621,034	12/31/2013	Kembel et al.	709	217	
	1P	2001/0011341	08/02/2001	Hayes, Jr., et al.	712	11	
	1Q	2002/0054085	05/01/2002	Taylor et al.	345	744	
	1R	2002/0136167	09/26/2002	Steele et al.	370	260	
	1S	2013/0339866	12/19/2013	Kembel et al.	715	738	
	1T	2013/0339867	12/19/2013	Kembel et al.	715	738	
	1U	2014/0101559	04/10/2014	Kembel et al.	715	736	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO
	1V	EP 798634 A1	10/01/1997	Europe				

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	1Y	"Customizing the Active Desktop", Windows 98 Unleashed, published May 12, 1998, retrieved from the Internet from <http://my.safaribooksonline.com/print?xmlid=0-672-31235-2/ch05lev1sec3>, 9 pages.
	1Z	ROSE, Charlton, "Windows: Pop-Up Dialog Boxes", November 28, 1996, retrieved from the Internet <URL: http://sharkysoft.com/archive/1997/jsa/content/008.html>, 2 pages.
	1AA	No Stated Author, "Window Spawning and Remotes: Window Attributes - Doc JavaScript", created November 18, 1997, retrieved from the Internet <URL: http://webreference.com/js/column7/attributes.html>, 4 pages.
	1BB	MERRICK *et al.*, "Web Interface Definition Language (WIDL)", September 22, 1997, retrieved from the Internet: <URL: http://www.w3.org/TR/NOTE-widl>, 14 pages.

EXAMINER	/KENNY LIN/	DATE CONSIDERED	09/24/2015

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	13/975,227
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	August 23, 2013	2447

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	2A	No Stated Author, "CoffeeCup: Uploading Files to Your Server", December 31, 1996, retrieved from the Internet <URL: http://www.coffeecup.com/help/articles/uploading-files-to-your-server/>, 2 pages.
	2B	ELLERMAN, Castedo, "Channel Definition Format (CDF)", World Wide Web Consortium (W3C), available at http://www.w3.org/TR/NOTE-CDFsubmit.html, March 9, 1997, 10 pages.
	2C	"HTML 4.0 Specification", World Wide Web Consortium (W3C), available at http://www.w3.org/TR/1998/REC-html40-19980424.html, revised April 24, 1998, 30 pages.

EXAMINER	/KENNY LIN/	DATE CONSIDERED	09/24/2015

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	1A	60/153,917	09/14/1999	Franco et al.			
	1B	5,375,199	12/20/1994	Harrow et al.	715	771	
	1C	5,599,756	02/04/1997	Matsuo (Hermann)	501	127	
	1D	5,625,781	04/29/1997	Cline et al.	715	854	
	1E	5,649,186	07/15/1997	Ferguson	1	1	
	1F	5,682,511	10/28/1997	Sposato et al.	715	716	
	1G	5,740,549	04/14/1998	Reilly et al.	705	14	
	1H	5,745,718	04/28/1998	Cline et al.	715	777	
	1I	5,761,662	06/02/1998	Dasan	1	1	
	1J	5,774,670	06/30/1998	Montulli	395	200.57	
	1K	5,794,230	08/11/1998	Horadan et al.	705	35	
	1L	5,796,393	08/18/1998	MacNaughton et al.	715	733	
	1M	5,796,952	08/18/1998	Davis et al.	709	224	
	1N	5,801,702	09/01/1998	Dolan et al.	715	854	
	1O	5,802,530	09/01/1998	Van Hoff	715	513	
	1P	5,805,829	09/08/1998	Cohen *et al.*	395	200.32	
	1Q	5,809,248	09/15/1998	Vidovic	709	219	
	1R	5,818,446	10/06/1998	Bertram et al.	715	746	
	1S	5,835,088	11/10/1998	Jaaskelainen, Jr.	715	803	
	1T	5,838,906	11/17/1998	Doyle et al.	709	219	
	1U	5,860,068	01/12/1999	Cook	705	26.81	
	1V	5,864,676	01/26/1999	Beer et al.	709	229	
	1W	5,864,868	01/26/1999	Contois	707	104	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO
	1X	WO 01/80086	10/25/2001	International				

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	1Y	Patent Application entitled "Parallel Web Sites", Serial No. 09/192,633, Filed November 16, 1998.
	1Z	Alexa 1.4.1 Support Pages, 9 pages, downloaded from www.alexa.com/support/index1.html, January 1999.
	1AA	Alexa General FAQs, 4 pages, downloaded from www.alexa.com/whatisalexa.faq.html#general, January 1999.
	1BB	"Custom Explorer Bars Give Sites an Edge", 2 pages, downloaded from www.microsoft.com/Windows/Ie/IE5/custom.asp, January 1999.

EXAMINER	DATE CONSIDERED
/KENNY LIN/	09/24/2015

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	2A	5,890,172	03/30/1999	Borman et al.	715	205	
	2B	5,893,091	04/06/1996	Hunt et al.	707	3	
	2C	5,896,533	04/20/1999	Ramos et al.	395	680	
	2D	5,918,237	06/29/1999	Montalbano	715	206	
	2E	5,919,247	07/06/1999	Van Hoff et al.	709	217	
	2F	5,922,044	07/13/1999	Banthia	709	203	
	2G	5,923,845	07/13/1999	Kamiya et al.	709	206	
	2H	5,923,885	07/13/1999	Johnson et al.	717	176	
	2I	5,948,061	09/07/1999	Merriman et al.	709	219	
	2J	5,959,621	09/28/1999	Nawaz et al.	345	329	
	2K	5,966,715	10/12/1999	Sweeney et al.	707	203	
	2L	5,973,692	10/26/1999	Knowlton et al.	345	348	
	2M	5,974,446	10/26/1999	Sonnenreich et al.	709	204	
	2N	5,974,546	10/26/1999	Anderson	713	2	
	2O	5,977,964	11/02/1999	Williams et al.	345	721	
	2P	5,983,227	11/09/1999	Nazem et al.	707	10	
	2Q	5,987,513	11/16/1999	Prithviraj et al.	709	223	
	2R	5,995,756	11/30/1999	Herrmann	717	178	
	2S	6,006,252	12/21/1999	Wolfe	709	203	
	2T	6,012,090	01/04/2000	Chung et al.	709	219	
	2U	6,012,098	01/04/2000	Bayeh et al.	709	246	
	2V	6,018,344	01/25/2000	Harada et al.	715	818	
	2W	6,023,698	02/08/2000	Lavey, Jr., *et al.*	707	10	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	2X	"Flexibility Across the Web", 2 pages, downloaded from www.microsoft.com/Windows/Ie/IE5/choice.asp, January 1999.
	2Y	"Web Accessories Overview", 2 pages, downloaded from www.microsoft.com/workshop/…er/accessory/overview/overview.asp, January 1999.
	2Z	"Browser Extensions Overview", 2 pages, downloaded from www.microsoft.com/workshop/browser/ext/overview/overview.asp, January 1999.
	2AA	Alexa Technology, 4 pages, downloaded from www.alexa.com/support/technology.html, January 1999.

EXAMINER	DATE CONSIDERED
/KENNY LIN/	09/24/2015

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	3A	6,026,433	02/15/2000	D'Arlach et al.	709	217	
	3B	6,031,904	02/29/2000	An et al.	379	201	
	3C	6,034,652	03/07/2000	Freiberger et al.	715	730	
	3D	6,044,403	03/28/2000	Gerszberg et al.	709	225	
	3E	6,061,695	05/09/2000	Slivka *et al.*	707	513	
	3F	6,061,696	05/09/2000	Lee *et al.*	707	513	
	3G	6,065,044	05/16/2000	Ogasawara	709	207	
	3H	6,088,717	07/11/2000	Reed et al.	709	201	
	3I	6,091,411	07/18/2000	Straub et al.	715	747	
	3J	6,091,412	07/18/2000	Simonoff *et al.*	345	335	
	3K	6,101,510	08/08/2000	Stone et al.	707	513	
	3L	6,104,391	08/15/2000	Johnston, Jr. et al.	715	745	
	3M	6,105,063	08/15/2000	Hayes, Jr.	709	223	
	3N	6,115,040	09/05/2000	Bladow et al.	345	335	
	3O	6,128,655	10/03/2000	Fields et al.	709	219	
	3P	6,133,916	10/17/2000	Bukszar et al.	715	744	
	3Q	6,161,112	12/12/2000	Cragun et al.	715	501.1	
	3R	6,177,936	01/23/2001	Cragun	715	760	
	3S	6,192,407	02/20/2001	Smith et al.	709	229	
	3T	6,199,082	03/06/2001	Ferrel et al.	715	522	
	3U	6,215,490	04/10/2001	Kaply	715	788	
	3V	6,216,141	04/10/2001	Straub et al.	707	513	
	3W	6,230,173	05/08/2001	Ferrel et al.	715	513	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	3X	"Creating Custom Explorer Bars and Desk Bands", 13 pages, downloaded from www.microsoft.com/workshop/browser/ext/overview/Bands.asp, January 1999, 13 pages.
	3Y	Alexa Internet Tour, 1 page, downloaded from www.alexa.com.whatisalexa.index.html, January 1999.
	3Z	"Revolutionary Ad Model", Advertise on Alexa, 1 page, downloaded from www.alexa.com/company/advertise/html, January 1999.
	3AA	"The Alexa Service Appears on Your Desktop in Its Own Window", 1 page, downloaded from www.alexa.com/tour/overview.html, January 1999.

EXAMINER	DATE CONSIDERED
/KENNY LIN/	09/24/2015

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4A	6,237,030	05/22/2001	Adams et al.	709	218	
	4B	6,240,555	05/29/2001	Shoff *et al.*	725	110	
	4C	6,268,856	07/31/2001	Bruck et al.	715	733	
	4D	6,275,854	08/14/2001	Himmel et al.	709	224	
	4E	6,278,448	08/21/2001	Brown et al.	345	333	
	4F	6,278,449	08/21/2001	Sugiarto et al.	715	826	
	4G	6,286,034	09/04/2001	Sato et al.	709	204	
	4H	6,289,362	09/11/2001	Van Der Meer	715	273	
	4I	6,292,185	09/18/2001	Ko et al.	715	763	
	4J	6,292,186	09/18/2001	Lehman et al.	345	335	
	4K	6,297,819	10/02/2001	Furst	715	733	
	4L	6,314,451	11/06/2001	Landsman et al.	709	203	
	4M	6,317,759	11/13/2001	Osmond	715	513	
	4N	6,339,826	01/15/2002	Hayes, Jr. et al.	713	166	
	4O	6,341,305	01/22/2002	Wolfe	709	203	
	4P	6,342,907	01/29/2002	Petty et al.	345	762	
	4Q	6,343,377	01/29/2002	Gessner *et al.*	717	10	
	4R	6,356,905	03/12/2002	Gershman et al.	707	10	
	4S	6,369,840	04/09/2002	Barnett et al.	345	853	
	4T	6,370,552	04/09/2002	Bloomfield	715	513	
	4U	6,374,273	04/16/2002	Webster	707	513	
	4V	6,385,596	05/07/2002	Wiser et al.	705	51	
	4W	6,393,407	05/21/2002	Middleton, III et al.	705	14	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	4X	"Know More About the Sites You Visit", 1 page, downloaded from www.alexa.com/tour/site_stats.html, January 1999.
	4Y	"Find Related Web Sites", 1 page, downloaded from www.alexa.com/tour/related_links.html, January 1999.
	4Z	"500,000 Sites and Growing", 1 page, downloaded from www.alexa.com/tour/archive/html, January 1999.
	4AA	"Research Tools at Your Fingertips", 1 page, downloaded from www.alexa.com/tour/eb.html, January 1999.

EXAMINER	/KENNY LIN/	DATE CONSIDERED	09/24/2015

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5A	6,401,134	06/04/2002	Razavi *et al.*	709	310	
	5B	6,411,992	06/25/2002	Srinivasan et al.	709	218	
	5C	6,414,677	07/02/2002	Robertson et al.	345	419	
	5D	6,418,440	07/09/2002	Kuo et al.	707	10	
	5E	6,434,563	08/13/2002	Pasquali et al.	707	10	
	5F	6,434,598	08/13/2002	Gish	709	203	
	5G	6,452,609	09/17/2002	Katinsky et al.	345	716	
	5H	6,453,348	09/17/2002	Barnier *et al.*	709	225	
	5I	6,460,029	10/01/2002	Fries et al.	1	1	
	5J	6,476,833	11/05/2002	Moshfeghi	345	854	
	5K	6,484,149	11/19/2002	Jammes et al.	705	26	
	5L	6,487,566	11/26/2002	Sundaresan	707	513	
	5M	6,487,663	11/26/2002	Jaisimha *et al.*	713	193	
	5N	6,496,203	12/17/2002	Beaumont et al.	345	762	
	5O	6,510,466	01/21/2003	Cox *et al.*	709	229	
	5P	6,537,324	03/25/2003	Tabata et al.	715	513	
	5Q	6,538,673	03/25/2003	Maslov	345	853	
	5R	6,549,612	04/15/2003	Gifford et al.	379	67.1	
	5S	6,560,639	05/06/2003	Dan et al.	709	218	
	5T	6,571,245	05/27/2003	Huang et al.	1	1	
	5U	6,594,682	07/03/2005	Peterson et al.	709	219	
	5V	6,606,657	08/12/2003	Zilberstein et al.	709	224	
	5W	6,629,143	09/30/2003	Pang	709	226	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	5X	"Reporting", 1 page, downloaded from www.alexa.com/company/reporting.html, January 1999.
	5Y	"Alexa Internet's Related Links Integrated into Netscape Browsers", 1 page, downloaded from www.alexa.com/company/netscape.html, January 1999.
	5Z	"Demographics", 1 page, downloaded from www.alexa.com/company/demographics.html, January 1999.
	5AA	"Ads Appear in the Pop-up and on the Bar", 1 page, downloaded from www.alexa.com/company/adspecs.html, January 1999.

EXAMINER	DATE CONSIDERED
/KENNY LIN/	09/24/2015

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6A	6,662,341	12/09/2003	Cooper et al.	715	513	
	6B	6,681,368	01/20/2004	Kawabata	715	501.1	
	6C	6,687,745	02/03/2004	Franco et al.	709	219	
	6D	6,691,130	02/10/2004	Kawasaki et al.	707	102	
	6E	6,694,484	02/17/2004	Mueller	715	513	
	6F	6,718,015	04/06/2004	Berstis	379	88.17	
	6G	6,724,403	04/20/2004	Santoro et al.	345	765	
	6H	6,751,606	06/15/2004	Fries et al.	707	3	
	6I	6,757,716	06/29/2004	Blegen et al.	709	217	
	6J	6,766,454	07/20/2004	Riggins	713	185	
	6K	6,784,900	08/31/2004	Dobronsky et al.	345	744	
	6L	6,816,880	11/09/2004	Strandberg et al.	709	217	
	6M	6,819,343	11/16/2004	Sobeski et al.	715	848	
	6N	6,819,345	11/16/2004	Jones et al.	345	856	
	6O	6,834,302	12/21/2004	Harvell	709	224	
	6P	6,842,779	01/11/2005	Nishizawa	715	757	
	6Q	6,879,994	04/12/2005	Matsliach et al.	709	204	
	6R	6,938,041	08/30/2005	Brandow et al.	707	10	
	6S	7,039,857	05/02/2006	Beck *et al.*	715	500.1	
	6T	7,039,859	05/02/2006	Sundaresan	715	513	
	6U	7,076,737	07/11/2006	Abbott et al.	715	744	
	6V	7,107,548	09/12/2006	Shafron	715	826	
	6W	7,216,300	05/08/2007	Dang	715	783	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	6X	"Alexa Why Crawl", 1 page, downloaded from www.alexa.com/support/why_crawl.html, January 1999.
	6Y	GIF Image 590x329 pixels, Alexa, 1 page, downloaded from www.alexa.com/tour/images/alexa_overview.gif, January 1999.
	6Z	"It's X-treme!", Alexa, PC Magazine: The Best of 1998, 1 page, downloaded from www.zdnet.com/pcmag/special/bestof98/internet5.html, January 1999.
	6AA	"Search While You Surf", PC Magazine: Search the Web, by Sarah ROBERTS-WITT, 1 page, downloaded from www.zdnet.com/pcmag/features/websearch98/surf.html, January 1999.

EXAMINER	DATE CONSIDERED
/KENNY LIN/	09/24/2015

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	7A	7,222,303	05/22/2007	Oren et al.	715	744	
	7B	7,356,569	04/08/2008	Kembel et al.	709	217	
	7C	7,574,649	08/11/2009	Safars *et al.*	715	200	
	7D	7,756,967	07/13/2010	Kembel et al.	709	224	
	7E	7,660,868	02/09/2010	Kembel et al.	709	217	
	7F	7,792,947	09/07/2010	Kembel et al.	709	224	
	7G	8,020,083	09/13/2001	Kembel et al.	715	201	
	7H	8,346,887	01/01/2013	Kembel et al.	709	217	
	7I	8,510,406	08/13/2013	Kembel et al.	709	217	
	7J	8,510,407	08/13/2013	Kembel et al.	709	217	
	7K	2001/0042107	11/15/2001	Palm	709	218	
	7L	2002/0065896	05/30/2002	Burakoff et al.	709	206	
	7M	2002/0078136	06/20/2002	Brodsky et al.	709	203	
	7N	2002/0089526	07/11/2002	Buxton et al.	345	700	
	7O	2002/0089536	07/11/2002	Dang	345	749	
	7P	2002/0091697	07/11/2002	Huang et al.	707	10	
	7Q	2002/0130900	09/19/2002	Davis	345	744	
	7R	2002/0161879	10/31/2002	Richard	709	223	
	7S	2003/0051027	03/13/2003	Aupperle et al.	709	224	
	7T	2003/0069944	04/10/2003	Barlock et al.	709	220	
	7U	2004/0041836	03/01/2004	Zaner et al.	345	751	
	7V	2004/0165007	08/26/2004	Shafron	715	781	
	7W	2005/0273718	12/08/2005	Naas	715	745	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	7X	Online document; MindSpring, My Yahoo!; ©MindSpring Enterprises, Inc.; http://www.mindspring.com/myyahoo/contents.htm; December 1997, pages 1-16
	7Y	MORRISON, Michael, XML Unleashed, Sams Publishing, December 21, 1999, 5 pages.
	7Z	FLANAGAN, David, "JavaScript: The Definitive Guide", 3rd Edition, O'Reilly, June 1998, 6 pages.
	7AA	Microsoft Computer Dictionary, Fifth Edition, 2002, Definition of "Web Browser".
	7BB	WILLIAMS, Margot, "Cyberspace Calendars: The Web's Growing Date Base", November 30, 1998, The Washington Post, page 1.

EXAMINER	DATE CONSIDERED
/KENNY LIN/	09/24/2015

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	8A	2008/0134018	06/05/2008	Kembel et al.	715	234	
	8B	2008/0163202	07/03/2008	Kembel et al.	717	178	
	8C	2008/0229217	09/18/2008	Kembel et al.	715	760	
	8D	2008/0040681	02/14/2008	Synstelien et al.	715	765	
	8E	2010/0235757	09/16/2010	Kembel et al.	715	745	
	8F	2010/0257442	10/07/2010	Kembel et al.	715	234	
	8G	2012/0117479	05/10/2012	Kembel et al.	715	736	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	8H	BOTT, Ed., *et al.*, "Special Edition Using Windows 95 with Internet Explorer 4.0", Publisher: Que, February 17, 1998, pages 585 and 435.
	8I	McFEDRIES, Paul, "Windows 98 Unleashed", Publisher: Sams, May 12, 1998, pages 594-596.
	8J	McFEDRIES, Paul, "Windows 98 Unleashed", Publisher: Sams Publishing, May 12, 1998, pages xix, xx, xxi, xxiv, 2-4, 44-46, 69, 70, 79, 80, 97-116 ,148, 158-163, 251, 551, 787-792, 799-807, 885, 899, 900, and 904-906.
	8K	McCRICKARD, D. Scott, *et al.*, "Supporting Information Awareness Using Animated Widgets", Proceedings of the 7th USENIX Tel/Tk Conference, February 14-18, 2000, 12 pages.
	8L	"Streaming Internet Technologies", PR Newswire, May 18, 1999, 2 pages.
	8M	"NewsEdge Delivers the Power of Real-Time News in a Browser", Business Wire, November 9, 1998, 3 pages.
	8N	McCARTNEY, Terrance Paul, "End-User Construction and Configuration of Distributed Multimedia Applications", ProQuest Dissertations and Theses, 1996, 197 pages.
	8O	"Microsoft Eyes Marimba's Castanet", by CNET News.com Staff, December 24, 1996, printed from <http://news.cnet.com/Microsoft-eyes-Marimbas-Castanet/2100-1001_3-257491.html>, 2 pages.
	8P	WILLIAMS, Dennis, "Application Delivery on a Grand Scale", Network World Fusion, March 22, 1999, printed from <http://www.networkworld.com/reviews/0322revmarimba.html>, 4 pages.
	8Q	WHITEHEAD et al., "WEBDAV: IETF Standard for Collaborative Authoring on the Web", September and October 1998, Retrieved from the Internet <URL:ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=722228>, pages 1-7 as printed.

EXAMINER	DATE CONSIDERED
/KENNY LIN/	09/24/2015

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /KL/

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13975227	KEMBEL ET AL.
	Examiner	**Art Unit**
	KENNY LIN	3649

CPC- SEARCHED		
Symbol	**Date**	**Examiner**

CPC COMBINATION SETS - SEARCHED		
Symbol	**Date**	**Examiner**

US CLASSIFICATION SEARCHED			
Class	**Subclass**	**Date**	**Examiner**
ID			

SEARCH NOTES		
Search Notes	**Date**	**Examiner**
IDS considered	9/24/15	KL
EAST keyword search	9/24/15	KL
limited CPC search G06F3/0484 17/30861 17/30899	9/24/15	KL

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

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	13/975,227
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	August 23, 2013	2447

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	1A	5,297,250	03/22/1994	Leroy et al.	715	763	
	1B	5,761,071	06/02/1998	Bernstein et al.	364	479.07	
	1C	5,778,187	07/07/1998	Monteiro et al.	395	200.61	
	1D	5,793,964	08/11/1998	Rogers et al.	395	200.32	
	1E	5,892,905	04/06/1999	Brandt et al.	395	187.01	
	1F	5,915,001	06/22/1999	Uppaluru	379	88.22	
	1G	6,144,990	11/07/2000	Brandt et al.	709	203	
	1H	6,307,574	10/01/2001	Ashe et al.	715	765	
	1I	6,324,578	11/27/2001	Cox et al.	709	223	
	1J	6,421,694	07/16/2002	Nawaz et al.	707	526	
	1K	7,257,638	08/14/2007	Celik et al.	709	231	
	1L	7,290,217	10/30/2007	Jones et al.	715	764	
	1M	7,478,142	01/13/2009	Veditz	709	218	
	1N	8,521,833	08/27/2013	Kembel et al.	709	217	
	1O	8,621,034	12/31/2013	Kembel et al.	709	217	
	1P	2001/0011341	08/02/2001	Hayes, Jr., et al.	712	11	
	1Q	2002/0054085	05/01/2002	Taylor et al.	345	744	
	1R	2002/0136167	09/26/2002	Steele et al.	370	260	
	1S	2013/0339866	12/19/2013	Kembel et al.	715	738	
	1T	2013/0339867	12/19/2013	Kembel et al.	715	738	
	1U	2014/0101559	04/10/2014	Kembel et al.	715	736	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO
	1V	EP 798634 A1	10/01/1997	Europe				

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	1Y	"Customizing the Active Desktop", Windows 98 Unleashed, published May 12, 1998, retrieved from the Internet from <http://my.safaribooksonline.com/print?xmlid=0-672-31235-2/ch05lev1sec3>, 9 pages.
	1Z	ROSE, Charlton, "Windows: Pop-Up Dialog Boxes", November 28, 1996, retrieved from the Internet <URL: http://sharkysoft.com/archive/1997/jsa/content/008.html>, 2 pages.
	1AA	No Stated Author, "Window Spawning and Remotes: Window Attributes - Doc JavaScript", created November 18, 1997, retrieved from the Internet <URL: http://webreference.com/js/column7/attributes.html>, 4 pages.
	1BB	MERRICK *et al.*, "Web Interface Definition Language (WIDL)", September 22, 1997, retrieved from the Internet: <URL: http://www.w3.org/TR/NOTE-widl>, 14 pages.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	13/975,227
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	August 23, 2013	2447

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	2A	No Stated Author, "CoffeeCup: Uploading Files to Your Server", December 31, 1996, retrieved from the Internet <URL: http://www.coffeecup.com/help/articles/uploading-files-to-your-server/>, 2 pages.
	2B	ELLERMAN, Castedo, "Channel Definition Format (CDF)", World Wide Web Consortium (W3C), available at http://www.w3.org/TR/NOTE-CDFsubmit.html, March 9, 1997, 10 pages.
	2C	"HTML 4.0 Specification", World Wide Web Consortium (W3C), available at http://www.w3.org/TR/1998/REC-html40-19980424.html, revised April 24, 1998, 30 pages.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 0 798 634 A1

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
01.10.1997 Bulletin 1997/40

(51) Int. Cl.[6]: **G06F 9/44**

(21) Application number: **97103091.1**

(22) Date of filing: **26.02.1997**

(84) Designated Contracting States:
DE FR GB NL SE

(30) Priority: **28.02.1996 US 607939**

(71) Applicant: **Sun Microsystems**
Mountain View, California 94043-1100 (US)

(72) Inventors:
- **Hiura, Hideki**
Mountain View, California 94040 (US)
- **Sato, Hiroko**
San Jose, California 95134 (US)

(74) Representative: **Kahler, Kurt, Dipl.-Ing.**
Patentanwälte
Kahler, Käck, Fiener et col.,
Vorderer Anger 268
86899 Landsberg/Lech (DE)

(54) **Method and system for creating user interface independent programs**

(57) An apparatus and method for separating the design and implementation of a user interface ("the user interface logic") from the design and implementation of the functional portion of a software program (the "core logic"). The present invention uses an object-oriented programming model in which one or more look and feel agents (304) act as servers for one or more logic objects (302). The look and feel agent (304) controls the appearance and behavior of the user interface, while logic objects (302) perform the functions of the software program. A look and feel agent (304) does not "know" what functions constitute the core logic and the logic objects (302) do not "know" what the user interface looks like or how it behaves.

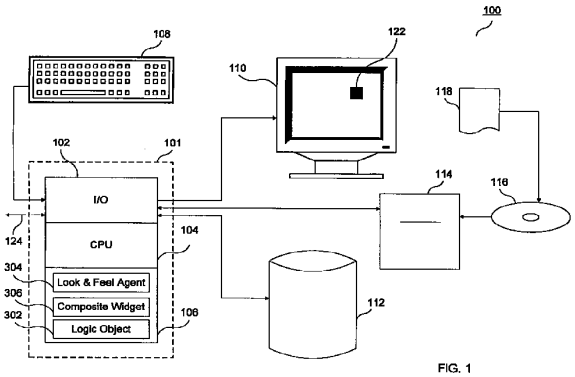


FIG. 1

EP 0 798 634 A1

Printed by Rank Xerox (UK) Business Services
2.14.14/3.4

Description

This invention relates to generating a display on a computer screen and, more particularly, to a method and apparatus for separating the design and development of user interface functions from the design and development of core logic functions in a data processing system.

BACKGROUND OF THE INVENTION

A software program that is executed by a data processing system must have a way to "talk" to the world outside the computer system. For example, many software programs include a "graphical user interface" (GUI) that allows a human being using the software to give instructions to the software by moving a pointer on a display device with a mouse, a touchpad, or the like. The Windows operating system is an example of a software program that interfaces with the user via a GUI. ("Windows" is a trademark of Microsoft, Inc.) Another example of an operating system that uses a GUI is the OpenLook operating system, which is manufactured by Sun Microsystems. "OpenLook" is a trademark or a registered trademark in the U.S. and foreign countries of Sun Microsystems. Another example of an operating system that uses a GUI is the OpenStep operating system, which is manufactured by Next, Inc. "OpenStep" is a trademark of Next, Inc.

It is desirable for software programs to use GUIs when interfacing with human users because human users find GUIs easier to use than traditional character-based computer interfaces. As a rule, however, GUIs are more complex than traditional character-based interfaces and take more time and effort to design and program. Thus, GUIs are more expensive and take more time to develop than non-graphical, character-based user interfaces.

Generally speaking, software that uses a GUI performs several functions. First, the software must be able to display elements on the display device and must be able to adjust the displayed information in response to actions by the user, such as the user moving a cursor on the display device with a mouse. This function is an example of a "user interface function." Second, the software must be able to perform the actions indicated by the user via the user interface (such as performing one of a list of optional functions chosen by the user). These functions are examples of "core logic" functions. Conventionally, software programs have contained both user interface functions and core logic functions. For example, within a single software program, a core logic function might make calls to a user interface function that opens a new window on the display device. In such conventional programs, the call to the user interface function (where the call includes the name of the user interface function) is an integral part of the core logic.

Most software is designed to operate with a single GUI. For example, the Microsoft "Windows" operating system expects to operate using a conventional Windows GUI. The GUI used with Windows will always look a certain way and there is no provision within Windows to use a different GUI. Modifying a program written to run under Windows to use a different GUI would involve extensive modifications to the core logic of the program. In other words, software programs written to run under Windows is tied to the Windows GUI and cannot be easily changed.

It is desirable to be able to use any user interface with any software program. If the software program can operate with any user interface, the design of the user interface can be changed at will without having to change the core logic of the software program itself. Such a scheme would, for example, allow one or more GUIs to be developed independently of the core logic of the software program without impacting the design or complexity of the core logic of the software program. In addition, it would be easy to use different GUIs under different circumstances, since the only time involved in switching between GUIs would be the time required to develop or install the new GUI itself. No changes to the core logic of the software program would be required.

As discussed above, conventional software programs mix user interface functions and core logic functions and intertwine the operation of the two types of functions. Another problem arising from the mixing of user interface functions and core logic functions is that certain computer programmers are expert at writing computer programs for user interface functions or for logic functions, but not for both. Adding a different user interface to a software program is a problem for a computer programmer who is expert in core logic programming but who is not expert in user interface programming. Similarly, if the user interface logic is too closely tied to the core logic, it creates problems for a programmer who is expert in user interface programming, but not in core logic programming.

Conventional software sometimes allows a software program to operate with different user interfaces. This usually is accomplished by re-linking the core logic software so that it is linked to run with a new user interface. Before the relinking process can be performed, the core logic must be modified to refer to the new user interface. In other conventional software, the software is able to access a common "Application Program Interface" (API) layer that allows the software to use one of a plurality of user interfaces. In this case, however, the software program controls which user interface it uses and controls the initial selection of that user interface within the API. Thus, the functionality of the core logic is not completely separate from the choice and functionality of the user interface

SUMMARY OF THE INVENTION

The present invention provides an apparatus and method for separating the design and implementation of a user

interface from the design and implementation of the functional portion of a software program (the "core logic"). The present invention uses an object-oriented programming model in which one or more "look and feel agents" (hereinafter "L&F agents") act as servers for one or more logic object clients. A L&F agent controls the appearance and behavior of the user interface, while a logic object performs the functions of the software program. A L&F agent does not "know" what functions constitute the core logic and the core logic does not "know" what the user interface looks like or how it behaves.

In accordance with the purpose of the invention, as embodied and broadly described herein, the invention relates to a method of controlling the appearance and behavior of a display device in a data processing system, including the steps of:

defining by a look and feel agent, an appearance of a widget using configuration information that is not a part of the look and feel agent; and
performing, by a core logic object, a core logic function;
determining, by the core logic object during performance of the core logic function, that data must be displayed on the display device;
sending information from the core logic object to the look and feel agent, the data representing the data to be displayed; and
displaying, by the widgets of the look and feel agent, the data sent by the core logic object.

BRIEF DESCRIPTION OF THE DRAWINGS

The objects, features, and advantages of the system of the present invention will be apparent from the following description, in which:

Fig. 1 illustrates an exemplary computer system in accordance with a preferred embodiment of the present invention.
Fig. 2 is a representation of an "object world" in a preferred embodiment of the present invention.
Fig. 3 is a block diagram showing a plurality of logic objects communicating with a plurality of look and feel agents of Fig. 2.
Figs. 4(a) and 4(b) are diagrams showing steps performed by an exemplary logic object and an exemplary look and feel agent to communicate with a user through a GUI.
Figs. 5(a) through 5(c) show exemplary functions called by the logic object of Fig. 3 to interface between the logic object and the look and feel agent.
Fig. 6 shows source code for an example logic object.
Fig. 7 is a flow chart of exemplary steps performed by a look and feel agent.
Fig. 8 shows a syntax of configuration information used by the look and feel agent.
Fig. 9 shows an example of configuration information in accordance with Fig. 8.
Fig. 10 shows an example of classes of widgets created by the look and feel agent of Fig. 3.
Fig. 11 is a flow chart of steps performed by a first exemplary composite widget.
Fig. 12(a) shows an example of a window displayed in accordance with the example configuration information of Fig. 9 and the steps of Fig. 11.
Fig. 12(b) shows an example of a pull-down menu in the window of Fig. 10.
Fig. 13 is a flow chart of steps performed by a second exemplary composite widget.
Fig. 14 shows an example of a screen display generated in accordance with the steps of Fig. 13.
Fig. 15(a)-15(c) show an example of a composite widget.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The following description is of the best presently contemplated modes of carrying out the invention. This description is made for the purpose of illustrating the general principles of the invention and is not to be taken in a limiting sense.

I. Operating Environment

The environment in which the present invention is used encompasses a general distributed computing system 100, wherein general purpose computers, workstations, or personal computers are connected via communication links of various types, in a client-server arrangement, wherein programs and data, many in the form of objects, are made available and shared by various members of the system for execution and access by other members of the system.

Some of the elements of a general purpose workstation computer are shown in Fig. 1. Fig. 1 shows a processor 101, which has an input/output ("I/O") section 102, a central processing unit ("CPU"), 104, and a memory section 106.

Memory section 106 includes a logic object 302, and a look and feel agent 304 (hereinafter "L&F" agent 114), and a composite Widget 306. Elements 302, 304, and 306 and their uses are discussed below in detail. The I/O section 102 is connected to a keyboard 108, a display unit 110, a disk storage unit 112, and a CD-ROM drive 114. CD-ROM drive 114 can read a CD-ROM medium 116, which typically contains programs 118 and data. A computer display icon 122 is shown on display unit 110. Similar workstations may be connected by a communications path 124 (e.g., an Ethernet network) to form a distributed computer system.

II. A Preferred Embodiment

The present invention is included as a part of Sun Microsystem's L10N Development Kit, version 2.0. The functionality of the L10N Development Kit, which currently uses a graphical user interface, is intended to help computer programmers "localize" software products by tailoring certain aspects of the software products and manuals to various countries in which the software products and manuals are to be distributed. The present invention, however, may be used with any software program that interfaces with a human being and is not limited to use with localization programs or with any particular type of computer software. Moreover, the present invention is not limited to GUIs, but can integrate any type of user interface with the logic performing portion of a computer program. For example, the present invention can be used to add a text-based user interface to a computer program.

The described embodiment of the invention is written in the C++ programming language. C++ is an object-oriented language and, although the present invention will be described in terms of an object-oriented implementation, the present invention could also be implemented without using an object-oriented implementation. The described embodiment utilizes the Solaris operating system. Solaris is a version of the UNIX operating system that is manufactured by Sun Microsystems, Inc. Solaris is a trademark of Sun Microsystems, Inc. "UNIX" is a registered trademark in the United States and other countries, exclusively licensed through X/OPEN, Ltd.

Fig. 2 is a representation of an object world 200 in a preferred embodiment of the present invention. The objects of Fig. 2 are classified into two types: logic objects 102, 104, 107, 108, 112, and 113 and L&F agents 106, 114, 115. Object-oriented programming is well-known to persons of ordinary skill in the art and will not be discussed in detail herein. In a preferred embodiment of the present invention, objects and agents communicate by "object migration" as discussed below.

In the described embodiment, logic objects provide the functionality of the system by performing localization functions. In this embodiment, localization functions are examples of core logic functions. For example, Fig. 2 shows a logic object 102 that performs the functions of "Navigator". The logic objects of Fig. 2 also include: "Dictionary Lookup" 107, "Translation Assistant" 112, "Install" 108, and "Glossary" 113. The specific nature of the core logic functions are not a part of the present invention and will not be discussed in detail. The present invention is directed to separation of the function of the core logic of logic objects from the user interface functions of L&F agent 114. This separation allows the logic objects to operate with L&F agents that implement various user interfaces.

Fig. 3 is a block diagram showing a plurality of logic objects 102, 104 and 112 communicating with a plurality of L&F agents 114, 106 and 115. Each line 302 of Fig. 3 represents a connection established between a logic object and a L&F agent using "object migration," as discussed below. Lines 302 do not necessarily represent separate physical connections. Each L&F agent includes a plurality of composite widgets, each plurality represented by respective reference numbers 306, 308 and 310.

A logic object communicates with a L&F agent via a "Distributed Object Management" (DOM) system 320. This system passes objects containing predefined information between the logic objects and the L&F agents. In each L&F agent, a "Local Object Manager" (LOM) 330 in the DOM accesses configuration information 320. The LOM 330 then initiates composite widgets in accordance with the configuration information. The LOM interfaces with the composite widgets, which perform GUI functions. Composite widgets 306, 308 and 310 are designed to operate with three different GUI's. Motif, OpenStep, and MS-Windows are shown in the Figure as examples. The LOM 330 is the same in agents 106, 114 and 115.

In the present invention, multiple logic objects may act together as an individual process or as an individual thread within a process. Multiple logic objects may also act independently as separate threads or as separate processes. The system may contain any number of L&F agents, which interface to various GUI's. Respective L&F agents in the system may control different respective user interfaces at a given time. Some L&F agents may be on a different network node than all or some of the logic objects.

The following paragraphs discuss L&F agent 114 and logic object 102, although the discussion is equally applicable to any L&F agent and to any logic object in the system. L&F agent 114 is a service provider that handles the user interface (e.g., a GUI) for a client (a logic object). It is an important aspect of the present invention that the user interface is completely handled by the L&F agent.

The appearance and behavior of the user interface is entirely controlled by the L&F agent, as described in detail below. L&F agent 114 is a "service provider" for the logic objects. The logic objects interface with L&F agent 114 for visual feedback, interactive input from a human being, and any other user-related tasks. The logic objects send requests

to L&F agent 114 for visual feedback on GUI events that require a user's attention. L&F agent 114 receives interaction from a human via the user interface, converts the interaction to a functional request, and sends the functional request to an appropriate logic object. Thus, the logic object does not "know" what GUI is being used.

In the described embodiment, L&F agent 114 acts as a single server running on the user's workstation. Similarly, at least one logic object, such as delivery system logic object 102, functions as a window manager in an X Window system. As discussed above, a preferred embodiment of the present invention uses an object-oriented methodology. Specifically, the implementation may use DOE/DOMF (Distributed Objects Everywhere/Distributed Objects Messaging Format) to communicate between objects.

L&F agent 114 creates and accesses a plurality of composite widgets 306. A "widget" is an object representing a display element, such as a requester box. In the described embodiment, the composite widgets of L&F agent 114 interface with Motif, revision 2.2 in accordance with configuration information 320. It should be understood by persons of ordinary skill in the art that other user interfaces can be used in place of Motif. For example, the present invention can be used with OpenStep, with NextStep, with Windows-95, or with a text-based interface.

Logic object 102 interfaces with L&F agent 114 for the following purposes:

1. Physical communication between the agent and the logic object.
2. Instance name binding. Each display element is considered an "instance" of a type of display object. Logic object 102 starts the display of a display element by binding a new instance name for the display element to display symbols stored in as associated configuration information 320. Configuration information 320 is discussed in more detail in connection with Fig. 9.
3. Upstream message handling. Besides the instance/name binding, the logic objects sends messages needed to build the look of and feel of the objects, such as a list of the choices in a particular data format.
4. Downstream message handling. In certain implementations a logic object may request a callback (at the time that it initiates an object), where the callback is to be performed, e.g., when the user clicks on a choice in a list of choices. If logic object 102 requires a "callback", L&F agent 114 interfaces its own callbacks registered to the composite widget layer of L&F agent 114.
5. Managing multiple contexts of logic objects. Each L&F agent can communicate with multiple logic objects.
6. Define look and feel policy. Because logic object 102 does not have any look and feel policy, L&F agent 114 defines such a policy from the external configuration information 320 associated with the L&F agent 114. Configuration information 320 is discussed in more detail in connection with Fig. 9.

Figs. 4(a) and 4(b) are diagrams showing steps performed by the logic object 102 and the L&F agent 114. It will be understood by persons of ordinary skill in the art that the steps of Fig. 4 are embodied by a CPU, such as CPU 104 of Fig. 1, that executes instructions stored in a memory of the computer system 100.

In step 401, logic object 102 calls a "configure user interface" routine and passes it a name identifying the configuration information 320. This information is passed to L&F agent 114.

In step 402, LOM 314 reads and parses configuration information 320. Configuration information 320, which is discussed below in more detail, describes a screen layout of the user interface, a list of resources of widgets, and a list of reactions of the logic object to the user's actions. Exemplary user actions include pressing a button, selecting an item in a list, pressing a key, etc. LOM 314 then creates an internal widget list in memory 106 in accordance with the information. In step 404 logic object 102 invokes a function "set_cw_resource" (set composite widget resource). The DOM of the logic object 102 migrates this information to the DOM of L&F agent 114. LOM 314 searches its internal "instantiated" widget list (not shown) for a widget ID specified in the set_cw_resource function. In step 406, LOM 314 invokes the proper member function of the proper composite widget and passes the resource data received from the logic object and the configuration information to the widget.

After the user indicates that his input is complete, the composite widget passes the user input to L&F agent 114. The L&F agent 114 notifies the logic object 102. Logic object 102 invokes a look and feel function "get_cw_output" ("get composite widget output,") in step 408. L&F agent 114 searches its internal "instantiated widget list" in step 410 for a widget ID specified in the get_cw_output function. LOM 314 then gets the requested information from the composite widget and, in step 410, returns the information or data to the calling logic object 102.

Fig 4(b) shows an alternate embodiment of the present invention employing "call-backs" between the L&F agent and the logic object. In this embodiment, steps 420-432 are performed instead of steps 406-412 of Fig. 4(a). In step 420, logic object 102 calls a "bind-callback" function. The DOM of logic object 102 communicates the name of the logic objects callback function to the agent 114, which "binds" the logic object's call back function name to the name of an existing callback function in the agent.

Thereafter, whenever the user performs an action that has been defined in the L&F agent to invoke the agent's callback function the DOM of the agent will also notify logic object 102 that a callback has occurred (see step 426). The logic object can then request the user input from the L&F agent 114, as discussed above in connection with Fig. 4(a).

Fig. 5 lists the calls that logic object 102 can issue to communicate with L&F agent 114. These calls include:

bind_cb, set_cw_resource, set_cw_input, and display-GUI.

Fig. 6 shows source code for an example logic object. The logic object calls "config_ui" at line 602; calls "bind_callback" at line 604, and calls set_cw_resource at lines 606.

Fig. 7 is a flow chart of exemplary steps performed by an L&F agent. Initially, the L&F agent reads and parses configuration information 320 in step 702. In step 704, in accordance with the configuration information, the L&F agent instantiates composite widgets required to implement the GUI to be used.

If, in step 706, the L&F agent receives a set_cw_resource request, the L&F agent searches its "instantiated widget list" in step 708 for a widget that performs the function in the request. In step 710, the L&F agent invokes the proper member function of the composite widget. The resource data in the request is passed as an argument to the invocation of the member function.

If, in step 712, the L&F agent receives a get_cw_output request, the L&F agent searches its "instantiated widget list" in step 714 for a widget that performs the function in the request. In step 716, the L&F agent invokes the proper member function of the composite widget and receives data from the composite widget. In step 718, the L&G agent returns the received data to the logic object. In step 720, the L&F agent notifies the logic object of any user action that requires a reaction from the logic object.

Fig. 8 shows a syntax of configuration information 320. As shown in Fig. 8 at 702, the configuration information preferably has three sections: a LAYOUT section, a RESOURCE section, and an ACTION section. Each section starts with a keyword (LAYOUT, RESOURCE or ACTION) followed by a colon. The LAYOUT section defines the type of the widgets used. The LAYOUT section includes one or more layout statements, each of which includes a widget ID, a class of the widget ID, either another widget ID or a widget tree. Fig. 10 shows exemplary widget classes. An example widget tree might look like:

```
action1(\
action2 (act2_1, act2_2),\
action3, \
action4 (\
        act4-1, act4_2, act4_3 (\
                act4_3_1)\
                )\
  ).
```

The widget name is more frequently used as configuration information than is the widget tree. The widget tree above is used by LOM 314 to construct a pull-down menu. For example, the delivery subsystem of Fig. 12(b) has a menu button "File" with two subcategories, "deliver" and "quit". Note that "ROOT" is a reserved word in the configuration information 320 representing the root in the widget tree in the configuration information. Whether the widget class "actionMenuW" is rendered as a pull-down menu button or not is decided by the widget itself.

The RESOURCE section of configuration information 320 has one or more resource statements of the form:

widget_id.resource: value

For example, for "load.label: Load Glossary" the action-Menu "load" has a label "Load Glossary".

The ACTION section of configuration information 320 defines actions to be taken upon actions by the human user. Some widgets may produce events which should be handled by the logic or any trigger value changes of other widgets. Logic may also expect results from widgets as it handles the event. These functionalities can be expressed in the following rules -

```
action_widget_id:          callback        ID(output_widget_id_1,
  output_widget_id_2,...)
or
action_widget_id: <affected_widget_id.resource: value>
```

The first rule tells L&F agent 114 that when an event comes from "action_widget_id", the event handler, "callbackID", from the logic should be invoked with outputs from "output_widget_id" as arguments. Note that output_widget_ids are optional. The logic also needs to register the actual call-back function to L&F agent 114.

With the second format the source of the affected widget is set to the specified value. It is legal to specify more than one event handler as well as affected widgets. The invoking sequence depends on the appearance in the configuration information.

Fig. 9 shows an example of configuration information in accordance with the syntax of Fig. 8. The configuration information includes a LAYOUT section 902, a resource Section 904, and an action section 906.

As discussed above, the LOM of L&F agent 114 instantiates composite widgets in accordance with configuration information 320. Fig. 10 shows classes of composite widgets used that can be created by LOM 314 to be used with the Motif user interface. The classes of Fig. 10 are defined as follows:

- CWObj:
  The CWObj class is the top of the Composite Widget Set tree. The CWObj class is the only class with no superclass. The CWObj class is defined as pure virtual class, it is only to be inherited by the every classes in Composite Widget.

- CWMain Frame:
  The CWMainFrame class provides the frame with menu bar and message area. The CWMainFrame must be created as base window for all logic objects.

- CWTextMsgDF:
  This class contains message area, textfield and confirm buttons. It corresponds to PromptDialog Widget.

- CWPullMenu:
  The CRPullMenu class provides a PullDown menu, label and textfield area.

- CWMenu:
  The CWMenu class is to add extra menu to the menubar part of the CWMainFrame class. The CWMenu class consists of Pulldown menu, cascade buttons, and a label.

- CWBrowser:
  It contains two Selection Box Widgets with two buttons attached to each of the Boxes. It also contains three Label Widgets. The Label widgets are used for the title of the two selection widgets, the label for the left selection widget, and the third is for the right selection widget.

- CWHierarchyBrowser:
  Subclass of CWBrowser. In addition to CWBrowser class, CWHierarchyBrowser class provides the hierarchical data handling scheme listed in the Selection Box. It takes a tree structure containing multiple objects as a initialization input, and returns a list of objects being selected.

- CWListBrowser:
  Subclass of CWBrowser. In addition to CWBrowser class, CWListBrowser class provides the list data handling scheme displayed in the Selection Box. It takes a list structure containing multiple objects as an initialization input, and returns an objects being selected.

- CWMessage:
  MessageDialog class. This class contains message area and confirm buttons.

- CWTextEdit:
  Multi line editable text class.

- CWSelRadioD:
  This class consists of dialog widget that contains message area, radio buttons for selections, and confirm buttons. It will have BulletinBoard for the body parts.

Fig. 11 is a flow chart of steps performed by a first exemplary composite widget. Fig. 13 is a flow chart of steps performed by a second exemplary composite widget. From the viewpoint of logic object 102, the composite widgets of Figs.

11 and 13 perform exactly the same function: to display a list of choices and to allow the user to select one of the choices. In fact, however, the first composite widget implements a graphical user interface, while the second composite widget implements a text user interface. The difference between the two composite widgets is totally transparent to logic object 102. The LOM of L&F agent 114 initially instantiates one or the other of the objects of Figs. 11 and 13, in accordance with configuration information 320.

Display area 1202 of Fig. 12 is generated by the steps of Fig. 11, which implements a graphical user interface. In step 1102, the composite widget receives from the LOM arguments for the member function invoked by the LOM. In step 1104, the member function outputs each choice with a small circle next to it. In step 1106, the member function allows the user to select one of the choices with, e.g., a mouse, and fills in the circle next to the selected choice. In step 1108, once the user has made a final selection, as indicated by, e.g., double clicking the mouse button, the member function returns the user's choice to the LOM.

Display area 1402 of Fig. 14 is generated by the steps of Fig. 13, which implements a text user interface. In step 1302, the second composite widget receives from the LOM arguments for the member function invoked by the LOM. In step 1304, the member function outputs each choice to the display screen. Note that the second composite widget does not interface with a windowing system, as does the composite widget of Figs. 11 and 12. In step 1306, the member function allows the user to select the choices by moving a cursor virtually using, e.g., keys on a keyboard. Each choice is highlighted as the cursor passes over it. In step 1308, once the user has made a final selection, as indicated by, e.g., hitting the "return" key on the keyboard, the member function returns the user's choice to the LOM.

Figs. 15(a) and 15(b) show an example composite widget. The composite widget shown is the widget to generate the main window in a windowing subsystem. Thus, the widget generates a menubar, a window body, and a footer area.

As will be understood by persons of ordinary skill in the art, a system in accordance with the present invention may contain any number of widgets in an L&F agent, and those widgets may perform any functionality required to generate a desired user interface. As discussed above, the widgets may implement any type of desired user interface, such as a graphical user interface or a text user interface. The type of user interface implemented is transparent to any logic objects interfacing with the L&F agent.

Several preferred embodiments of the present invention have been described. Nevertheless, it will be understood that various modifications may be made without departing from the spirit and scope of the invention.

In describing the preferred embodiment, a number of specific technologies used to implement the embodiments of various aspects of the invention were identified and related to more general terms in which the invention was described. However, it should be understood that such specificity is not intended to limit the scope of the claimed invention.

Claims

1. A method of controlling the appearance and behavior of a display device in a data processing system, including the steps of:

   defining, by a look and feel agent, an appearance of a widget using configuration information that is not a part of the look and feel agent; and
   performing, by a core logic object, a core logic function;
   determining, by the core logic object during performance of the core logic function, that data must be displayed on the display device;
   sending information from the core logic object to the look and feel agent, the data representing the data to be displayed; and
   displaying, by the widgets of the look and feel agent, the data sent by the core logic object.

2. The method of claim 1, further including the step of returning control by the look and feel agent to the core logic object when the look and feel agent receives a callback from the widget.

3. The method of claim 1, wherein the configuration information has a layout section, a resource section, and an action section.

4. The method of claim 1, wherein the sending step includes the step of migrating objects between the core logic object and the look and feel agent.

5. The method of claim 1, further including the steps of:

   defining, by a second look and feel agent, a second widget using second configuration information that is not a part of the second look and feel agent and that is different from the first configuration information.

6. The method of claim 1, wherein the configuration information corresponds to a first user interface.

7. The method of claim 5, wherein the second configuration information corresponds to a second user interface.

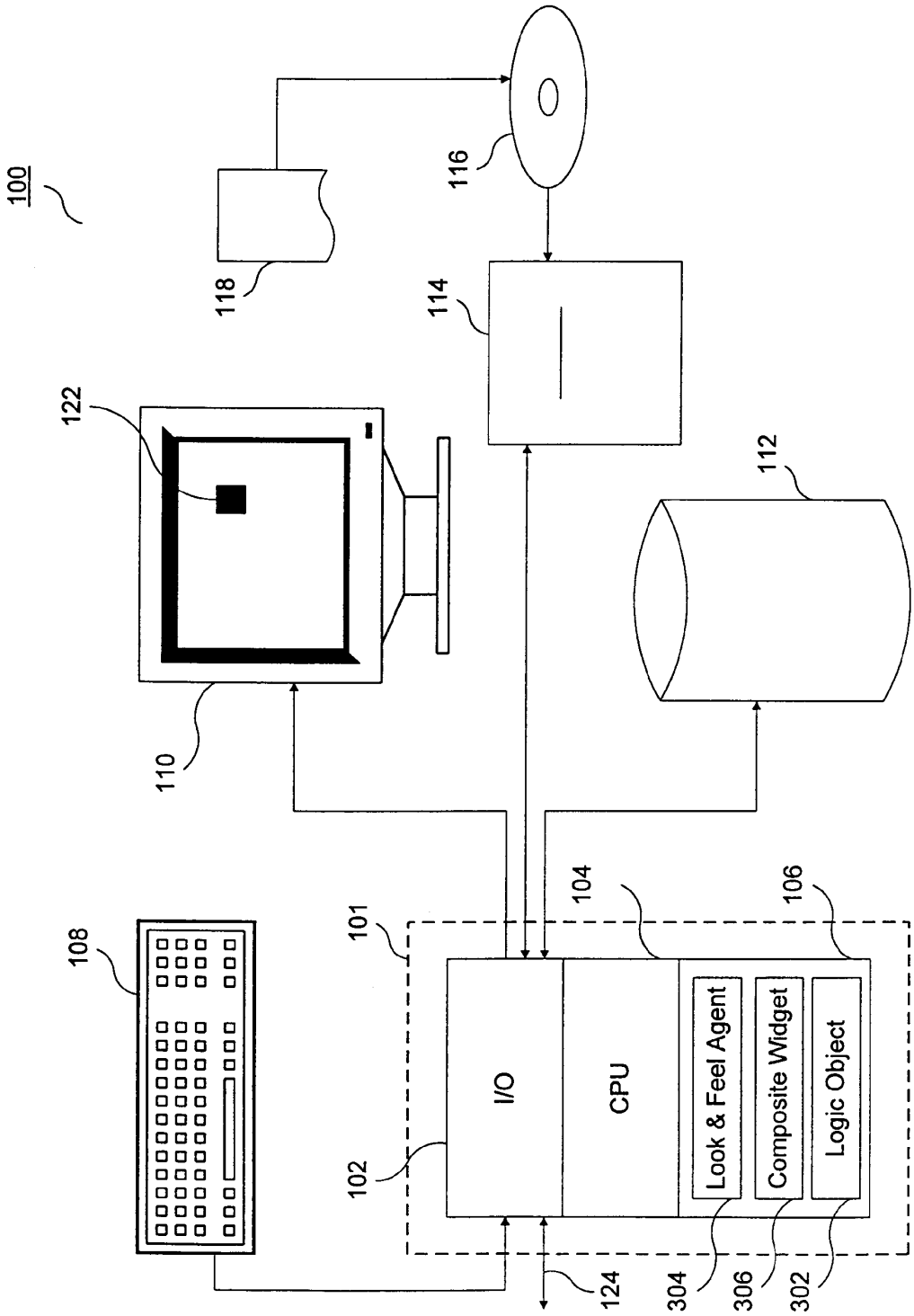

100
118
116
114
122
112
110
108
101
104
106
I/O
CPU
Look & Feel Agent
Composite Widget
Logic Object
102
124
304
306
302

FIG. 1

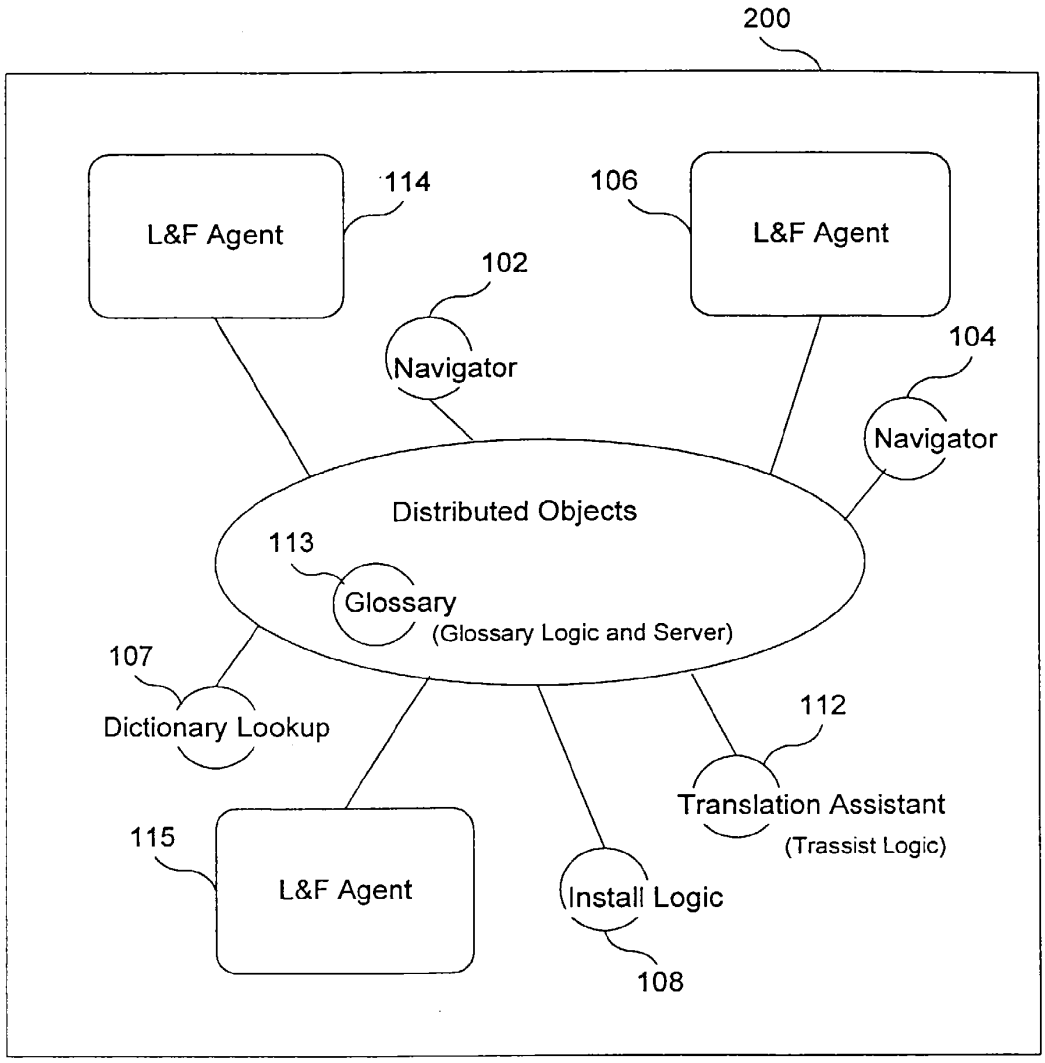

200
L&F Agent
114
106
L&F Agent
102
Navigator
104
Navigator
Distributed Objects
113
Glossary
(Glossary Logic and Server)
107
Dictionary Lookup
112
Translation Assistant
(Trassist Logic)
115
L&F Agent
Install Logic
108

FIG. 2

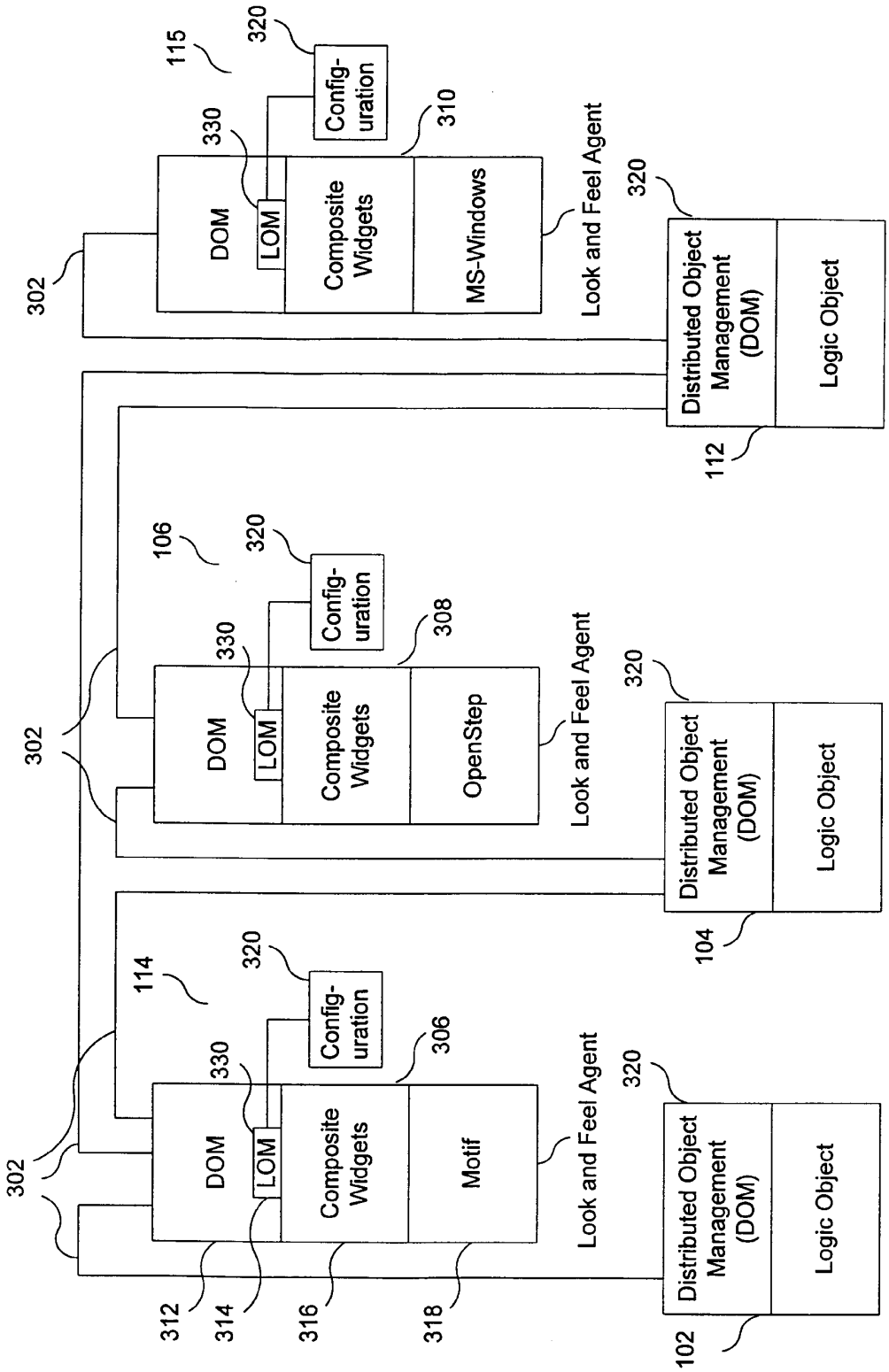

115
320
Config-
uration
330
310
DOM
LOM
Composite
Widgets
MS-Windows
Look and Feel Agent
320
302
Distributed Object
Management
(DOM)
Logic Object
112
106
320
Config-
uration
330
308
DOM
LOM
Composite
Widgets
OpenStep
Look and Feel Agent
320
302
Distributed Object
Management
(DOM)
Logic Object
104
114
320
Config-
uration
330
306
DOM
LOM
Composite
Widgets
Motif
Look and Feel Agent
320
302
Distributed Object
Management
(DOM)
Logic Object
312
314
316
318
102

FIG. 3

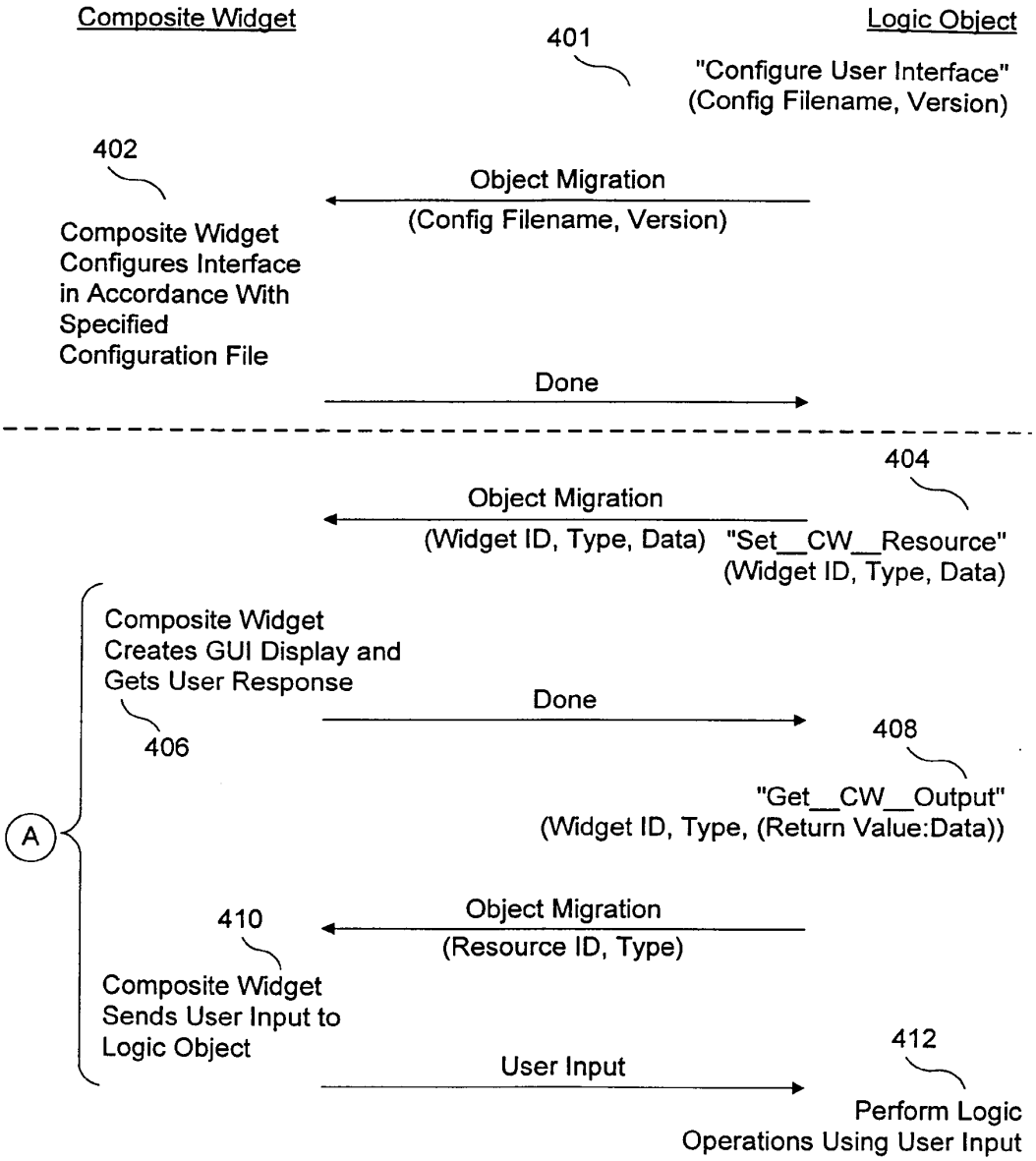

Composite Widget
Logic Object
401
"Configure User Interface"
(Config Filename, Version)
402
Object Migration
(Config Filename, Version)
Composite Widget
Configures Interface
in Accordance With
Specified
Configuration File
Done
404
Object Migration
(Widget ID, Type, Data)
"Set__CW__Resource"
(Widget ID, Type, Data)
Composite Widget
Creates GUI Display and
Gets User Response
Done
406
408
"Get__CW__Output"
(Widget ID, Type, (Return Value:Data))
A
410
Object Migration
(Resource ID, Type)
Composite Widget
Sends User Input to
Logic Object
412
User Input
Perform Logic
Operations Using User Input

FIG. 4(a)

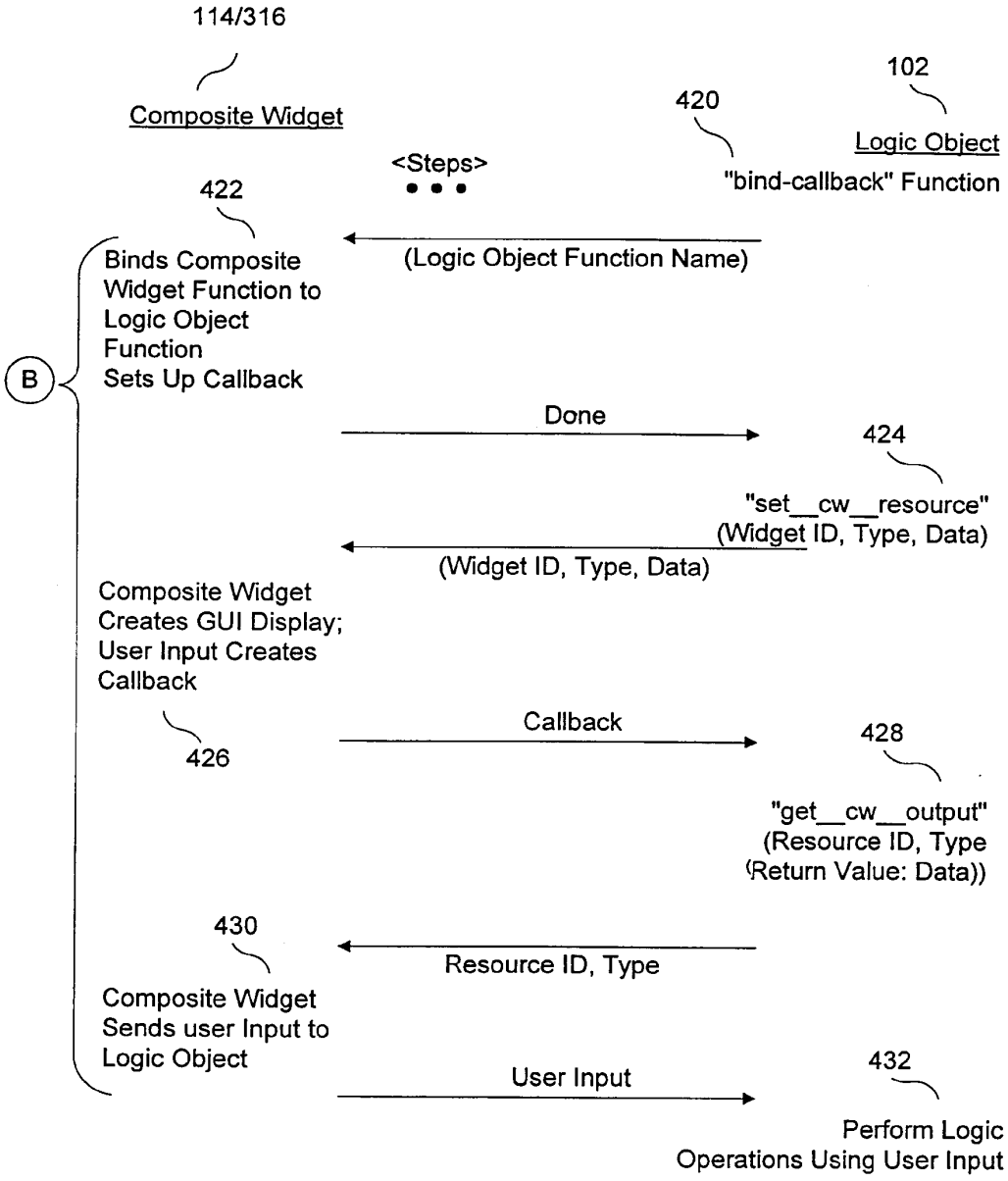

114/316
Composite Widget
102
420
Logic Object
"bind-callback" Function
<Steps>
• • •
422
(Logic Object Function Name)
Binds Composite Widget Function to Logic Object Function
Sets Up Callback
B
Done
424
"set__cw__resource"
(Widget ID, Type, Data)
(Widget ID, Type, Data)
Composite Widget Creates GUI Display; User Input Creates Callback
426
Callback
428
"get__cw__output"
(Resource ID, Type
(Return Value: Data))
430
Resource ID, Type
Composite Widget Sends user Input to Logic Object
User Input
432
Perform Logic Operations Using User Input

FIG. 4(b)

Agents/Brokers Interface

Look&Feel Agent

The *interface* LnFAgent is defined as follows in IDL.

```
interface LnFAgent {
    LnFAgent (

        in const char*,          // configuration filename
        in const char* = "",     // version number
        in const char* = "C",    // locale

    );
    ~LnFAgent();
void bind_cb(

        in const char*,          // callback ID specified in C
        in CallbackType,         // callback routine
        in void*                 // callback data

    );
void set_cw_resource(

        in const char*,          // widget instance name
        in cw_resource,          // resource name
        in const char*           // value

    );
void set_cw_resource(

        in const char*,          // widget instance name
        in CW_Resource,          // resource name
        in int                   // value

    );
void set_cw_input(
```

FIG. 5(a)

```
                in const char*,          // widget instance name
                in int                   // value
            );
        void set_cw_input(

                in const char*,          // widget instance name
                in const char*           // value
            );
        void set_cw_input(

                in const char*,          // widget instance name
                in CW_Data               // value
            );
        void set_cw_input(

                in const char*,          // widget instance name
                in CW_DataList           // value
            );
        void display_gui(
              (void)(*)(void) = NULL // logic routine
            );
};
```

constructor and destructor

LnFAgent() and LnFAgent() are constructor and destructor respectively. LnFAgent() reads the configuration file whose name is the concatenation of the two arguments, "filename" and "version", and creates proper composite widgets.

set_cw_resource() and set_cw_input()

setResource() sets a resource of a widget instance. Depending on the widget type and resource type, set_cw_resource() may take more than two arguments.

set_cw_input() initializes a widget with necessary information.

bind_cb()

From the configuration file Look&Feel agent only learns the IDs of callbacks which should be invoked as an event occurs. We still need a mechanism to locate the callback address by its ID. bind_cb() serves such purpose. If the first argument

FIG. 5(b)

matches the callback ID in the configuration file, the handler specified in the second argument is called.

The type of the handler, "CallbackType", is defined as

```
int (*)(LnFAgentMessageType, void* clnt_data)
```

The second argument, "clnt_data", is the third argument passed in bind_cb().

The type of the first argument "LnFAgentMessage" is a pointer to a struct with two members -

```
typedef struct {
    const char*  widgetID;
    void** result;
} *LnFAgentMessage;
```

The first member identifies where the event comes from. The second member contains the outputs as specified in the configuration file.

The event handler returns 0 if no error happens.

display_gui()

The Look&Feel agent may start to display GUI. The logics wait until the window is destroyed.

FIG. 5(c)

logic.cc

```
#include <stdlib.h>
#include <unistd.h>
#include <iostream.h>
        #include <string.h>
#include "qlist.hh"
#include "LnFAgent.hh"

const. char* MYCONFIG = "xxx.conf";
LnFAgent* myagent;

void
myErrorHandler(void*, const char* msg) {
        cerr << "In myErrorHandler : message is: " <<msg << endl; }

void
myExitHandler(void* msg) {
        cerr << "In myExitHandler : message " << (char*) msg << endl; }

int
myCallback (void*) { cerr << "Callback ..." << endl;
                static int i = 0;
                i = 1 - i; return i; }

int
quitCB(void*) { cerr << "In QuitCB, Exit  0" << endl; exit(0);
                /* not reached */ return 0; }

int
actCB2(void*) {
        cerr << "In actCB2 and sleep" << endl;
        myagent->set_cw_resource("ROOT", "CWmessage", "hi there");
                return 0;                                          602
}

main() {
         myagent = new LnFAgent (myErrorHandler);
                                                                   604
        myagent->config_ui (MYCONFIG);

        myagent->bind_callback("deliverCB", myCallback, NULL);
        myagent ->bind_callback ("quitCB", NULL);
        myagent->bind_callback ("actCB2", actCB2, NULL);
```

Example Logic Object
FIG. 6(a)

```
        // construct medium list
        static char* pp[ ] = { "CD-ROM", "TAPE", "EMAIL", "FILE", NULL };
        static char* qq[ ] = { "/dev/rst0", "/dev/rst1", "", "", NULL };
        static int rr[ ] = { 1, 1, 1, 0, NULL };
        int i;
        QList<RadioList> qlist;
        QListIter<RadioList> qit (qlist);

        for (i=0; pp[i] != NULL; i++) {
                RadioList * r = new RadioList;
                r->label = strdup(pp[i]);
                r->media_path = strdup(qq[i]);
                r->is_read_only = rr[i];
                qit.ins_next(*r);                                          606
        }
        myagent->set_cw_resource("menu1", "CWInput", (CWData*) &qlist);

CWString s1[ ] = {
  {"OS"},
  {"Windows"},
  {"AnswerBook"},
  {"dinner"},
  {"lunch"},
  {"hi"},
  {0}
};
        QList<CWString> slist;
        QListIter<CWString> iter_slist(slist);;
        for(i = 0 ; sl[i].get_value() !=0 ; i++) {                         608
                iter_slist.ins_next(sl[i]);
        }
                myagent->set_cw_resource("browser1", "CWInput", (CWData*) &slist);

                myagent->display_ui(myExitHandler, "It's over");
```

Example Logic Object
FIG. 6(b)

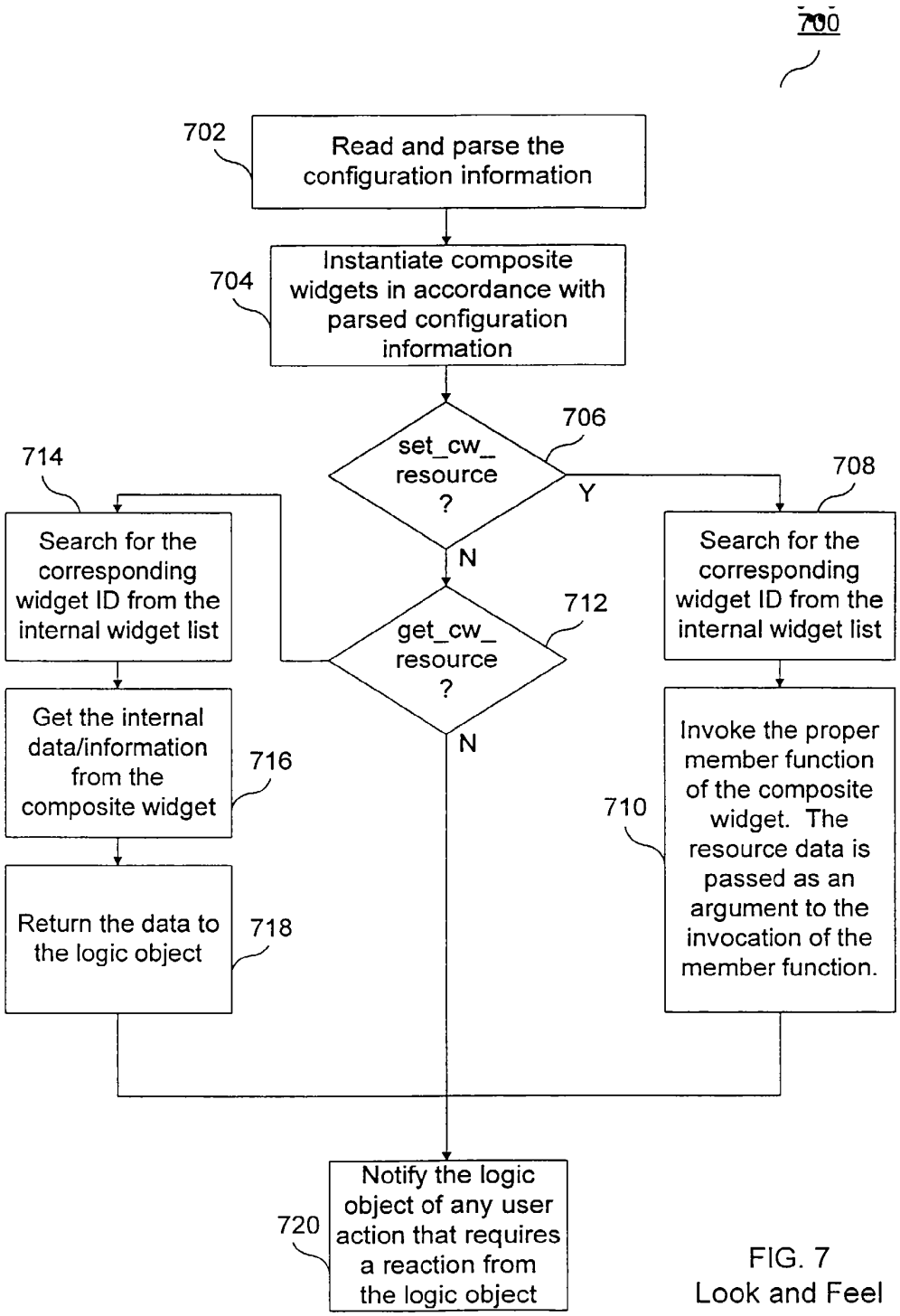


FIG. 7
Look and Feel Agent (Local Object Manager)

Syntax rules used in a config file:

802

config_file::
LAYOUT layout_section RESOURCE resrc_section ACTION act_section

layout_section::
layout_statement...

layout_statement::
WidgetID.WidgetClass: widget_id_list

widget_id_list::
WidgetID / widget_tree

widget_tree::
WidgetID(widget_id_list,...)

resrc_section::
[resrc_statement...]

resrc_statement::
WidgetID.ResourceID: Value

action_section::
[act n_statment...]

action_statement::
WidgetID[.ActionType]: action

action::
single_action | multi_action

single_action::
CallbackID | <resrc_statement> | if_action

if_action:: IF (CallbackID) THEN action [ELSE action]

multi_action:: { action... }

FIG. 8(a)

WidgetID:: string
WidgetClass:: string
ResourceID:: string
Value:: string
ActionType:: string
CallbackID:: string

1. [x] means x can be omitted
2. x... means x can be repeated
3. x/y means x or y
4. "LAYOUT", "RESOURCE" and "ACTION" are pre-defined keywords.
5. "ROOT" is a predefined WidgetID

FIG. 8(b)

xxx.conf

```
#
#       Delivery Subsystem Configuration File
#
#       Words in upper case are pre-defined keywords.
#
#       syntax:
#
#       LAYOUT:
#               parentWidgetID.widgetClass: [ widget_id  |
#                       widget_id(subwidgetID,..) ]
#       RESOURCE:
#               widget_id.resource:         value
#       ACTION:
#               widget_id: [ callbackID(widget_id...)  |
#                               <widget_id.resource:        value> ]
#
LAYOUT
        ROOT.actionW:       action1(\
                                    action2(act2_1, act2_2), \
                                    action3, \
                                    action4(\
                                            act4_1, act4_2, act4_3(\
                                                    act4_3_1) \
                                            ) \
                                    )
#       ROOT.actionW:                       help1
        ROOT.shortExclusiveListW:           menu1
        ROOT.browserW:                      browser1

RESOURCE
        action1.CWlabel:            Deliver
        action2.CWlabel:            Change Msg Area
        action3.CWlabel:            QUIT
        act2_1.CWlabel:       ACT2_1
#       help1.CWlabel:        HELP ME
#       ROOT.CWmessage:  mmmmmm
#       menu1.CWlabel:        Media
#       browser1.CWlabel:           Deliverables

#INPUT:
#       menu1:                dataList
#       browser1:             dataTree
#
```

902

904

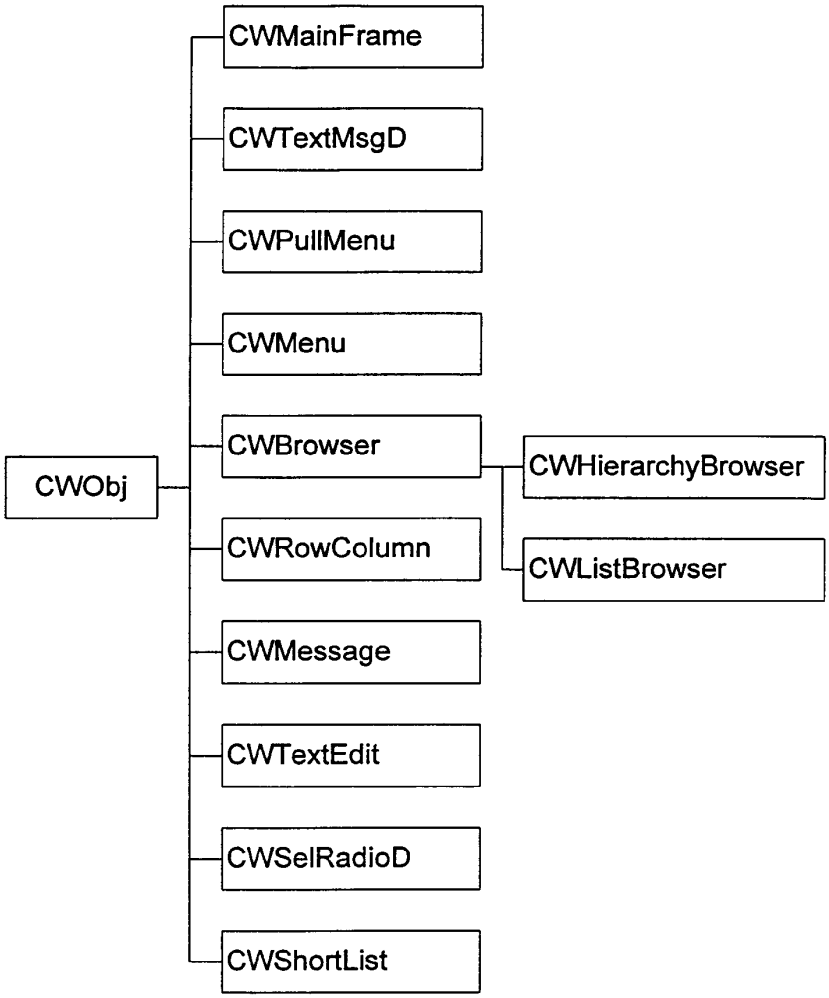
Example Configuation Info
FIG. 9(a)

```
#OUTPUT:
#       menu1:          data
#       browser1:       dataList
#
# p.s.  Showing INPUT and OUTPUT sections here is for your information
        only.  Users can not change the pre-defined input and output types of
906     the composite widgets
        L&F Agent will not recognize INPUT and OUTPUT commands.

ACTION
        act2_1: IF (deliverCB) THEN \
                                <ROOT.CWmessage: hello>

        act2_2: IF (deliverCB) THEN \
                                <ROOT.CWmessage: hello> \
                        ELSE { <ROOT.CWmessage: world> actCB2 }
        action3:        quitCB
#       act2_1: quitCB
```

Example Configuration Information
FIG. 9(b)



Composite Object ClassHierarchy
FIG. 10

Composite Widget #1 (Lets User select one of a group of choices)
(Windows version)

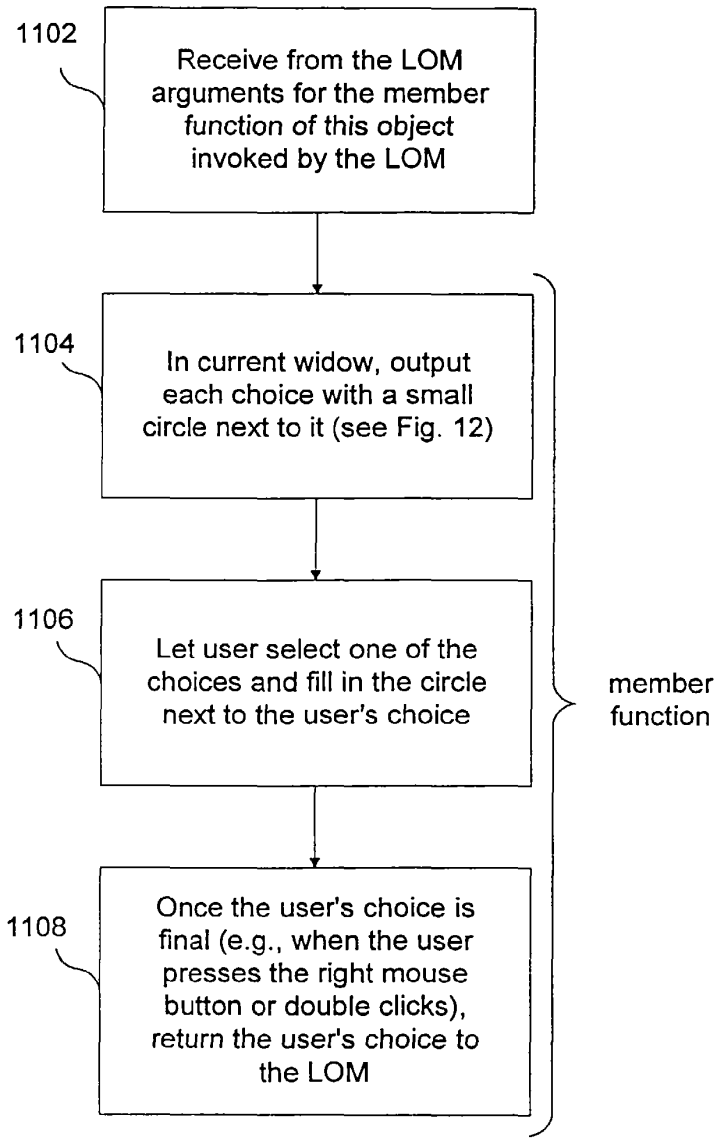


FIG. 11

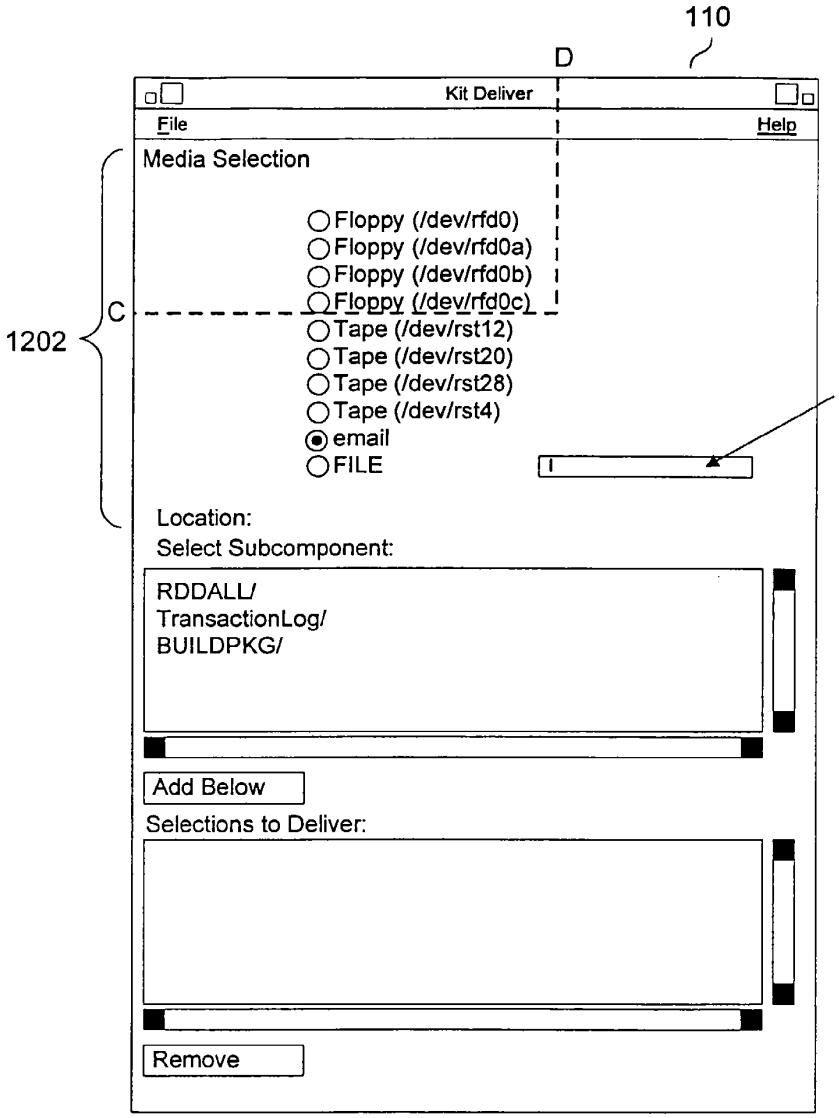


FIG. 12 (a)

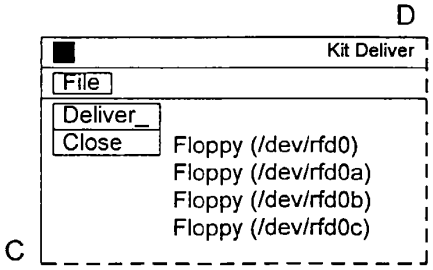


FIG. 12(b)

Composite Widget #2 (Lets User select one of a group of choices)
(Text version)

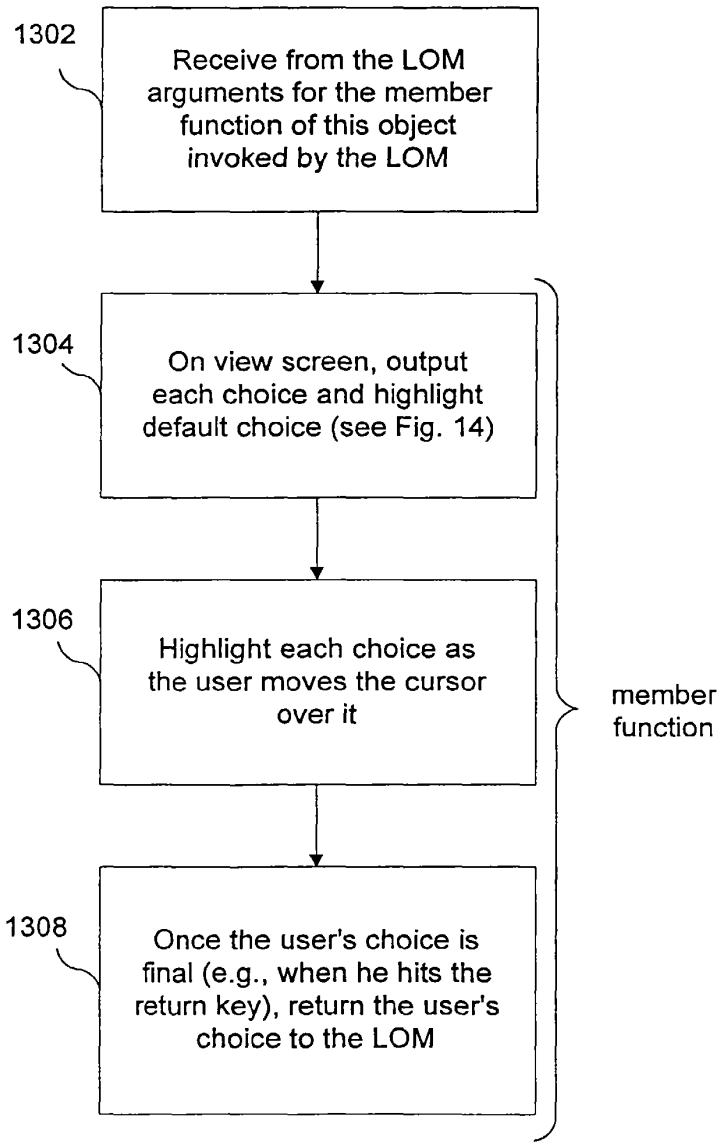


FIG. 13

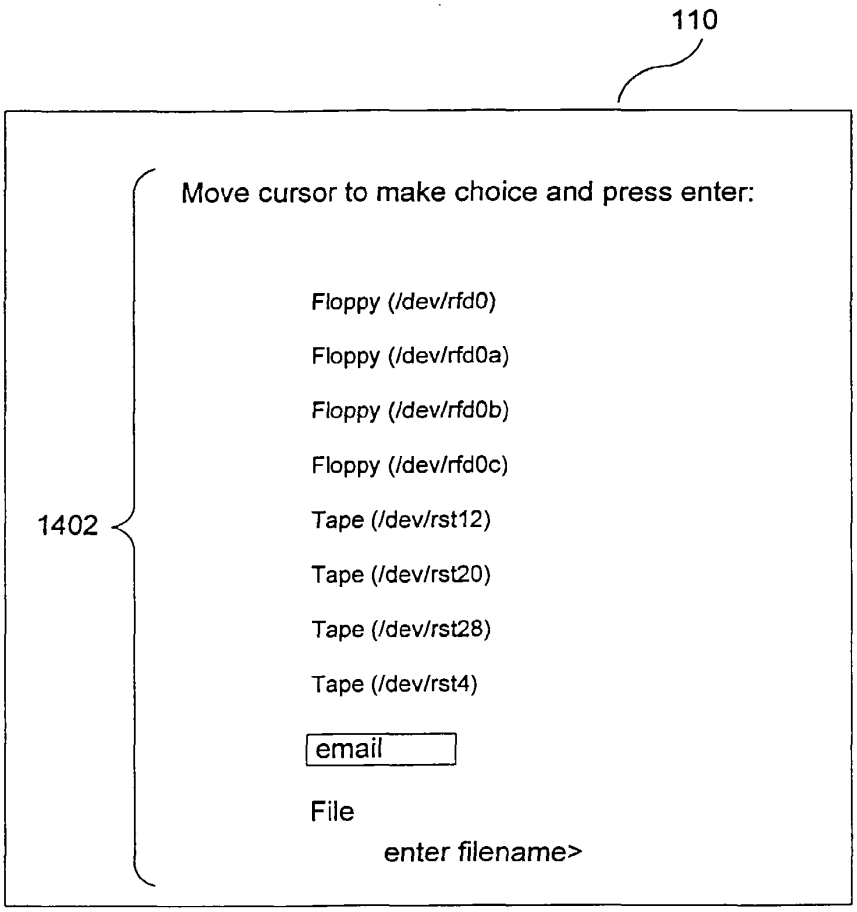

110
Move cursor to make choice and press enter:
Floppy (/dev/rfd0)
Floppy (/dev/rfd0a)
Floppy (/dev/rfd0b)
Floppy (/dev/rfd0c)
1402
Tape (/dev/rst12)
Tape (/dev/rst20)
Tape (/dev/rst28)
Tape (/dev/rst4)
email
File
enter filename>

FIG. 14

```
//
// CWMainframe.h:  This is the Mainframe window for all subsystems.
//                 It contains, menubar, body and footer message area.
//                 Resources that you can change is only for Form Widget.
//                 (Resources for Form widgets should be specified from the
//                 children of Form Widget)

#ifndef_CWOBJ_CWMAINFRAME_HH
#define_CWOBJ_CWMAINFRAME_HH
#incude "CWObj.hh"
#include "I18NString.hh"

struct CWMainframeP ; // forward declaration
struct PopupData;

#include "qlist.hh"

struct menuTree{
        I18NString label;                   //label string
        I18NString mnemonic;                //label mnemonic
        I18NString accelerator;             //accelerator
        I18NString acceleratorText;          //acceleratorText
        void (*cb) (void*);                  //cb to be registered
        //----define your own type
        void * cb_data;                      //call_data added 9/14/94
static const int op_id; //
                static MenuTree* decode(char* s, char*& to) { return NULL; } ;
                void encode(char*& buf, int& len) const {};
} ;

enum Popup_Status_mode {Ok, //ok btn pressed
                                Cancel //cancel button pressed
                        } ;

class CWMainframe : public CWObj {
 public:
                CWMainframe(const char *) ;      //User:instance name
                -CWMainframe() ;
                void instantiate_help_panel () ;
                void open_help () ;
                void close_help () ;
                void write_help_text(const I18NString&) ;
        void create_pulldown(QList<MenuTree>&) ;//User:cb registration will be down
                                                 // inside here..
                                                 // User use this to add pulldown
                                                 // menu like "File"
// The methods which override CWObj methods.
        XMApplicationShell *get_toplevel() ;
```

Composite Widget
FIG. 15(a)

```
        XMObject                    *get_parentContainer();
        void                         set_right_footer_message(I18NString &) ;
        void                         set_left_footer_message(I18NString &) ;
        void                         set_frameTitle(I18NString &) ;

//popup panels for warning/text entries.//////////////////////////////
        void set_okpopdown(PopupData *);
        //use this for popping up any warning messages.
        //Only has OK button
        void                 popup_warning(I18NString &) ;

        //use popup_prompt when you want user to type
        //in the entry such as file name
        //Has both OK and Cancel button
void                         popup_prompt(I18NString &);
void                         set_popupfield_content(char *) ;//CW only
void                         popdown_prompt() ; //call this to popdown the popup
void                         reg_prompt_ok_cb(void(*cb)(void*), void *client_data) ;
void                         reg_prompt_cancel_cb(void(*cb)(void*), void
                                     *client_data);
I18NString *                 get_prompt_content() ;  //output

//use this to display error message
//Only displays OK button
void                         popup_error(I18NString &) ;

//Working(busy) Popup//////////////////////
// NO button
// Popdown when process is complete
//////////////////////////////////////
void                 popup_working() ;
void                 popdown_working();

//Question Popup//////////////////////////////
//use this to ask user a question
//Has both OK and Cancel button
void                 popup_question(I18NString &) ;
void                 reg_question_ok_cb(void(*cb)(void *), void *client_data) ;
void                 reg_question_cancel_cb(void(*cb) (void *) , void
                             *client_data) ;
void                 popdown_question();

//used only in CW
void                         set_status(Popup_Status_mode,PopupData *) ;
//return if user selected OK or cancel btn
Boolean                      get_status() ;
```

Composite Widget
FIG. 15(b)

```
//use this button if you want to give some
//friendly info to the user
//Has OK button
void                    popup_info(I18NString &) ;

//Selection Popup//////////////////////////////////////
//list selection choices
// contains OK and Cancel buttons
void                    popup_selection(QList<I18NString> &) ;
void                    reg_select_ok_cb(void(*cb) (void *) , void *client_data);
void                    reg-select_cancel_cb(void(*cb) (void *), void
                              *client_data) ;
void                    popdown_selection() ;
void                    set_selectedValue (XmSelectionBoxCallbackStruct *) ;
                              //CW use only
I18NString *            get_selectedItem() ;

//DoubleTextf Popup//////////////////////////////////////////
// Two input area : use it for file and directory type of inputs
// It comes with cancel and ok btn
// You can set up message area using set_msgBody(I18NString &)
void                    pop_doubleTextf(QList<I18NString> &) ;
void                    popdown_doubleText();
void                    reg_doubletext_cancel_cb(void(*cb) (void*) ,
                              void *client_data);
void                    reg_doubletext_ok_cb(void(*cb) (void*) ,
                              void *client_data) ;
void                    set_msgBody(I18NString &) ;
QList<I18NString> *     get_doubleFields() ;
```

Composite Widget
FIG. 15(c)

```
//CWFilePick//////////////////////////////////////////////
void    reg_file_cancel_cb(void(*cb) (void*) , void *client_data) ;
void    reg_file_ok_cb(void(*cb) (void*) , void *client_data) ;
void    popup_filepick () ;
void    popdown_filepick () ;
void    set-default_path (I18NString &) ;
I18NString * get_selection() ;
private:
CWMainframeP *p;
void    set_menuItems (QListIter<MenuTree>, void*) ;
void    instantiate_prompt_panel();
void    instantiate_question_panel() ;
void    instantiate_doubleTextf() ;
void    instantiate_sel_box() ;

} ;

#endif                  // _CWOBJ_CWMAINFRAME_HH
```

Composite Widget
FIG. 15(d)

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 97 10 3091

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
Y	EP 0 569 902 A (SOFTIS HF) 18 November 1993 * the whole document * ---	1-7	G06F9/44
Y	GENIE LOGICIEL ET SYSTEMES EXPERTS, no. 24, September 1991, NANTERRE, FR, pages 90-102, XP000443999 JEAN-MARIE CHAUVET ET AL.: "OPEN INTERFACE: Un outil de contruction d'interfaces graphiques portables" * the whole document * ---	1-7	
A	EP 0 622 729 A (IBM) 2 November 1994 * abstract * * page 2, line 16 - page 4, line 21 * * page 17, line 20 - page 20, line 26 * * page 21, line 44 - page 22, line 30 * ---	1-7	
A	IBM TECHNICAL DISCLOSURE BULLETIN, vol. 34, no. 5, 1 October 1991, pages 321-322, XP000189757 "MODEL VIEW SCHEMA" * the whole document * -----	1-7	TECHNICAL FIELDS SEARCHED (Int.Cl.6) G06F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	6 June 1997	Fonderson, A

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons
.....
& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

Electronic Acknowledgement Receipt

EFS ID:	22880471
Application Number:	13975227
International Application Number:	
Confirmation Number:	7642
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Customer Number:	909
Filer:	Ian Carl Schick/Monet Noel
Filer Authorized By:	Ian Carl Schick
Attorney Docket Number:	043311-0423953
Receipt Date:	10-JUL-2015
Filing Date:	23-AUG-2013
Time Stamp:	11:43:38
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	0423953_IDS.pdf	517431 3eb5fea320f44578fa12c7d5e3b176a6ab445a1e	no	2

Warnings:

Information:

2	Information Disclosure Statement (IDS) Form (SB08)	0423953_1449.pdf	465708 6cafbc33b35700d1d3edada605d9028d77d5af77	no	2
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
3	Foreign Reference	EP798634A1.pdf	1060170 0937e43fa0876826cff2ef9440f867ae2f6280d7	no	34
Warnings:					
Information:					
4	Non Patent Literature	Customizing.pdf	825042 e05f7ab007f6c6b2b66367f194a0f4cd69487da3	no	9
Warnings:					
Information:					
5	Non Patent Literature	ROSE.pdf	99356 eae49e52fa15ed863739e0f9d3951f4d2ae811b7	no	2
Warnings:					
Information:					
6	Non Patent Literature	Window.pdf	303729 08cec3e6b8e2a28c2ec3f4fe58837cd0c6427812	no	4
Warnings:					
Information:					
7	Non Patent Literature	MERRICK.pdf	882198 ef899e1c145ce43aa36acb293a4caabfcaa9093f	no	14
Warnings:					
Information:					
8	Non Patent Literature	CoffeeCup.pdf	273658 6721e798ff6df53b4ccce5984c257150035c476c	no	2
Warnings:					
Information:					
9	Non Patent Literature	ELLERMAN_ChannelDefinition.pdf	521676 16b7c97e4f49a22cc518d6a8ae8f8ce8b22358cd	no	10
Warnings:					
Information:					
10	Non Patent Literature	HTML4.pdf	1098518 b03e9093eee64feb0d5a71523fe584dbee9594b5	no	30

Warnings:	
Information:	
Total Files Size (in bytes):	6047486

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS :	John Albert KEMBEL *et al.*	CONFIRMATION NO.:	7642
SERIAL NUMBER :	13/975,227	EXAMINER:	Joon H. Hwang
FILING DATE :	August 23, 2013	ART UNIT:	2447
FOR :	ACCESSING AND DISPLAYING NETWORK CONTENT		

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

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

Dear Commissioner:

Pursuant to the duty of disclosure under 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby makes of record in the above-identified application the documents listed on the attached Form PTO-1449.

Applicant has listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicant reserves the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This Information Disclosure Statement is being filed within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. §

1.53(d), or within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, or before the mailing date of a first Office Action on the merits, or before the mailing date of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No certification or fee is required. 37 C.F.R. § 1.97(b).

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449.

Respectfully submitted,

PILLSBURY WINTHROP SHAW PITTMAN LLP

Customer No.
00909

By /Ian C. Schick, Ph.D. /
Ian C. Schick, Ph.D.
Registration No.: 63,293

P. O. Box 10500
McLean, Virginia 22102
Telephone: (703) 770-7900
Telefax: (703) 770-7901

Dated: July 9, 2015

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/975,227	08/23/2013	John Albert Kembel	043311-0423953

CONFIRMATION NO. 7642

PUBLICATION NOTICE

909
Pillsbury Winthrop Shaw Pittman, LLP (NV)
PO Box 10500
McLean, VA 22102

OC000000065755351

Title:ACCESSING AND DISPLAYING NETWORK CONTENT

Publication No.US-2013-0346485-A1
Publication Date:12/26/2013

NOTICE OF PUBLICATION OF APPLICATION

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

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

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

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

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

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

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 13/975,227

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	70		N/A	
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	300		N/A	
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	360		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	21 minus 20 =	* 1	x 40 =	40	OR		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2 minus 3 =	*	x 210 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			200			
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	970		TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
AMENDMENT A	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
AMENDMENT A	Application Size Fee (37 CFR 1.16(s))									
AMENDMENT A	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)	OR	RATE($)	ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
AMENDMENT B	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
AMENDMENT B	Application Size Fee (37 CFR 1.16(s))									
AMENDMENT B	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
13/975,227	08/23/2013	2447	1040	043311-0423953	21	2

CONFIRMATION NO. 7642

FILING RECEIPT

909
Pillsbury Winthrop Shaw Pittman, LLP (NV)
PO Box 10500
McLean, VA 22102

OC000000063744508

Date Mailed: 09/17/2013

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)

John Albert Kembel, Palo Alto, CA;
George Andrew Kembel, Menlo Park, CA;
Daniel S. Kim, Palo Alto, CA;
John Russell, Palo Alto, CA;
Jake Wobbrock, Palo Alto, CA;
Geoffrey S. Kembel, Menlo Park, CA;
Jeremy L. Kembel, Palo Alto, CA;
Lynn D. Gabbay, Sunnyvale, CA;

Applicant(s)

Mainstream Scientific, LLC, Mountain View, CA

Assignment For Published Patent Application

Mainstream Scientific, LLC, Mountain View, CA

Power of Attorney: The patent practitioners associated with Customer Number 00909

Domestic Priority data as claimed by applicant

This application is a CON of 11/932,392 10/31/2007 PAT 8521833
which is a CON of 09/558,925 04/26/2000 PAT 7660868
which claims benefit of 60/131,083 04/26/1999
and claims benefit of 60/131,114 04/26/1999
and claims benefit of 60/131,115 04/26/1999
and claims benefit of 60/176,687 01/18/2000
and claims benefit of 60/176,699 01/18/2000

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

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

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

If Required, Foreign Filing License Granted: 09/12/2013

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 13/975,227**

Projected Publication Date: 12/26/2013

Non-Publication Request: No

Early Publication Request: No
**** SMALL ENTITY ****
Title

ACCESSING AND DISPLAYING NETWORK CONTENT

Preliminary Class

709

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 AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

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

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor

community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop technology, manufacture products, deliver services, and grow your business, visit http://www.SelectUSA.gov or call +1-202-482-6800.

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/975,227	08/23/2013	John Albert Kembel	043311-0423953

CONFIRMATION NO. 7642

POA ACCEPTANCE LETTER

909
Pillsbury Winthrop Shaw Pittman, LLP (NV)
PO Box 10500
McLean, VA 22102

OC000000063730541

Date Mailed: 09/17/2013

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/23/2013.

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

/twoldeyes/

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

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/975,227	08/23/2013	John Albert Kembel	043311-0423953

CONFIRMATION NO. 7642

909
Pillsbury Winthrop Shaw Pittman, LLP (NV)
PO Box 10500
McLean, VA 22102

NOTICE

OC000000063744509

Date Mailed: 09/17/2013

INFORMATIONAL NOTICE TO APPLICANT

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

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

- A properly executed inventor's oath or declaration has not been received for the following inventor(s):
  John Albert Kembel
  George Andrew Kembel
  Daniel S. Kim
  John Russell
  Jake Wobbrock
  Geoffrey S. Kembel
  Jeremy L. Kembel
  Lynn D. Gabbay

  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.

PTO/AIA/15 (07-12)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	043311-0423953
First Inventor	John Albert Kembel
Title	ACCESSING AND DISPLAYING NETWORK CONTENT
Express Mail Label No.	

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: **Commissioner for Patents**
P.O. Box 1450
Alexandria VA 22313-1450

1. ☐ **Fee Transmittal Form.** (PTO/SB/17 or equivalent)
2. ☑ **Applicant claims small entity status.** See 37 CFR 1.27.
3. ☑ **Specification.** [*Total Pages* 101]
   Both the claims and abstract must start on a new page
   (For information on the preferred arrangement, see MPEP § 608.01(a))
4. ☑ **Drawing(s).** (*35 U.S.C. 113*) [*Total Sheets* 37]
5. **Inventor's Oath or Declaration.** [*Total Sheets* _____]
   (including substitute statements under 37 CFR 1.64 and assignments serving as an oath or declaration under 37 CFR 1.63(e))
   a. ☐ Newly executed (original or copy)
   b. ☐ A copy from a prior application (37 CFR 1.63(d))
6. ☑ **Application Data Sheet.** **See Note below.* See 37 CFR 1.76 (PTO/AIA/14 or equivalent)
7. ☐ **CD-ROM or CD-R.** in duplicate, large table or Computer Program *(Appendix)*
   ☐ Landscape Table on CD
8. **Nucleotide and/or Amino Acid Sequence Submission.** *(if applicable, items a. – c. are required)*
   a. ☐ Computer Readable Form (CRF)
   b. ☐ Specification Sequence Listing on:
      i. ☐ CD-ROM or CD-R (2 copies); or
      ii. ☐ Paper
   c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ **Assignment Papers.** (cover sheet & document(s))
   Name of Assignee_____
10. ☐ **37 CFR 3.73(c) Statement.** *(when there is an assignee)* ☐ **Power of Attorney.**
11. ☐ **English Translation Document.** *(if applicable)*
12. ☑ **Information Disclosure Statement.** (PTO/SB/08 or PTO-1449)
    ☐ Copies of citations attached
13. ☐ **Preliminary Amendment.**
14. ☐ **Return Receipt Postcard.** *(MPEP § 503) (Should be specifically itemized)*
15. ☐ **Certified Copy of Priority Document(s).** *(if foreign priority is claimed)*
16. ☐ **Nonpublication Request.** Under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent.
17. ☐ **Other:**_____

***Note:** (1) Benefit claims under 37 CFR 1.78 and foreign priority claims under 1.55 **must** be included in an Application Data Sheet (ADS).
(2) For applications filed under 35 U.S.C. 111, the application must contain an ADS specifying the applicant if the applicant is an assignee, person to whom the inventor is under an obligation to assign, or person who otherwise shows sufficient proprietary interest in the matter. See 37 CFR 1.46(b).

18. CORRESPONDENCE ADDRESS

☑ The address associated with Customer Number: 00909 ***OR*** ☐ Correspondence address below

Name					
Address					
City		State		Zip Code	
Country		Telephone		Email	

Signature	/D. Benjamin Esplin/	Date	August 23, 2013
Name (Print/Type)	D. Benjamin Esplin	Registration No. (Attorney/Agent)	58,297

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: 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.

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.

PTO/AIA/14 (03-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	043311-0423953
	Application Number	
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

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

Secrecy Order 37 CFR 5.2

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

Inventor Information:

Inventor 1 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	John	Albert	Kembel	

Residence Information (Select One) ◉ US Residency ◯ Non US Residency ◯ Active US Military Service

City	Palo Alto	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	2334 Williams Street		
Address 2			
City	Palo Alto	**State/Province**	CA
Postal Code	94306	**Country** i	US

Inventor 2 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	George	Andrew	Kembel	

Residence Information (Select One) ◉ US Residency ◯ Non US Residency ◯ Active US Military Service

City	Menlo Park	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	1045 Santa Cruz Avenue, Apartment F		
Address 2			
City	Menlo Park	**State/Province**	CA
Postal Code	94025	**Country** i	US

Inventor 3 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Daniel	S.	Kim	

Residence Information (Select One) ◉ US Residency ◯ Non US Residency ◯ Active US Military Service

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	043311-0423953
	Application Number	
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

City	Palo Alto	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	408 Pepper Avenue		
Address 2			
City	Palo Alto	State/Province	CA
Postal Code	94306	Country i	US

Inventor 4 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	John		Russell	

Residence Information (Select One) (•) US Residency ( ) Non US Residency ( ) Active US Military Service

City	Palo Alto	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	605 Colorado Avenue		
Address 2			
City	Palo Alto	State/Province	CA
Postal Code	94306	Country i	US

Inventor 5 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Jake		Wobbrock	

Residence Information (Select One) (•) US Residency ( ) Non US Residency ( ) Active US Military Service

City	Palo Alto	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	1091 Tanland Drive #201		
Address 2			
City	Palo Alto	State/Province	CA
Postal Code	94303	Country i	US

Inventor 6 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Geoffrey	S.	Kembel	

Residence Information (Select One) (•) US Residency ( ) Non US Residency ( ) Active US Military Service

City	Menlo Park	State/Province	CA	Country of Residence i	US

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	043311-0423953
	Application Number	
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

Mailing Address of Inventor:

Address 1	1045 Santa Cruz Avenue, Apartment F		
Address 2			
City	Menlo Park	**State/Province**	CA
Postal Code	94025	**Country** i	US

Inventor 7 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Jeremy	L.	Kembel	

Residence Information (Select One) (•) US Residency ( ) Non US Residency ( ) Active US Military Service

City	Palo Alto	**State/Province**	CA	**Country of Residence** i	US

Mailing Address of Inventor:

Address 1	213 Fulton Street		
Address 2			
City	Palo Alto	**State/Province**	CA
Postal Code	94301	**Country** i	US

Inventor 8 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Lynn	D.	Gabbay	

Residence Information (Select One) (•) US Residency ( ) Non US Residency ( ) Active US Military Service

City	Sunnyvale	**State/Province**	CA	**Country of Residence** i	US

Mailing Address of Inventor:

Address 1	1249 Lakeside Drive #1064		
Address 2			
City	Sunnyvale	**State/Province**	CA
Postal Code	94085	**Country** i	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.
For further information see 37 CFR 1.33(a).

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

Customer Number	00909

PTO/AIA/14 (03-13)
Approved for use through 01/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	043311-0423953
	Application Number	
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

Email Address	Docket_IP@Pillsburylaw.com	Add Email	Remove Email

Application Information:

Title of the Invention	ACCESSING AND DISPLAYING NETWORK CONTENT		
Attorney Docket Number	043311-0423953	**Small Entity Status Claimed**	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	37	**Suggested Figure for Publication (if any)**	

Publication Information:

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

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

Representative Information:

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

Please Select One:	◉ Customer Number	◯ US Patent Practitioner	◯ Limited Recognition (37 CFR 11.9)
Customer Number	00909		

Domestic Benefit/National Stage Information:

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

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	Continuation of	11932392	2007-10-31

Prior Application Status	Patented		Remove		
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
11932392	Continuation of	09558925	2000-04-26	7660868	2010-02-09
Prior Application Status	Expired		Remove		

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	043311-0423953
	Application Number	
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
09558925	non provisional of	60131083	1999-04-26
Prior Application Status	Expired		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
09558925	non provisional of	60131114	1999-04-26
Prior Application Status	Expired		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
09558925	non provisional of	60131115	1999-04-26
Prior Application Status	Expired		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
09558925	non provisional of	60176687	2000-01-18
Prior Application Status	Expired		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
09558925	non provisional of	60176699	2000-01-18

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

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(d). When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX) [i] the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(h)(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).

Remove

Application Number	Country [i]	Filing Date (YYYY-MM-DD)	Access Code [i] (if applicable)

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

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	043311-0423953
	Application Number	
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

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.

Authorization to Permit Access:

☒ Authorization to Permit Access to the Instant Application by the Participating Offices

If 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 World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the instant patent application is filed access to the instant patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the instant patent application is filed to have access to the instant patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the instant patent application with respect to: 1) the instant patent application-as-filed; 2) any foreign application to which the instant patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the instant patent application; and 3) any U.S. application-as-filed from which benefit is sought in the instant patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing this Authorization.

Applicant Information:

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

Applicant 1 Remove

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.

Clear

◉ 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	

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	043311-0423953
	Application Number	
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

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 :

If the Applicant is an Organization check here. ☒

Organization Name	MAINSTREAM SCIENTIFIC, LLC		
Mailing Address Information:			
Address 1	650 CASTRO STREET, SUITE 120-333		
Address 2			
City	MOUNTAIN VIEW	**State/Province**	CA
Country i	US	Postal Code	94041
Phone Number		Fax Number	
Email Address			

Additional Applicant Data may be generated within this form by selecting the Add button. Add

Non-Applicant Assignee Information:

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

Assignee 1

Complete this section only if non-applicant assignee information is desired to be included on the patent application publication in accordance with 37 CFR 1.215(b). Do not include in this section 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), as the patent application publication will include the name of the applicant(s).

Remove

If the Assignee is an Organization check here. ☐

Prefix	**Given Name**	Middle Name	**Family Name**	Suffix

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.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	043311-0423953
	Application Number	
Title of Invention	ACCESSING AND DISPLAYING NETWORK CONTENT	

Mailing Address Information:			
Address 1			
Address 2			
City		**State/Province**	
Country i		Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Assignee Data may be generated within this form by selecting the Add button. Add

Signature:

Remove

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications					
Signature	/D. Benjamin Esplin/			Date (YYYY-MM-DD)	2013-08-23
First Name	D. Benjamin	Last Name	Esplin	Registration Number	58297

Additional Signature may be generated within this form by selecting the Add button. Add

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.

ACCESSING AND DISPLAYING NETWORK CONTENT

CROSS-REFERENCE TO RELATED APPLICATIONS

(01) The present application is a continuation of and incorporates by reference U.S. Non-Provisional patent application Ser. No. 11/932,392 filed Oct. 31, 2007, which is a continuation of and incorporates by reference U.S. Non-Provisional patent application Ser. No. 09/558,925, filed Apr. 26, 2000, now U.S. Patent No. 7,660,868, which claims priority from and incorporates by reference U.S. Provisional Application ser. nos. 60/131,083, filed Apr. 26, 1999, 60/131,114, filed Apr. 26, 1999, 60/131,115, filed Apr. 26, 1999, 60/176,687, filed Jan. 18, 2000, and 60/176,699, filed Jan. 18, 2000. The present application claims priority to U.S. Non-Provisional patent application ser. no. 11/932,392, filed Oct 31, 2007 and each of the aforementioned applications to which it claims priority.

BACKGROUND OF THE INVENTION

(02) A user operating a client computer typically accesses the Internet by using a viewer application, such as a browser to view web content provided at a destination address, typically a web page. In this context, web content and web applications are designed to fill the entire web page. It is known to divide the web content into different regions of a single web page. For example, personalized web pages can be specified, such that a user views a variety of content sources in a single page, such as stock information, weather information, and sports information, which is aggregated at the server that delivers the web page to the user, who then views the aggregated content in a single web page. Observe that even when

disparate content is aggregated, in this manner, it is reassembled into a full web page and is served through a full-screen browser. Web content and application developers therefore have limited control over the user experience: content is typically trapped within the frame of the browser. A developer's only alternative to engaging a user page-by-page in a browser is to develop, distribute, and support custom client software. In the Web browser scenario, it is the content provider, not the user that aggregates the information that is viewed by the user. Thus, the user is not in a position to separately aggregate the content at a client computer, instead the user is constrained to view the content that has been delivered in the manner provided by the server computer hosting the web page. There is a growing desire for individual users to fully control the aggregation and presentation of content and web applications that appears on a client computer.

(03) A user who wishes to view multiple web pages or applications can open multiple instances of a browser. However, the user will not be able to view each "full-screen" page at the same time. Instead, the user must adjust the windows corresponding to each browser instance and view only part of each page. The information appearing in each browser is not designed for viewing in this manner. Thus, the user cannot create an optimized display of content from multiple sources.

(04) Currently, content providers and end users have limited tools to alter the browser in which content appears. That is, the controls associated with a browser are not fully configurable. Thus, the vendor of a browser is in a position to brand the browser and regulate the controls associated with the browser. There is a growing desire for content providers to not only fill a browser with their content, but to also fully brand and control the frame in which the content appears. Further, in some instances, content providers desire to

limit the controls associated with a browser or viewer, so that a user is more inclined to view a single set of content, for example, by having limited access to previously viewed content.

(05) At the present time, it is relatively difficult to trace the content viewing activity of a client computer. In other words, it is difficult to identify the type of content that a particular user of a client computer favors. Consequently, there are limited tools 25 available to provide a user with tailored information that would be of particular interest to the user.

(06) In view of the foregoing, there is a need in the art to provide a technique for accessing multiple instances of distributable computer readable media in their entirety simultaneously, where these instances are typically smaller than the full pages used in 30 current web pages and web applications. There is a further need for providing the user with flexibility in selecting, collecting, relating and viewing such computer readable media, and for giving the media provider flexibility in directing media to a specific user and controlling the framework in which media is presented. Finally, there is a need to gather more accurate information regarding the type of content that a user enjoys, so that the user can be automatically provided with this content.

SUMMARY OF THE INVENTION

(07) The invention includes a method of presenting distributable computer readable media to a user in response to a user request. The method comprises the steps of identifying a definition of a Networked Information Monitor (NIM). A NIM frame is defined for the NIM using the definition. Content is then retrieved for the NIM. Then, the content is placed in a NIM viewer defined by the frame.

(08) The invention also includes a method of altering a Networked Information Monitor (NIM). The method includes the step of receiving a message at a NIM. The message specifies a configurable feature of the NUM. The NIM is altered in accordance with the configurable feature of the message.

(09) The apparatus of the invention includes a computer readable memory to direct a computer to function in a specific manner. The computer readable memory includes a first executable module to identify a definition of a Networked Information Monitor (NIM). A second executable module defines a NIM frame for the NIM using the definition. A third executable module retrieves content for the NIM. A fourth executable module places the content in a NUM viewer defined by the frame.

(10) The apparatus of the invention further includes a computer readable memory with a first executable module to receive a Networked Information Monitor (NIM) message. The NIM message specifies a configurable feature of a NIM. A second executable module alters the NIM in accordance with the configurable feature of the NIM message.

BRIEF DESCRIPTION OF THE DRAWINGS

(11) FIG. 1 illustrates a system for processing distributable computer readable media in accordance with one embodiment of the present invention;

(12) FIG. 2 shows exemplary processing steps used to initiate an instance of a home networked information monitor (NIM) using the apparatus of FIG. 1;

(13) FIG. 3A illustrates a screen logo in accordance with one embodiment of the present invention;

(14) FIG. 3B illustrates a login construct in accordance with one embodiment of the present invention;

(15) FIG. 4 illustrates a set of visual manifestations corresponding to a collection of NIMs, including a home NIM;

(16) FIG. 5 illustrates a visual manifestation of a home NIM as well as a visual manifestation of a reference NIM that references additional NIMs;

(17) FIG. 6 illustrates how a NIM, referenced by the reference NIM of FIG. 5, is added to a processed user profile in response to a designated keyboard entry sequence or mouse click;

(18) FIG. 7 illustrates how a NIM is shared with other users in accordance with an embodiment of the present invention;

(19) FIGS. 8A and 8B illustrate screen panels that facilitate the collection of the description of a set of designated NIMs into a pack;

(20) FIG. 9A illustrates how the relative position of visual manifestations that correspond to NIMs remains fixed when the visual manifestations are within a predetermined distance of each other;

(21) FIG. 9B illustrates a representative pack in accordance with the present 20 invention;

(22) FIGS. 10A, 10B and 10C illustrate how a set of visual manifestations corresponding to a collection of NIMs is aligned against a boundary when a user selects the visual manifestations and pushes them against the boundary;

(23) FIG. 11 is a flow chart of the steps taken by a client to give a user access to a NIM where the user "collects" the NIM, in accordance with one embodiment of the invention;

(24) FIG. 12 is a flow chart of the steps taken by a client to present a NIM to a user, where the NIM has been "collected" previously by the user, in accordance with one embodiment of the invention;

(25) FIG. 13 illustrates a data structure for a NIM definition, stored in the NIM application server's template database or user profile database;

(26) FIG. 14 illustrates NMA message routing between NIMs and the message interface in the client parser application;

(27) FIG. 15 is a diagrammatic illustration of an embodiment of a NIM Management Module utilized in accordance with an embodiment of the invention;

(28) FIG. 16 is a diagrammatic illustration of an embodiment of the NIM Templates database utilized in accordance with an embodiment of the invention;

(29) FIG. 17 is an illustration of a main NIMIndex Web page used in accordance with an embodiment of the invention;

(30) FIG. 18 is an illustration of a single NIMIndex category used in accordance with an embodiment of the invention;

(31) FIG. 19 is an illustration of a full description of NIM content provided in accordance with an embodiment of the invention;

(32) FIG. 20 is an illustration of a Web page displayed to the user once the user has clicked to collect the NIM;

(33) FIG. 21 is an illustration of the main home NIM graphical user interface used in accordance with an embodiment of the invention;

(34) FIG. 22 is an illustration of a "Get New NIM" graphical user interface that may be used in accordance with an embodiment of the invention;

(35) FIG. 23 is an illustration of a "More NIMs" graphical user interface representative of an embodiment of the invention;

(36) FIG. 24 is a diagrammatic illustration of the ShareLink database used in accordance with an embodiment of the invention;

(37) FIG. 25 is an illustration of a Share NIM's graphical user interface according to an embodiment of the invention;

(38) FIG. 26 is an illustration of the main DevZone Web page utilized in accordance with an embodiment of the invention;

(39) FIG. 27 is a partial view of a NIM modification web page utilized in accordance with an embodiment of the invention;

(40) FIGS. 28A to 28D are graphical user interfaces of development NIMs (DevNIMs) utilized in accordance with an embodiment of the invention;

(41) FIGS. 29A and 29B are illustrations of Administrative Zone (AdminZone) Web pages utilized in accordance with an embodiment of the invention;

(42) FIGS. 30A and 30B are also illustrations of Administrative Zone (AdminZone) Web pages utilized in accordance with an embodiment of the invention;

(43) FIGS. 31A and 31B are further illustrations of Administrative Zone (AdminZone) Web pages utilized in accordance with an embodiment of the invention;

(44) FIG. 32 illustrates an embodiment of an event log that may be used in accordance with an embodiment of the invention;

(45) FIG. 33 illustrates the tracking of events in an event log module in accordance with an embodiment of the invention;

(46) FIG. 34 illustrates a statistics database that may be used in accordance with an embodiment of the invention;

(47) FIG. 35 illustrates a statistical analysis module and a content analysis module that may be used in accordance with an embodiment of the invention;

(48) FIG. 36 illustrates a content database that may be used in accordance with an embodiment of the invention; and

(49) FIG. 37 illustrates a user account database that may be used in accordance with an embodiment of the invention.

DETAILED DESCRIPTION OF THE INVENTION

(50) The present invention discloses a technology that is capable of processing distributable computer readable media. Distributable computer readable media includes, but is not limited to, standard web content, such as HTML, dHTML, images, imbedded ActiveX and Java applications, JavaScript, CSS, Pen scripts, Streaming Media, and/or Flash. The present invention is advantageous relative to prior art systems and methods because it provides improved mechanisms for simultaneously interacting with several independent sources of distributable computer readable media, collecting references to such media, and sharing such references with other users. The ac disclosed technology is further advantageous because it provides improved systems and methods for on screen management of distributable computer readable media.

(51) In the system and method of the present invention, a user logs into a server by providing a login identifier to a login construct. The login identifier is used by the server to obtain an unprocessed user profile that corresponds to the user. The unprocessed user profile is

processed by the server to generate a processed user profile. Advantageously, this processing step allows for up-to-date refinement of the user profile. Up-to-date refinements include, for example, the addition of advertisements directed to the user based on one or more characteristics in the user profile. The processed user profile is delivered to the client computer associated with the user. The processed user profile includes references to the networked information monitors (NIMs). As used herein, the term networked information monitor or NIM refers to a fully configurable frame with one or more controls; the frame through which content is optionally presented. The fully configurable frame utilized in accordance with the invention stands in contrast to present web browsers, which are branded by the browser vendor and which have limited means by which to alter the controls associated with the browser.

(52) Attention is initially directed toward the home NIM of the invention, which coordinates the activities of all other NIMs that are accessed by a user. The home NIM facilitates much of the technology of the present invention, including the ability to simultaneously review multiple sources of distributable computer readable media as well as to package and distribute such media.

(53) FIG. 1 is a general illustration of a system in accordance with one embodiment of the present invention. In FIG. 1, a network 10 is operated in accordance with the present invention. Network 10 includes at least one user or client computer 20, at least one server computer of class 50, and optionally one or more server computers of class 82. User computer 20 as well as server computers of class 20 50 and 82 are each connected by transmission channel 44, which is any wired or wireless transmission channel.

(54) User computer 20 is any device that includes a Central Processing Unit (CPU) 24 connected to a random access memory 30, a network connection 28, and one or more user input/output ("i/o") devices 40 including output means 42. Output means 42 is any device capable of communicating with a user and includes, for example, a video monitor, a liquid crystal display, voice user interfaces, and/or integrated graphic means such as mini-displays present in web-phones. Typically, user computer 20 includes a main non-volatile storage unit 22, preferably a hard disk drive, for storing software and data. Further, user computer 20 includes one or more internal buses 26 for interconnecting the aforementioned elements. In a typical embodiment, memory 30 includes an operating system 32 for managing files and programs associated with user computer 20. In some embodiments, operating system 32 includes a registry 34 that has one or more references to specified locations in system 10. The exemplary memory 30 of FIG. 1 further includes a web browser 36 for viewing web content and a client parser application 38 for facilitating low level functionality, such as login and logout procedures, in accordance with the present invention. In some embodiments, client parser application 38 uses the one or more references in registry 34 to obtain a login construct from server 50. In various embodiments, in accordance with the present invention, client parser application 38 runs in conjunction with one or more software modules, such as an event log module 98, which tracks user activity, a message interface module 106, which serves as a communication interface between the client parser application 38 and web server 58 and/or external web servers, a home NIM 108, which references one or more NIMs 110, and a visual management system 114 which regulates the characteristics of visual manifestations of NIMs 108 and 110 when displayed on output device 42. Furthermore, in some

embodiments, client parser application 38 runs in conjunction with instances of web browser 36 as well as web server 58 as detailed below.

(55) Server computer 50 includes standard server components, including a network connection device 46, a CPU 52, a main non-volatile storage unit 54, and a random access memory 56. Further, server computer 50 includes one or more internal buses 48 for interconnecting the aforementioned elements. Memory 56 stores a set of computer programs, modules and data to implement the processing associated with the present invention.

(56) The embodiment of memory 56 illustrated in FIG. 1 includes a web server 58 for processing requests received from client computer 20. Web server 58 has many components, including a variety of modules and data structures to assist users that want to log into system 10. Namely, login module 60 handles an entry request from a client computer 20 and accepts a login identifier that corresponds to a user from client computer 20. Login constructor 62 generates a login construct in response to a call for a login construct and transfers the login construct to client 20. Login constructor 62 dynamically generates login constructs using updated login NIM content 64. Login validation module 66 works in conjunction with user profile database manager 100 to identify an unprocessed user profile, which is associated with a user provided login, in user profile database 76. If an unprocessed user profile corresponding to the user provided login does not exist in user profile database 76, login validation module 66 associates a new unprocessed user profile with the login identifier.

(57) When an unprocessed user profile is identified by login validation module 66, it is processed by user profile processor module 68 to produce a processed profile. It will be

appreciated that the services of user profile processor module 68 are highly advantageous because they allow for last minute user profile revisions. Such revisions include, for example, the addition or customization of NIMs referenced by the user profile, and/or server redirect information that is a function of current server load in system 10. Importantly, the processed user profile includes a reference to a home NIM. The home NIM is capable of accessing each of the NIMs that are represented in the processed user profile. Memory 56 further includes delivery module 70, which coordinates the delivery of portions of the home NIM to the client based on parameters specified in the processed user profile.

(58) Once a user has successfully logged into system 10, request server module 72 handles requests for specified NIMs from client 20. When such a request is received, request server module 72 routes the request to an address that corresponds to the specified NIM and transmits the specified NIM to client 20. One class of specified networked information handled by request server module 72 is requests for NIMs. When such a request is received, request server module 72 searches NIM templates database 74 for the specified NIM. NIM templates database 74 includes a large number of NIM templates. Each NIM template defines the characteristics of a specific NIM, including fully configurable frame characteristics, viewer and control characteristics, and NIM content references.

(59) The web server 58 illustrated in FIG. 1 further includes additional modules 102 to handle specialized features of the present invention. For example, one embodiment of the present invention provides a mechanism that allows users to distribute NIMs to each other. In such embodiments, a special server module 102 provides instructions for storing the NIMs, which are to be distributed, in sharelink database 78. Advantageously, NIMs that are distributed to other users are customizable. A user can, for example, resize and position a

particular NIM prior to sharing it with another user. Indeed, it is possible, in such embodiments, for a user to arrange a series of NIMs in a unique arrangement and then distribute the collection of NIMs in the designated NIMs in the designed arrangement. As an illustration, a user arranges a first NIM that represents a scrolling stock ticker at the bottom of an output means, such as a computer screen, a second NIM that tracks the NASDAQ top ten most heavily traded stocks in the upper left corner of the output means, and a third NIM that tracks headline news on the upper right hand corner of the output means. Then, the user distributes the three NIMs in this customized arrangement to other users. Observe that in this example a user of a client computer is aggregating separate sets of information in different NIMs. This stands in contrast to prior art approaches where a web server running on a server computer aggregates information in a single page.

(60) System 10 is highly scalable and thus supports a large number of users. This scalability stems from the fact that the server 50 is delivering the definition associated with a NIM. The content displayed in the NIM may be located on a separate computer.

(61) Memory 56 provides a statistical analysis module 104 for tracking key events associated with users. This information is stored in statistics database 80. The information collected by statistical analysis module 104 is used for a wide variety of purposes, including server load optimization and directed advertising, as discussed below. As described below, the statistical information gathered in accordance with the invention includes fully traced events defining the type of content and the duration over which all content is viewed by a user. This type of comprehensive information is not available using present techniques.

(62) Much of the distributable computer readable media that is available for processing is stored as content elements 94 on server 82. Server 82 is a standard web server that includes components such as a network connection device 88, a CPU 86, a main non-volatile storage unit 84, a random access memory (RAM) 92, and one or more internal buses 90 for interconnecting the aforementioned elements. RAM 92 includes some of the content elements 94 stored by server 82. Other content elements 94 are stored in storage unit 84. In some embodiments, a single web server 58 is capable of directly accessing content elements 94 located on one or more servers 82. In other embodiments, each server 82 has a resident web server module that works in conjunction with server 50 to identify, optionally dynamically generate, and serve content elements 94 upon demand.

(63) Now that general architecture of a system in ac dance with the present invention has been disclosed, attention turns to FIG. 2, which discloses a method for logging into system 10 (FIG. 1). In the first processing step shown in FIG. 2 (202), a user initiates a session on system 10 by requesting the global login script "session_config." It will be appreciated that the term "session_config" merely provides an illustrative name for the global login script and that the technology of the present invention is by no means limited to this name or the script described.

(64) The request for "session_config" originates on client 20 and is sent to server 50 where it is processed by login module 60 of web server 58. Upon receiving request 202, login module 60 creates a "session_config" global login script (204). Processing step 204 is advantageous relative to systems that have static global login scripts because it allows for the incorporation of highly variable information. This highly variable information includes, for example, system settings such as up-to-date server redirect information, server content

address changes, directed advertisements, and messages. An exemplary "session_config" is found in Example 1 below. Each line of data has an associated numeral. The remaining text in the example describes the purpose of select data.

(65) EXAMPLE 1

(66) Version tag that identifies the latest home NIM version

(1) </SESSION_CONFIG VERSION="alpha:3"

(67) Upgrade event that is sourced when home NIM version is outdated

(2) <UPGRADE=http://www.NIM.com /QuickOpen.exe>

(68) LOCATION OF SERVER-SUPPORTED FUNCTIONALITY Default base address for server supported functionality

(3) <METHODS BASEURL=http://neo.NIM.com /servlet/NIMServer/>

(4) <ADD_USER URL="addUser/>

(5) <GET_USER URL="getUser"/>

(6) <SET_USER URL="setUser/>

(7) <GET_SES_CONFIG URL=http://www.NIM.com /home_NIM/s_cnfg.xml"/>

(69) Server-based functionality for setting password

(8) <SET_PASSWORD URL="setPassword"/>

(70) List of all publically available NIMs

(9) <GET_MASTER_NIM_LIST URL="getMasterNIMList"/>

(10) <GET_ALL_CONFIG URL="getAllConfig"/>

(11) <SET_ALL_CONFIG URL="setAllConfig/>

(12) <SET_ALL_STATS URL="setAllStats"/>

(13) <GET_NIM_TEMPLATE URL="get_NIM_Template"/>

(71) Location of server-side NIM and pack sharing functionality

(14) <ADD_SHARE URL="addShare"/>

(15) <GET_SHARE URL="getShare"/>

(16) <AUTH_TEST URL="DOeCHO?AUTH=TRUE"/>

(72) Redirect information

(17) <DO_REDIR URL="doRedir"/>

(18) </METHODS>

(73) Flexible content layer that defines default NIM frame appearance, including the default appearance of the frame of a home NIM

(19) <FRAMES>

(74) Default NIM frame appearance

(20) <NIM>

(21) <IMAGES BASEURL=

http://www.NIM.com /home_NIM/NIM_FrameImages/>

(22) </NIM>

(75) Default home NIM frame appearance

(23) <HOME_NIM>

(24) <IMAGES BASEURL=

http://www.NIM.com /home_NIMImages/>

(25) </HOME_NIM>

(26) </FRAMES>

(76) Location of system NIM templates

(27) <NIMs>

(28) <ADD TEMPLATE="http://www.NIM.com / . . . /add_NIM_XML.xml"/>

(29) <HELP TEMPLATE="http://www.NIM.com / . . . /help_NIM_XML.xml"/

(30) <LOGIN TEMPLATE="http://www.NIM.com / . . . /login2.xml"/

(31) </NIMs>

(32) </SESSION_CONFIG>

(77) Line 1 of the exemplary "session_config" of Example 1 provides the version tag for the expected version of the home dot system that corresponds to the "session_config" script. In one embodiment, client parser application 38 determines whether it is up-to-date using the information in line 1. If client parser application 38 determines that it is outdated, an upgrade request is made in accordance with the instructions provided by the UPGRADE flag of line 2. In one embodiment, the UPGRADE flag in line 2 of Example 1 describes the location of an executable program, one of skill in the art will appreciate that this flag can in fact reference any form of instruction, including a flat file, a web page, a script, a symbol, or an address.

(78) Lines 3 through 18 in Example 1 define the functionality that is provided by a server, such as server 50. For example, line 8 of Example 1 provides the location of a set of instructions that are called when a user requests a password change. Furthermore, line 9 of Example 1 provides the location of master list of NIMs that are publically available. Lines 14 and 15 of Example 1 provide the location of specialized server-side functionality that allows users to share data such as NIM definitions.

(79) Lines 19 through 26 of Example 1 define where the default appearance of a NIM and a home NIM are found within system 10. Lines 27 through 31 define a collection of system NIMs. A system NIM is any type of NIM that is to be distributed to each user of system 10.

In some embodiments, system NIMs are used to provide a core functionality. In Example 1, line 28 defines a NIM that provides users with a convenient mechanism for collecting additional NIMs. Line 29 defines the location of a NIM that is invoked when the user presses a help button associated with a home NIM. Finally, line 30 defines the location of a NIM that is used to log into system 10.

(80) Returning to FIG. 2, once login module 60 has created "session_config," it is sent back to requesting client 20 (206). When a "session_config" is received by client 20, client parser application 38 parses the global login script in order to identify a reference to a login constructor 62 (208). Login constructor 62 is a server-based module that generates a construct that allows a user to log into system 10. When client parser application 38 locates the reference to login constructor 62 in "session_config," a request for a login construct is directed to the identified reference (210). In Example 1 above, the reference to the login construct is provided in line 30. On line 30, the global variable "LOGIN TEMPLATE" is assigned the URL address "http://www.NIM.com . . . /login2.xml." Client parser application uses the URL assigned to the global variable "LOGIN TEMPLATE" to make a request for a login constructor 62 that is directed to this URL. When login constructor 62 receives a request for a login construct, it generates a login construct (212).

(81) Login construct 148 (FIG. 3B) illustrates a type of login construct that is generated in one embodiment of the present invention during processing step 212. Before the login construct is executed on client 20, a schematic such as logo 146 (FIG. 3A) is displayed on output means 42. As illustrated in FIG. 1, login constructor 62 is a component of web server 58. However, there is no requirement that login constructor 62 be a component of web server 58. In fact, login constructor 62 is a standalone software program in some

embodiments of the present invention whereas in other embodiments, login constructor 62 is merely a script, such as a PERL script, that is processed by an interpreter program native to server 50. In still other embodiments, login constructor 62 is merely a simple flat file that includes a set of instructions that are interpretable by client parser application 38. In such embodiments, login constructor 62 is the login construct. In embodiments in which a login construct is dynamically generated, it is possible to introduce last minute changes in the login construct. Thus, an advantage of the exemplary login process shown in FIG. 2 is that there are multiple stages in which updated information is used to customize the login process based on the environmental variables.

(82) Once a login construct has been prepared by login constructor 62, it is transferred back to client 20 (214) (FIG. 2) and executed in conjunction with client parser application 38 (216). The login constructs of the present invention are a form of NIM. Therefore, one function of processing step 216 is to obtain the login NIM content 64 (FIG. 1) specified by the login construct from server 64. In login construct 148, for example, the login NIM content includes the shape and functionality of "Exit button 160," message 150, the shape and functionality of "New user" button 152, the functionality of "Forgot it?" button 154, and login panel 156. When processing step 216 is completed, the user uses the login construct to provide a login identifier (218).

(83) In FIG. 3B, a user has provided the login identifier "Galliani." The definition of login identifier as used in the present invention is to be broadly construed. In some embodiments, login identifiers include a unique name and a corresponding password. In other embodiments, a login identifier does not have a password. This is particularly the case when the user is a guest or a new user and there is no user profile associated with the user.

(84) Working in conjunction with client parser application 38, the login construct accepts the user login and sends it to server 50 for validation (218). As illustrated in the exemplary system of FIG. 1, web server 58 includes a login validation module 66 to verify the login identifier provided by user (220). Typically, processing step 220 involves a look-up operation in which the login identifier is used to query user profile database 76 for an unprocessed or raw user profile that matches the login identifier. In embodiments that include a password, validation step 220 includes a password verification step. Successful completion of processing step requires entry of a valid login identifier sequence in processing step 218. When processing step 220 has been successfully completed, the raw or unprocessed user profile corresponding to the login identifier is obtained from user profile database 76 (FIG. 1) (222) and is processed by user profile process module 68 to produce a processed or finalized user profile that is delivered to client 26 (226). In sonic embodiments, a user profile 76 includes user contact information, such as the name, address, telephone number and email address of a user. Additionally, some embodiments of system 10 provide different types of access privileges. For example one embodiment of the present invention includes developer access privileges, administration access privilege, and general user access privileges. In such embodiments, the access privileges that have been granted to a user are stored in the user profile 76 associated with the user.

(85) The processed user profile includes a reference to each NIM in system 10 that is associated with the login identifier provided in processing step 216. One of the NIMs referenced by the processed user profile is the home NIM that corresponds to the login identifier provided in processing step 216. When executed in conjunction with client parser application 38 in processing step 226, the home NIM provides a mechanism for accessing

each of the NIMs referenced by the processed user profile. Like the login construct, the home NIM includes several components, including pull down menus and screen manipulation functionality. The reference to the home NIM in the processed user profile includes the system 10 address of each of these components. Therefore, in one embodiment, construction of the home NIM in processing step 226 involves one or more requests to server 50 and/or server 82 for content (228) that is then rendered (230) in accordance with the home NIM description provided in the processed user profile. In some embodiments, the home NIM is distinct from other NIMs in the sense that a large proportion of the home NIM in such embodiments is pre-compiled. Such embodiments are advantageous because some of the functionality provided by the home NIM requires substantial client 30 processing resources. Therefore, to minimize such processing resource requirements, many aspects of the home NIM are pre-compiled in some embodiments. In other embodiments, however, the home NIM has a structure that is substantially the same as a regular NIM. In such embodiments, simple script commands are used to identify the NIM as a home NIM.

(86) Upon completion of processing step 230, the user is granted access to all of the technologies of the present invention, including the ability to view multiple NIMs simultaneously, collect new NIMs, customize NIMs, and share customized NIMs with other users. An exemplary processed user profile is provided in Example 2. Once again, each line of data is identified with a numeral, while the remaining text in the example describes select data. In some embodiments, the user is granted specific privileges and the extent to which the user is granted access to system 10 is regulated by the types of privileges that have been granted to the user.

(87) EXAMPLE 2

(1) SAMPLE PROCESSED USER PROFILE

(2) <ALL CONFIG>

(88) NIMs AND PACKS THAT CORRESPOND TO THE USER

(3) USER

(89) NIM definition 1

(4) <NIM DOMAIN="ZDNet" GLOBALID="1" KND="news"

(5) <FRAME BACKGROUNDCOLOR=#FFFF00" COLLAPSED="FALSE"

(6) FIXHEIGHT="TRUE" FIXWIDTH="TRUE" NAME="ZDNet Breaking News"

(7) PIXELHEIGHT="275" PIXELWIDTH="235" X="RIGHT" Y="TOP">

(8) <TITLE COLOR=#000000" JUSTIFY="RIGHT" TEXT=" "/>

(9) <TITLEBARIMAGE DOWN=http://www.NIM.com / . . . /feed/titlebar.gif

(10) HOVER=URL address to a first GIF file <param 1> . . . <param N>

(11) INACTIVE=URL address to a second GIF file <param 1> . . . <param 2>

(12) NORMAL=URL address to a third GIF file <param 1> . . . <param 2>

(13) <BOTTOMBARIMAGE DOWN=

http://www.NIM.com / . . . /feed/bottombar.gif

(15) HOVER=URL address to a fourth GIF file <param 1> . . . <param 2>

(16) INACTIVE=URL address to a fifth GIF file <param 1> . . . <param 2>

(17) NORMAL=URL address to a sixth GIF file <param 1> . . . <param 2>

(18) </FRAME>

(19) <MENU/>

(20) <CONTROL_LAYOUT HEIGHT="1" HEIGHTSCALES="TRUE" WIDTH="1"

(21) WIDTHSCALES="TRUE"> <CONTROL CLASS="Browser" HEIGHT="1"

(22) ID="1" KIND="A" LEFT="0" TOP="0"

(23) URL=http://www.mandala.com /cgl/zdnet/zdfeedl.cgi WIDTH="1"/>

(24) </CONTROL_LAYOUT>

(25) <CATEGORIES/>

(26) <EVENTS/>

(27) </NIM>

(90) NIM definition 2

(28) <NIM DOMAIN=NIM DOMAIN 2 GLOBALID=`2`

(29) </NIM>

(91) NIM definition N

(30) <NIM DOMAIN=NIM DOMAIN 2 GLOBALID=`N`

(31) </NIM>

(92) Pack definition 1

(32) <PRESET TITLE="New DotPack">

(33) <NIM GLOBALID="1" X="RIGHT" Y="TOP"/>

(34) <NIM GLOBALID="2" X=RIGHT Y="320"/>

(35) </PRESET>

(36) </SHARE>

(93) Last state of the home NIM

(37) <LASTSTATE>

(38) <PRESET TITLE=" ">

(39) <NIM GLOBALID="1" X="RIGHT" Y="TOP"/>

(40) <NIM GLOBALID="2" X=RIGHT Y="280"/>

(41) </PRESET>

(42) <HOMENIM COLLAPSED="FALSE" HEIGHT="134" X=616" Y="109"/>

(43) </LASTSTATE>

(44) </ALL_CONFIG>

(94) Example 2 describes a representative processed user profile in accordance with the present invention. In general, a processed user profile includes three major components: (i) a definition of each NIM associated with the user, (ii) a description of each pack associated with the user and, (iii) the last state of each home NIM associated with a user. In Example 2,

the definition of each NIM associated with the user is found on lines 4 through 31. Specifically, lines 4 through 31 describe NIM definitions I through N. In Example 2 there is only one pack associated with the user. This pack, entitled "New DotPack," is found on lines 32 through 35 of Example 2. The final major component of the processed user profile found in Example 2 is the last state of the home NIM, which is defined on lines 37 through 43. This code stores the last state of the home NIM. Such last state information includes whether the home NIM was collapsed, and the position of the home NIM on the screen.

(95) When the user wishes to log out of system 10, the processed user profile is transferred from client 20 to server 50. When web server 58 receives the processed user profile, it passes the processed user profile to user profile database manager 100. User profile database manager 100 stores the processed user profile as the unprocessed user profile 76 corresponding to the user. In some embodiments, such a storage operation involves a conversion process. For example, advertisements or specific system NIM definitions are stripped from the processed user profile in order to convert the processed user profile to the unprocessed user profile 76 that corresponds to the user. In some embodiments, the processed user profile is periodically transferred, in its entirety or incrementally, from client 20 to server 50 and saved in the manner described in the log out procedure above. Such timed periodic or event based backup procedures are possible because NIM definitions are efficiently described, thus the absolute size of a processed user profile remains relatively small. Accordingly, timed backups of a processed user profile to user profile database 76 are possible without extensive use of system 10 bandwidth or server 50 resources.

(96) At this stage, a system (FIG. 1) and a login procedure (FIG. 2) in accordance with the present invention has been disclosed. Although the system and login procedure was discussed using an example where only one home NIM was associated with a user, it will be appreciated that, in some embodiments, any number of distinctly different home NIMs are associated with a user. Furthermore, a user can simultaneously execute multiple instances of a particular home NIM on client 20 or, indeed, any number of different home NIMs. In one embodiment, a developer or merchant provides a user with a highly customized home NIM that provides specialized functionality. In such embodiments, the user collects the home NIMs and, therefore, a processed user profile includes a description of more than one home NIM.

(97) Attention now turns to some of the advantages and features of the present invention. In FIG. 4, a visual manifestation of the home NIM 162 is illustrated. One advantage of the home NIM, which is an advantage that is common to NIMs in general, is that the content of the NIM is not trapped in a third party viewer. In fact, the home NIM definition regulates the actual appearance of the home NIM. The home NIM definition is formed by general parameters and commands found in "session_config" as well as customized parameters and commands in the processed user profile. The division of the home NIM definition between a system level file and a user level file represents a balance in the tension between the need for a system 10 host to insure a consistent level of quality, through the proper implementation of general parameters and commands, and the desire of each user to create highly customized home NIMs. Lines 20 through 22 of Example 1 provide an example of general parameters that are defined in "session_config." Lines 23 through 25 define the source location of home NIM frame images. In home NIM 162 (FIG. 4), such home NIM

frame images include the image used to represent buttons 164 through 174, and menu tabs 1 d 178. Furthermore, lines 20 through 22 of Example 1 define the location of other images that are used to construct default NIMs. An example of user initiated home NIM customization is found in lines 33 through 39 of Example 2, which define a "LASTSTATE" definition for the home NIM, including the dimensions of the visual manifestation corresponding to the home NIM on line 38 (HEIGHT="134" X="616" Y="109") and indicates that the home NM is not collapsed upon startup (COLLAPSED="FALSE").

(98) The visual manifestation of home NIM 162 illustrates additional benefits and features of a home NIM in accordance with the present invention. When a user selects tab 176, a list of the NIMs that are present in the processed user profile associated with the user is displayed in viewer 180. As disclosed in more detail below, a user has the option to associate a collection of NIMs into an object termed a "pack". The pack references some subset of the NIMs associated with a user as well as associated state information. This arrangement includes, for example, whether a visual manifestation corresponding to each MM is displayed on output means 42 or not, the dimensions of each visual manifestation, and the position of each visual manifestation. The name of each pack is stored in the processed user profile. A user reviews packs associated with the user by selecting tab 178 (FIG. 4). In FIG. 4, the user only has one pack, "Customized DotPack" 182. When the user selects pack 182, each NIM in the pack is restored in accordance with the state information stored in the pack definition.

(99) In total, FIG. 4 represents a typical visual experience provided by one embodiment of the present invention. In addition to home NIM 162, visual manifestations 184 and 186, corresponding to two additional NIMs in the processed user profile, are displayed. Visual

manifestation 184 provides functionality that allows a user to manage an address book, schedule appointments, or create groups and plan activities. Visual manifestation 186 represents a NIM that provides time and date information.

(100) FIG. 5 shows the visual manifestation of home NIM 162 of FIG. 4 with tab 176 selected. Accordingly, each of the NIMs in the processed user profile associated with the user is listed in list 188. The user can activate any of the listed NIMs by clicking on the NIM name. In addition to the NIMs in list 188, home NIM 162 includes core NIMs that are defined in "session_config." In the "session_config" of Example 1, cores are found on lines 28 and 29. Specifically, line 28 provides the address of an XML-based definition for the add template functionality associated with button 172 in FIGS. 4 and 5, and line 29 provides the address of an XML-based definition for the help template functionality associated with button 174 in FIGS. 4 and 5.

(101) Importantly, the user can categorize NIMs using filter 190. Categories include such topics as sports, personal, weather, etc. Furthermore, the user can add NIMs to the processed user profile associated with the user as well as delete NIMs. There are a variety of mechanisms that enable a user to add a NIM to the processed user profile. One mechanism is to receive links to NIMs from other users of system 10 (FIG. 1), as disclosed below. Another mechanism is to toggle button 172 in order to activate a visual manifestation associated with NIM 192 (FIG. 5).

(102) NIM 192 provides a system that enables users to add select NIMs to their user profile with a single click or keystroke sequence. NIM 192 includes tab 194 that allows the user to select premiere NIMs and a general tab 196 that allows the user to review a general catalog of NIMs that is present in NIM templates database 74 (FIG. 1). In one embodiment, when a

user selects a NIM in list 198 (FIG. 5), the NIM is added to list 188 and is incorporated into the processed user profile associated with the user. In this way, the user can collect NIMs of interest to the user using a single mouse click. By illustration, consider the case in which a user selects the NIM "AnyDay Calender" in list 198. In response to this selection, a definition of the NIM "AnyDay Calender" is obtained from NIM templates database 74 and is copied directly into the processed user profile associated with the user. Furthermore, the title of the selected NIM, "AnyDay Calender" is added to list 188. Finally, a visual manifestation that corresponds to the NIM "AnyDay Calender" is displayed on output means 42 (FIG. 1). As a result, the display illustrated in FIG. 5 adopts the appearance illustrated in FIG. 6.

(103) In FIG. 6, the NIM "AnyDay Calendar" appears at the top of list 188. Furthermore, a control 101 associated with the NIM "AnyDay Calendar" in list 188 is filled, indicating that the NIM is currently active. Additionally, as illustrated in FIG. 6, a visual manifestation 103 corresponding to NIM "AnyDay Calendar" appears on the output means. The user has the ability to toggle this NIM between an inactive and active state by selecting control 101.

(104) In one embodiment, the user is provided with the option of (i) incorporating a NIM selected in list 198 into the processed user profile or (ii) transiently executing the NIM on client 20. Furthermore, when the user receives NIMs from other users, the user has the option to transiently operate the received NIMs on client 20. If the user decides to keep the transient NIMs at a later date, the user has the option to add the transient NIMs to the processed user profile at that time. Thus, in such embodiments, the user effectively has the option to "preview" NIMs before adding them to the processed user profile. This is advantageous because it reduces the chances of filling the user profile with undesirable

NIMs. Such a feature is particularly advantageous in the case of novice or inexperienced users of system 10. Furthermore, one of skill in the art will appreciate that the concept of transient NIM execution raises the possibility of executing NIMs on a client 20 during a period of time in which the user is not logged into system 10. For example, consider a NIM that is executed on a client 20 after a user initiated response to a web page advertisement presented in web browser 36. Although the user is not logged into web server 58 and therefore does not have a processed user profile resident on client 20, the user can execute the NIM on client 20 on a transient basis. Furthermore, if the user wishes to add the transiently executed NIM to the user profile 76 associated with the user, the user can log into web server 58 and then add the NIM to the processed user profile that is delivered to client 20 as a function of the log in process.

(105) Another important feature of the present invention is the ability for users to share NIMs with each other. For example, if a user wishes to share the NIM "AnyDay Calendar" that was added to list 188 in FIG. 6, the user clicks "share" button 170 (FIG. 6). In response, panel 105 is displayed (FIG. 7). Because "share" button 170 is pressed while tab 176 is active in the illustration provided by FIGS. 6 and 7, panel 105 lists each of the NIMs associated with the user. If, however, "share" button 170 is pressed while tab 178 is active rather than tab 176, panel 105 will list each of the packs associated with the user instead of each of the NIMs. Returning to the situation illustrated in FIG. 7, the user shares a NIM with other users by selecting the NIM to be shared from list 107 and then toggling button 109 "Share via email." In one embodiment, the user has the option to select multiple NIMs from list 107 using predefined keystroke operations. For example, in one embodiment, the user selects multiple NIMs by clicking on several of the NIMs in list 107 with a mouse

button while depressing the "shift" button on the keyboard. When a user decides not to share a NIM and panel 105 is displayed, the user presses cancel button 111 and panel 105 is dismissed.

(106) When a user toggles "share via email" button 109 at a time when one or more NIMs in list 107 have been selected, the definition of each selected NIM is copied from the processed user profile associated with the user into a container and the container is sent to server 50 (FIG. 1). In the embodiment shown in FIG. 1, the container is received by web server 58. Web server 58 includes instructions for routing the container to sharelink database 78 where the container is stored. When the container is stored, a unique identifier is assigned to the container. Although a large number of different mechanisms for generating a unique identifier are practiced in accordance with this aspect of the invention, in one embodiment, the unique identifier assigned to the container upon storage in sharelink database 78 can be subsequently processed to form a URL address that specifically references the container within the context of system 10. In one embodiment, after a unique identifier has been assigned to the container, an e-mail program is launched on client 20 and the user is requested to designate the recipients of the designated NIMs. Then, each recipient is provided with the unique identifier associated with the container in an e-mail message. When the recipient clicks on the unique identifier, a call is made for a copy of the associated container from sharelink database 78 and the container is delivered to the client 20 associated with the recipient.

(107) As is readily apparent upon review of FIG. 7, the user has the option to size and position the visual manifestation that corresponds to each NIM. Furthermore, by toggling controls, such as toggle button 101 (FIG. 7), the visual manifestation of a NIM is toggled between an

on state and an off state. Such functionality is highly advantageous. First, by using this functionality, the user has the option to create unique arrangements. Second, NIM developers have the ability to control the default position and size of NIMs as well, and can therefore produce an arrangement of NIMs to further specialized purposes. Finally, because the NIMs of the present invention are not trapped in third party applications that have a set of undesirable features such banner ads, the utility and overall appearance of an arrangement of NIMs is enhanced and adopts an independent value. Using the technology disclosed in the present invention, the user collects an assortment of NIMs and arranges them in a customized fashion. The user has the option to "capture" favored arrangements into constructs known as packs, which have been briefly discussed previously.

(108) FIGS. 8 and 9A illustrate the formation of a pack using the arrangement of NIMs illustrated in FIG. 4. The process begins when the user toggles button 164 "Make Pack" in FIG. 4. In the embodiment illustrated by FIGS. 8 and 9A, panel 113 (FIG. 8) is displayed when the user toggles button 164 (FIG. 4). Panel 113 advises the user to open and arrange each of the NIMs that are to be included in a pack. In the case of FIG. 4, for example, such an arrangement could include the arrangement of NIMs 184 and 186. The user indicates that specified NIMs are in a desired arrangement by selecting button 115 "Next" (FIG. 8). When button 115 is toggled, prompt 113 is terminated and prompt 117 is displayed to prompt the user for a name to associate with the designated pack. The user indicates that a name 119 has been provided for the pack by selecting "Done" button 121.

(109) In the embodiment shown in FIG. 8, the user further has the option to return to panel 113 and rearrange the specified NIMs before committing to pack creation by selecting the "Back" button 123. In the situation illustrated in FIG. 8, the user has provided the name

"New DotPack." FIG. 9A illustrates the state of the visual manifestation corresponding to home NIM 162 after the user has selected "Done" button 121 (FIG. 8). Specifically, the name "New DotPack" is added to pack list 125 and tab 178 is activated to display the user pack list rather than the user NIM list that is displayed when tab 176 is activated. Furthermore, in response to the user selection of "Done" button 121 in FIG. 8, a reference to each NIM specified by the user is collected into a pack, along with some state information, and the pack is stored in the processed user profile associated with the user. Representative state information for each NIM stored in a pack includes whether the NIM was collapsed and the position of the NIM. In some embodiments, the state information includes the dimensions of the last visual manifestation corresponding to the NIM to have been displayed on output means 42.

(110) FIG. 9 illustrates pack 139, which is delineated with a dashed box. Pack 139 includes five NIMs 133. Each NIM 133 includes two primary components, a viewer 135 for viewing content and a frame 137 for providing user functionality. Each viewer 135 provides a platform for reviewing machine readable information, such as HTML, dHTML, images, imbedded ActiveX and Java applications, JavaScript, CSS, Streaming Media, and/or Flash. Furthermore, in some embodiments, viewer 135 provides functionality for processing digitally recorded sound. Observe then that each NIM of the invention utilizes machine readable information that is easily retrieved from a specified address. If the content provider of this information desires to change the machine readable information, changes can be made and then delivered the next time that the machine readable information is addressed. This stands in contrast to prior art techniques in which updates to executable code can be relatively difficult to distribute.

(111) Each frame 137 provides functions and controls for manipulating the visual manifestation of the NIM 133 corresponding to the frame. For example, some frames 137 include a dismiss button 141. When the user clicks on dismiss button 141, the corresponding NIM 133 is dismissed. Additionally, some frames 137 include a menu button 143. When the user clicks on button 143, a menu appears. In one embodiment, the menu is a pull down menu and the menu items are defined in the corresponding NIM definition. In an abstract example, the NIM definition provides a menu definition of the format:

Menu 143-(I)-"Get more NIMs" URL

(112) where (I) refers to the N.sup.th element of the menu that is activated when menu button 143 is pressed, "Get more NIMs" is the menu element name, and URL is the event or web address that is called when the user selects the N.sup.th element of the menu associated with button 143.

(113) The developer has full control over all aspects of the appearance and functionality of NIM frame 137. Thus, a NIM developer has the ability to control, for example, the functionality located at any corner of frame 137, functionality placed along the top or bottom of the frame, or on the sides of the frame. As an illustration, frame 137-3 includes a control button 145 that allows the user to resize the visual manifestation of NIM 133-3. One of skill in the art will appreciate that the bottom row of NIM frame 137 could have any number of buttons, including a forward control, a backward control, and similar controls, each of which provides the user with distinct functionality.

(114) An advantage of the present invention is that it is possible to embed commands that affect frames 137 in the content of the computer readable media delivered to frame viewer

135. The use of embedded commands provides NIM developers with powerful tools and additional flexibility. For example, a developer can use embedded commands, such as the menu command above, to design a NIM that has a context sensitive help menu. Each time a particular event occurs, the developer changes the content of the help menu using embedded commands. For example, when a sound file is delivered to a NIM, the sound file may be attached to a set of embedded commands that provide sound manipulation functionality in the form of a pull down menu. Elements of such a pull down menu include a command for saving the sound file to disk, commands for fast forward, stop, and play, and commands for sound enhancement. After the sound file has been played, embedded commands are used in this example by the developer to reset the menu associated with button 143 to some default state. One of skill in the art will appreciate the benefits and advantages of a frame 137 that is capable of being modified based on commands embedded in the machine readable media delivered to the corresponding viewer 135. The developer can use presentation tools, such as adding transient help buttons, resizing the visual manifestation of the NIM, changing the frame border color, changing the title of the frame, and changing the frame border patterns, to create a more effective application.

(115) One of the advantages of the disclosed pack system is that it provides a convenient mechanism for rapidly assembling NIMs that track diverse sources of information. Furthermore, when a useful set of NIMs is collected into a pack, the user can share the pack with other users using the same procedure previously identified for sharing one or more NIMs. It will be appreciated that in some embodiments, NIMs are commercial applications and that appropriate use of packs provides an additional dimension for application development. Therefore, in some embodiments, pack recipients are subscribers to a service

provided by a pack developer. In other embodiments, pack recipients are purchasers or licensees of packs. In still other embodiments, pack recipients receive packs developed by friends, family members, or business associates.

(116) The technology of the present invention further provides a set of NIM management tools to help a user manage displayed NIMs. In some embodiments of the present invention, these management tools are provided by visual management module 114 (FIG. 1). Two such NIM management tools are, in fact, properties that are associated with NIMs, namely magnetism and snapping. The property of magnetism is exhibited when a visual manifestation corresponding to a first NIM is dragged or moved near a visual manifestation corresponding to a second NIM. When this occurs, the two NIMs exhibit a magnetism that causes the first NIM to accelerate toward the second NIM. However, when the visual manifestations are within a predetermined distance of each other, the NIMs snap together. In one embodiment, the predetermined distance that triggers the two visual manifestations to snap together is a gap of about five pixels. While the above discussion describes the principles of snapping and magnetism based on a pair of NIMs, there is in fact no limitation on the number of NIMs that can be snapped together and furthermore, the principle of magnetism is not dependent on whether a NIM is in fact snapped to another NIM or not.

(117) An additional management tool, illustrated in FIG. 9A, provides a mechanism for selecting multiple NIMs and for moving the NIMs in a coordinated fashion. In FIG. 9A, visual manifestations 162, 184 and 186 corresponding to respective NIMs are locked together. In response, halo 127 is drawn around the selected locked visual manifestations to graphically notify the user which NIMs are locked together. As mentioned previously, the user has the option to position NIMs as a coordinated group. For example, in one

embodiment, when halo 127 is displayed and the user moves mouse arrow 129 after selecting one of the visual manifestations corresponding to a locked NIM, a target manifestation 131 is displayed to indicate to the user the position that the selected NIMs will be relocated to if the user clicks a mouse key. In some embodiments, target manifestation is a shadow image of the NIMs within halo 127 rather than the box depicted in FIG. 9.

(118) The present technology further provides additional methods for controlling visual manifestations of NIMs. For example, in one embodiment, the user has the option to select multiple NIMs by pressing a predefined key such as the keyboard "Ctrl" key, before selecting a specified NIM. While continuing to depress the control key, the user has the option to select additional NIMs and add the corresponding NIMs to a group. The user then has the option to move each of the NIMs in a single coordinated fashion as a group. Furthermore, by entering a designated keyboard or mouse sequence, the user has the option to move a single NIM even in situations where the NIM is in a group. In one embodiment in accordance with this aspect of the invention, the user clicks the visual manifestation corresponding to a locked NIM that the user wishes to move in an independent manner and the user does not click the visual manifestation when the user wishes to move the NIM in a manner that is coordinated with the other NIMs. Additional features of the present invention include the option to select rows or columns of NIMs using specialized control sequences. For example, in one embodiment of the present invention, the user selects a column of NIMs by clicking on a NIM while holding down the alphanumeric character "c" on the keyboard.

(119) It will be appreciated that one advantage of the present invention is that it is possible to display multiple NIMs and that each NIM provides a specialized visual experience. Therefore, NIM alignment tools are advantageous because they allow users to quickly make room on output means 42 for additional NIMs and/or to produce highly styled NIM arrangements. Accordingly, the present technology provides a specialized feature to rapidly align NIMs. This technology is illustrated in FIG. 10. The technology works in conjunction with the tools for selecting multiple NIMs. In FIG. 10A, the user selects the visual manifestations 147, 149 and 151 corresponding to respective NIMs using, for example, the column select feature disclosed above. Then, the user pushes the selected NIMs against boundary 153. In one embodiment, boundary 153 is the horizontal or vertical edge of output means 42. In another embodiment, all visual manifestations corresponding to NIMs are displayed in a single viewport such as a window. In such embodiments, the horizontal and vertical edges of the window each represent a boundary. FIG. 10B illustrates how visual manifestations 147, 149, and 151 are automatically aligned when they are pushed against a boundary, such as boundary 153. In some embodiments, the relative alignment between the visual manifestations is preserved even after the manifestations are moved in subsequent action by the user. The present technology further allows for the rearrangement of NIMs along a particular axis. For example, if NIMs are substantially oriented along a vertical axis as shown in FIG. 10B and the user wishes to realign the NIMs on the horizontal axis, all the user has to do is push the collection of NIMs against a horizontal border. For example, when the user pushes visual manifestations 147, 149 and 151 against border 155, the visual manifestations realign to conform to border 155 thus resulting in the view depicted in FIG. 10C.

(120) The features of the home NIM of the invention have been fully described. Attention presently turns to the architecture and operation of individual NIMs utilized in accordance with the invention.

(121) In one embodiment of the invention, after a user has logged into the system, as discussed above in connection with FIGS. 1 to 10, the user interface 40 displays the home NIM 162 as shown in FIG. 5. The home NIM typically includes a list of NIMs 188, referred to in FIG. 5 as "MyDots." These are NIMs which have been "collected" by the user. The list of collected NIMs, along with their associated definitions, is stored on the server in the user profile database 76, and downloaded from the application server 50 in response to a request from the client parser application 38. The local copy of the processed user profile is then further processed when the user collects or uses NIMs.

(122) Collected NIMs may be opened or closed by clicking on the control button next to the NIM's name or on the NIM's name itself, in list 188, and all NIMs may be closed by clicking on the "all off button` 166. The user may place NIMs into categories in a list of categories 190, which can be edited by clicking on the-Edit" button 168. New NIMs may be added to the user's collection of NIMs by clicking on the "Get" button 172.

(123) FIG. 5 also shows a NIM 192 with a list of NIMs 198, which may be previewed and/or collected by the client 20. The user may preview or collect a NIM by clicking on the associated name of the NIM, e.g., "eHOW". The steps taken to provide the NIM to a user are shown in FIG. 11. After logging in (step 240) the user clicks on the name of a NIM, and the client parser application 38 sends a request including the NIM_ID of the NIM definition, to the applications server 50 via the transmission channel 44 (step 241). Alternatively, the user may click on a NIM link before logging in, for example if the link

has been e-mailed to the user, and then, after clicking on the link, log in. In another aspect, the user could view, but not collect, a transient NIM without ever logging in.

(124) After the user is logged in and has clicked on the NIM, the applications server 50 retrieves the NIM definition from the NIM template database 74 using the NIM ID, in step 242, and provides it to the client 20 in step 243. The client 20 receives the NIM definition from the applications server 50 in step 244, and the client parser application 38 creates a frame in the display of the user interface 42 in step 245. In step 246, the client 20 requests the necessary content elements 94 stored at the URLs identified in the NIM definition from the corresponding content server 82. The content server 82 transmits the content 94 in step 247, and in step 248 the client parser application 38 places the content in the viewer, which is enclosed by the frame, allowing the user to preview the NIM. Alternatively, the client parser application 38 may simply collect the NIM, adding it to the user's processed user profile.

(125) The user may then view the NIM on the user interface display 42, and may interact with the NIM much in the same way as a user may interact with Internet content or web applications. This may change the NIM from its present, "raw" state to a used state reflecting alteration or use of the NIM by the user. For example, the user may direct the NIM to different content within the NIM if the NIM content enables the user to do so. Or, the user may provide information to the content server 82 which allows the NIM to be personalized. The user may additionally be given the option of changing the size of the frame.

(126) If the user collects the NIM, the NIM will be added to the user's list of collected NIMs such as the list 188 shown in FIG. 5. Additionally, the client parser application will add the

NIM's definition to the processed user profile, and, on logout, send the processed user profile to the application server 50. Thus, the NIM's "state" will be preserved. Alternatively, the client parser application may collect the NIM automatically, without waiting for a user command, by adding the NIM definition directly to the processed user profile.

(127) If the NIM's state has been altered by the user or by the content--if for example, the user has directed the NIM to Internet content other than the initially-displayed content, provided personalizing information, or changed the properties of the frame, or if the content itself has caused an alteration in the NIM--this alteration will be reflected in the NIM definition stored in the user profile database 76. Information which personalizes the resulting content, instead of being stored in a "cookie" on the client's hard drive, can be stored as part of the NIM definition. This advantageously permits personalization of content, such as web content that is associated with the NIM content and the user, without storing a cookie on the client 20.

(128) A user may also access a NIM which has been previously collected, and possibly altered by use as explained above. As previously described, the user profile 76 includes NIM definitions for NIMs which have been viewed and collected by each user. A screen shot showing NIMs 188, which have been previously collected by a user is shown in FIG. 5. The steps taken to provide the user with NIMs which have been previously collected are shown in FIG. 12.

(129) As discussed above, on login (step 250) the user's profile is retrieved by the client parser application 38 in the client 20 (step 251 and 252). The user's profile, stored in the user profile database 76, includes the NIM definition for each of the NIMs previously collected,

and possibly altered, by each user. The NIM definitions, as discussed above, includes the NIM frame definition and the definition of the controls for filling the viewer within the frame with content. After log in, a local copy of the processed user profile is stored on the client 20, and this copy is further processed as the user collects new NIMs, or uses new or collected NIMs such that the NIMs are altered.

(130) When the user clicks on the name of a collected NIM (step 253) the client parser application 38 creates a frame in the display 42 of the user interface 40 in step 254. At step 255, the client 20 requests the necessary content elements 94 stored at the URLs identified in the NIM definition from the corresponding content servers 82, which provide the content 94 in step 256. It will be appreciated that these URLs need not be the same as the initialization URLs in the "raw" NIM definition stored in the NIM template database 74 on applications server 50, and in fact the content servers need not be the same content servers corresponding to the initialization URLs. In step 257, the NIM parser application 38 places the content in the NIM frame, and the NIM is then fully opened.

(131) FIG. 13 illustrates a data structure for a NIM definition. As discussed above, a NIM is defined as a frame that contains a collection of controls, or functional units, such as a web rendering control or a GIF rendering control. The NIM frame surrounds a viewer, which displays the addressed content. The MM has a defined layout or arrangement of the controls, and defined initialization input data, e.g. data and URLS, for each control or element, in the NIM. NIM definitions are available to the client parser application via NIM links. The NIM links "point" to NIM definitions, which include all the information needed to build a NIM frame and fill the NIM with NIM content. Thus, NIMs links are easily collected, associated into packs, and shared by users.

(132) In one embodiment, the NIM definitions are defined using Extensible Markup Language (XML), so that the NIM as a whole--the frame and the content within the viewer--is advantageously as flexible as standard web content. NIMs are extremely flexible, because the definition of the NIM is content, rather than compiled code. The NIM definition defines the structure of the NIM, and everything that is visible in a NIM is based on standard Internet content, such as HTML, dHTML, or GIFs, and is referenced or pointed to by the NIM definition. An "application"-type NIM, such as a web calendar or web mail, may be changed by the user, by the content provider, or by other content, while advantageously avoiding the need to distribute and support a hard-coded compiled application. The definition of a NIM thus includes everything that is needed for the NIM to be rendered and filled with Internet content.

(133) As shown in the exemplary embodiment of FIG. 13, the definition of a NIM includes tags that identify the NIM 270, define and configure the NIM frame 271, specify and layout the controls 273 in the NIM viewer, and specify parameters to initialize all the NIM's components with content or data.

(134) In one embodiment, a NIM is identified by three ID strings 270: GlobalID, Domain and Kind. A GlobaliD is used when the MM definition is within a share. It is unique with respect to other NIM tags in the share. A NIM's domain is a unique label for the owning company or developer of the NIM, such as "dodots.com ." Finally, a NIM's kind, which is specified by the NIM's developer, is a helpful identifier for finding the NIM, but need not be unique. Examples of possible NIM kinds include "mp3", "scriblets," and "calculator." As discussed above, a NIM definition will typically be written in a format which facilitates sharing of data over the Internet, such as XML. An XML specification for the NIM

identification strings, for one embodiment of the invention follows. The bold text identifies NIM definition data, while the remaining text describes the data.

GLOBALID="string" Used only within <SHARE> tags. This GLOBALID must be unique with respect to other <NIM> tags in this <SHARE>.

DOMAIN="string"

(135) Unique label for the owning company of this NIM. In theory, NIMs may be limited to communicating with NIMs only from their own domain.

KIND="string"

(136) Helpful identifier for finding such a NIM from another NIM. Does not have to be unique.

(137) The NIM definition also includes the definition of a frame 271, which specifies the frame size and shape, and optionally the frame orientation and/or location on the user's screen. The space within the frame is the control space or viewer; visible controls are distributed within the control space or viewer.

(138) The NIM definition may optionally include controls for: a titlebar; a NIM menu with flexible menu entries; an exit button; and a bottombar. A typical layout for these components is: titlebar at the top of the control space, with menu on the left and exit button on the right, and the bottombar at the bottom.

(139) The titlebar component gives the user a place to grab and drag the NIM in a windowed environment. In one embodiment, it is implemented as a GIF rendering control that can be

targeted to a local or remote titlebar image. The titlebar will preferably have a fixed height and width that is a function of the NIM's width. The titlebar is preferably capable of being located at any position on the periphery of the NIM. Overlay text can also be specified to layer on top of the titlebar image. The bottombar may be implemented in a similar fashion, but typically will not include text overlay. The titlebar and bottombar may be filled in with initialization data from a fixed data file, or alternatively with Internet content from, example, an initialization URL.

(140) In one embodiment, a menu definition 271 is also included in the NIM definition. The menu includes items and actions of the NIM provider's choosing. For example, menu items may include the title "browse" associated with the action of targeting a full-screen browser or another NIM, and retrieving content for that browser or NIM from a specified address such as a URL. Logging off, or directing the NIM to another address or URL, are also possible menu action items. Menu action items that require communication of messages between the NIM and another NIM may also be provided--for example, opening another NIM, or changing the content of another NIM that is already open. Communication of messages between different parts of the system is discussed below.

(141) An XML specification for a frame, titlebar, bottombar and menu, for one embodiment of the invention follows:

<FRAME>

<TITLE>

TEXT="string"

JUSTIFY=-"LEFT"|"CENTER"|"RIGHT"

COLOR="#XXXXXX"

PIXELWIDTH="integer"

Width in pixel units. Overrides WIDTH attribute.

PIXELHEIGHT="integer"

Height in pixel units. Overrides HEIGHT attribute.

WIDTH="integer"

Width in NIM units. Default value is 1.

HEIGHT="integer"

Height in NIM units. Default value is 1.

X="integer"|"LEFT"|"CENTER"|"RIGHT"

Initial X position in screen coordinates. Default is center.

Y="integer"|"TOP"|"CENTER"|"BOTTOM"

Initial Y position in screen coordinates. Default is center.

FIXWIDTH="TRUE"|"FALSE"

Default is false.

FIXHEIGHT="TRUE"1"FALSE"

Default is false.

BACKGROUND COLOR="#XXXXXX"

Default is white.

<TITLEBARIMAGE>

JUSTIFY="LEFT"|"CENTER"|"RIGHT"

TILELEFT="integer"

TILERIGHT="integer"

NORMAL="URL"

DOWN="URL"

HOVER="URL"

INACTIVE="URL"

<BOTTOMBARIMAGE>

JUSTIFY="LEFT"|"CENTER"|"RIGHT"

TILELEFT="integer"

TILERIGHT="integer"

NORMAL="URL"

DOWN="URL"

HOVER="URL"

INACTIVE="URL"

<MENU>

Contains zero or more <ITEM> tags.

<ITEM>

TITLE="string"

TOOLTIP="string"

ICON="URL"

ID="string"

Must be unique.

<ACTION> RECIPIENT="address" MESSAGE="string"

(142) As shown in FIG. 13, the NIM definition also includes layout and definition of the controls 273. A control may be visible and render some sort of visual or text display, either static or dynamic. A control may be hidden, for example a functional element that is not necessarily visual such as a Java control. The control definition 273 includes identification of the types of controls, the layout of the controls, and initialization information. In one embodiment, NIM controls are specified and identified by class, kind and ID. Class defines the type of NIM control and is not unique. Kind is a useful identifier selected by the developer, and again is not unique. The NIM ID is unique within a user's processed profile.

(143) Different classes of controls may be used. For example, a control may be a web rendering object, which can render web content such as HTML, dHTML, images, imbedded ActiveX and Java applications, JavaScript, CSS, Streaming Media, and/or Flash. Alternatively, a control may be any object capable of rendering any kind of computer readable media, such as a GIF rendering object or an custom-designed object to display a particular kind of information. Alternatively, a control may be an object capable of processing any kind of application logic, such as a Java module. For example, an on-line brokerage firm could implement a custom stock-chart-rendering control, and define a NIM to use this control.

(144) As discussed above, the control space is located within the frame, and one or more controls can be flexibly positioned within the control space, and these controls may include a titlebar and a bottombar, as well as other controls. The location of controls is specified by the layout in the definition of the controls 273 within the NIM definition. In one embodiment, the controls are laid out or positioned within the NIM frame according to a flexible grid. In this embodiment, the NIM definition allows the control space to be

subdivided into equal vertical and horizontal units, and then for the controls to be positioned and sized within the control space.

(145) A control definition will typically include initialization data. For example, where a control is a web rendering object, the definition will include initial URLs. When the NIM is opened, the control will navigate to the initial URLs to obtain content and render the NIM. If the control is a GIF, the control could retrieve the GIF file from a content server or from the application server. A NIM definition may optionally include additional tags identifying initialization parameters for different platforms: for example, a URL is suitable for a PC, but a "P-URL" may be provided as well, pointing to content suitable for users viewing NIMs through a personal digital assistant (PDA) or similar device.

(146) Controls are typically installed on the applications server, and may be updated after installation by the applications server. The home NIM code, downloaded when the client becomes "NIM-enabled," includes the then-existing controls. Controls are updated as new controls are installed on the server or when a user requests a NIM that requires a new control. The server may then may download such updates to the client parser application, for example on log-in. The NIM framework allows any control to be positioned and initialized in a control space in a NIM, as discussed above.

(147) An XML specification for control definition and layout, in accordance with one embodiment of the invention, follows:

<CONTROL_LAYOUT> Contains zero or more <CONTROL> tags.

WIDTH="integer" Divides control space into this many evenly spaced columns. Default is

1.

HEIGHT="integer" Divides control space into this many evenly spaced rows. Default is 1.

WIDTHSCALES="TRUE"|"FALSE" Default is true.

HEIGHTSCALES="TRUE"|"FALSE" Divides control space into this many evenly spaced columns. Default is 1.

<CONTROL>

CLASS="string" Class may be "Browser," "GIF reader," or other object for rendering computer readable media.

KIND="string"

ID="string" Must be unique with other controls in this NIM.

LEFT="integer" X position of the control in container unites. Default is 0.

TOP="integer" Y position of the control in container units. Default is 0.

WIDTH="integer" Width in container units. Default is 1.

HEIGHT="integer" Height in container units. Default is 1.

URL="URL" This is read if and only if this control is of class "Browser". This is the URL to which this control navigates. Otherwise, may include address for other control content, e.g. GIF address in applications server.

<CATEGORIES> Contains zero or more <CATEGORY> tags.

<CATEGORY> Adds the NIM to this category. This is the only way categories are specified; i.e. there is no master category list.

NAME="string" This is the name of the category.

(148) A NIM definition may also optionally include home NIM categories 274. A home NIM category used by home NIM 204 is a convenient way for a user to keep track of collected NIMS. When a user adds a NIM to a category 204, the category is added, as a string element, to the categories element 274 of the NIM definition in the user profile. For example, a user may categorize a particular NIM as "entertainment," or "news," or "reference." This category will then be added to the categories element 274 of the MM definition.

(149) A NIM definition may also optionally include an events element 275, which defines actions to certain NIM events. For example, the OnClose event, when a NIM is closed, may be assigned a specific and targeted action, similar to a menu item. An XML specification

for the event element in a NIM definition, in accordance with one embodiment of the invention, follows:

<EVENTS>

<ONCLOSE>

(150) Executes this action list on close.

<ACTION_LIST>

(151) Contains zero or more <ACTION> tags.

<ACTION>

RECIPIENT="address"

MESSAGE="string"

(152) A sample NIM definition, in an XML file format in accordance with the above specification, follows:

<NIM DOMAIN="calculator" KIND="basic">

<FRAME CLASS="Standard" BACKGROUNDCOLOR="#FFFF00"

```
WIDTH="6" HEIGHT="4" FIXWIDTH="TRUE" FIXHEIGHT="TRUE">

<TITLE TEXT="Basic Calculator" COLOR="#000OFF" JUSTIFY="LEFT"/>

<TITLEBARIMAGE JUSTIFY="LEFT" TILELEFT="1" TILERIGHT="1"

NORMAL=" " INACTIVE=" " HOVER=" " DOWN=" "/>

<BOTTOMBARIMAGE JUSTIFY="LEFT" TILELEFT="1"

TILERIGHT="1" NORMAL=" " INACTIVE=" " HOVER=" " DOWN=" "/>

</FRAME>

<MENU/>

<CONTROL LAYOUT WIDTH="1" HEIGHT="1">

<CONTROL CLASS="Browser" KIND="A" ID="1" TOP="0" LEFT="O" WIDTH="1"
HEIGHT="1"

URL="http://www.dodots.com /dots/Calc/CALCULATOR2.htm"/>
```

</CONTROL LAYOUT>

</NIM>

(153) The first line of this definition establishes the identification of the NIM definition, as discussed above: it is in the domain "calculator," and the kind of display is "basic."

(154) In one embodiment, the domain will be the domain name associated with the content provider. The domain name is a unique label for the provider or developer of the NIM. The NIM's "kind" is a helpful identifier for locating the NIM, and need not be unique. A NIM may also be identified using a GlobalID, when the NIM is being shared. Since the NIM defined by this XML file is not being shared, it does not have a GlobalID.

(155) The second line of the example XML NIM definition establishes the size and appearance of the NIM frame, defining a NIM viewer in which the NIM content will be placed. The third line ensures that the height and width of the frame are fixed--that is, the size of this frame cannot be adjusted by the user. The fourth and fifth lines establish the title of the NIM--"Basic calculator"--and its location. The next four lines establish the location and placing of the titlebar and bottombar, and relevant images, e.g. mouse-over. Thus, the first part of the example NIM definition defines the NIM frame. The definition of a frame, titlebar, menu and other aspects distinguish a NIM from a browser--the content provider has control over the frame size and every aspect of the NIM's appearance, whereas when a browser is used, the content provider has to adapt to the browser display size, and browser titlebar, menu, logo and other aspects cannot be controlled by the content provider.

(156) The rest of the NIM definition identifies, positions, and initializes the NIM's controls, which, in this case, are contained by the NIM frame. In this example, the next few lines

establish that a single control will start in the upper left corner of the NIM viewer, that the control is of the type "browser," or web-rendering, and that the initialization URL for the control is www.dodots.com /dots/Calc/CALCULATOR2.htm. This URL is typically referred to as the "initialization URL," because it is where the NIM looks for NIM content when it is opened. Where the control is of type "browser," the content will typically be HTML content. However, any standard Internet content--HTML, dHTML, flash, streaming media, or Java, for example--may be used. As discussed earlier, a control, could include types other than a browser. The final two lines of the XML file close the definition file.

(157) It will be appreciated that the NIM is designed such that content consumes the entire frame. In one embodiment, the content for the corners of the frame--the menu and the exit button--and the frame sizing images are served by an application server and referenced when the user logs in. Everything else is developed and served by a separate NIM developer. This differs fundamentally from the current approach to providing web content, in which there is a strong distinction between the viewer application--the browser--and the web page or web content. Using present browser-type technology, the content is trapped within the viewer. To obtain a cohesive application feel and access to application features, the current alternative is to develop custom client applications. NIMs allow a developer to provide an application feel without developing custom client applications.

(158) NIMs and the client parser application have a messaging architecture--the NIM messaging architecture, or NMA--that enables NIMs, controls, and the client parser application to communicate. Messaging, in combination with the NIM definition, gives the content of a NIM access to the application/rendering program--the client parser application--and to other NIMs, allowing true application behavior. The NIM definition,

discussed above, is accessible, flexible, and may be changed by a NIM or a user while the NIM is in use, even after it's been rendered.

(159) The content provider, the user, or other NIMs can change a NIM. For example, the content--which includes the titlebar and menu elements--may be changed by the NIM provider by simply enhanced NIM content, using 20 messaging, so that NIMs can exhibit true application behavior. For example, an online brokerage firm can go beyond providing a NIM that renders stock tracking charts, and allow users to trade on-line via a second NIM that can interact with other NIMs such as the first NIM to help facilitate the activity.

(160) A NIM can be changed by its content, or by another NIM, using messaging. This enables a NIM to, for example, notify a user of events, such as a change in content. A NIM could, for example, remain open, but in a collapsed mode, until a particular event occurs, and could then either expand to normal size, or open another related NIM. For example, if a particular stock hits a predetermined price, the stock tracking chart NIM discussed earlier can notify the user by expanding, by popping up a message, or by opening another NIM (such as a stock trading NIM). Alternatively, the NIM could notify the user of a particular event by coming into focus or changing size or content. These changes could also be made by sending messages from a content or applications server to the NIM.

(161) As illustrated in FIG. 14, all elements of the system can send and receive NMA messages. Message routing between NIMs, from a NIM to itself (that is, between e.g. the frame elements and a control, or one control and another), and from NIMs to the system, are handled by a message interface module 106, which is part of the client parser application 38 in the client 20. In one embodiment, the message interface module 106 resolves addressing queries, executes system-level commands from the NIMs such as

"close all NIMs," and passes messages between NIMs. The message interface 106 may also communicate messages to controls such as the browser class controls, for example "navigate the addressed NIM's browser control to the argument URL." Alternatively, the message interface module 106 may route a message to an application or content server (not shown in FIG. 14) for expanded functionality. In one embodiment, the message interface module 106 uses an HTTP request to access an application program interface (API) call, with data optionally being sent and received in XML format. For example, the message interface 106 could send a message providing user input, such as credit card information to a credit processing module on a web server 82.

(162) In one embodiment, an NMA message has two components: a recipient, or address, and the message body. Both are represented as strings. The address may specify an exact NIM, a kind of NIM or control, a domain, or the system, meaning the overall home NIM display. For example, in one embodiment, the address may be in the form:

#<NTM specifier>:<control specifier>

(163) if the communication is between NIMs in the same domain, or

#<domain>:<NIM specifier>:<control specifier>

(164) or

#<domain>:<NIM specifier>:<NIM id>:<control kind>:<control id>

(165) if the communication is between NIMs in different domains, or

#system

(166) if the communication is to the system.

(167) In one embodiment, if the address is not properly specified it defaults to #system. The message interface 106 in the client 20 can flexibly allow, restrict MM addressing or sending messages--for example, the message interface can ensure that only certain NIMs can send message to a particular NIM. This allows NIM developers to develop coordinated NIMs that can interact, by sending messages to e.g. change content or open one another, without allowing other NIMs to interact with their coordinated NIMs.

(168) In one embodiment, a specifier in n address may be the unique identification of the NIM, control or domain in question: <specifier>:=<ID>. Alternatively, where the kind of NIM or control receiving the message is important but the specific NIM or control is not, the specifier may address a message to the closest matching recipient using a search criteria: <specifier>:=<kind>#<search criteria>. The kind should be a type of NIM or control that is installed in the system. Search criteria may be, for example, "any," "open," or "closed." Finally, where the control is being specified, the specifier may be a symbol, such as ".", indicating that the message is addressed to the sending NIM. For example, in one embodiment, the address #system sends the message to the system. The address #. sends the message to the NIM which sent the message. The address #7 sends the a message to the NIM with the identifier 7. The address #B#open:5 sends a message to the control with the identifier 5, in the first open dot of kind B found in the system.

(169) In one embodiment, certain NIMs will have privileges to send particular messages to certain NIMs, and not to other NIMs. For example, NIMs in a domain may be permitted to send control messages to other NIMs in the same domain, but not to NIMs in other domains. Thus, a NIM provider may have control over messaging between NIMs in his domain, and prevent NIMs in other domains from changing NIMs in his domain. Alternatively, NIM providers may coordinate with NIM providers in other domains, permitting certain messaging privileges between some of the NIMs in their respective domains. The HomeNIM and other system NIMs, such as the login NIM, which are in the system domain, may have certain messaging privileges that no other NIMs have, such as logging the user out or closing all the currently-open NIMs.

(170) In one embodiment of the invention, the second part of the message, the body, is represented as a string of characters. Messages may be sent to the client parser application, to the frame of a NIM, or to a control. Messages may be specific, defined messages, as shown in the following examples, or may be any javascript, which may be sent in or out of NIM content. Examples of defined messages to the client parser application, in one embodiment, are:

Application Message<arg>	Function
Refresh	Refreshes the user's profile.
#have-NIM <NIM-address>	Check if the user has the specified NIM as part of the user's profile.
#delete-NIM <NIM-address>	Remove the specified NIM from the user's

	profile.
#get-screen-width	Returns the width of the screen.
#get-screen-height	Returns the height of the screen.
#close-all-NIMs	Closes all open NIMs.
#get-NIM-ids <NIM-address>	Returns the NIM ID of the specified NIM.

(171) Messages can also be sent from a NIM to itself, or to another NIM, and the identified actions or functions, specified in the body, are performed on the receiving NIM. The following are examples of messages to a NIM for one embodiment of the invention:

Defined NIM Message<arg>	Function
#set-size<width><height>	Sets the size of the NIM.
#set-width<width>	Sets the width of the NIM.
#set-height<height>	Sets the height of the NIM.
#set-position<x-pos><y-pos>	Sets the position, of screen, of the NIM.
#set-title<title>	Sets the title of the NIM.
#collapse	Collapses, but does not close, the NIM.
#uncollapse	Uncollapses the NIM.
#set-user-sizable<width true/ false><height true/false> sizeable	Establishes whether the NIM is by the user
#set-background-color<color>	Sets background color of the NIM.
#set-title-text-justify<justify-keyword>	

(172) The above examples of NIM messages may, in one embodiment of the invention, be sent to a NIM by another NIM. For example, a user may provide input to a NIM, for example a stock tracking chart NIM, indicating an interest in another NIM, such as a stock trading NIM. The current NIM may then send an "open" message to the second NIM to open it, if it wasn't already open. The current NEM may then send a navigate message (see below) that may include an argument, such as a URL or other content pointer, so that the second NIM could be opened to a specific URL indicated by the first NIM.

(173) Finally, messages may be sent to a control of a NIM, either by the NIM itself, another control, the HomeNim system, or another NIM. As examples, the following control messages are provided in one embodiment of the invention:

Defined Control Message	Function
##<any javascript>	Run any javascript in the control, e.g. javascriptin a browser-type control.
#show	Set visibility control within a NIM.
#hide	Set invisibility of a control within a NIM.
#get-size	Get size of control.
#get-address	Query for unique ID of a control by kind.
#navigate	Navigate the control.

(174) Control messages may be used by a NIM, addressed to its own control, or to the control of another NIM. Control messages may also be sent by the HomeNIM, or by the applications server or content server.

(175) An example of a message to a NIM is window.external.PostMessage("#.:","#collapse)" this is a message from a NIM, to itself, collapsing the NIM. Another example of a message from a NIM to another NIM is "window.external.PostMessage("#mp3#any:","#open")", which is addressed to a NIM with the kind "mp3," but only if it is in the same domain as the sending NIM. The body of the message instructs the message of type mp3 to open. An example of a javascript message is "window.external.PostMessage("#mp3#any:1", "33play( )")", which sends a message to the mp3 NIM control that calls the javascript function play( ).

(176) The operation of the home NIM and individual NIMs has been described. Attention presently turns to different techniques used in accordance with the invention 25 to host NIMs.

(177) As shown and described in relation to FIG. 1, the application server 50 includes a NIM Management Modulel 12, a NIM Templates Database 74, a ShareLink Database 78, and a user profile database 76.

(178) FIG. 15 is a diagrammatic illustration of an embodiment of the NIM Management Modulel 12. NIM Management Modulel 12 may contain the NIM Templates Database 74 and the ShareLink Database 78, discussed in further detail below. NIM Management Module 112 may also contain content 402 for filling in a NIM frame or for rendering Internet pages. Alternatively, content 402 may be stored elsewhere, such as on a Web server similar to the server 82 shown in FIG. 1. As discussed above, the content preferably contains Internet content such as HTML (Hypertext Markup Language), dHTML, and images.

(179) In addition, Management Modulel 12 preferably contains executable procedures 403 for controlling and managing the NIM system. These procedures 403 may include: a Collection procedure 404 for obtaining new NIMs; a Sharing procedure 405 for sharing NIMs with others; Development procedures 406, such as a DevZone procedure 407 and a DevNIM procedure 408, for creating, modifying or deleting NIMs; Publishing procedures 409, such as a PubZone procedure 410 and a PubNIM procedure 411, for publishing NIMs so that they are publically accessible; and Administration procedures 412, such as an AdminZone procedure 413 and an AdminNIM procedure 414, for administering the system. It should be noted that the NIM sharing procedure, discussed in further detail below, may be processed by either the Server module (102 of FIG. 1), or the Sharing procedure (405 of FIG. 15). Control and management of the server and the NIM Management Modulel 12 components will now be discussed in further detail.

(180) FIG. 16 is a diagrammatic illustration of an embodiment of the NIM Templates database 74. In this embodiment, NIM Templates database 74 primarily stores XML NIM definitions in their initial unmodified state as initially designed by a partner and which have not been altered by a user in any way. The unmodified NIMs are also referred to as "Raw NIMs". The NIM Templatesdatabase 74 is used as the starting point for the development of NIMs which may later be customized or modified by a user, developer, or system administrator, as discussed below.

(181) For ease of explanation, the individual or organization that controls the server (50 of FIG. 1) will hereinafter be referred to as the system provider and the individual or organization who supplies the content will hereinafter be referred to as a partner. It should be understood that a provider, partner, user, developer, and administrator of the system may

be distinct entities, the same entity, or a combination of both. Furthermore, as discussed above, each of the above entities is assigned access rights or privileges which permit or forbid that entity from performing different actions on the system.

(182) FIG. 16 illustrates an embodiment of a NIM Template database 74. A NIM identification number (NIM_ID) 416 is stored in a NIM Template table 41.5 in the NIM Templates database 74. A Raw NW, identified by its NIM_ID, includes a plethora of RAW NIM characteristics, including, but not limited to, a Raw NIM creation date 417, which indicates when the NIM was created and is useful when searching for NIMs created during a specific time, a Raw N.I.M definition module 418, and the NIMIndex categories 422 in which the NIM has been categorized. Each NIM when created in typically classified into one or more NIM Index categories by the developer, such as "Applications", "Business", "Entertainment" and "News".

(183) Each NIM is fully configurable and definable. The NIM definition module 418 contains details defining the NIM, such as the look-and-feel 419, of the Raw NIM, initialization URLs (Uniform Resource Locators) 420, and a location 421 of where the developer would like the NIM to open on a users's computer screen. The look and feel of the NIM is the appearance and function of the NIM interface. The look and feel may characterize the frame or skeleton layout, the graphics used to represent certain functions, such as opening and closing the NIM, whether the frame is sizable, and the appearance and operation of menus in the frame.

(184) The definition module 418 may also contain Initialization URLs 420 which reference resources containing content. The content resources may be HTML (Hypertext Markup Language), dHTML, images, programs such as Java applets, or any other file supported by

HTTP. The Initialization URLs 420 contains the name of the protocol required to access the resource, a domain name that identifies a specific computer on a network, such as the Internet, and a hierarchical description of a file location on that specific computer. These files or resources are then used by the home NIM to fill in the frame and controls with content. In addition, the definition module 418 may contain other details such as the location 421 on a user's computer screen where the NIM should initially open.

(185) The NIMIndex may be used to search for, learn about, and collect NIMs. The NIMIndex is typically accessed from either a Web browser, such as Internet Explorer.RTM. or Netscape Navigator.RTM. or from the home NIM, 108 of FIG. 1. A user may search for NIMs by, or according to, any field of the NIM Templates table 415 via the NIMIndex.

(186) A user accessing the NIMIndex from a Web Brow typically navigates to a main NIMIndex web page such as that shown in FIG. 17. FIG. 17 is an illustration of the main NIMIndex Web page 423. A user typically navigates to main NIMIndex Web page 423 from a NIM home-page (not shown), or while anywhere within the NIM Web site by clicking on the "Collect the DOtS.TM." link 424 in a menu 425. A user may search the NIMIndex by entering a search term in a form 426 and clicking on the "Search" button 428 which implements the Collection Procedure (404 of FIG. 15) to search the NIM Templates database (74 of FIG. 15) for NIMs that match the query. In one embodiment, the NLMIndex may be searched by NIM title, NIM description, or partner, as shown in the pull down menu 430. The user may also browse the NIMIndex by clicking on a link 432 to a NIMIndex category 434 which will navigate the user to a NIMIndex category Web page 440, as shown in FIG. 18.

(187) FIG. 18 is an illustration of a single NIMIndex category, the "Applications" category 435, shown in FIG. 17. A list of sub-categories (not shown), as well as a list of NIMs 442 and their short descriptions are shown in FIG. 18. A user may click on the "more detail" link 444 to be taken to a page displaying a full description (discussed later in relation to FIG. 29B) of the NIM, shown in FIG. 19.

(188) Navigation of the Internet generally occurs through the use of URLs (Uniform Resource Locators), which are the addresses of files or resources accessible on the Internet. The type of resource depends on the Internet application protocol. Using the World Wide Web's protocol, the Hypertext Transfer Protocol (HTTP), the resource can be an HTML (Hypertext Markup Language) page, an image file, a program such as a Java applet, or any other file supported by HTTP. The URL contains the name of the protocol required to access the resource, a domain name that identifies a specific computer on the Internet, and a hierarchical description of a file location on the computer and usually takes the form: "URL=protocol://machine.name[:port]/directory/document.name`?[&argu- ments] " The "protocol" is the Internet protocol used to reach the document or resource. On the Web, the "protocol" is typically HTTP, but it can take any number of forms, such as ftp (file transfer protocol), file (a local file), gopher (gopher protocol), mailto (electronic mail address), news (Usenet news), telnet and tn3270 (interactive sessions), wais (wide area information servers), or the like.

(189) The "machine.name" is the name of the host come where the document resides (such as www.NIM.com). The ":port" portion of the address is optional and is only necessary when a resource is accessible through a non-standard TCP port number. Although the standard

port number for HTTP is 80, there are numerous Web servers on the Internet that use non-standard ports, such as port 8000.

(190) The NIM system, however, may also utilize a proprietary NIM protocol. An example of a URL using the proprietary NIM protocol is: "NIMS:?NIMTemplate=<N/M_ID>"

(191) The NIM protocol URL is used to collect, distribute, and share NIMs. When collecting NIMs the NIM protocol URL is referred to as a NIMLink. When distributing or sharing NIMs the NIM protocol URL is referred to as a ShareLink.

(192) The "NIMs:" term defines the NIM protocol or scheme and is always followed by a colon. The "?NIMTemplate=<NIM_ID" is an argument, where a dollar sign (5) and a question mark (?) are used to denote path and/or search elements. It should be noted that no path is supplied (i.e.: "//path/to/something"). The argument instructs the client parser application (38 of FIG. 1) how to handle a user's selection of a NIM protocol URL and what the NIM protocol URL must do. For example, to obtain a NIM, the argument might read "NIMTemplate=123`, to obtain a Share (discussed below) the argument might read "Share=123", to obtain a Pack (discussed below) the argument might read "Pack=123", etc. The argument can be used to cause the client parser application to do anything within it's system of functionality by specifying new argument sets to build new types of special client parser application links.

(193) In one embodiment, the address for where the client parser application (38 of FIG. 1) searches the system (10 of FIG. 1) for the NIM Template or ShareLink database (74 and 78 of FIG. 1) is specified within the processed login script or session_config, although it could alternatively be specified within the NIM protocol URL. When a user clicks on a NIM protocol URL (from any where you can place and click on a link, for example in a browser,

in a NIM, in email, in a document, etc.), the client parser application processes the NIM protocol URL in the same manner as a browser processes HTTP links and an email program processes mailto links.

(194) When a protocol URL takes the form of a NIMLink, the client parser application responds by obtaining the NIM definition from the NIM Template database, optionally adds the NIM to the user's processed user profile (unless the NIM has been specified to be opened in transient mode, which may be specified in the argument), and optionally opens the NIM on the user's display screen.

(195) In one embodiment, by default, unless specified otherwise, a NIM will be added to a users collection (transient--false) and will be opened (open--true). A NIMLink with arguments may look as follows: "NIMS:?NIMTemplate&transient=true" or "NIMS:?NIMTemplate&open=false". More than one additional argument could be added by appending another argument to the URL which may read as "&argument=value".

(196) A ShareLink (discussed below) is similar to a NIMLink and may read "NIMS:?share=123", where 123 is the SHARE ID referencing the share module within the ShareLink Database. Pack Links (discussed below) typically read as "NIMS:?pack-123", where 123 is the PACK_ID referencing a pack module within the NIM Template Database.

(197) FIG. 19 is an illustration of a full description of NIM content 446. A graphic of the opened NIM may also be displayed 448.

(198) Once the user decides that he would like to add a NIM to his home NIM, the user clicks on the "get it now" or "Get This Dots.TM. NIMLink 450 (FIGS. 18 and 19) which either runs the Collection procedure (404 of FIG. 15) which obtains that NIM's NIM definition

module (418 of FIG. 16) from the NIM Template table (415 of FIG. 16), or opens another Web page as shown in FIG. 20.

(199) FIG. 20 is an illustration of a Web page 452 which might be displayed to the user once the user has clicked on the NIMLink 450. The user is presented with an option of either collecting the NIM 456, or if the user does not have the home NIM application, the user may first download the home NIM by clicking on "Get the homeDotIm" 454. Once the user clicks on the download the NIM button 456, the Collection procedure (404 of FIG. 15) obtains that NIM's NIM definition module (418 of FIG. 16) from the NIM Template table (415 of FIG. 16).

(200) The Collection procedure (404 of FIG. 15) transmits the NIM definition to the user's home NIM, which optionally opens the MM and saves the NIM definition module (418 of FIG. 16) on the user's local processed user profile. All NIM definition modules (418 of FIG. 16) on the user's computer may subsequently be saved to the user profile database, as discussed earlier in this writing. Alternatively, a "preview" button may be provided which transiently displays the NIM on the user's computer screen without adding the NIM to the user's local processed user profile. The user may also search the NIMIndex from their home NIM.

(201) FIG. 21 is an illustration of the main home NIM graphical user interface (GUI) 464, similar to that shown in FIG. 5. The home NIM displays a list of all NIMs 466 that the user has collected. Furthermore, any NIMs that the user has collected in groups or packs, can be accessed by clicking on the "My Dotpacks'" tab 468. One way to obtain new NIMs is to click on the "Get" button 470, which opens the NIM shown in FIG. 22.

(202) FIG. 22 is an illustration of a get new NIM GUI 474. A list of all NIMs 476 (or a featured subset) that may be collected by the user are displayed. Clicking on the "More Dots'" tab 478 (shown in FIG. 23) displays further NIMs which may be collected.

(203) When a user selects or clicks on any of the NIMLinks 480, NIMLink 480 references the NIM_ID (416 of FIG. 16) for that NIM in the NIM Templates database (74 of FIG. 16). The collection procedure (404 of FIG. 15) receives the NIM_ID (416 of FIG. 16) from the user, locates the NIM definition module (418 of FIG. 16) corresponding to that NIM_ID in the NIM templates database, and transmits the NIM definition module to the user's computer. That NIM may automatically be opened on the user's computer screen. The NIM is saved to the user's list of NIMs on their home NIM (466 of FIG. 21), and the NIM definition module is saved in the user's local processed user profile. Alternatively a "preview" button may be provided which transiently displays the NIM on the user's computer screen without adding the NIM to the user's local processed user profile, as discussed above in relation to the N1MLink. All the NIM definitions that the user has listed on their home NIM are saved to the user profile database either periodically, at a set time, by event, or when the user closes their home NIM. The technique of the invention facilitates a viral distribution architecture. In other words, the technique of the invention facilitates rampant distribution of generated NIMs, as described below.

(204) Users (or developers) may share NIMs they have collected, and perhaps even modified, with other users (or developers) in accordance with this viral distribution architecture. Because the NIM definition contains basic reference information, such as data to instantiate the NIM and URLs and other references to where the NIM content is located, a NIM is easily and quickly distributed, collected, and shared. By-packaging Internet content and

applications as NIMs and referencing the NIMs by NIMLinks, the system advantageously gives Internet content viral characteristics as the NIMs can easily be distributed or shared between users.

(205) Each NIM definition contains just enough information to define and initialize the NIM's components (NIM frame, controls, etc.). For example, this information may contain data to configure the skeleton or frame that is filled in by NIM content from a developer's server. The NIM definition is therefore fairly small in size (-2K), and is therefore easily distributable as an XML file or Blob (binary large object), which is communicated using the same mechanisms (HTTP/HTTPS requests) as regular Web pages.

(206) This is especially useful where a user has collected a NIM or a group of NIMs (Packs) that he would like to send to another user. For example, a user may have an online trading NIM, calculator NIM, and stock research MM all set up in various positions on his screen, and would like to share the entire Pack with a friend who is remotely connected to the Internet.

(207) To share NIMs with others, the system utilizes the Sharelink database 78 of 25 FIG. 15 and the Sharing procedure 405 of FIG. 15. FIG. 24 is a diagrammatic illustration of the Sharelink database 78. NIM Sharelink database 78 stores a list of all NIMs shared by users, developers, or administrators, in a share table 484. Each NIM or group of NIMs shared is assigned a Share ID 486 which points to a Share module 488. Each Share Module 488 may also include a creation date 490, multiple 30 individual MM definition modules 492, or multiple packs of NIMs that have been shared (Sharepack module 494) containing multiple NIM definition modules 496 and 498.

(208) FIG. 25 is an illustration of a Share NIM's GUI 500. All dots collected by the user (466 of FIG. 21) can be shared with other users by clicking on the "Share" button 502 shown in FIG. 21. Once the user has clicked on the "Share" button 502, the GUI 500 shown in FIG. 25 is launched. The user may then highlight any of the NIMs or packs of NIMs 504 he has collected or created and thereafter share the NIMs or packs of NIMs 504 by clicking on the "Share via email" button 506. It should be noted that other means of distributing the NIMs may be used together with, or instead of, email.

(209) When users share NIMs or NIM packs, their home NIM application generates a 10 share module, which may for example be an XML Blob containing the N1M definition or Sharepack modules shared. The shared NIM XML is then sent to, and saved in, the Sharelink database (78 of FIGS. 1 and 24). The Sharing procedure 405 of FIG. 15 then automatically generates a shared link (ShareLink) that references or points to the address of the shared XML on the Sharelink database. This ShareLink is then sent or 15 distributed (via email or posted on a Web site) to other users.

(210) If a user receives shared NIM(s) or pack(s) and has a home NIM installed on his client computer, then clicking on the Sharelink adds the NIM(s) to the user's home NIM and opens the shared NIM(s) on the user's screen. If a recipient of a shared NIM does not have the home NIM installed on his computer, then the home NIM is downloaded and installed (with the user's cooperation), the shared MM is added to his local processed user profile, and the NIM is opened.

(211) The NIM management module (112 of FIG. 15) may also be responsible for controlling and managing the development of new NIMs via the DevZone and the DevNIM discussed below.

(212) Because NIM content is based on existing Internet content standards (HTML, DHTML, GIFs, etc.) developers can create MM content using their existing Internet content development tools and methodologies. Therefore, no special hardware or software is required to develop or serve NIM content.

(213) Furthermore, as the application server (50 of FIG. 1) hosts and delivers NIM definitions from the NIM Templates database (74 of FIG. 1) developers merely define and package the NIM content without directly authoring, hosting, or serving the XML NIM definitions. Therefore, no special hardware or software is required on the developer-side to host and serve the NIM content, other than required for their regular Internet content.

(214) Two means are provided for creating NIMs. First, a Developer Zone Web site (DevZone) and second, a set of developing NIMs (DevNIMs). Both means enable NIM developers to create, define, and modify NIM definitions, and to support the NIM development process which results in XML NIM definitions being added to the NIM Templates database and NIMLinks generated.

(215) The DevZone is a Web site where NIM developers can view a list of NIMs they have defined and/or published, add new NIMs, and categorize, view, modify, or delete their existing NIMs. The DevZone is preferably rendered in a Web browser, is hosted on the Web server (82 of FIG. 1), and is implemented with a DevZone procedure (406 of FIG. 15). To access the DevZone, the developer may typically pass through a secure portal, such as by supplying a login identity and password.

(216) FIG. 26 is an illustration of the main DevZone Web page 510. All NIMs created by the NIM developer appear in a customized NIM list 514 that may only be accessed by that NIM developer. All NIMs created by a developer appear on the NIM list 514, unless they have

been deleted by the developer or by a system administrator. The NIM list may contain the NIM name 518, the date the NIM was created 520, and an indication 516 of whether the NIM is in development or accessible by the public in the NIMIndex (i.e. "in-development" or "published").

(217) To access the NIM definition (for modification or review) the developer clicks on a "modify" or "preview" link 524 as transient (e.g. to add the NIM to their home NIM for previewing and testing). By clicking on the "modify" link, the developer is taken to the NIM modification web page, as shown in FIG. 27. Alternatively, by clicking on the "Create a Dot'" button 522, the developer is taken to a web page similar to the NIM modification web page shown in FIG. 27, where the developer may create a new NIM.

(218) FIG. 27 is a partial view of a NIM modification web page 530. To modify an existing NIM, or create a new NIM definition, a developer preferably utilizes Web forms, such as 534 to 542, or any area that contains objects that capture user input, such as text entry spaces, check boxes, and selection buttons. Developers typically fill in forms with information which defines the NIM, where the details might include the NIM's name 534, the URL for any image associated with NIM 540 (as shown in FIG. 18), the URL for a detailed image 542 (448 of FIG. 19), and such details as NIM frame (e.g., size of NIM, sizeable), layout of the controls (e.g., WebConduit control), and to specify the initial MM content (e.g., the initial target URLs for the WebConduit control, TitleBar, BottomBar), and any categories in which the developer would like the NIM to be listed in the NIMIndex. Once the developer has completed or modified the forms, he may either save or delete the NIM 532. If the developer selects either the development check box 536 or the public check box 538, and then saves the NIM, the DevZone procedure (407 of FIG. 15) generates a

XML NIM definition, stores the XML NIM definition in the NIM Templates database (74 of FIGS. 1 and 15) and returns a NIMLink pointing to that NIM which is listed on the NIM list (514 of FIG. 26) on the developer's home NIM. The only difference being that once the developer selects the public check box 538 and saves the NIM, the NIM definition is published utilizing the PubZone publishing procedure (410 of FIG. 15) to a publically accessible portion of the NIM Template Table (415 of FIG. 16), from where users can access, download, and collect the NIM. If the developer selects the development check box 536, the NIM can only be viewed and or modified by the developer and system administrator. It should be noted that the DevZone only allows control of certain characteristics of each NIM. Other characteristics may be set to default while still other characteristics can only be altered by an administrator. In an alternative embodiment, the DevZone may be rendered in a NIM or group of NIMs just as it was rendered in a Web browser. In either embodiment, NIM developers fill out one or more forms specifying NIM definition parameters, an XML NIM definition gets created and stored in the NIM Templates. Database, and a NIMLink gets generated that points to the new NIM. The Developer can then view or debug this NIM by clicking on the NIMLink to add it to his home NIM, or preview as transient, and thereafter render it on his screen. NIM definitions may also be developed using NIMs and NMA messages. A 30 developer may create Raw NIMs from empty NIM Templates using a development NIM (the DevNIM) on the developer's home NIM.

(219) FIG. 28A to 28D are GUIs of a development NIM (the Dev NIM). A developer may obtain a DevNIM by either collecting the DevNIM in the usual manner, as discussed above, or the system, via the system administrator, may share the NIM with the developer, also as

discussed above. The DevNim contains a DevNIM procedure (408 of FIG. 15) which is transmitted to the developer's home NIM, as discussed above.

(220) To create a new NIM, the developer launches the DevNIM and enters a NIM name 550 into the DevNIM. The server then obtains an empty NIM (a NIM with default or no initialization data and with only basic characteristics) from the NIM Template Database using the procedure for collecting NIMs described above, and saves the empty NIM under the supplied new NIM name 550 locally in the developer's processed user profile. The developer may then modify the empty NIM to the required form using the DevNIM. In the preferred embodiment a pull down menu 552 is provided where the developer can select which feature to modify, such as the frame characteristics (FIG. 28B), the titlebar (FIG. 28C), or initialization URLs for different frame or control elements (FIG. 28D).

(221) Each time the developer modifies a setting, the DevNIM, using the DevNIM procedure, sends NMA messages to the newly saved NIM to modify its definition parameters. For example, modifying the NIM's name, size, TitleBars, BottomBars, or WebConduits (as shown in FIGS. 28A to 28C).

(222) Unlike the DevZone, a new XML NIM definition and NIMLink is not generated every time a modification is made. All modifications (during the development cycle) are made locally to the NIM definition and are stored in the developer's processed user profile. The DevNIM embodiment, therefore, requires a separate publishing step that promotes the newly created NIM definition from the developer's user profile, to the NIM templates database on the application server.

(223) To publish the NIM, the NIM developer categorizes the NIM and the NIM definition is copied from the developer's processed user profile to the NIM Templates database.

(224) A publishing NIM (PubNIM), implemented with Publishing procedures 409, is provided to handle these functions. The PubNIM may therefore be shared or transmitted to the developer along with the DevNIM. The PubNIM contains a PubNIM procedure (411 of FIG. 15) which controls the publication of the NIMs to the NIM template database, as discussed above. The PubNIM procedure sends a NIM definition module to the application server which receives the NIM definition module, extracts the NIM definition from the share module, stores it in the NIM Templates database, and associates the NIM with the developer so that the NIMLink shows up on the developer's NIM list (in their DevZone account).

(225) Alternatively, the new NIM may be published directly from the DevNIM. Once a user is satisfied with the NIM, he may select an option which publishes that NIM definition to the NIM Templates database. It should be noted that a developer may modify his NIMs at any time from the DevNIM.

(226) As mentioned earlier, when a developer is first authorized to create and/or modify NIMs, or at any time thereafter, information about that developer is saved in that developer's user profile (76 of FIG. 1) on the application server.

(227) A developer may also create application programs using NIMs, which a user may access from his client computer. Just as client-side application characteristics (sizing, position, menus) are accessible to content via NMA, the system may offer server-side application functionality, or toolkits, which are accessible through the NMA.

(228) A developer can build a NIM application without implementing, hosting, or supporting complex server or client applications. By using the server toolkits, a developer can develop

N1Ms that exhibit server-application behavior by focusing on implementing NIM content (just like standard Internet content).

(229) For example, a NIM's content (an HTML page) may send a message to the system (or server) to request a credit card to be processed. Other toolkit examples may include credit card billing, user profiling, targeted advertising, email, chat rooms, Internet telephony applications, or calendars.

(230) Any server-side application can be made accessible through the NMA, as a toolkit, just as client-side application behaviors are made accessible. In the current implementation, server-side application functions could be offered by a NIM (exposed via javascript functions on a page in a hidden frame). Other NIMs could access this functionality by sending NMA messages to this "Toolkit NIM" calling the functions. A NIM developer may therefore focus on Internet content development while accessing the features, behaviors, and functionality of an application just as if he had developed custom client and server side applications. The NIM management module (112 of FIG. 15) may also be responsible for controlling and managing the administration of the system via the AdminZone and the AdminNIM discussed below.

(231) A system administrator has the power to create, modify or delete users, developers, NIMs, other administrators, or NIMIndex categories, depending on that administrators access privileges. In a similar manner to the DevZone and DevNIM, system administrators may utilize either a Web browser administration zone (AdminZone), or an administration NIM (AdminNIM) which both make use of Administration procedures (412 of FIG. 15).

(232) To access the AdminZone, an administrator typically passes through a secure portal, such as by supplying a login identity and password. Once within the AdminZone, the

administrator may search for a NIM by NIM name or title 552, category, developer, developer contact name, or status, as shown in FIG. 29A. The administrator may also selectively search for NIM's in development or publically accessible NIMs 554.

(233) Utilizing an AdminZone procedure (413 of FIG. 15), once the required NIM 20 is located the administrator may modify or delete the NIM in a similar manner to a developer as shown in FIG. 29B, and described above.

(234) Also utilizing the AdminZone procedure, the administrator may manage NIMIndex categories by creating new categories, modifying or deleting existing categories, and/or adjusting the layout of the NIMs within those categories as shown in FIGS. 30A and 30B. For example, an administrator may change a category's name 558, designate the category active or inactive 556, or create sub-categories 560. The system administrator may also select a category or categories for the NIM to appear in, where each NIM may be registered in more than one category.

(235) Finally, utilizing the AdminZone procedure (413 of FIG. 15), an administrator may search for users, providers, or developers and adjust their details, as shown in FIGS. 31A and 31 B. The system administrator may, for example, change a users contact details. In addition to adding, modifying or deleting NIMs, system administrator may have the task of reviewing NIM submissions from developers and promoting NIMs to the public. A submissions list of newly submitted NIMs may be displayed to an administrator, who may promote the NIM to the public or view the NIM. Once promoted, changes are made to the NIM Templates database and the NIM is automatically removed from the submissions list (again by utilizing the AdminZone procedure (413 of FIG. 15)).

(236) The foregoing discussion has explored the inherent nature of NIMs. Attention now turns to different techniques that may be used to exploit information that is associated with the use of NIMs. In particular, the following discussion is directed toward the accumulation of statistical information that is only available in view of the architecture of the present invention.

(237) Currently, the predominant method of tracking and collecting user online behavior is severely limited for a number of reasons. First, most Internet use or visitor statistics are single-dimensional (linear, sequential) because Internet content is presented to users one full-screen page at a time. Second, users visit and leave sites so rapidly their visits are barely meaningful. Third, user's browsing habits are often discontinuous (browsers give users navigational bypass controls--back, forward, home, refresh, stop, etc.). Fourth, user behavior tracking is limited from a single site's server point of view. Current use statistics are plagued with the challenge of tracking continuous user behavior (especially from a cross-company perspective), with more than a single dimension of use context. Finally, because a computer may have multiple users, or a single user may use multiple computers, tracking continuous user on-line behavior is extremely difficult.

(238) One of the advantages of the NIM system as illustrated in FIG. 1, is that the Server 50 is able to track continuous, long-term NIM use information about each user. This is because the NIM server, through communication with the home NIM, can track each NIM event performed by each user. Therefore, it is possible to track each individual user's entire NIM use activity from the moment the user downloads the home NIM.

(239) Referring to FIG. 32, in one embodiment of the invention the following events may be tracked by the Event Log Module 98 (within the client computer 20 of FIG. 1): home NIM

Download Event 704 NIM Download Event 706 NIM Display Event 708 Web Click-Through Event 710 Page-View Event 712 First NIM Installation Event 714 First home NIM Startup Event 716 Transient Mode Event 718 Share NIM Received Event 720 NIM Pack Received Event 722.

(240) A home NIM Download Event 704 is logged when the user clicks on a link to request the home NIM user application. Preferably, the start time 752, and the end time 754 are recorded for this event. Also recorded is the provider ID 750 which is a parameter (generally, an integer) that represents the content provider partner who provided the link to the user.

(241) NIM Download Event 706 is logged when the home NIM acquires a NIM via a NIMLink. The start time 752, the end time 754, and the provider ID 750 are recorded for this event. Also recorded is the NIM ID 756 which is a parameter (generally, an integer) that represents the NIM that was just downloaded.

(242) NIM Display Event 708 is logged when a user activates a NIM. The NIM ID 756, the start time 752, and the end time 754 are recorded for this event. Web Click-Through Event 710 is logged whenever a user links from a NIM to a full-screen browser. This can occur when a user clicks on a link in the NIM, or it can occur automatically through the NIM messaging, or directly through the content provider. The NEM ID 756, the start time 752, and the Internet address 758 of the link are recorded. Page-View Event 712 is logged whenever a user views a page of content within a NIM. The NIM ID 756, and the start time 752 are recorded for this event.

(243) First NIM Installation Event 714 is logged the first, a NIM or NIM Pack is installed from a web site. This event is logged only once for each user account. The NIM ID 756, start time 752, and end time 754 are recorded for this event.

(244) First home NIM Startup Event 716 is logged when the home NIM runs for the first time. This event is logged only once for each user account. The start time 752 is recorded for this event.

(245) Transient Mode Event 718 is logged when the home NIM runs in transient mode. Transient mode occurs when the home NIM runs before the user has logged in. The start time 752, and the end time 754 are recorded for this event.

(246) Shared NIM Received Event 720 is logged for each NIM a user receives as part of a share. If a NIM Pack is shared, this event will be recorded for each NIM in the shared pack. The NIM ID 756, the start time 752, and the end time 754 are recorded for this event.

(247) Shared NIM Pack Received Event 722 is logged for each NIM Pack a user receives as part of a share. Thus, when a NIM Pack is shared, an Event 720 will be logged for each NIM in the NIM Pack, while an Event 722 will be logged once for the NIM Pack itself. The start time 752, and the end time 754 are recorded for this event.

(248) The events listed above are tracked in one particular embodiment. Other embodiments may track more or perhaps fewer events. This comprehensive event tracking is possible because each user event can be identified by the NIM Server through communication with the home NIM. Additional events may include tracking when a user sends a share or tracking when a user sends a NIM or a NIM Pack.

(249) FIG. 33 shows a typical series of user actions 800 as they are tracked by the Event Log Module 98. First, a user may request to download the home NIM application (step 802)

from either a partner's web site or the NIM Server 50. The Event Log Module 98 records a home NIM Download Event, as shown with field 704 of FIG. 32. The start time 752, and the end time 754 are preferably recorded. Also, the provider ID 750 of the site from where the home NIM download request was received is recorded.

(250) Returning to FIG. 33, the user subsequently activates the home NIM for the first time (step 804). The Event Log Module 98 records a First home NIM Startup Event 716, as shown in FIG. 32. The start time 752 is preferably recorded. In addition, the home NIM is activated and the user lot yet logged in, a Transient Mode Event 718 is logged and the start time 752 is recorded.

(251) As shown in step 806 of FIG. 33, the user logs into the home NIM. When this occurs, the end time 754 may be recorded for the Transient Mode Event 718.

(252) A user download of a new NIM (step 808) may be from a partner's web site or the NIM Server. When this occurs, the raw NIM definition is copied into the user's User Profile 76. The event log 98 records two events. First, because this is the first NIM the user has installed, a First NIM Installation Event 714 is recorded. The start time 752, the end time 754, and the provider ID 750 of the download site are preferably recorded. The second event recorded is a NIM Download Event 706. The Event Log Module 98 preferably tracks the NIM ID 756, the provider ID 750, the start time 752, and the end time 754 for this event. The next thing a user may do is open the NIM (step 810). This consists of retrieving the NIM definition from the user's User Profile and getting NIM content from the provider 82, as discussed above. The NIM is displayed for the user and the Event Log Module 98 records a NIM Display Event 708. However, at this point, the Event Log Module 98 can

only record the start time 752, and the NIM ID 756 for this event. The end time 754 is recorded when the NIM is closed.

(253) For every page of content a user views within a NIM 812, a Page-View Event 712 is recorded. Some page views may require content from the provider 82. The NIM ID 756, and the start time 752 are recorded for this event.

(254) The NIM may also enable the user to click on a link that results in navigating to a full screen web browser (step 814). When a user does this, a Web Click-Through Event 710 is recorded. The Event Log Module 98 records the NIM ID 756, the start time 752, and the URL of the web site that is passed from the NIM content to the browser 758.

(255) When the NIM closes (step 816), the end time 754 for the NIM Display Event 708 is recorded. When the user logs out of the home NIM (step 818), the event log is uploaded to the Server 50 (of FIG. 1).

(256) In one embodiment of the invention, the previously described Event Log Module 98 (within the client computer 20 of FIG. 1) tracks user events in the home NIM user application and uploads the information to the Statistics Database 80 (of the server computer 50 of FIG. 1) at predetermined intervals alternate embodiments, the Event Log 700 (in FIG. 32) may be processed by the NIM Server before it is stored in the Statistics Database 80. For example, the NIM Server may process NIM use status information for each user that is currently logged in.

(257) The Statistics Database 80, illustrated in FIG. 34, preferably lists every event 1002 by every user of home NIMs along with the corresponding fields associated with each event. For-example, if a NIM Display Event is recorded, the User ID 1004 of the user that performed the event is listed, the start time 1006 is listed, the end time 1008 is listed, and

the NIM ID 1010 is listed. If a Web Click-Through Event is recorded, the User ID 1004 is listed, the NIM ID 1010 is listed, the start time 1006 is listed, and the URL of the web site 1014 is listed. The Statistics Database 80 therefore allows the list of events to be easily referenced and searched by each event or by each of the fields associated with the events.

(258) Referring to FIG. 35, the Statistical Analysis Module 900 uses the Statistics Database 80 in order to provide various services for the content provider partners 82. Preferably, the Statistical Analysis Module 900 includes a Multi-Dimensional Consumer Profile Module 902, a Real-Time Advertising Module 904, and a Pack Building Module 906, as discussed below.

(259) A primary advantage of the present invention is that, because NIMs are used in groups and are used more often and for longer periods of time than web pages or web sites, real-time multi-dimensional NIM use data (that's a function of which NIMs are activated simultaneously) can be accumulated. In accordance with an embodiment of the invention, this accumulated data is used to generate a multi-dimensional consumer profiling database. The Multi-Dimensional Consumer Profile Module 902 uses information from the Statistics Database 80 to examine, for each user, the start time, and the end time of each NIM Display Event It then determines the NIMs (using the NIM IDs) that are opened simultaneously for each user. The Module 902 determines, for every selected NIM, the other NIMs that a given user may use in conjunction with the selected NIM. The Module 902 also determines how often these other NIMs are used simultaneously with the selected NIM. For example, Company X provides a NIM for selling its books. The Multi-Dimensional Consumer Profile Module 902 determines for Company X that a particular user has a NIM related to finance activated 30% of the time the user has the book-selling NIM acted, a NIM related to

computers 20% of the time the user has the book-selling NIM activated, and a NIM related to wedding gifts 5% of the time the user has the book-selling NIM activated. This will provide Company X with a more complete profile of the user's interests.

(260) The Real-Time Advertising Module 904 determines the NIMs that each user has displayed at any given moment. This information is used by a content provider partner or by the NIM Server to target advertising information. For example, if a user has a NIM related to sports displayed simultaneously with Company X's book-selling NIM, Company X uses this information to stream an advertisement for a sports book. In one embodiment, this is accomplished by associating each NIM with a context keyword. This is done by incorporating the context keyword into the NIM definition or, alternatively, by maintaining a table of NIMs and their corresponding context keywords. For example, the NIM related to sports is associated with the context keyword "sports." Moreover, the Real-Time Advertising Module 904 may combine the real-time user information with the historical user information from the Statistics Database 80 to provide advertisers with a complete picture of a user's interests.

(261) The Pack Building Module 906 uses the Statistics Database 80 to determine which NIMs are being used simultaneously. The Module 906 also determines which NIMs are being shared as NIM Packs. From this, the Module 906 provides information to content provider partners about which NIMs should be bundled together. In alternate embodiments, the Module 906 builds a NIM Pack based upon the information it processes. For example, if the Pack Building Module 906 determines that an airline NIM is being used with a hotel NIM and a car rental NIM, the Module 906 may build a NIM Pack with a restaurant NIM.

(262) Additionally, in one embodiment of the present invention, the NIM Server 82 may track the content within a NIM in a Content Database 1050, as illustrated in FIG. 36. A content descriptor 1052 which may be a string describing the content that is shown within the NIM is recorded for content shown in the NIM. For example, if a NIM displayed an advertisement for an automobile followed by an advertisement for a restaurant, the two recorded content descriptors might say "automobile ad" and "restaurant ad." In addition, the NIM ID 1054, the start time at which the content is displayed 1056, and the end time 1058 are all preferably recorded for each content descriptor.

(263) Referring to FIG. 35, The Content Analysis Module 950 is able to correlate, at any moment, the content displayed to the user as recorded in the Content Database with the user's NIM activity recorded in the Statistics Database. For example, if one NIM displays to a user an advertisement for a travel book, the user may open a NIM related to Florida, a NIM owned by a specific airline, and a NIM owned by a car rental company. This pattern of user behavior will allow the company that provides the travel book advertisement to better understand the effect of the advertisement on the user. The company may use this information to make cross-promotions with other NIM providers, or, simply to provide more effective targeted advertisements.

(264) In an alternative embodiment, each of the content providers may track its own content information. The content providers could then compare its content information with the user information provided by the Statistics Database of the NIMServer.

(265) Finally, referring to FIG. 37, all of the user event information may be used in conjunction with user information provided at login. During the login process, the user may be required to enter demographic information such as age, marital status, etc. In one

embodiment, this information is stored in a User Account Database 1100. Each User ID 1102 is listed along with the corresponding user information 1104. Therefore, it is possible to match the user events with personal information about the particular user to give advertisers or NIM content providers a more complete behavior profile of each user.

(266) The foregoing description, for purposes of explanation, used specific nomenclature to provide a thorough understanding of the invention. However, it will be apparent to one skilled in the art that the specific details are not required in order to practice the invention. In other instances, well known circuits and devices are shown in block diagram form in order to avoid unnecessary distraction from the underlying invention. Thus, the foregoing descriptions of specific embodiments of the present invention are presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the invention to the precise forms disclosed, obviously many modifications and variations are possible in view of the above teachings. The embodiments were chosen and described in order to best explain the principles of the invention and its practical applications, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to the particular use contemplated. It is intended that the scope of the invention be defined by the following claims and their equivalents.

WHAT IS CLAIMED IS:

1. A computer-implemented method of obtaining content over a network and displaying the content to a user, the method being implemented in a client computing device in operative communication with a server over a network, the client computing device including electronic storage, a display, and one or more processors configured to execute one or more computer program modules, the method comprising:

transmitting a request to the server over the network, the request requesting networked information monitor template;

receiving the requested networked information monitor template from the server over the internet, the requested networked information monitor template having been transmitted from the server over the network responsive to the transmitted request, the networked information monitor template comprising:

a definition of a viewer graphical user interface within which content in a web browser-readable language may be presented on the display of the client computing device; and

a definition of a first content element for the networked information monitor template, the definition of the first content element referencing a first network location from which the first content element for the networked information monitor template is served over the network;

responsive to instructions included in the requested networked information monitor template, presenting the viewer graphical user interface defined by the networked information monitor on the display of the client computing device separate from and outside of any other graphical user interface that includes user controls for specifying the first network location from which the first content element for the networked information monitor is served over the

network;

responsive to instructions included in the requested networked information monitor template, transmitting over the network a first content request to the first network location referenced by the definition of the first content element for the networked information monitor template;

receiving , over the network, the first content element transmitted responsive to the first content request;

presenting the received the first content element in the viewer graphical user interface defined by the networked information monitor template, wherein the definition of the viewer graphical user interface and/or the first content element define all controls for enabling a user to interact with the first content element through the viewer graphical user interface.

2. The method of claim 1, wherein the definition of the viewer graphical user interface includes a definition of at least one control effective for controlling an aspect of the viewer graphical user interface, and wherein presenting the viewer graphical user interface comprises presenting the at least one control.

3. The method of claim 2, wherein the aspect is the location at which the user interface is rendered on a display device.

4. The method of claim 2, wherein the aspect is the size of the user interface when presented on the display of the client computing device.

5. The method of claim 1, wherein the networked information monitor template includes instructions in extensible markup language (XML) format, and further wherein the method further comprises parsing the definition of the viewer graphical user interface.

6. The method of claim 1, wherein the definition of the viewer graphical user interface defined by the networked information monitor template comprises an image, and wherein presenting the viewere graphical user interface defined by the networked information monitor template on the display of the client computing device comprises presenting the image included in the definition as part of the viewer graphical user interface.

7. The method claim 6, wherein presenting the received the first content element in the viewer graphical user interface defined by the networked information monitor template comprises presenting the received the first content element in association with the image.

8. The method of claim 6, wherein presenting the received the first content element in the viewer graphical user interface defined by the networked information monitor template comprises presenting the received the first content element at least in part within the image.

9. The method of claim 1, wherein the definition of the viewer graphical user interface defines at least one control permitting the modification of the appearance of the viewer graphical user interface defined by the networked information monitor template, and wherein presenting the viewer graphical user interface defined by the networked information monitor template on the display of the client computing device comprises presenting the at least one control.

10. The method of claim 1, wherein the first content element includes audio content, video content, graphics content, still image content, textual content and/or interactive content.

11. The method of claim 1, further comprising:

executing a client parser application that is separate from the networked information monitor template, the client parser application being configured to present the viewer graphical user interface defined by the networked information monitor template on the client computing device, to generate the request for the content that is transmitted to the first network location referenced by the defintion of the first content element for the networked information monitor template, and to present the first content element received from the first network location within the viewer graphical user interface defined by the networked information monitor template.

12. The method of claim 1, further comprising causing the networked information monitor to communicate with another networked information monitor.

13. The method of claim 1, wherein the networked information monitor is configured to cause the client computing device to periodically request the first content element from the first network location referenced by the defintion of the first content element for the networked information monitor template and to present the received first content element within the viewer graphical user interface in an ongoing manner.

14. The method of claim 1, wherein the network is the internet.

15. The method of claim 1, wherein the networked infomration template further comprising a definition of a second content element for the networked information monitor template, the definition of the second content element referencing a second network location from which the second content element for the networked information monitor template is served over the network, and wherein the method futher comprises:

responsive to instructions included in the requested networked information monitor template, transmitting over the network a second content request to the second network location referenced by the defintion of the second content element for the networked information monitor template;

receiving, over the network, the second content element transmitted responsive to the second content request; and

presenting the received second content element in the viewer graphical user interface defined by the networked information monitor template, wherein the definition of the viewer graphical user interface and/or the second content element define all controls for enabling a user to interact with the second content element through the viewer graphical user interface.

16. A computer-implemented method of obtaining and displaying content obtained over a network to a user on a client computing device, the method being implemented in the client computing device, the client computing device including electronic storage, a display, and one or more processors configured to execute one or more computer program modules, the method comprising:

executing on the client computing device client parser, wherein the execution of the client parser results in the client computing device:

transmitting over the network a first content request to a first network location referenced by a defintion of a first content element in a networked information monitor template that is readable by the client parser;

receiving, over the network, the first content element transmitted responsive to the first content request;

presenting a viewer graphical user interface defined by the networked information monitor template on the display of the client computing device and wherein the viewer graphical user interface defined by the networked information monitor template is presented separate from and outside of any other graphical user interface that includes user controls for specifying the first network location from which the first content element for the networked information monitor is served over the network; and

presenting the received content element within the viewer graphical user interface defined by the networked information monitor template, wherein the definition of the viewer graphical user interface and/or the first content element define all controls for enabling a user to interact with the first content element through the viewer graphical user interface.

17. The method of claim 16, wherein execution of the client parser further results in the client computing device determining that the first element content modifies the networked information monitor template and responsive to such determination, modifying the networked information monitor template prior to the step of presenting the graphical user interface.

18. The method of claim 16, further comprising presenting an icon representing networked information monitor associated with the networked information monitor template on the

display of the client computing device, and wherein execution of the client parser to perform one or more of the transmitting operation, the presenting the viewer graphical user interface operation, or presenting the first content element operation is responsive to reception of selection by a user of the icon.

19. The method of claim 16, further comprising invoking the client parser and initiating one or more of the transmitting operation, the presenting the viewer graphical user interface operation, or presenting the first content element operation automatically during a start-up process of the client computing device.

20. The method of claim 19, wherein execution on the client computing device of the client parser further results in the client computing device:

transmitting over the network a second content request to a second network location referenced by a defintion of a second content element in a second networked information monitor template that is readable by the client parser;

receiving the second content element transmitted responsive to the second content request;

presenting a second viewer graphical user interface defined by the second networked information monitor template on the display of the client computing device, wherein the second viewer graphical user interface lacks user controls, wherein the definition of the second viewer graphical user interface and/or the second content element define all controls for enabling a user to interact with the second content element through the second viewer graphical user interface; and

presenting the second content element within the viewer second graphical user interface,

wherein execution of the client parser to perform the transmitting the second content request, the presenting the second viewer graphical user interface operation, and the presenting the second content element is responsive to reception of a selection to initiate a second networked information monitor associated with the second networked information monitor template.

21. The method of claim 16, wherein the network is the internet.

ABSTRACT:

A method for accessing and displaying network content employs an informational component which includes a definition for rendering a graphical user interface within which content may be presented outside of and without utilization of another application. The infomrational component also includes one or more definitions of content locations from which content elements may be transmitted over a network and presented within the graphical user interface. A provider of an informational component or informational components may thus create customized displays within which intended content may be rendered. An application component may be used in association with an informational component or informational components to manage the collection, organization, sharing, and rendering of pluarlity of the informational component(s).

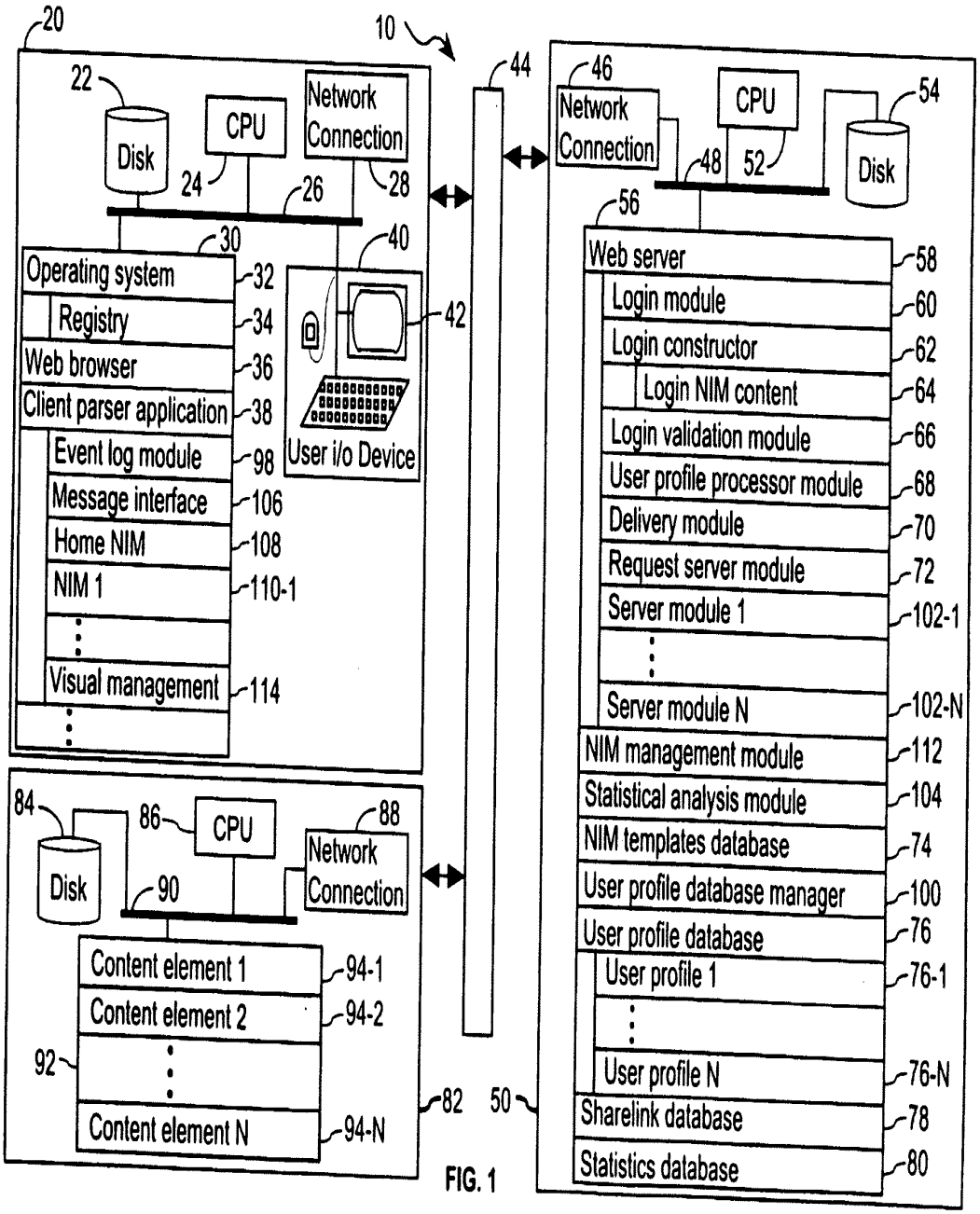

20
10
22
Disk
CPU
Network Connection
24
26
28
30
40
Operating system
32
Registry
34
Web browser
36
Client parser application
38
Event log module
98
Message interface
106
Home NIM
108
NIM 1
110-1
Visual management
114
42
User i/o Device
44
46
Network Connection
CPU
48
52
54
Disk
56
Web server
58
Login module
60
Login constructor
62
Login NIM content
64
Login validation module
66
User profile processor module
68
Delivery module
70
Request server module
72
Server module 1
102-1
Server module N
102-N
NIM management module
112
Statistical analysis module
104
NIM templates database
74
User profile database manager
100
User profile database
76
User profile 1
76-1
User profile N
76-N
Sharelink database
78
Statistics database
80
50
84
Disk
86
CPU
88
Network Connection
90
Content element 1
94-1
Content element 2
94-2
92
Content element N
94-N
82

FIG. 1

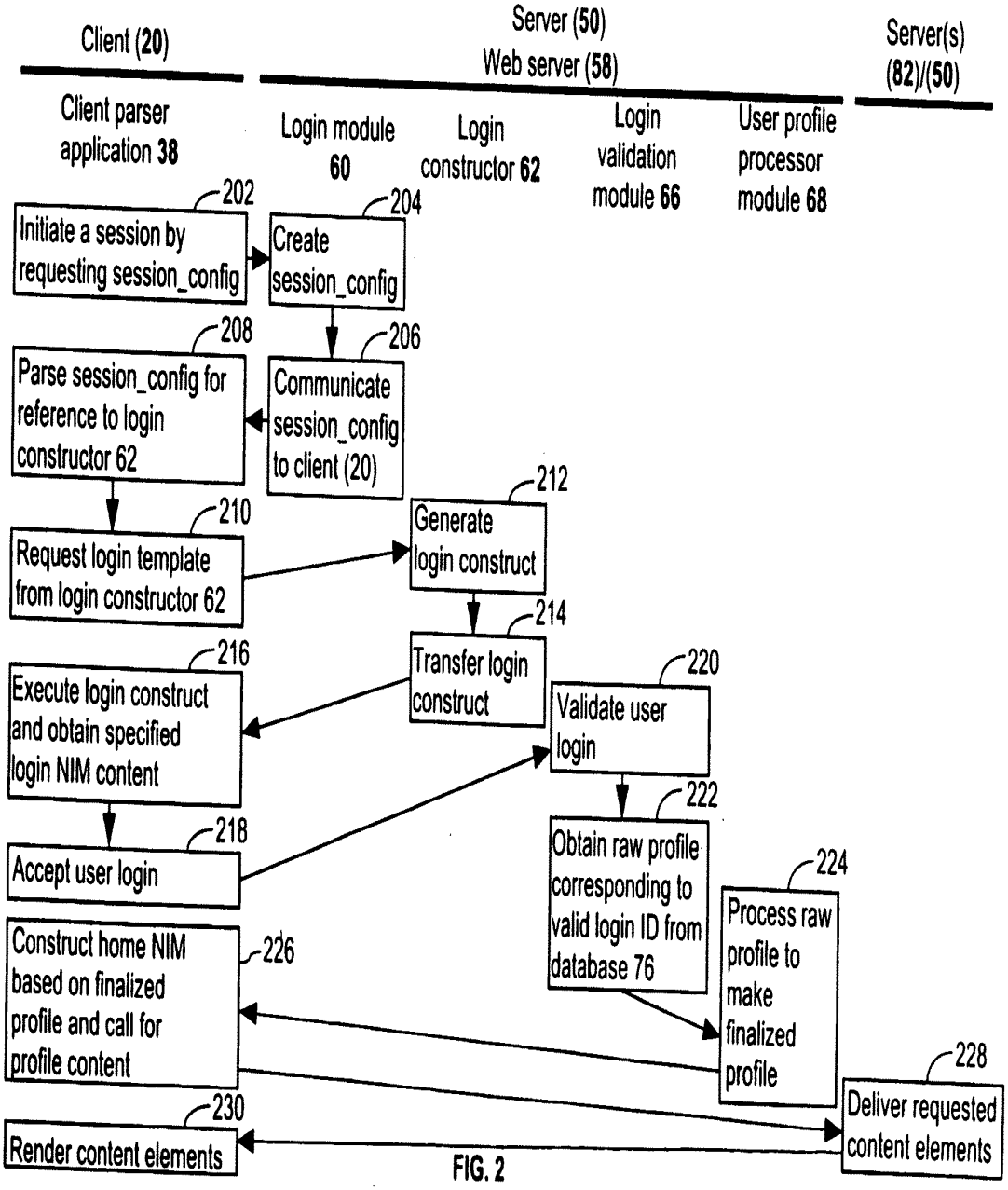

Client (20)
Server (50)
Web server (58)
Server(s) (82)/(50)
Client parser application 38
Login module 60
Login constructor 62
Login validation module 66
User profile processor module 68
202
Initiate a session by requesting session_config
204
Create session_config
206
Communicate session_config to client (20)
208
Parse session_config for reference to login constructor 62
210
Request login template from login constructor 62
212
Generate login construct
214
Transfer login construct
216
Execute login construct and obtain specified login NIM content
218
Accept user login
220
Validate user login
222
Obtain raw profile corresponding to valid login ID from database 76
224
Process raw profile to make finalized profile
226
Construct home NIM based on finalized profile and call for profile content
228
Deliver requested content elements
230
Render content elements

FIG. 2

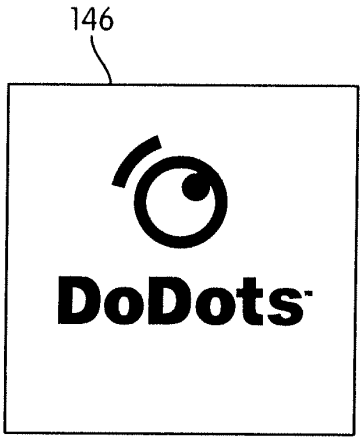

146
DoDots

FIG. 3A

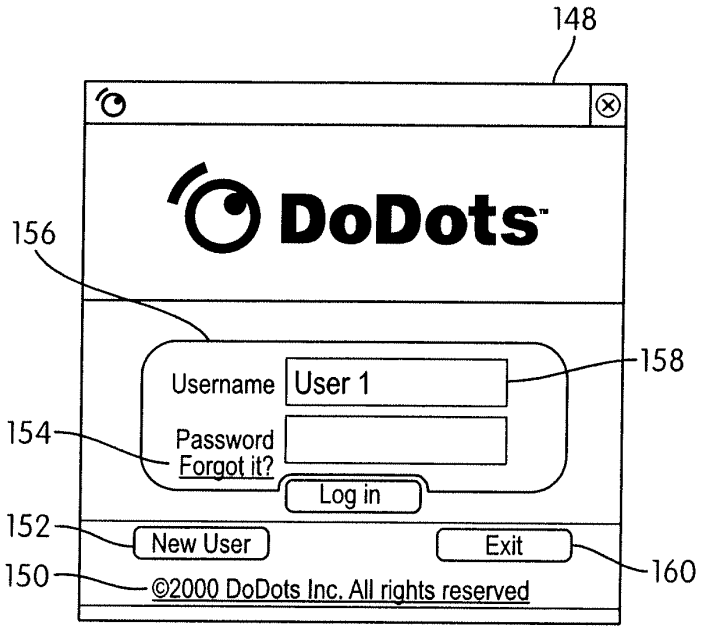

148
DoDots
156
Username
User 1
158
154
Password
Forgot it?
Log in
152
New User
Exit
150
©2000 DoDots Inc. All rights reserved
160

FIG. 3B

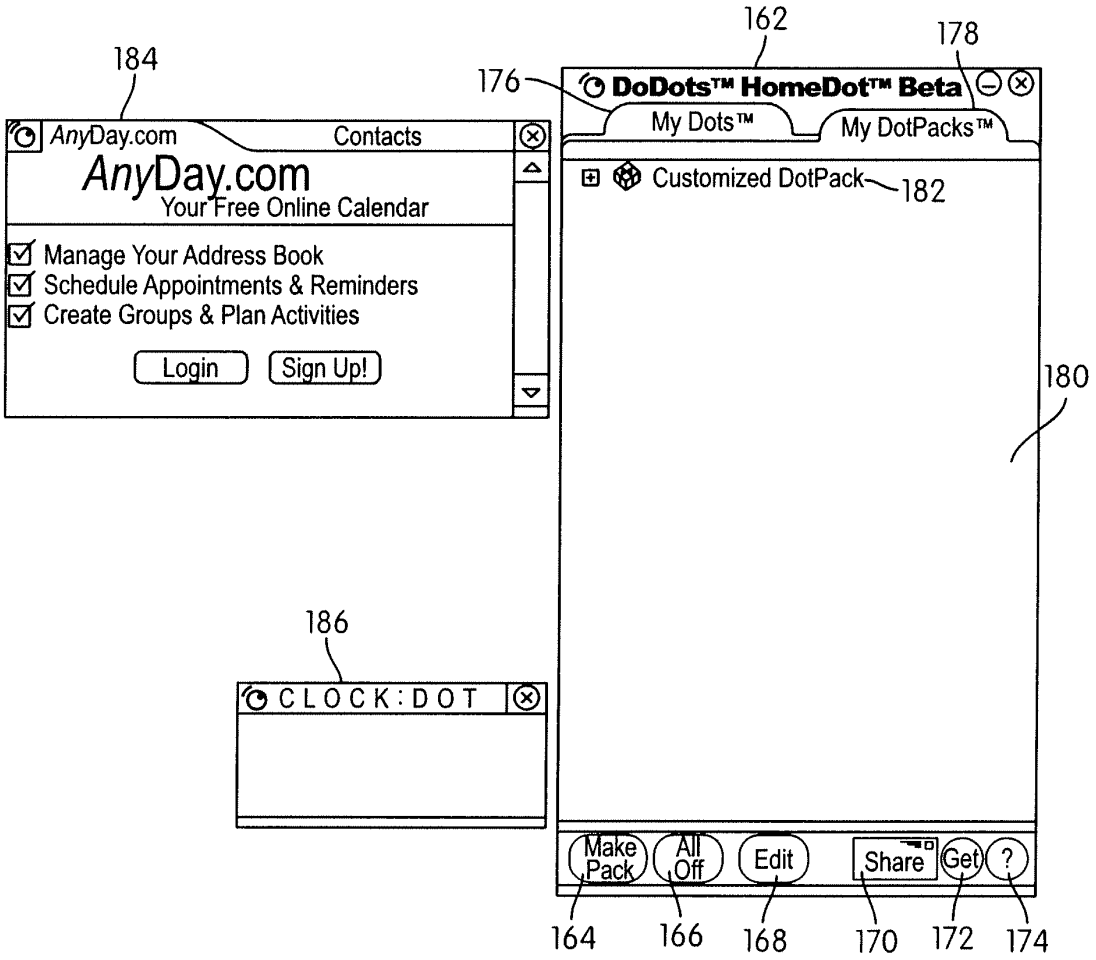

162
178
184
176
DoDots™ HomeDot™ Beta
AnyDay.com
Contacts
My Dots™
My DotPacks™
AnyDay.com
Your Free Online Calendar
Customized DotPack
182
Manage Your Address Book
Schedule Appointments & Reminders
Create Groups & Plan Activities
Login
Sign Up!
180
186
CLOCK:DOT
Make Pack
All Off
Edit
Share
Get
?
164
166
168
170
172
174

FIG. 4

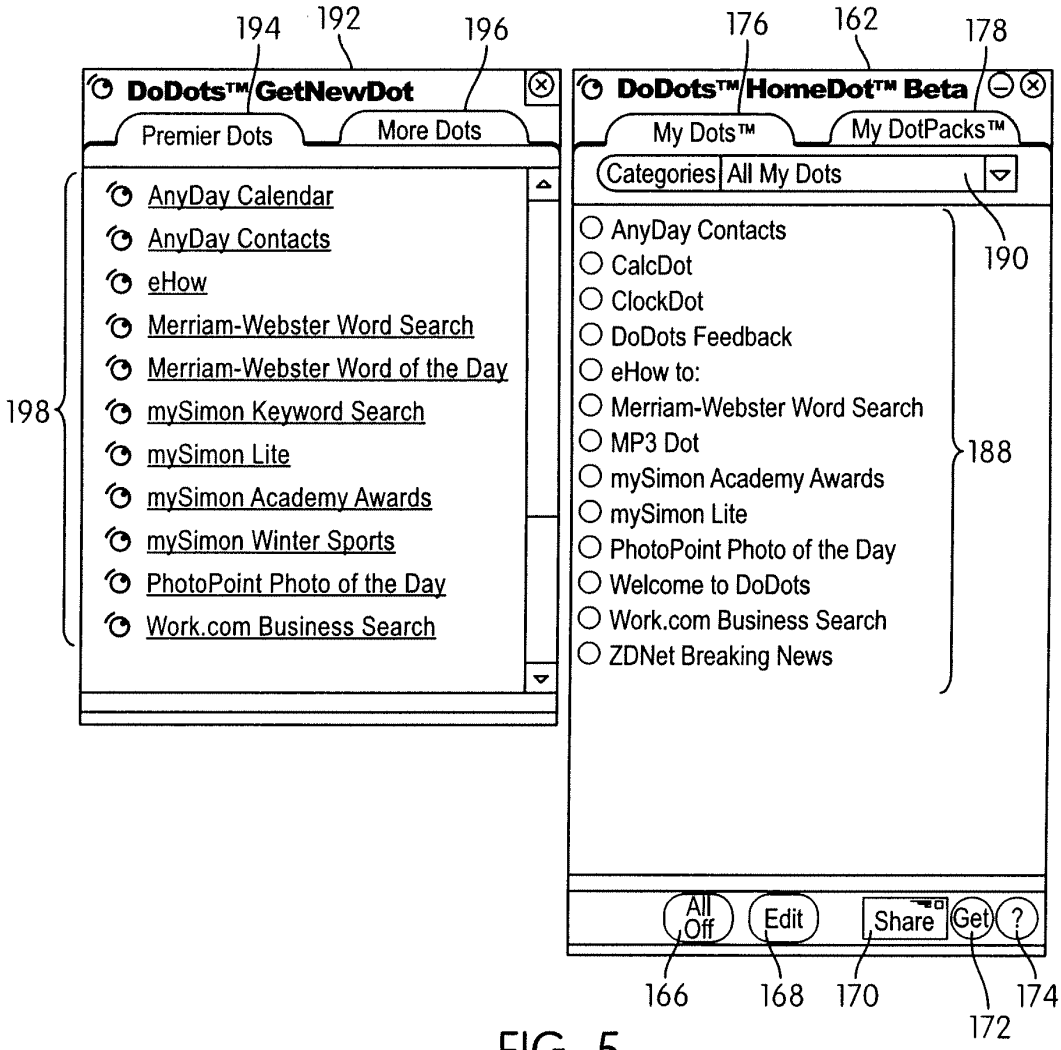

194
192
196
DoDots™ GetNewDot
Premier Dots
More Dots
AnyDay Calendar
AnyDay Contacts
eHow
Merriam-Webster Word Search
Merriam-Webster Word of the Day
mySimon Keyword Search
mySimon Lite
mySimon Academy Awards
mySimon Winter Sports
PhotoPoint Photo of the Day
Work.com Business Search
198
176
162
178
DoDots™ HomeDot™ Beta
My Dots™
My DotPacks™
Categories
All My Dots
190
AnyDay Contacts
CalcDot
ClockDot
DoDots Feedback
eHow to:
Merriam-Webster Word Search
MP3 Dot
mySimon Academy Awards
mySimon Lite
PhotoPoint Photo of the Day
Welcome to DoDots
Work.com Business Search
ZDNet Breaking News
188
All Off
Edit
Share
Get
?
166
168
170
172
174

FIG. 5

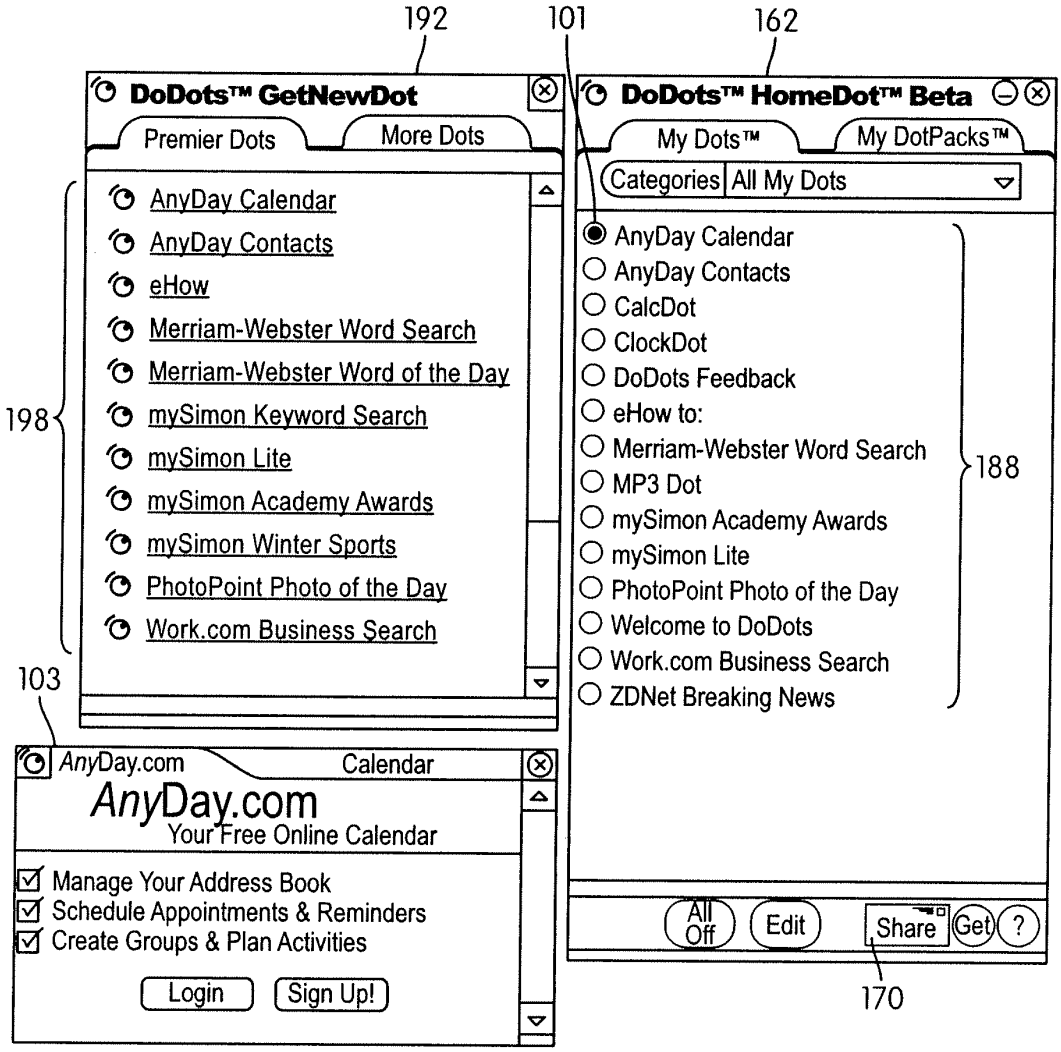

192
101
162
DoDots™ GetNewDot
Premier Dots
More Dots
AnyDay Calendar
AnyDay Contacts
eHow
Merriam-Webster Word Search
Merriam-Webster Word of the Day
mySimon Keyword Search
mySimon Lite
mySimon Academy Awards
mySimon Winter Sports
PhotoPoint Photo of the Day
Work.com Business Search
198
103
AnyDay.com
Calendar
AnyDay.com
Your Free Online Calendar
Manage Your Address Book
Schedule Appointments & Reminders
Create Groups & Plan Activities
Login
Sign Up!
DoDots™ HomeDot™ Beta
My Dots™
My DotPacks™
Categories
All My Dots
AnyDay Calendar
AnyDay Contacts
CalcDot
ClockDot
DoDots Feedback
eHow to:
Merriam-Webster Word Search
MP3 Dot
mySimon Academy Awards
mySimon Lite
PhotoPoint Photo of the Day
Welcome to DoDots
Work.com Business Search
ZDNet Breaking News
188
All Off
Edit
Share
Get
?
170

FIG. 6

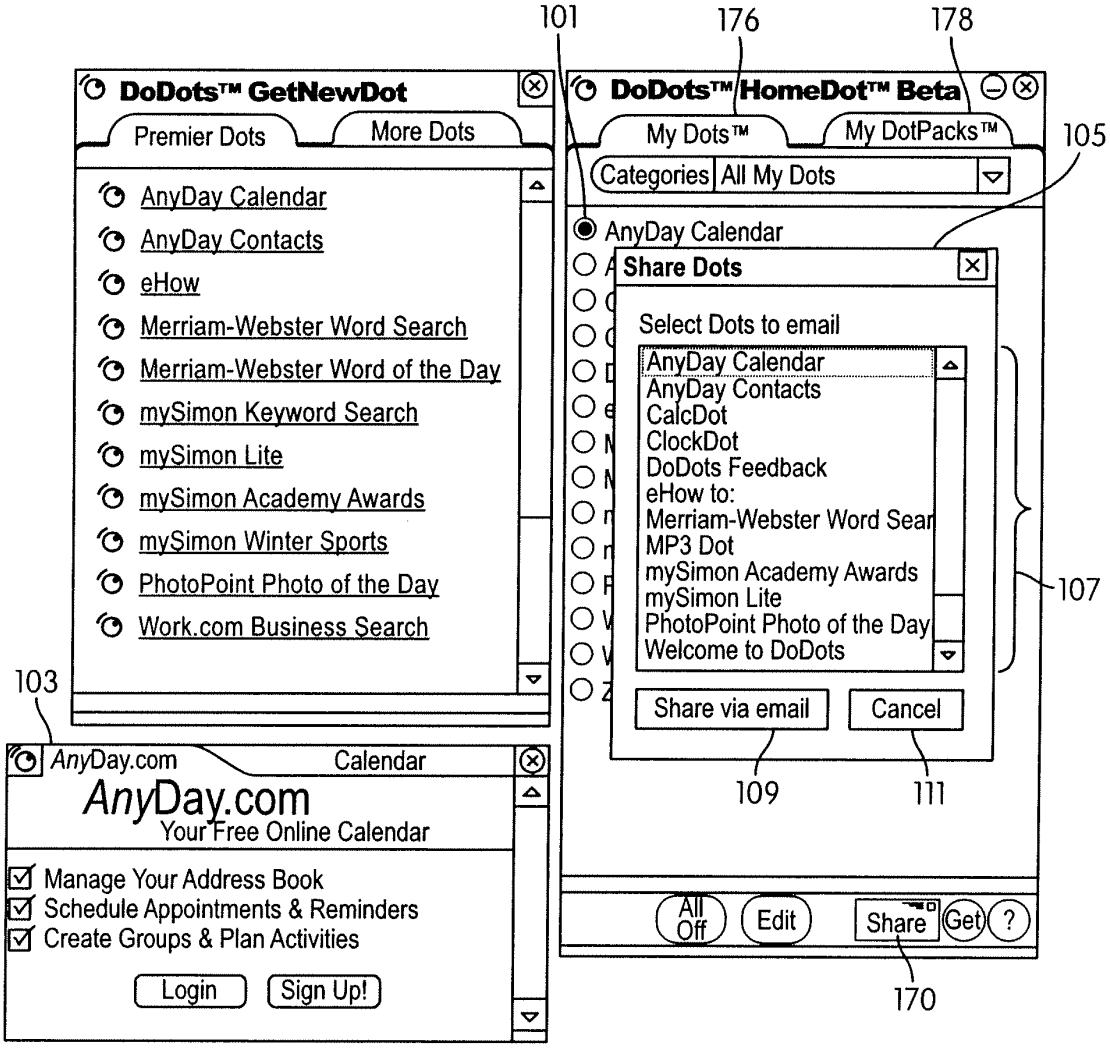

101
176
178
DoDots™ GetNewDot
Premier Dots
More Dots
AnyDay Calendar
AnyDay Contacts
eHow
Merriam-Webster Word Search
Merriam-Webster Word of the Day
mySimon Keyword Search
mySimon Lite
mySimon Academy Awards
mySimon Winter Sports
PhotoPoint Photo of the Day
Work.com Business Search
DoDots™ HomeDot™ Beta
My Dots™
My DotPacks™
105
Categories
All My Dots
AnyDay Calendar
Share Dots
Select Dots to email
AnyDay Calendar
AnyDay Contacts
CalcDot
ClockDot
DoDots Feedback
eHow to:
Merriam-Webster Word Sear
MP3 Dot
mySimon Academy Awards
mySimon Lite
PhotoPoint Photo of the Day
Welcome to DoDots
107
Share via email
Cancel
109
111
103
AnyDay.com
Calendar
AnyDay.com
Your Free Online Calendar
Manage Your Address Book
Schedule Appointments & Reminders
Create Groups & Plan Activities
Login
Sign Up!
All Off
Edit
Share
Get
?
170

FIG. 7

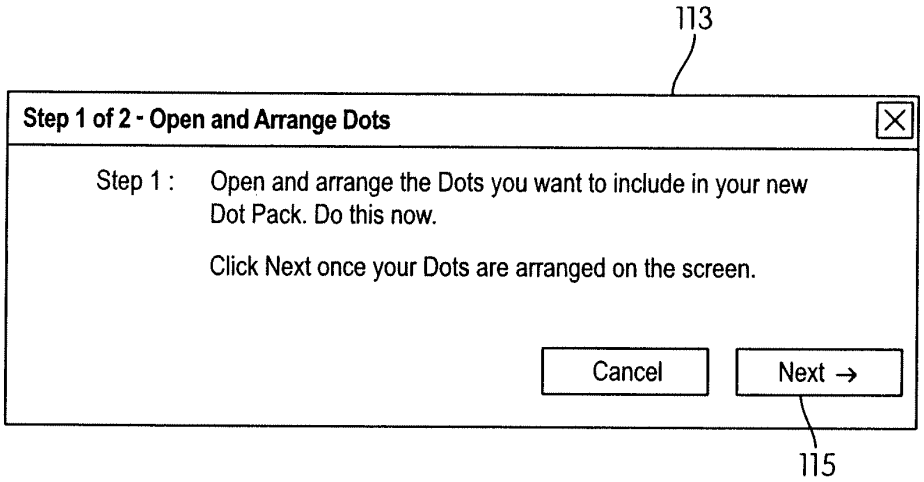

113
Step 1 of 2 - Open and Arrange Dots
Step 1 :
Open and arrange the Dots you want to include in your new Dot Pack. Do this now.
Click Next once your Dots are arranged on the screen.
Cancel
Next →
115

FIG. 8A

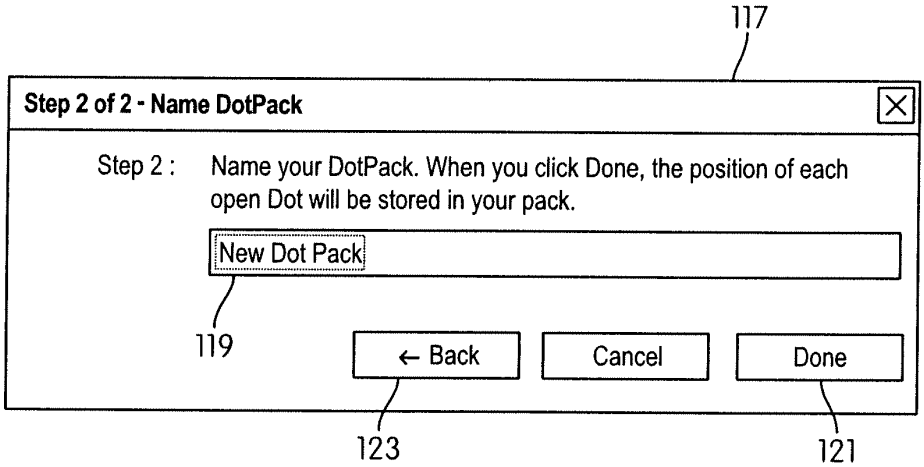

117
Step 2 of 2 - Name DotPack
Step 2 :
Name your DotPack. When you click Done, the position of each open Dot will be stored in your pack.
New Dot Pack
119
← Back
Cancel
Done
123
121

FIG. 8B

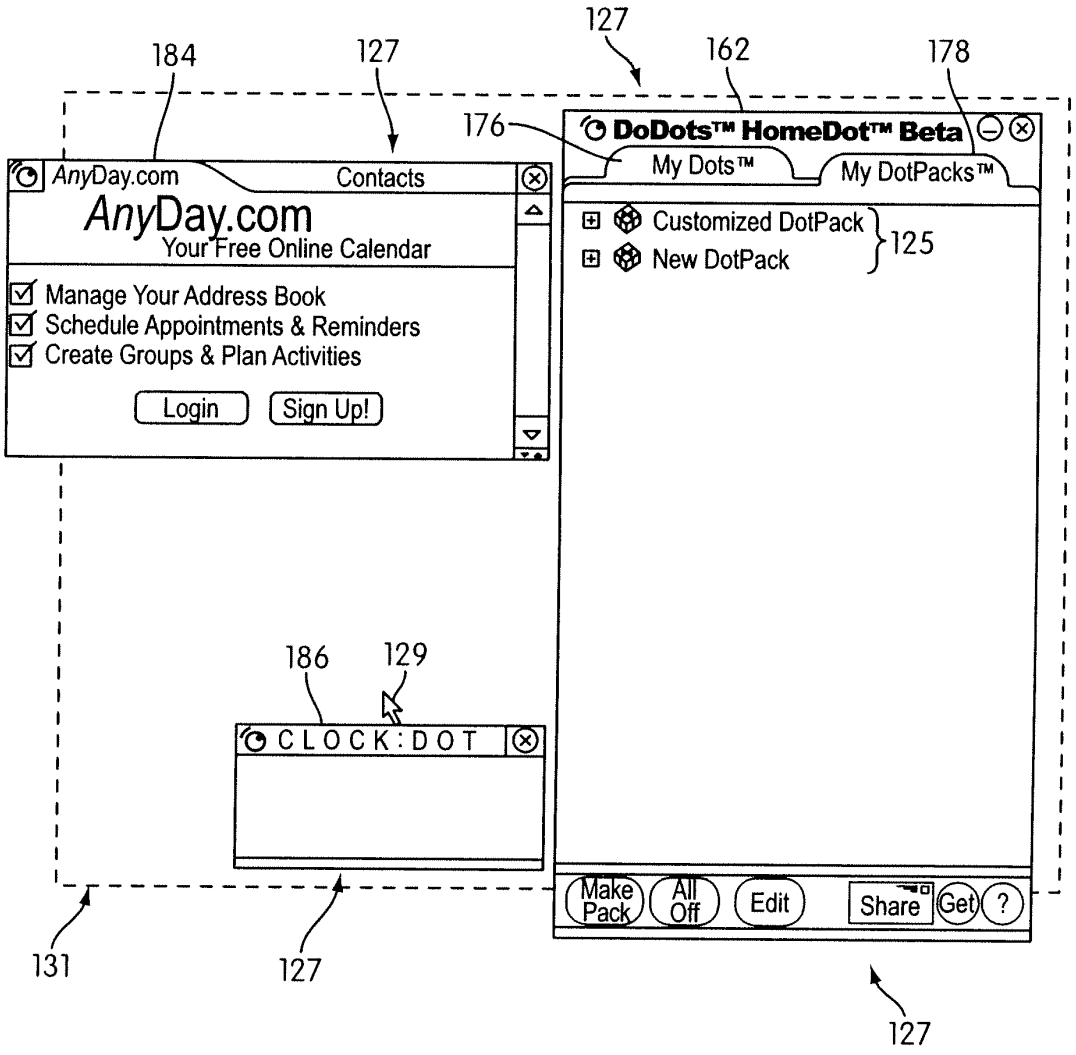

127
184
127
162
178
176
DoDots™ HomeDot™ Beta
AnyDay.com
Contacts
My Dots™
My DotPacks™
AnyDay.com
Your Free Online Calendar
Customized DotPack
New DotPack
125
Manage Your Address Book
Schedule Appointments & Reminders
Create Groups & Plan Activities
Login
Sign Up!
186
129
CLOCK:DOT
Make Pack
All Off
Edit
Share
Get
?
131
127
127

FIG. 9A

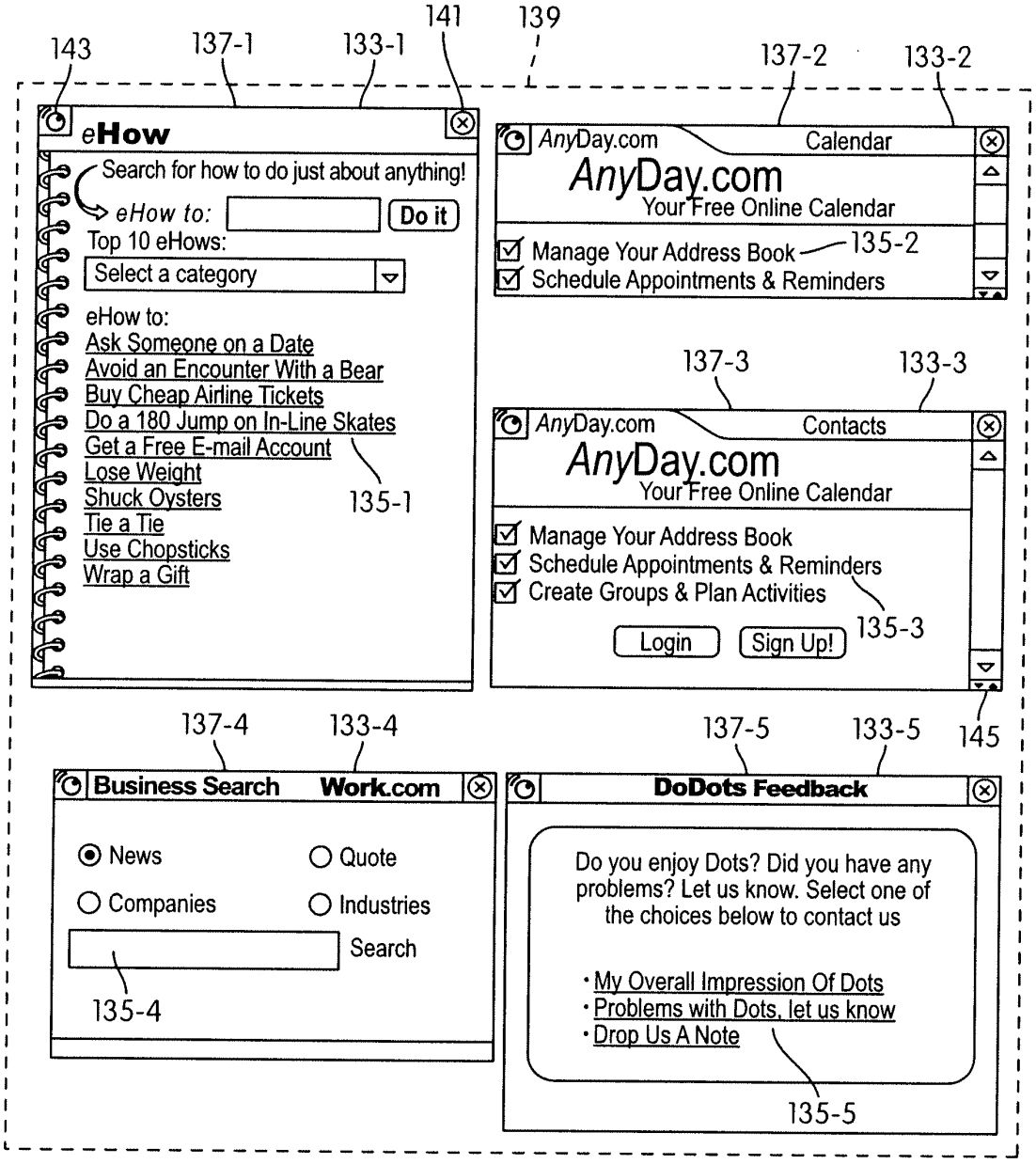

143
137-1
133-1
141
139
137-2
133-2
eHow
Search for how to do just about anything!
eHow to:
Do it
Top 10 eHows:
Select a category
eHow to:
Ask Someone on a Date
Avoid an Encounter With a Bear
Buy Cheap Airline Tickets
Do a 180 Jump on In-Line Skates
Get a Free E-mail Account
Lose Weight
Shuck Oysters
Tie a Tie
Use Chopsticks
Wrap a Gift
135-1
AnyDay.com
Calendar
AnyDay.com
Your Free Online Calendar
Manage Your Address Book
135-2
Schedule Appointments & Reminders
137-3
133-3
AnyDay.com
Contacts
AnyDay.com
Your Free Online Calendar
Manage Your Address Book
Schedule Appointments & Reminders
Create Groups & Plan Activities
135-3
Login
Sign Up!
145
137-4
133-4
Business Search
Work.com
News
Quote
Companies
Industries
Search
135-4
137-5
133-5
DoDots Feedback
Do you enjoy Dots? Did you have any problems? Let us know. Select one of the choices below to contact us
My Overall Impression Of Dots
Problems with Dots, let us know
Drop Us A Note
135-5

FIG. 9B

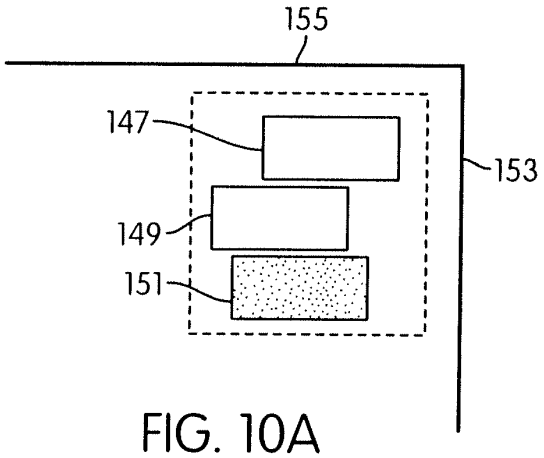


FIG. 10A

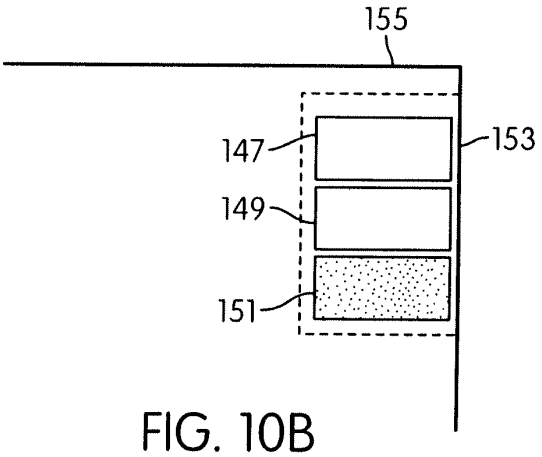


FIG. 10B

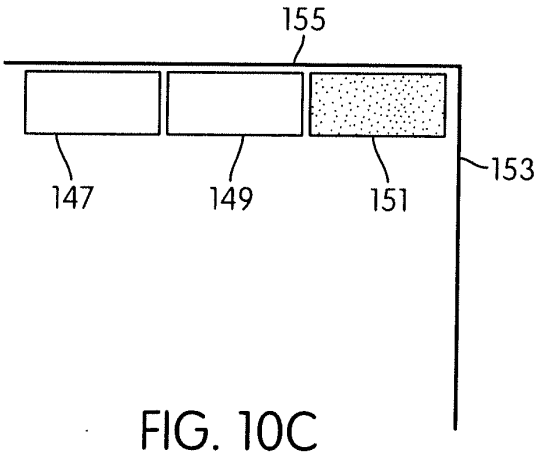


FIG. 10C

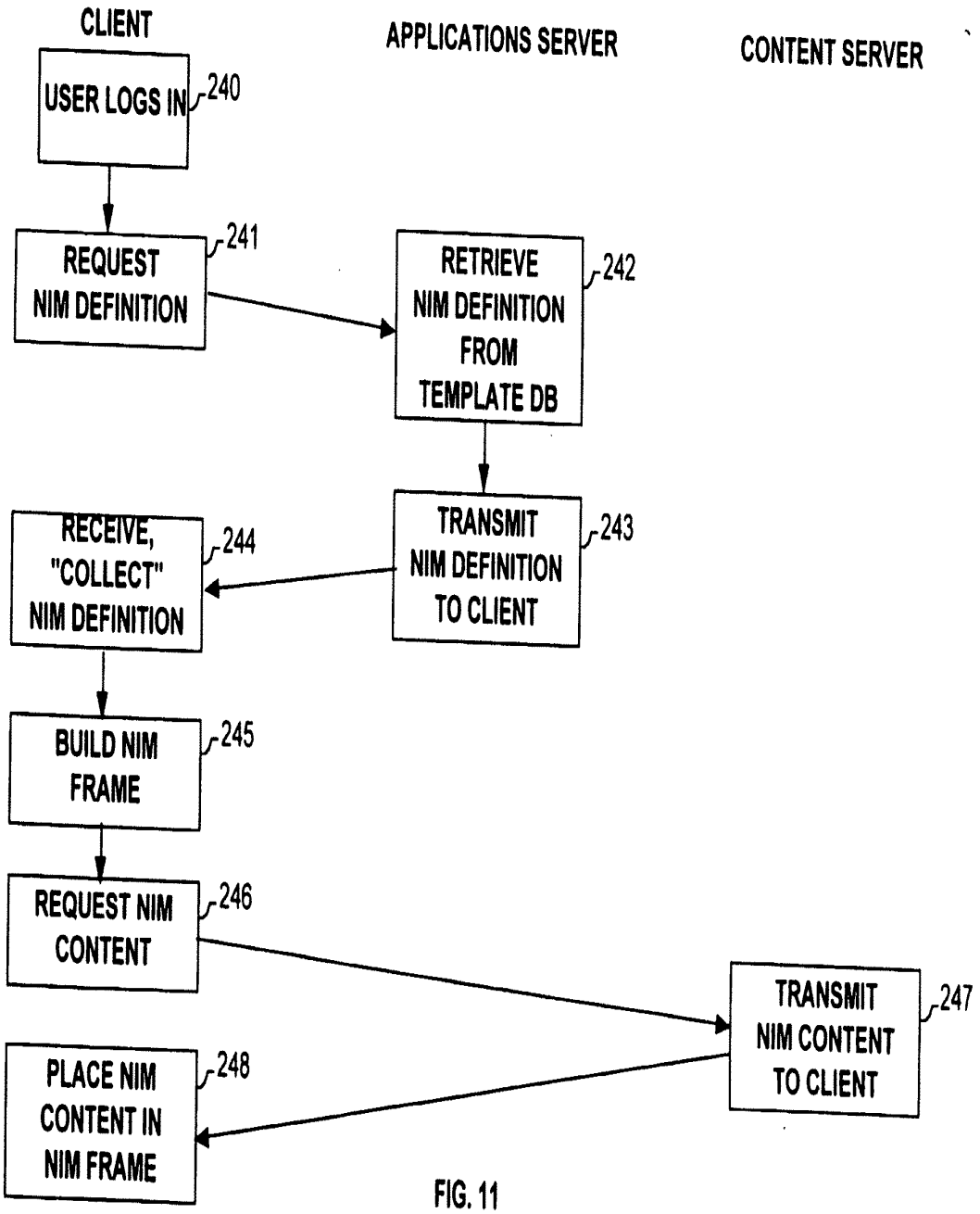

CLIENT
APPLICATIONS SERVER
CONTENT SERVER
USER LOGS IN
240
REQUEST NIM DEFINITION
241
RETRIEVE NIM DEFINITION FROM TEMPLATE DB
242
TRANSMIT NIM DEFINITION TO CLIENT
243
RECEIVE, "COLLECT" NIM DEFINITION
244
BUILD NIM FRAME
245
REQUEST NIM CONTENT
246
TRANSMIT NIM CONTENT TO CLIENT
247
PLACE NIM CONTENT IN NIM FRAME
248

FIG. 11

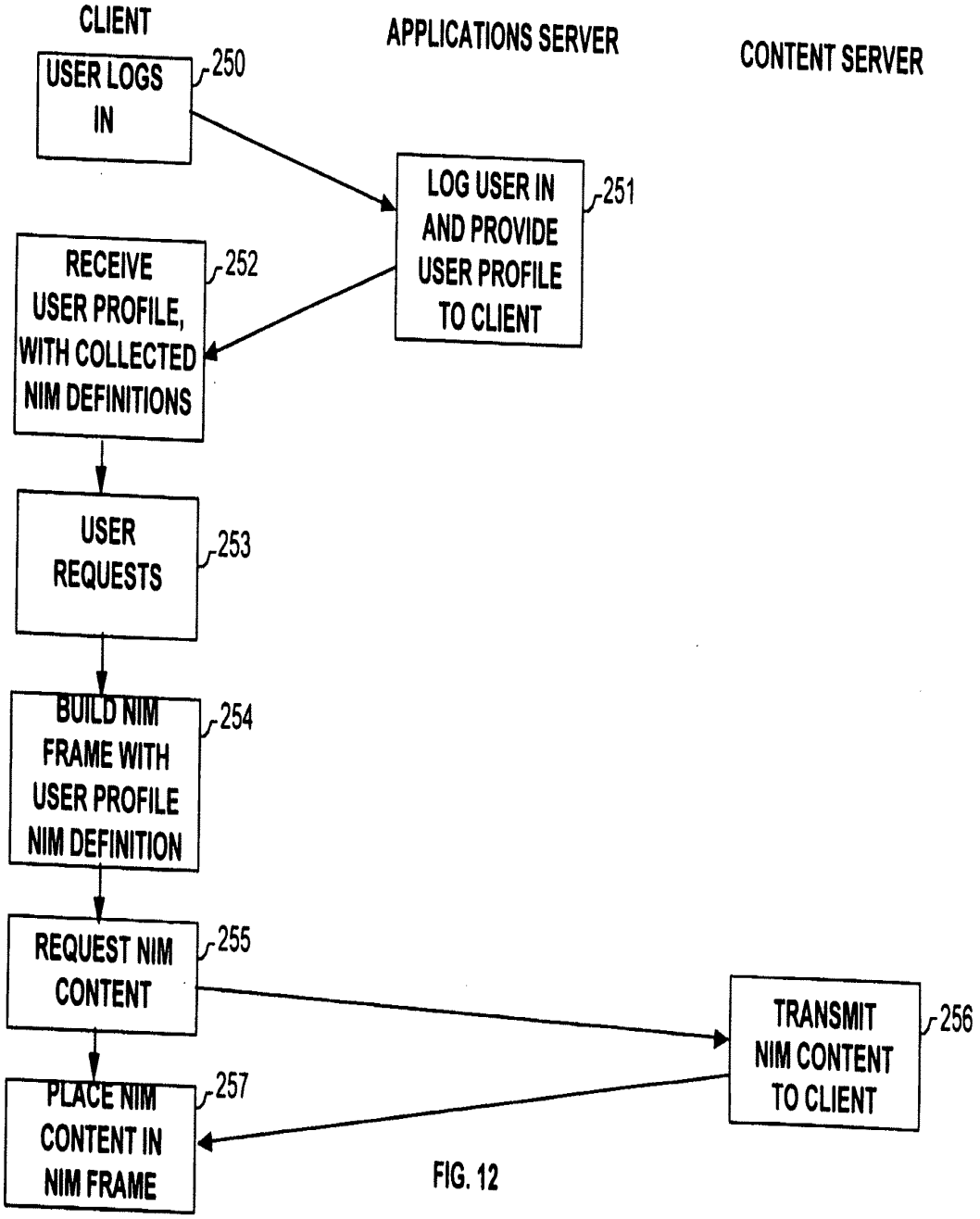

CLIENT
APPLICATIONS SERVER
CONTENT SERVER
USER LOGS IN
250
LOG USER IN AND PROVIDE USER PROFILE TO CLIENT
251
RECEIVE USER PROFILE, WITH COLLECTED NIM DEFINITIONS
252
USER REQUESTS
253
BUILD NIM FRAME WITH USER PROFILE NIM DEFINITION
254
REQUEST NIM CONTENT
255
TRANSMIT NIM CONTENT TO CLIENT
256
PLACE NIM CONTENT IN NIM FRAME
257

FIG. 12

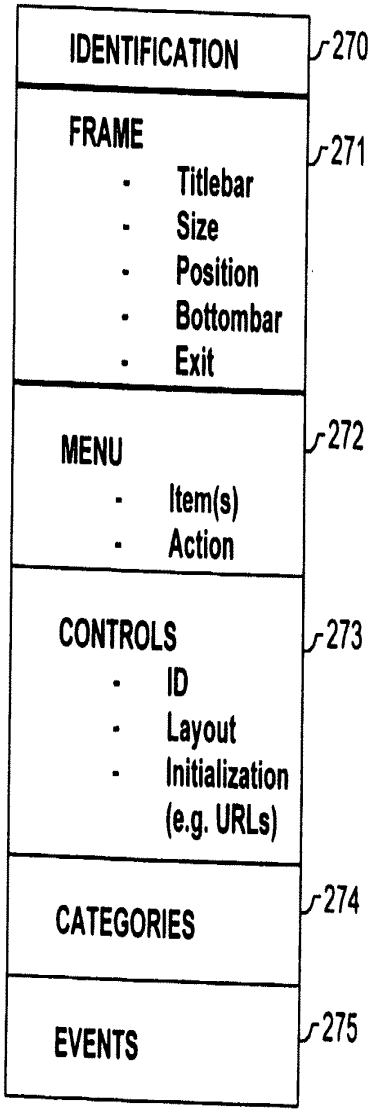

IDENTIFICATION
270
FRAME
- Titlebar
- Size
- Position
- Bottombar
- Exit
271
MENU
- Item(s)
- Action
272
CONTROLS
- ID
- Layout
- Initialization (e.g. URLs)
273
CATEGORIES
274
EVENTS
275

FIG. 13

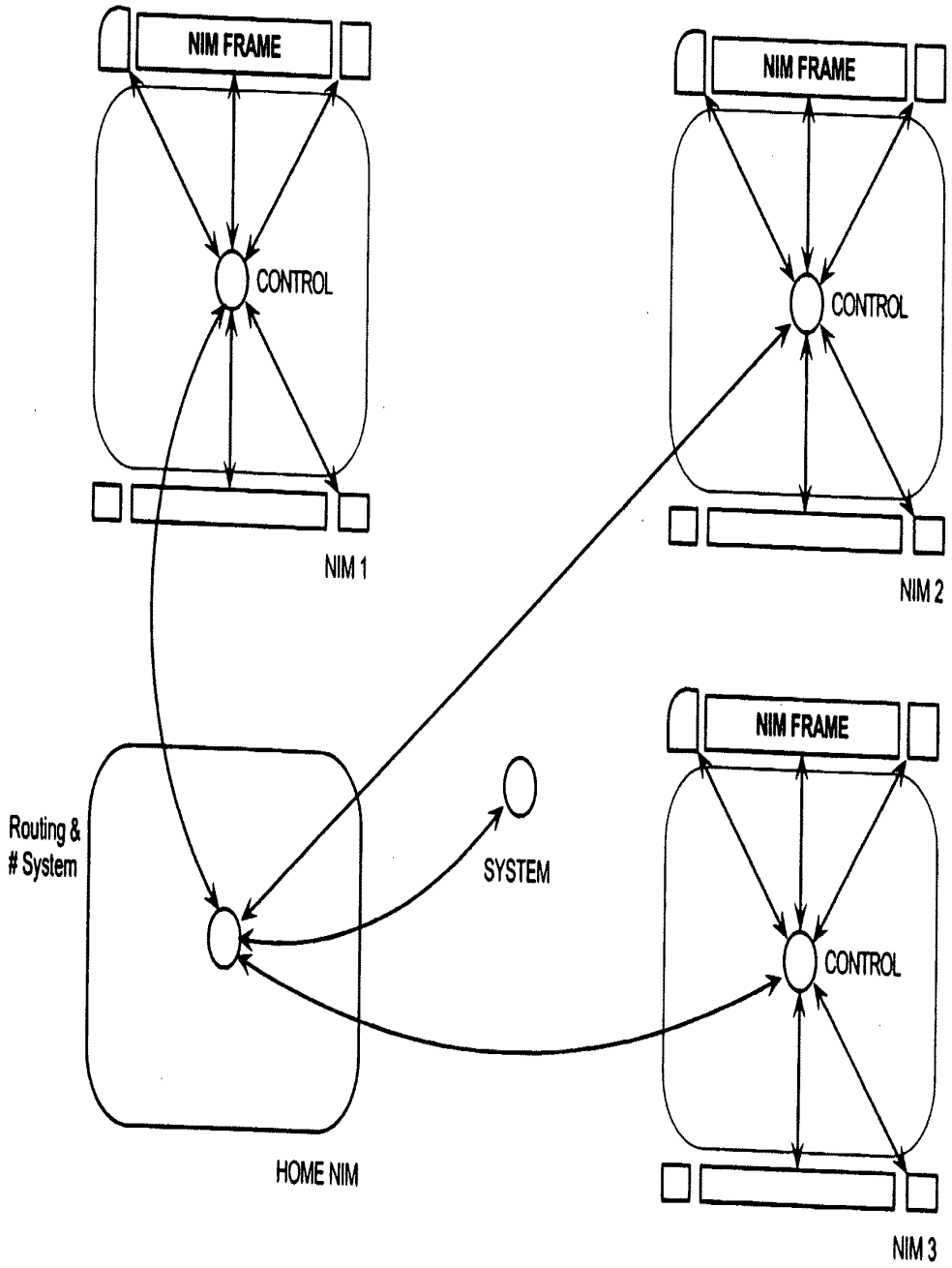

NIM FRAME
CONTROL
NIM 1
NIM FRAME
CONTROL
NIM 2
NIM FRAME
CONTROL
NIM 3
Routing &
System
SYSTEM
HOME NIM

FIG. 14

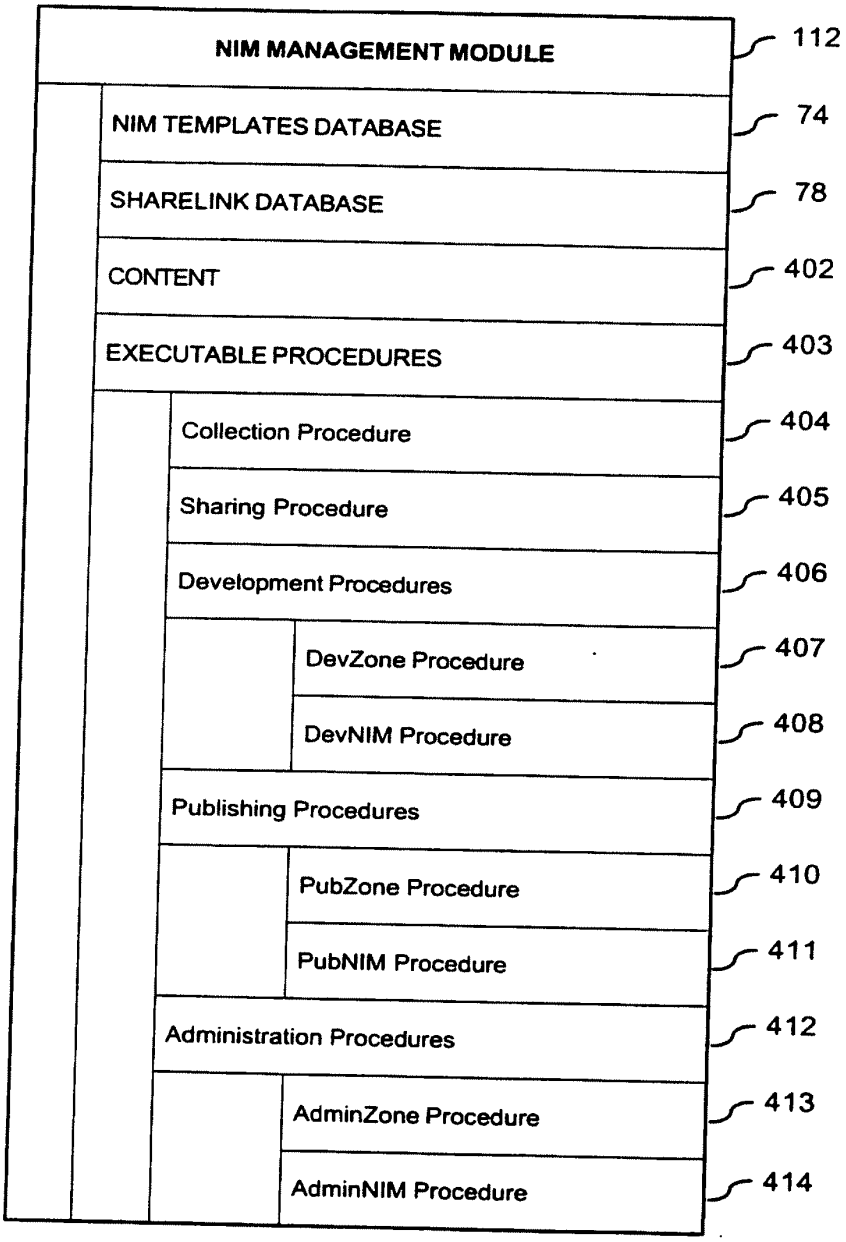

NIM MANAGEMENT MODULE
112
NIM TEMPLATES DATABASE
74
SHARELINK DATABASE
78
CONTENT
402
EXECUTABLE PROCEDURES
403
Collection Procedure
404
Sharing Procedure
405
Development Procedures
406
DevZone Procedure
407
DevNIM Procedure
408
Publishing Procedures
409
PubZone Procedure
410
PubNIM Procedure
411
Administration Procedures
412
AdminZone Procedure
413
AdminNIM Procedure
414

FIG. 15

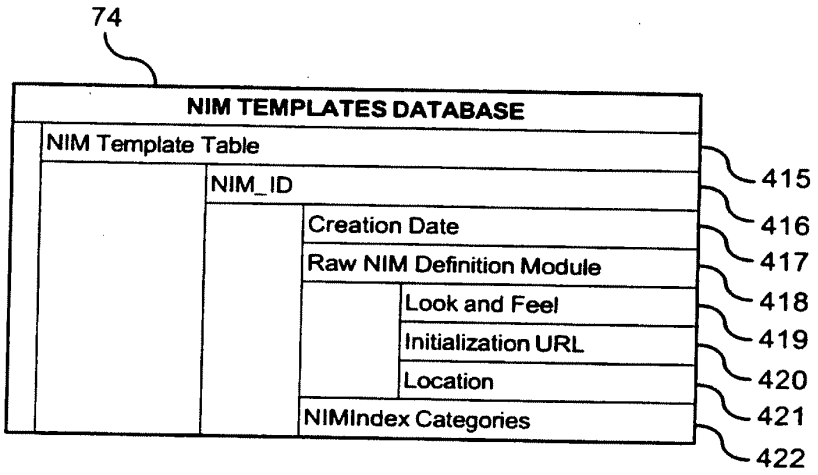

74
NIM TEMPLATES DATABASE
NIM Template Table
NIM_ID
Creation Date
Raw NIM Definition Module
Look and Feel
Initialization URL
Location
NIMIndex Categories
415
416
417
418
419
420
421
422

FIG. 16

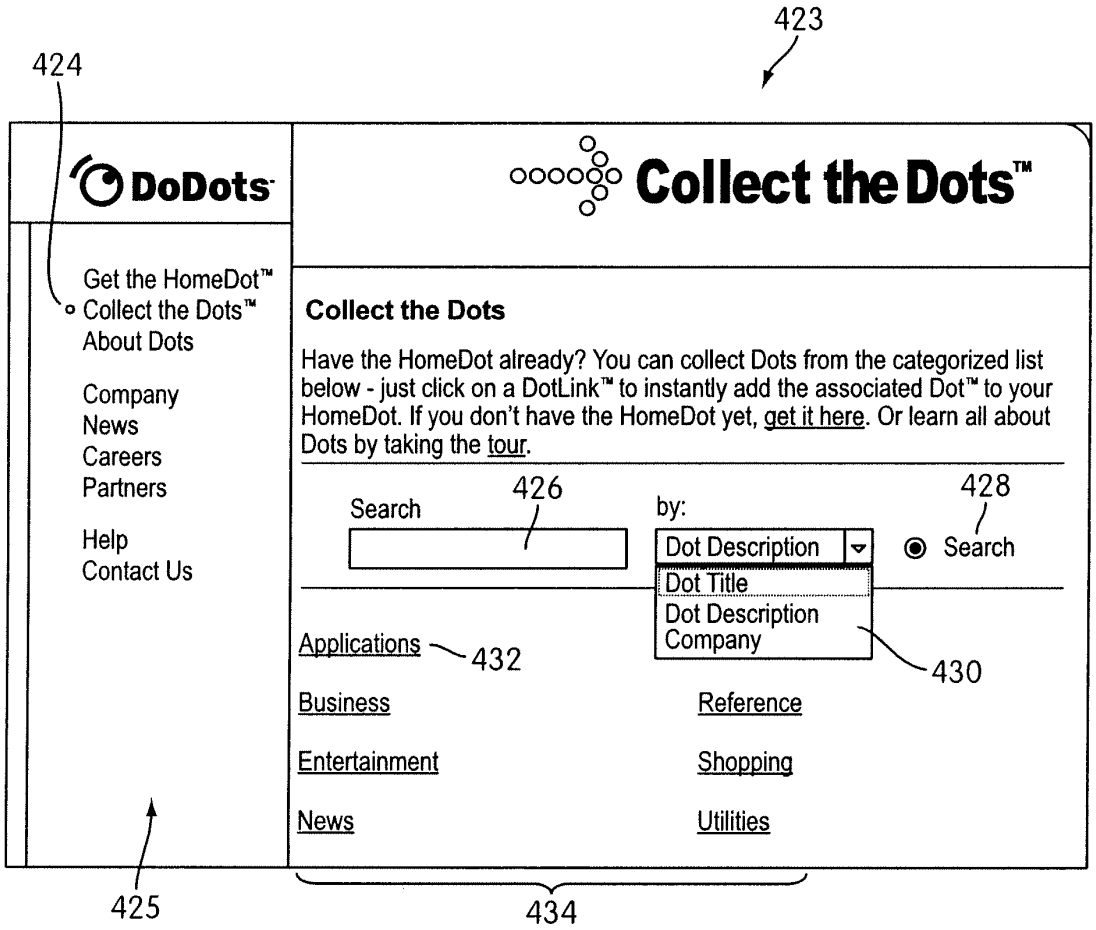

423
424
DoDots
Collect the Dots™
Get the HomeDot™
Collect the Dots™
About Dots
Company
News
Careers
Partners
Help
Contact Us
Collect the Dots
Have the HomeDot already? You can collect Dots from the categorized list below - just click on a DotLink™ to instantly add the associated Dot™ to your HomeDot. If you don't have the HomeDot yet, get it here. Or learn all about Dots by taking the tour.
Search
426
by:
428
Dot Description
Search
Dot Title
Dot Description
Company
430
Applications
432
Business
Reference
Entertainment
Shopping
News
Utilities
425
434

FIG. 17

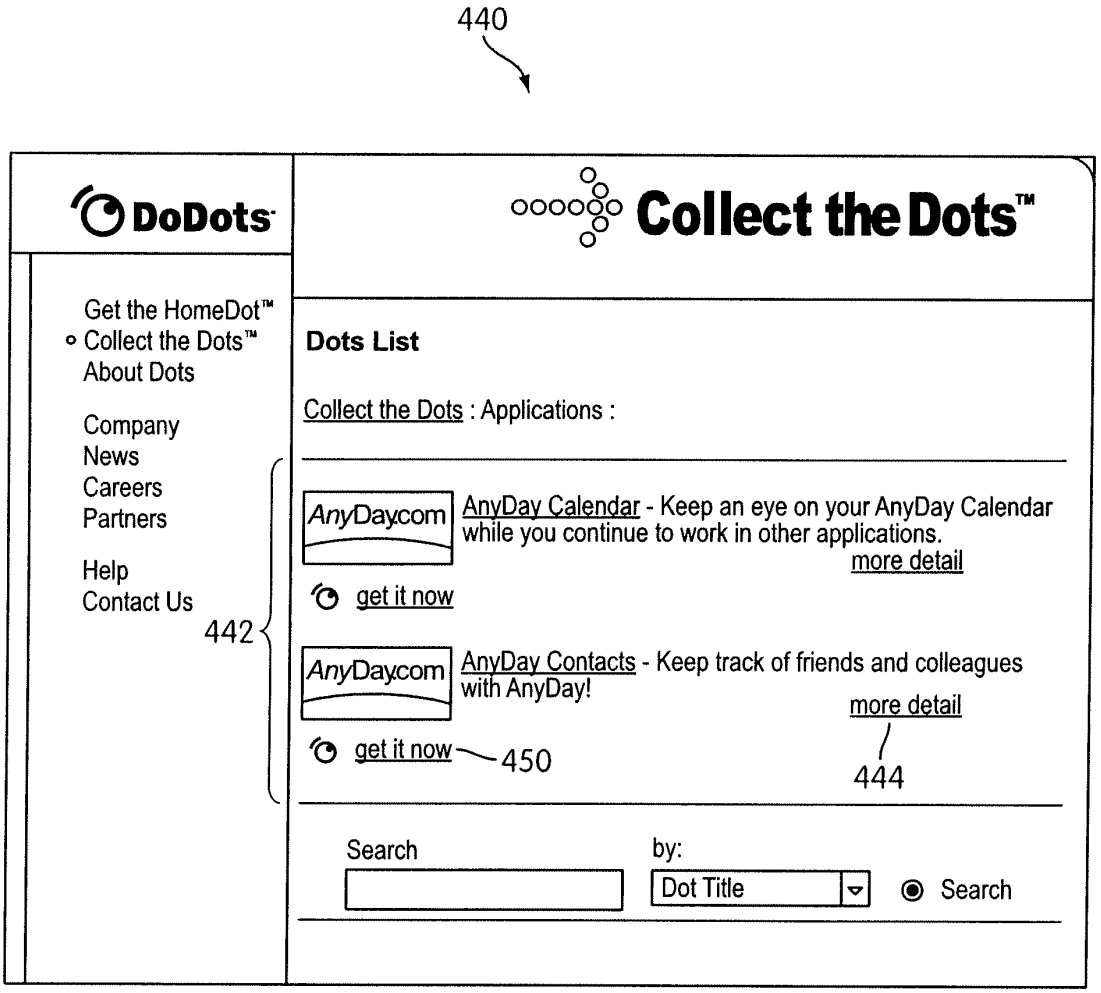

440
DoDots
Collect the Dots™
Get the HomeDot™
Collect the Dots™
About Dots
Company
News
Careers
Partners
Help
Contact Us
442
Dots List
Collect the Dots : Applications :
AnyDay.com
AnyDay Calendar - Keep an eye on your AnyDay Calendar while you continue to work in other applications.
more detail
get it now
AnyDay.com
AnyDay Contacts - Keep track of friends and colleagues with AnyDay!
more detail
get it now
450
444
Search
by:
Dot Title
Search

FIG. 18

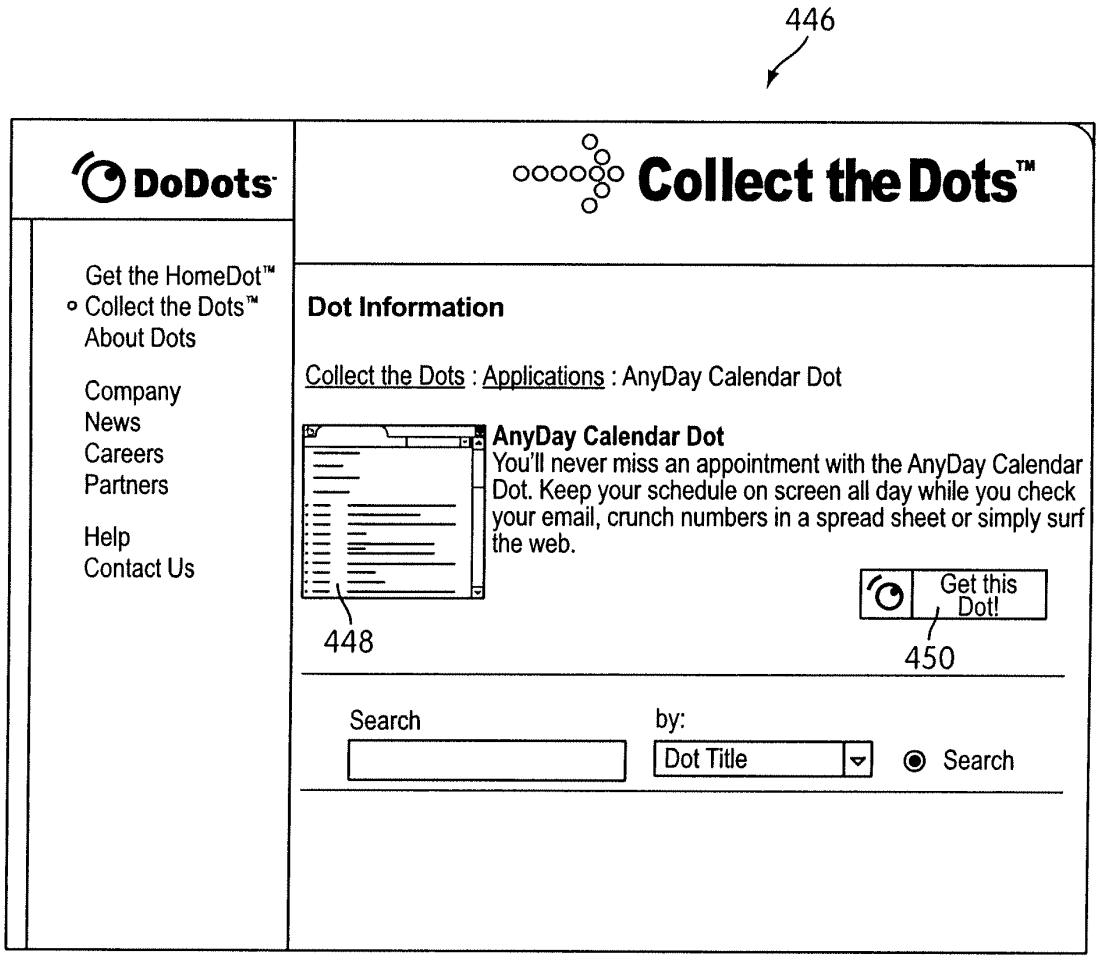

446
DoDots
Collect the Dots™
Get the HomeDot™
Collect the Dots™
About Dots
Company
News
Careers
Partners
Help
Contact Us
Dot Information
Collect the Dots : Applications : AnyDay Calendar Dot
AnyDay Calendar Dot
You'll never miss an appointment with the AnyDay Calendar Dot. Keep your schedule on screen all day while you check your email, crunch numbers in a spread sheet or simply surf the web.
448
Get this Dot!
450
Search
by:
Dot Title
Search

FIG. 19

452

DoDots™

Have you used Dots™ before?

No, I'm new to Dots – If you've never used Dots before, first install the beta version of DoDots™ HomeDot™, which enables you to use, organize and share the Dots you will collect. Download once and you're ready to get the Dots!

1. Click the button below.

Get the HomeDot 454

2. Select **"Run this program from its current location"** to install.
3. After installing the HomeDot, click the "Get the Dot" button below.

Yes, I'm already a Dot user – Simply click on the button below to get the Dot!

Get the Dot! 456

FIG. 20

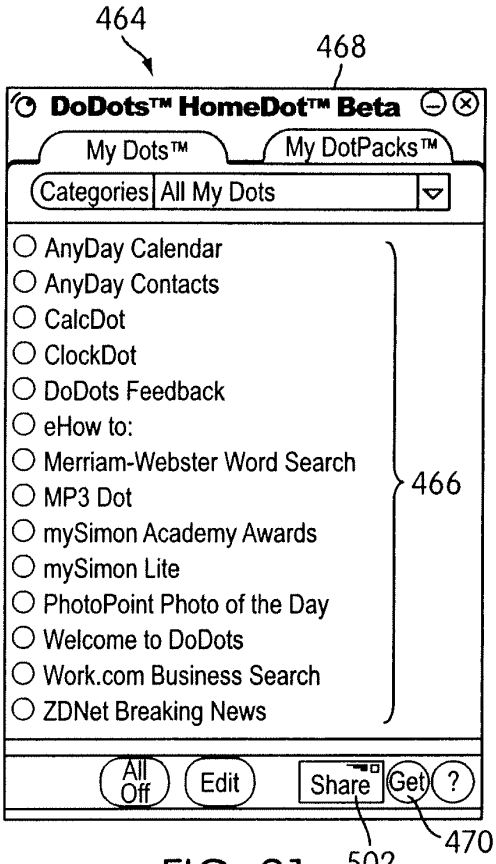


FIG. 21

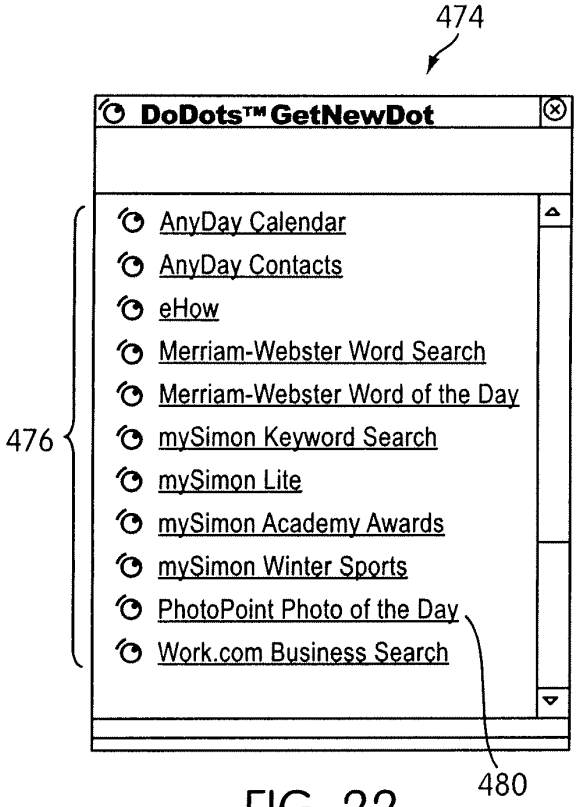


FIG. 22

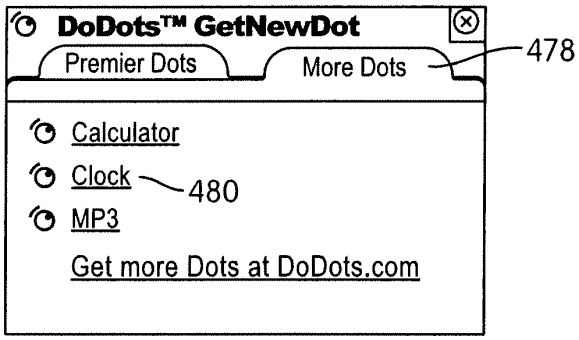


FIG. 23

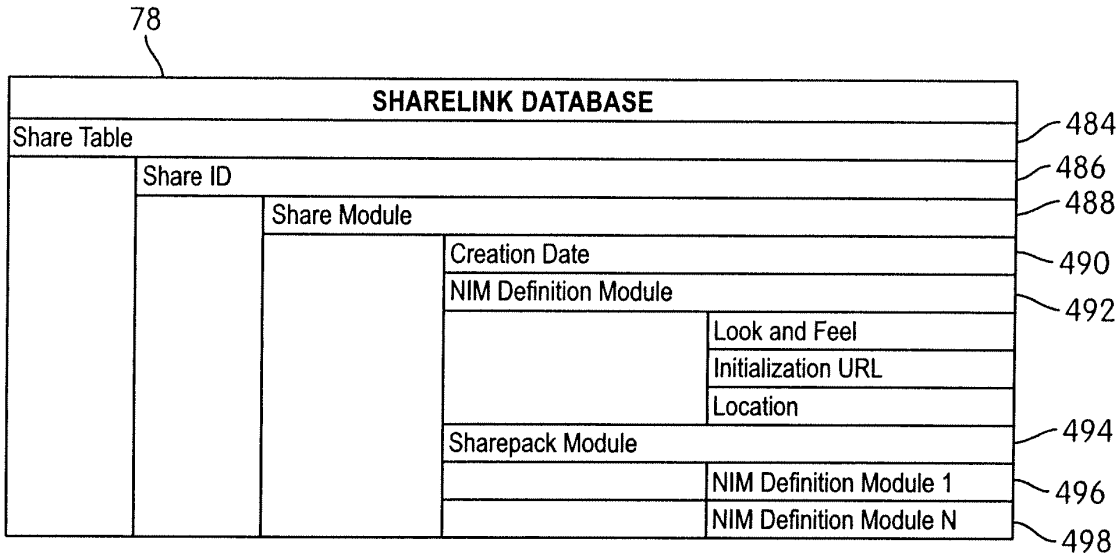

78
SHARELINK DATABASE
Share Table
Share ID
Share Module
Creation Date
NIM Definition Module
Look and Feel
Initialization URL
Location
Sharepack Module
NIM Definition Module 1
NIM Definition Module N
484
486
488
490
492
494
496
498

FIG. 24

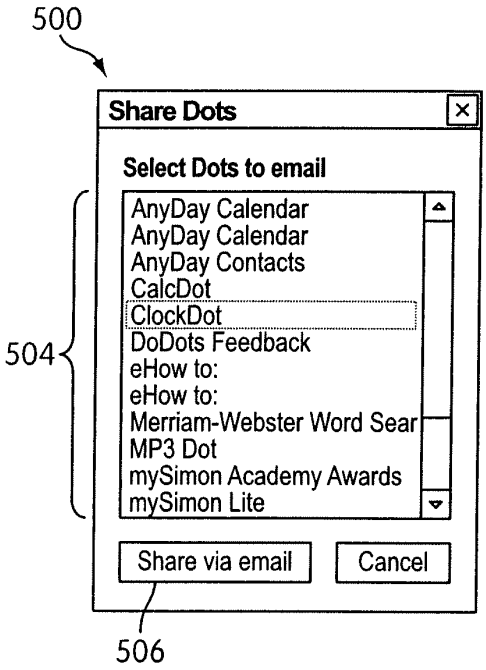

500
Share Dots
Select Dots to email
AnyDay Calendar
AnyDay Calendar
AnyDay Contacts
CalcDot
ClockDot
DoDots Feedback
eHow to:
eHow to:
Merriam-Webster Word Sear
MP3 Dot
mySimon Academy Awards
mySimon Lite
504
Share via email
Cancel
506

FIG. 25

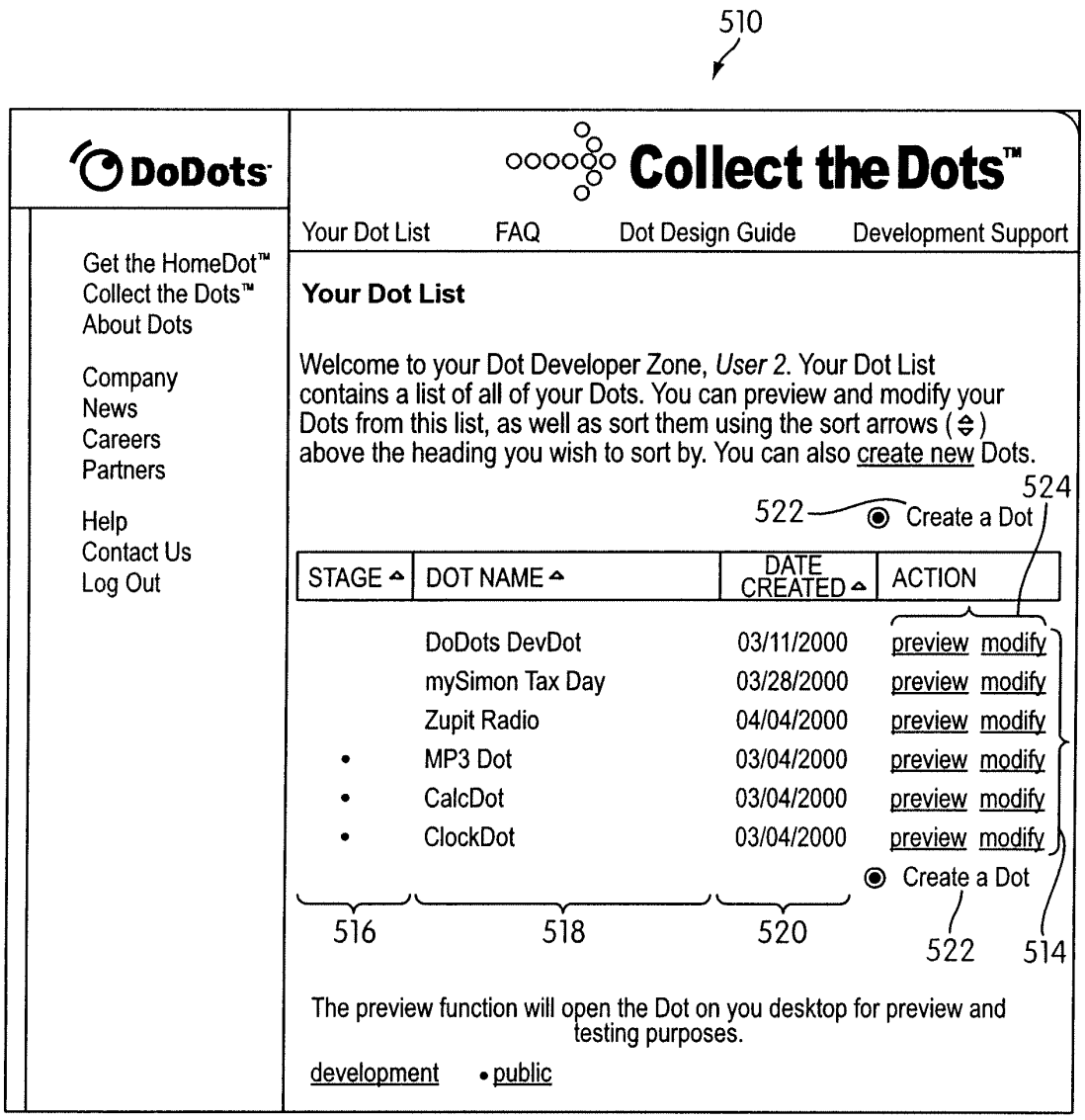

510
DoDots
Collect the Dots™
Your Dot List
FAQ
Dot Design Guide
Development Support
Get the HomeDot™
Collect the Dots™
About Dots
Company
News
Careers
Partners
Help
Contact Us
Log Out
Your Dot List
Welcome to your Dot Developer Zone, User 2. Your Dot List contains a list of all of your Dots. You can preview and modify your Dots from this list, as well as sort them using the sort arrows (⇕) above the heading you wish to sort by. You can also create new Dots.
522
Create a Dot
524
STAGE
DOT NAME
DATE CREATED
ACTION
DoDots DevDot 03/11/2000 preview modify
mySimon Tax Day 03/28/2000 preview modify
Zupit Radio 04/04/2000 preview modify
MP3 Dot 03/04/2000 preview modify
CalcDot 03/04/2000 preview modify
ClockDot 03/04/2000 preview modify
Create a Dot
516
518
520
522
514
The preview function will open the Dot on you desktop for preview and testing purposes.
development
public

FIG. 26

530

DoDots

Collect the Dots™

Your Dot List | FAQ | Dot Design Guide | Development Support

Get the HomeDot™
Collect the Dots™
About Dots

Company
News
Careers
Partners

Help
Contact Us
Log Out

Modify Dot

Fields marked with an asterisk (*) are required.

◉ Delete 532 532 ◉ Save

General Dot Information

Dot Name*: ?

534 MP3 Dot

536 ○ Development ◉ • Public 538

Username and Dot Company: ?

User 3 **DoDots**

URL for Branding Image*: ?

540 ../DotPartners/jiffybank/DotIndex/jiffybank_80x40.gif

URL for Detailed Image*: ?

542 ../DotPartners/jiffybank/DotIndex/MP3_100x100.gif

FIG. 27

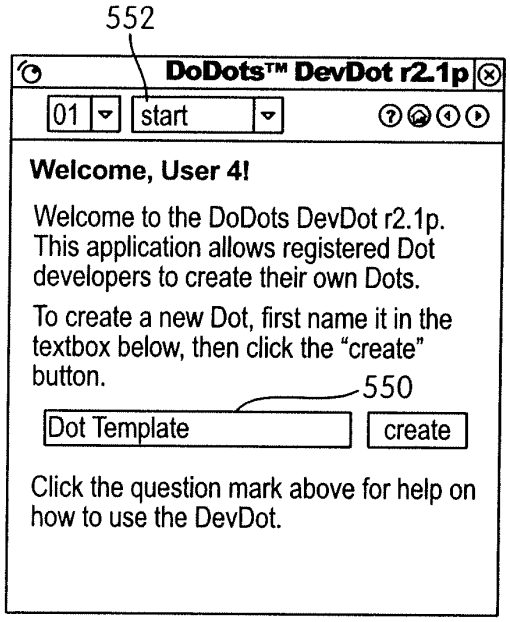


FIG. 28A

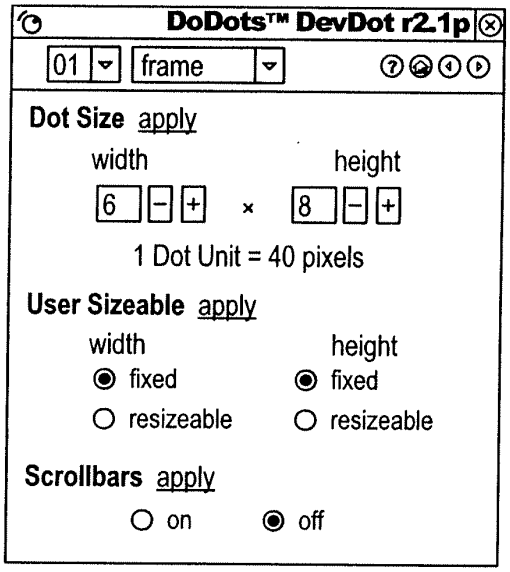


FIG. 28B

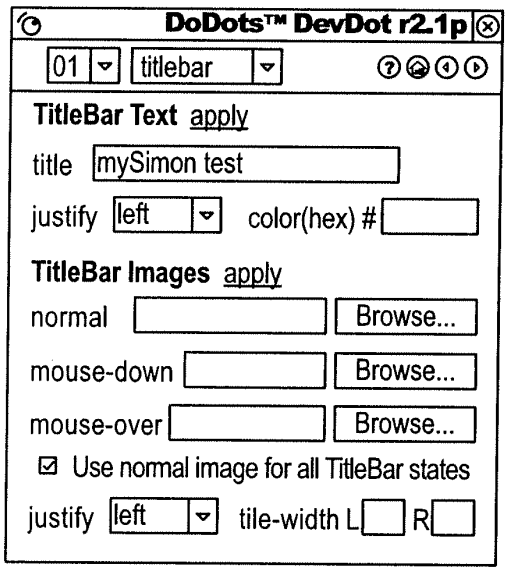


FIG. 28C

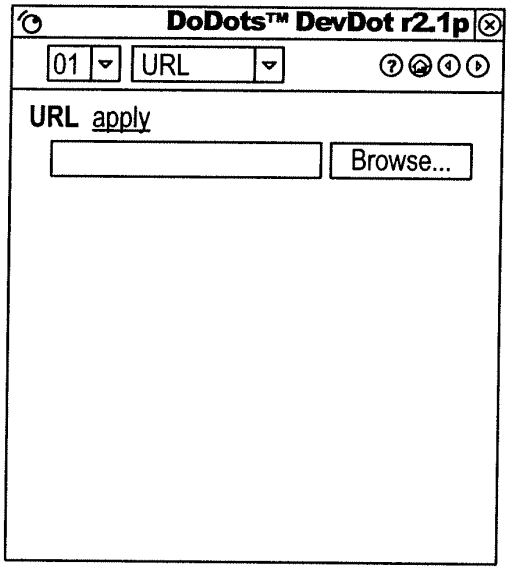


FIG. 28D

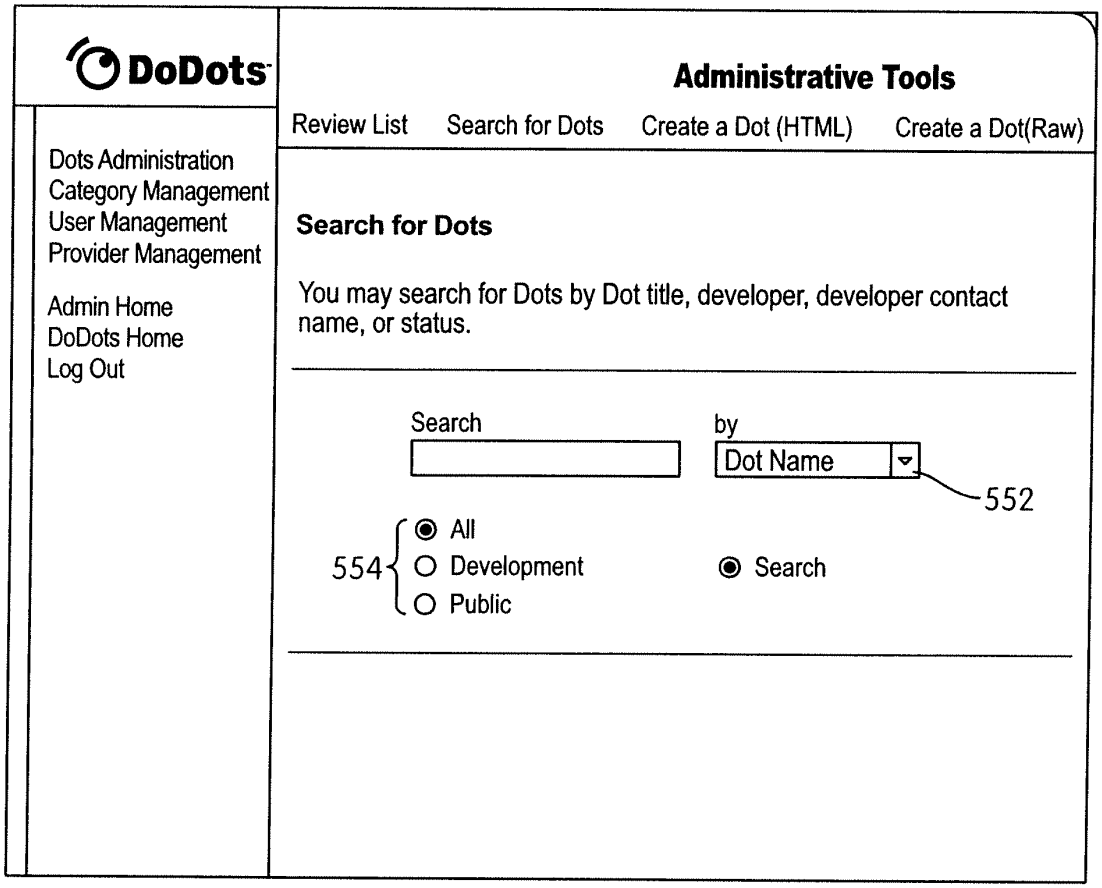

DoDots
Administrative Tools
Review List
Search for Dots
Create a Dot (HTML)
Create a Dot(Raw)
Dots Administration
Category Management
User Management
Provider Management
Admin Home
DoDots Home
Log Out
Search for Dots
You may search for Dots by Dot title, developer, developer contact name, or status.
Search
by
Dot Name
552
554
All
Development
Public
Search

FIG. 29A

DoDots

Administrative Tools

Review List | Search for Dots | Create a Dot

Dots Administration
Category Management
User Management
Provider Management

Admin Home
DoDots Home
Log Out

Modify Dot

Fields marked with an asterisk (*) are required.

◉ Delete ◉ Submit

General Dot Information

Dot Name*: ?

AnyDay Contacts

○ Development ◉ • Public

Username and Dot Company: ?

anyday | anyday

URL for Branding Image*: ?

../DotPartners/jiffybank/DotIndex/jiffybank_80x40.gif

URL for Detailed Image*: ?

../DotPartners/jiffybank/DotIndex/MP3_100x100.gif

Dot Categorization*: ? text text
text

Brief Dot Description*: ?

Keep stock of friends and colleagues with AnyDay!

Full Dot Description*: ?

Text Text Text Text Text Text Text Text Text
Text Text Text Text Text Text Text Text Text
Text Text

Text*: ?

Comments

Text

Text ## ? Text ◉ Yes ○ No

Text ## ? Text ○ Yes ◉ No

FIG. 29B

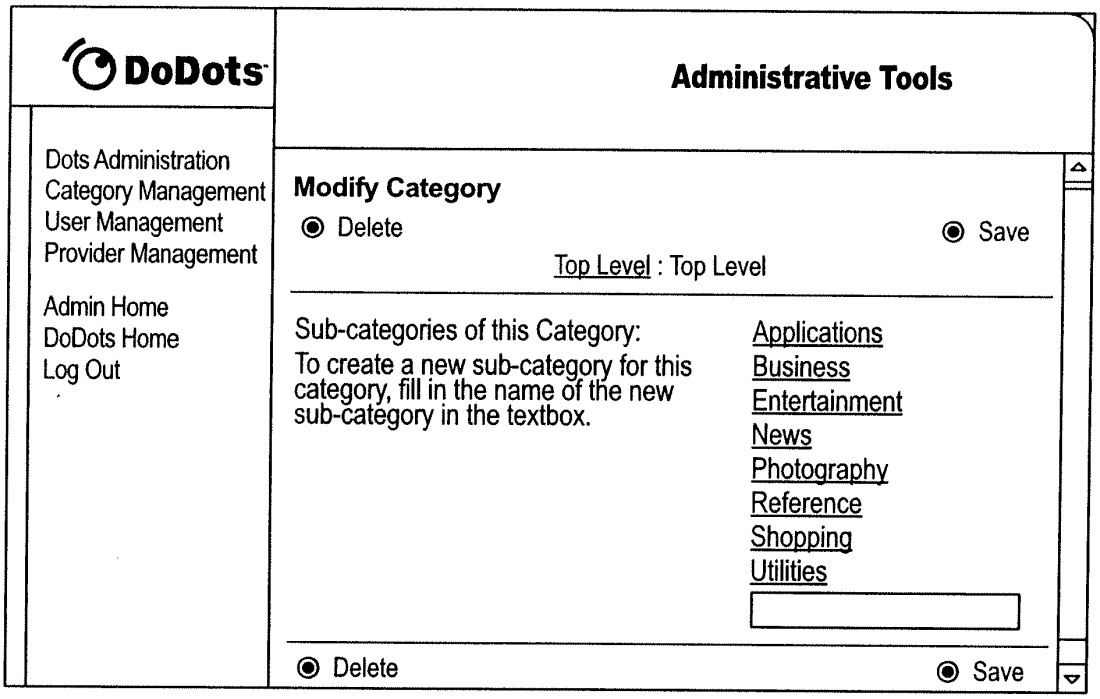


FIG. 30A

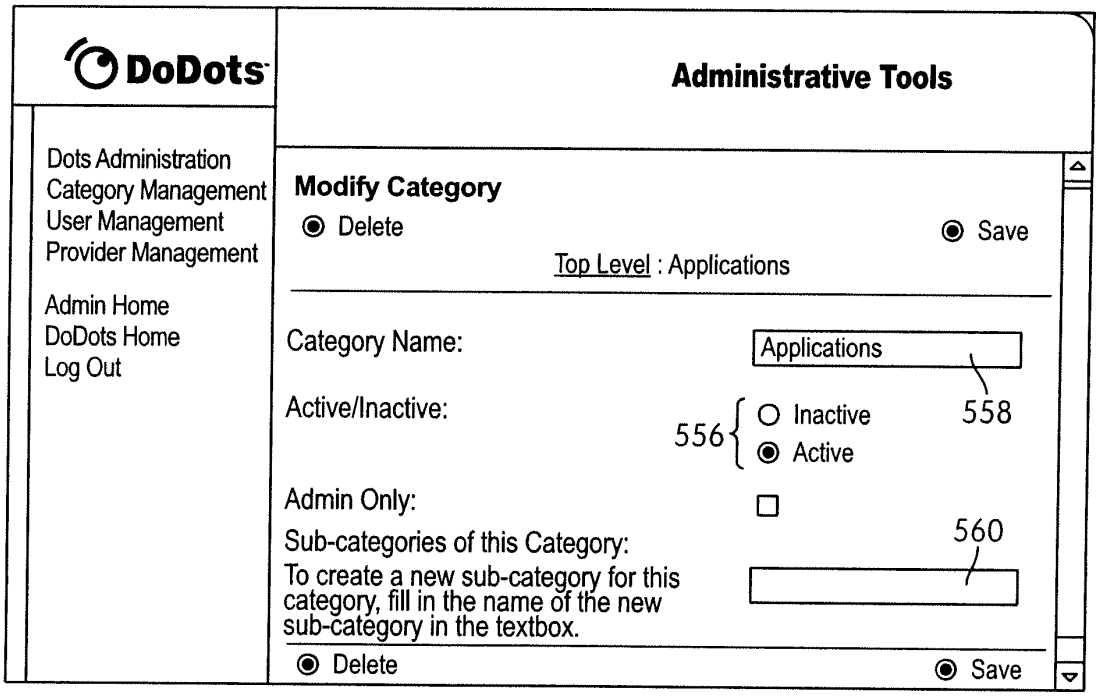


FIG. 30B

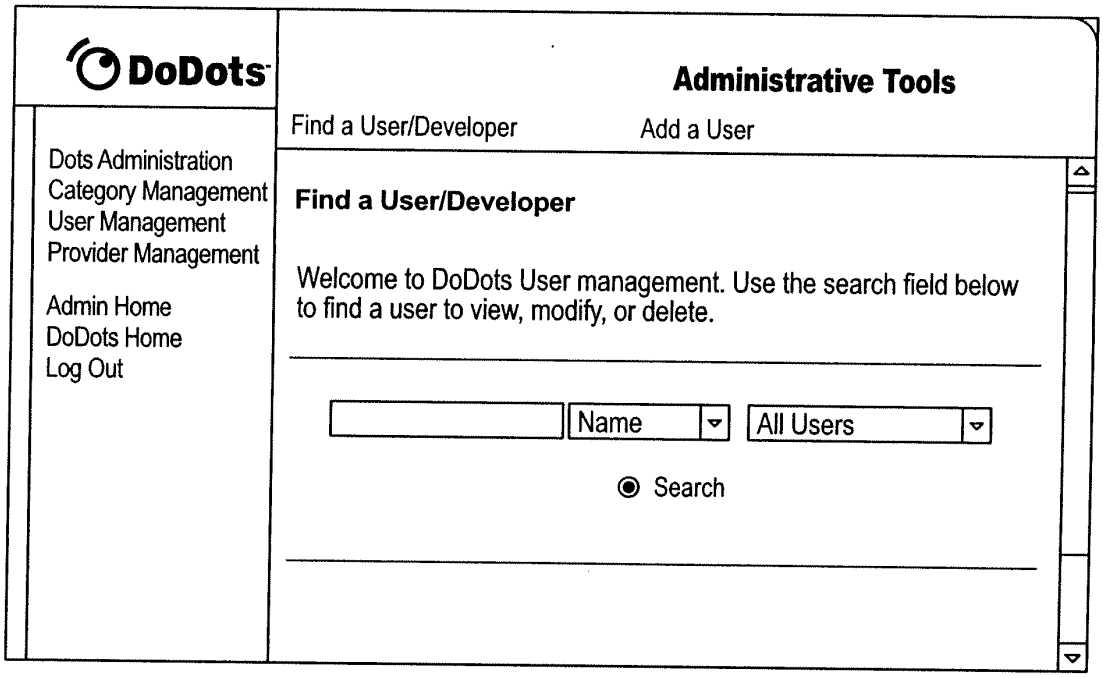

DoDots
Administrative Tools
Find a User/Developer
Add a User
Dots Administration
Category Management
User Management
Provider Management
Admin Home
DoDots Home
Log Out
Find a User/Developer
Welcome to DoDots User management. Use the search field below to find a user to view, modify, or delete.
Name
All Users
Search

FIG. 31A

DoDots

Administrative Tools

Find a User/Developer Add a User

Dots Administration
Category Management
User Management
Provider Management

Admin Home
DoDots Home
Log Out

Modify A User
text
text
text
text

◉ Delete ◉ Update this User

User Status:
○ HomeDot User ◉ Dot Developer ○ Dot Administrator
Partner

Active/Inactive:
◉ Active ○ Inactive

First Name: User 5
Last Name: User 5
Login*: ehow
Password*: ********
Retype Password*: ********
E-Mail*: User5@ehow.com
Address 1:
Address 2:
City:
State/Province: -Select-
Postal Code:
Country: -Select-
Age: -Select-
Gender: -Select-
Occupation: None

☐ Please contact me from time to time about specials and new products

FIG. 31B

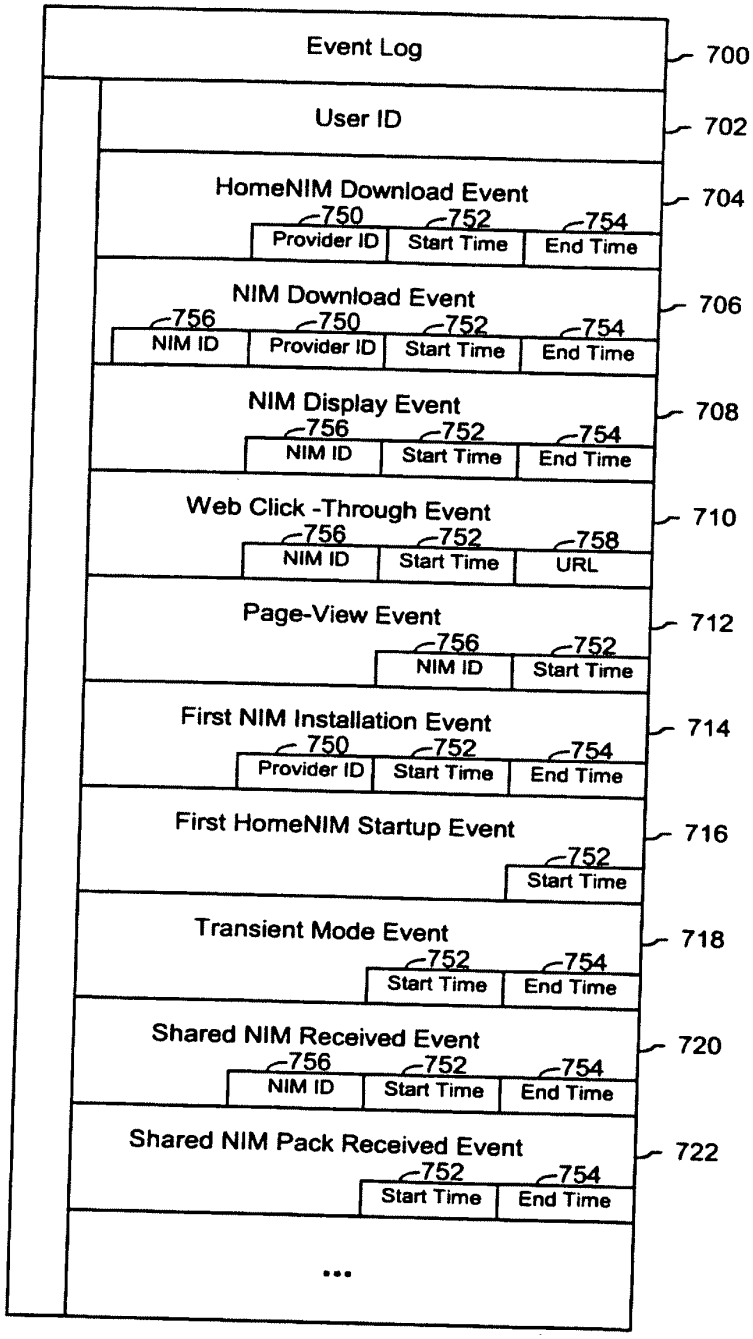

Event Log
700
User ID
702
HomeNIM Download Event
704
750
752
754
Provider ID
Start Time
End Time
NIM Download Event
706
756
750
752
754
NIM ID
Provider ID
Start Time
End Time
NIM Display Event
708
756
752
754
NIM ID
Start Time
End Time
Web Click -Through Event
710
756
752
758
NIM ID
Start Time
URL
Page-View Event
712
756
752
NIM ID
Start Time
First NIM Installation Event
714
750
752
754
Provider ID
Start Time
End Time
First HomeNIM Startup Event
716
752
Start Time
Transient Mode Event
718
752
754
Start Time
End Time
Shared NIM Received Event
720
756
752
754
NIM ID
Start Time
End Time
Shared NIM Pack Received Event
722
752
754
Start Time
End Time
...

FIG. 32

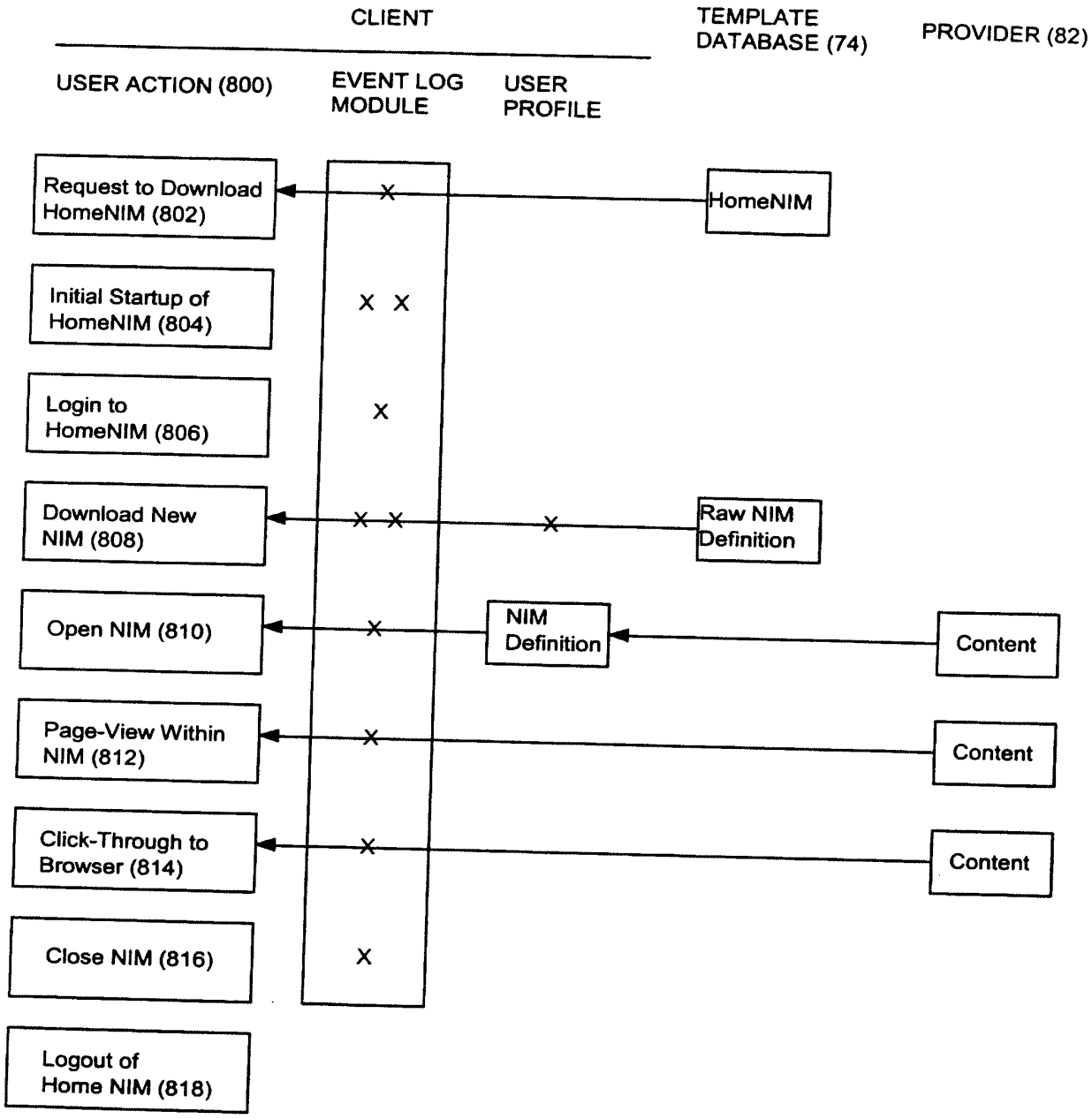

CLIENT
TEMPLATE DATABASE (74)
PROVIDER (82)
USER ACTION (800)
EVENT LOG MODULE
USER PROFILE
Request to Download HomeNIM (802)
HomeNIM
Initial Startup of HomeNIM (804)
Login to HomeNIM (806)
Download New NIM (808)
Raw NIM Definition
Open NIM (810)
NIM Definition
Content
Page-View Within NIM (812)
Content
Click-Through to Browser (814)
Content
Close NIM (816)
Logout of Home NIM (818)

FIG. 33

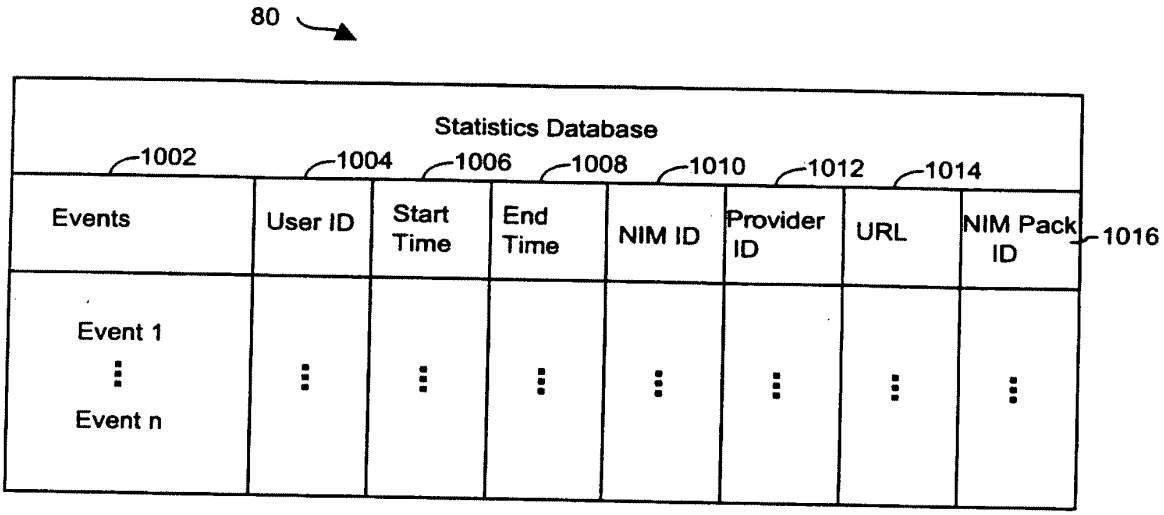

80
Statistics Database
1002
1004
1006
1008
1010
1012
1014
1016
Events
User ID
Start Time
End Time
NIM ID
Provider ID
URL
NIM Pack ID
Event 1
Event n

FIG. 34

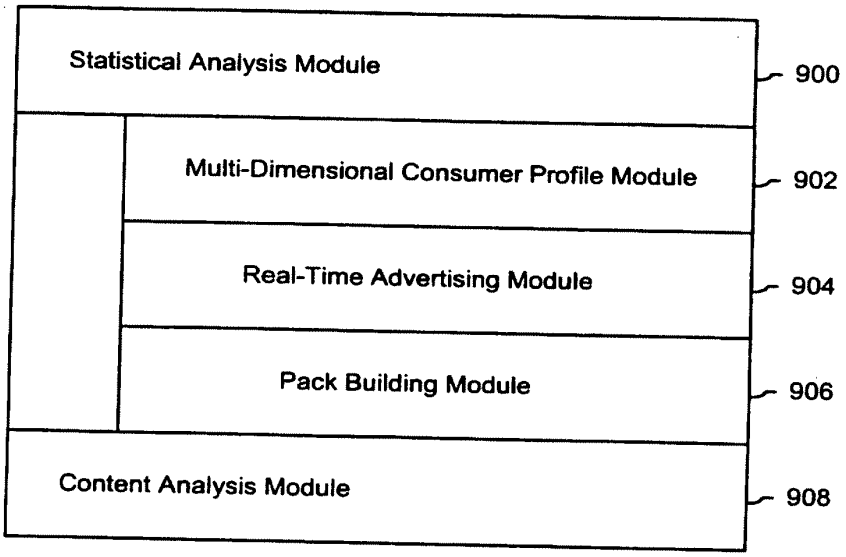

Statistical Analysis Module
900
Multi-Dimensional Consumer Profile Module
902
Real-Time Advertising Module
904
Pack Building Module
906
Content Analysis Module
908

FIG. 35

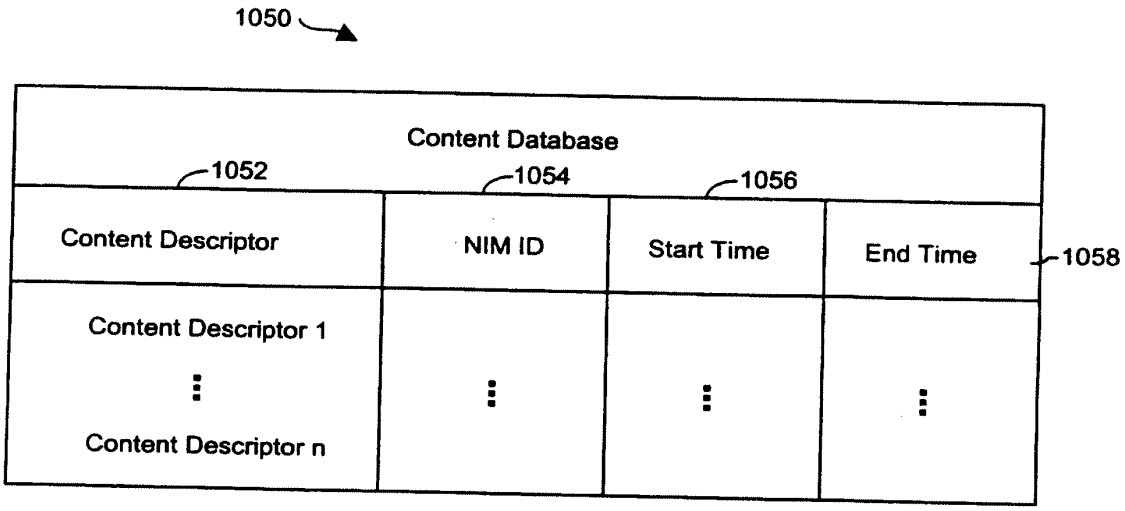

1050
Content Database
1052
1054
1056
Content Descriptor
NIM ID
Start Time
End Time
1058
Content Descriptor 1
Content Descriptor n

FIG. 36

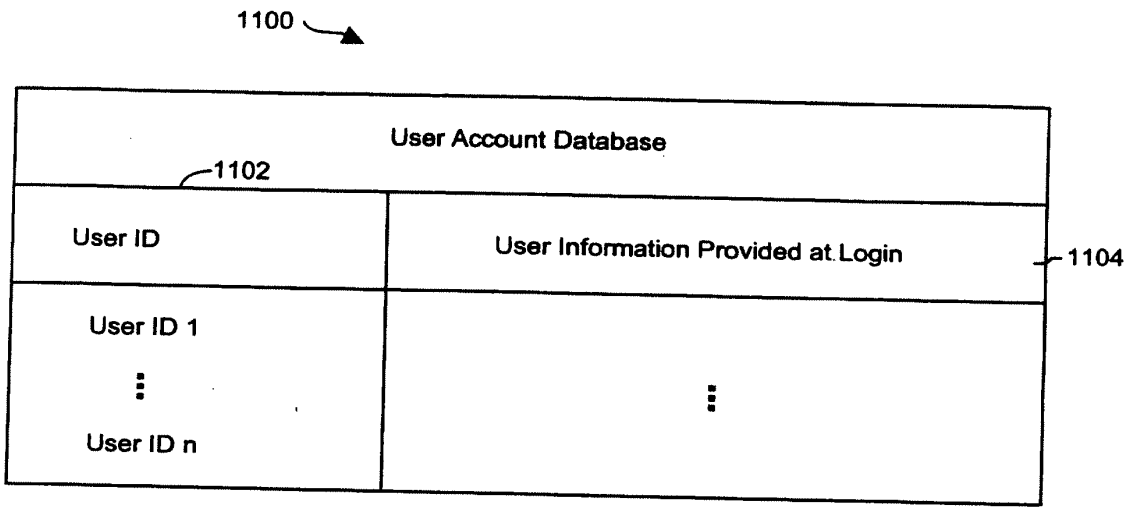

1100
User Account Database
1102
User ID
User Information Provided at Login
1104
User ID 1
User ID n

FIG. 37

PTO/SB/80 (11-08)
Approved for use through 11/30/2011. OMB 0651-0035
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

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

I hereby appoint:

☑ Practitioners associated with the Customer Number: 00909

OR

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

Name	Registration Number	Name	Registration Number

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

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

☑ The address associated with Customer Number: 00909

OR

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

Assignee Name and Address:
MAINSTREAM SCIENTIFIC, LLC
201 San Antonio Circle, Suite 290,
Mountain View, CA 94040

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

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

Signature		Date	8/12/13
Name	Wilfred Lam	Telephone	(650) 969-8300
Title	VICE President, MAINSTREAM SCIENTIFIC, LLC		

This collection of information is required by 37 CFR 1.31, 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.

PTO/AIA/96 (08-12)
Approved for use through 01/31/2013. OMB 0651-0031
U.S. Patent and Trademark Office;U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of1995, no persons arerequired to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(c)

Applicant/Patent Owner: John Albert Kembel et al.

Application No./Patent No.: To Be Assigned Filed/Issue Date: Herewith (August 23, 2013)

Titled: ACCESSING AND DISPLAYING NETWORK CONTENT

MAINSTREAM SCIENTIFIC, LLC, a limited Liability Company

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose **one** of options 1, 2, 3 or 4 below):

1. ☑ The assignee of the entire right, title, and interest.

2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):

☐ The extent (by percentage) of its ownership interest is _____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.

☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (*e.g.*, bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose **one** of options A or B below):

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

B. ☑ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: John Albert Kembel et al. To: DODOTS, INC.

The document was recorded in the United States Patent and Trademark Office at

Reel 011154, Frame 0086, or for which a copy thereof is attached.

2. From: DODOTS, INC. To: SHERWOOD PARTNERS, INC.

The document was recorded in the United States Patent and Trademark Office at

Reel 016020, Frame 0684, or for which a copy thereof is attached.

This collection of information is required by37 CFR3.73(b). The information is required toobtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentialityis governed by35 U.S.C. 122and 37 CFR1.11 and1.14. Thiscollection is estimated to take 12 minutes to complete, including gathering, preparing, and submittingthe 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 tothe 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.

STATEMENT UNDER 37 CFR 3.73(c)

3. From: SHERWOOD PARTNERS, INC. To: INNOVATION MANAGEMENT SCIENCES

The document was recorded in the United States Patent and Trademark Office at
Reel 016024, Frame 0221, or for which a copy thereof is attached.

4. From: INNOVATION MANAGEMENT SCIENCES To: MAINSTREAM SCIENTIFIC, LLC

The document was recorded in the United States Patent and Trademark Office at
Reel 022846, Frame 0153, or for which a copy thereof is attached.

5. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

6. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☑ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/D. Benjamin Esplin/	August 23, 2013
Signature	Date
D. Benjamin Esplin	58297
Printed or Typed Name	Title or Registration Number

[Page 2 of 2]

Privacy Act Statement

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

The informationprovided 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 informationin 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 InternationalApplication 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, arecord 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 thissystem of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS :	John Albert KEMBEL *et al.*	CONFIRMATION NO.:	To be Determined
SERIAL NUMBER :	To be Determined	EXAMINER:	To be Determined
FILING DATE :	Herewith (August 23, 2013)	ART UNIT:	To be Determined
FOR :	ACCESSING AND DISPLAYING NETWORK CONTENT		

INFORMATION DISCLOSURE STATEMENT (IDS)

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

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicants hereby make of record in the above-identified application the documents listed on the attached Form PTO-1449.

Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This Information Disclosure Statement is being filed within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d), or within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, or before the mailing date of a first Office Action on the merits, or before the mailing date of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No certification or fee is required. 37 C.F.R. § 1.97(b).

The Foreign Document and the non-patent literature ("Other Documents") were cited by or submitted to the Office in Application No. 11/932,392, filed October 31, 2007, which is relied upon for an earlier filing date under 35 U.S.C. § 120. Thus copies of these documents are not attached. 37 C.F.R. § 1.98(d).

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449.

Respectfully submitted,

PILLSBURY WINTHROP SHAW PITTMAN LLP

By /D. Benjamin Esplin/
D. Benjamin Esplin
Registration No.: 58,297

Customer No.
00909

P. O. Box 10500
McLean, Virginia 22102
Telephone: (703) 770-7900
Telefax: (703) 770-7901

Dated: August 23, 2013

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	1A	60/153,917	09/14/1999	Franco et al.			
	1B	5,375,199	12/20/1994	Harrow et al.	715	771	
	1C	5,599,756	02/04/1997	Matsuo (Hermann)	501	127	
	1D	5,625,781	04/29/1997	Cline et al.	715	854	
	1E	5,649,186	07/15/1997	Ferguson	1	1	
	1F	5,682,511	10/28/1997	Sposato et al.	715	716	
	1G	5,740,549	04/14/1998	Reilly et al.	705	14	
	1H	5,745,718	04/28/1998	Cline et al.	715	777	
	1I	5,761,662	06/02/1998	Dasan	1	1	
	1J	5,774,670	06/30/1998	Montulli	395	200.57	
	1K	5,794,230	08/11/1998	Horadan et al.	705	35	
	1L	5,796,393	08/18/1998	MacNaughton et al.	715	733	
	1M	5,796,952	08/18/1998	Davis et al.	709	224	
	1N	5,801,702	09/01/1998	Dolan et al.	715	854	
	1O	5,802,530	09/01/1998	Van Hoff	715	513	
	1P	5,805,829	09/08/1998	Cohen *et al.*	395	200.32	
	1Q	5,809,248	09/15/1998	Vidovic	709	219	
	1R	5,818,446	10/06/1998	Bertram et al.	715	746	
	1S	5,835,088	11/10/1998	Jaaskelainen, Jr.	715	803	
	1T	5,838,906	11/17/1998	Doyle et al.	709	219	
	1U	5,860,068	01/12/1999	Cook	705	26.81	
	1V	5,864,676	01/26/1999	Beer et al.	709	229	
	1W	5,864,868	01/26/1999	Contois	707	104	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO
	1X	WO 01/80086	10/25/2001	International				

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	1Y	Patent Application entitled "Parallel Web Sites", Serial No. 09/192,633, Filed November 16, 1998.
	1Z	Alexa 1.4.1 Support Pages, 9 pages, downloaded from www.alexa.com/support/index1.html, January 1999.
	1AA	Alexa General FAQs, 4 pages, downloaded from www.alexa.com/whatisalexa.faq.html#general, January 1999.
	1BB	"Custom Explorer Bars Give Sites an Edge", 2 pages, downloaded from www.microsoft.com/Windows/Ie/IE5/custom.asp, January 1999.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	2A	5,890,172	03/30/1999	Borman et al.	715	205	
	2B	5,893,091	04/06/1996	Hunt et al.	707	3	
	2C	5,896,533	04/20/1999	Ramos et al.	395	680	
	2D	5,918,237	06/29/1999	Montalbano	715	206	
	2E	5,919,247	07/06/1999	Van Hoff et al.	709	217	
	2F	5,922,044	07/13/1999	Banthia	709	203	
	2G	5,923,845	07/13/1999	Kamiya et al.	709	206	
	2H	5,923,885	07/13/1999	Johnson et al.	717	176	
	2I	5,948,061	09/07/1999	Merriman et al.	709	219	
	2J	5,959,621	09/28/1999	Nawaz et al.	345	329	
	2K	5,966,715	10/12/1999	Sweeney et al.	707	203	
	2L	5,973,692	10/26/1999	Knowlton et al.	345	348	
	2M	5,974,446	10/26/1999	Sonnenreich et al.	709	204	
	2N	5,974,546	10/26/1999	Anderson	713	2	
	2O	5,977,964	11/02/1999	Williams et al.	345	721	
	2P	5,983,227	11/09/1999	Nazem et al.	707	10	
	2Q	5,987,513	11/16/1999	Prithviraj et al.	709	223	
	2R	5,995,756	11/30/1999	Herrmann	717	178	
	2S	6,006,252	12/21/1999	Wolfe	709	203	
	2T	6,012,090	01/04/2000	Chung et al.	709	219	
	2U	6,012,098	01/04/2000	Bayeh et al.	709	246	
	2V	6,018,344	01/25/2000	Harada et al.	715	818	
	2W	6,023,698	02/08/2000	Lavey, Jr., *et al.*	707	10	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	2X	"Flexibility Across the Web", 2 pages, downloaded from www.microsoft.com/Windows/Ie/IE5/choice.asp, January 1999.
	2Y	"Web Accessories Overview", 2 pages, downloaded from www.microsoft.com/workshop/…er/accessory/overview/overview.asp, January 1999.
	2Z	"Browser Extensions Overview", 2 pages, downloaded from www.microsoft.com/workshop/browser/ext/overview/overview.asp, January 1999.
	2AA	Alexa Technology, 4 pages, downloaded from www.alexa.com/support/technology.html, January 1999.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	3A	6,026,433	02/15/2000	D'Arlach et al.	709	217	
	3B	6,031,904	02/29/2000	An et al.	379	201	
	3C	6,034,652	03/07/2000	Freiberger et al.	715	730	
	3D	6,044,403	03/28/2000	Gerszberg et al.	709	225	
	3E	6,061,695	05/09/2000	Slivka *et al.*	707	513	
	3F	6,061,696	05/09/2000	Lee *et al.*	707	513	
	3G	6,065,044	05/16/2000	Ogasawara	709	207	
	3H	6,088,717	07/11/2000	Reed et al.	709	201	
	3I	6,091,411	07/18/2000	Straub et al.	715	747	
	3J	6,091,412	07/18/2000	Simonoff *et al.*	345	335	
	3K	6,101,510	08/08/2000	Stone et al.	707	513	
	3L	6,104,391	08/15/2000	Johnston, Jr. et al.	715	745	
	3M	6,105,063	08/15/2000	Hayes, Jr.	709	223	
	3N	6,115,040	09/05/2000	Bladow et al.	345	335	
	3O	6,128,655	10/03/2000	Fields et al.	709	219	
	3P	6,133,916	10/17/2000	Bukszar et al.	715	744	
	3Q	6,161,112	12/12/2000	Cragun et al.	715	501.1	
	3R	6,177,936	01/23/2001	Cragun	715	760	
	3S	6,192,407	02/20/2001	Smith et al.	709	229	
	3T	6,199,082	03/06/2001	Ferrel et al.	715	522	
	3U	6,215,490	04/10/2001	Kaply	715	788	
	3V	6,216,141	04/10/2001	Straub et al.	707	513	
	3W	6,230,173	05/08/2001	Ferrel et al.	715	513	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	3X	"Creating Custom Explorer Bars and Desk Bands", 13 pages, downloaded from www.microsoft.com/workshop/browser/ext/overview/Bands.asp, January 1999, 13 pages.
	3Y	Alexa Internet Tour, 1 page, downloaded from www.alexa.com.whatisalexa.index.html, January 1999.
	3Z	"Revolutionary Ad Model", Advertise on Alexa, 1 page, downloaded from www.alexa.com/company/advertise/html, January 1999.
	3AA	"The Alexa Service Appears on Your Desktop in Its Own Window", 1 page, downloaded from www.alexa.com/tour/overview.html, January 1999.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4A	6,237,030	05/22/2001	Adams et al.	709	218	
	4B	6,240,555	05/29/2001	Shoff *et al.*	725	110	
	4C	6,268,856	07/31/2001	Bruck et al.	715	733	
	4D	6,275,854	08/14/2001	Himmel et al.	709	224	
	4E	6,278,448	08/21/2001	Brown et al.	345	333	
	4F	6,278,449	08/21/2001	Sugiarto et al.	715	826	
	4G	6,286,034	09/04/2001	Sato et al.	709	204	
	4H	6,289,362	09/11/2001	Van Der Meer	715	273	
	4I	6,292,185	09/18/2001	Ko et al.	715	763	
	4J	6,292,186	09/18/2001	Lehman et al.	345	335	
	4K	6,297,819	10/02/2001	Furst	715	733	
	4L	6,314,451	11/06/2001	Landsman et al.	709	203	
	4M	6,317,759	11/13/2001	Osmond	715	513	
	4N	6,339,826	01/15/2002	Hayes, Jr. et al.	713	166	
	4O	6,341,305	01/22/2002	Wolfe	709	203	
	4P	6,342,907	01/29/2002	Petty et al.	345	762	
	4Q	6,343,377	01/29/2002	Gessner *et al.*	717	10	
	4R	6,356,905	03/12/2002	Gershman et al.	707	10	
	4S	6,369,840	04/09/2002	Barnett et al.	345	853	
	4T	6,370,552	04/09/2002	Bloomfield	715	513	
	4U	6,374,273	04/16/2002	Webster	707	513	
	4V	6,385,596	05/07/2002	Wiser et al.	705	51	
	4W	6,393,407	05/21/2002	Middleton, III et al.	705	14	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	4X	"Know More About the Sites You Visit", 1 page, downloaded from www.alexa.com/tour/site_stats.html, January 1999.
	4Y	"Find Related Web Sites", 1 page, downloaded from www.alexa.com/tour/related_links.html, January 1999.
	4Z	"500,000 Sites and Growing", 1 page, downloaded from www.alexa.com/tour/archive/html, January 1999.
	4AA	"Research Tools at Your Fingertips", 1 page, downloaded from www.alexa.com/tour/eb.html, January 1999.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	5A	6,401,134	06/04/2002	Razavi *et al.*	709	310	
	5B	6,411,992	06/25/2002	Srinivasan et al.	709	218	
	5C	6,414,677	07/02/2002	Robertson et al.	345	419	
	5D	6,418,440	07/09/2002	Kuo et al.	707	10	
	5E	6,434,563	08/13/2002	Pasquali et al.	707	10	
	5F	6,434,598	08/13/2002	Gish	709	203	
	5G	6,452,609	09/17/2002	Katinsky et al.	345	716	
	5H	6,453,348	09/17/2002	Barnier *et al.*	709	225	
	5I	6,460,029	10/01/2002	Fries et al.	1	1	
	5J	6,476,833	11/05/2002	Moshfeghi	345	854	
	5K	6,484,149	11/19/2002	Jammes et al.	705	26	
	5L	6,487,566	11/26/2002	Sundaresan	707	513	
	5M	6,487,663	11/26/2002	Jaisimha *et al.*	713	193	
	5N	6,496,203	12/17/2002	Beaumont et al.	345	762	
	5O	6,510,466	01/21/2003	Cox *et al.*	709	229	
	5P	6,537,324	03/25/2003	Tabata et al.	715	513	
	5Q	6,538,673	03/25/2003	Maslov	345	853	
	5R	6,549,612	04/15/2003	Gifford et al.	379	67.1	
	5S	6,560,639	05/06/2003	Dan et al.	709	218	
	5T	6,571,245	05/27/2003	Huang et al.	1	1	
	5U	6,594,682	07/03/2005	Peterson et al.	709	219	
	5V	6,606,657	08/12/2003	Zilberstein et al.	709	224	
	5W	6,629,143	09/30/2003	Pang	709	226	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	5X	"Reporting", 1 page, downloaded from www.alexa.com/company/reporting.html, January 1999.
	5Y	"Alexa Internet's Related Links Integrated into Netscape Browsers", 1 page, downloaded from www.alexa.com/company/netscape.html, January 1999.
	5Z	"Demographics", 1 page, downloaded from www.alexa.com/company/demographics.html, January 1999.
	5AA	"Ads Appear in the Pop-up and on the Bar", 1 page, downloaded from www.alexa.com/company/adspecs.html, January 1999.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6A	6,662,341	12/09/2003	Cooper et al.	715	513	
	6B	6,681,368	01/20/2004	Kawabata	715	501.1	
	6C	6,687,745	02/03/2004	Franco et al.	709	219	
	6D	6,691,130	02/10/2004	Kawasaki et al.	707	102	
	6E	6,694,484	02/17/2004	Mueller	715	513	
	6F	6,718,015	04/06/2004	Berstis	379	88.17	
	6G	6,724,403	04/20/2004	Santoro et al.	345	765	
	6H	6,751,606	06/15/2004	Fries et al.	707	3	
	6I	6,757,716	06/29/2004	Blegen et al.	709	217	
	6J	6,766,454	07/20/2004	Riggins	713	185	
	6K	6,784,900	08/31/2004	Dobronsky et al.	345	744	
	6L	6,816,880	11/09/2004	Strandberg et al.	709	217	
	6M	6,819,343	11/16/2004	Sobeski et al.	715	848	
	6N	6,819,345	11/16/2004	Jones et al.	345	856	
	6O	6,834,302	12/21/2004	Harvell	709	224	
	6P	6,842,779	01/11/2005	Nishizawa	715	757	
	6Q	6,879,994	04/12/2005	Matsliach et al.	709	204	
	6R	6,938,041	08/30/2005	Brandow et al.	707	10	
	6S	7,039,857	05/02/2006	Beck *et al.*	715	500.1	
	6T	7,039,859	05/02/2006	Sundaresan	715	513	
	6U	7,076,737	07/11/2006	Abbott et al.	715	744	
	6V	7,107,548	09/12/2006	Shafron	715	826	
	6W	7,216,300	05/08/2007	Dang	715	783	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	6X	"Alexa Why Crawl", 1 page, downloaded from www.alexa.com/support/why_crawl.html, January 1999.
	6Y	GIF Image 590x329 pixels, Alexa, 1 page, downloaded from www.alexa.com/tour/images/alexa_overview.gif, January 1999.
	6Z	"It's X-treme!", Alexa, PC Magazine: The Best of 1998, 1 page, downloaded from www.zdnet.com/pcmag/special/bestof98/internet5.html, January 1999.
	6AA	"Search While You Surf", PC Magazine: Search the Web, by Sarah ROBERTS-WITT, 1 page, downloaded from www.zdnet.com/pcmag/features/websearch98/surf.html, January 1999.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	7A	7,222,303	05/22/2007	Oren et al.	715	744	
	7B	7,356,569	04/08/2008	Kembel et al.	709	217	
	7C	7,574,649	08/11/2009	Safars *et al.*	715	200	
	7D	7,756,967	07/13/2010	Kembel et al.	709	224	
	7E	7,660,868	02/09/2010	Kembel et al.	709	217	
	7F	7,792,947	09/07/2010	Kembel et al.	709	224	
	7G	8,020,083	09/13/2001	Kembel et al.	715	201	
	7H	8,346,887	01/01/2013	Kembel et al.	709	217	
	7I	8,510,406	08/13/2013	Kembel et al.	709	217	
	7J	8,510,407	08/13/2013	Kembel et al.	709	217	
	7K	2001/0042107	11/15/2001	Palm	709	218	
	7L	2002/0065896	05/30/2002	Burakoff et al.	709	206	
	7M	2002/0078136	06/20/2002	Brodsky et al.	709	203	
	7N	2002/0089526	07/11/2002	Buxton et al.	345	700	
	7O	2002/0089536	07/11/2002	Dang	345	749	
	7P	2002/0091697	07/11/2002	Huang et al.	707	10	
	7Q	2002/0130900	09/19/2002	Davis	345	744	
	7R	2002/0161879	10/31/2002	Richard	709	223	
	7S	2003/0051027	03/13/2003	Aupperle et al.	709	224	
	7T	2003/0069944	04/10/2003	Barlock et al.	709	220	
	7U	2004/0041836	03/01/2004	Zaner et al.	345	751	
	7V	2004/0165007	08/26/2004	Shafron	715	781	
	7W	2005/0273718	12/08/2005	Naas	715	745	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	7X	Online document; MindSpring, My Yahoo!; ©MindSpring Enterprises, Inc.; http://www.mindspring.com/myyahoo/contents.htm; December 1997, pages 1-16
	7Y	MORRISON, Michael, XML Unleashed, Sams Publishing, December 21, 1999, 5 pages.
	7Z	FLANAGAN, David, "JavaScript: The Definitive Guide", 3rd Edition, O'Reilly, June 1998, 6 pages.
	7AA	Microsoft Computer Dictionary, Fifth Edition, 2002, Definition of "Web Browser".
	7BB	WILLIAMS, Margot, "Cyberspace Calendars: The Web's Growing Date Base", November 30, 1998, The Washington Post, page 1.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

INFORMATION DISCLOSURE CITATION IN AN APPLICATION	Docket Number	Application Number
	043311-0423953	*To be Determined*
	Applicant(s)	
	John Albert KEMBEL *et al.*	
	Filing Date	Group Art Unit
Form PTO-1449	Herewith (August 23, 2013)	*To be Determined*

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	8A	2008/0134018	06/05/2008	Kembel et al.	715	234	
	8B	2008/0163202	07/03/2008	Kembel et al.	717	178	
	8C	2008/0229217	09/18/2008	Kembel et al.	715	760	
	8D	2008/0040681	02/14/2008	Synstelien et al.	715	765	
	8E	2010/0235757	09/16/2010	Kembel et al.	715	745	
	8F	2010/0257442	10/07/2010	Kembel et al.	715	234	
	8G	2012/0117479	05/10/2012	Kembel et al.	715	736	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	Translations YES	Translations NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

	8H	BOTT, Ed., *et al.*, "Special Edition Using Windows 95 with Internet Explorer 4.0", Publisher: Que, February 17, 1998, pages 585 and 435.
	8I	McFEDRIES, Paul, "Windows 98 Unleashed", Publisher: Sams, May 12, 1998, pages 594-596.
	8J	McFEDRIES, Paul, "Windows 98 Unleashed", Publisher: Sams Publishing, May 12, 1998, pages xix, xx, xxi, xxiv, 2-4, 44-46, 69, 70, 79, 80, 97-116 ,148, 158-163, 251, 551, 787-792, 799-807, 885, 899, 900, and 904-906.
	8K	McCRICKARD, D. Scott, *et al.*, "Supporting Information Awareness Using Animated Widgets", Proceedings of the 7th USENIX Tel/Tk Conference, February 14-18, 2000, 12 pages.
	8L	"Streaming Internet Technologies", PR Newswire, May 18, 1999, 2 pages.
	8M	"NewsEdge Delivers the Power of Real-Time News in a Browser", Business Wire, November 9, 1998, 3 pages.
	8N	McCARTNEY, Terrance Paul, "End-User Construction and Configuration of Distributed Multimedia Applications", ProQuest Dissertations and Theses, 1996, 197 pages.
	8O	"Microsoft Eyes Marimba's Castanet", by CNET News.com Staff, December 24, 1996, printed from <http://news.cnet.com/Microsoft-eyes-Marimbas-Castanet/2100-1001_3-257491.html>, 2 pages.
	8P	WILLIAMS, Dennis, "Application Delivery on a Grand Scale", Network World Fusion, March 22, 1999, printed from <http://www.networkworld.com/reviews/0322revmarimba.html>, 4 pages.
	8Q	WHITEHEAD et al., "WEBDAV: IETF Standard for Collaborative Authoring on the Web", September and October 1998, Retrieved from the Internet <URL:ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=722228>, pages 1-7 as printed.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Filer:	D. Benjamin Esplin/Maxine Cutietta
Attorney Docket Number:	043311-0423953

Filed as Small Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Utility filing Fee (Electronic filing)	4011	1	70	70
Utility Search Fee	2111	1	300	300
Utility Examination Fee	2311	1	360	360
Pages:				
Claims:				
Claims in excess of 20	2202	1	40	40
Miscellaneous-Filing:				
Petition:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**770**

Electronic Acknowledgement Receipt	
EFS ID:	16678026
Application Number:	13975227
International Application Number:	
Confirmation Number:	7642
Title of Invention:	ACCESSING AND DISPLAYING NETWORK CONTENT
First Named Inventor/Applicant Name:	John Albert Kembel
Customer Number:	909
Filer:	D. Benjamin Esplin/Maxine Cutietta
Filer Authorized By:	D. Benjamin Esplin
Attorney Docket Number:	043311-0423953
Receipt Date:	23-AUG-2013
Filing Date:	
Time Stamp:	20:57:11
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$770
RAM confirmation Number	7102
Deposit Account	033975
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees) Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)	

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal of New Application	0423953_UtilityTransmittal.pdf	139025 cd731ad395ceeb9a067ac3fefc0276c9d99fe19e	no	2
Warnings:					
Information:					
2	Application Data Sheet	0423953_ADS.pdf	1504547 59dcf61b59309b5d4885615fb2f56659bc7864db	no	9
Warnings:					
Information:					
3		0423953_Application.pdf	395620 86c6f1701237aee8b02456f0d2a68c8c83d8e5cc	yes	101

Multipart Description/PDF files in .zip description

Document Description	Start	End
Specification	1	92
Claims	93	100
Abstract	101	101

Warnings:					
Information:					
4	Drawings-only black and white line drawings	0423953_Figures.pdf	1639220 f8e8370c403b6de279456f05b6c5f9fb750b014c	no	37
Warnings:					
Information:					
5	Power of Attorney	MainStream_POA.pdf	284378 8a7dea6eaa11aac759ed4e682f8af7902a483e84	no	1
Warnings:					
Information:					
6	Assignee showing of ownership per 37 CFR 3.73.	0423953_373.pdf	122394 8314063042f84018e20d249611c5bc3b18efea4d	no	3
Warnings:					

Information:					
7	Transmittal Letter	0423953_IDS.pdf	521871 c49fa01d59b7dc78735199 7f55810d89ea48d627	no	2
Warnings:					
Information:					
8	Information Disclosure Statement (IDS) Form (SB08)	0423953_PTO1449.pdf	1042534 04d959bae38619d1736881ff6f973885da19aca4	no	8
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
9	Fee Worksheet (SB06)	fee-info.pdf	36927 71dbd8cdcaffbf248a1b409c698d8db89c7b6801	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	5686516	

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

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

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

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

Document code: WFEE

United States Patent and Trademark Office
Sales Receipt for Accounting Date: 09/12/2013

VVAN11 SALE #00000011 Mailroom Dt: 08/23/2013 033975 13975227

01	FC : 2081	200.00	DA
02	FC : 2051	70.00	DA