Doc Code: TRACK1.REQ
Document Description: TrackOne Request

PTO/AIA/424 (03-14)

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

First Named Inventor:	Timothy S. Murphy	Nonprovisional Application Number (if known):	
Title of Invention:	System and method for controlling electronic communications		

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

1. The processing fee set forth in 37 CFR 1.17(i)(1), the prioritized examination fee set forth in 37 CFR 1.17(c), and if not already paid, the publication fee set forth in 37 CFR 1.18(d) have been filed with the request. The basic filing fee, search fee, and examination fee are filed with the request or have been already been paid. I understand that any required excess claims fees or application size fee must be paid for the application.

2. I understand that the application may not contain, or be amended to contain, more than four independent claims, more than thirty total claims, or any multiple dependent claims.

3. The applicable box is checked below:

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

i. (a) The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a). This certification and request is being filed with the utility application via EFS-Web.

---OR---

(b) The application is an original nonprovisional plant application filed under 35 U.S.C. 111(a). This certification and request is being filed with the plant application in paper.

ii. An executed inventor's oath or declaration under 37 CFR 1.63 or 37 CFR 1.64 for each inventor, **or** the application data sheet meeting the conditions specified in 37 CFR 1.53(f)(3)(i) is filed with the application.

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

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

Signature /Brian C. McCormack, Reg. No. 36601/	Date May 6, 2014
Name (Print/Typed) Brian C. McCormack	Practitioner Registration Number 36601

Note: *This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required.**

☑ *Total of 1 forms are submitted.

Privacy Act Statement

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

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

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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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	VEEVA-3
	Application Number	
Title of Invention	System and method for controlling electronic communications	

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
	Timothy	S.	Murphy	

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

City	Berkeley	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	4637 Chabot Drive, Suite 210		
Address 2			
City	Pleasanton	**State/Province**	CA
Postal Code	94588	**Country** i	US

Inventor 2 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Brian	C.	Longo	

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

City	Danville	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	4637 Chabot Drive, Suite 210		
Address 2			
City	Pleasanton	**State/Province**	CA
Postal Code	94588	**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).

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	VEEVA-3
	Application Number	
Title of Invention	System and method for controlling electronic communications	

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

Customer Number	23562		
Email Address		Add Email	Remove Email

Application Information:

Title of the Invention	System and method for controlling electronic communications		
Attorney Docket Number	VEEVA-3	**Small Entity Status Claimed**	☒
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	18	**Suggested Figure for Publication (if any)**	

Filing By Reference :

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

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

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

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	23562		

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	VEEVA-3
	Application Number	
Title of Invention	System and method for controlling electronic communications	

Domestic Benefit/National Stage Information:

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

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	Claims benefit of provisional	61/820029	2013-05-06
Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	Claims benefit of provisional	61/828034	2013-05-28

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	VEEVA-3
	Application Number	
Title of Invention	System and method for controlling electronic communications	

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

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.
NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Authorization 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.

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	VEEVA-3
	Application Number	
Title of Invention	System and method for controlling electronic communications	

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	

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. [X]

Organization Name	VEEVA SYSTEMS INC.		
Mailing Address Information:			
Address 1	4637 Chabot Drive, Suite 210		
Address 2			
City	Pleasanton	**State/Province**	CA
Country [i]	US	Postal Code	94588
Phone Number		Fax Number	
Email Address			

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

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

Remove

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

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	VEEVA-3
	Application Number	
Title of Invention	System and method for controlling electronic communications	

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

Mailing Address Information For Assignee including Non-Applicant Assignee:

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

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button. 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	/Brian C. McCormack, Reg. No. 36601/			Date (YYYY-MM-DD)	2014-05-06
First Name	Brian C.	Last Name	McCormack	Registration Number	36601

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.

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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.

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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.

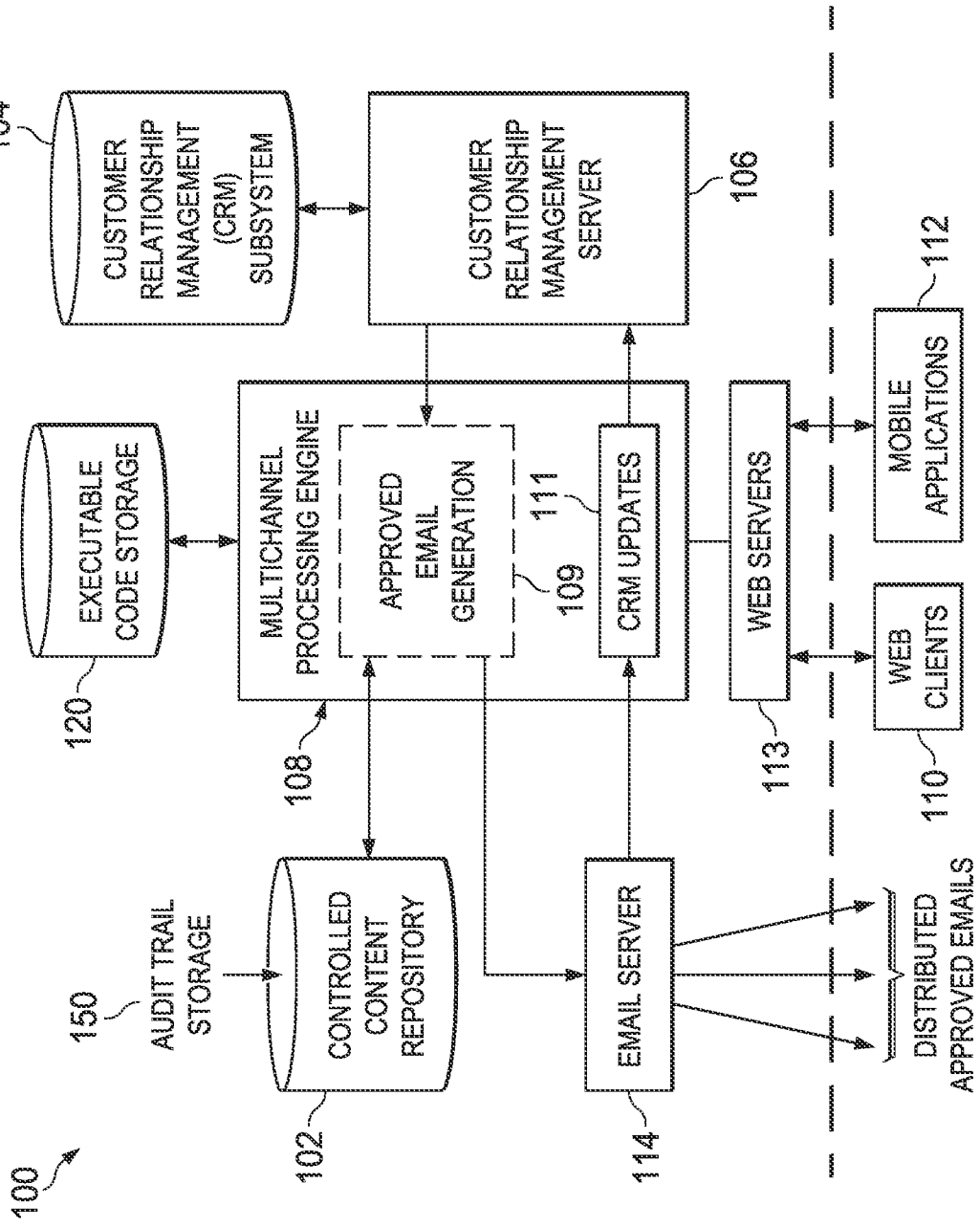

100
102
CONTROLLED CONTENT REPOSITORY
104
CUSTOMER RELATIONSHIP MANAGEMENT (CRM) SUBSYSTEM
106
CUSTOMER RELATIONSHIP MANAGEMENT SERVER
108
MULTICHANNEL PROCESSING ENGINE
109
APPROVED EMAIL GENERATION
111
CRM UPDATES
112
MOBILE APPLICATIONS
113
WEB SERVERS
114
EMAIL SERVER
120
EXECUTABLE CODE STORAGE
150
AUDIT TRAIL STORAGE
110
WEB CLIENTS
DISTRIBUTED APPROVED EMAILS

FIG. 1

FIG. 2

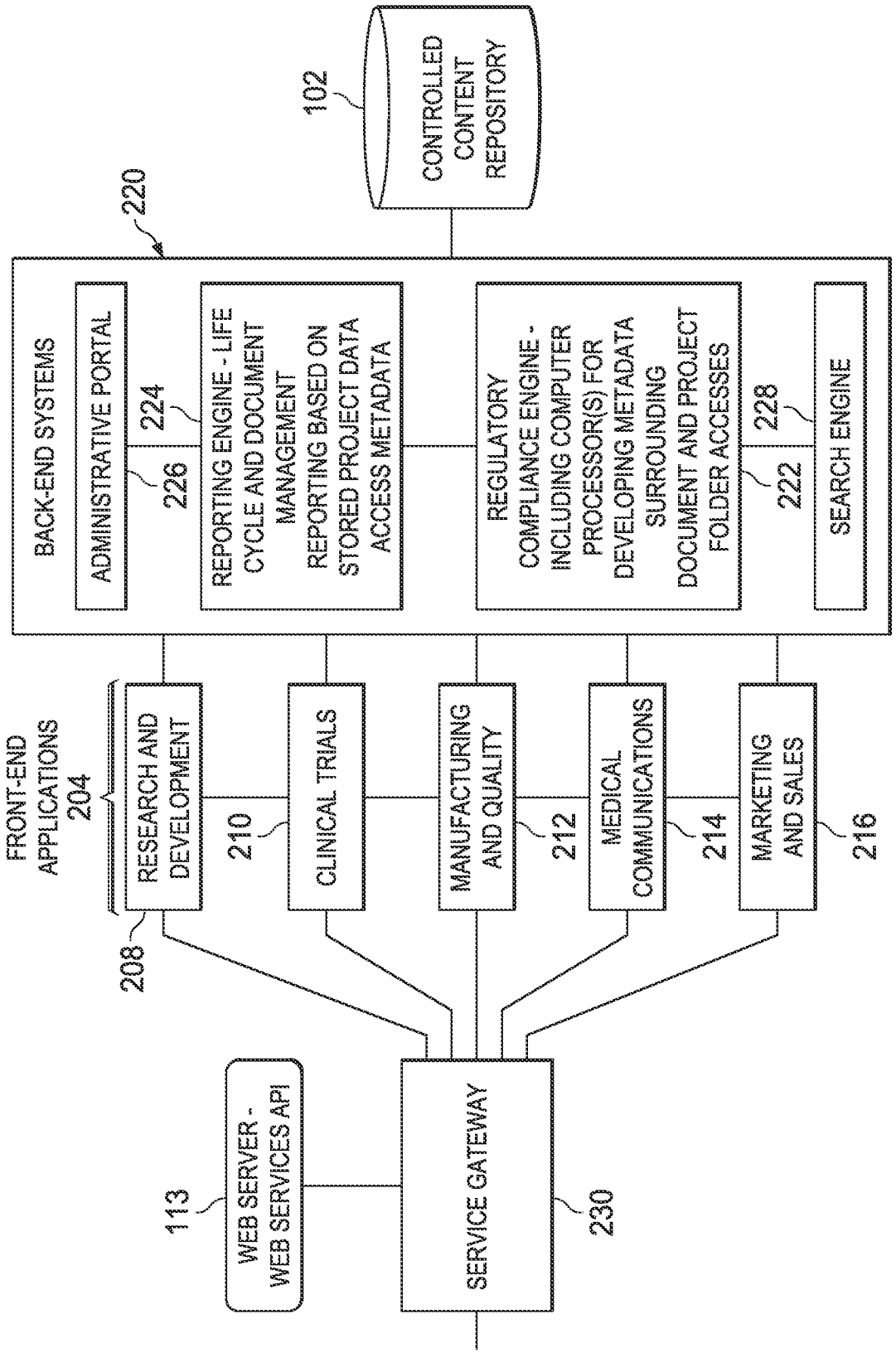

102
CONTROLLED CONTENT REPOSITORY
220
BACK-END SYSTEMS
ADMINISTRATIVE PORTAL
226
224
REPORTING ENGINE - LIFE CYCLE AND DOCUMENT MANAGEMENT REPORTING BASED ON STORED PROJECT DATA ACCESS METADATA
REGULATORY COMPLIANCE ENGINE - INCLUDING COMPUTER PROCESSOR(S) FOR DEVELOPING METADATA SURROUNDING DOCUMENT AND PROJECT FOLDER ACCESSES
222
228
SEARCH ENGINE
FRONT-END APPLICATIONS 204
RESEARCH AND DEVELOPMENT
208
210
CLINICAL TRIALS
MANUFACTURING AND QUALITY
212
MEDICAL COMMUNICATIONS
214
MARKETING AND SALES
216
113
WEB SERVER - WEB SERVICES API
SERVICE GATEWAY
230

FIG. 3a

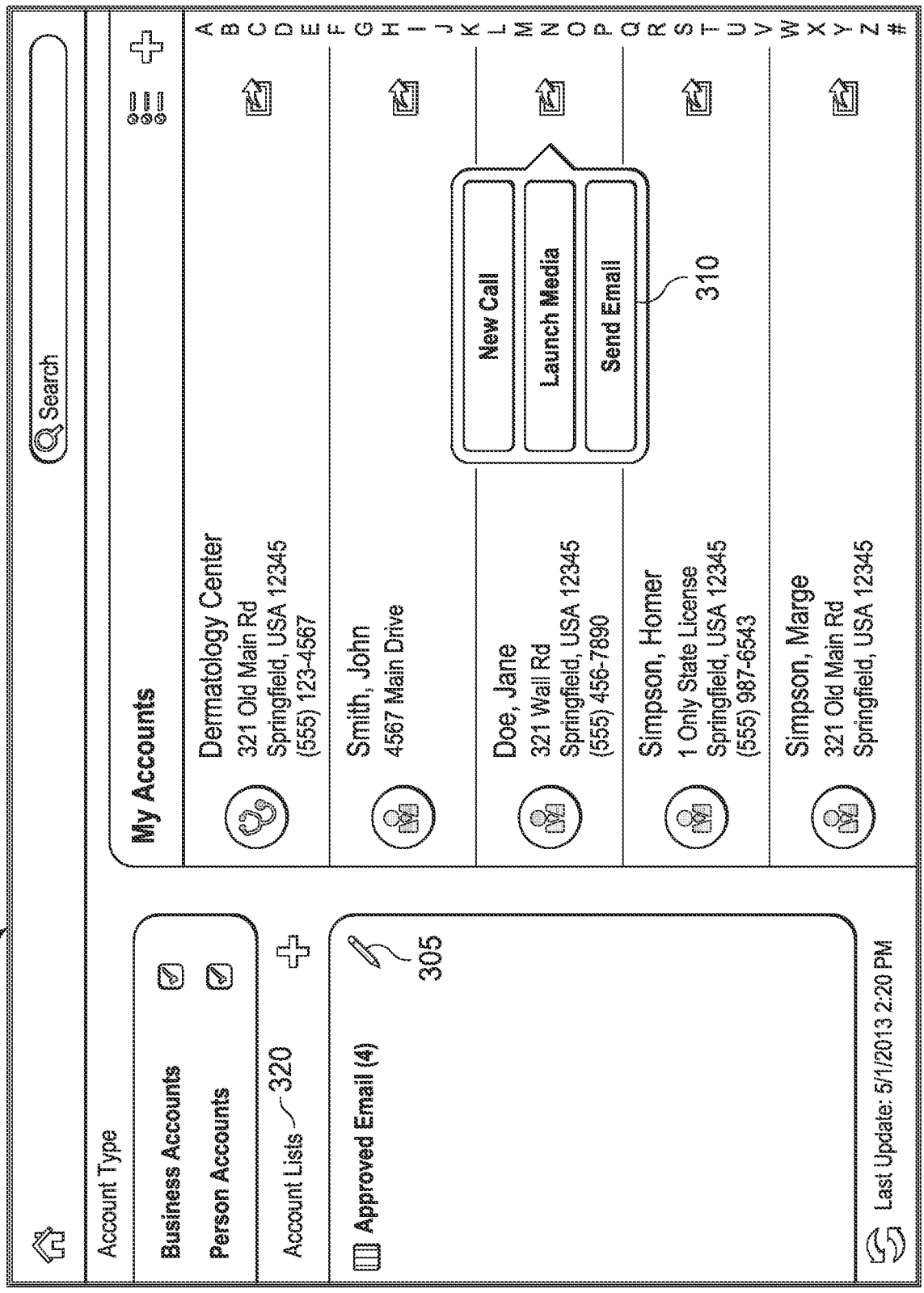
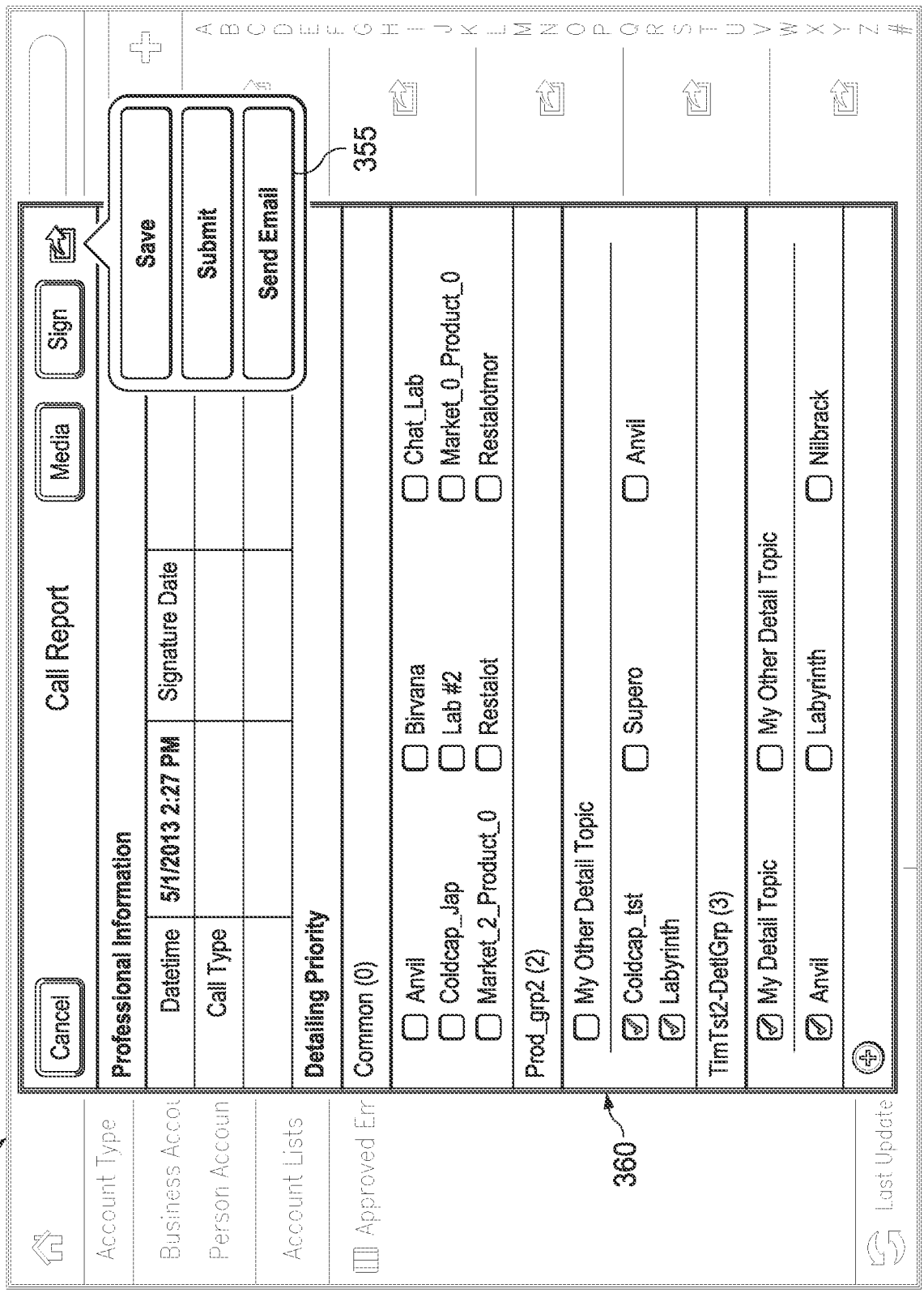

302
Search
Account Type
Business Accounts
Person Accounts
Account Lists
320
Approved Email (4)
305
My Accounts
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #
Dermatology Center
321 Old Main Rd
Springfield, USA 12345
(555) 123-4567
Smith, John
4567 Main Drive
Doe, Jane
321 Wall Rd
Springfield, USA 12345
(555) 456-7890
Simpson, Homer
1 Only State License
Springfield, USA 12345
(555) 987-6543
Simpson, Marge
321 Old Main Rd
Springfield, USA 12345
New Call
Launch Media
Send Email
310
Last Update: 5/1/2013 2:20 PM

FIG. 3b


352
Cancel
Call Report
Media
Sign
Save
Submit
Send Email
355
Professional Information
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5/1/2013 2:27 PM
Signature Date
Call Type
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Birvana
Lab #2
Restalot
Chat_Lab
Market_0_Product_0
Restalotmor
Prod_grp2 (2)
360
My Other Detail Topic
Coldcap_tst
Labyrinth
Supero
Anvil
TimTst2-DetiGrp (3)
My Detail Topic
Anvil
My Other Detail Topic
Labyrinth
Nilbrack
Account Type
Business Accou
Person Accoun
Account Lists
Approved Err
Last Update
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z #

FIG. 4

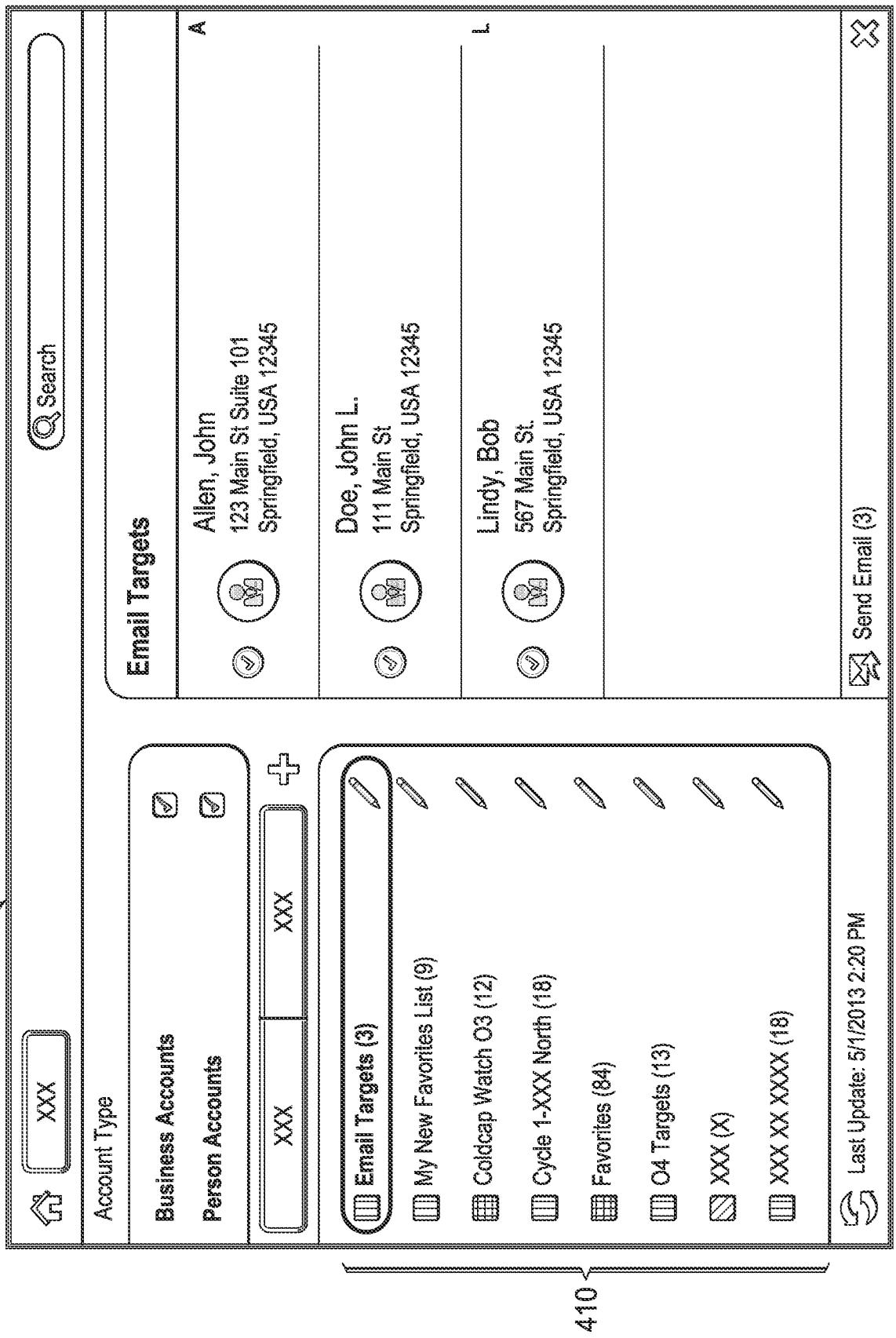

402
XXX
Search
Account Type
Business Accounts
Person Accounts
XXX
XXX
Email Targets (3)
My New Favorites List (9)
Coldcap Watch O3 (12)
Cycle 1-XXX North (18)
Favorites (84)
O4 Targets (13)
XXX (X)
XXX XX XXXX (18)
Last Update: 5/1/2013 2:20 PM
410
420
Email Targets
A
Allen, John
123 Main St Suite 101
Springfield, USA 12345
Doe, John L.
111 Main St
Springfield, USA 12345
L
Lindy, Bob
567 Main St.
Springfield, USA 12345
Send Email (3)

FIG. 5

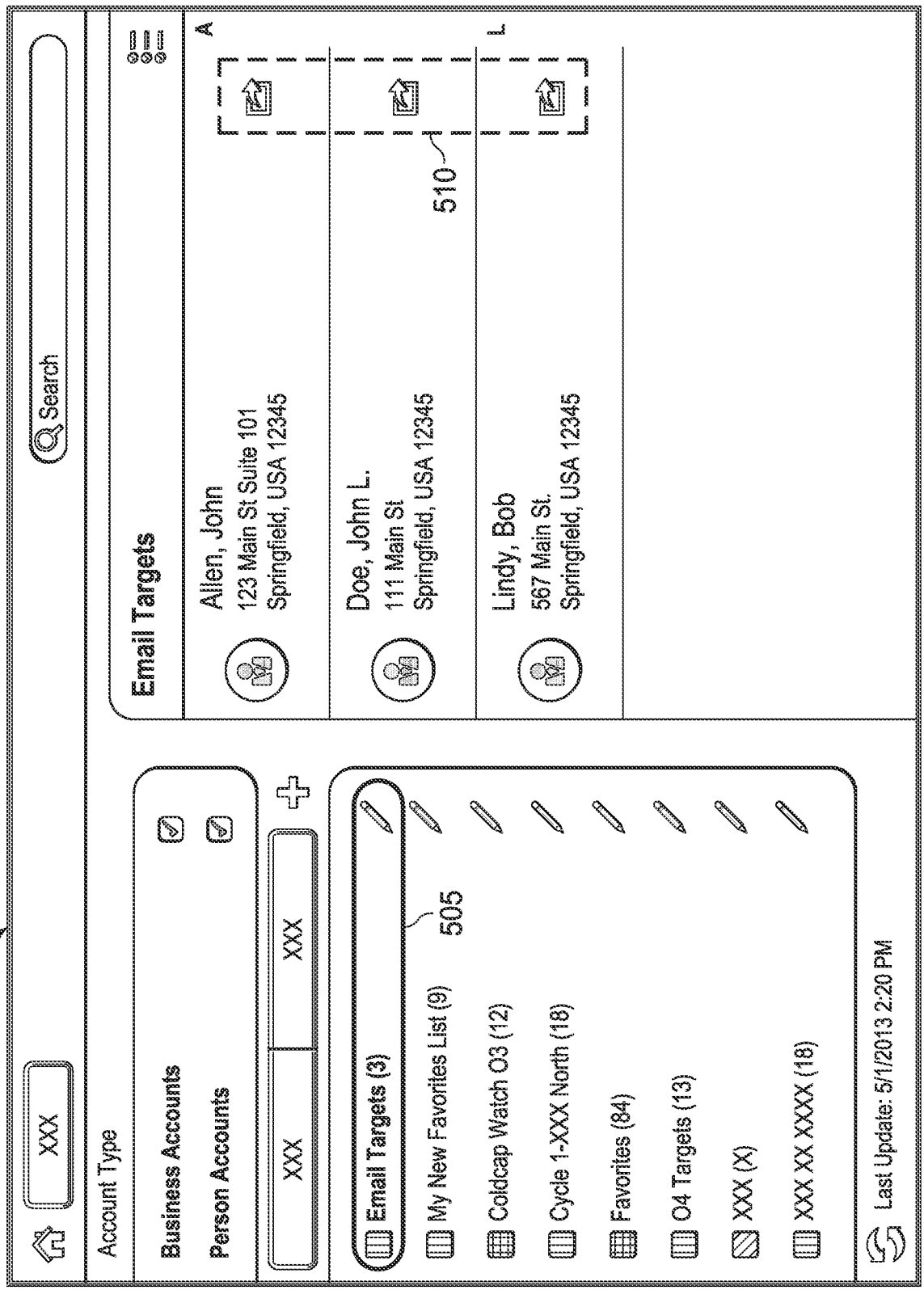

502
XXX
Search
Account Type
Business Accounts
Person Accounts
XXX
XXX
Email Targets (3)
505
My New Favorites List (9)
Coldcap Watch O3 (12)
Cycle 1-XXX North (18)
Favorites (84)
O4 Targets (13)
XXX (X)
XXX XX XXXX (18)
Last Update: 5/1/2013 2:20 PM
Email Targets
A
L
Allen, John
123 Main St Suite 101
Springfield, USA 12345
Doe, John L.
111 Main St
Springfield, USA 12345
510
Lindy, Bob
567 Main St.
Springfield, USA 12345

FIG. 6

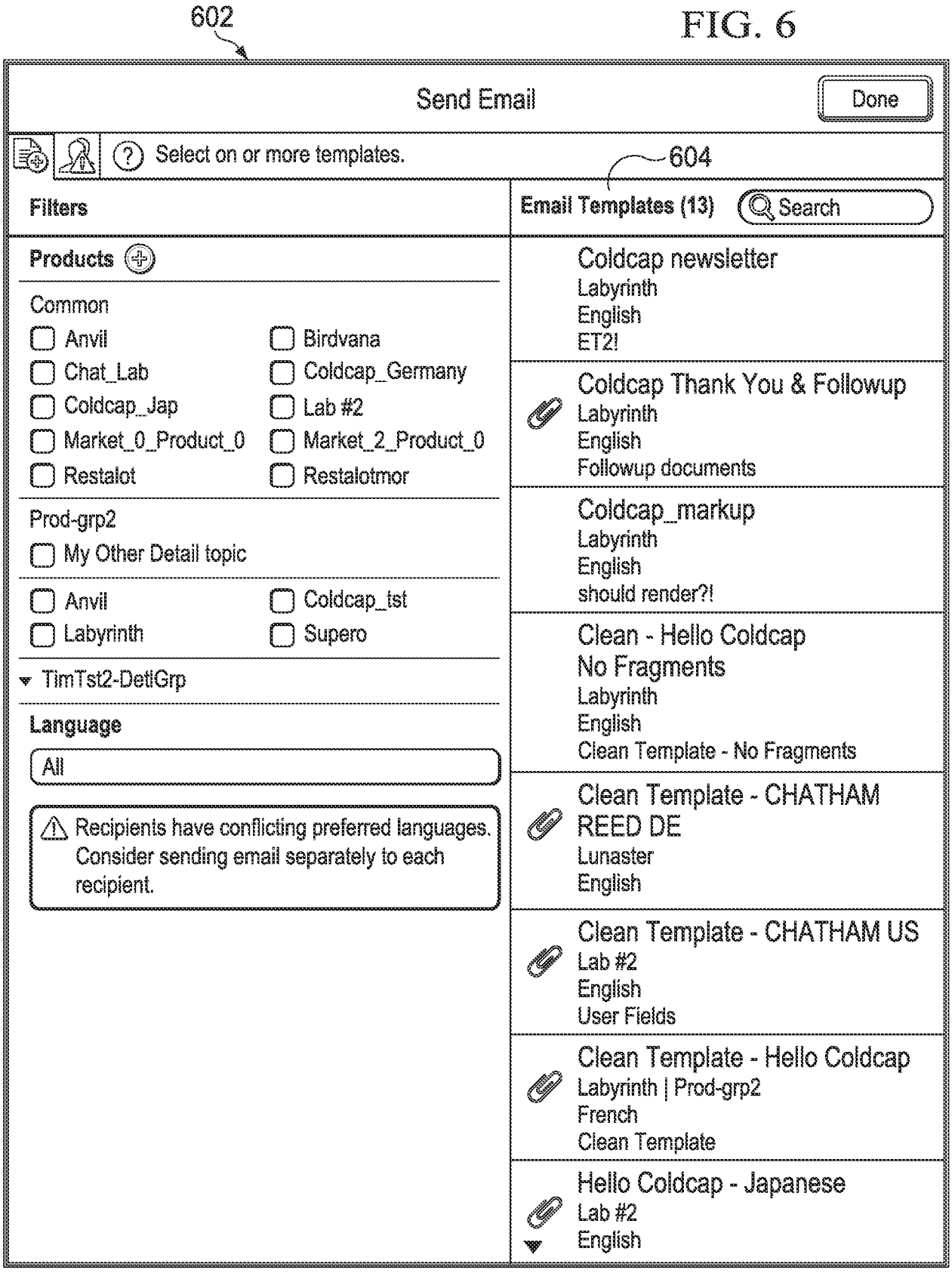

602
Send Email
Done
Select on or more templates.
604
Filters
Email Templates (13)
Search
Products
Common
Anvil
Birdvana
Chat_Lab
Coldcap_Germany
Coldcap_Jap
Lab #2
Market_0_Product_0
Market_2_Product_0
Restalot
Restalotmor
Prod-grp2
My Other Detail topic
Anvil
Coldcap_tst
Labyrinth
Supero
TimTst2-DetlGrp
Language
All
Recipients have conflicting preferred languages. Consider sending email separately to each recipient.
Coldcap newsletter
Labyrinth
English
ET2!
Coldcap Thank You & Followup
Labyrinth
English
Followup documents
Coldcap_markup
Labyrinth
English
should render?!
Clean - Hello Coldcap No Fragments
Labyrinth
English
Clean Template - No Fragments
Clean Template - CHATHAM REED DE
Lunaster
English
Clean Template - CHATHAM US
Lab #2
English
User Fields
Clean Template - Hello Coldcap
Labyrinth | Prod-grp2
French
Clean Template
Hello Coldcap - Japanese
Lab #2
English

FIG. 7

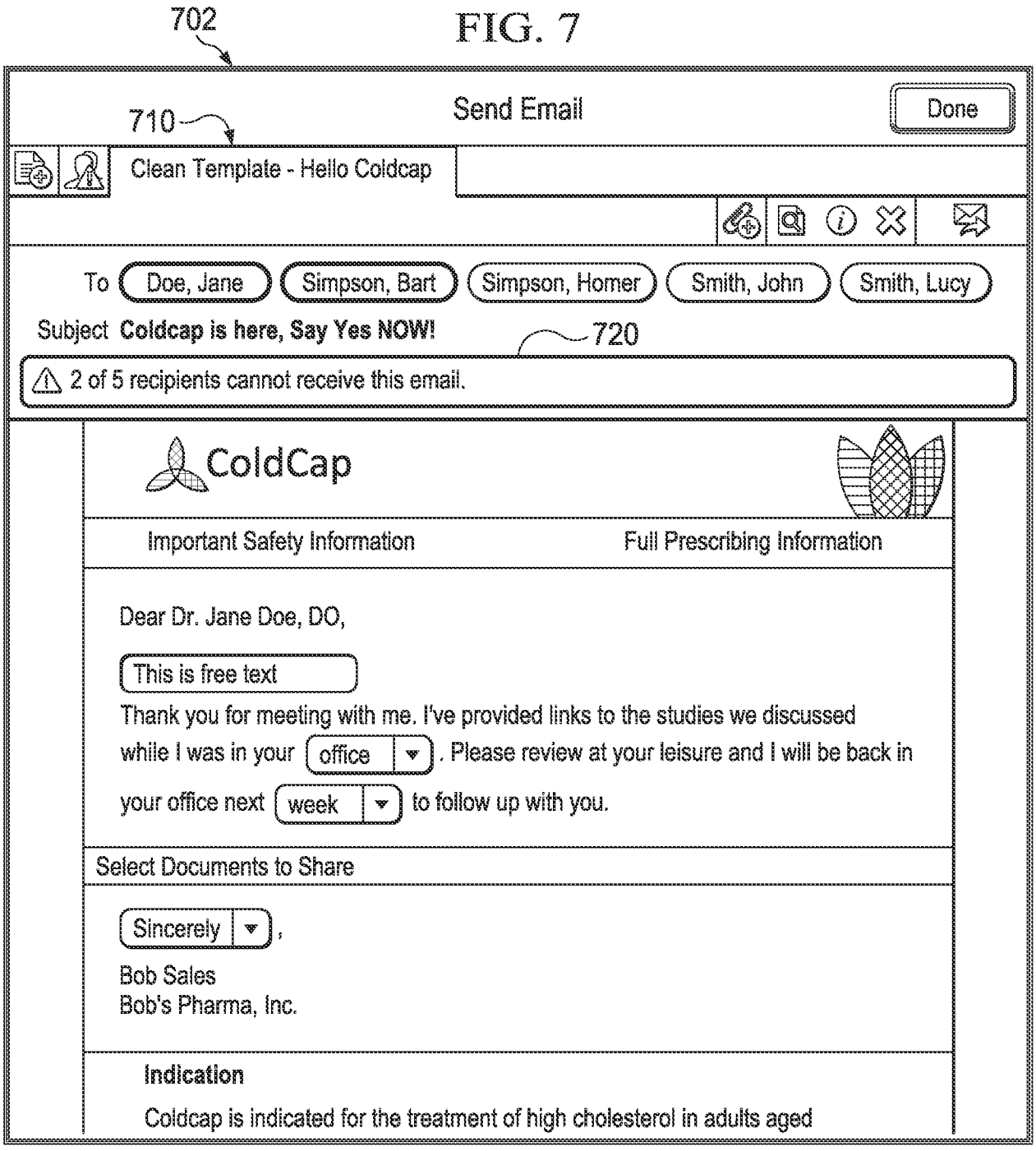

702
Send Email
Done
710
Clean Template - Hello Coldcap
To
Doe, Jane
Simpson, Bart
Simpson, Homer
Smith, John
Smith, Lucy
Subject Coldcap is here, Say Yes NOW!
720
2 of 5 recipients cannot receive this email.
ColdCap
Important Safety Information
Full Prescribing Information
Dear Dr. Jane Doe, DO,
This is free text
Thank you for meeting with me. I've provided links to the studies we discussed while I was in your office . Please review at your leisure and I will be back in your office next week to follow up with you.
Select Documents to Share
Sincerely ,
Bob Sales
Bob's Pharma, Inc.
Indication
Coldcap is indicated for the treatment of high cholesterol in adults aged

FIG. 8

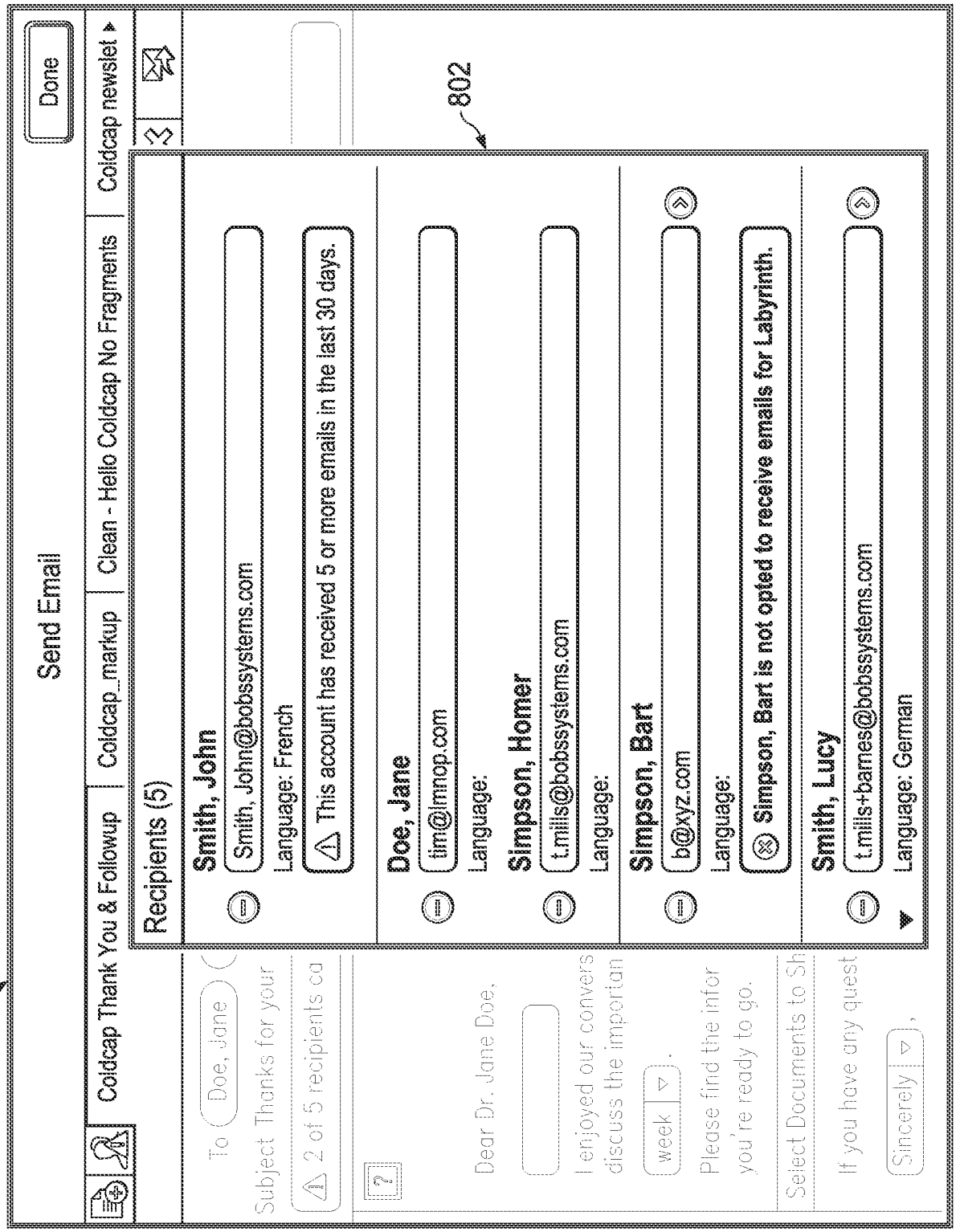

702
Send Email
Done
Coldcap Thank You & Followup
Coldcap_markup
Clean - Hello Coldcap No Fragments
Coldcap newslet
Recipients (5)
802
Smith, John
Smith, John@bobssystems.com
Language: French
This account has received 5 or more emails in the last 30 days.
Doe, Jane
tim@lmnop.com
Language:
Simpson, Homer
t.millis@bobssystems.com
Language:
Simpson, Bart
b@xyz.com
Language:
Simpson, Bart is not opted to receive emails for Labyrinth.
Smith, Lucy
t.millis+barnes@bobssystems.com
Language: German
To Doe, Jane
Subject Thanks for your
2 of 5 recipients ca
Dear Dr. Jane Doe,
I enjoyed our convers
discuss the importan
week
Please find the infor
you're ready to go.
Select Documents to Sh
If you have any quest
Sincerely

FIG. 9

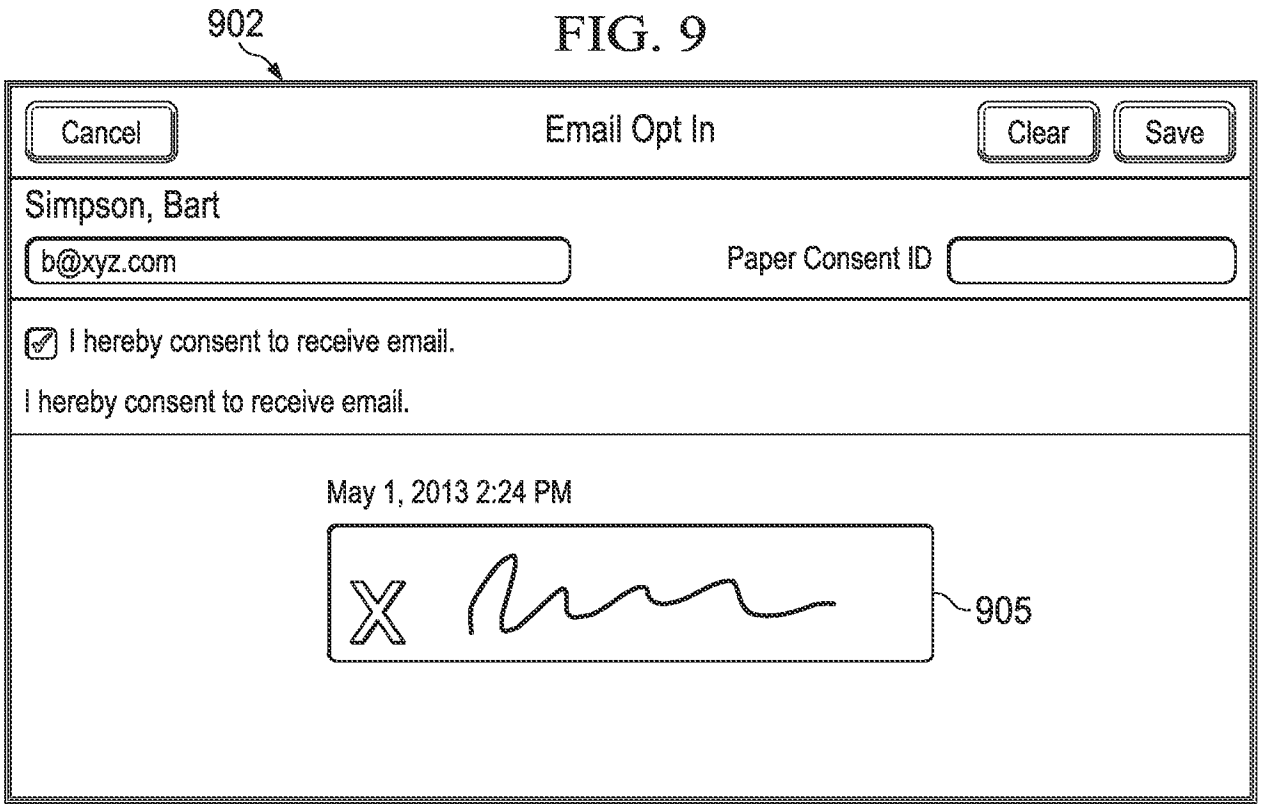

902
Cancel
Email Opt In
Clear
Save
Simpson, Bart
b@xyz.com
Paper Consent ID
I hereby consent to receive email.
I hereby consent to receive email.
May 1, 2013 2:24 PM
X
905

FIG. 10a

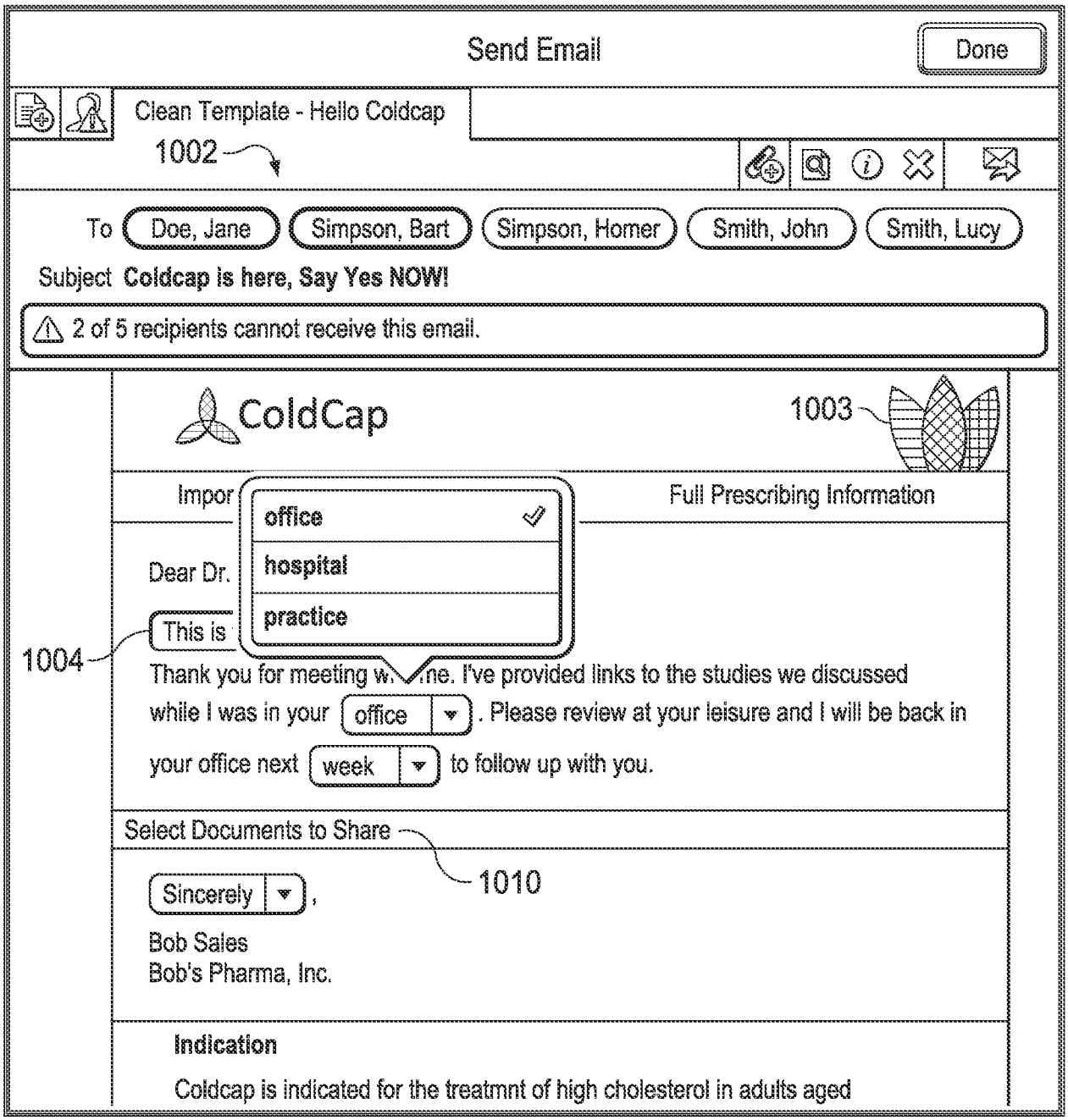

Send Email
Done
Clean Template - Hello Coldcap
1002
To
Doe, Jane
Simpson, Bart
Simpson, Homer
Smith, John
Smith, Lucy
Subject Coldcap is here, Say Yes NOW!
2 of 5 recipients cannot receive this email.
ColdCap
1003
Impor
Full Prescribing Information
office
hospital
practice
Dear Dr.
This is
1004
Thank you for meeting w me. I've provided links to the studies we discussed while I was in your office . Please review at your leisure and I will be back in your office next week to follow up with you.
Select Documents to Share
1010
Sincerely ,
Bob Sales
Bob's Pharma, Inc.
Indication
Coldcap is indicated for the treatmnt of high cholesterol in adults aged

FIG. 10b

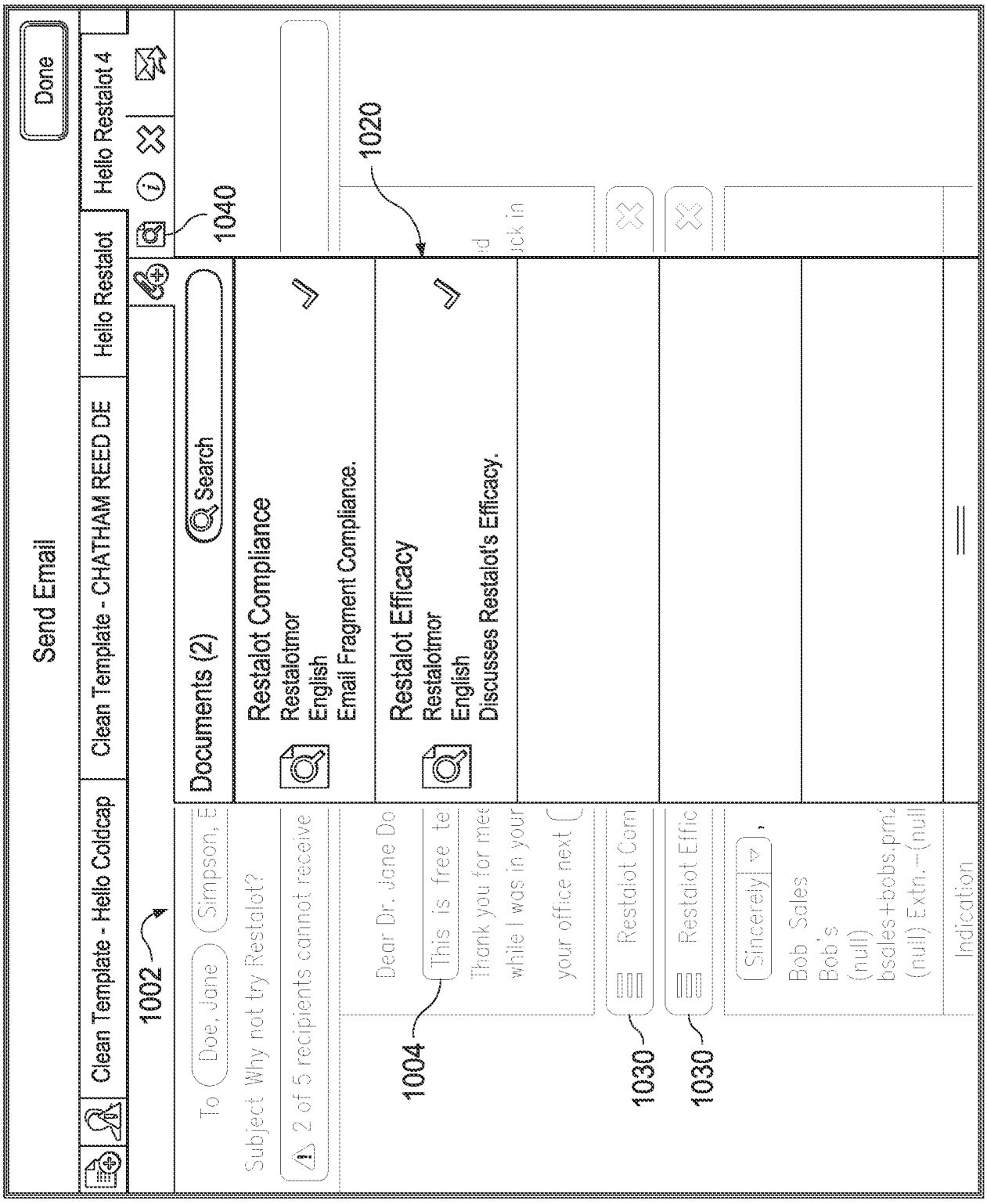

Send Email
Done
Clean Template - Hello Coldcap
Clean Template - CHATHAM REED DE
Hello Restalot
Hello Restalot 4
1002
To
Doe, Jane
Simpson, E
Subject Why not try Restalot?
2 of 5 recipients cannot receive
Documents (2)
Search
1040
Restalot Compliance
Restalotmor
English
Email Fragment Compliance.
Restalot Efficacy
Restalotmor
English
Discusses Restalot's Efficacy.
1020
Dear Dr. Jane Do
1004
This is free te
Thank you for mee
while I was in your
your office next
1030
Restalot Com
1030
Restalot Effic
Sincerely
Bob Sales
Bob's
(null)
bsales+bobs.pri
(null) Extn.-(null
Indication

FIG. 10c

Send Email
Done
Clean Template - Hello Coldcap
Clean Template - CHATHAM REED DE
Hello Restalot
Hello Restalot 4
1060
1050
To
Doe, Jane
Simpson, Bart
Simpson, Homer
Smith, John
Smith, Lucy
Subject Why not try Restalot?
2 of 5 recipients cannot receive this email.
Dear Dr. Jane Doe, DO,
This is free text
Thank you for meeting with me. I've provided links to the studies we discussed while I was in your office . Please review at your leisure and I will be back in your office next week to follow up with you.
Restalot Compliance, Email Fragment Compliance.
Restalot Efficacy, Discusses Restalot's Efficacy.
Sincerely ,
Bob Sales
Bob's
(null)
badmin+bobs.pm2@bobssystems.com
(null) Extn.-(null)
Indication

FIG. 11

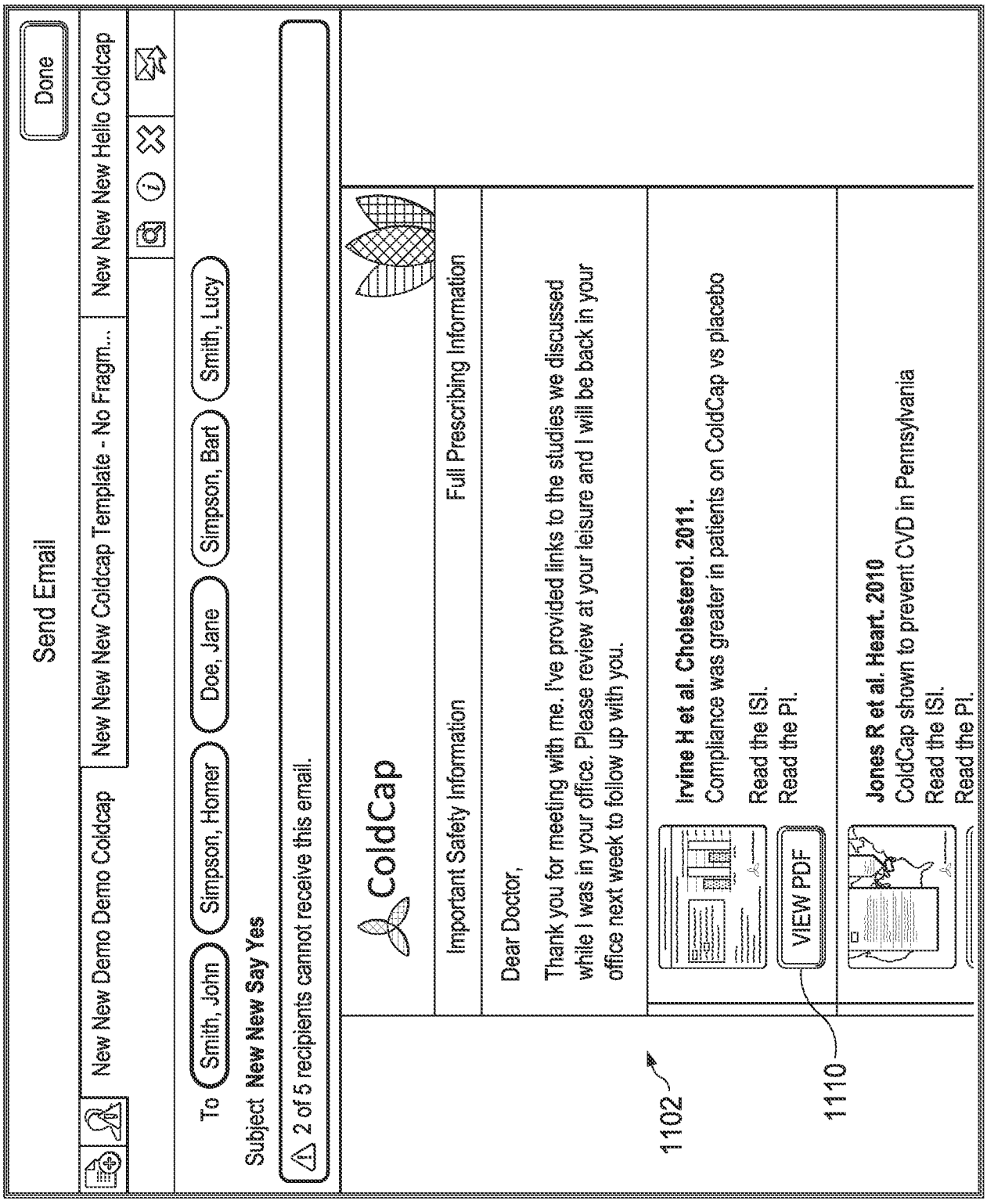

Send Email
Done
New New Demo Demo Coldcap
New New New Coldcap Template - No Fragm...
New New New Hello Coldcap
To
Smith, John
Simpson, Homer
Doe, Jane
Simpson, Bart
Smith, Lucy
Subject New New Say Yes
2 of 5 recipients cannot receive this email.
ColdCap
Important Safety Information
Full Prescribing Information
Dear Doctor,
Thank you for meeting with me. I've provided links to the studies we discussed while I was in your office. Please review at your leisure and I will be back in your office next week to follow up with you.
Irvine H et al. Cholesterol. 2011.
Compliance was greater in patients on ColdCap vs placebo
Read the ISI.
Read the PI.
VIEW PDF
Jones R et al. Heart. 2010
ColdCap shown to prevent CVD in Pennsylvania
Read the ISI.
Read the PI.
1102
1110

FIG. 12

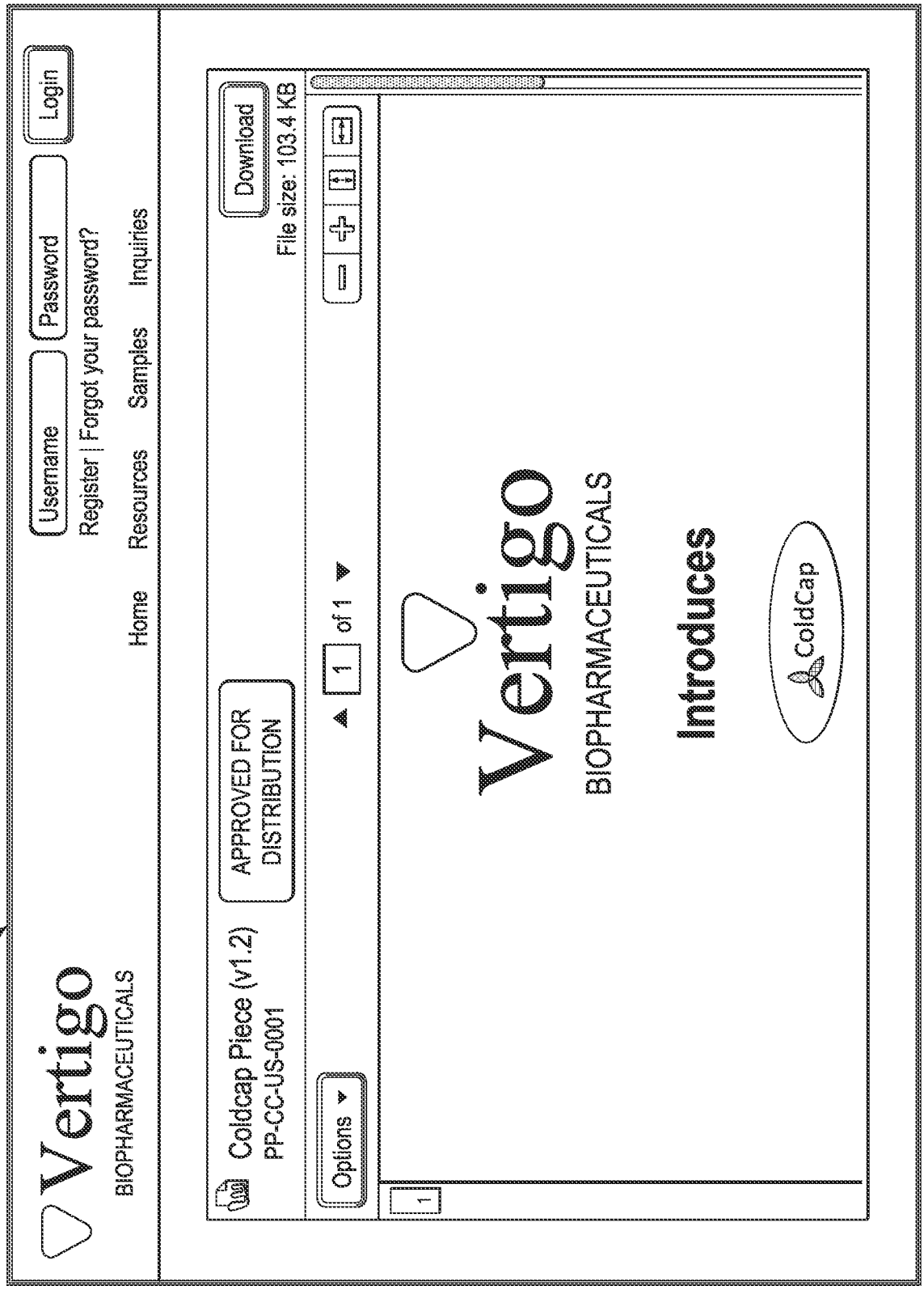

1202
Vertigo
BIOPHARMACEUTICALS
Username
Password
Login
Register | Forgot your password?
Home
Resources
Samples
Inquiries
Coldcap Piece (v1.2)
PP-CC-US-0001
APPROVED FOR DISTRIBUTION
Download
File size: 103.4 KB
Options
1
of 1
Vertigo
BIOPHARMACEUTICALS
Introduces
ColdCap

FIG. 13a

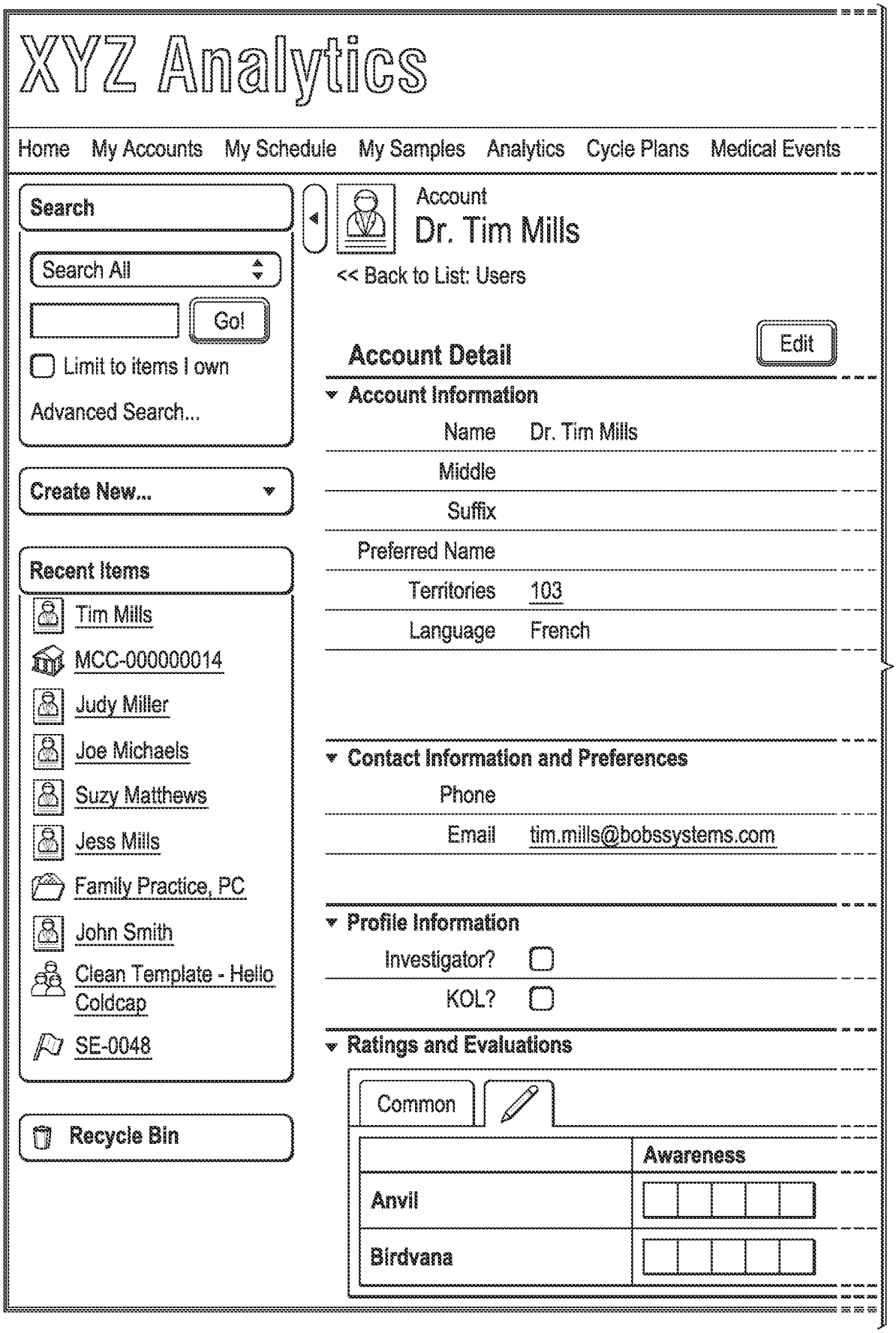
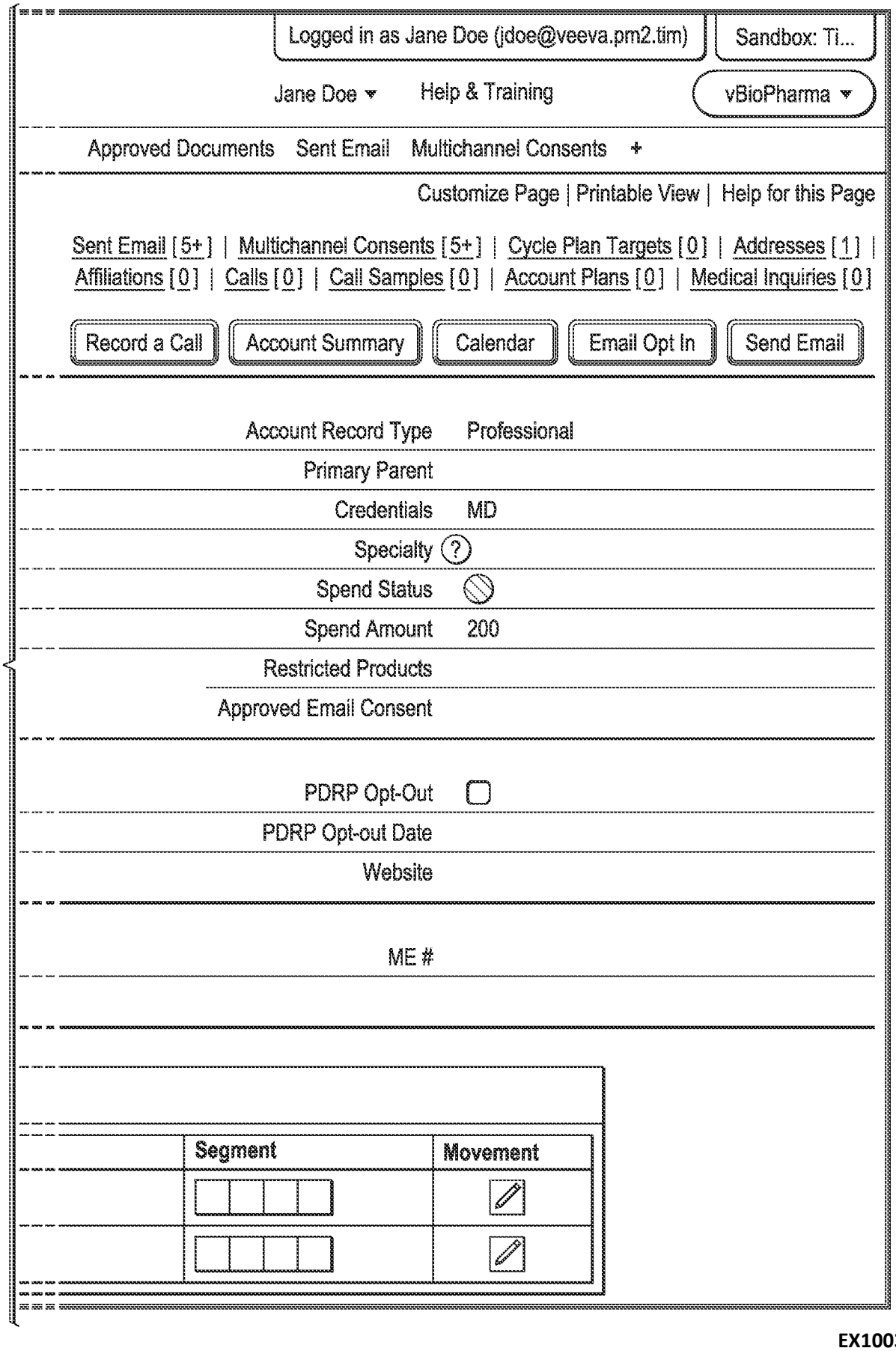

XYZ Analytics
Home
My Accounts
My Schedule
My Samples
Analytics
Cycle Plans
Medical Events
Search
Search All
Go!
Limit to items I own
Advanced Search...
Create New...
Recent Items
Tim Mills
MCC-000000014
Judy Miller
Joe Michaels
Suzy Matthews
Jess Mills
Family Practice, PC
John Smith
Clean Template - Hello Coldcap
SE-0048
Recycle Bin
Account
Dr. Tim Mills
<< Back to List: Users
Account Detail
Edit
Account Information
Name Dr. Tim Mills
Middle
Suffix
Preferred Name
Territories 103
Language French
Contact Information and Preferences
Phone
Email tim.mills@bobssystems.com
Profile Information
Investigator?
KOL?
Ratings and Evaluations
Common
Awareness
Anvil
Birdvana
TO FIG. 13b

FIG. 13b


FROM FIG. 13a
Logged in as Jane Doe (jdoe@veeva.pm2.tim)
Sandbox: Ti...
Jane Doe
Help & Training
vBioPharma
Approved Documents
Sent Email
Multichannel Consents
+
Customize Page | Printable View | Help for this Page
Sent Email [5+] | Multichannel Consents [5+] | Cycle Plan Targets [0] | Addresses [1] | Affiliations [0] | Calls [0] | Call Samples [0] | Account Plans [0] | Medical Inquiries [0]
Record a Call
Account Summary
Calendar
Email Opt In
Send Email
Account Record Type
Professional
Primary Parent
Credentials
MD
Specialty
Spend Status
Spend Amount
200
Restricted Products
Approved Email Consent
PDRP Opt-Out
PDRP Opt-out Date
Website
ME #
Segment
Movement

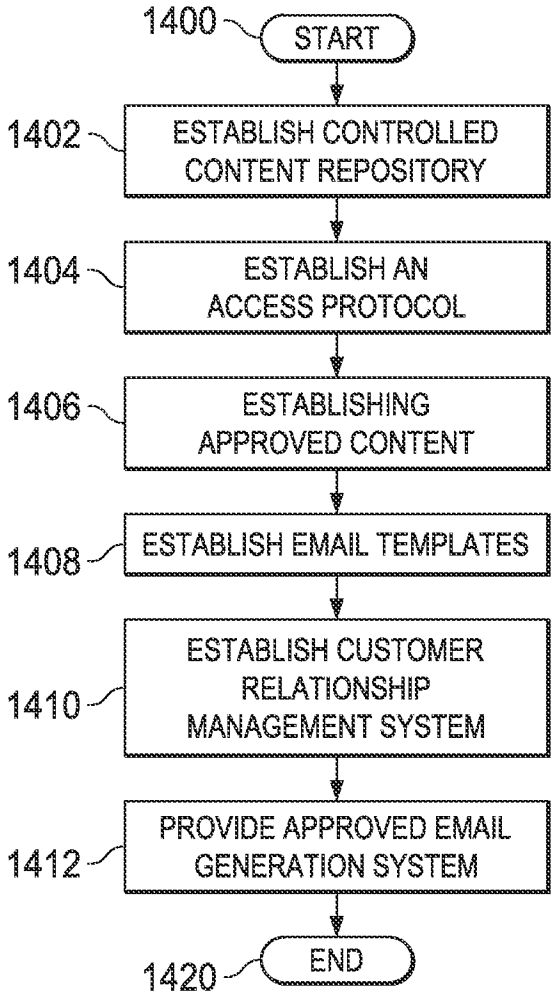

1400
START
1402
ESTABLISH CONTROLLED CONTENT REPOSITORY
1404
ESTABLISH AN ACCESS PROTOCOL
1406
ESTABLISHING APPROVED CONTENT
1408
ESTABLISH EMAIL TEMPLATES
1410
ESTABLISH CUSTOMER RELATIONSHIP MANAGEMENT SYSTEM
1412
PROVIDE APPROVED EMAIL GENERATION SYSTEM
1420
END

FIG. 14

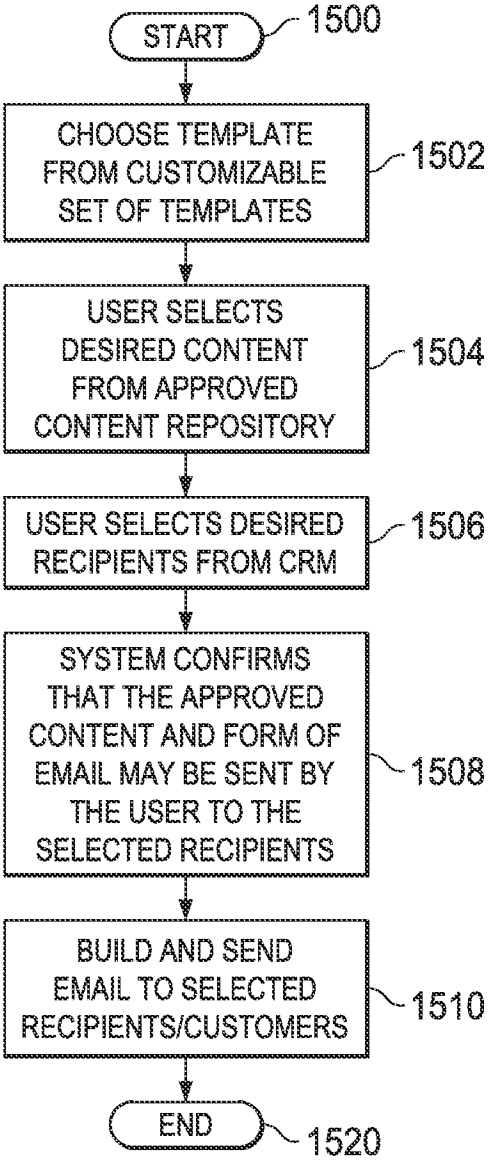

START
1500
CHOOSE TEMPLATE FROM CUSTOMIZABLE SET OF TEMPLATES
1502
USER SELECTS DESIRED CONTENT FROM APPROVED CONTENT REPOSITORY
1504
USER SELECTS DESIRED RECIPIENTS FROM CRM
1506
SYSTEM CONFIRMS THAT THE APPROVED CONTENT AND FORM OF EMAIL MAY BE SENT BY THE USER TO THE SELECTED RECIPIENTS
1508
BUILD AND SEND EMAIL TO SELECTED RECIPIENTS/CUSTOMERS
1510
END
1520

FIG. 15

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

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(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2014-05-06
First Named Inventor	Timothy S. Murphy
Art Unit	
Examiner Name	
Attorney Docket Number	Veeva-3

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	7584251	B2	2009-09-01	Brown et al.	
	2	7865394	B1	2011-01-04	Calloway et al.	
	3	6449634	B1	2002-09-10	Capiel	
	4	7363384	B2	2008-04-22	Chatani et al.	
	5	7149964	B1	2006-12-12	Cottrille et al.	
	6	6167435		2000-12-26	Druckenmiller et al.	
	7	7065555	B2	2006-06-20	Foulger et al.	
	8	6360221	B1	2002-03-19	Gough et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy
	Art Unit	
	Examiner Name	
	Attorney Docket Number	Veeva-3

	9	7904922	B1	2011-03-08	Haberman et al.	
	10	6295058	B1	2001-09-25	Hsu et al.	
	11	6978417	B1	2005-12-20	Kohn et al.	
	12	6789108	B1	2004-09-07	McMillan	
	13	6438584	B1	2002-08-20	Powers	
	14	6775689	B1	2004-08-10	Raghunandan	
	15	7730165	B2	2010-06-01	Shapiro	
	16	7523167	B2	2009-04-21	Thomas et al.	

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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	20040093429	A1	2004-05-13	Burton et al.	

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	Application Number	
	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy
	Art Unit	
	Examiner Name	
	Attorney Docket Number	Veeva-3

	2	20020019849	A1	2002-02-14	Tuvey et al.	

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Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	WO01/93509	WO	A1	2001-12-06	Yong-Tae Kim		☐
	2	WO00/65762	WO	A2	2000-11-02	HIJK		☐
	3	WO0030009	WO	A2	2000-05-25	XOOM.COM		☐

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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	U.S. Provisional Patent Application number 60/261,712 filed on January 12, 2001 entitled Method and System for Creating Presentation Packages.	☐
	2	U.S. Provisional Patent Application number 60/326,776 filed on October 3, 2001 entitled Methods and Apparatus for a Dynamic Messaging Engine.	☐

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.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy
	Art Unit	
	Examiner Name	
	Attorney Docket Number	Veeva-3

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	
	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy
	Art Unit	
	Examiner Name	
	Attorney Docket Number	Veeva-3

CERTIFICATION STATEMENT

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

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OR

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

☐ See attached certification statement.

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

☒ A certification statement is not submitted herewith.

SIGNATURE

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

Signature	/Brian C. McCormack, Reg. No. 36601/	Date (YYYY-MM-DD)	2014-05-06
Name/Print	Brian C. McCormack	Registration Number	36601

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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.

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Title of Invention	System and method for controlling electronic communications

As the below named inventor, I hereby declare that:

This declaration is directed to:

- [■] The attached application, or
- [ ] United States application or PCT international application number _____

filed on _____.

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

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

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

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LEGAL NAME OF INVENTOR

Inventor: Timothy S. Murphy Date (Optional): 5/6/14

Signature: _____

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

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SYSTEM AND METHOD FOR CONTROLLING ELECTRONIC COMMUNICATIONS

Cross-reference to related applications

[0001] The present application relates and claims priority to provisional patent application nos. 61/820,029, filed May 6, 2013 and 61/828,034, filed May 28, 2013, both entitled "System and method for controlling electronic communications." Both of these provisional patent applications are hereby incorporated by reference herein for all purposes.

Technical Field

[0002] The present application relates generally to systems and methods that provide for sending approved content to electronic communications recipients, including methods and systems for building the approved content and generating the approved messages for electronic communications such as email.

Background

[0003] In certain fields, the ability to achieve the efficiencies associated with modern electronic communications such as email has been hampered by the risks (regulatory and otherwise) of sending such electronic communications. An example of one field that has been so limited has been the pharmaceutical sales industry, where sales reps typically are restricted from sending email communications to prescribing doctors because of the enormous risks that can flow from unapproved, uncontrolled messages. For example, a careless rep or other personnel might send an email to a subscribing doctor suggesting off-label uses for a drug. This could end up exposing the company employer (e.g., a pharmaceutical company) to regulatory penalties or other legal liabilities.

Summary

[0004] Embodiments disclosed in the present document provide a machine-implemented method for generating approved emails. The method comprises: establishing a controlled content repository, the controlled content repository being securely and controllably accessed; establishing an access protocol for the controlled content repository, whereby approved content is stored in the controlled content repository according to the access protocol and whereby the access protocol comprises at least one set of alignment rules for determining if a first piece of approved content within the controlled content repository can be made available to a first customer via an electronic message; storing the approved content within the controlled content repository, the approved content further being accessible according to the established access protocol; aligning the approved content within the controlled content repository with information from an information management system; and providing an approved email generating system which generates an electronic message according to the established access protocol for sending a piece of approved content within the controlled content repository to an approved customer.

Brief Description of the Drawings

[0005] For a more complete understanding of the present application and its advantages, reference is now made to the following description taken in conjunction with the accompanying drawings, in which like reference numbers indicate like features.

[0006] **FIGURE 1** illustrates an exemplary architecture for managing the building and sending of approved electronic communications;

[0007] **FIGURE 2** illustrates an example architecture for the content repository of FIGURE 1 in which content is built and organized in a controlled manner that facilitates efficient content generation;

[0008] **FIGURE 3a** illustrates a screenshot showing one embodiment of the "My Accounts" option where the user may access personalized customer mailing lists;

[0009] **FIGURE 3b** illustrates a screenshot showing an embodiment of starting to build an approved email from a content page;

[0010] **FIGURE 4** illustrates a screenshot showing one example of the "Email Targets" option in the mobile application (or web application) from which users may select individuals from the mailing list as recipients of an approved email;

[0011] **FIGURE 5** illustrates a screenshot of an example "Email Targets" screen with individual email targets selected to receive an approved email;

[0012] **FIGURE 6** illustrates a screenshot of one embodiment of an "Email Template" selection screen where the user may choose one or more customer-aligned templates to generate approved emails to selected customers;

[0013] **FIGURE 7** illustrates a screenshot of an example approved template for email generation with an example warning icon indicating that one or more of the email recipients is unapproved to receive the content within the template or content attached to the template email;

[0014] **FIGURE 8** illustrates a screenshot of example pop-up screen detailing the reasons why individual customers may not be approved to receive the content;

[0015] **FIGURE 9** illustrates a screenshot of one embodiment of the signature capture technology available to users through the mobile application to provide for remote opt-in for electronic communications;

[0016] **FIGURE 10a-c** illustrates a screenshot of an example approved email template with user-selected hyperlinks to approved content included within the body;

[0017] **FIGURE 11** illustrates a screenshot of an example "Preview" screen, from which the user may view the approved email in the format in which it is viewable by the recipient;

[0018] **FIGURE 12** illustrates a screenshot of an example customer portal through which customers may access approved content from the controlled content repository;

[0019] **FIGURE 13a-b** illustrate a screenshot of one embodiment of the customer profile information screen wherein users may have access to information regarding approved email communication history with the customer;

[0020] **FIGURE 14** is a flowchart illustrating the providing and/or provisioning of an approved email system; and

[0021] **FIGURE 15** is a flowchart illustrating the building and sending of approved emails.

[0022] Although similar reference numbers may be used to refer to similar elements for convenience, it can be appreciated that each of the various example embodiments may be considered to be distinct variations.

[0023] The present embodiments will now be described hereinafter with reference to the accompanying drawings, which form a part hereof, and which illustrate example embodiments which may be practiced. As used in the disclosures and the appended claims, the terms "embodiment" and "example embodiment" do not necessarily refer to a single embodiment, although it may, and various example embodiments may be readily combined and interchanged, without departing from the scope or spirit of the present embodiments. Furthermore, the terminology as used herein is for the purpose of describing example embodiments only, and are not intended to be limitations. In this respect, as used herein, the term "in" may include "in" and

"on," and the terms "a," "an" and "the" may include singular and plural references. Furthermore, as used herein, the term "by" may also mean "from," depending on the context. Furthermore, as used herein, the term "if" may also mean "when" or "upon," depending on the context. Furthermore, as used herein, the words "and/or" may refer to and encompass any and all possible combinations of one or more of the associated listed items.

Detailed Description

[0024] Embodiments disclosed in the present application allow for control of email content for communications between system users and email recipients (customers) by providing for a system and method for generating an "approved email" communication. Users may access a list of email templates which have been pre-generated with approved content and then aligned with various customer attributes such as regulatory limitations, customer preferences and demographic information in order to ensure compliant and tailored communication between the user and the customer.

[0025] Such controlled email or other electronic communication generation occurs at an interface between a repository of approved content items and templates along with customer relationship management (CRM) information including customer profile information and parameters including customer preferences and regulatory limitations or fields that can be used to facilitate compliance with regulatory limitations. The system is capable of generating warning notices to users when content and customer access do not align and users may choose various actions to address the warning notices such as excluding certain customers from the communication or changing email content. The customer information is from a customer relationship management subsystem.

[0026] In disclosed embodiments, intelligent and flexible updating of records may be provided within the customer relationship management subsystem, including such approaches as communicating with third-party systems and sources in order to verify and update customer information in an effective and timely manner, such as by using the collective information gained by managing a cloud-based system / Software-as-a-Service (SaaS) system on behalf of multiple company customers for the disclosed embodiments.

[0027] After approved emails are constructed by the user, the content contained within the approved email may be once again checked for accuracy and validity by the system before release to the email server. When a customer accesses content within an approved email, the customer is directed to a customer portal through which the content is accessed. The customer may be only allowed access to the most current version of the approved content within the content repository. In this manner, the content received and viewable by the customer has been verified in real-time as being compliant, approved content.

[0028] **FIGURE 1** is a system overview illustrating an embodiment of a controlled email communication system 100. The presently disclosed embodiment comprises a controlled content repository 102, a Customer Relationship Management (CRM) server 106, and a multichannel processing engine 108. The customer relationship management server 106 may provide access to a customer relationship management subsystem 104, and the multichannel processing engine 108 may be coupled to an email server 114. In one embodiment, the customer relationship management subsystem 104 and/or the email server 114 may be operated by a third party. The multichannel processing engine 108 may be accessed by users such as company sales representatives through web clients 110 or through mobile apps 112 (such as iOS, Android, Blackberry, or Windows Mobile systems), communicating with the multichannel processing

engine 108 through web servers 113. Although the users may be described in the present application as being company sales representatives, this particular described embodiment is not intended to limit the generality of the claims that may eventually issue in patents stemming from the present disclosure.

[0029] The controlled content repository 102 is designed to have a process for developing approved content that is sharable across multiple users, such as shareholders, reviewers, managers, marketing personnel, sales representatives, etc. The content generated in the controlled content repository 102 may be accessed on a regulated basis and used to generate approved electronic communications. This regulated basis may be determined, in part, by the company as a whole and additionally by interaction with data from the customer relationship management subsystem 104, described in further detail below. In one embodiment, approved content, customer profile information, customer preferences, and regulatory limitations and requirements may be stored in a table in the controlled content repository 102. In addition to storage and development of content, the controlled content repository 102 may also store an audit trail, tracking exact content of communications as they were sent by the user, as well as metadata about the communications and information regarding the content accessed by customers.

[0030] The customer relationship management subsystem 104 contains all contact information that may be available to users. In addition to storage of contact information, the customer relationship management subsystem 104 may also be capable of storing configurations regarding specific preferences, regulatory limitations and requirements, and other fields that will facilitate the generation of appropriate approved electronic communications, in general or on a by-recipient basis. These preferences and/or requirements include both the preferences of the

user (e.g., maintaining account lists) as well as the preferences of the enterprise (e.g., employers of the users), discussed in further detail below. In some examples, the approved content and email templates may be pre-processed and stored in the controlled content repository 102 and provided to the multichannel processing engine 108 during the process for generating an approved email. In other examples, the customer relationship management subsystem 104 may have a content management subsystem and may provide the approved content and the templates.

[0031] In this embodiment, the customer relationship management subsystem 104 is capable of communication with multiple sources through the customer relationship management server 106 or through other channels to maintain a current and accurate collection of information regarding customer accounts. The interface with the multiple sources can be, for example, through an Applications Programming Interface or API, as the API interface will allow compatibility with a flexible array of third-party provider servers. The information being updated may include, but is not limited to, licensing information, area of practice, and location of the various customer contacts. In this manner, the customer relationship management subsystem 104 pulls the approved version of what represents an account or physician, which then pulls from multiple networks to ensure that the information regarding an account is up-to-date. The customer relationship management subsystem 104 may also be used to determine the type of domain an email communication is delivered through. A customer in Spain may receive an email from "CompanyX.es," whereas a customer in Germany would receive the same email from "CompanyX.ge." This may allow for additional branding options for the company controlling and sending the electronic communications.

[0032] With further reference to the customer relationship management subsystem 104, this system may be a cloud-based customer database that provides a central access to store and

distribute consistent data across customer companies as well as their possible third-party partners and agencies that are used to keep this data updated. This system can provide standard data formats and provide an easy and automated way for customers to have access to coordinated and frequently updated CRM data and to use that coordinated data for sending approved electronic communications in accordance with the system described herein.

[0033] In an embodiment, the multichannel processing engine 108 is responsible for combining the customer account information from the customer relationship management subsystem 104 with content available from the controlled content repository 102. Within the customer relationship management subsystem 104, customer accounts may be assigned a set of alignment rules which determine specific pieces of content that are available for use from the controlled content repository 102. The multichannel processing engine 108 may apply these rules and supply the user with a list of approved email templates and pieces of content that may then be used to construct an approved email communication. Approved email generation occurs within the multichannel processing engine 108 according to executable code computer instructions stored in executable code storage 120.

[0034] The executable code comprises computer readable instructions stored on the computer readable medium (the code storage medium 120). The executable code storage 120 is in communication with the various computing machines in the system 100 such as the customer relationship management server 106 and the multichannel processing engine 108. The same or another executable code storage 120 may be accessed by the previously described components of the controlled content repository 102 for providing separate computer readable code for operating upon by processing machines in that system. In all cases, the code is programmed to

perform the functions that are described in the present embodiments and/or additional functions according to system design needs.

[0035] Communication between the multichannel processing engine 108 and the customer relationship management subsystem 104 may occur via the customer relationship management server 106, which acts as an interface between the two. The customer relationship management server 106 may act solely as an entry and exit point for the customer relationship management subsystem 104. The user may access the multichannel processing engine 108 through either a Web Client 110 or through the mobile apps 112 (such as iOS, Android, Blackberry, or Windows Mobile systems).

[0036] **FIGURE 2** provides a description of the controlled content repository 102 with additional specific applications and interfaces connected thereto. In an embodiment, this controlled content repository 102 is a cloud-based or distributed network based system for consolidating an enterprise's data, oftentimes integrating multiple content repositories in an enterprise into a single system having coordinated control, measuring, and auditing of data creation, access and distribution.

[0037] In an embodiment of the controlled content repository 102 for the life sciences industry, as illustrated in the figure, this repository 102 can include specific data collections for the following areas and/or business process-specific front-end applications 204:

[0038] The Research & Development (R&D) front end application 208 provides for an aggregation of materials in support of research and initial clinical trial submissions through building organized and controlled content repositories within the controlled content repository 102. Elements that can be stored, organized, and managed through this front end include submission bills of materials, Drug Information Association (DIA) reference models support,

and submission-ready renderings. This front end 208 is designed to provide an interface to the controlled content repository 102 whereby researchers, contract research organizations (CROs), and other collaboration partners can access and/or distribute content through a single controlled document system.

[0039] The clinical trials front-end application 210 provides for faster and more organized access to trial documents and reports, while supporting seamless collaboration between sponsors, CROs, sites, investigators and other trial participants. Specific features both ease study and site administration as well as support the DIA trial master file (TMF) reference model. Having this front-end application providing access to the controlled content repository 102 further provides for efficient passing off of controlled content repository content between this phase and other phases of the life sciences development process.

[0040] The manufacturing and quality application 212 enables the creation, review, approval and distribution of controlled documents across the organization and with external partners in the context of materials control and other manufacturing elements. The application 212 provides functionality in support of the manufacturing process including watermarking, controlled print, signature manifestation and "Read and Understood" signature capabilities. The documents and metadata associated with this process is managed and stored in the controlled content repository 102 whereby it can be assured that the related documents are not distributed in contravention of law and company policy.

[0041] The medical communications application 214 provides for communications with medical facilities, including call center access, integration, and interface functionality. Particular access control features and metadata associated with this application 214 include expiration and

periodic review elements, multi-channel support, global documents and automatic response package generation through the controlled content repository 102.

[0042] The marketing and sales application 216 application provides an end-to-end solution for the development, approval, distribution, expiration and withdrawal of promotional materials. Specific features include support for global pieces, approved Form FDA 2253 (or similar international forms) form generation, online document, and video annotation, and a built-in digital asset library (DAL). Again, the communications may be through the controlled content repository 102.

[0043] In disclosed embodiments, there are provided a number of back-end system applications 220 that provide for the management of the data, forms, and other communications in the controlled content repository. For example, the back-end systems applications 220 may include a regulatory compliance engine 222 to facilitate regulatory compliance, including audit trail systems, electronic signatures systems, and system traceability to comply with government regulations, such as 21 CFR Part 11, Annex 11 and GxP-related requirements. The regulatory compliance engine 222 may include processors for developing metadata surrounding document and project folder accesses so from a regulatory compliance standpoint it can be assured that only allowed accesses have been permitted. The regulatory compliance engine 122 may further includes prevalidation functionality to build controlled content in support of installation qualification (IQ) and/or operational qualification (OQ), resulting in significant savings to customers for their system validation costs.

[0044] In further disclosed embodiments, the back-end systems 220 may contain a reporting engine 224 that reports on documents, their properties and the complete audit trail of changes. These simple-to-navigate reports show end users and management how content moves through

its life cycle over time, enabling the ability to track 'plan versus actual' and identify process bottlenecks. The reporting engine may include processors for developing and reporting life cycle and document management reporting based on stored project data and access metadata relative to documents, forms and other communications stored in the controlled content repository 102.

[0045] In further disclosed embodiments, the back-end systems 220 can include an administrative portal 226 whereby administrators can control documents, properties, users, security, workflow and reporting with a simple, point-and-click web interface. Customers also have the ability to quickly change and extend the applications or create brand new applications, including without writing additional software code.

[0046] In further disclosed embodiments, the back-end systems 220 may include a search engine 228 whereby the controlled content repository 102 can deliver simple, relevant and secure searching.

[0047] In providing this holistic combination of front-end applications 204 and back-end system applications 220, the various applications can further be coordinated and communicated with by the service gateway 230, which in turn can provide for communications with various web servers and/or web services APIs 113. Such web servers and/or web services APIs 113 can include access to the content and metadata layers of some or all of the various applications 204 and systems 220, enabling seamless integration among complementary systems.

[0048] In the context of the described embodiments, the particular features and capabilities integrate with the other elements of the controlled email communication system 100 such that particular features are usable within the various user screens. For example, and without limitation to any other possible combination of features, in the below-described description of generating an approved electronic communication, the above-described search portal can be used

to search for approved attachments (i.e. content) within the controlled content repository 102 which may be then attached to one of the template emails being prepared for sending to a customer. And the synergy of combining these particular systems is that the generation of the controlled content can be done in a controlled fashion such that the approved content can be sent to customers with greater confidence in the integrity of the data being sent.

[0049] **FIGURE 3a** illustrates an embodiment screenshot 302 of a "My Accounts" interface in a web-based or mobile interface within a web-based system 110 or mobile system 112 (see FIGURE 1). From this screen 302, a user may select an individual account from a list of existing physician or other clinical accounts within the customer relationship management subsystem 104. By selecting a specific individual account from the "My Accounts" screen 302, the user can be taken to a screen containing current contact information for the selected account as stored in the customer relationship management subsystem 104. From this screen, users may begin constructing an approved email to the individual customers by selecting a "Compose Email" link on the screen. In this embodiment, there are additional options within the web-based or mobile application 110, 112 for sending an individual customer an approved email. From the "My Accounts" screen 302 shown in FIGURE 3a, the user may also click on or mouse over the "Action" sheet shown in this embodiment to the right of the contact name to get a pop-up window and select a "Send Email" link 310 in the pop-up window. The user may click on a link 305 to update information of the accounts.

[0050] A user may also begin constructing an email from a content page, e.g., when the user is viewing a document or a video on his screen. FIGURE 3b illustrates an embodiment screenshot 352 of a "Call Report" interface in a web-based or mobile interface within a web-based system 110 or mobile system 112 (see FIGURE 1). While viewing a Call Report 360 on

screen 352, a user may decide to send content related to some topics in the Call Report. The user may click on or mouse over the "Action" sheet next to the "Sign" link shown in this embodiment to get a pop-up window and then select a "Send Email" link 355 in the pop-up window. After that, the screenshot 302 may be displayed for the user to build an approved email. Because the described system including the controlled content repository 102 provides for a coherent and controlled access to the approved content for email communications, it can be made quite flexible as to providing consistently formatted and approved content from various applications and/or specific screenshots within applications.

[0051] Referring now to **FIGURE 4**, by selecting the "Account Lists" 320 on the left hand side of the screen in FIGURE 3a, users may access personally or institutionally pre-constructed lists 410 of individual customers as configured in the customer relationship management subsystem 104. From this screen 402, the user may also select a number of individual customer accounts 420 with whom they wish to communicate. Once desired customers have been selected from the list, which could include the selecting of all customers in the list, the user may begin building an approved email to the selected customers through the web-based or mobile client application 110, 112. The email may be constructed within the multichannel processing engine 108 from the accessible content provided by the controlled content repository 102 which has been aligned with the customer information provided by the customer relationship management subsystem 104.

[0052] **FIGURE 5** illustrates an exemplary screenshot 502 in which the user begins constructing the approved email by selecting an "Email Targets" link 505. The link icon may also contain the number of selected customers in parentheses. In this embodiment, the "Send Email" links 510 appear after the customer selection of the "Email Targets" link 505.

[0053] Shown in **FIGURE 6**, by selecting the "Send Email" link, the user may access the "Email Generation Wizard." From this screen 602, a user may access pre-approved, controlled email templates 604 that are available and approved for the specific group of customers selected. From this approved list, the user may select multiple templates. After desired templates are selected, individual tabs appear at the top of the screen and within each tab is a separate approved email which may be sent to the selected customers.

[0054] The user may access an individual template, as shown in the screenshot 702 of **FIGURE 7**, by selecting the appropriate tab 710. The template may also display a warning icon 720, shown in the top left of FIGURE 7, which indicates that one or more of the selected individuals may be restricted from receiving the chosen template with its current content. This warning is generated from information contained within the customer relationship management subsystem 104. The user may select this icon 720, which generates a pop-up window 802 containing specific warning information for all potential recipients who may be currently restricted from receiving the content, shown in **FIGURE 8**. Recipients may be removed from the email list on this screen by selecting the appropriate icon.

[0055] Warnings generated on the pop-up screen 802 illustrated in FIGURE 8 may appear for reasons that include, but are not limited to, regulatory limitations, customer preferences, demographic information, a customer "opt-out" option where the customer has requested to not have the content delivered; the absence of a customer "opt-in" option where the customer may not receive the communication without prior approval; or that the most current information contained within the customer account profile no longer allows access to the current content delivered by the controlled content repository 102. Information regarding regulatory limitations,

customer preferences, demographic information, the "opt-in" or "opt-out" status of individual customer accounts is stored within the customer relationship management subsystem 104.

[0056] In an embodiment, as shown in **FIGURE 9**, the user may access an "opt-in" request 902 from the recipient of the email through the web-based or mobile client applications 110, 112. In this embodiment, the user may have access to signature capture technology, which allows for instant, remote customer approval along with the appropriate signature 905.

[0057] Once all warnings are cleared, or all restricted recipients are removed from the list, the user may once again have access to the approved email template 1002 as illustrated in **FIGURE 10a**. Email templates may be either "branded" with imagery 1003 or may be presented in a plain, text-only format, selectable by the user. As illustrated in FIGURE 10a, the user may have the ability to personalize the email content by free-texting in the text box 1004 supplied within the template. This customizable text box 1004 may also be regulated to ensure compliance by limiting the number of characters that may be typed in the box and by constructing "libraries" of restricted words for each customer that may not be used in the box. The information used to regulate the text box may be accessed from the customer relationship management subsystem 104, and configuration of these regulatory parameters may be designated by both the company, by the specific customer, and/or by specific regulation. Within the approved template, the user may choose from approved content to be included in the body of the email.

[0058] The user may select the "Select Documents to Share" icon 1010 within the template, which generates a pop-up screen 1020 (see **FIGURE 10b**) containing a list of approved content from within the controlled content repository 102 that has been aligned with the customer information retrieved from the customer relationship management subsystem 104. From the pop-

up screen 1020, the user may select multiple content items to be included within the body in the form of one hyperlink per selected content item. As the content items are selected, they are added to the body of the email as individual tiles 1030 as illustrated in the center of FIGURE 10b. The list of content items may be rearranged by the user by dragging the tiles into the desired order. The user may preview the approved email on the web-based or mobile applications 110, 112 as it will be received by the customer by selecting the "magnifying glass" icon 1040 located within the template screen. The user may then return to the edit function by selecting an "editing" icon or clicking outside the document selection pop-up screen 1020.

[0059] From this continued editing screen 1050 of **FIGURE 10c**, the user may also select a customized valediction from a drop-down menu located within the template 1050. The overall approved content authoring system described herein includes selection capabilities that are highly flexible, highly configurable, and may be applicable to any place within the approved email template. The user may then send the email to selected recipients using the "Send" icon 1060 illustrated in FIGURE 10c.

[0060] The communications between the mobile applications 112 or the web clients 110 and the multichannel processing engine 108 may use any communication protocols between a web client and its server, e.g., HttpPost.

[0061] In one embodiment, the content contained within the generated email may be once again checked for accuracy and validity by the system just before releasing. Once the approved email is generated in the multichannel processing engine 108 and the user selects the "Send" icon, the communication is then sent to the controlled content repository 102 for final verification of the accuracy and validity of the selected content. The controlled content repository 102 may also store audit trail data 150 which documents and retains information that

may include, but is not limited to, recipient information, time stamp data, and the most current version number of any content included within the approved email. The communication is then sent back to the multichannel processing engine 108, where it may be routed through an email server 114 and then delivered to the customer's preferred inbox. The multichannel processing engine 108 may send only enough information to the email server 114 for the email server 114 to create an email, and the email server 114 may create the actual email to be sent to the customer. The email server 114 may collect and distribute the outbound email content, but it may also collect interaction information from the customer regarding clicks, views, and other statistics regarding customer usage. As shown in FIGURE 1, this information may then be posted back to the multichannel processing engine 108 as CRM updates 111 and sent through the customer relationship management server 106 to be deposited in the customer relationship management subsystem 104 as information contained within the customer account profile. The email sent may also be stored in the customer relationship management subsystem 104.

[0062] As shown in the approved email preview screen 1102 illustrated in **FIGURE 11**, when an approved email is opened by the customer, the customer may have immediate access to communications as they appeared in the "preview" screens or thumbnails available to the user through the web-based or mobile applications 112. This communication 1102 includes the readable text and a tiled list of approved content hyperlinks, shown in the figure. The recipient may choose to view the content by selecting the appropriate content icon. In an embodiment of the system, the recipient may select the "view pdf" hyperlink 1110 within the email, which will redirect the recipient to the customer portal screen 1202, shown in **FIGURE 12**. Each recipient has the ability to custom-configure the specific URL to be loaded as the "landing page" for clicks from the approved emails.

[0063] This arrangement allows for the direction of customers to specific portals. Within the portal 1202, the recipient may view the full text of the content that was included as a tile within the body of the original approved email. The content is accessed directly from the controlled content repository 102 to ensure that the most up-to-date information is displayed when the customer accesses the selected content. If the content has been updated to a newer version since the user constructed the approved email, then the hyperlink included in the approved email will automatically connect the customer to the most up-to-date version of the selected content. Information regarding the content version viewed by the customer may be stored with other pertinent information about the customer experience in the audit trail within the controlled content repository 102. In one embodiment, the controlled content repository 102 may create a token for the approved content to be sent with the approved email. The token may have information about which piece of content to show to the customer, and direct the customer to the right content. In one embodiment, even when the content is updated after the email is sent, the token may direct the customer to the latest version of the content.

[0064] Illustrated in **FIGURE 13a-b** is an embodiment of the system that allows the user access to information regarding specific communications. This information is stored in the customer relationship management subsystem 104 along with customer account information. The user may access this information through either mobile apps 112 or through web clients 110. The information available may include, but is not limited to, the number of times the approved email communication has been opened by the customer, the number of clicks executed, type of device used to access the communication, platform used when accessing the content, and location when the communication was viewed.

[0065] **FIGURE 14** is a flowchart illustrating the building and/or provisioning of exemplary elements of an approved email system in accordance with the embodiments disclosed in the present application. The method starts and block 1400, after which the system builders and/or administrators establish a controlled content repository 102 at block 1402. As described herein, the controlled content repository is designed to be securely and controllably accessed such that only authorized users can build the controlled content therein. To ensure the integrity and security of the controlled content repository 102, an access protocol is established at block 1402. The access protocol may be defined by computer instructions stored in the computer readable memory or executable code storage 120. By the computer instructions stored therein, the multichannel processing engine 108 is thereby able to control access to the controlled content repository 108 in accordance with the principles described in the present application.

[0066] At block 1406, one or more users establish approved content to be stored in the controlled content repository 102 under the control of the access protocol established at block 1402 (or as that protocol is later changed or updated). At block 1408, a system designer or other admin establishes or updates email templates that approved content senders can pick and choose from in building approved email content messages. At block 1410, a customer relationship management system is accessed such that the approved emails can be addressed to customer contacts of the enterprise or salesperson for the enterprise who is engaging in the marketing, manufacturing, clinical trials, or other activity described herein. At block 1412, the actual email generation system is provided that interfaces with the approved content, the access protocol, the email templates, and/or the customer relationship management system. This email generation system, or more specifically the multichannel processing engine 108, is accessed by senders of approved email content as described in the present application.

[0067] It should be appreciated that as previously discussed, the customer relationship management system 104/106 may be further operable to communicate with multiple sources of information to build a current and accurate collection of information regarding customer accounts. It should also be appreciated that to facilitate such communications, at least one of the multiple sources of information that might communicate with the custom relationship management system 104/106 may communicate with external servers that belong to one or more third-party partners or agencies through an Application Programming Interface ("API") whereby the customer relationship management system can flexibly receive data updates from the one or more third-party partners or agencies. The access protocol that is established may also include a set of alignment rules that determine specific pieces of approved content that are available to the selected customers from the controlled content repository.

[0068] While FIGURE 14 is described in basic terms regarding its general operation as a controlled content access system, it should be appreciated that such a system is described herein with multiple specific implementations. Such specific implementations can be facilitated through front-end applications in the context of supporting research, development, and initial clinical trial submissions as previously described. Other front-end applications as previously described include manage access and/or distribution of trial documents and reports in support of ongoing clinical trials, materials control and/or manufacturing process controls, communications with medical facilities in support of medical facility operations, and the development and distribution of promotional materials as related to regulatory restricted products such as prescription drugs.

[0069] To facilitate the compliance with government regulation, a regulatory compliance engine can be provided to review content and the access protocols and to ensure that only

approved content authored by properly authorized individuals and according to required controls can be distributed to permitted possible customers or other content recipients in accordance with government regulations.

[0070] Next with regard to **FIGURE 15**, a method for generation of approved email content is described. In particular, FIGURE 15 shows at block 1500 the start of the process, after which at block 1502 an email author or prospective sender can choose a template from a set of customizable templates. In this way the email authors or prospective senders do not have to recreate content every time an email campaign is beginning. At block 1504, the user selects the desired content from the approved content repository 102, and the user at block 1506 selects the desired recipients or customers from the CRM database 104.

[0071] Still referring to FIGURE 15, the system, or more specifically the multichannel processing engine 108 confirms that the approved content and form of email may permissibly be sent by the prospective email sender to the customers or other selected recipients at 1508 based on factors including but not limited to regulatory limitations, customer preferences, demographic information, or the "opt-in" or "opt-out" status of individual customer accounts. Once that has been confirmed in accordance with the access protocol, the multichannel processing engine 108 can begin building and sending the emails in accordance with the user's selections or as modified in accordance with the access protocol, regulator engine, and or other system controls, at 1512. The content contained within the approved email may be checked for accuracy and validity by the system before release to the email server 114. If the email is created when the user is offline, the content contained in the approved emails may be checked again after the user is back online, before they are sent to the email server.

[0072] The flowcharts do not mean to limit the sequence of the steps. In one example, the controlled content repository 102 may determine in advance, before a template is chosen at 1502, if a piece of content can be sent to a customer and store the result. The result may be stored as a part of metadata for the content in the controlled content repository 102. During the generation of the approved email, the multichannel processing engine may check information in the controlled content repository 102, instead of the customer relationship management subsystem 104, to decide if a piece of content can be sent to a customer.

[0073] While various embodiments have been described above, it should be understood that they have been presented by way of example only, and not limitation. Thus, the breadth and scope of a preferred embodiment should not be limited by any of the above described exemplary embodiments, but should be defined only in accordance with the claims and their equivalents for any patent that issues claiming priority from the present provisional patent application.

[0074] For example, although the embodiments are described with a customer relationship management subsystem 104, the customer information and content may be from other types of information management systems, e.g., a Closed Loop Marketing (CLM) system. In addition, the multichannel processing engine 108 is shown to communicate with only one customer relationship management subsystem 104 in the drawings, but it may communicate with more customer relationship management subsystems. For example, as referred to herein, a machine or engine may be a virtual machine, computer, node, instance, host, or machine in a networked computing environment. Also as referred to herein, a networked computing environment is a collection of machines connected by communication channels that facilitate communications between machines and allow for machines to share resources. Network may also refer to a communication medium between processes on the same machine. Also as referred to herein, a

server is a machine deployed to execute a program operating as a socket listener and may include software instances.

[0075] In all descriptions of "servers" or other computing devices herein, whether or not the illustrations of those servers or other computing devices similarly show a server-like illustration in the figures, it should be understood that any such described servers or computing devices will similarly perform their described functions in accordance with computer-readable instructions stored on a computer-readable media that are connected thereto.

[0076] Resources may encompass any types of resources for running instances including hardware (such as servers, clients, mainframe computers, networks, network storage, data sources, memory, central processing unit time, scientific instruments, and other computing devices), as well as software, software licenses, available network services, and other non-hardware resources, or a combination thereof.

[0077] A networked computing environment may include, but is not limited to, computing grid systems, distributed computing environments, cloud computing environment, etc. Such networked computing environments include hardware and software infrastructures configured to form a virtual organization comprised of multiple resources which may be in geographically disperse locations.

[0078] The approved content may be in any format, e.g., text, audio, video, picture, multimedia, or PDF.

[0079] Various terms used herein have special meanings within the present technical field. Whether a particular term should be construed as such a "term of art," depends on the context in which that term is used. "Connected to," "in communication with," or other similar terms should generally be construed broadly to include situations both where communications and connections

are direct between referenced elements or through one or more intermediaries between the referenced elements, including through the Internet or some other communicating network. "Network," "system," "environment," and other similar terms generally refer to networked computing systems that embody one or more aspects of the present disclosure. These and other terms are to be construed in light of the context in which they are used in the present disclosure and as those terms would be understood by one of ordinary skill in the art would understand those terms in the disclosed context. The above definitions are not exclusive of other meanings that might be imparted to those terms based on the disclosed context.

[0080] Words of comparison, measurement, and timing such as "at the time," "equivalent," "during," "complete," and the like should be understood to mean "substantially at the time," "substantially equivalent," "substantially during," "substantially complete," etc., where "substantially" means that such comparisons, measurements, and timings are practicable to accomplish the implicitly or expressly stated desired result.

[0081] Additionally, the section headings herein are provided for consistency with the suggestions under 37 CFR 1.77 or otherwise to provide organizational cues. These headings shall not limit or characterize the invention(s) set out in any claims that may issue from this disclosure. Specifically and by way of example, although the headings refer to a "Technical Field," such claims should not be limited by the language chosen under this heading to describe the so-called technical field. Further, a description of a technology in the "Background" is not to be construed as an admission that technology is prior art to any invention(s) in this disclosure. Neither is the "Brief Summary" to be considered as a characterization of the invention(s) set forth in issued claims. Furthermore, any reference in this disclosure to "invention" in the singular should not be used to argue that there is only a single point of novelty in this disclosure.

Multiple inventions may be set forth according to the limitations of the multiple claims issuing from this disclosure, and such claims accordingly define the invention(s), and their equivalents, that are protected thereby. In all instances, the scope of such claims shall be considered on their own merits in light of this disclosure, but should not be constrained by the headings set forth herein.

CLAIMS

What is claimed is:

1. A machine-implemented method for generating approved electronic messages, the method comprising:

establishing a controlled content repository, the controlled content repository being securely and controllably accessed;

establishing an access protocol for the controlled content repository, whereby approved content is stored in the controlled content repository according to the access protocol and whereby the access protocol comprises at least one set of alignment rules for determining if a first piece of approved content within the controlled content repository can be made available to a first customer via an electronic message;

storing the approved content within the controlled content repository, the approved content further being accessible according to the established access protocol;

aligning the approved content within the controlled content repository with information from an information management system; and

providing an approved electronic message generating system which generates an electronic message according to the established access protocol for sending the first piece of approved content to the first customer when it is determined that the first piece of approved content can be made available to the first customer.

2. The method of claim 1, wherein the information management system is a customer relationship management (CRM) system or a closed loop marketing (CLM) system.

3. The method of claim 1, wherein the information from the information management system comprises information related to a customer profile, customer preferences or regulatory limitations.

4. The method of claim 1, further comprising: providing a template for the electronic message, wherein the template is pre-generated with approved content and has at least one customizable area.

5. The method of claim 1, further comprising: providing a hyperlink to the first piece of approved content and including the hyperlink in the electronic message.

6. The method of claim 5, further comprising: directing the first customer to a customer portal through which the first piece of approved content can be accessed.

7. The method of claim 6, wherein when the first piece of approved content is updated after the electronic message is generated, the first customer is automatically directed to the updated version.

8. The method of claim 1, further comprising: determining a domain the electronic message is delivered through.

9. The method of claim 1, further comprising: displaying a warning when it is determined that the first piece of approved content can't be made available to a second customer.

10. The method of claim 1, further comprising: verifying content in the generated electronic message just before releasing it to a server for sending the electronic message.

11. The method of claim 1, wherein the access protocol is based on regulatory restrictions.

12. The method of claim 11, wherein the access protocol is further based on customer profile information.

13. The method of claim 1, wherein the controlled content repository is adapted to provide development and distribution of promotional materials as related to regulatory restricted products.

14. The method of claim 13, wherein the regulatory restricted products are prescription drugs.

15. The method of claim 1, further comprising: a signature interface to register a customer's "opt in" input to receive the electronic message.

16. The method of claim 1, further comprising: reporting life cycle analytics relating to review cycles of the approved content.

17. The method of claim 1, further comprising: storing audit trail information relative to the controlled content repository whereby compliance with government regulations for access of such controlled content can be audited.

18. A system for generating approved electronic messages, comprising:

a controlled content repository for storing approved content according to an access protocol, wherein the access protocol is based on regulatory restrictions, and comprises at least one set of alignment rules for determining if a first piece of approved content within the controlled content repository can be made available to a first customer via an electronic message; and

an approved electronic message generator, coupled to the controlled content repository, coupled to an application over a network, and generating an electronic message according to the access protocol for sending a piece of approved content within the controlled content repository to an approved customer.

19, The system of claim 18, further comprising: a regulatory compliance engine for checking that the piece of approved content is in compliance with government regulations.

20. A non-transitory computer-readable medium for generating approved emails, the computer-readable medium comprising instructions that, when executed by a computer, cause the computer to:

access an information management system for customer information;

receive selection of a customer and a template;

determine if selected customer is approved to receive selected template according to an access protocol;

when the selected customer is approved to receive the selected template, construct an email template;

access a controlled content repository, according to the access protocol, for content that the selected customer is approved to access; and

generate an electronic message to the selected customer, which enables the selected customer to access content that the selected customer is approved to access,

wherein the access protocol is based on regulatory restrictions.

ABSTRACT

The approved email generation system described is capable of producing email communications between user and customer by using approved email templates and content that have been aligned with customer information regarding access to such content. Once the approved email has been generated, the content may be verified again for accuracy and validity before being delivered to the customer. When the customer accesses delivered content, the approved email generation system again verifies the content and allows the customer access to only the most current version of the content available. The system provides for control of the content of electronic communications to customers.

EX1003, Page 66

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Filer:	Brian Charles McCormack
Attorney Docket Number:	VEEVA-3

Filed as Small Entity

Track I Prioritized Examination - Nonprovisional Application 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
Request for Prioritized Examination	2817	1	2000	2000
Pages:				
Claims:				
Miscellaneous-Filing:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Publ. Fee- Early, Voluntary, or Normal	1504	1	0	0
PROCESSING FEE, EXCEPT PROV. APPLS.	2830	1	70	70

Petition:	
Patent-Appeals-and-Interference:	
Post-Allowance-and-Post-Issuance:	
Extension-of-Time:	
Miscellaneous:	
Total in USD ($)	**2800**

Electronic Acknowledgement Receipt

EFS ID:	18954780
Application Number:	14271134
International Application Number:	
Confirmation Number:	1557
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Customer Number:	23562
Filer:	Brian Charles McCormack
Filer Authorized By:	
Attorney Docket Number:	VEEVA-3
Receipt Date:	06-MAY-2014
Filing Date:	
Time Stamp:	17:53:40
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$2800
RAM confirmation Number	4447
Deposit Account	130480
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	TrackOne Request	Veeva_Track_One_Request.pdf	152574 0a09996172daa91e249a80a53f3e2c16ebfe3891	no	2
Warnings:					
Information:					
2	Application Data Sheet	Veeva_ADS.pdf	1565993 83be9edd1e92a33b8b2d94c87e1029d5b213a7f0	no	7
Warnings:					
Information:					
3	Drawings-only black and white line drawings	Veeva_Formal_Drawings.pdf	881998 2b9893a24ddc2adc841ea892bb3b1c90d4b544c3	no	18
Warnings:					
Information:					
4	Information Disclosure Statement (IDS) Form (SB08)	Veeva_IDS.pdf	613164 71c241711f8e6262e49ebc19a6ac40317de716f1	no	6
Warnings:					
Information:					
5	Non Patent Literature	NPL_Hedge_60261712.pdf	11611197 80f7953c2ff66a1e7a97979b6ff8948866bbbaf6	no	67
Warnings:					
Information:					
6	Non Patent Literature	NPL_Lockhart_60326776.pdf	1440233 8a3a13a44e434d5cd303067ce5eae94507e86d38	no	8
Warnings:					
Information:					
7	Oath or Declaration filed	signed_Declaration_Murphy.pdf	685887 32312710dda4a3b81dd4621ee9b973e30e547851	no	1
Warnings:					
Information:					
8		Veeva_specification_final_as_filed.pdf	151630 e118da7d6f1359dcc68ccf9096f8b52b751b8228	yes	32

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Specification	1	27
	Claims	28	31
	Abstract	32	32

Warnings:					
Information:					
9	Fee Worksheet (SB06)	fee-info.pdf	40175 636baef335d3e3537e87e8de5b2c7a56df04bfc3	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	17142851		

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.

PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Number: 14/271134 **Current Date** May 6, 2014

Filing Date: May 6, 2014 **Art Group:** NA

Inventor: Murphy **Confirmation No.:** 1557

Title: System and method for controlling electronic communications

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

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

Sir:

This communication hereby notifies the United States Patent and Trademark Office that small entity status is no longer applicable for the above-identified application. Applicant filed the above Track 1 application on May 6, 2014 and inadvertently identified the Applicant as a small entity. A new Application Data Sheet and remainder of fees are filed concurrently herewith on the same date.

Respectfully submitted,

/Brian C. McCormack/
Brian C. McCormack
Registration No. 36601
BAKER & McKENZIE LLP
2001 Ross Avenue, Suite 2300
Dallas, TX 75201

Electronic Patent Application Fee Transmittal

Application Number:	14271134
Filing Date:	
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Filer:	Brian Charles McCormack
Attorney Docket Number:	VEEVA-3

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
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Utility Examination Fee	2311	1	360	360
Request for Prioritized Examination	2817	1	2000	2000
Pages:				
Claims:				
Miscellaneous-Filing:				
PROCESSING FEE, EXCEPT PROV. APPLS.	2830	1	70	70

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**2800**

Electronic Acknowledgement Receipt

EFS ID:	18961526
Application Number:	14271134
International Application Number:	
Confirmation Number:	1557
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Customer Number:	23562
Filer:	Brian Charles McCormack
Filer Authorized By:	
Attorney Docket Number:	VEEVA-3
Receipt Date:	06-MAY-2014
Filing Date:	
Time Stamp:	22:22:04
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	Application Data Sheet	Veeva_ADS_Rev.pdf	1561377 d9ac65a5e743fe737e7a03de832a5799fb351f28	no	7

Warnings:	
Information:	

2	Miscellaneous Incoming Letter	Veeva-3_Change_of_Status.pdf	57914 c80990890527caaa6a6dd030484f273b70843812	no	1
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	38318 1ebd6a3a31a4b77775957620bed95af94d86d4fe	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	1657609	

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

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

PTO/AIA/14 (12-13)
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	VEEVA-3
	Application Number	
Title of Invention	System and method for controlling electronic communications	

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
	Timothy	S.	Murphy	

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

City	Berkeley	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	4637 Chabot Drive, Suite 210		
Address 2			
City	Pleasanton	State/Province	CA
Postal Code	94588	Country i	US

Inventor 2 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Brian	C.	Longo	

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

City	Danville	State/Province	CA	Country of Residence i	US

Mailing Address of Inventor:

Address 1	4637 Chabot Drive, Suite 210		
Address 2			
City	Pleasanton	State/Province	CA
Postal Code	94588	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).

PTO/AIA/14 (12-13)
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	VEEVA-3
	Application Number	
Title of Invention	System and method for controlling electronic communications	

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

Customer Number	23562		
Email Address		Add Email	Remove Email

Application Information:

Title of the Invention	System and method for controlling electronic communications		
Attorney Docket Number	VEEVA-3	**Small Entity Status Claimed**	☐
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	18	**Suggested Figure for Publication (if any)**	

Filing By Reference :

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

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

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

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	23562		

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	VEEVA-3
	Application Number	
Title of Invention	System and method for controlling electronic communications	

Domestic Benefit/National Stage Information:

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

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	Claims benefit of provisional	61/820029	2013-05-06
Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	Claims benefit of provisional	61/828034	2013-05-28

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	VEEVA-3
	Application Number	
Title of Invention	System and method for controlling electronic communications	

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

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.
NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Authorization 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.

PTO/AIA/14 (12-13)
Approved for use through 01/31/2014. OMB 0651-0032
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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	VEEVA-3
	Application Number	
Title of Invention	System and method for controlling electronic communications	

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	

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. [X]

Organization Name	VEEVA SYSTEMS INC.		
Mailing Address Information:			
Address 1	4637 Chabot Drive, Suite 210		
Address 2			
City	Pleasanton	**State/Province**	CA
Country [i]	US	Postal Code	94588
Phone Number		Fax Number	
Email Address			

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

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

Remove

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

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Application Data Sheet 37 CFR 1.76	Attorney Docket Number	VEEVA-3
	Application Number	
Title of Invention	System and method for controlling electronic communications	

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

Mailing Address Information For Assignee including Non-Applicant Assignee:

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

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button. 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	/Brian C. McCormack, Reg. No. 36601/			Date (YYYY-MM-DD)	2014-05-06
First Name	Brian C.	Last Name	McCormack	Registration Number	36601

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.

Document code: WFEE

United States Patent and Trademark Office
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MNGUYEN ADJ #00000002 Mailroom Dt: 05/06/2014
Seq No: 4447 Sales Acctg Dt: 05/07/2014 130480 14271134

01	FC : 4011	70.00 CR
02	FC : 2111	300.00 CR
03	FC : 2311	360.00 CR
04	FC : 2817	2000.00 CR
05	FC : 2830	70.00 CR

Document code: WFEE

United States Patent and Trademark Office
Sales Receipt for Accounting Date: 05/28/2014

SDUONG	SALE	#00000020	Mailroom Dt:	05/06/2014	130480	14271134	
		01	FC : 1011	280.00	DA		
		02	FC : 1111	600.00	DA		
		03	FC : 1311	720.00	DA		
		04	FC : 1830	140.00	DA		
		05	FC : 1817	4,000.00	DA		

PTO/AIA/01 (06-12)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	System and method for controlling electronic communications

As the below named inventor, I hereby declare that:

This declaration is directed to: ■ The attached application, or

☐ United States application or PCT international application number: _____

filed on _____

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

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

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

WARNING:

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

LEGAL NAME OF INVENTOR

Inventor: Brian C. Longo Date (Optional): 5/6/14

Signature: _____

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

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

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

Application Number:	14271134
Filing Date:	
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Filer:	Brian Charles McCormack/scarlett pereida
Attorney Docket Number:	VEEVA-3

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Late Filing Fee for Oath or Declaration	1051	1	140	140
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
			Total in USD ($)	**140**

Electronic Acknowledgement Receipt

EFS ID:	19022438
Application Number:	14271134
International Application Number:	
Confirmation Number:	1557
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Customer Number:	23562
Filer:	Brian Charles McCormack/scarlett pereida
Filer Authorized By:	Brian Charles McCormack
Attorney Docket Number:	VEEVA-3
Receipt Date:	13-MAY-2014
Filing Date:	
Time Stamp:	17:21:48
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$140
RAM confirmation Number	3770
Deposit Account	130480
Authorized User	

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

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Oath or Declaration filed	signed_Declaration-Longo.pdf	541907 571e1990fcbf1a664a0811844f2f2305802a31a1	no	2
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	29478 0e16811d2b8ec01e34f5fd6b777304e8acd9a0f6	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	571385		

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

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

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

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

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01 FC : 1051 140.00 DA

Document code: WFEE

United States Patent and Trademark Office
Sales Receipt for Accounting Date: 05/28/2014

SDUONG ADJ #00000003 Mailroom Dt: 05/13/2014
Seq No: 3770 Sales Acctg Dt: 05/14/2014 130480 14271134
01 FC : 1051 140.00 CR

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 14/271,134

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	280
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	600
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	720
TOTAL CLAIMS (37 CFR 1.16(i))	20 minus 20 =	*			OR	x 80 =	0.00
INDEPENDENT CLAIMS (37 CFR 1.16(h))	3 minus 3 =	*				x 420 =	0.00
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						0.00
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							0.00
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	1600

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)		RATE($)	ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
14/271,134	05/06/2014	2447	1740	VEEVA-3	20	3

CONFIRMATION NO. 1557

23562
BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201

FILING RECEIPT

OC000000068685232

Date Mailed: 05/29/2014

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)

Timothy S. Murphy, Berkeley, CA;
Brian C. Longo, Danville, CA;

Applicant(s)

VEEVA SYSTEMS INC., Pleasanton, CA

Assignment For Published Patent Application

VEEVA SYSTEMS INC., Pleasanton, CA

Power of Attorney: None

Domestic Priority data as claimed by applicant

This appln claims benefit of 61/820,029 05/06/2013
and claims benefit of 61/828,034 05/28/2013

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: 05/28/2014
The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/271,134**
Projected Publication Date: 11/06/2014

Non-Publication Request: No

Early Publication Request: No

Title

System and method for controlling electronic communications

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

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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.

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NOT GRANTED

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

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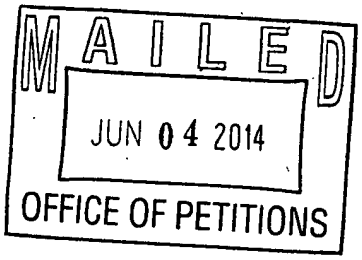

BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS TX 75201

Doc Code: TRACK1.GRANT

Decision Granting Request for Prioritized Examination (Track I or After RCE)	Application No.: 14/271,134

1. THE REQUEST FILED May 06, 2014 IS **GRANTED.**

The above-identified application has met the requirements for prioritized examination

A. ☒ for an original nonprovisional application (Track I).
B. ☐ for an application undergoing continued examination (RCE).

2. **The above-identified application will undergo prioritized examination.** The application will be accorded special status throughout its entire course of prosecution until one of the following occurs:

A. filing a **petition for extension of time** to extend the time period for filing a reply;
B. filing an **amendment to amend the application to contain more than four independent claims, more than thirty total claims**, or a multiple dependent claim;
C. filing a **request for continued examination**;
D. filing a notice of appeal;
E. filing a request for suspension of action;
F. mailing of a notice of allowance;
G. mailing of a final Office action;
H. completion of examination as defined in 37 CFR 41.102; or
I. abandonment of the application.

Telephone inquiries with regard to this decision should be directed to **Michelle R. Eason** at (571) 272-4231. In his/her absence, calls may be directed to Brian W. Brown at (571) 272-5338.

/Michelle R. Eason/
(*Signature*)

Paralegal Specialist, Office of Petitions
(Title)

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/271,134	05/06/2014	Timothy S. Murphy	VEEVA-3	1557

23562 7590 09/19/2014

BAKER & MCKENZIE LLP
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EXAMINER	
JEAN GILLES, JUDE	

ART UNIT	PAPER NUMBER
2447	

NOTIFICATION DATE	DELIVERY MODE
09/19/2014	ELECTRONIC

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

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

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

docket@bakermckenzie.com

Office Action Summary	Application No. 14/271,134	Applicant(s) MURPHY ET AL.	
	Examiner JUDE JEAN GILLES	Art Unit 2447	AIA (First Inventor to File) Status Yes

-- 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 *05/06/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

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

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

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

Disposition of Claims*

5)☒ Claim(s) *1-20* 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) *1-20* 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 *05/06/2014*.

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

4) ☐ Other: _____.

Detailed Action

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

2. This Office Action is in Reply to communication to 05/06/2014. Claimed priority is granted from Provisional Application 61820029, filed 05/06/2013.

Claim Rejections - 35 USC § 102

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

> A person shall be entitled to a patent unless –
>
> (a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

4. Claims 1-20 are rejected under 35 U.S.C. 102(a)(1) based upon a public use or sale or other public availability of the invention. Claims 1-20 are anticipated by Reed, US 2007/0073699 A1.

5. Reed teaches:

1. A machine-implemented method for generating approved electronic messages, the method comprising:

establishing a controlled content repository, the controlled content repository being securely and controllably accessed (0004, 0005, and 0018);

establishing an access protocol for the controlled content repository, whereby approved content is stored in the controlled content repository according to the access protocol

and whereby the access protocol comprises at least one set of alignment rules for determining if a first piece of approved content within the controlled content repository can be made available to a first customer via an electronic message (0024, 0050-0051);

storing the approved content within the controlled content repository, the approved content further being accessible according to the established access protocol;

aligning the approved content within the controlled content repository with information from an information management system (0018); and

providing an approved electronic message generating system which generates an electronic message according to the established access protocol for sending the first piece of approved content to the first customer when it is determined that the first piece of approved content can be made available to the first customer (figs. 6a-d; 0050-0051).

2.

The method of claim 1, wherein the information management system is a customer relationship management (CRM) system or a closed loop marketing (CLM) system (See the IDM of 0004 and 0025; fig. 1).

3.

The method of claim 1, wherein the information from the information management system comprises information related to a customer profile, customer preferences or regulatory limitations (0023).

4.

The method of claim 1, further comprising: providing a template for the electronic

message, wherein the template is pre-generated with approved content and has at least one customizable area (0050).

5.

The method of claim 1, further comprising: providing a hyperlink to the first piece of approved content and including the hyperlink in the electronic message (0029 and 0040).

6.

The method of claim 5, further comprising: directing the first customer to a customer portal through which the first piece of approved content can be accessed (fig. 1, 0023).

7.

The method of claim 6, wherein when the first piece of approved content is updated after the electronic message is generated, the first customer is automatically directed to the updated version (0050, 0053, 0064).

8.

The method of claim 1, further comprising: determining a domain the electronic message is delivered through (0030 and 0033).

9.

The method of claim 1, further comprising: displaying a warning when it is determined that the first piece of approved content can't be made available to a second customer (0050, 0053, 0064).

10. The method of claim 1, further comprising: verifying content in the generated

electronic message just before releasing it to a server for sending the electronic message (0050, 0053, 0064).

11. The method of claim 1, wherein the access protocol is based on regulatory restrictions (0023).

12. The method of claim 11, wherein the access protocol is further based on customer profile information (0023).

13. The method of claim 1, wherein the controlled content repository is adapted to provide development and distribution of promotional materials as related to regulatory restricted products (0037, 0042, and 0043).

14. The method of claim 13, wherein the regulatory restricted products are prescription drugs. The Examiner takes the Official notice that prescription drugs products in the context of the invention is well known in the art.

15. The method of claim 1, further comprising: a signature interface to register a customer's "opt in" input to receive the electronic message (0023).

16. The method of claim 1, further comprising: reporting life cycle analytics relating to review cycles of the approved content (0064).

17. The method of claim 1, further comprising: storing audit trail information relative to the controlled content repository whereby compliance with government regulations for access of such controlled content can be audited (0032).

18. A system for generating approved electronic messages, comprising:
a controlled content repository for storing approved content according to an access protocol, wherein the access protocol is based on regulatory restrictions, and comprises at least one set of alignment rules for determining if a first piece of approved content within the controlled content repository can be made available to a first customer via an electronic message; and an approved electronic message generator, coupled to the controlled content repository, coupled to an application over a network, and generating an electronic message according to the access protocol for sending a piece of approved content within the controlled content repository to an approved customer (0004, 0005, 0024, 0050-0051, and 0018).

19. The system of claim 18, further comprising: a regulatory compliance engine for checking that the piece of approved content is in compliance with government regulations. The Examiner takes the Official notice that prescription drugs products in the context of the invention is well known in the art.

20. A non-transitory computer-readable medium for generating approved emails, the computer-readable medium comprising instructions that, when executed by a computer, cause the computer to: access an information management system for customer information; receive selection of a customer and a template; determine if selected customer is approved to receive selected template according to an access protocol; when the selected customer is approved to receive the selected template, construct an email template; access a controlled content repository, according

to the access protocol, for content that the selected customer is approved to access; and generate an electronic message to the selected customer, which enables the selected customer to access content that the selected customer is approved to access, wherein the access protocol is based on regulatory restrictions (0004, 0005, 0024, 0050-005, and 0018).

Conclusion

6. ***This action is made Non-Final***. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Hwang, can be reached on **(571) 272-4036**. The fax phone number for the organization where this application or proceeding is assigned is **(571) 273-3301.**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

/Jude J Jean-Gilles/

Primary Examiner, Art Unit 2447

September 14, 2014

Notice of References Cited	Application/Control No. 14/271,134	Applicant(s)/Patent Under Reexamination MURPHY ET AL.	
	Examiner JUDE JEAN GILLES	Art Unit 2447	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2007/0073699	03-2007	Reed, Dana A.	707/009
*	B	US-2009/0240521	09-2009	Simons et al.	705/2
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

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

NON-PATENT DOCUMENTS

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

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

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14271134	MURPHY ET AL.
	Examiner	Art Unit
	JUDE JEAN GILLES	2447

CPC- SEARCHED		
Symbol	Date	Examiner
G06F 27/30; H04N21/4345	9/14/2014	JG

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner
(H04N21/4345 OR H04L65/4076 OR H04L12/2836 OR H04L29/06027).CPC.	9/14/2014	JG

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	206	9/14/2014	JG

SEARCH NOTES		
Search Notes	Date	Examiner
EAST text and claim seach	9/14/2014	JG

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

	/JUDE JEAN GILLES/ Primary Examiner.Art Unit 2447

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Field
PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	14/156,220
Filing Date	January 15, 2014
First Named Inventor	Myles Parker
Art Unit	2447
Examiner Name	Not Yet Assigned
Attorney Docket Number	93573-893031 P2010-03-07.1

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
	A1	5,870,149		02-09-1999	Comroe et al.	
	A2	7,251,500		07-31-2007	Nakagawa et al.	
	A3	7,496,281		02-24-2009	Ishida, Hideo	
	A4	7,567,207		07-28-2009	Angus, Allan Douglas	
	A5	7,606,799		10-20-2009	Kalinichenko et al.	
	A6	7,698,393		04-13-2010	Milstein et al.	
	A7	8,055,221		11-08-2011	Lee et al.	
	A8	8,307,392		11-06-2012	Ahanger et al.	
	A9	8,316,392		11-20-2012	Ahanger et al.	
	A10	8,320,939		11-27-2012	Vincent	
	A11	8,348,762		01-08-2013	Willis, Daniel	

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
	A12	2002-0059632	A1	05-16-2002	Link et al.	
	A13	2002-0092019	A1	07-11-2002	Marcus	
	A14	2002-0133393	A1	09-19-2002	Tatsumi	
	A15	2005-0204379	A1	09-15-2005	Yamamori	
	A16	2006-0084410	A1	04-20-2006	Sutaria et al.	
	A17	2006-0222328	A1	10-05-2006	Akahane, Takashi	
	A18	2008-0201731	A1	08-21-2008	Howcroft	
	A19	2010-0057466	A1	03-04-2010	Garg et al.	

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]
	B1	201215109	TW	A	04-01-2012	Dish Network L.L.C.		
	B2	2011/163019	WO	A1	29-12-2011	Dish Network L.L.C.		

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.J/

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Field

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

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	14/156,220
	Filing Date	January 15, 2014
	First Named Inventor	Myles Parker
	Art Unit	2447
	Examiner Name	Not Yet Assigned
	Attorney Docket Number	93573-893031 P2010-03-07.1

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, page(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	C1	International Search Report for PCT/US2011/040407 mailed on July 1, 2011, 4 pages.	

EXAMINER SIGNATURE			
Examiner Signature	/Jude Jean Gilles/ (09/16/2014)	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.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JJ/

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	"20070073699" and resource near30 (control$4 manag$5) near30 access$3	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:09
L2	2	"20070073699" and resource near30 (control$4 manag$5) same database	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:16
L5	32610	resource near30 (control$4 manag$5) same database	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:18
L6	17737	resource near30 (control$4 manag$5) near30 database	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:18
L7	2	"20070073699" and resource near30 (control$4 manag$5) near30 database	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:18
L8	1	"20070073699" and rules same access$3 same (user participant subscriber)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:20
L9	1	"20070073699" and stor$3 same rules same access$3 same (user participant subscriber)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:23
L10	1	"20070073699" and ("IDM")	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:32
L12	1	"20070073699" and customer	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:36
L13	1	"20070073699" and template	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:37

L16	1	"20070073699" and messag$3	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:39
L17	1	"20070073699" and messag$3 same approv$3	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:39
L20	1	"20070073699" and internet	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:40
L23	2	"20070073699" and resource same (email e-mail)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:45
L25	2	"20070073699" and (email e-mail)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:49
L29	2	"20070073699" and resources	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:58
L33	1	"20070073699" and messag$3 same (email e-mail)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 23:03
L34	1	"20070073699" and audit$3	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 23:03
L36	57	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol and ((avail$4 approv$3)near7 customer)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 23:23
L37	29	36 AND ((H04N21/4345 OR H04L65/4076 OR H04L12/2836 OR H04L29/06027).CPC.)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 23:31
S1	61645	((content messag3 data information) adj4 repository)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S2	523180	((content messag3 data information) adj4 (repository database))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11

S3	576624	((content messag3 data information) adj4 (repository database log))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S4	615982	((content messag3 data information) adj4 (repository database log queue))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S5	1015995	((content messag3 data information) adj4 (repository database host server))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S6	816	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:12
S8	164	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol and ((avail$4 approv$3)near7 (customer client member subscriber))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:14
S9	314	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol and ((avail$4 approv$3)near7 (user customer client member subscriber))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:14
S10	32	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol and ((avail$4 approv$3)near7 (user customer client member subscriber)) same (email e-mail (electronic adj3 messag$3))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:14
S11	4	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol same ((avail$4 approv$3)near7 (user customer client member subscriber)) same (email e-mail (electronic adj3 messag$3))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:15
S12	8	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol same ((avail$4 approv$3 select$3)near7 (user customer client member subscriber)) same (email e-mail (electronic adj3 messag$3))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:15
S13	1	approv$3 adj3 (email e-mail (electronic adj2 mail)) adj3 template	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 17:44
S14	0	approv$3 adj3 access$3 adj5 (content	US-	OR	ON	2014/09/14

		data information messag$3)same (email e-mail (electronic adj2 mail)) adj3 template	PGPUB; USPAT; EPO; DERWENT			18:15
S15	65	approv$3 adj3 access$3 adj5 (content data information messag$3)same (email e-mail (electronic adj2 mail))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:15
S16	0	approv$3 adj3 access$3 adj5 (content data information messag$3) near30 template same (email e-mail (electronic adj2 mail))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:16
S17	0	approv$3 adj3 access$3 adj5 (content data information messag$3) same template same (email e-mail (electronic adj2 mail))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:16
S18	27	(approv$3 control$4)adj3 access$3 adj5 (content data information messag$3) same template same (email e-mail (electronic adj2 mail))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:17
S19	12	(approv$3 control$4)adj3 access$3 adj5 (content data information messag$3) same template same (email e-mail (electronic adj2 mail)) and (profile preference)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:18
S20	12	(approv$3 control$4)adj3 access$3 adj5 (content data information messag$3) same template same (email e-mail (electronic adj2 mail)) and (profile preference) same (user customer member participant subscriber)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:26

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Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14271134	MURPHY ET AL.
	Examiner	**Art Unit**
	JUDE JEAN GILLES	2447

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

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

CLAIM		DATE								
Final	Original	09/14/2014								
	1	✓								
	2	✓								
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	4	✓								
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	17	✓								
	18	✓								
	19	✓								
	20	✓								

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Timothy S. Murphy et al.	**Group Art No.:**	2447
Serial No.:	14/271,134	**Examiner:**	Jean-Gilles, Jude
Filed:	May 6, 2014	**Atty. Docket No.:**	68277411-000003
For:	System and method for controlling electronic communications	**Confirmation No.:**	1557

Submitted via EFS

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

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/Brian C. McCormack, Reg. No. 36601/
Brian C. McCormack
Reg. Number 36,601
DATE OF SUBMISSION: OCTOBER 13, 2014
ELECTRONIC FILING (EFS)

RESPONSE TO NON-FINAL OFFICE ACTION

This paper is submitted in response to the Non-Final Office Action mailed September 19, 2014 ("Office Action"). Applicants thank Examiner Jean-Gilles for his time and courtesy during the interview conducted on Thursday, October 9, 2014. An interview summary under 37 CFR 1.133(b) is enclosed herewith. Applicants respectfully request reconsideration of the above-identified application in light of the accompanying remarks. If the Examiner has any questions or comments, Applicants invite the Examiner to contact the below-signed attorney of record via telephone. The three-month response deadline expires on December 19, 2014. Accordingly, this response is timely.

Listing of the Claims begins on page **2** of this paper.

Remarks and Arguments begin on page **8** of this paper.

Examiner Interview Summary begins on page **9** of this paper.

LISTING OF THE CLAIMS

Below is the entire set of pending claims pursuant to 37 C.F.R. § 1.121(c)(3)(i).

1. (Currently Amended) A machine-implemented method for generating approved electronic messages, the method comprising:

establishing a controlled content repository, the controlled content repository being securely and controllably accessed;

establishing an access protocol for the controlled content repository, whereby approved content is stored in the controlled content repository according to the access protocol and whereby the access protocol comprises at least one set of alignment rules for determining if a first item [[piece]] of approved content within the controlled content repository can be made available to a first customer via an electronic message;

storing the approved content within the controlled content repository, the approved content further being accessible according to the established access protocol;

aligning the approved content within the controlled content repository with information from an information management system; [[and]]

providing the first item of approved content for selection by a sender after a determination that the first item of approved content is authorized to be made available to the first customer in accordance with the at least one set of alignment rules; and

providing an approved electronic message generating system which generates an electronic message according to the established access protocol for sending the provided first item [[piece]] of approved content to the first customer ~~when it is determined that the first piece of approved content can be made available to the first customer~~.

2. (Original) The method of claim 1, wherein the information management system is a

customer relationship management (CRM) system or a closed loop marketing (CLM) system.

3. (Original) The method of claim 1, wherein the information from the information management system comprises information related to a customer profile, customer preferences or regulatory limitations.

4. (Original) The method of claim 1, further comprising: providing a template for the electronic message, wherein the template is pre-generated with approved content and has at least one customizable area.

5. (Currently Amended) The method of claim 1, further comprising: providing a hyperlink to the first item [[piece]] of approved content and including the hyperlink in the electronic message.

6. (Currently Amended) The method of claim 5, further comprising: directing the first customer to a customer portal through which the first item [[piece]] of approved content can be accessed.

7. (Currently Amended) The method of claim 6, wherein when the first item [[piece]] of approved content is updated after the electronic message is generated, the first customer is automatically directed to the updated version.

8. (Original) The method of claim 1, further comprising: determining a domain the electronic message is delivered through.

9. (Currently Amended) The method of claim 1, further comprising: displaying a warning when it is determined that the first item [[piece]] of approved content can't be made available to a second customer.

10. (Original) The method of claim 1, further comprising: verifying content in the generated electronic message just before releasing it to a server for sending the electronic message.

11. (Original) The method of claim 1, wherein the access protocol is based on regulatory restrictions.

12. (Original) The method of claim 11, wherein the access protocol is further based on customer profile information.

13. (Original) The method of claim 1, wherein the controlled content repository is adapted to provide development and distribution of promotional materials as related to regulatory restricted products.

14. (Original) The method of claim 13, wherein the regulatory restricted products are prescription drugs.

15. (Original) The method of claim 1, further comprising: a signature interface to register a customer's "opt in" input to receive the electronic message.

16. (Original) The method of claim 1, further comprising: reporting life cycle analytics relating to

review cycles of the approved content.

17. (Original) The method of claim 1, further comprising: storing audit trail information relative to the controlled content repository whereby compliance with government regulations for access of such controlled content can be audited.

18. (Currently Amended) A system for generating approved electronic messages, comprising:

a controlled content repository for storing approved content according to an access protocol, wherein the access protocol is based on regulatory restrictions, and comprises at least one set of alignment rules for determining if a first item [[piece]] of approved content within the controlled content repository can be made available to a first customer via an electronic message; and

an approved electronic message generator, coupled to the controlled content repository, coupled to an application over a network, providing the first item of approved content for selection by a sender after a determination that the first item of approved content is authorized to be made available to the first customer in accordance with the at least one set of alignment rules, and generating an electronic message according to the access protocol for sending the first item ~~a piece~~ of approved content within the controlled content repository to the first customer ~~an approved customer~~.

19. (Currently Amended) The system of claim 18, further comprising: a regulatory compliance engine for checking that the item [[piece]] of approved content is in compliance with government regulations.

20. (Currently Amended) A non-transitory computer-readable medium for generating approved emails, the computer-readable medium comprising instructions that, when executed by a computer, cause the computer to:

access an information management system for customer information;

receive selection of a customer and a template;

determine if a selected customer is approved to receive a selected template according to an access protocol;

~~when the selected customer is approved to receive the selected template,~~

provide the selected template for selection by a sender after a determination that the selected template is authorized to be made available to a selected customer;

construct an email template;

access a controlled content repository, according to the access protocol, for content that the selected customer is approved to access; and

generate an electronic message to the selected customer, which enables the selected customer to access content that the selected customer is approved to access,

wherein the access protocol is based on regulatory restrictions.

21. (New) The method of claim 1, further comprising:

receiving a selection by a sender for the first item of approved content after the determination that the first item of approved content is authorized to be made available to a first customer.

22. (New) The method of claim 1, wherein the electronic message is generated at least in part based on a selection by a sender for the first item of approved content.

23. (New) The method of claim 1, wherein the determination that the first item of approved content is authorized to be made available to a first customer is based at least in part on regulatory limitations for a regulatory restricted product.

24. (New) The method of claim 1, wherein the determination that the first item of approved content is authorized to be made available to a first customer is based at least in part on a customer profile, customer preferences, and an "opt-in" customer selection.

25. (New) The method of claim 1, further comprising:

sending the electronic message to the first customer.

REMARKS AND ARGUMENTS

The status of the claims is set forth in the above listing of claims. Claims 1-20 were originally filed. In the present response, claims 1, 5-7, 9, and 18-20 are amended. New claims 21-25 are added. Support for the amendments and the new claims can be found in the specification at least at ¶¶ [0029], [0032], [0048]-[0055]. No new matter is introduced. Claims 1-25 remain pending in the present application.

In the Office Action, claims 1-20 were rejected under 35 U.S.C. § 102(a)(1) as allegedly anticipated by U.S. Publication No. 2007/0073699 to Reed ("*Reed*"). Applicants respectfully disagree and request reconsideration in view of the following remarks and arguments.

Independent claim 1 as amended recites "***providing the first item of approved content for selection by a sender after a determination that the first item of approved content is authorized to be made available to the first customer in accordance with the at least one set of alignment rules.***" Independent claims 18 and 20 as amended recite similar language. Applicants respectfully submit that at least these features are wholly missing from the disclosure of *Reed*. Indeed, during the Examiner Interview conducted on October 9, 2014, Applicants and Examiner Jean-Gilles agreed that the above claim features would overcome at least *Reed*. Accordingly, independent claims 1, 18, and 20 are patentably distinct over *Reed*.

Dependent claims 2-17, 19, and 21-25 depend from independent claims 1 and 18. Thus, dependent claims 2-17, 19, and 21-25 include all the features of their respective independent claims. Accordingly, dependent claims 2-17, 19, and 21-25 are also patentably distinct over *Reed*. Applicants respectfully request withdrawal of the pending rejection and a Notice of Allowance.

EXAMINER INTERVIEW SUMMARY

The present Examiner Interview Summary is provided in accordance with MPEP § 713.04. The Examiner Interview was held on October 9, 2014. Participants for the Examiner Interview include Examiner Jude Jean-Gilles and Attorneys for Applicants, Brian C. McCormack, Josh Faddis, Lin Deng, and Yahn-Lin (Franklin) Chu. The interview commenced with a discussion of the perceived distinctions between the pending claims and the cited reference. Potential claim amendments to expedite prosecution were discussed. Examiner Jude Jean-Gilles indicated that the proposed claim amendments would overcome the cited reference and advance prosecution. Applicants again thank Examiner Jude Jean-Gilles for his time and courtesy during the interview and welcome additional telephone calls with the below-signed attorney of record if such would further expedite prosecution.

CONCLUSION

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and remarks. If it is determined that additional fees are due, or if an overcharge has occurred, please charge or credit deposit account no. 13-0480, referencing Attorney Docket No. 68277411-000003.

Respectfully submitted,

Date: October 13, 2014

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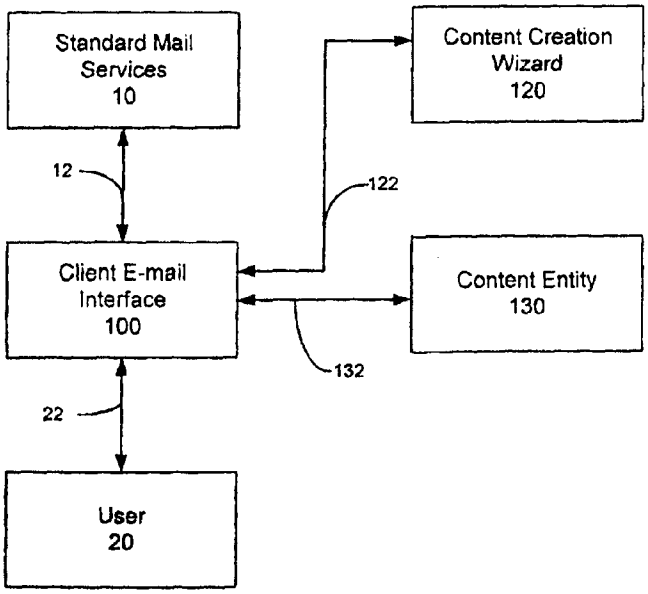
(54) Title: SYSTEM AND METHOD OF AUGMENTED MESSAGING TOOLKIT



(57) Abstract

The invention provides an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user. The toolkit includes a client e-mail interface, a content creation wizard and a content entity.

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SYSTEM AND METHOD OF AUGMENTED MESSAGING TOOLKIT

Technical field

This invention relates to e-mail and other messaging user tools.

Background Art

E-mail and messaging systems have been in use for many years. E-mail specifically, and messaging in general, has proven to be a remarkably useful communication mechanism for a wide diversity of users facing various communication needs.

E-mail began as the ability to transfer plain text from a user to one or more other users. It has evolved to typically include the ability to embed html (Hyper Text Markup Language) commands and the ability to attach files. It is now possible to apply encryption algorithms in a fairly seamless fashion to the contents of e-mail messages. It is further possible to include signature files providing a uniform "signature" which can include stating the user's name, position, company information, contact information etc.. Contemporary e-mail services support maintaining address lists within an "address book", so that specific groups of users may be targeted by a single e-mail broadcast to every user in the address list.

Figure **1** depicts a typical prior art e-mail tool **30** interacting **34** with standard mail services **10** and interacting **32** with a user **20**. Standard mail services **10** provide the transfer of messages **34** between e-mail tool **30** operated **32** by users **20**. These messages are created, viewed and their storage managed by e-mail tools **30** under the control **32** of users **20**.

E-mail tool **30** performs the generation of the message provided **34** as a message to the standard mail service **10**. The embedding of text, html, signature files and attachments are all performed by standard e-mail tools **30**

to create raw messages. Once created, these raw messages may be further encrypted by e-mail tool **30** before being sent **34** to standard mail services **10**.

E-mail tool **30** can often perform a number of tasks to process a received message **34** from standard mail services **10**. The received message may be encrypted and e-mail tool **30** may need to decrypt the received message to create a viewable message. The viewable message may further contain html code, which the e-mail tool **30** will interpret to present the hypertext in a viewable manner. The viewable message attachments are presented in some fashion by the e-mail tool **30**. Upon user **20** stimulus, e-mail tool **30** may detach the attachments as files in the local file management of the computer running the e-mail tool **30**.

These innovations have been significant, but there remain several problems and needs which are not addressed in the prior art. Many users belong to multiple affinity groups and would like to share embedded information regarding those affinity groups. One engineer may be a devoted science fiction fan, specifically an X-files fan. Hyper text links to web-sites for fans would be something such an individual might well wish to include in e-mail to other fans. This same engineer may be an active participant in a professional organization such as the Institute for Electrical and Electronic Engineers (IEEE) and a member of local chapters of several professional societies within the IEEE, say the Communications Society and the Antenna Society. Hypertext to favorite web-sites for local chapter information, or a schedule of upcoming events is desirable to keep other members up to date. This same individual may be a sports fan, seriously dedicated to specific teams or players. Inclusion of sports related information, recent scores or photos of teams or players is desirable.

Contemporary messaging services support this individual being able to target these distinct interests using difference address lists. However contemporary messaging services provide no help in tailoring the content of messages aimed at these distinct interest groups. The user must laboriously develop

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html code to then be embedded into the text of the message to achieve anything other than an attached file or embedded link. Getting the graphical information to fit is a time-consuming job of matching the pixel sizing of a frame with the html code. What is needed is a tool or toolkit providing messaging users with the ability to customize content layouts, which could be used for a variety of messages.

Many companies expend significant revenue and effort to provide messaging services to their employees and affiliates. This effort does not help a company's marketing and sales effort, as the messages contain little, if anything, related to what the company deems its marketing and/or sales message. What is needed is a mechanism whereby a collection of targeted content templates could be uniformly made available to employees and affiliates to embed not only the personal e-mail message but also the overall corporate message at the same time.

Many advertisers are discovering electronic commerce to be an effective way to market products. Utilizing entertainment fan clubs, sporting team, social, institutional, and professional affiliations in personal e-mails to disseminate an advertising message in a coherent, measurable manner is not possible with the prior art. What is needed is a coherent, measurable manner to disseminate an advertising message using personal e-mail based upon using entertainment, sporting, social, institutional and professional affiliations.

Many advertisers desire to form a mutual branding of trademarked or copyrighted products, images, logos and the like to create a co-branded image. The prior art provides no way for this to be carried out in an efficient manner for advertising embedding content with e-mail. Further, there is no way to monitor licensing fees based upon usage of such agreed upon content. What is needed is a mechanism supporting co-branded advertising embedded content in personal e-mails.

Disclosure of the invention

Aspects of this invention solve all the disclosed problems and unanswered needs of the prior art.

One aspect of the invention provides an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from the client user. The toolkit includes a client e-mail interface, a content creation wizard and a content entity.

The client e-mail interface couples the client user to the standard mail service. The client e-mail interface supports client user selectable entities. The content creation wizard couples to the client e-mail interface as one of the client user selectable entities. The content library couples to the client e-mail interface as one of the client user selectable entities. The content library contains at least one content entity coupled to the client e-mail interface as one of the client user selectable entities.

The client user selects the content creation wizard coupled to the client e-mail interface to create a content e-mail template containing at least one client user selectable content site within the content e-mail template. The client user selects a first selectable content entity and a first content site within the content e-mail template to create the content e-mail template with the first content entity at the first content site. The client user uses the content e-mail template to create a first e-mail message sent by the standard mail service from the client user.

This aspect of the invention advantageously provides for the simplified creation of e-mail templates using the content creation wizards with inserted selectable content for messages to be sent to a standard mail service.

Certain embodiments include user created selectable content entities. A further embodiment includes only user created selectable content entities. These embodiments are advantageous for individuals placing classified ads and posting announcements, such as baby pictures, invitations and surveys.

A further embodiment incorporates content libraries including selectable content entities. These provide a user-friendly way to organize and make available many content entities.

A further embodiment incorporates customizable content libraries customized by the client user. Embodiments offer the client user increased flexibility and control of their content.

A further embodiment incorporates an administrator, which is sent a subscription message by a client user wishing to subscribe to the augmented mail service. The administrator receives the subscription message and responds to the message. The administrator response includes creating the content creation wizard, content library and client e-mail interface with content creation wizard and content library. The administrator provides a mechanism by which multiple user may be accommodated in terms of setting up accounts, initializing content creation wizards, content libraries and client e-mail interfaces.

A further embodiment incorporates a database under the control of the administrator and from which the content creation wizard, content libraries and client e-mail interface are created upon a client user subscribing. This is advantageous in ordering the initializing of a user subscription.

A further embodiment incorporates a tracking module coupled to the database and responding to commands from the administrator. The client e-mail interface further records with the database every instance of using a content creation wizard template and/or selectable content entity to create a message sent to the standard mail services. The tracking module, responding to administrator requests, queries the database regarding database records of usage and generates a report message to the administrator. This is advantageous in providing exact usage information to content providers such as advertisers.

Another aspect of the invention includes a client-server system for a network supporting an augmented messaging toolkit. The augmented messaging toolkit includes a client interface with a selectable content creation wizard a selectable content entity. The client interface uses a standard mail service module. The user operates a client computer communicating via the network to a server system.

The client computer executes program code segments. These program code segments implement the client interface, selection of the selectable content creation wizard, and selection of the selectable content entity.

The server system executes program code segments. These program code segments implement the standard mail service module, the selectable content creation wizard, and the selectable content entity.

This system advantageously provides content creation wizards and selectable content entity capabilities in an augmented messaging toolkit to clients distributed throughout a network. Such capabilities are distributed without any physical delivery, no boxes, CD's, etc. need be received to effect operation.

An embodiment includes use of a web browser on the client computer to execute the client interface. This is advantageous in that many people are already familiar with the basic user interface aspects of such an interface.

A further embodiment includes using a web page to subscribe. Another further embodiment includes using a web page in the client interface. A further embodiment includes the client interface web page originating from the server system. Another further embodiment includes access to the client interface web page being enabled from the server system. Another further embodiment includes the program code segments for the client interface being enabled by the web browser accessing the client interface web page. These embodiments are advantageous in providing consistent, readily accessible, high bandwidth capable avenues for client server interaction in these activities.

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Another embodiment includes the server system containing a database, which records client subscriptions. A further embodiment includes the client interface recording all sent e-mail in the database. A further embodiment records the click-through from the client interface to the database. These embodiments are advantageous in providing marketing data on which advertisements are being used by which clients, where are they being sent, and the nature of the follow-up activities (or click-through) to these advertisements.

Another further embodiment includes an administrator commanding a tracking module which in turn accesses the database in response to administrator commands to build reports. This embodiment is advantageous in providing the collected marketing data in an organized fashion and also providing a specific point of access to this valuable source of marketing and confidential information. A further embodiment includes the database containing a database engine controlling a mass storage system. This embodiment provides optimal database throughput to handle large numbers of client generated database accesses.

Another further embodiment includes an application server engine executing at least one of the program code segments of the invention of the server system. A further embodiment includes an application server engine executing all of the application program code segments except possibly the standard mail services in the server system. This is advantageous in providing a platform for the program code segments to execute in response to potentially large numbers of tasks large numbers of client would need for support. An alternative embodiment includes an application server engine executing content creation wizard and content entity program code segments. This is advantageous in that it is a simple version of the system suitable for minimal requirement applications.

Another aspect of the invention includes a method of operating a distributed content system controlled by an administrator based upon an agreement by a

first provider and a second provider to advertise a shared content to a collection of distributed content agents.

The first provider provides a first content and the second provider provides a second content. The first provider and second provider agree to advertise shared content containing the first content and the second content. Each of the distributed content agents uses at least one content entity and is in communication with the distributed content system.

The method includes the administrator receives message signaling the agreement and the administrator commands the distributed content system to send the shared content to the collection of distributed content agents to be used as a content entity.

This method advantageously enables content providers to carry out an agreement to share a co-branded advertising content being distributed to a collection of distributed content agents by recording the transaction with the administrator. The administrator then directs the distributed content system to carry out distributing the shared content and commanding the use of the shared content.

These and other advantages of the present invention will become apparent upon reading the following detailed descriptions and studying the various figures of the drawings.

Brief Description of the Drawings

Figure **1** depicts a typical prior art e-mail tool interacting with standard mail services and a user;

Figure **2** depicts a system flow diagram using a client e-mail interface **100** a content creation wizard **120** and a content entity **130** in accordance with one aspect of the invention;

Figure **3A** depicts a user operational flowchart in accordance with an aspect of the invention;

Figure **3B** depicts a software operational flowchart supporting the user operation flowchart of Figure **3A** in accordance with an aspect of the invention;

Figure **3C** depicts a detail flowchart of operation **312** of Figure **3B** supporting the user operation flowchart of Figure **3A** in accordance with an aspect of the invention;

Figure **4** depicts a refinement of the system flow diagram of Figure **2** using a client e-mail interface **100** a content creation wizard **120** and a content library **134** including a content entity **130** in accordance with one aspect of the invention;

Figure **5A** depicts a user operational flowchart for selecting a content library and a selectable content entity within the selected content library in accordance with an aspect of the invention;

Figure **5B** depicts a software operational flowchart supporting the user operation flowchart of Figure **5A** for selecting a content library and a selectable content entity within the selected content library in accordance with an aspect of the invention;

Figure **6** depicts a refinement of the system flow diagram of Figure **4** incorporating an administrator **150** as well as a client e-mail interface **100** a content creation wizard **120** and a content library **134** including a content entity **130** in accordance with one aspect of the invention;

Figure **7A** depicts a user operational flowchart supporting a user **20** subscribing **24** to the augmented messaging toolkit as discussed in Figure **6** in accordance with an aspect of the invention;

Figure **7B** depicts an administrator **150** operational flowchart receiving and responding to a subscription message **24** from user **20** as discussed in Figure **6** in accordance with an aspect of the invention;

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Figure **7C** depicts a detail flowchart of administrator operation **408** of Figure **7B** supporting the response to the received subscription message from client user **20** in accordance with an aspect of the invention;

Figure **7D** depicts an operational flowchart supporting the client user operations of Figure **7A** in which a user **20** subscribing **24** to the augmented messaging toolkit as discussed in Figure **6** in accordance with an aspect of the invention;

Figure **7E** depicts an operational flowchart supporting the operations of Figure **7B** in which an administrator **150** operational flowchart receiving and responding to a subscription message **24** from user **20** as discussed in Figure **6** in accordance with an aspect of the invention;

Figure **7F** depicts a detail flowchart of administrator operation **508** of Figure **7E** supporting the response to the received subscription message from client user **20** in accordance with an aspect of the invention;

Figure **8** depicts a refinement of the system flow diagram of Figure **6** incorporating content creation wizard reservoir **170** and content meta-library **160** as well as administrator **150**, client e-mail interface **100**, a content creation wizard **120** and a content library **134** including a content entity **130** in accordance with one aspect of the invention;

Figure **9A** depicts administrator operations maintaining a content creation wizard reservoir in accordance with an aspect of the invention;

Figure **9B** depicts a detail flowchart of operation **432** of Figure **7C** where creating a content creation wizard uses the content creation wizard reservoir in accordance with an aspect of the invention;

Figure **9C** depicts operations supporting administrator operations of Figure **9A** maintaining a content creation wizard reservoir in accordance with an aspect of the invention;

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Figure **9D** depicts a detail flowchart of operation **532** of Figure **7F** supporting the creation of a content creation wizard using the content creation wizard reservoir in accordance with an aspect of the invention;

Figure **9E** depicts administrator operations maintaining a content meta-library in accordance with an aspect of the invention;

Figure **9F** depicts detail flowchart of operation **436** of Figure **7C** using the content meta-library to create the selectable content library in accordance with an aspect of the invention;

Figure **9G** depicts a detail flowchart of operation **616** of Figure **9F** supporting either inserting or coupling the first content entity in accordance with an aspect of the invention.

Figure **9H** depicts an operational flowchart supporting administrator operations of Figure **9E** maintaining a content meta-library in accordance with an aspect of the invention;

Figure **9I** depicts detail flowchart of operation **536** of Figure **7F** using the content meta-library to create the selectable content library in accordance with an aspect of the invention;

Figure **9J** depicts a detail flowchart of operation **716** of Figure **9I** supporting either inserting or coupling the first content entity in accordance with an aspect of the invention;

Figure **9K** depicts a detail flowchart of operation **250** of Figure **7A** depicting accessing a subscription web page in accordance with some embodiments of the invention;

Figure **9L** depicts a detail flowchart of operation **350** of Figure **7D** depicting accessing a subscription web page in accordance with some embodiments of the invention;

Figure **9M** depicts a flowchart of client e-mail interface **100** coupling **12** standard mail services **10** and user **20** including accessing a client interface web page in accordance with an aspect of the invention;

Figure **9N** depicts an operational flowchart of client e-mail interface **100** coupling **12** standard mail services **10** and user **20** including supporting accessing a client interface web page in accordance with an aspect of the invention;

Figure **10** depicts a refinement of the system flow diagram of Figure **8** incorporating a data base **180** supporting creation wizard reservoir **170** and content meta-library **160**, administrator **150**, client e-mail interface **100**, a content creation wizard **120** and a content library **134** including a content entity **130** in accordance with one aspect of the invention;

Figure **11A** depicts a detail flowchart of administrator operation **408** of Figure **7B** in which the administrator responds to a subscription message by recording a subscription record in the database based upon the subscription message in accordance with an aspect of the invention;

Figure **11B** depicts a detail flowchart of operation **508** of Figure **7E** in which supporting the administrator responding to a subscription message for recording a subscription record in the database based upon the subscription message in accordance with an aspect of the invention;

Figure **11C** depicts the client e-mail interface recording a first e-mail message in the database whenever the user sends the first e-mail message to the standard mail service in accordance with an aspect of the invention;

Figure **11D** depicts supporting the client e-mail interface recording a first e-mail message in the database whenever the user sends the first e-mail message to the standard mail service in accordance with an aspect of the invention;

Figure **12** depicts a refinement of the system flow diagram of Figure **10** incorporating a tracking and gathering data module **190** as well as a data base **180** supporting creation wizard reservoir **170** and content meta-library **160**, administrator **150**, client e-mail interface **100**, a content creation wizard **120** and a content library **134** including a content entity **130** in accordance with one aspect of the invention;

Figure **13A** depicts a flowchart of administrator **150** operations supporting sending a report request to the tracking module **190** and receiving a report message from tracking module **190** in accordance with an aspect of the invention;

Figure **13B** depicts a flowchart of tracking module **190** operations supporting receiving a report request from the administrator **150**, accessing **194** database **180** and sending a report message to administrator **150** in accordance with an aspect of the invention;

Figure **13C** depicts an operational flowchart supporting administrator **150** operations for sending a report request to the tracking module **190** and receiving a report message from tracking module **190** in accordance with an aspect of the invention;

Figure **13D** depicts an operational flowchart supporting tracking module **190** operations for receiving a report request from the administrator **150**, accessing **194** database **180** and sending a report message to administrator **150** in accordance with an aspect of the invention;

Figure **14** depicts schematically the capabilities of the various embodiments and their advantages compared with standard e-mail tools **20**;

Figure **15** depicts client computer **26** communicating **1002** with server system **1000** with client computer **26** executing program code segments and with server system executing program code segments in accordance with an aspect of the invention;

Figure **16** depicts a refinement of Figure **15**, depicting client computer **26** communicating **1002** with server system **1000** communicating **2002** application server engine **2000**, with client computer **26** executing program code segments, with server system executing program code segments and with application server engine executing program code segments in accordance with an aspect of the invention;

Figure **17** depicts a refinement of Figure **15**, depicting client computer **26** communicating **1002** with server system **1000**, with client computer **26** executing program code segments including executing a web browser, which in turn executes the client e-mail interface program code segment and with server system executing program code segments in accordance with an aspect of the invention;

Figure **18** depicts a refinement of Figure **17**, depicting client computer **26** communicating **1002** with server system **1000**, with client computer **26** executing program code segments, with server system executing program code segments including maintaining the client e-mail interface in accordance with an aspect of the invention;

Figure **19** depicts a refinement of Figure **18**, depicting client computer **26** communicating **1002** with server system **1000**, with client computer **26** executing program code segments, with server system executing program code segments including client interface web page in accordance with an aspect of the invention;

Figure **20** depicts a refinement of Figure **19**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000**, with client computer **26** executing program code segments, with server system executing program code segments in accordance with an aspect of the invention;

Figure **21** depicts a refinement of Figure **20**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000**

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further containing database engine **3100** coupled **3102** to mass storage system **3200**, with client computer **26** executing program code segments, with server system executing program code segments in accordance with an aspect of the invention;

Figure **22** depicts a refinement of Figures **21** and **16**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000** further containing database engine **3100** coupled **3102** to mass storage system **3200**, with client computer **26** executing program code segments, with server system executing program code segments and with application server engine executing program code segments in accordance with an aspect of the invention;

Figure **23** depicts a refinement of Figure **22**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000** further containing database engine **3100** coupled **3102** to mass storage system **3200** further coupled **3302** to backup system **3300**, with client computer **26** executing program code segments, with server system executing program code segments and with application server engine executing program code segments in accordance with an aspect of the invention;

Figure **24** depicts a refinement of Figure **21**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000** further containing database engine **3100** coupled **3102** to mass storage system **3200** further coupled **3302** to backup system **3300**, with client computer **26** executing program code segments, with server system executing program code segments in accordance with an aspect of the invention;

Figure **25** depicts a refinement of Figure **24**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000** further containing database engine **3100** coupled **3102** to mass storage system **3200** further coupled **3302** to backup system **3300**, with client computer **26** executing program code segments, with server system executing

program code segments including several additional or altered program codes segments in accordance with an aspect of the invention;

Figure **26** depicts a refinement of Figures **24** and **22**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000** further containing database engine **3100** coupled **3102** to mass storage system **3200** further coupled **3302** to backup system **3300**, with client computer **26** executing program code segments, with server system executing program code segments and with application server engine executing program code segments including several additional or altered program codes segments in accordance with an aspect of the invention;

Figure **27** depicts a systems block diagram of the interactions between two intellectual property providers sharing intellectual property content using an administrator of a distributed content system to control distribution of the shared intellectual property content to distributed content agents in accordance with an aspect of the invention;

Figure **28** depicts a user view of a client user login and subscription web page in accordance with an aspect of the invention;

Figure **29A** depicts a user view of a client e-mail interface web page in accordance with an aspect of the invention;

Figure **29B** depicts a user view of a client e-mail interface in accordance with an aspect of the invention;

Figure **30** depicts a user view of an e-mail composition page showing letterheads (content creation wizards) and selectable content in accordance with an aspect of the invention;

Figure **31** depicts a user view of a client e-mail interface web page viewing a content rich message in accordance with an aspect of the invention;

Figure **32** depicts a user view of an administrator report request form in accordance with an aspect of the invention;

Figure **33** depicts a user view of a client e-mail interface web page for a consumer affiliated with a fan club in accordance with an aspect of the invention;

Figure **34** depicts a user view of a client e-mail interface web page for a consumer affiliated with a special interest group in accordance with an aspect of the invention;

Figure **35** depicts a user view of a client e-mail interface web page for a consumer affiliated with a business concern in accordance with an aspect of the invention;

Figure **36** depicts a user view of a client e-mail interface web page for a consumer affiliated with a family in accordance with an aspect of the invention;

Figure **37** depicts a user view of a client e-mail interface web page for a consumer affiliated with business in accordance with an aspect of the invention;

Figure **38** depicts a user view of an e-mail composition page showing letterheads (content creation wizards) and selectable content and further possessing controls for display of stock tickers and site links and displaying stock ticker and site link in accordance with an aspect of the invention;

Figure **39** depicts a user view of an e-mail composition page showing letterheads (content creation wizards) and selectable content and further possessing controls for display of stock tickers and site links and not displaying stock ticker and site link in accordance with an aspect of the invention;

Figure **40** depicts a user view of a site link editor in accordance with an aspect of the invention;

Figure **41** depicts a user view of a survey editor in accordance with an aspect of the invention;

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Figure **42** depicts a user view of a survey editor editing a survey in accordance with an aspect of the invention;

Figure **43** depicts a user view of a site link editor adding a new site link in accordance with an aspect of the invention;

Figure **44** depicts a user view of a site link editor editing a new site link in accordance with an aspect of the invention;

Figure **45** depicts a user view of a site link editor in accordance with an aspect of the invention;

Figure **46** depicts a user view of an administrator interface web page in accordance with an aspect of the invention;

Figure **47** depicts a user view of an administrator interface web page for controlling user access to the augmented toolkit in accordance with an aspect of the invention;

Figure **48** depicts a portion of the background controls indicating selection of no background image library;

Figure **49** depicts a portion of the background controls indicating selection of the drink background image library previewed showing the drink advertisement;

Figure **50** depicts a portion of the background controls indicating selection of a background to be seen in the composition view, when it will start being used and when it will stop being used;

Figure **51** depicts a portion of the background controls indicating selection of a background to be seen in the composition view and the time intervals between its use; and

Figure **52** depicts a portion of the background controls indicating selection of a background to be seen in the composition view and the number of times it is to be used before the default background will again be used.

Detailed Description of the Invention

Figure **1** depicts a typical prior art e-mail tool interacting with standard mail services and a user previously discussed in the background.

Figure **2** depicts a system flow diagram using a client e-mail interface **100** a content creation wizard **120** and a content entity **130** in accordance with one aspect of the invention.

User **20** is coupled **22** with client e-mail interface **100**, which interacts **12** with standard mail services **10**. Client e-mail interface **100** is coupled **122** to content creation wizard **120** as a user selectable entity, so that user **20** can select the content creation wizard **120** to create a message template. Client e-mail interface **100** is coupled **132** to content entity **130** as a user selectable entity, which further contains at least one user selectable content entity.

In certain embodiments, client e-mail interface **100** is a computer program executing on a client computer operated by user **20**. In certain embodiments, client e-mail interface is a web page accessed by user **20** using a browser. In certain embodiments, client e-mail interface **100** executes within a browser as a collection of program code segments incorporating a portable computing language. In certain further embodiments, the portable computing language is related to JAVA. In other further embodiments, the portable computing language is related to HTML. In other further embodiments, the portable computing language is related to VRML. In other further embodiments, the program code segments executed within the browser to implement the client e-mail interface **100** may be from more than one portable computing language. In certain embodiments, at least one of the program code segments executed within the browser to implement the client e-mail interface **100** may be executable native code.

In certain embodiments, there are multiple content creation wizards **120**. In certain embodiments, user access to one or more content creation wizards may be organized in collections of content creation wizards. In certain further

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embodiments, these collections may be accessed as folders or directories. In certain further embodiments, the folders or directories may be nested to create folders within folders or directories within directories.

Certain embodiments include user created selectable content entities. A further embodiment includes only user created selectable content entities. These embodiments are advantageous for individuals placing classified ads and posting announcements, such as baby pictures, invitations and surveys.

Figure **3A** depicts a user operational flowchart in accordance with an aspect of the invention.

User operation **200** starts the usage of this flowchart. Arrow **202** directs the usage flow from user operation **200** to user operation **204**. User operation **204** performs the client user selecting the content creation wizard coupled to the client e-mail interface creating a content e-mail template containing at least one client user selectable content site within the content e-mail template. Arrow **206** directs usage from user operation **204** to user operation **208**. User operation **208** terminates the usage of this flowchart.

Arrow **210** directs the usage flow from user operation **200** to user operation **212**. User operation **212** performs the client user selecting a first of the client user selectable content entities and the client user selecting a first of the client user selectable content sites within the content e-mail template to create the content e-mail template with the first content entity at the first content site. Arrow **214** directs usage from user operation **212** to user operation **208**. User operation **208** terminates the usage of this flowchart.

Arrow **220** directs the usage flow from user operation **200** to user operation **222**. User operation **222** performs the client user using the content e-mail template to create a first e-mail message sent by the standard mail service from the client user. Arrow **224** directs usage from user operation **222** to user operation **208**. User operation **208** terminates the usage of this flowchart.

Figure **3B** depicts a software operational flowchart supporting the user operational flowchart in Figure **3A** in accordance with an aspect of the invention.

Operation **300** starts the operations of this flowchart. Arrow **302** directs the flow of execution from operation **300** to operation **304**. Operation **304** performs determining the client user selection of the content creation wizard coupled to the client e-mail interface to create a content e-mail template containing at least one client user selectable content site within the content e-mail template. Arrow **306** directs execution from operation **304** to operation **308**. Operation **308** terminates the operations of this flowchart.

Arrow **310** directs the flow of execution from starting operation **300** to operation **312**. Operation **312** performs determining the client user selection of a first of the client user selectable content entities and determining the client user selection of a first of the client user selectable content sites within the content e-mail template to create the content e-mail template with the first content entity at the first content site. Arrow **314** directs execution from operation **312** to operation **308**. Operation **308** terminates the operations of this flowchart.

Arrow **320** directs the flow of execution from starting operation **300** to operation **322**. Operation **322** performs supporting the client user using the content e-mail template to create a first e-mail message sent by the standard mail service from the client user. Arrow **324** directs execution from operation **322** to operation **308**. Operation **308** terminates the operations of this flowchart.

Figure **3C** depicts a detail flowchart of operation **312** of Figure **3B** supporting the user operation flowchart of Figure **3A** in accordance with an aspect of the invention.

Arrow **340** directs the flow of execution from starting operation **312** to operation **342**. Operation **342** performs determining the client user selection

of a first of the client user selectable content entities. Arrow **344** directs execution from operation **342** to operation **346**. Operation **346** performs determining the client user selection of a first of the client user selectable content sites within the content e-mail template. Arrow **348** directs execution from operation **346** to operation **350**. Operation **350** performs creating the content e-mail template with the first content entity at the first content site. Arrow **352** directs execution from operation **350** to operation **354**. Operation **354** terminates the operations of this flowchart.

Figure **4** depicts a refinement of the system flow diagram of Figure **2** using a client e-mail interface **100** a content creation wizard **120** and a content library **134** including a content entity **130** in accordance with one aspect of the invention;

As in Figure **2**, user **20** is coupled **22** with client e-mail interface **100**, which interacts **12** with standard mail services **10**. Client e-mail interface **100** is coupled **122** to content creation wizard **120** as a user selectable entity, so that user **20** can select the content creation wizard **120** to create a message template. Client e-mail interface **100** is coupled **132** to content entity **130** as a user selectable entity, which further contains at least one user selectable content entity.

In addition to Figure **2**, content entity **130** is coupled **134** to content library **140** which is also coupled **142** to client e-mail interface **100** as a user selectable entity. In certain embodiments of the invention, content entity **130** may be directly user selectable **132** at all times. In certain other embodiments, content entity **130** is only selectable **134** based upon the selection **142** of content library **140**.

Figure **5A** depicts a user operational flowchart for selecting a content library and a selectable content entity within the selected content library in accordance with an aspect of the invention.

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Arrow **230** directs the usage flow from starting user operation **200** to user operation **232**. User operation **232** performs the client user selecting a first of the client user selectable content entities of the content library. Arrow **234** directs usage from user operation **232** to user operation **236**. User operation **236** terminates the usage of this flowchart.

Arrow **240** directs the usage flow from user operation **200** to user operation **242**. User operation **242** performs the client user selecting the content library containing the first client user selectable content entity. Arrow **244** directs usage from user operation **242** to user operation **236**. User operation **236** terminates the usage of this flowchart.

Note that in certain embodiments, the client user may only be able to select the first content entity when the content library it belongs to is selected. In certain other embodiments, the first content entity may be either directly selectable, or selectable when a specific content library containing it is selected.

Figure **5B** depicts a software operational flowchart supporting the user operation flowchart of Figure **5A** for selecting a content library and a selectable content entity within the selected content library in accordance with an aspect of the invention.

Operation **360** starts the operations of this flowchart. Arrow **362** directs the flow of execution from operation **360** to operation **364**. Operation **364** performs determining the client user selecting the content library containing the first client user selectable content entity. Arrow **366** directs execution from operation **364** to operation **368**. Operation **368** performs determining the client user selecting a first of the client user selectable content entities of the content library. Arrow **370** directs execution from operation **368** to operation **372**. Operation **372** terminates the operations of this flowchart.

Figure **6** depicts a refinement of the system flow diagram of Figure **4** incorporating an administrator **150** as well as a client e-mail interface **100** a

content creation wizard **120** and a content library **134** including a content entity **130** in accordance with one aspect of the invention.

As in Figures **2** and **4**, user **20** is coupled **22** with client e-mail interface **100**, which interacts **12** with standard mail services **10**. Client e-mail interface **100** is coupled **122** to content creation wizard **120** as a user selectable entity, so that user **20** can select the content creation wizard **120** to create a message template. Client e-mail interface **100** is coupled **132** to content entity **130** as a user selectable entity, which further contains at least one user selectable content entity.

As in Figure **4**, content entity **130** is coupled **134** to content library **140** which is also coupled **142** to client e-mail interface **100** as a user selectable entity. In certain embodiments of the invention, content entity **130** may be directly user selectable **132** at all times. In certain other embodiments, content entity **130** is only selectable **134** based upon the selection **142** of content library **140**.

In addition to Figures **2** and **4**, administrator **150** is coupled **152** to standard mail services **10**. Client user **20** subscribes to the augmented toolkit, which creates and sends a message **24** based upon the client user **20** to the administrator **150**. Administrator **150** receives the message **24** and responds by performing the following: Administrator **150** creates **124** at least one client selectable content creation wizard **120**. Administrator **150** creates **144** at least one client user selectable content library **140**. Administrator **150** creates **102** the client e-mail interface **100** supporting client user selectable entities including client selectable **122** content creation wizard **120** and client selectable **142** content library **140**.

Figure **7A** depicts a user operational flowchart supporting a user **20** subscribing **24** to the augmented messaging toolkit as discussed in Figure **6** in accordance with an aspect of the invention.

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User operation **250** starts the usage of this flowchart. Arrow **252** directs the usage flow from user operation **250** to user operation **254**. User operation **254** performs the client user **20** creating a subscription message. Arrow **256** directs usage from user operation **254** to user operation **258**. User operation **258** performs the client user **20** sending **24** the subscription message to the administrator **150**. Arrow **260** directs usage from user operation **258** to user operation **262**. User operation **262** terminates the usage of this flowchart.

Figure **7B** depicts an administrator **150** operational flowchart receiving and responding to a subscription message **24** from user **20** as discussed in Figure **6** in accordance with an aspect of the invention.

Administrator operation **400** starts the usage of this flowchart. Arrow **402** directs the usage flow from administrator operation **400** to administrator operation **404**. Administrator operation **404** performs the administrator **150** receiving the subscription message **24** from the client user **20**. Arrow **406** directs usage from administrator operation **404** to administrator operation **408**. Administrator operation **408** performs the administrator **150** responding to the received subscription message. Arrow **410** directs usage from administrator operation **408** to administrator operation **412**. Administrator operation **412** terminates the usage of this flowchart.

Figure **7C** depicts a detail flowchart of administrator operation **408** of Figure **7B** supporting the response to the received subscription message from client user **20** in accordance with an aspect of the invention.

Arrow **430** directs the usage flow from starting administrator operation **408** to administrator operation **432**. Administrator operation **432** performs creating **124** the client user selectable content creation wizard **120**. Arrow **434** directs usage from administrator operation **432** to administrator operation **436**. Administrator operation **436** performs creating **144** the client user selectable content library **140** comprised **134** of at least one client user selectable content entity **130**. Arrow **438** directs usage from administrator operation **436** to administrator operation **440**. Administrator operation **440** performs creating

102 the client e-mail interface **100** coupling **22** the client user **20** to **12** the standard mail service **10** and the client e-mail interface supporting client user selectable entities including the client user selectable **122** content creation wizard **120** and the client user selectable **142** content library **140**. Arrow **442** directs usage from administrator operation **440** to administrator operation **444**. Administrator operation **444** terminates the usage of this flowchart.

Figure **7D** depicts an operational flowchart supporting the client user operations of Figure **7A** in which a user **20** subscribing **24** to the augmented messaging toolkit as discussed in Figure **6** in accordance with an aspect of the invention.

Operation **350** starts the operations of this flowchart. Arrow **352** directs the flow of execution from operation **350** to operation **354**. Operation **354** performs supporting the client user creating a subscription message. Arrow **356** directs execution from operation **354** to operation **358**. Operation **358** performs supporting the client user sending the subscription message to the administrator. Arrow **360** directs execution from operation **358** to operation **362**. Operation **362** terminates the operations of this flowchart.

Figure **7E** depicts an operational flowchart supporting the operations of Figure **7B** in which an administrator **150** operational flowchart receiving and responding to a subscription message **24** from user **20** as discussed in Figure **6** in accordance with an aspect of the invention.

Operation **500** starts the operations of this flowchart. Arrow **502** directs the flow of execution from operation **500** to operation **504**. Operation **504** performs supporting the administrator receiving the subscription message from the client user. Arrow **506** directs execution from operation **504** to operation **508**. Operation **508** performs supporting the administrator responding to the received subscription message. Arrow **510** directs execution from operation **508** to operation **512**. Operation **512** terminates the operations of this flowchart.

Figure **7F** depicts a detail flowchart of administrator operation **508** of Figure **7E** supporting the response to the received subscription message from client user **20** in accordance with an aspect of the invention.

Arrow **530** directs the flow of execution from starting operation **508** to operation **532**. Operation **532** performs supporting creating the client selectable content creation wizard. Arrow **534** directs execution from operation **532** to operation **536**. Operation **536** performs supporting creating the client selectable content library. Arrow **538** directs execution from operation **536** to operation **540**. Operation **540** performs supporting creating the client e-mail interface coupling the client user to the standard mail service and the client e-mail interface supporting client user selectable entities including the client selectable content creation wizard and the client selectable content library. Arrow **542** directs execution from operation **540** to operation **544**. Operation **544** terminates the operations of this flowchart.

Figure **8** depicts a refinement of the system flow diagram of Figure **6** incorporating content creation wizard reservoir **170** and content meta-library **160** as well as administrator **150**, client e-mail interface **100**, a content creation wizard **120** and a content library **134** including a content entity **130** in accordance with one aspect of the invention;

As in Figures **2**, **4** and **6**, user **20** is coupled **22** with client e-mail interface **100**, which interacts **12** with standard mail services **10**. Client e-mail interface **100** is coupled **122** to content creation wizard **120** as a user selectable entity, so that user **20** can select the content creation wizard **120** to create a message template. Client e-mail interface **100** is coupled **132** to content entity **130** as a user selectable entity, which further contains at least one user selectable content entity.

As in Figures **4** and **6**, content entity **130** is coupled **134** to content library **140** which is also coupled **142** to client e-mail interface **100** as a user selectable entity. In certain embodiments of the invention, content entity **130** may be directly user selectable **132** at all times. In certain other embodiments,

content entity **130** is only selectable **134** based upon the selection **142** of content library **140**.

As in Figure **6**, administrator **150** is coupled **152** to standard mail services **10**. Client user **20** subscribes to the augmented toolkit, which creates and sends a message **24** based upon the client user **20** to the administrator **150**. Administrator **150** receives the message **24** and responds by performing the following: Administrator **150** creates **124** at least one client selectable content creation wizard **120**. Administrator **150** creates **144** at least one client user selectable content library **140**. Administrator **150** creates **102** the client e-mail interface **100** supporting client user selectable entities including client selectable **122** content creation wizard **120** and client selectable **142** content library **140**.

In addition to Figures **2**, **4** and **6**, administrator **150** communicates **154** with content creation wizard reservoir **170** and communicates **156** with content meta-library **160**. The creation **124** of content creation wizard **120** includes **172** selection **154** of at least one content creation wizard of content creation wizard reservoir **170**. The creation **144** of content library **140** includes **162** selection **156** of at least one content entity contained in content meta-library **160**.

Figure **9A** depicts administrator operations maintaining a content creation wizard reservoir in accordance with an aspect of the invention.

Administrator operation **460** starts the usage of this flowchart. Arrow **462** directs the usage flow from administrator operation **460** to administrator operation **464**. Administrator operation **464** performs the administrator further maintaining a content creation wizard reservoir comprised of at least one content creation wizard. Arrow **466** directs usage from administrator operation **464** to administrator operation **468**. Administrator operation **468** terminates the usage of this flowchart.

Figure **9B** depicts a detail flowchart of operation **432** of Figure **7C** where creating a content creation wizard uses the content creation wizard reservoir in accordance with an aspect of the invention.

Arrow **480** directs the usage flow from starting user operation **432** to user operation **482**. User operation **482** performs selecting a first of the content creation wizards from the content creation wizard reservoir. Arrow **484** directs usage from user operation **482** to user operation **486**. User operation **486** performs coupling the first content creation wizard to the client e-mail interface to create the first client selectable content creation wizard. Arrow **488** directs usage from user operation **486** to user operation **490**. User operation **490** terminates the usage of this flowchart.

Figure **9C** depicts operations supporting administrator operations of Figure **9A** maintaining a content creation wizard reservoir in accordance with an aspect of the invention.

Operation **560** starts the operations of this flowchart. Arrow **562** directs the flow of execution from operation **560** to operation **564**. Operation **564** performs supporting the administrator maintaining a content creation wizard library comprised of at least one content creation wizard. Arrow **566** directs execution from operation **564** to operation **568**. Operation **568** terminates the operations of this flowchart.

Figure **9D** depicts a detail flowchart of operation **532** of Figure **7F** supporting the creation of a content creation wizard using the content creation wizard reservoir in accordance with an aspect of the invention.

Arrow **580** directs the flow of execution from starting operation **532** to operation **582**. Operation **582** performs supporting selecting a first of the content creation wizards from the content creation wizard library. Arrow **584** directs execution from operation **582** to operation **586**. Operation **586** performs supporting coupling the first content creation wizard to the client e-mail interface to create the first client selectable content creation wizard.

Arrow **588** directs execution from operation **586** to operation **590**. Operation **590** terminates the operations of this flowchart.

Figure **9E** depicts administrator operations maintaining a content meta-library in accordance with an aspect of the invention.

Administrator operation **600** starts the usage of this flowchart. Arrow **602** directs the usage flow from administrator operation **600** to administrator operation **604**. Administrator operation **604** performs the administrator further maintaining a content meta-library comprised of at least one content entity. Arrow **606** directs usage from administrator operation **604** to administrator operation **608**. Administrator operation **608** terminates the usage of this flowchart.

Figure **9F** depicts detail flowchart of operation **436** of Figure **7C** using the content meta-library to create the selectable content library in accordance with an aspect of the invention.

Arrow **610** directs the usage flow from starting administrator operation **432** to administrator operation **612**. Administrator operation **612** performs selecting a first of the content entities from the content meta-library to create a first content entity. Arrow **614** directs usage from administrator operation **612** to administrator operation **616**. Administrator operation **616** performs using the first content entity to create the client selectable library. Arrow **618** directs usage from administrator operation **616** to administrator operation **620**. Administrator operation **620** terminates the usage of this flowchart.

Figure **9G** depicts a detail flowchart of operation **616** of Figure **9F** supporting either inserting or coupling the first content entity in accordance with an aspect of the invention.

Arrow **630** directs the usage flow from starting administrator operation **616** to administrator operation **632**. Administrator operation **632** performs inserting the first content entity into the client selectable content library to create a client selectable content entity. Arrow **634** directs usage from administrator

operation **632** to administrator operation **636**. Administrator operation **636** terminates the usage of this flowchart.

Arrow **640** directs the usage flow from administrator operation **616** to administrator operation **642**. Administrator operation **642** performs coupling the first content entity to the client e-mail interface to create a client administrator selectable content entity coupled to the client e-mail interface. Arrow **644** directs usage from administrator operation **642** to administrator operation **636**. Administrator operation **636** terminates the usage of this flowchart.

Figure **9H** depicts an operational flowchart supporting administrator operations of Figure **9E** maintaining a content meta-library in accordance with an aspect of the invention.

Operation **700** starts the operations of this flowchart. Arrow **702** directs the flow of execution from operation **700** to operation **704**. Operation **704** performs supporting the administrator maintaining a content meta-library comprised of at least one content entity. Arrow **706** directs execution from operation **704** to operation **708**. Operation **708** terminates the operations of this flowchart.

Figure **9I** depicts detail flowchart of operation **536** of Figure **7F** using the content meta-library to create the selectable content library in accordance with an aspect of the invention.

Arrow **710** directs the flow of execution from starting operation **536** to operation **712**. Operation **712** performs supporting selecting a first of the content entities from the content meta-library to create a first content entity. Arrow **714** directs execution from operation **712** to operation **716**. Operation **716** performs supporting using the first content entity to create the client selectable library. Arrow **718** directs execution from operation **716** to operation **720**. Operation **720** terminates the operations of this flowchart.

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Figure **9J** depicts a detail flowchart of operation **716** of Figure **9I** supporting either inserting or coupling the first content entity in accordance with an aspect of the invention.

Arrow **730** directs the flow of execution from starting operation **716** to operation **732**. Operation **732** performs supporting inserting the first content entity into the client selectable content library to create a client selectable content entity. Arrow **734** directs execution from operation **732** to operation **736**. Operation **736** terminates the operations of this flowchart.

Arrow **740** directs the flow of execution from starting operation **716** to operation **742**. Operation **742** performs supporting coupling the first content entity to the client e-mail interface to create a client user selectable content entity coupled to the client e-mail interface. Arrow **744** directs execution from operation **742** to operation **736**. Operation **736** terminates the operations of this flowchart.

Figure **9K** depicts a detail flowchart of operation **250** of Figure **7A** depicting accessing a subscription web page in accordance with some embodiments of the invention.

Arrow **650** directs the usage flow from starting user operation **250** to user operation **652**. User operation **652** performs accessing a subscription web page. Arrow **654** directs usage from user operation **652** to user operation **656**. User operation **656** terminates the usage of this flowchart.

Figure **9L** depicts a detail flowchart of operation **350** of Figure **7D** depicting accessing a subscription web page in accordance with some embodiments of the invention.

Arrow **750** directs the flow of execution from starting operation **350** to operation **752**. Operation **752** performs supporting accessing a subscription web page. Arrow **754** directs execution from operation **752** to operation **756**. Operation **756** terminates the operations of this flowchart.

Figure **9M** depicts a user flowchart of client e-mail interface **100** coupling **12** standard mail services **10** and user **20** including accessing a client interface web page in accordance with an aspect of the invention.

Arrow **670** directs the usage flow from starting user operation **12** to user operation **672**. User operation **672** performs the client user accessing a client e-mail interface web page. Arrow **674** directs usage from user operation **672** to user operation **676**. User operation **676** terminates the usage of this flowchart.

Figure **9N** depicts an operational flowchart of client e-mail interface **100** coupling **12** standard mail services **10** and user **20** including supporting accessing a client interface web page in accordance with an aspect of the invention.

Arrow **750** directs the flow of execution from starting operation **12** to operation **752**. Operation **752** performs supporting the client user accessing a client e-mail interface web page. Arrow **754** directs execution from operation **752** to operation **756**. Operation **756** terminates the operations of this flowchart.

Figure **10** depicts a refinement of the system flow diagram of Figure **8** incorporating a data base **180** supporting creation wizard reservoir **170** and content meta-library **160**, administrator **150**, client e-mail interface **100**, a content creation wizard **120** and a content library **134** including a content entity **130** in accordance with one aspect of the invention.

As in Figures **2**, **4**, **6** and **8**, user **20** is coupled **22** with client e-mail interface **100**, which interacts **12** with standard mail services **10**. Client e-mail interface **100** is coupled **122** to content creation wizard **120** as a user selectable entity, so that user **20** can select the content creation wizard **120** to create a message template. Client e-mail interface **100** is coupled **132** to content entity **130** as a user selectable entity, which further contains at least one user selectable content entity.

As in Figures **4**, **6** and **8**, content entity **130** is coupled **134** to content library **140** which is also coupled **142** to client e-mail interface **100** as a user selectable entity. In certain embodiments of the invention, content entity **130** may be directly user selectable **132** at all times. In certain other embodiments, content entity **130** is only selectable **134** based upon the selection **142** of content library **140**.

As in Figures **6** and **8**, administrator **150** is coupled **152** to standard mail services **10**. Client user **20** subscribes to the augmented toolkit, which creates and sends a message **24** based upon the client user **20** to the administrator **150**. Administrator **150** receives the message **24** and responds by performing the following: Administrator **150** creates **124** at least one client selectable content creation wizard. Administrator **150** creates **144** at least one client user selectable content library **140**. Administrator **150** creates **102** the client e-mail interface **100** supporting client user selectable entities including client selectable **122** content creation wizard **120** and client selectable **142** content library **140**.

As in Figure **8**, administrator **150** communicates **154** with content creation wizard reservoir **170** and communicates **156** with content meta-library **160**. The creation **124** of content creation wizard **120** includes **172** selection **154** of at least one content creation wizard of content creation wizard reservoir **170**. The creation **144** of content library **140** includes **162** selection **156** of at least one content entity contained in content meta-library **160**.

In addition to Figures **2**, **4**, **6** and **8**, database **180** communicates **182** with administrator **150**. At the direction **182** of administrator **150**, database **180** maintains **126** content creation wizard **120**, maintains **144** content library **140** including **134** content entity **130** and generates **104** client e-mail interface **100**.

In certain further embodiments, as directed **182** by administrator **150**, database **180** maintains content creation wizard reservoir **170**. Creating **172**

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content creation wizard **120** is performed as operations **174** upon database **180** and content creation wizard reservoir **170**.

In certain further embodiments, as directed **182** by administrator **150**, database **180** maintains **164** content meta-library **160**, which contains content entities. Creating **162** content library **140** is performed as operations **164** upon database **180** and content meta-library **160**.

Figure **11A** depicts a detail flowchart of administrator operation **408** of Figure **7B** in which the administrator responds to a subscription message by recording a subscription record in the database based upon the subscription message in accordance with an aspect of the invention.

Arrow **690** directs the usage flow from starting user operation **408** to user operation **692**. User operation **692** performs the administrator recording in the database to create a client subscription record based upon the received subscription record. Arrow **694** directs usage from user operation **692** to user operation **696**. User operation **696** terminates the usage of this flowchart.

Figure **11B** depicts a detail flowchart of operation **508** of Figure **7E** in which supporting the administrator responding to a subscription message for recording a subscription record in the database based upon the subscription message in accordance with an aspect of the invention.

Arrow **790** directs the flow of execution from starting operation **508** to operation **792**. Operation **792** performs supporting the administrator recording in the database to create a client subscription record based upon the received subscription record. Arrow **794** directs execution from operation **792** to operation **796**. Operation **796** terminates the operations of this flowchart.

Figure **11C** depicts the client e-mail interface recording a first e-mail message in the database whenever the user sends the first e-mail message to the standard mail service in accordance with an aspect of the invention.

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Operation **800** starts the operations of this flowchart. Arrow **802** directs the flow of execution from operation **800** to operation **804**. Operation **804** performs whenever the client user sends the first e-mail message to the standard mail service from the client e-mail interface. Arrow **806** directs execution from operation **804** to operation **808**. Operation **808** performs the client e-mail interface recording a first e-mail message in the database as a first e-mail record associated with the subscription record of the client user. Arrow **810** directs execution from operation **808** to operation **812**. Operation **812** terminates the operations of this flowchart.

Figure **11D** depicts supporting the client e-mail interface recording a first e-mail message in the database whenever the user sends the first e-mail message to the standard mail service in accordance with an aspect of the invention.

Operation **900** starts the operations of this flowchart. Arrow **902** directs the flow of execution from operation **900** to operation **904**. Operation **904** performs whenever the client user sends the first e-mail message to the standard mail service from the client e-mail interface. Arrow **906** directs execution from operation **904** to operation **908**. Operation **908** performs supporting the client e-mail interface recording a first e-mail message in the database as a first e-mail record associated with the subscription record of the client user. Arrow **910** directs execution from operation **908** to operation **912**. Operation **912** terminates the operations of this flowchart.

Figure **12** depicts a refinement of the system flow diagram of Figure **10** incorporating a tracking and gathering data module **190** as well as a data base **180** supporting creation wizard reservoir **170** and content meta-library **160**, administrator **150**, client e-mail interface **100**, a content creation wizard **120** and a content library **134** including a content entity **130** in accordance with one aspect of the invention.

As in Figures **2**, **4**, **6**, **8** and **10**, user **20** is coupled **22** with client e-mail interface **100**, which interacts **12** with standard mail services **10**. Client e-mail

interface **100** is coupled **122** to content creation wizard **120** as a user selectable entity, so that user **20** can select the content creation wizard **120** to create a message template. Client e-mail interface **100** is coupled **132** to content entity **130** as a user selectable entity, which further contains at least one user selectable content entity.

As in Figures **4**, **6**, **8** and **10**, content entity **130** is coupled **134** to content library **140** which is also coupled **142** to client e-mail interface **100** as a user selectable entity. In certain embodiments of the invention, content entity **130** may be directly user selectable **132** at all times. In certain other embodiments, content entity **130** is only selectable **134** based upon the selection **142** of content library **140**.

As in Figures **6**, **8** and **10**, administrator **150** is coupled **152** to standard mail services **10**. Client user **20** subscribes to the augmented toolkit, which creates and sends a message **24** based upon the client user **20** to the administrator **150**. Administrator **150** receives the message **24** and responds by performing the following: Administrator **150** creates **124** at least one client selectable content creation wizard. Administrator **150** creates **144** at least one client user selectable content library **140**. Administrator **150** creates **102** the client e-mail interface **100** supporting client user selectable entities including client selectable **122** content creation wizard **120** and client selectable **142** content library **140**.

As in Figures **8** and **10**, administrator **150** communicates **154** with content creation wizard reservoir **170** and communicates **156** with content meta-library **160**. The creation **124** of content creation wizard **120** includes **172** selection **154** of at least one content creation wizard of content creation wizard reservoir **170**. The creation **144** of content library **140** includes **162** selection **156** of at least one content entity contained in content meta-library **160**.

As in Figure **10**, database **180** communicates **182** with administrator **150**. At the direction **182** of administrator **150**, database **180** maintains **126** content

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creation wizard **120**, maintains **144** content library **140** including **134** content entity **130** and generates **104** client e-mail interface **100**.

In addition to Figures **2**, **4**, **6**, **8** and **10**, tracking/gathering data **190** communicates **192** with administrator **150** and is coupled **194** with database **180**.

In certain embodiments, client e-mail interface **100** upon sending **12** a message using a template provided by content creation wizard **120** will record **104** in database **180** the usage of the content creation wizard **120** in database **180**. Tracking/gatheringdata **190** will review **194** such records and generate a message **192** tracking such usage to administrator **150**.

In certain further embodiments, client e-mail interface **100** upon sending **12** a message using a template provided by content creation wizard **120** with a content site containing a selected content entity **130** will record **104** in database **180** the usage of the content creation wizard **120** and content entity **130** in database **180**. Tracking/gatheringdata **190** will review **194** such records and generate a message **192** tracking such usage to administrator **150**.

In certain embodiments, administrator **150** will request **192** a specific collection of one or more queries **194** of database **180** be performed by **190** and a reporting message sent **192** to administrator **150** of the results of the performed queries.

MightyMail™ is an embodiment of the invention. MightyMail™ allows branding and suggestive content to be placed within person-to-person e-mail that is sent by individuals to individuals. This is made possible by the introduction of compelling, affinity based content (pictures, links, audio, or video) and end-user content creation tools (classified ads, calendars, surveys) which are embedded in customizable "letterheads." These letterheads are known elsewhere in this document as templates. By pollinating millions of viral e-

mail messages with personalized rich content, MightyMail's mission is simple but ambitious: to become the standard platform for rich e-mail services.

Figure **13A** depicts a flowchart of administrator **150** operations supporting sending a report request to the tracking module **190** and receiving a report message from tracking module **190** in accordance with an aspect of the invention.

Administrator operation **810** starts the usage of this flowchart. Arrow **812** directs the usage flow from administrator operation **810** to administrator operation **814**. Administrator operation **814** performs the administrator sending the tracking module a report request message. Arrow **816** directs usage from administrator operation **814** to administrator operation **818**. Administrator operation **818** performs the administrator receiving from the tracking module a report message based upon the report request message. Arrow **820** directs usage from administrator operation **818** to administrator operation **822**. Administrator operation **822** terminates the usage of this flowchart.

Figure **13B** depicts a flowchart of tracking module **190** operations supporting receiving a report request from the administrator **150**, accessing **194** database **180** and sending a report message to administrator **150** in accordance with an aspect of the invention.

Tracking module operation **830** starts the usage of this flowchart. Arrow **832** directs the usage flow from tracking module operation **830** to tracking module operation **834**. Tracking module operation **834** performs the tracking module receiving the report request message from the administrator to create a received report request message. Arrow **836** directs usage from tracking module operation **834** to tracking module operation **838**. Tracking module operation **838** performs the tracking module accessing the database based upon the received report request message to create the report message. Arrow **840** directs usage from tracking module operation **838** to tracking module operation **842**. Tracking module operation **842** performs the tracking

module sending the report message to the administrator. Arrow **844** directs usage from tracking module operation **842** to tracking module operation **846**. Tracking module operation **846** terminates the usage of this flowchart.

Figure **13C** depicts an operational flowchart supporting administrator **150** operations for sending a report request to the tracking module **190** and receiving a report message from tracking module **190** in accordance with an aspect of the invention.

Operation **910** starts the operations of this flowchart. Arrow **912** directs the flow of execution from operation **910** to operation **914**. Operation **914** performs supporting the administrator sending the tracking module a report request message. Arrow **916** directs execution from operation **914** to operation **918**. Operation **918** performs supporting the administrator receiving from the tracking module a report message based upon the report request message. Arrow **920** directs execution from operation **918** to operation **922**. Operation **922** terminates the operations of this flowchart.

Figure **13D** depicts an operational flowchart supporting tracking module **190** operations for receiving a report request from the administrator **150**, accessing **194** database **180** and sending a report message to administrator **150** in accordance with an aspect of the invention.

Operation **930** starts the operations of this flowchart. Arrow **932** directs the flow of execution from operation **930** to operation **934**. Operation **934** performs supporting the tracking module receiving the report request message from the administrator to create a received report request message. Arrow **936** directs execution from operation **934** to operation **938**. Operation **938** performs supporting the tracking module accessing the database based upon the received report request message to create the report message. Arrow **940** directs execution from operation **938** to operation **942**. Operation **942** performs supporting the tracking module sending the report message to the administrator. Arrow **944** directs execution from operation **942** to operation **946**. Operation **946** terminates the operations of this flowchart.

Figure **14** depicts schematically the capabilities of the various embodiments and compares them with standard e-mail tools **20**.

Box **990** depicts the functionality of standard mail services, which include the ability to create, send and read standard text e-mail with attachments.

Box **992** depicts the functionality of content libraries **140**, including but not limited to promotions, graphics, games and links that can be easily integrated into a personal "letterhead library."

Box **994** depicts the functionality of content creation wizards **120** which include but are not limited to simplified creation of e-mail-ready classified ads, surveys, forms, business cards, letterhead, schedules, etc..

Box **996** depicts the functionality of tracking/gathering data **199** including but are not limited to complete tracking of e-mail account activity, mail content choices, user inputs, and mail impressions/click-through.

Box **998** depicts the functionality of administrator **150** including but are not limited to the ability to dynamically administer content and features within an e-mail "letterhead" for one or many e-mail accounts.

Figure **15** depicts client computer **26** communicating **1002** with server system **1000** with client computer **26** executing program code segments and with server system **1000** executing program code segments in accordance with an aspect of the invention.

The server system **1000** executes **1018** a program code segment for standard mail services **1010**. The server system **1000** executes **1128** a program code segment for content creation wizard **1120**. The server system **1000** executes **1138** a program code segment for content entity **1130**. In certain embodiments, these program code segments are all in the same computer language. In other embodiments, differing computer languages are used to implement program code segments.

The client computer **26** executes **1122** a program code segment for selecting content creation wizard **1124**. The client computer **26** executes **1102** a program code segment for client e-mail interface **1100**. The client computer **26** executes **1132** a program code segment for selecting content entity **1134**. In certain embodiments, these program code segments are all in the same computer language. In other embodiments, differing computer languages are used to implement program code segments.

Figure **16** depicts a refinement of Figure **15**, depicting client computer **26** communicating **1002** with server system **1000** communicating **2002** application server engine **2000**, with client computer **26** executing program code segments, with server system executing program code segments and with application server engine executing program code segments in accordance with an aspect of the invention.

The server system **1000** executes **1018** a program code segment for standard mail services **1010**. The application server engine **2000** executes **1126** a program code segment for content creation wizard **1120**. The application server engine **2000** executes **1136** a program code segment for content entity **1130**. In certain embodiments, these program code segments are all in the same computer language. In other embodiments, differing computer languages are used to implement program code segments.

The client computer **26** executes **1122** a program code segment for selecting content creation wizard **1124**. The client computer **26** executes **1102** a program code segment for client e-mail interface **1100**. The client computer **26** executes **1132** a program code segment for selecting content entity **1134**. In certain embodiments, these program code segments are all in the same computer language. In other embodiments, differing computer languages are used to implement program code segments.

Figure **17** depicts a refinement of Figure **15**, depicting client computer **26** communicating **1002** with server system **1000**, with client computer **26** executing program code segments including executing a web browser, which

in turn executes the client e-mail interface program code segment and with server system executing program code segments in accordance with an aspect of the invention.

The server system **1000** executes **1018** a program code segment for standard mail services **1010**. The server system **1000** executes **1128** a program code segment for content creation wizard **1120**. The server system **1000** executes **1138** a program code segment for content entity **1130**.

The client computer **26** executes **1122** a program code segment for selecting content creation wizard **1124**. The client computer **26** executes **1132** a program code segment for selecting content entity **1134**.

Previously, the client computer **26** executed **1102** a program code segment for client e-mail interface **1100**. In this embodiment, this is effected by client computer **26** executing **1022** a program code segment for a web browser **1020**, which in turn executes 1104 a program code segment implementing client e-mail interface **1100**.

Figure **18** depicts a refinement of Figure **17**, depicting client computer **26** communicating **1002** with server system **1000**, with client computer **26** executing program code segments, with server system executing program code segments including maintaining the client e-mail interface in accordance with an aspect of the invention.

The server system **1000** executes **1018** a program code segment for standard mail services **1010**. The server system **1000** executes **1128** a program code segment for content creation wizard **1120**. The server system **1000** executes **1138** a program code segment for content entity **1130**.

Additionally, server system **1000** executes **2118** a program code segment maintaining the client e-mail interface **2110**.

The client computer **26** executing **1022** a program code segment for a web browser **1020**, which in turn executes 1104 a program code segment

implementing client e-mail interface **1100**. The client computer **26** executes **1122** a program code segment for selecting content creation wizard **1124**. The client computer **26** executes **1132** a program code segment for selecting content entity **1134**.

Figure **19** depicts a refinement of Figure **18**, depicting client computer **26** communicating **1002** with server system **1000**, with client computer **26** executing program code segments, with server system executing program code segments including client interface web page in accordance with an aspect of the invention.

The server system **1000** executes **1018** a program code segment for standard mail services **1010**. The server system **1000** executes **1128** a program code segment for content creation wizard **1120**. The server system **1000** executes **1138** a program code segment for content entity **1130**. The server system **1000** executes **2118** a program code segment maintaining the client e-mail interface **2110**.

Additionally, server system **1000** executes **2108** a program code segment for client interface web page **2100.**

The client computer **26** executing **1022** a program code segment for a web browser **1020**, which in turn executes **1104** a program code segment implementing client e-mail interface **1100**. The client computer **26** executes **1122** a program code segment for selecting content creation wizard **1124**. The client computer **26** executes **1132** a program code segment for selecting content entity **1134**.

Figure **20** depicts a refinement of Figure **19**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000**, with client computer **26** executing program code segments, with server system executing program code segments in accordance with an aspect of the invention. Additionally, server system **1000** is coupled **3004** to database **3000**.

The server system **1000** executes **1018** a program code segment for standard mail services **1010**. The server system **1000** executes **1128** a program code segment for content creation wizard **1120**. The server system **1000** executes **1138** a program code segment for content entity **1130**. The server system **1000** executes **2118** a program code segment maintaining the client e-mail interface **2110**. The server system **1000** executes **2108** a program code segment for client interface web page **2100.**

The client computer **26** executing **1022** a program code segment for a web browser **1020**, which in turn executes **1104** a program code segment implementing client e-mail interface **1100**. The client computer **26** executes **1122** a program code segment for selecting content creation wizard **1124**. The client computer **26** executes **1132** a program code segment for selecting content entity **1134**.

Figure **21** depicts a refinement of Figure **20**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000** further containing database engine **3100** coupled **3102** to mass storage system **3200**, with client computer **26** executing program code segments, with server system executing program code segments in accordance with an aspect of the invention.

The server system **1000** is coupled **3004** to database **3000**, and additionally coupled **3004** to database engine **3100**. Database engine **3100** accesses **3102** mass storage system **3200**. In certain embodiments, database engine **3100** is a single computer. In certain other embodiments, database engine **3100** is a fault tolerant computer. In certain other embodiments, database engine **3100** is a redundant, fault tolerant computer. In certain other embodiments, database engine **3100** is a load balancing, redundant, fault tolerant computer system.

The server system **1000** executes **1018** a program code segment for standard mail services **1010**. The server system **1000** executes **1128** a program code segment for content creation wizard **1120**. The server system **1000** executes

1138 a program code segment for content entity **1130**. The server system **1000** executes **2118** a program code segment maintaining the client e-mail interface **2110**. The server system **1000** executes **2108** a program code segment for client interface web page **2100.**

The client computer **26** executing **1022** a program code segment for a web browser **1020**, which in turn executes **1104** a program code segment implementing client e-mail interface **1100**. The client computer **26** executes **1122** a program code segment for selecting content creation wizard **1124**. The client computer **26** executes **1132** a program code segment for selecting content entity **1134**.

Figure **22** depicts a refinement of Figures **21** and **16**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000** further containing database engine **3100** coupled **3102** to mass storage system **3200**, with client computer **26** executing program code segments, with server system executing program code segments and with application server engine executing program code segments in accordance with an aspect of the invention.

Application server engine **2000** communicates **2002** with server system **1000**. Application server engine **2000** communicates **3002** with database **3000** and additionally communicates **3004** to database engine **3100**. In certain embodiments, application server engine **2000** is a single computer. In certain other embodiments, application server engine **2000** is a fault tolerant computer. In certain other embodiments, application server engine **2000** is a redundant, fault tolerant computer. In certain other embodiments, application server engine **2000** is a load balancing, redundant, fault tolerant computer system.

The server system **1000** is coupled **3004** to database **3000**, and additionally coupled **3004** to database engine **3100**. Database engine **3100** accesses **3102** mass storage system **3200**. In certain embodiments, database engine **3100** is a single computer. In certain other embodiments, database engine

3100 is a fault tolerant computer. In certain other embodiments, database engine **3100** is a redundant, fault tolerant computer. In certain other embodiments, database engine **3100** is a load balancing, redundant, fault tolerant computer system.

The server system **1000** executes **1018** a program code segment for standard mail services **1010**. The server system **1000** executes **2118** a program code segment maintaining the client e-mail interface **2110**.

The application server engine **2000** executes **1126** a program code segment for content creation wizard **1120**. The application server engine **2000** executes **1136** a program code segment for content entity **1130**. The application server engine **2000** executes **2106** a program code segment for client interface web page **2100.**

The client computer **26** executing **1022** a program code segment for a web browser **1020**, which in turn executes **1104** a program code segment implementing client e-mail interface **1100**. The client computer **26** executes **1122** a program code segment for selecting content creation wizard **1124**. The client computer **26** executes **1132** a program code segment for selecting content entity **1134**.

Figure **23** depicts a refinement of Figure **22**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000** further containing database engine **3100** coupled **3102** to mass storage system **3200** further coupled **3302** to backup system **3300**, with client computer **26** executing program code segments, with server system executing program code segments and with application server engine executing program code segments in accordance with an aspect of the invention.

Application server engine **2000** communicates **2002** with server system **1000**. Application server engine **2000** communicates **3002** with database **3000** and additionally communicates **3004** to database engine **3100**. In certain embodiments, application server engine **2000** is a single computer. In certain

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other embodiments, application server engine **2000** is a fault tolerant computer. In certain other embodiments, application server engine **2000** is a redundant, fault tolerant computer. In certain other embodiments, application server engine **2000** is a load balancing, redundant, fault tolerant computer system.

The server system **1000** is coupled **3004** to database **3000**, and additionally coupled **3004** to database engine **3100**. Database engine **3100** accesses **3102** mass storage system **3200**. Mass storage system **3200** further communicates with backup system **3300**. In certain embodiments, database engine **3100** is a single computer. In certain other embodiments, database engine **3100** is a fault tolerant computer. In certain other embodiments, database engine **3100** is a redundant, fault tolerant computer. In certain other embodiments, database engine **3100** is a load balancing, redundant, fault tolerant computer system.

The server system **1000** executes **1018** a program code segment for standard mail services **1010**. The server system **1000** executes **2118** a program code segment maintaining the client e-mail interface **2110**.

The application server engine **2000** executes **1126** a program code segment for content creation wizard **1120**. The application server engine **2000** executes **1136** a program code segment for content entity **1130**. The application server engine **2000** executes **2106** a program code segment for client interface web page **2100.**

The client computer **26** executing **1022** a program code segment for a web browser **1020**, which in turn executes **1104** a program code segment implementing client e-mail interface **1100**. The client computer **26** executes **1122** a program code segment for selecting content creation wizard **1124**. The client computer **26** executes **1132** a program code segment for selecting content entity **1134**.

Figure **24** depicts a refinement of Figure **21**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000** further containing database engine **3100** coupled **3102** to mass storage system **3200** further coupled **3302** to backup system **3300**, with client computer **26** executing program code segments, with server system executing program code segments in accordance with an aspect of the invention.

The server system **1000** is coupled **3004** to database **3000**, and additionally coupled **3004** to database engine **3100**. Database engine **3100** accesses **3102** mass storage system **3200**. Mass storage system **3200** further communicates with backup system **3300**. In certain embodiments, database engine **3100** is a single computer. In certain other embodiments, database engine **3100** is a fault tolerant computer. In certain other embodiments, database engine **3100** is a redundant, fault tolerant computer. In certain other embodiments, database engine **3100** is a load balancing, redundant, fault tolerant computer system.

The server system **1000** executes **1018** a program code segment for standard mail services **1010**. The server system **1000** executes **2118** a program code segment maintaining the client e-mail interface **2110**. The server system **1000** executes **1128** a program code segment for content creation wizard **1120**. The server system **1000** executes **1138** a program code segment for content entity **1130**. The server system **1000** executes **2108** a program code segment for client interface web page **2100.**

The client computer **26** executing **1022** a program code segment for a web browser **1020**, which in turn executes **1104** a program code segment implementing client e-mail interface **1100**. The client computer **26** executes **1122** a program code segment for selecting content creation wizard **1124**. The client computer **26** executes **1132** a program code segment for selecting content entity **1134**.

Figure **25** depicts a refinement of Figure **24**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000**

further containing database engine **3100** coupled **3102** to mass storage system **3200** further coupled **3302** to backup system **3300**, with client computer **26** executing program code segments, with server system executing program code segments including several additional or altered program codes segments in accordance with an aspect of the invention.

The server system **1000** is coupled **3004** to database **3000**, and additionally coupled **3004** to database engine **3100**. Database engine **3100** accesses **3102** mass storage system **3200**. Mass storage system **3200** further communicates with backup system **3300**. In certain embodiments, database engine **3100** is a single computer. In certain other embodiments, database engine **3100** is a fault tolerant computer. In certain other embodiments, database engine **3100** is a redundant, fault tolerant computer. In certain other embodiments, database engine **3100** is a load balancing, redundant, fault tolerant computer system.

The server system **1000** executes **1018** a program code segment for standard mail services **1010**. The server system **1000** executes **2118** a program code segment maintaining the client e-mail interface **2110**. The server system **1000** executes **1128** a program code segment for content creation wizard **1120**. The server system **1000** executes **1138** a program code segment for content entity **1130**. The server system **1000** executes **2108** a program code segment for client interface web page **2100**.

Additionally, server system **1000** executes **1158** a program code segment for administrator **1150**. The server system **1000** executes **1198** a program code segment for tracking/gathering data **1190**.

The client computer **26** executing **1022** a program code segment for a web browser **1020**, which in turn executes **1104** a program code segment implementing client e-mail interface **1100**. The client computer **26** executes **1122** a program code segment for selecting content creation wizard **1124**. The client computer **26** executes **1132** a program code segment for selecting content entity **1134**.

Figure **26** depicts a refinement of Figures **24** and **22**, depicting client computer **26** communicating **1002** with server system **1000** coupled **3004** to database **3000** further containing database engine **3100** coupled **3102** to mass storage system **3200** further coupled **3302** to backup system **3300**, with client computer **26** executing program code segments, with server system executing program code segments and with application server engine executing program code segments including several additional or altered program codes segments in accordance with an aspect of the invention.

Application server engine **2000** communicates **2002** with server system **1000.** Application server engine **2000** communicates **3002** with database **3000** and additionally communicates **3004** to database engine **3100**. In certain embodiments, application server engine **2000** is a single computer. In certain other embodiments, application server engine **2000** is a fault tolerant computer. In certain other embodiments, application server engine **2000** is a redundant, fault tolerant computer. In certain other embodiments, application server engine **2000** is a load balancing, redundant, fault tolerant computer system.

The server system **1000** is coupled **3004** to database **3000**, and additionally coupled **3004** to database engine **3100**. Database engine **3100** accesses **3102** mass storage system **3200**. Mass storage system **3200** further communicates with backup system **3300.** In certain embodiments, database engine **3100** is a single computer. In certain other embodiments, database engine **3100** is a fault tolerant computer. In certain other embodiments, database engine **3100** is a redundant, fault tolerant computer. In certain other embodiments, database engine **3100** is a load balancing, redundant, fault tolerant computer system.

The server system **1000** executes **1018** a program code segment for standard mail services **1010.**

The application server engine **2000** executes **2116** a program code segment maintaining the client e-mail interface **2110**. The application server engine

2000 executes **1126** a program code segment for content creation wizard and further reservoir **1122**. The application server engine **2000** executes **1136** a program code segment for content entity and further meta-library **1132**. The application server engine **2000** executes **2106** a program code segment for client interface web page **2100.** The application server engine **2000** executes **1156** a program code segment for administrator **1150.** The application server engine **2000** executes **1196** a program code segment for tracking/gathering data **1190.**

The client computer **26** executing **1022** a program code segment for a web browser **1020**, which in turn executes 1104 a program code segment implementing client e-mail interface **1100**. The client computer **26** executes **1122** a program code segment for selecting content creation wizard **1124**. The client computer **26** executes **1132** a program code segment for selecting content entity **1134**.

Certain embodiments run on an Oracle database and Unix OS. All the application code is written using Java Servlets running on a servlet enabled web server. The Application uses a three-tiered architecture common to most internet applications: an interface layer, an application layer, and a database layer. In addition, certain embodiments use a custom mail agent that links into a standard Mail Transfer Agent. In certain embodiments, this custom mail agent will be able to be used by any standard mail protocol if one wants a separate application running within their own mail environment.

The interface layer runs on a web server and consists of HTML files. The HTML files use standard HTML plus javascript calls. Each affinity group has its own set of HTML files, .jpg images, and .gif images. There is also a common directory of HTML and gif files.

The division of files across affinity groups makes it easier to brand many sites. Branded areas of HTML and images can easily be changed as an affinity group's content is added or changed. A new directory is created for each affinity group with the specific branded files re-created in these directories.

When a bug or change is made to one HTML file, this change needs to be made on all the affinity groups. This can become a large issue as more and more affinity groups are introduced. A custom tool has been built to address this. Thus, one master change is made and all files are altered accordingly.

There is one set of Java Servlets running on an application layer that serves all affinity groups. The servlets implement all application needs:

The mail environment servlets handle all the mail operations for the application. This involves all the major functions excluding the specific augmented toolkit tools functions.

For certain embodiments, message handling servlets manage incoming and outgoing messages. A message is sent through standard mail transport agents (SMTP for outgoing messages and pop3 for incoming messages). For managing incoming messages we use a commercial Post Office mail transfer agent, plus a custom built agent which takes a message, parses it, and dumps different parts of the message into the database. Other message handling operations include deleting messages or saving them to specified folders.

The folder servlets allow messages to be managed by users. This includes the ability to store messages into default folders (inbox, saved, sent, trash, etc.), but also allows users to create folders themselves. There's no limit to the number of subfolders a user can create. Other folder handling operations include deleting and moving folders.

The mail compose servlets allow a mail message to be constructed and integrate the body of a message with the augmented toolkit tools that are active for that message. The message is assembled as a multipart MIME message (MIME is the internet mail standard for adding multimedia and other formats for mail besides text). The MIME message consists of a plain text part (which allows non-HTML clients to still read the text message) and the HTML part of the message. In addition, the mail compose servlets enable

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attachments to be added to the message (again, constructed as a MIME type email).

For certain embodiments, tool servlets provide the rich mail functionality for the augmented toolkit application. Examples of tools include adding images, letterheads, surveys, games, etc. to outgoing emails. In certain further embodiments, while each tool consists of specific servlet code, these principles apply to all tool servlets:

> In certain embodiments, all tools have some general properties: The tools are tied into the database with a specific tool ID. The tools also are classified by certain general properties. For example, some tools fall under the category of "Image-Text-Link." These are basic multimedia object tools that can be added to an email and don't require interactivity from the recipient of the email (except for a simple hypertext link). Another category is "Form Tool." Something like a survey or a quiz game falls under this category. A form tool is one that requires some interactivity (not unlike an HTML form) by the mail recipient.
>
> In certain embodiments, all tools are tied into a user profile: One important feature with the database structure is the ability to map tools to user profiles. A permissions feature determines which tools a user has access to (defined by an affinity group administrator). Also, states of tool use can be saved by users so they can reuse old versions of tool instances.

Registration/Login: One key part of the application is caching the application as much as possible. Certain embodiments cache the most common HTML and image files. In certain further embodiments, large scale data is also cached.

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All data is stored in the database. Mail message header information, mail body information, user information – all this is stored in the database. Thus, the database architecture is an extremely vital part of the application.

The database schema revolves around two important pieces of data; the **GROUP** and the **TOOL.** The **GROUP** is the data structure of the customer and the user. The data consists of a tree structure where the highest level of the tree is the customer.

In certain embodiments, a customer consists of one or more affinity groups, and an affinity group consists of one or more users. Each member of this tree structure utilizes a **permission.** A permission simply describes the level of control that group member is allowed. An administrator privilege, for example, allows that group member to create and delete users or affinity groups, and has access to adding or deleting all tools.

In certain embodiments, the **TOOL** is the data involving MightyMail tools. In certain further embodiments, there are only a few generic tools that can create many specific tools. For example, a survey tool (one that allows a survey to be embedded in an email) is really a member of a **form** tool. A form tool has certain properties that the survey tool may share. A survey tool, in addition to form tool properties, also contains its own special properties. Such embodiment architectures are an object oriented design approach.

In certain embodiments, the ability to perform database analysis is a critical component of the Company's strategy, and mail account behaviors will be closely monitored. These include total messages sent from a an augmented toolkit site, messages per affinity group, messages sent per client, messages sent as part of "incentive programs", and usage of specific features. Certain embodiments work with data mining vendors (e.g. Epiphany, Personify) to insure that the architecture yields robust reporting data that can be linked with client-based "opt in" data and other inputs. This data will enable real-time direct marketing Return On Investment (ROI) reports.

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In certain embodiments, the application tracks both web use and message/tool use. The web use is calculated via standard log checking. More interesting is the tracking of mail message use. Certain embodiments keep track of the number of times a message is used, a tool is used, a click-through of a received message is used, etc.

As previously mentioned, all usage actions are stored in the database, thus permitting a plethora of reporting options. Reports can be generated based on users, affinity groups, or customers, as well as the usage of all the customers. Reports can be viewed based on history over any specified time. Reports can also be generated to show comparisons of where the heaviest usage is coming from – to quickly determine the most popular tools, letterheads, affinity groups, etc.

Figure **27** depicts a systems block diagram of the interactions between two intellectual property providers sharing intellectual property content using an administrator of a distributed content system to control distribution of the shared intellectual property content to distributed content agents in accordance with an aspect of the invention.

Provider A **4000** is the intellectual property owner **4002** of content A **4010**. Provider A **4000** communicates **4004** with administrator **4200**. Provider B **4100** is the intellectual property owner **4102** of content B **4110**. Provider b **4100** communicates **4104** with administrator **4200**.

Provider A **4000** and Provider B **4100** agree to advertise a shared content **4210** containing **4012** content A **4010** and containing **4112** content B **4110** in the distributed content system **4300** containing a collection of communicating distributed content agents **4310**, **4320**, **4330** and **4340**.

Administrator **4200** is signaled regarding the agreement to advertise shared content **4210**. Administrator **4200** commands distributed content system **4300** for the distributed content agents **4310**, **4320**, **4330** and **4340** to use the

shared content **4210** as indicated by arrows **4314**, **4324**, **4334** and **4344** respectively.

In certain embodiments, administrator **4200** receives message signaling the agreement and administrator **4200** commands **4204** the distributed content system **4300** to send the shared content **4210** to the collection of distributed content agents to be used as a content entity.

In certain further embodiments, the distributed content system **4300** creates **4312** distributed content agent **4310** of the collection of the distributed content agents. Administrator **4200** commands **4204** the distributed content system **4300** to create **4312** the distributed content agent **4310** using **4313** the shared content **4210**.

In certain further embodiments, the distributed content system **4300** maintains **4312** distributed content agent **4320** of the collection of the distributed content agents. Administrator **4200** commands **4204** the distributed content system **4300** to update **4322** the distributed content agent **4320** using **4324** the shared content **4210**.

In certain further embodiments, the distributed content system **4300** creates **4312** distributed content agent **4310** of the collection of the distributed content agents. Administrator **4200** commands **4204** the distributed content system **4300** to create the distributed content agent **4310** using **4314** the shared content **4210** for use as the content entity.

In certain further embodiments, the distributed content system **4300** creates **4332** distributed content agent with client messaging interface **4330** of the collection of the distributed content agent with client messaging interfaces. Administrator **4200** commands **4204** the distributed content system **4300** to create the distributed content agent with client messaging interface **4330** using **4334** the shared content **4210** for use with client messaging interface as a selectable content entity.

In further embodiments, distributed content agent with messaging interface **4330** includes an e-mail interface. In further embodiments, distributed content agent with messaging interface **4340** includes a video messaging interface.

In certain embodiments, administrator **4200** directs **4204** distributed content system **4300** to use a specific letterhead or messaging template as the default letterhead or messaging template, in accordance with certain aspects of the invention.

In certain embodiments, the administrator **4200** creates a default letterhead message designating a first letterhead. The administrator **4200** commanding **4204** the distributed content system **4300** to send the default letterhead message designating the first letterhead to the collection of distributed content agents to be used as the default message composing letterhead. The distributed content system **4300** sending the default letterhead message designating the first letterhead to the collection of distributed content agents to be used as the default message composing letterhead. Each of the collection of distributed content agents receiving the default letterhead message designating the first letterhead. Each of the collection of distributed content agents responding to the received default letterhead message designating the first letterhead.

Figure **28** depicts a user view of a client user login and subscription web page in accordance with an aspect of the invention. Note that in certain embodiments, two distinct web pages may be used to effect entry by existing users and subscribe new users.

Figure **29A** depicts a user view of a client e-mail interface web page in accordance with an aspect of the invention. Note that in certain embodiments, voice actuation rather than click-able buttons may be used to implement user selections. In certain other embodiments, the display may be a multi-dimensional virtual image display, rather than a flat-screen image display. In certain other embodiments, the display of information may be

effected acoustically, by audio announcing of the title and sender of received messages.

In certain other embodiments, video message toolkits, capable of receiving and transmitting video sequences and requiring a user interface may well have a user interface similar to this. Note that in certain further embodiments, the video interface may present a virtual sense of reality, embodying a stereoscopic sense of the visual imagery.

Figure **29B** depicts a user view of a client e-mail interface in accordance with an aspect of the invention. Note that in certain embodiments, voice actuation rather than click-able buttons may be used to implement user selections. In certain other embodiments, the display may be a multi-dimensional virtual image display, rather than a flat-screen image display. In certain other embodiments, the display of information may be effected acoustically, by audio announcing of the title and sender of received messages.

In certain other embodiments, video message toolkits, capable of receiving and transmitting video sequences and requiring a user interface may well have a user interface similar to this. Note that in certain further embodiments, the video interface may present a virtual sense of reality, embodying a stereoscopic sense of the visual imagery.

Figure **30** depicts a user view of an e-mail composition page showing letterheads (content creation wizards) and selectable content in accordance with an aspect of the invention. Note that in certain embodiments, voice actuation rather than click-able buttons may be used to implement user selections. In certain other embodiments, the display may be a multi-dimensional virtual image display, rather than a flat-screen image display. In certain other embodiments, the display of information may be effected acoustically, by audio announcing of the title and sender of received messages.

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Figure **31** depicts another user view of a client e-mail interface web page viewing a content rich message in accordance with an aspect of the invention. Note that in certain embodiments, voice actuation rather than click-able buttons may be used to implement user selections. In certain other embodiments, the display may be a multi-dimensional virtual image display, rather than a flat-screen image display. In certain other embodiments, the display of information may be effected acoustically, by audio announcing of the title and sender of received messages.

Figure **32** depicts a user view of an administrator report request form in accordance with an aspect of the invention. The report request includes request fields for tracking the number of click-throughs per letterhead, report date, specific customers, letterheads to be accessed, letterheads sent per customer group, letterheads sent per customer, most and least used letterheads used per customer and per group.

Figure **33** depicts a user view of a client e-mail interface web page for a consumer affiliated with a fan club in accordance with an aspect of the invention. Figure **34** depicts a user view of a client e-mail interface web page for a consumer affiliated with a special interest group in accordance with an aspect of the invention. Figure **35** depicts a user view of a client e-mail interface web page for a consumer affiliated with a business concern in accordance with an aspect of the invention. Figure **36** depicts a user view of a client e-mail interface web page for a consumer affiliated with a family in accordance with an aspect of the invention. Figure **37** depicts a user view of a client e-mail interface web page for a consumer affiliated with business in accordance with an aspect of the invention. Features of these figures include embedded designations of affiliations, logos of affiliated groups and companies, links to favored sites, pictures (content entities placed at content sites in the letterhead). Additional features include stock tickers featuring real-time stock quotes.

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Figure **38** depicts a user view of an e-mail composition page showing letterheads (content creation wizards) and selectable content and further possessing controls for display of stock tickers and site links and displaying stock ticker and site link in accordance with an aspect of the invention. Figure **39** depicts a user view of an e-mail composition page showing letterheads (content creation wizards) and selectable content and further possessing controls for display of stock tickers and site links and not displaying stock ticker and site link in accordance with an aspect of the invention.

The background referred to in the box at left in both Figures **38** and **39** includes the background of this web page, the placement of various content entities, such as the advertisement, stock ticker and site link.

Figure **40** depicts a user view of a site link editor in accordance with an aspect of the invention. Figure **43** depicts a user view of a site link editor adding a new site link in accordance with an aspect of the invention. Figure **44** depicts a user view of a site link editor editing a new site link in accordance with an aspect of the invention.

Figure **41** depicts a user view of a survey editor in accordance with an aspect of the invention. Figure **42** depicts a user view of a survey editor editing a survey in accordance with an aspect of the invention.

Figure **45** depicts another user view of a site link editor in accordance with an aspect of the invention. This view displays a collection of standard site links as prototypes for client customizable content libraries.

Figure **46** depicts a user view of an administrator interface web page in accordance with an aspect of the invention. A primary link is the accounts link, supporting creating and managing. Another link is the tools link, supporting previewing and selecting tools from the augmented messaging toolkit for use by clients at the direction of the administrator. Figure **47** depicts a user view of an administrator interface web page for controlling user access to the

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augmented toolkit in accordance with an aspect of the invention. This is another administrator view of the accounts link.

Figure **48** depicts a portion of the background controls indicating selection of no background image library. Figure **49** depicts a portion of the background controls indicating selection of the drink background image library previewed showing the drink advertisement. Figure **50** depicts a portion of the background controls indicating selection of a background to be seen in the composition view, when it will start being used and when it will stop being used. Figure **51** depicts a portion of the background controls indicating selection of a background to be seen in the composition view and the time intervals between its use. Figure **52** depicts a portion of the background controls indicating selection of a background to be seen in the composition view and the number of times it is to be used before the default background will again be used.

Because these letterheads are server-based, they can be administered and tracked from any computer that has access to the web.

MightyMail begins each customer relationship with an evaluation of the customer's audience, potential for viral growth and any other issues unique to the customer needs. Then a market test is performed on a sample of the customer's audience to get a sense of unique audience behaviors and make an estimate of the number of accounts needed by the customer prior to a full-scale launch.

The preceding embodiments have been provided by way of example and are not meant to constrain the scope of the following claims.

Claims

1. An augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user comprising:

a client e-mail interface coupling said client user to said standard mail service and said client e-mail interface supporting client user selectable entities;

a content creation wizard coupled to said client e-mail interface as one of said client user selectable entities;

at least one content entity coupled to said client e-mail interface as one of said client user selectable entities;

wherein said client user selecting said content creation wizard coupled to said client e-mail interface creates a content e-mail template containing at least one client user selectable content site within said content e-mail template;

wherein said client user selecting a first of said client user selectable content entities and said client user selecting a first of said client user selectable content sites within said content e-mail template creates said content e-mail template with said first content entity at said first content site; and

wherein said client user using said content e-mail template creates a first e-mail message for said standard mail service from said client user.

2. An augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 1;

further comprising at least one content library comprising at least one user selectable content entity coupled to said client e-mail interface as one of said client user selectable entities;

wherein said client user selecting a first of said client user selectable content entities of said content library is based upon said client user selecting said content library.

3. An augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 2;

further comprising an administrator coupled to said standard mail services;

wherein said client user subscribing to said augmented messaging toolkit includes;

said client user creating a subscription message; and

said client user sending said subscription message to said administrator;

wherein said administrator initiating a subscription for said client user includes;

said administrator receiving said subscription message from said client user; and

said administrator responding to said received subscription message.

4. An augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 3;

wherein said administrator responding to said received subscription message includes;

creating said client user selectable content creation wizard;

creating said client user selectable content library comprised of at least one client user selectable content entity; and

creating said client e-mail interface coupling said client user to said standard mail service and said client e-mail interface supporting client user selectable entities including said client user selectable content creation wizard and said client user selectable content library.

5. An augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 4;

wherein said administrator further maintains a content creation wizard reservoir comprised of at least one content creation wizard; and

wherein creating said first client selectable content creation wizards comprises

selecting a first of said content creation wizards from said content creation wizard reservoir; and

coupling said first content creation wizard to said client e-mail interface to create said first client selectable content creation wizard.

6. An augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 4;

wherein said administrator further maintains a content meta-library comprised of at least one content entity; and

wherein creating said client selectable content library comprises:

selecting a first of said content entities from said content meta-library to create a first content entity; and

using said first content entity to create said client selectable library further comprising at least one of the collection comprising:

inserting said first content entity into said client selectable content library to create a client selectable content entity;

and coupling said first content entity to said client e-mail interface to create a client user selectable content entity coupled to said client e-mail interface.

7. An augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 4;

further comprising a database;

wherein said administrator responding to said received subscription message further includes said administrator recording in said database to create a client subscription record of said client user based upon said received subscription record.

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8. An augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 7;

wherein said client e-mail interface recording a first e-mail message in said database as a first e-mail record associated with said subscription record of said client user said whenever said client user sends said first e-mail message to said standard mail service from said client e-mail interface.

9. An augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 7;

further comprising a tracking module accessing said database and communicating with said administrator; and

wherein said administrator sends said tracking module a report request message; and

wherein said administrator receives from said tracking module a report message based upon said report request message; and

wherein said tracking module receives said report request message from said administrator to create a received report request message;

wherein said tracking module accesses said database based upon said received report request message to create said report message; and

wherein said tracking module sends said report message to said administrator.

10. An augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 3;

wherein said client user subscribes to said augmented messaging toolkit includes accessing a subscription web page.

11. An augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 3;

wherein said client e-mail interface coupling said client user to said standard mail service includes said client user accessing a client e-mail interface web page.

12. An augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 11;

wherein said administrator creates said client e-mail interface by providing said client user access to said web e-mail interface page.

13. A method of using an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user containing a client e-mail interface coupling said client user to said standard mail service and said client e-mail interface supporting client user selectable entities, a content creation wizard coupled to said client e-mail interface as one of said client user selectable entities and at least one content entity coupled to said client e-mail interface as one of said client user selectable entities, comprising:

said client user selecting said content creation wizard coupled to said client e-mail interface creates a content e-mail template containing at least one client user selectable content site within said content e-mail template;

said client user selecting a first of said client user selectable content entities and said client user selecting a first of said client user selectable content sites within said content e-mail template to create said content e-mail template with said first content entity at said first content site; and

said client user using said content e-mail template to create a first e-mail message for said standard mail service from said client user.

14. A method of using an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 13;

wherein said client user selectable content entities are organized into at least one content library comprising at least one user selectable content

entity coupled to said client e-mail interface as one of said client user selectable entities;

wherein said client user selecting a first of said client user selectable content entities of said content library further comprises said client user selecting said content library containing said first client user selectable content entity.

15. A method of using an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 14;

wherein said augmented messaging toolkit further comprises an administrator coupled to said standard mail services;

further comprising said client user subscribing to said augmented messaging toolkit includes;

said client user creating a subscription message; and

said client user sending said subscription message to said administrator; and

further comprising said administrator initiating a subscription for said client user includes;

said administrator receiving said subscription message from said client user; and

said administrator responding to said received subscription message.

16. A method of using an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 15;

wherein said administrator responding to said received subscription message includes;

creating said client selectable content creation wizard;

creating said client selectable content library; and

creating said client e-mail interface coupling said client user to said standard mail service and said client e-mail interface supporting client user

selectable entities including said client selectable content creation wizard and said client selectable content library.

17. A method of using an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 15;

further comprising said administrator maintaining a content creation wizard reservoir comprised of at least one content creation wizard; and

wherein creating said first client selectable content creation wizards comprises

selecting a first of said content creation wizards from said content creation wizard reservoir; and

coupling said first content creation wizard to said client e-mail interface to create said first client selectable content creation wizard.

18. A method of using an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 15;

further comprising said administrator maintaining a content meta-library comprised of at least one content entity; and

wherein creating said client selectable content library comprises:

selecting a first of said content entities from said content meta-library to create a first content entity; and

using said first content entity to create said client selectable library further comprising at least one of the collection comprising:

inserting said first content entity into said client selectable content library to create a client selectable content entity; and

coupling said first content entity to said client e-mail interface to create a client user selectable content entity coupled to said client e-mail interface.

19. A method of using an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 16;

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wherein said augmented messaging toolkit further comprises a database;

further comprising said administrator responding to said received subscription message further includes said administrator recording in said database to create a client subscription record based upon said received subscription record.

20. A method of using an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 19;

further comprising said client e-mail interface recording a first e-mail message in said database as a first e-mail record whenever said client user sends said first e-mail message to said standard mail service from said client e-mail interface.

21. A method of using an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 19;

wherein said augmented messaging toolkit further comprises a tracking module accessing said database and communicating with said administrator; and

further comprising:

said administrator sending said tracking module a report request message; and

said administrator receiving from said tracking module a report message based upon said report request message; and

further comprising:

said tracking module receiving said report request message from said administrator to create a received report request message;

said tracking module accessing said database based upon said received report request message to create said report message; and

said tracking module sending said report message to said administrator.

22. A method of using an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 15;

wherein said client user subscribing to said augmented messaging toolkit includes accessing a web subscription page.

23. A method of using an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 15;

said client user coupling to said client e-mail interface includes accessing a web e-mail interface page.

24. A method of using an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 23;

said administrator creating said client e-mail interface includes providing said client user access to said web e-mail interface page.

25. A method of operating an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user containing a client e-mail interface coupling said client user to said standard mail service and said client e-mail interface supporting client user selectable entities, a content creation wizard coupled to said client e-mail interface as one of said client user selectable entities, and at least one content entity coupled to said client e-mail interface as one of said client user selectable entities, comprising:

determining said client user selection of said content creation wizard coupled to said client e-mail interface to create a content e-mail template containing at least one client user selectable content site within said content e-mail template;

determining said client user selection of a first of said client user selectable content entities and determining said client user selection of a first of said client user selectable content sites within said content e-mail template

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to create said content e-mail template with said first content entity at said first content site; and

supporting said client user using said content e-mail template to create a first e-mail message sent by said standard mail service from said client user.

26. A method of using an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 25;

wherein said client user selectable content entities are organized into at least one content library comprising at least one user selectable content entity coupled to said client e-mail interface as one of said client user selectable entities; and

further comprising determining said client user selecting a first of said client user selectable content entities of said content library; and

further comprises determining said client user selecting said content library containing said first client user selectable content entity.

27. A method of operating an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 26;

wherein said augmented messaging toolkit further comprises an administrator coupled to said standard mail services;

further comprising supporting said client user subscribing to said augmented messaging toolkit further comprising:

supporting said client user creating a subscription message; and

supporting said client user sending said subscription message to said administrator; and

further comprising supporting said administrator initiating a subscription for said client user includes;

supporting said administrator receiving said subscription message from said client user; and

supporting said administrator responding to said received subscription message.

28. A method of operating an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 27;

wherein supporting said administrator responding to said received subscription message includes;

supporting creating said client selectable content creation wizard;

supporting creating said client selectable content library; and

supporting creating said client e-mail interface coupling said client user to said standard mail service and said client e-mail interface supporting client user selectable entities including said client selectable content creation wizard and said client selectable content library.

29. A method of operating an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 27;

further comprising supporting said administrator maintaining a content creation wizard library comprised of at least one content creation wizard; and

wherein supporting creating said first client selectable content creation wizards comprises:

supporting selecting a first of said content creation wizards from said content creation wizard library; and

supporting coupling said first content creation wizard to said client e-mail interface to create said first client selectable content creation wizard.

30. A method of operating an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 27;

further comprising supporting said administrator maintaining a content meta-library comprised of at least one content entity; and

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wherein supporting creating said client selectable content library comprises

supporting selecting a first of said content entities from said content meta-library to create a first content entity; and

supporting using said first content entity to create said client selectable library further comprising at least one of the collection comprising:

supporting inserting said first content entity into said client selectable content library to create a client selectable content entity; and

supporting coupling said first content entity to said client e-mail interface to create a client user selectable content entity coupled to said client e-mail interface.

31. A method of operating an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 28;

wherein said augmented messaging toolkit further comprises a database;

further comprising supporting said administrator responding to said received subscription message further includes supporting said administrator recording in said database to create a client subscription record based upon said received subscription record.

32. A method of operating an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 31;

further comprising supporting said client e-mail interface recording a first e-mail message in said database as a first e-mail record whenever said client user sends said first e-mail message to said standard mail service from said client e-mail interface.

33. A method of operating an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 31;

wherein said augmented messaging toolkit further comprises a tracking module accessing said database and communicating with said administrator; and

further comprising:

supporting said administrator sending said tracking module a report request message; and

supporting said administrator receiving from said tracking module a report message based upon said report request message; and

further comprising:

supporting said tracking module receiving said report request message from said administrator to create a received report request message;

supporting said tracking module accessing said database based upon said received report request message to create said report message; and

supporting said tracking module sending said report message to said administrator.

34. A method of operating an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 27;

wherein said client user subscribing to said augmented messaging toolkit includes accessing a web subscription page.

35. A method of operating an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 27;

wherein supporting said client user coupling to said client e-mail interface includes supporting said client user accessing a web e-mail interface page.

36. A method of operating an augmented messaging toolkit interfacing a client user to a standard mail service supporting sending e-mail messages from said client user as recited in Claim 35;

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said administrator creating said client e-mail interface includes providing said client user access to said web e-mail interface page.

37. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module;

including said user operating a client computer communicating via said network to a server system;

wherein said client computer executing program code segments further including;

a program code segment implementing said client interface;

a program code segment implementing selection of said selectable content creation wizard; and

a program code segment implementing selection of said selectable content entity; and

wherein said server system executing program code segments further including;

a program code segment implementing said standard mail service module;

a program code segment implementing said selectable content creation wizard; and

a program code segment implementing said selectable content entity.

38. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module as recited in Claim 37;

wherein said client computer executing program code segments further including a program code segment implementing a web browser including a browser execution engine further executing program code segments; and

wherein said web browser execution engine executing said program code segment implementing said client interface.

39. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module as recited in Claim 38;

wherein said server system executing program code segments including a program code segment maintaining a client interface web page.

40. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module as recited in Claim 39;

wherein said web browser execution engine executing said program code segment implementing said client interface includes a program code segment accessing said client interface web page;

41. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module as recited in Claim 40;

wherein said program code segment implementing said client interface web page are executed by said server system.

42. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module as recited in Claim 40;

wherein said client computer executed program code segment implementing said client interface are received by said client computer by accessing said client interface web page with said browser.

43. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module as recited in Claim 40;

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wherein said client computer executed program code segment implementing said client interface are enabled for execution on said client computer by accessing said client interface web page with said browser.

44. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module as recited in Claim 38;

wherein said client computer executed program code segment implementing said client interface includes a program code segment implementing said selectable content creation wizard.

45. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module as recited in Claim 44;

wherein said client computer executed program code segment implementing said selectable content creation wizard is received from execution of said server system executing program code segment implementing said selectable content creation wizard.

46. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module as recited in Claim 44;

wherein said client computer executed program code segment implementing said selectable content creation wizard is enabled by execution of said server system program code segment implementing said selectable content creation wizard.

47. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content entity and with a selectable content entity and using a standard mail service module as recited in Claim 38;

wherein said client computer executed program code segment implementing said client interface includes a program code segment implementing said selectable content entity.

48. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content entity and with a selectable content entity and using a standard mail service module as recited in Claim 47;

wherein said client computer executed program code segment implementing said selectable content entity is received from execution of said server system program code segment implementing said selectable content entity.

49. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content entity and with a selectable content entity and using a standard mail service module as recited in Claim 47;

wherein said client computer executed program code segment implementing said selectable content entity is enabled by execution of said code segment implementing said selectable content entity.

50. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content entity and with a selectable content entity and using a standard mail service module as recited in Claim 47;

wherein said server system comprises a database coupled to said server system; and

wherein said user operating said client computer subscribing to said augmented messaging toolkit creates a client subscriber record in said database;

wherein said server system executing program code segments further comprises a program code segment maintaining said client computer executable program code segment implementing said client interface; and

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wherein said program code segment maintaining said client computer executable program code segment implementing said client interface accesses said client subscriber record of said database.

51. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content entity and with a selectable content entity and using a standard mail service module as recited in Claim 50;

wherein said server system executing program code segments further comprising:

an administrator program code segment; and

a tracking program code segment; and

wherein said administrator program code segment includes a program code segment commanding said tracking program code segment with a report command; and

wherein said tracking program code segment includes a program code segment responding to said report command further includes;

a program code segment accessing said database to create an access result;

a program code segment using said access result to create a report; and

a program code segment sending said report to said administrator program code segment.

52. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content entity and with a selectable content entity and using a standard mail service module as recited in Claim 51;

wherein said administrator program code segment includes a program code segment commanding said tracking program code segment with a report command; and

wherein said tracking program code segment includes a program code segment responding to said report command further includes;

a program code segment accessing said database to create an access result;

a program code segment using said access result to create a report; and

a program code segment sending said report to said administrator program code segment.

53. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module as recited in Claim 52;

wherein said server system includes an application server engine executing program code segments including at least one of the collection comprising:

said program code segment implementing said selectable content creation wizard;

said program code segment implementing said selectable content entity;

said program code segment maintaining said client computer executable program code segment implementing said client interface;

said program code segment implementing said client interface web page;

said administrator program code segment; and

said tracking program code segment.

54. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module as recited in Claim 53;

wherein said server system includes an application server engine executing program code segments comprising:

said program code segment implementing said selectable content creation wizard;

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said program code segment implementing said selectable content entity;

said program code segment maintaining said client computer executable program code segment implementing said client interface;

said program code segment implementing said client interface web page;

said administrator program code segment; and

said tracking program code segment.

55. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module as recited in Claim 51;

wherein said database includes a database engine coupled to a mass storage system;

wherein program code segments accessing said database include;

a program code segment sending a database access request to said database engine;

wherein said database engine executes program code segments comprising

a program code segment receiving said database access request to create a received database access request; and

a program code segment performing an access of said mass storage system based upon said received database access request.

56. A client-server system for a network supporting an augmented messaging toolkit including a client interface with a selectable content creation wizard and with a selectable content entity and using a standard mail service module as recited in Claim 37;

wherein said server system includes an application server engine executing program code segments including;

said program code segment implementing said selectable content creation wizard; and

said program code segment implementing said selectable content entity.

57. A method of operating a distributed content system controlled by an administrator based upon an agreement by a first provider of first content and a second provider of second content to advertise a shared content containing said first content and said second content to a collection of distributed content agents each using at least one content entity in communication with said distributed content system comprising:

said administrator receives a message signaling said agreement; and

said administrator commands said distributed content system to send said shared content to said collection of distributed content agents to be used as a content entity.

58. A method of operating a distributed content system controlled by an administrator based upon an agreement by a first provider of first content and a second provider of second content to advertise a shared content containing said first content and said second content to a collection of distributed content agents in communication with said distributed content system as recited in Claim 57;

wherein said distributed content system creates at least one distributed content agent of said collection of said distributed content agents;

said administrator commands said distributed content system to send said shared content to said collection of distributed content agents to be used as a content entity includes said distributed content system creating said distributed content agent using said shared content.

59. A method of operating a distributed content system controlled by an administrator based upon an agreement by a first provider of first content and a second provider of second content to advertise a shared content containing said first content and said second content to a collection of distributed content agents in communication with said distributed content system as recited in Claim 58 ;

wherein said distributed content system maintains at least one distributed content agent of said collection of said distributed content agents;

said administrator commands said distributed content system to send said shared content to said collection of distributed content agents to be used as a content entity includes said distributed content system maintaining said distributed content agent includes updating said distributed content agent with said shared content for use as said content entity.

60. A method of operating a distributed content system controlled by an administrator based upon an agreement by a first provider of first content and a second provider of second content to advertise a shared content containing said first content and said second content to a collection of distributed content agents in communication with said distributed content system as recited in Claim 59;

wherein at least one of said distributed content agent of said collection of said distributed content agents includes a client messaging interface with a selectable content entity.

61. A method of operating a distributed content system controlled by an administrator based upon an agreement by a first provider of first content and a second provider of second content to advertise a shared content containing said first content and said second content to a collection of distributed content agents in communication with said distributed content system as recited in Claim 60;

wherein said client messaging interface with a selectable content entity includes a client e-mail interface.

62. A method of operating a distributed content system controlled by an administrator based upon an agreement by a first provider of first content and a second provider of second content to advertise a shared content containing said first content and said second content to a collection of distributed content agents in communication with said distributed content system as recited in Claim 60;

wherein said client messaging interface with a selectable content entity includes a client video mail interface.

63. A method of operating a distributed content system controlled by an administrator of a collection of distributed content agents each using a default message composing letterhead in communication with said distributed content system comprising:

said administrator creating a default letterhead message designating a first letterhead;

said administrator commanding said distributed content system to send said default letterhead message designating said first letterhead to said collection of distributed content agents to be used as said default message composing letterhead;

said distributed content system sending said default letterhead message designating said first letterhead to said collection of distributed content agents to be used as said default message composing letterhead;

each of said collection of distributed content agents receiving said default letterhead message designating said first letterhead; and

each of said collection of distributed content agents responding to said received default letterhead message designating said first letterhead.

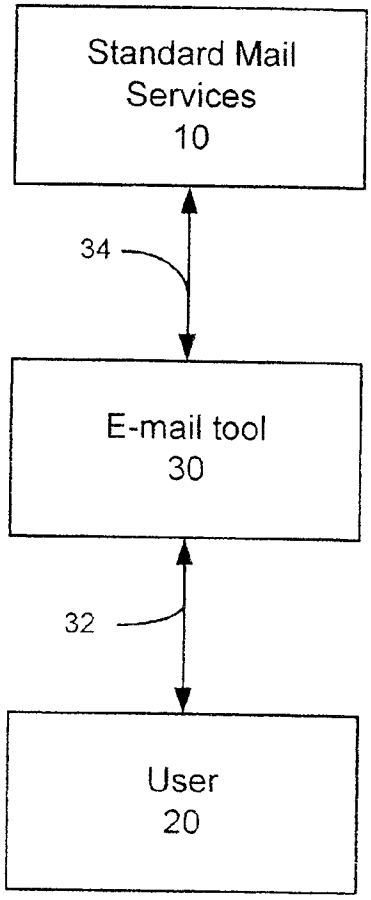


Fig. 1
prior art

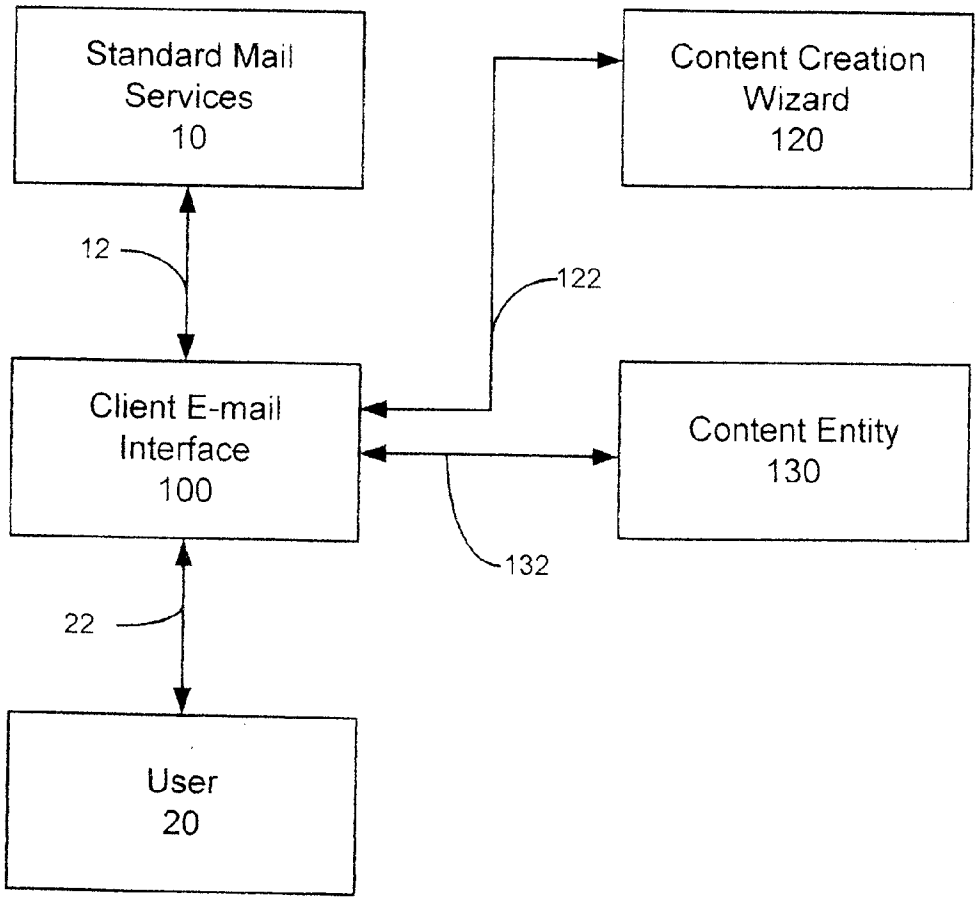

Standard Mail Services 10
Content Creation Wizard 120
12
122
Client E-mail Interface 100
Content Entity 130
132
22
User 20

Fig. 2

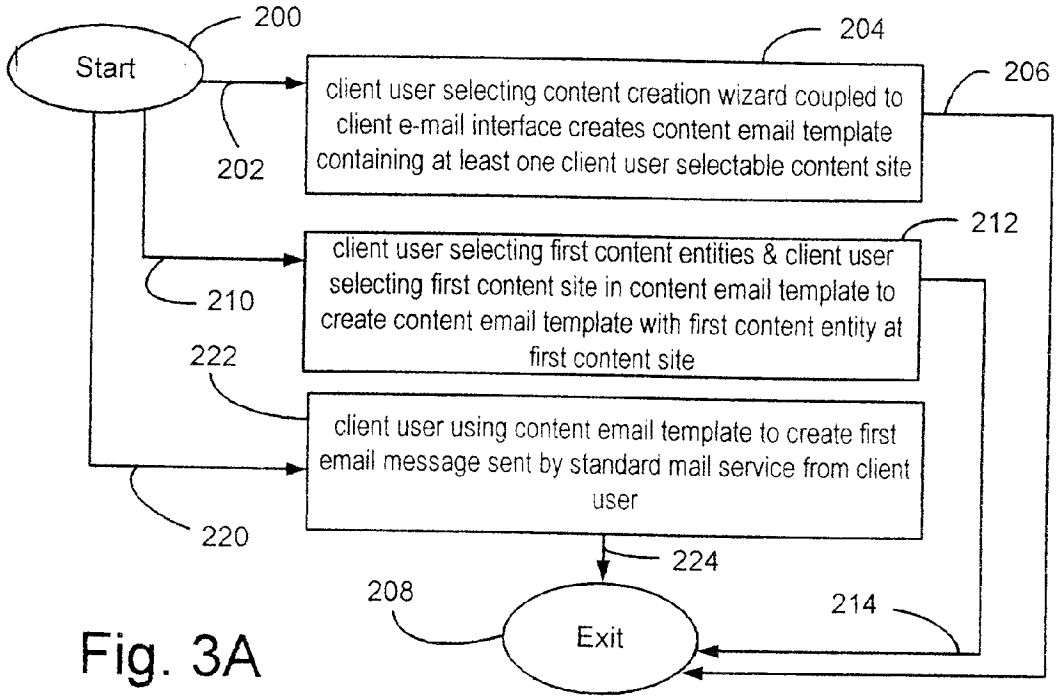

200
Start
202
204
client user selecting content creation wizard coupled to client e-mail interface creates content email template containing at least one client user selectable content site
206
210
212
client user selecting first content entities & client user selecting first content site in content email template to create content email template with first content entity at first content site
222
client user using content email template to create first email message sent by standard mail service from client user
220
224
208
Exit
214

Fig. 3A

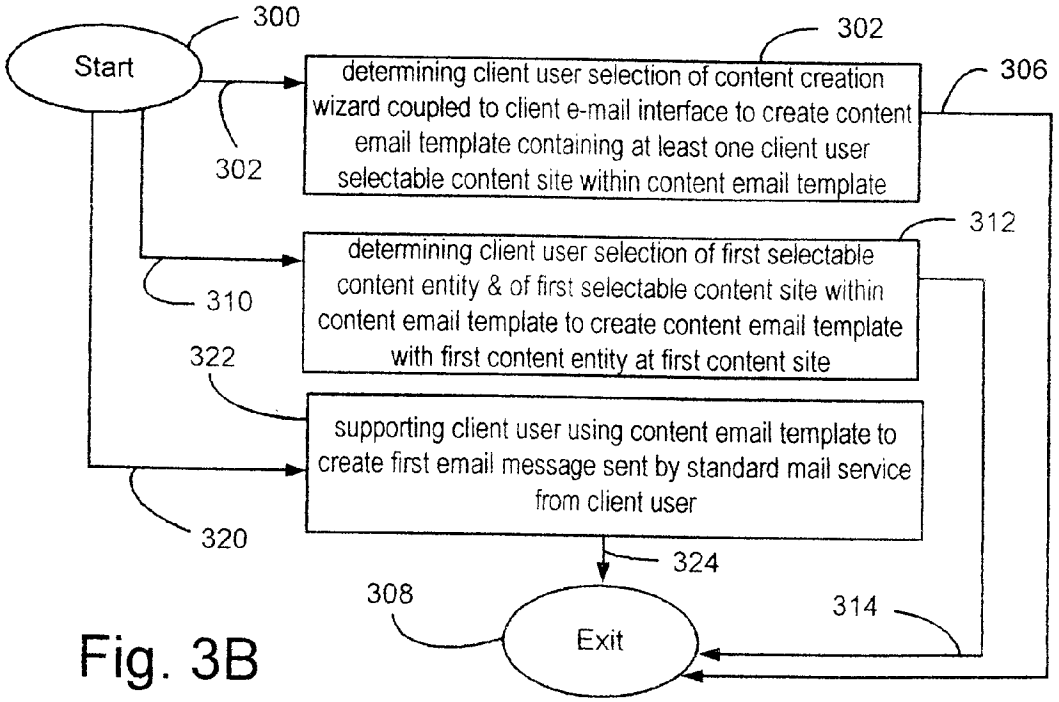

300
Start
302
302
determining client user selection of content creation wizard coupled to client e-mail interface to create content email template containing at least one client user selectable content site within content email template
306
310
312
determining client user selection of first selectable content entity & of first selectable content site within content email template to create content email template with first content entity at first content site
322
supporting client user using content email template to create first email message sent by standard mail service from client user
320
324
308
Exit
314

Fig. 3B

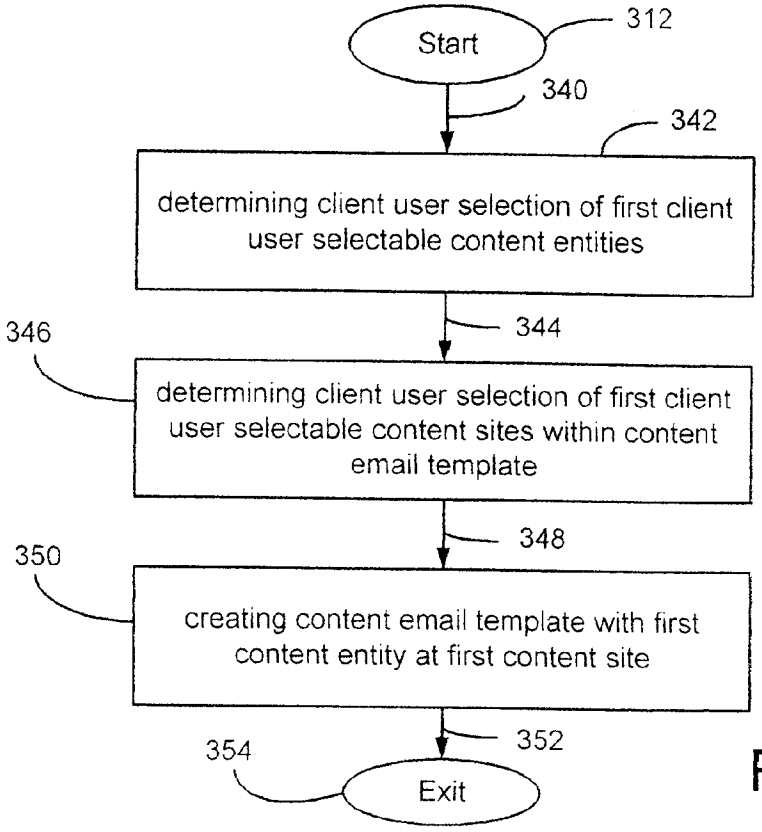

Start
312
340
342
determining client user selection of first client user selectable content entities
344
346
determining client user selection of first client user selectable content sites within content email template
348
350
creating content email template with first content entity at first content site
352
354
Exit

Fig. 3C

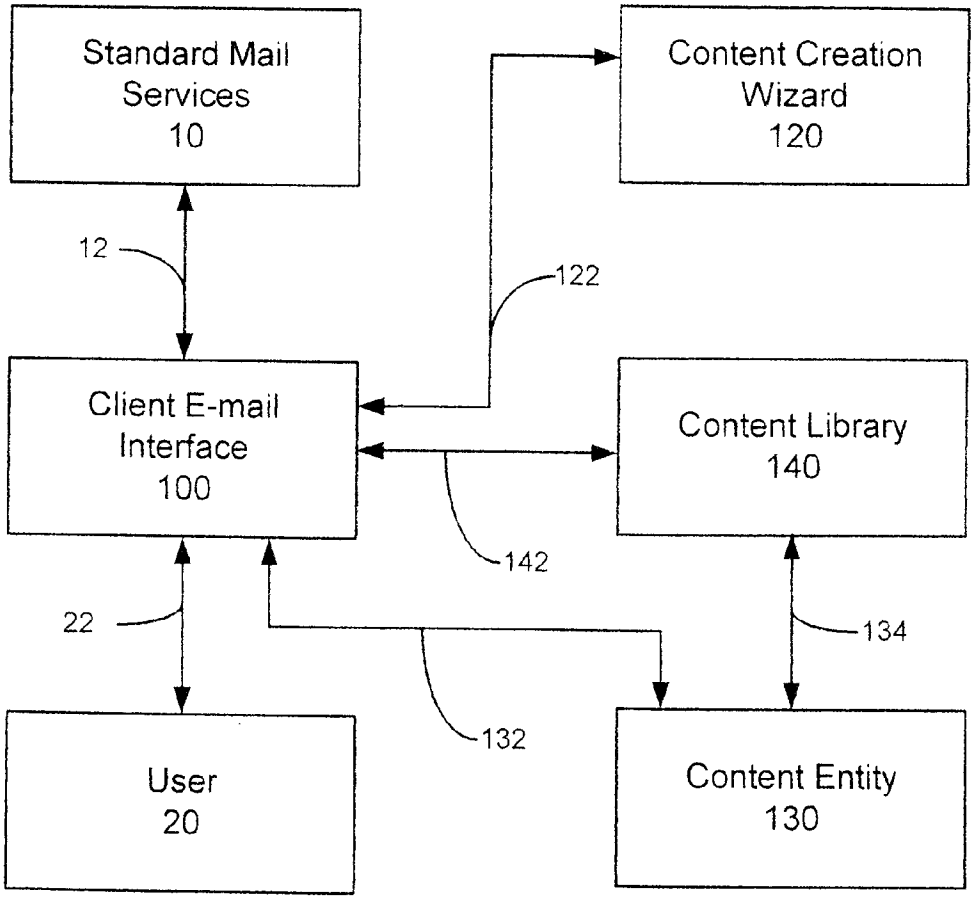

Standard Mail Services 10
Content Creation Wizard 120
12
122
Client E-mail Interface 100
Content Library 140
142
22
134
132
User 20
Content Entity 130

Fig. 4

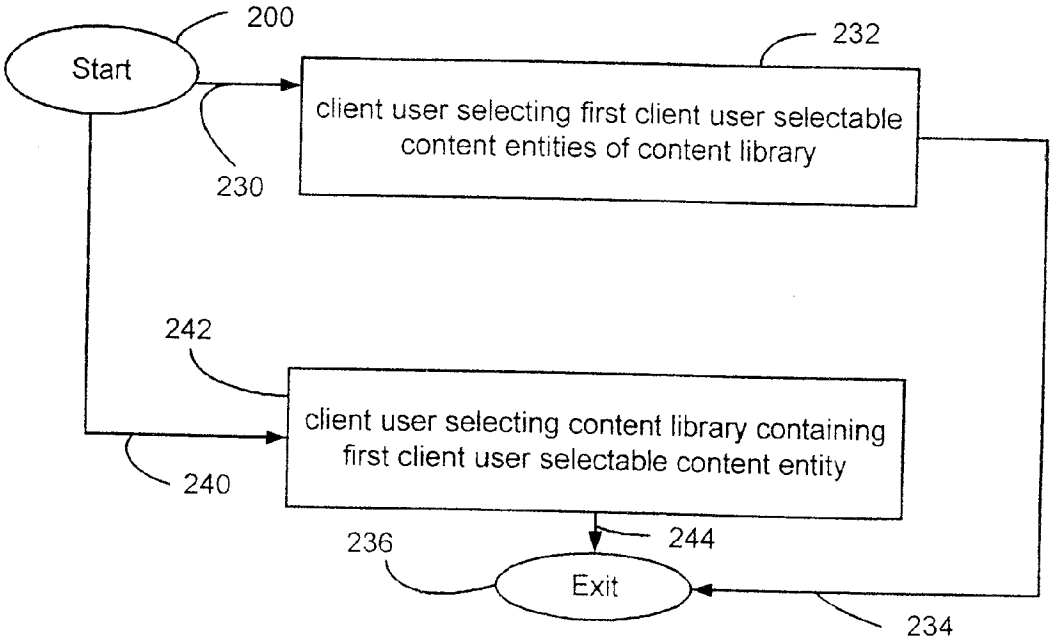

200
Start
232
client user selecting first client user selectable content entities of content library
230
242
client user selecting content library containing first client user selectable content entity
240
236
244
Exit
234

Fig. 5A

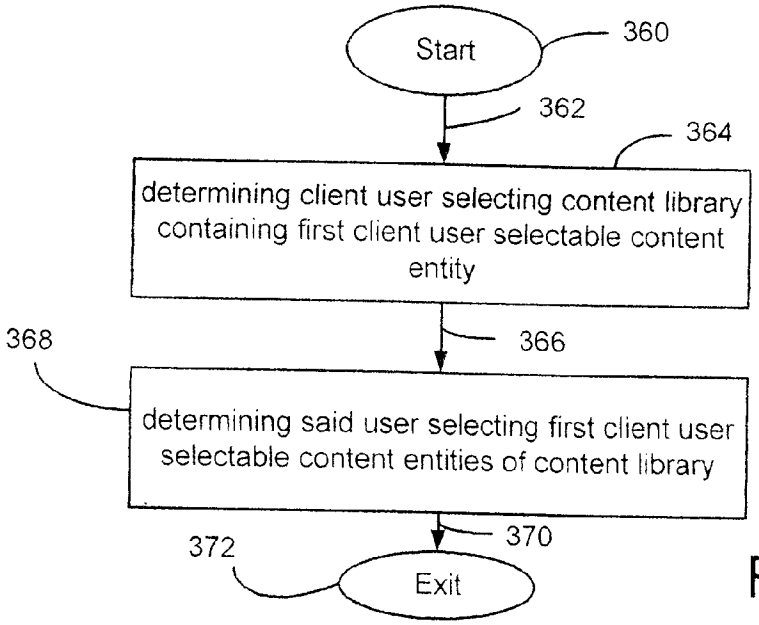

Start
360
362
364
determining client user selecting content library containing first client user selectable content entity
368
366
determining said user selecting first client user selectable content entities of content library
372
370
Exit

Fig. 5B

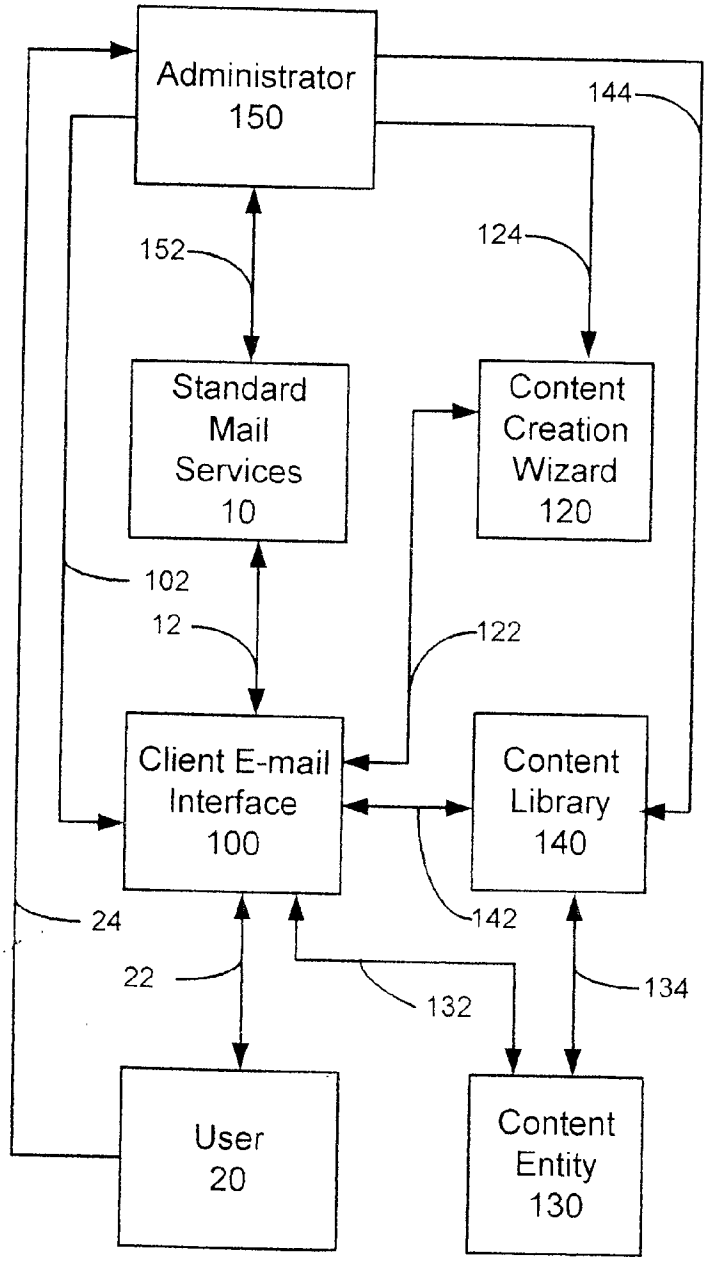

Administrator
150
144
152
124
Standard
Mail
Services
10
Content
Creation
Wizard
120
102
12
122
Client E-mail
Interface
100
Content
Library
140
24
142
22
132
134
User
20
Content
Entity
130

Fig. 6

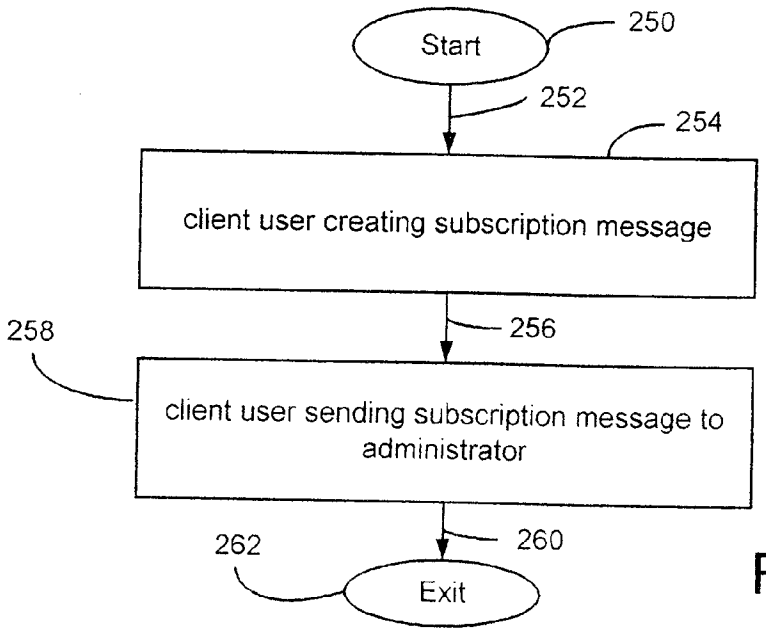

Start
250
252
254
client user creating subscription message
256
258
client user sending subscription message to administrator
260
262
Exit

Fig. 7A

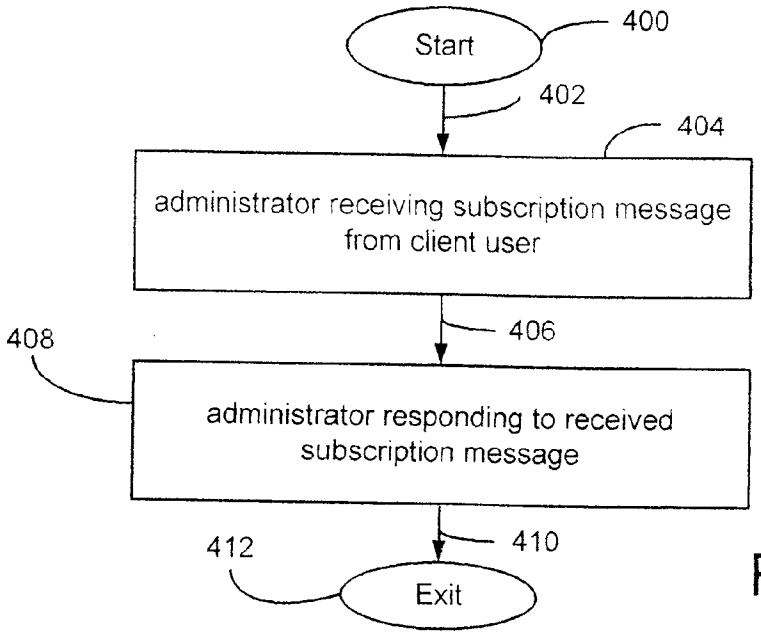

Start
400
402
404
administrator receiving subscription message from client user
406
408
administrator responding to received subscription message
410
412
Exit

Fig. 7B

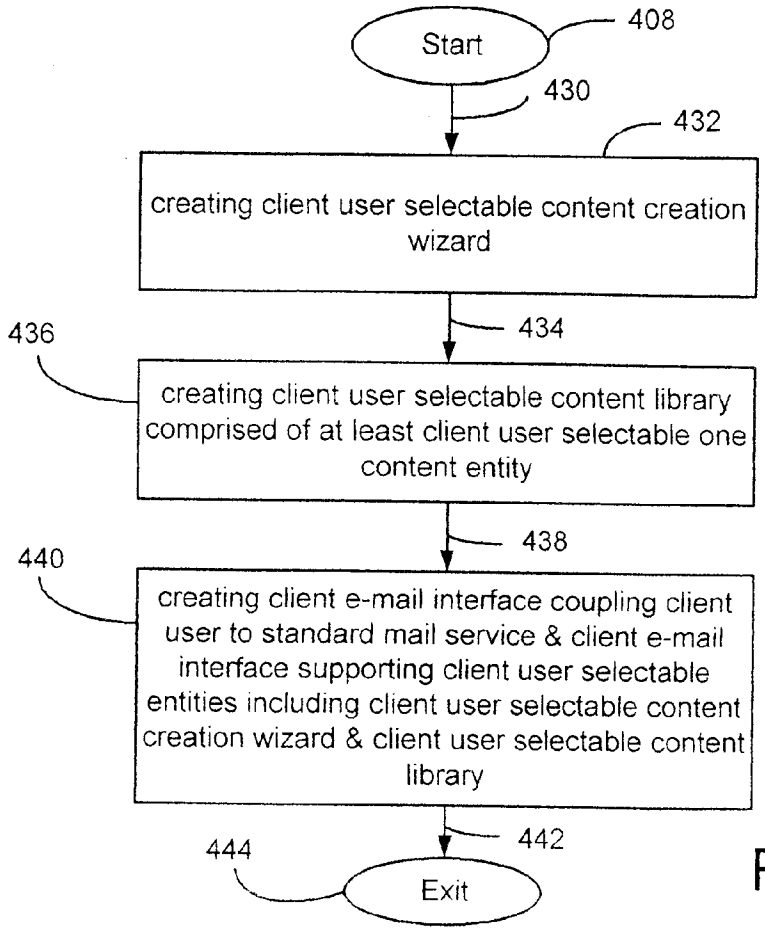

Start
408
430
432
creating client user selectable content creation wizard
434
436
creating client user selectable content library comprised of at least client user selectable one content entity
438
440
creating client e-mail interface coupling client user to standard mail service & client e-mail interface supporting client user selectable entities including client user selectable content creation wizard & client user selectable content library
442
444
Exit

Fig. 7C

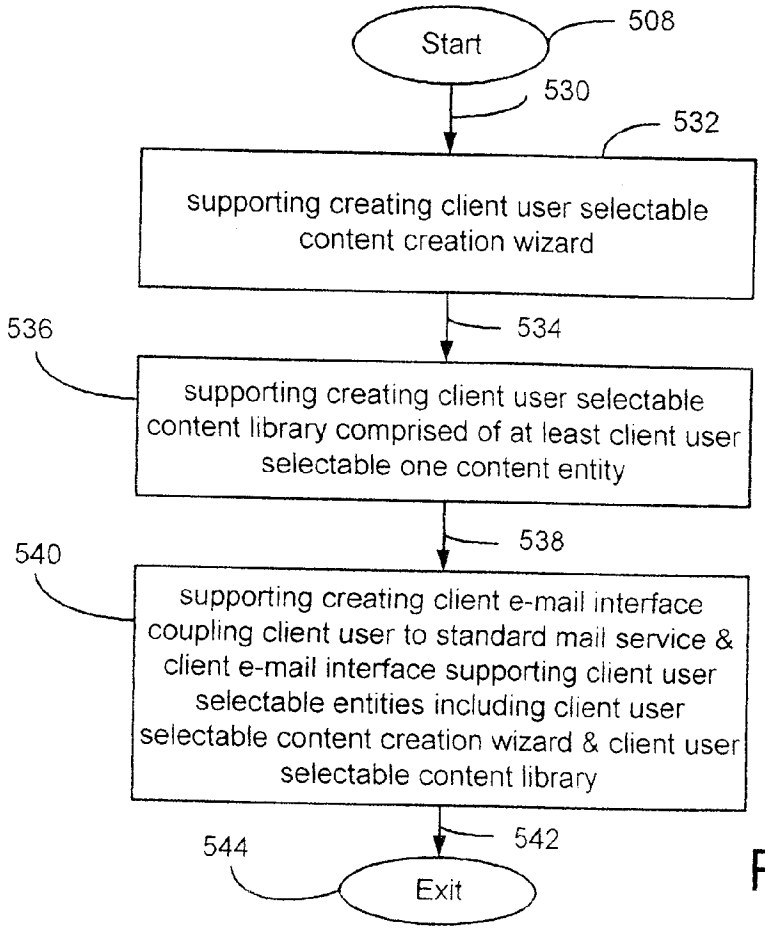

Start
508
530
532
supporting creating client user selectable content creation wizard
534
536
supporting creating client user selectable content library comprised of at least client user selectable one content entity
538
540
supporting creating client e-mail interface coupling client user to standard mail service & client e-mail interface supporting client user selectable entities including client user selectable content creation wizard & client user selectable content library
542
544
Exit

Fig. 7F

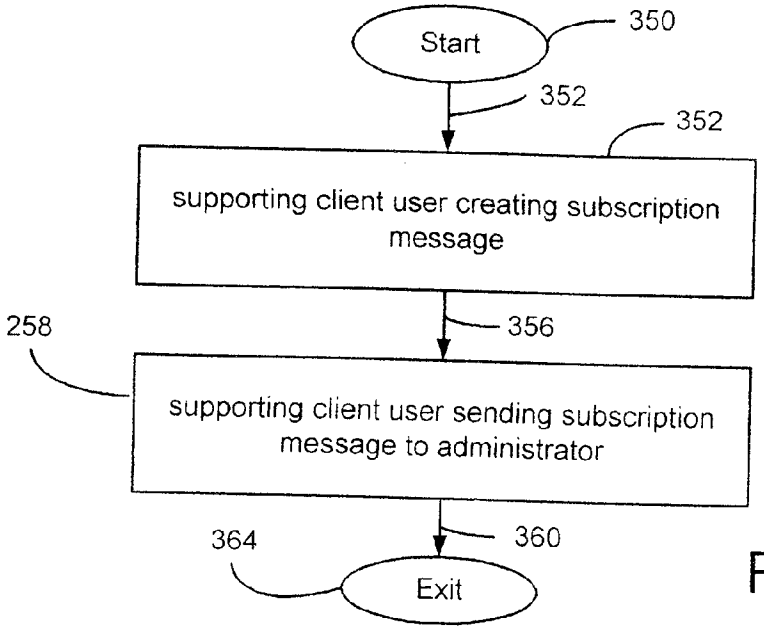

Start
350
352
352
supporting client user creating subscription message
356
258
supporting client user sending subscription message to administrator
364
360
Exit

Fig. 7D

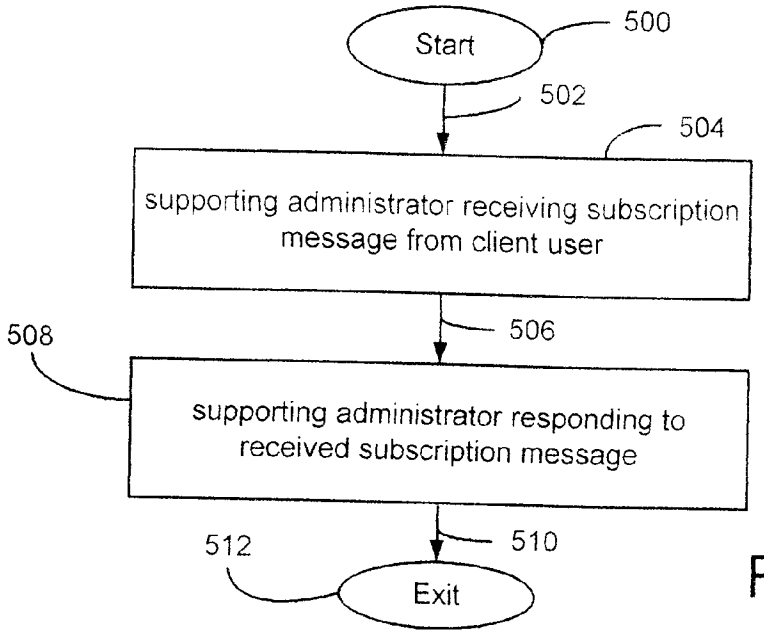

Start
500
502
504
supporting administrator receiving subscription message from client user
506
508
supporting administrator responding to received subscription message
512
510
Exit

Fig. 7E

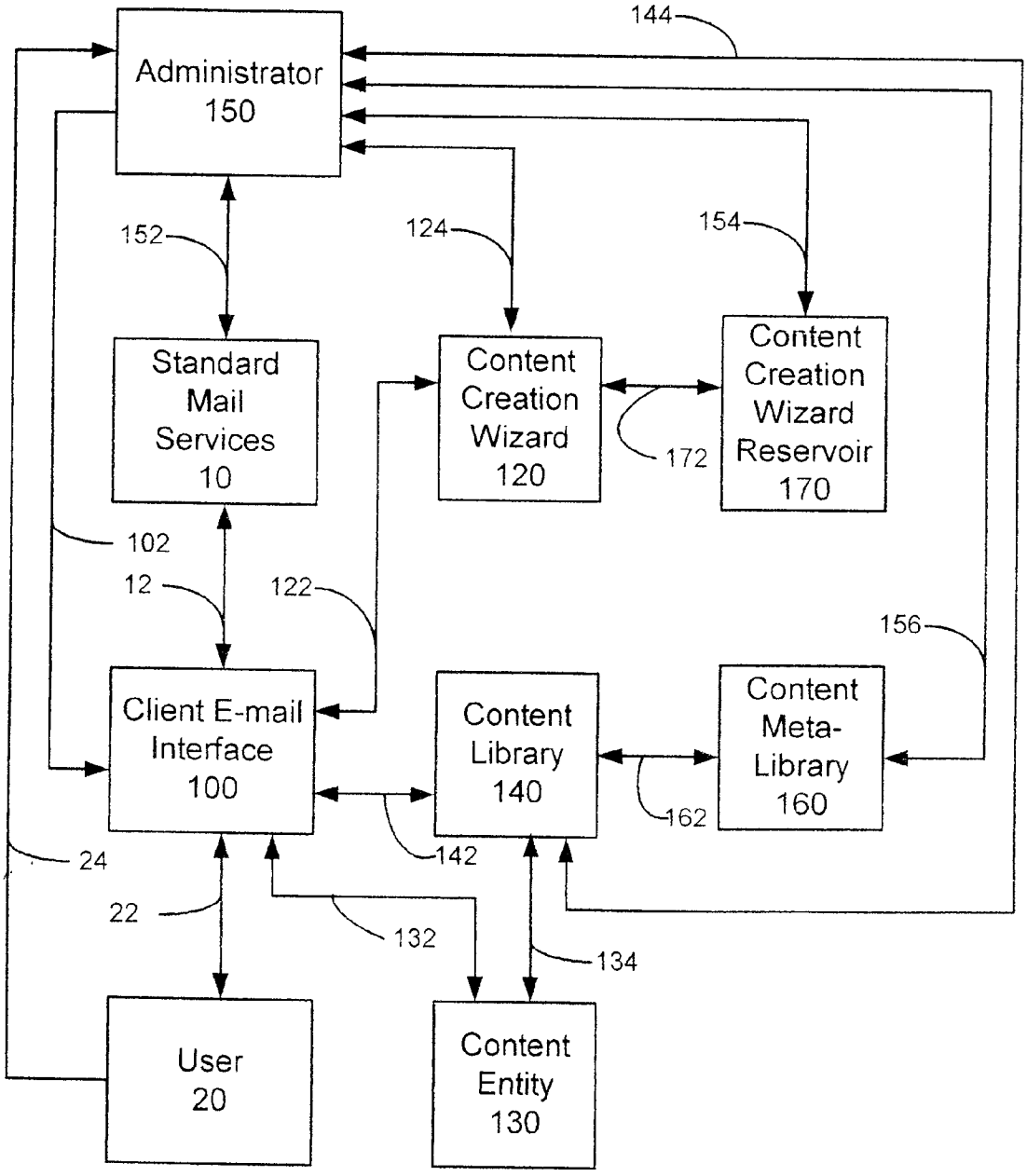

Administrator
150
144
152
124
154
Standard
Mail
Services
10
Content
Creation
Wizard
120
Content
Creation
Wizard
Reservoir
170
172
102
12
122
156
Client E-mail
Interface
100
Content
Library
140
Content
Meta-
Library
160
162
24
142
22
132
134
User
20
Content
Entity
130

Fig. 8

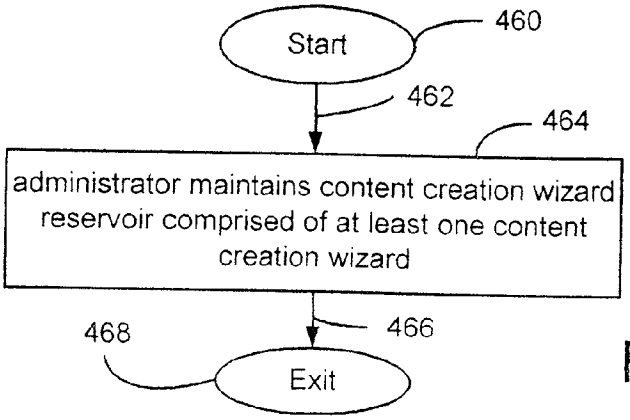

Start
460
462
464
administrator maintains content creation wizard reservoir comprised of at least one content creation wizard
468
466
Exit

Fig. 9A

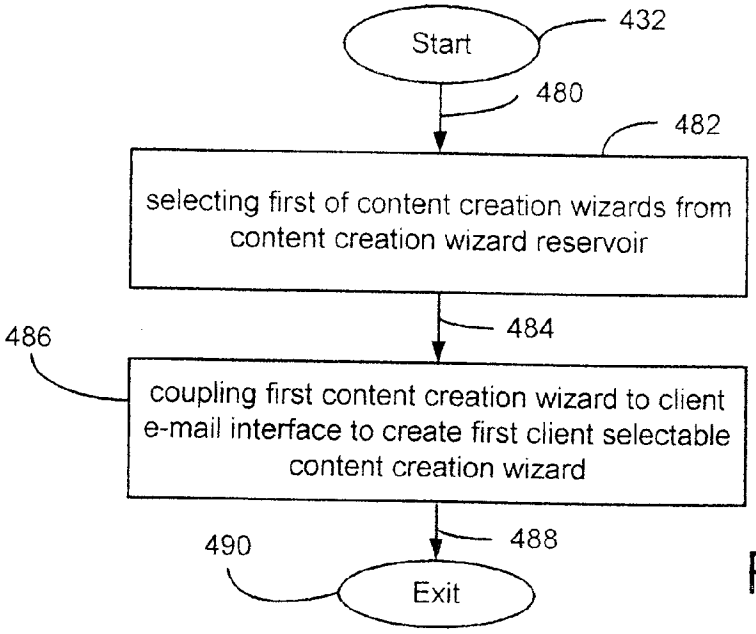

Start
432
480
482
selecting first of content creation wizards from content creation wizard reservoir
484
486
coupling first content creation wizard to client e-mail interface to create first client selectable content creation wizard
490
488
Exit

Fig. 9B

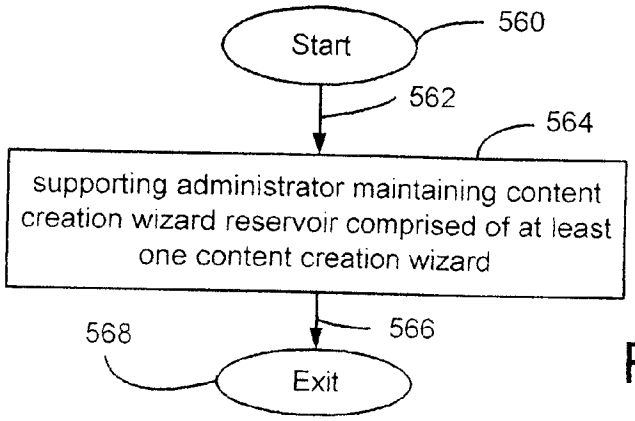

Start
560
562
564
supporting administrator maintaining content creation wizard reservoir comprised of at least one content creation wizard
566
568
Exit

Fig. 9C

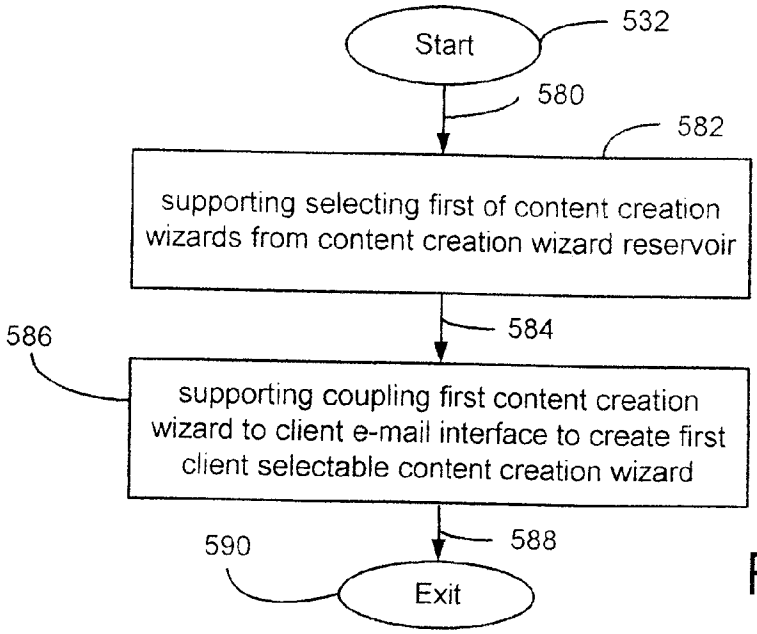

Start
532
580
582
supporting selecting first of content creation wizards from content creation wizard reservoir
584
586
supporting coupling first content creation wizard to client e-mail interface to create first client selectable content creation wizard
588
590
Exit

Fig. 9D

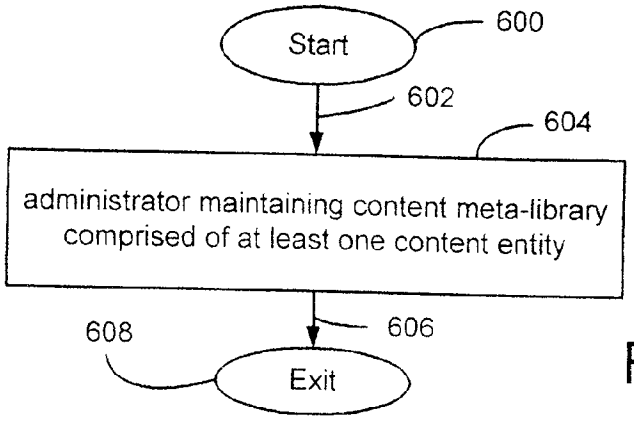

Start
600
602
604
administrator maintaining content meta-library comprised of at least one content entity
606
608
Exit

Fig. 9E

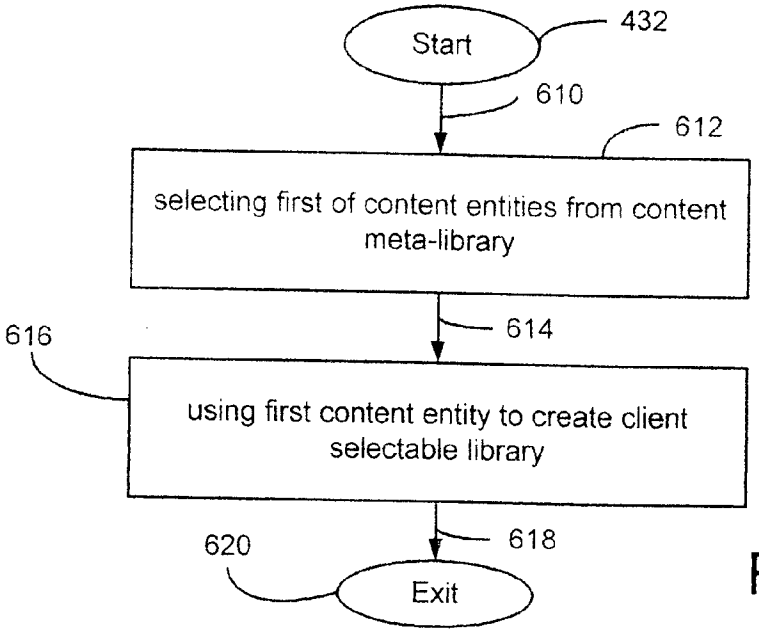

Start
432
610
612
selecting first of content entities from content meta-library
614
616
using first content entity to create client selectable library
618
620
Exit

Fig. 9F

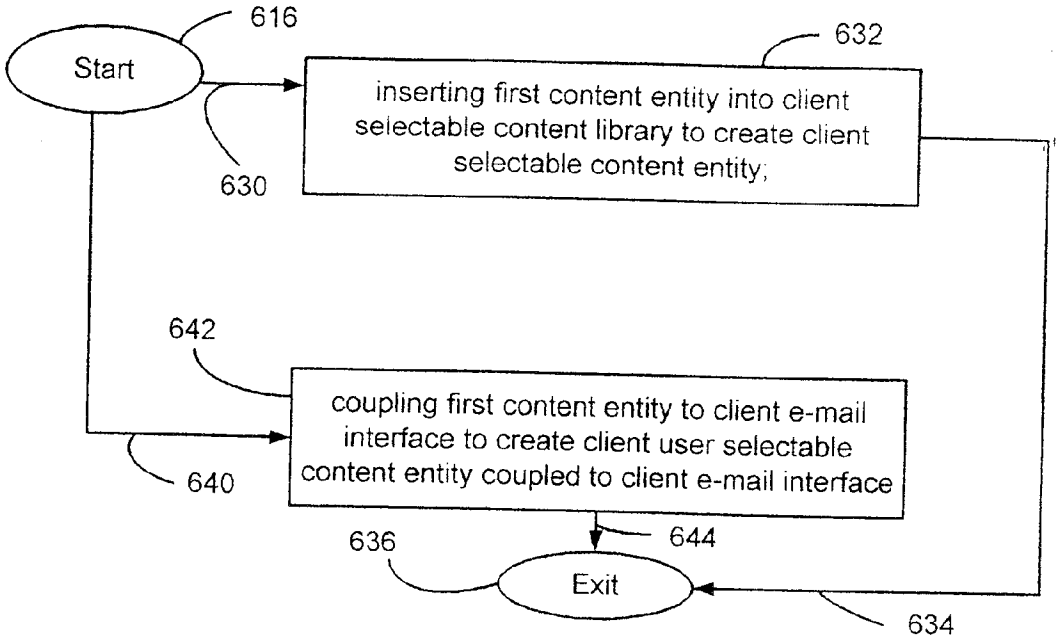

616
Start
632
inserting first content entity into client selectable content library to create client selectable content entity;
630
642
coupling first content entity to client e-mail interface to create client user selectable content entity coupled to client e-mail interface
640
636
644
Exit
634

Fig. 9G

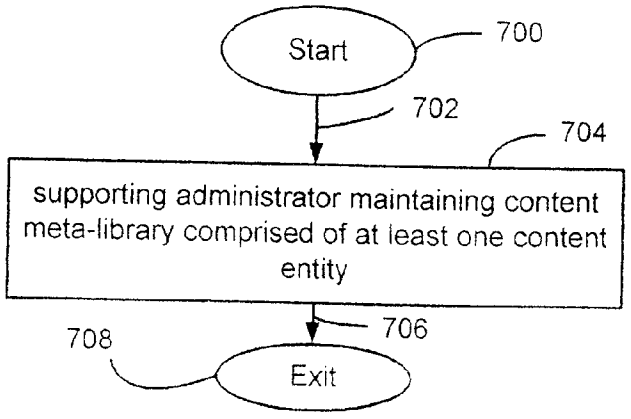

Start
700
702
704
supporting administrator maintaining content meta-library comprised of at least one content entity
706
708
Exit

Fig. 9H

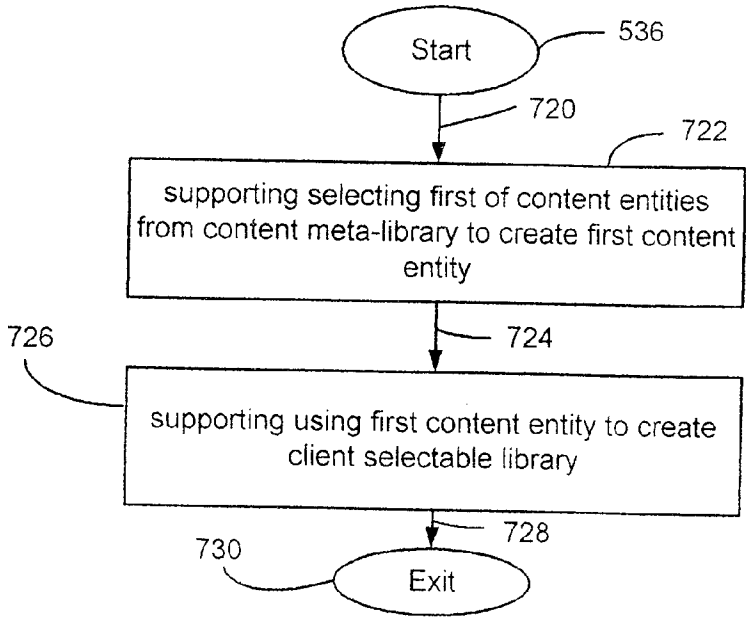

Start
536
720
722
supporting selecting first of content entities from content meta-library to create first content entity
724
726
supporting using first content entity to create client selectable library
728
730
Exit

Fig. 9I

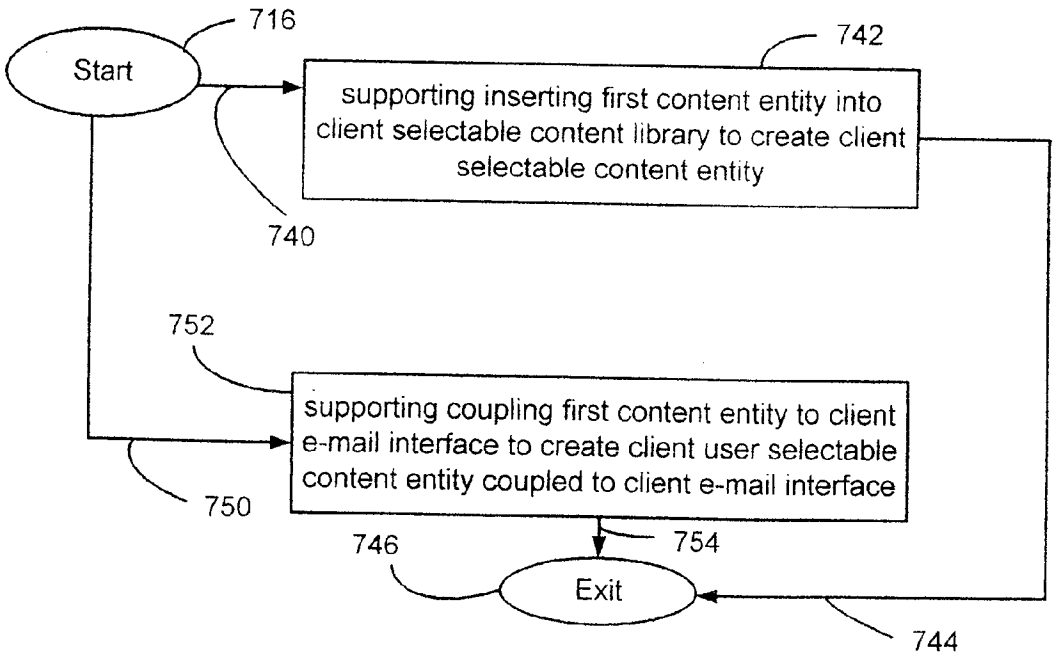

716
Start
742
supporting inserting first content entity into client selectable content library to create client selectable content entity
740
752
supporting coupling first content entity to client e-mail interface to create client user selectable content entity coupled to client e-mail interface
750
754
746
Exit
744

Fig. 9J

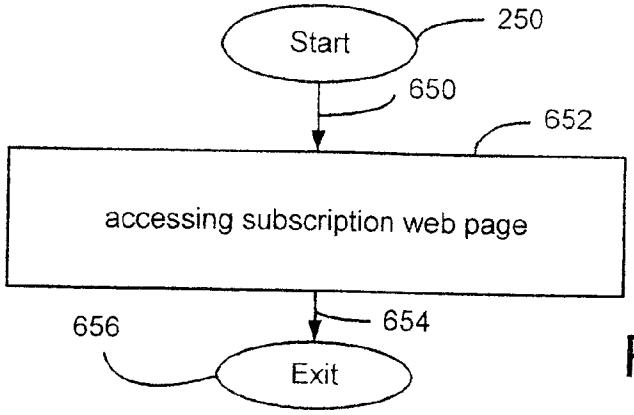


Fig. 9K

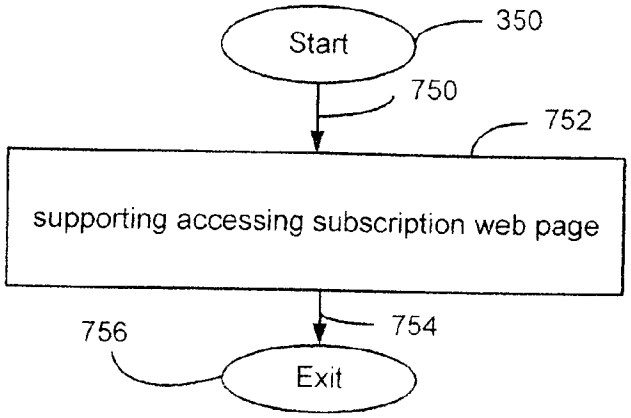


Fig. 9L

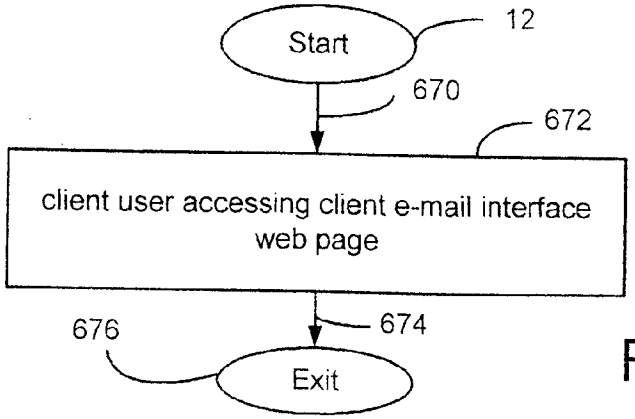


Fig. 9M

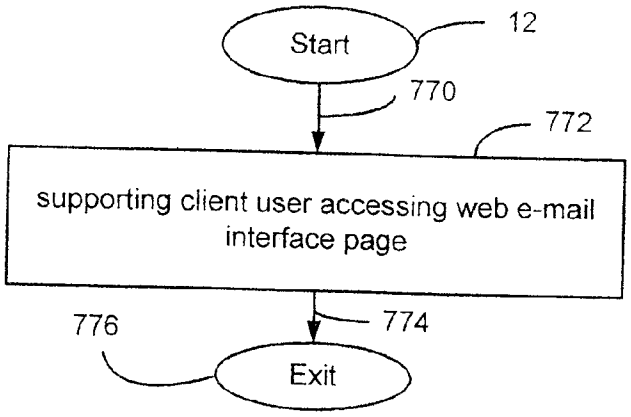


Fig. 9N

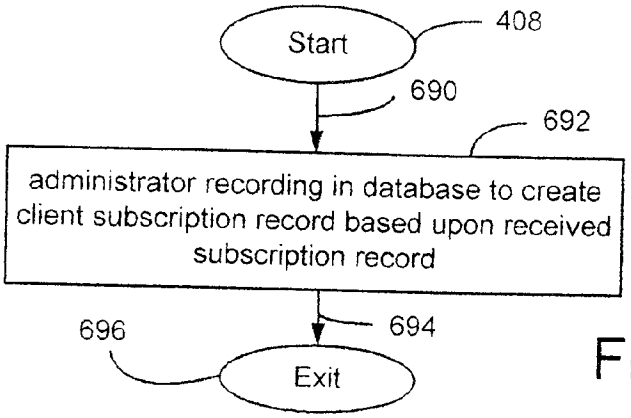


Fig. 11A

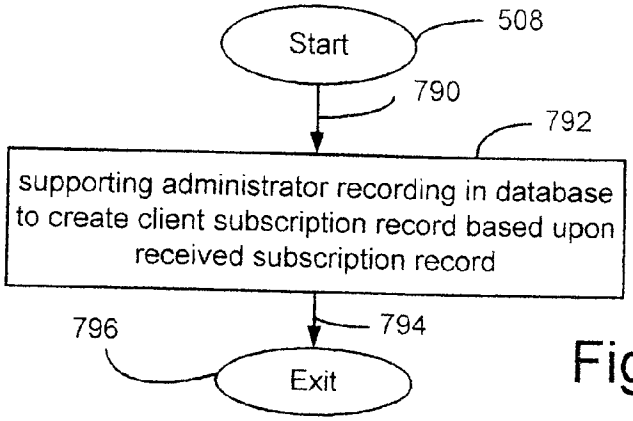


Fig. 11B

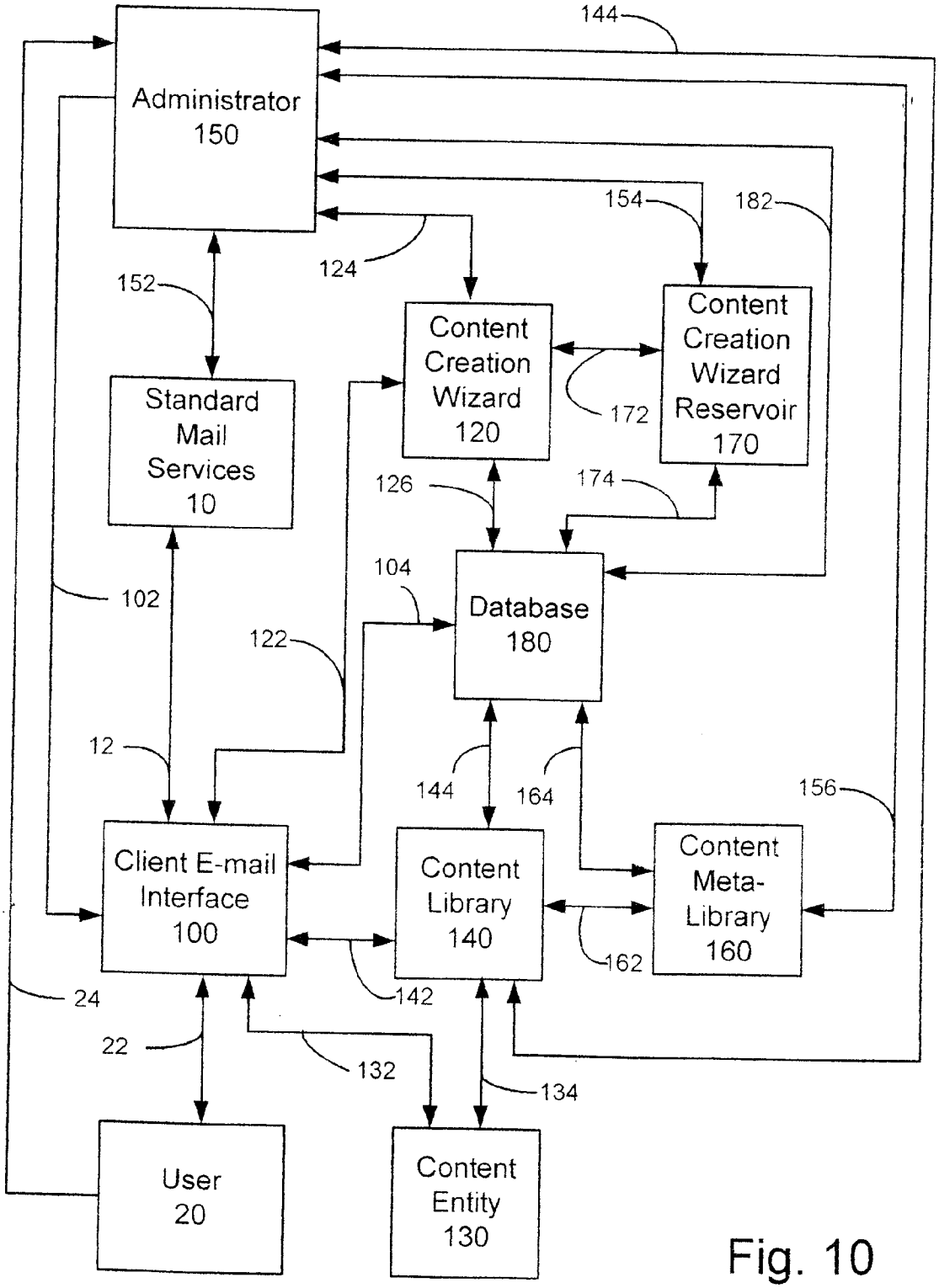

Administrator 150
144
154
182
124
152
Content Creation Wizard 120
Content Creation Wizard Reservoir 170
172
Standard Mail Services 10
126
174
104
102
Database 180
122
12
144
164
156
Client E-mail Interface 100
Content Library 140
Content Meta-Library 160
162
142
24
22
132
134
User 20
Content Entity 130

Fig. 10

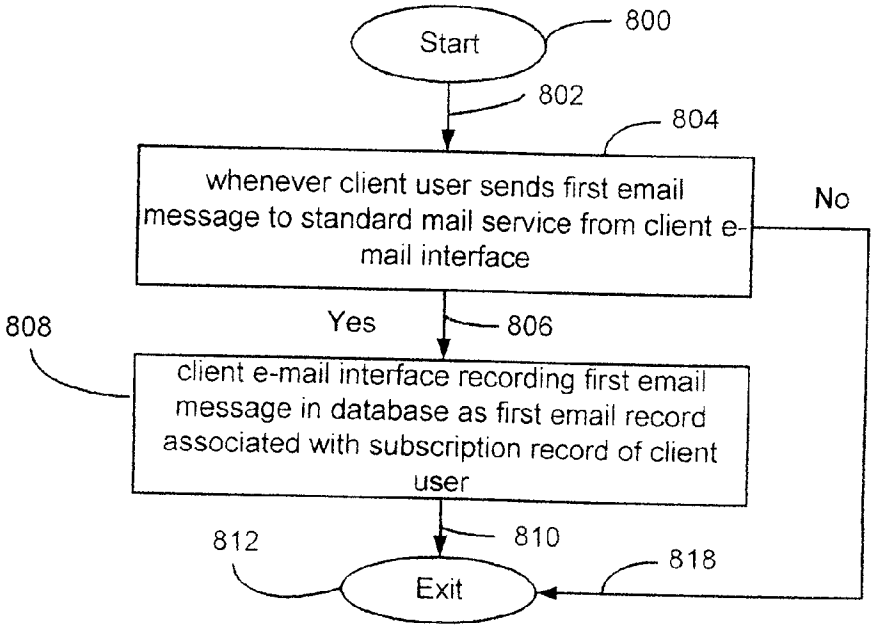


Fig. 11C

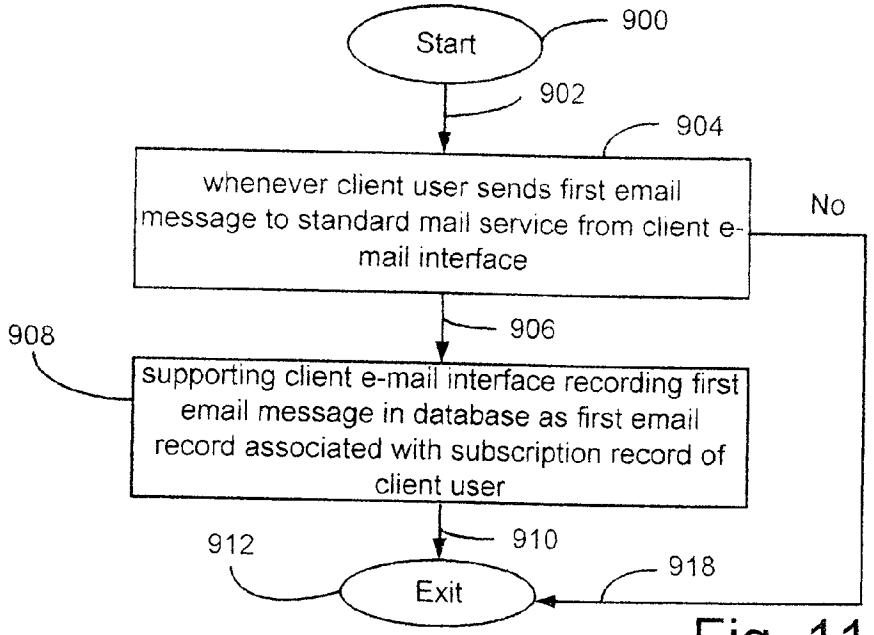


Fig. 11D

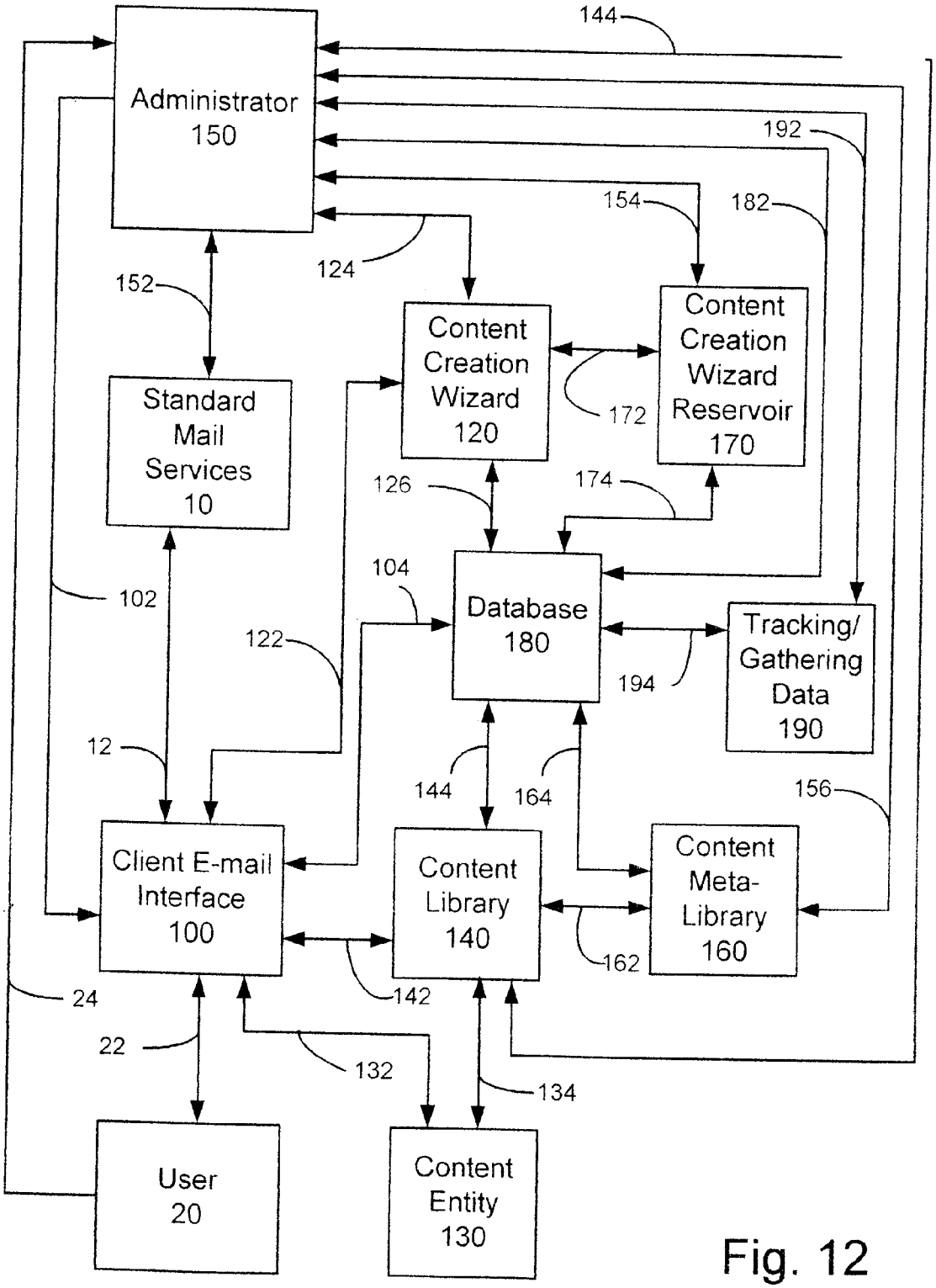

Administrator 150
144
192
154
182
124
152
Content Creation Wizard 120
Content Creation Wizard Reservoir 170
172
Standard Mail Services 10
126
174
104
102
Database 180
Tracking/ Gathering Data 190
122
194
12
144
164
156
Client E-mail Interface 100
Content Library 140
Content Meta-Library 160
162
142
24
22
132
134
User 20
Content Entity 130

Fig. 12

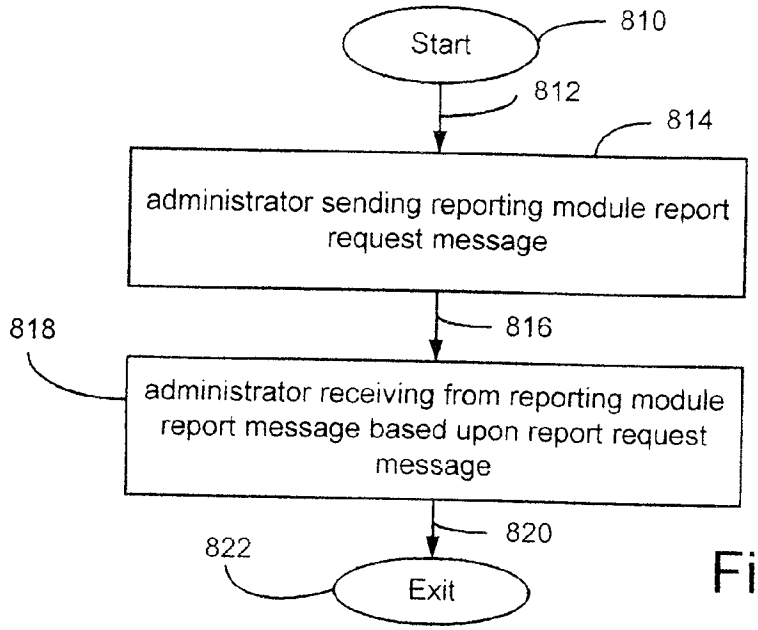


Fig. 13A

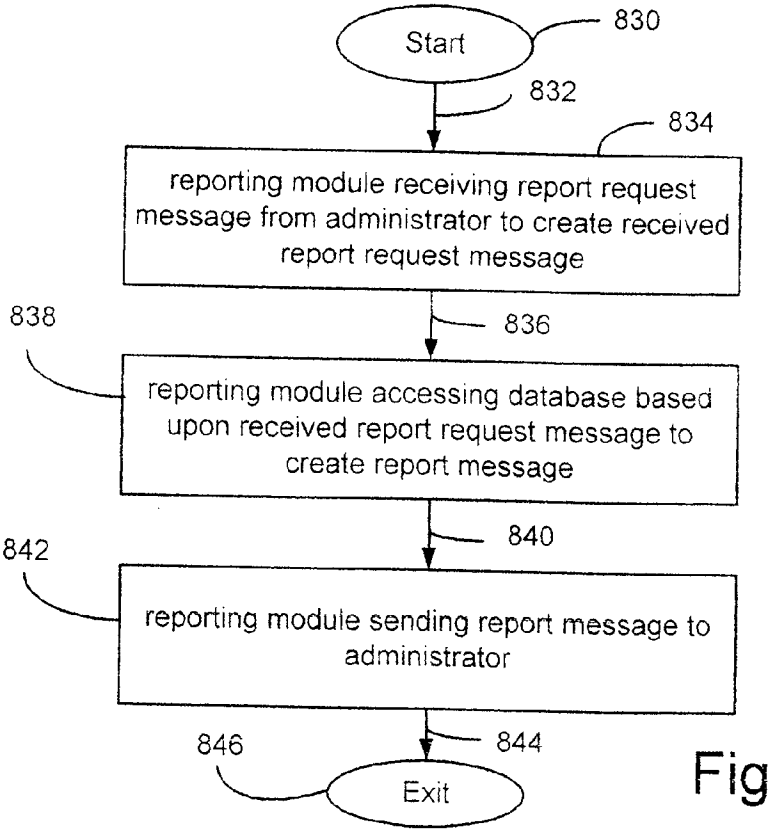


Fig. 13B

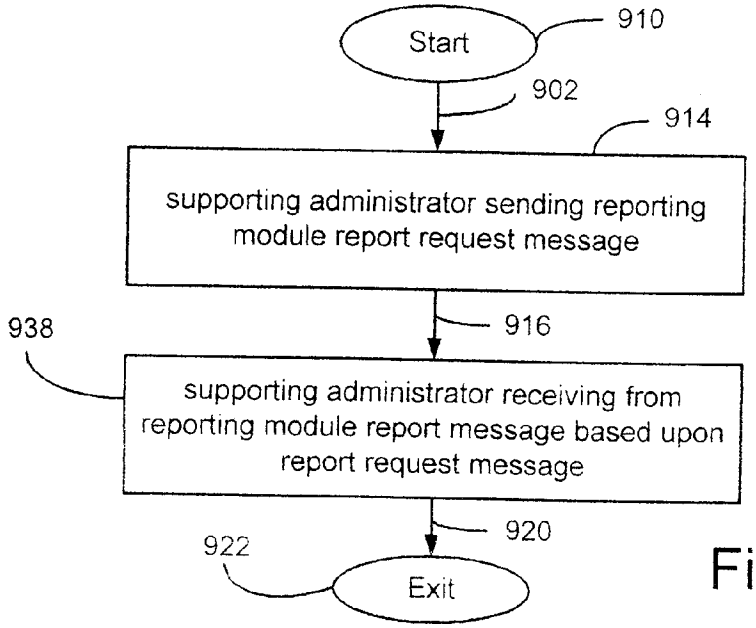


Fig. 13C

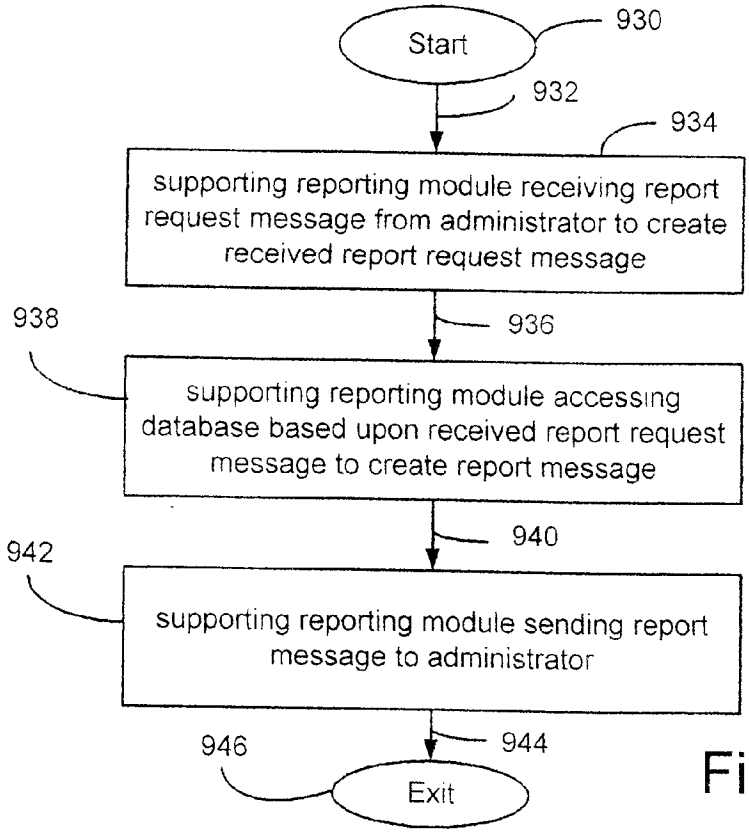


Fig. 13D

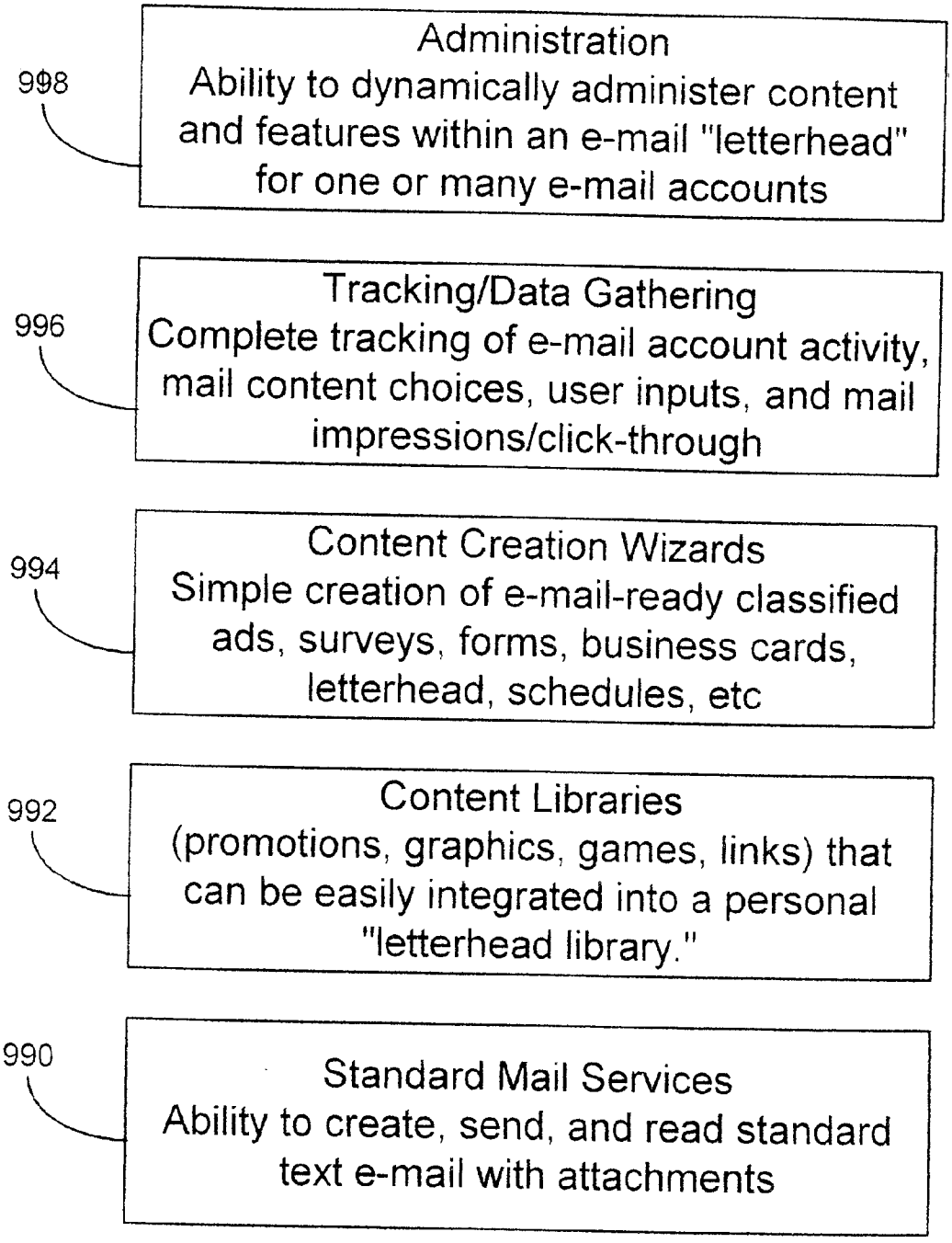

998
Administration
Ability to dynamically administer content and features within an e-mail "letterhead" for one or many e-mail accounts
996
Tracking/Data Gathering
Complete tracking of e-mail account activity, mail content choices, user inputs, and mail impressions/click-through
994
Content Creation Wizards
Simple creation of e-mail-ready classified ads, surveys, forms, business cards, letterhead, schedules, etc
992
Content Libraries
(promotions, graphics, games, links) that can be easily integrated into a personal "letterhead library."
990
Standard Mail Services
Ability to create, send, and read standard text e-mail with attachments

Fig. 14

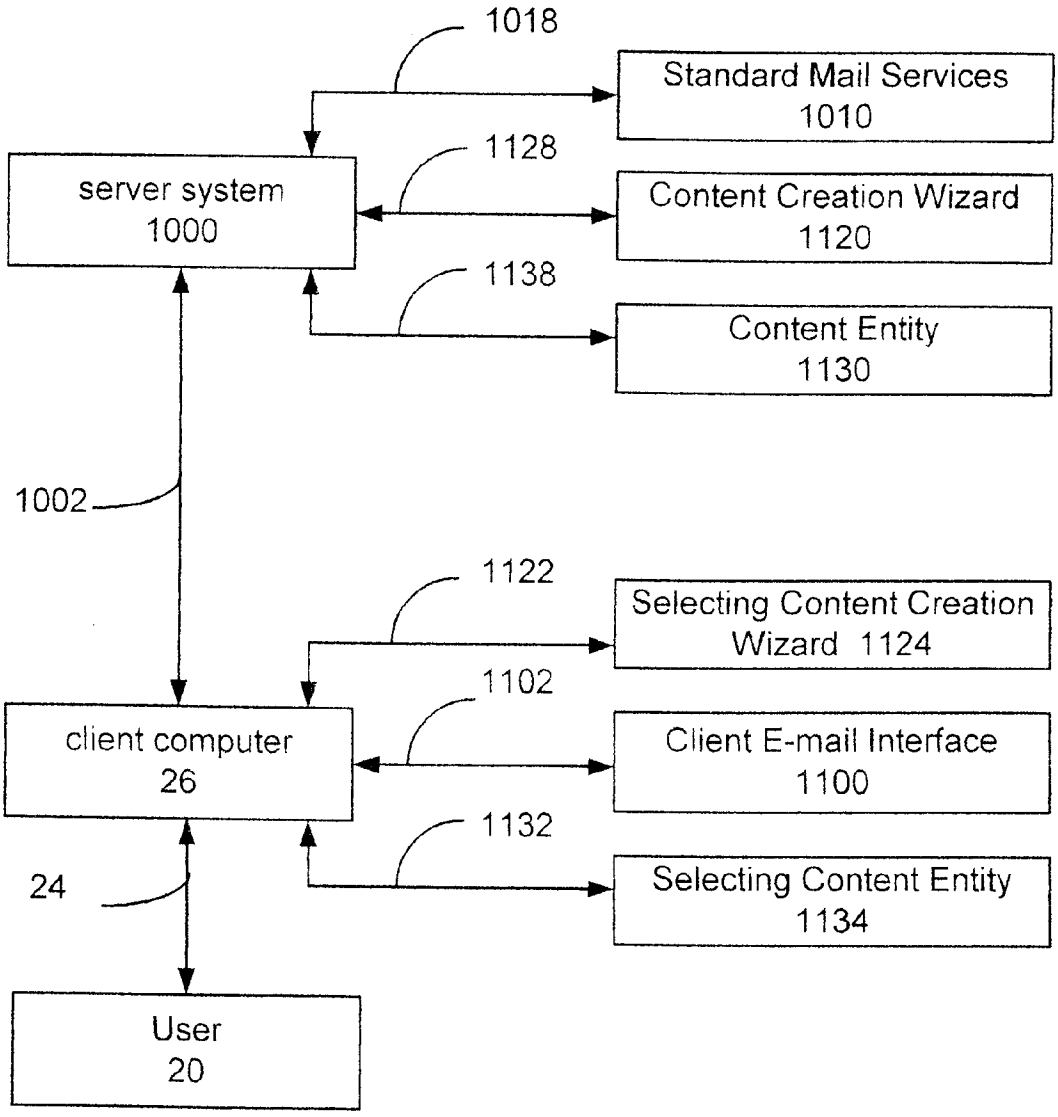

1018
Standard Mail Services
1010
1128
server system
1000
Content Creation Wizard
1120
1138
Content Entity
1130
1002
1122
Selecting Content Creation
Wizard 1124
1102
client computer
26
Client E-mail Interface
1100
1132
24
Selecting Content Entity
1134
User
20

Fig. 15

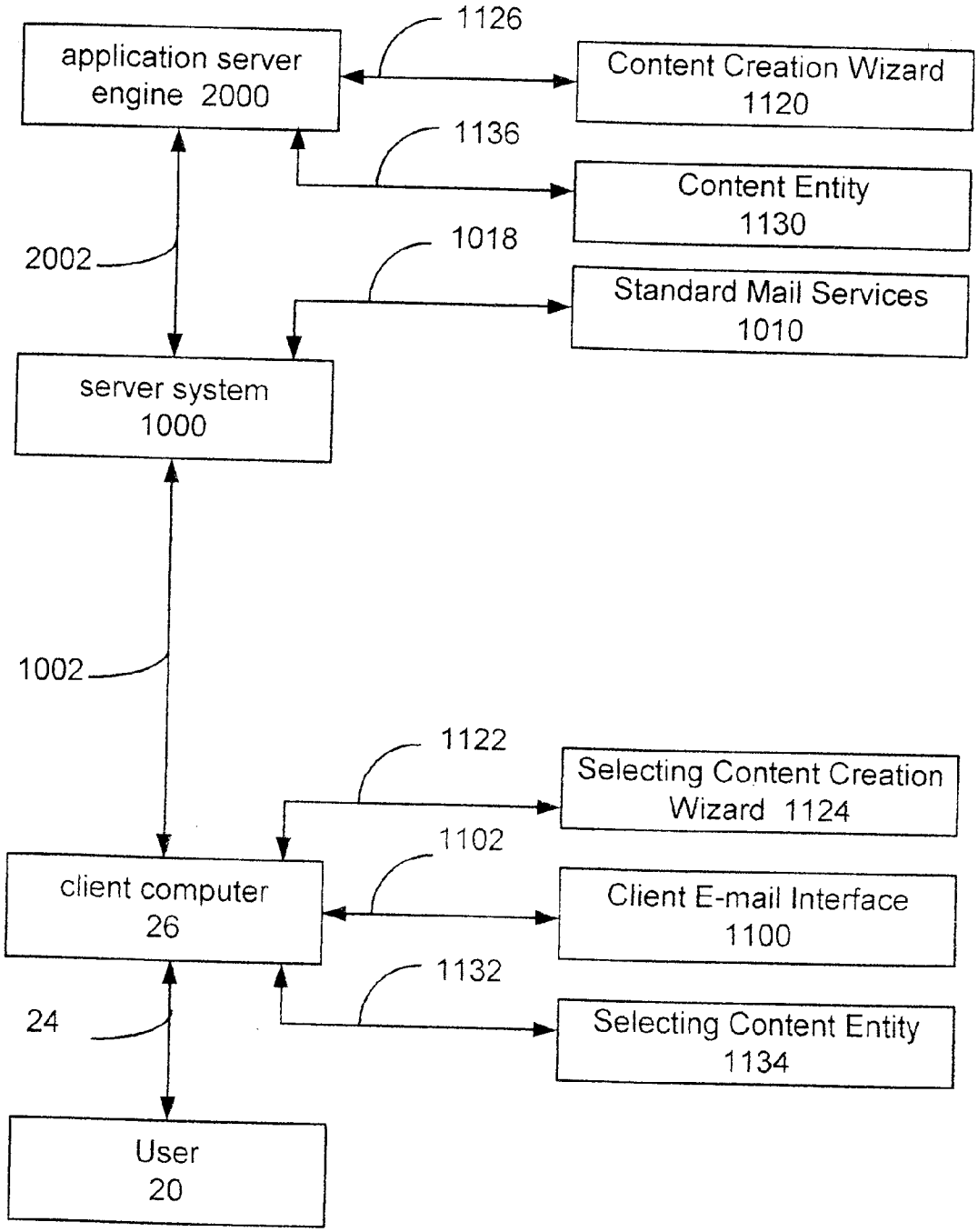

application server engine 2000
1126
Content Creation Wizard 1120
1136
Content Entity 1130
2002
1018
Standard Mail Services 1010
server system 1000
1002
1122
Selecting Content Creation Wizard 1124
client computer 26
1102
Client E-mail Interface 1100
1132
24
Selecting Content Entity 1134
User 20

Fig. 16

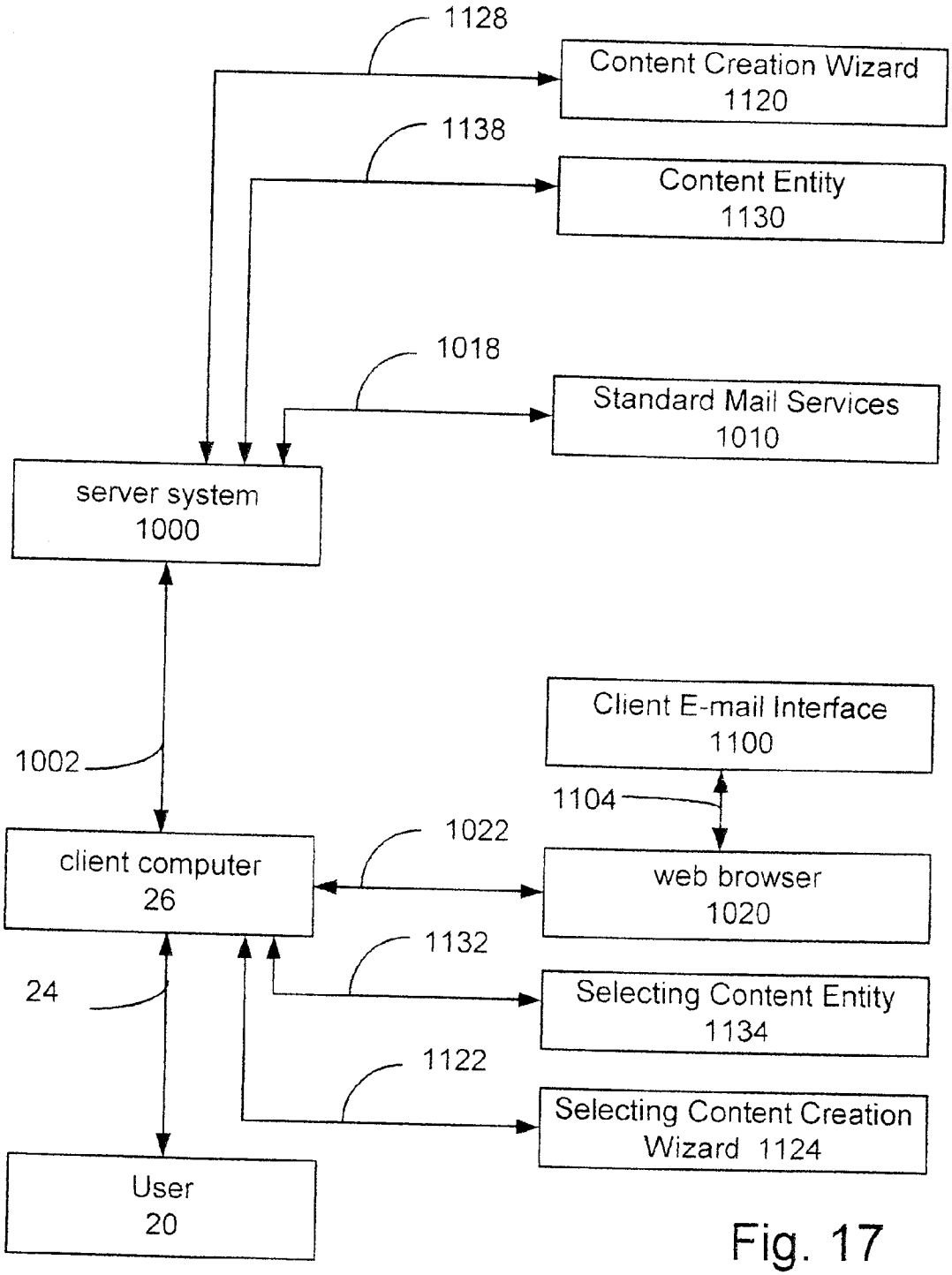

1128
Content Creation Wizard
1120
1138
Content Entity
1130
1018
Standard Mail Services
1010
server system
1000
1002
Client E-mail Interface
1100
1104
1022
client computer
26
web browser
1020
1132
24
Selecting Content Entity
1134
1122
Selecting Content Creation
Wizard 1124
User
20

Fig. 17

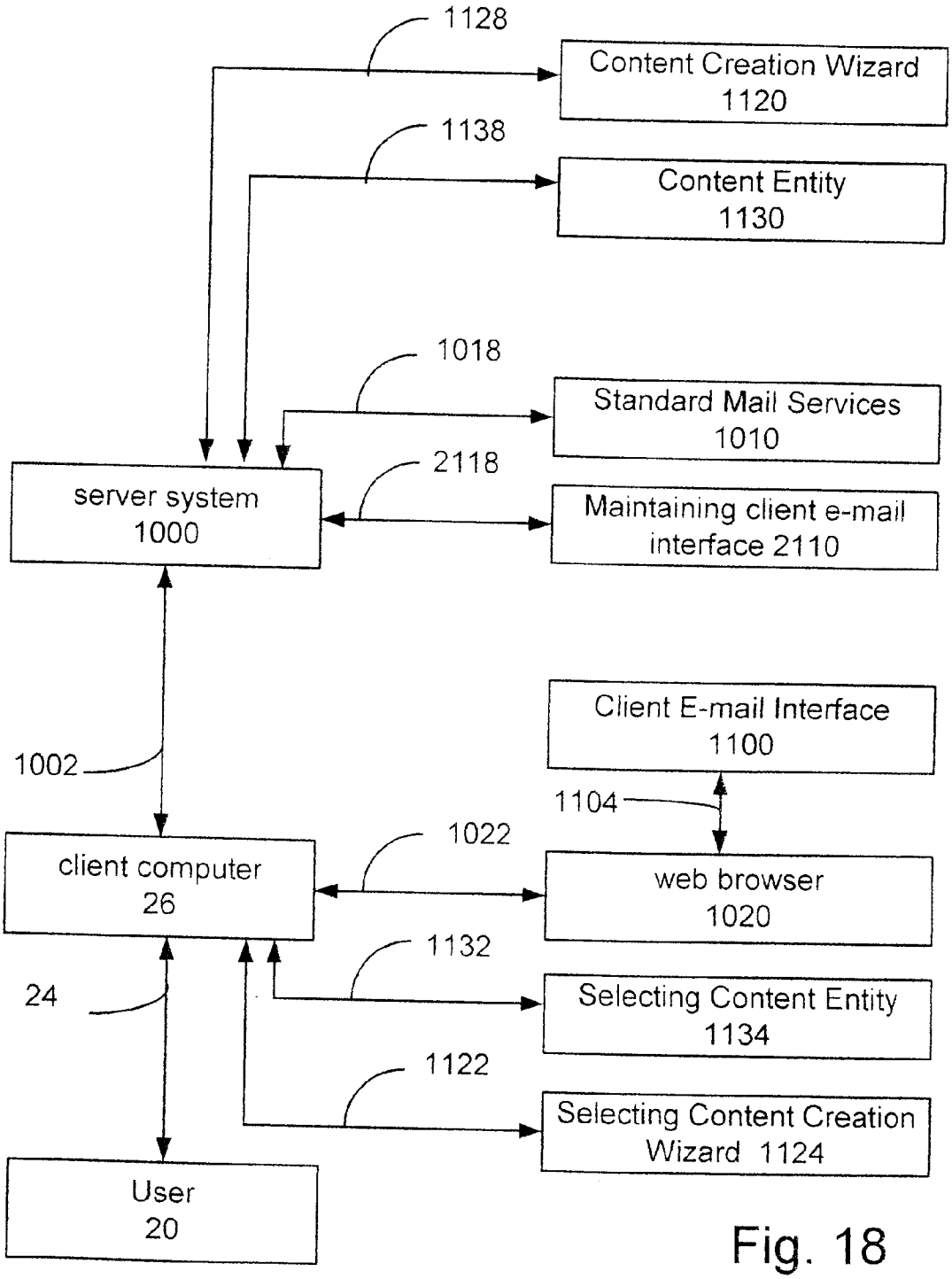

1128
Content Creation Wizard 1120
1138
Content Entity 1130
1018
Standard Mail Services 1010
2118
server system 1000
Maintaining client e-mail interface 2110
Client E-mail Interface 1100
1002
1104
1022
client computer 26
web browser 1020
1132
24
Selecting Content Entity 1134
1122
Selecting Content Creation Wizard 1124
User 20

Fig. 18

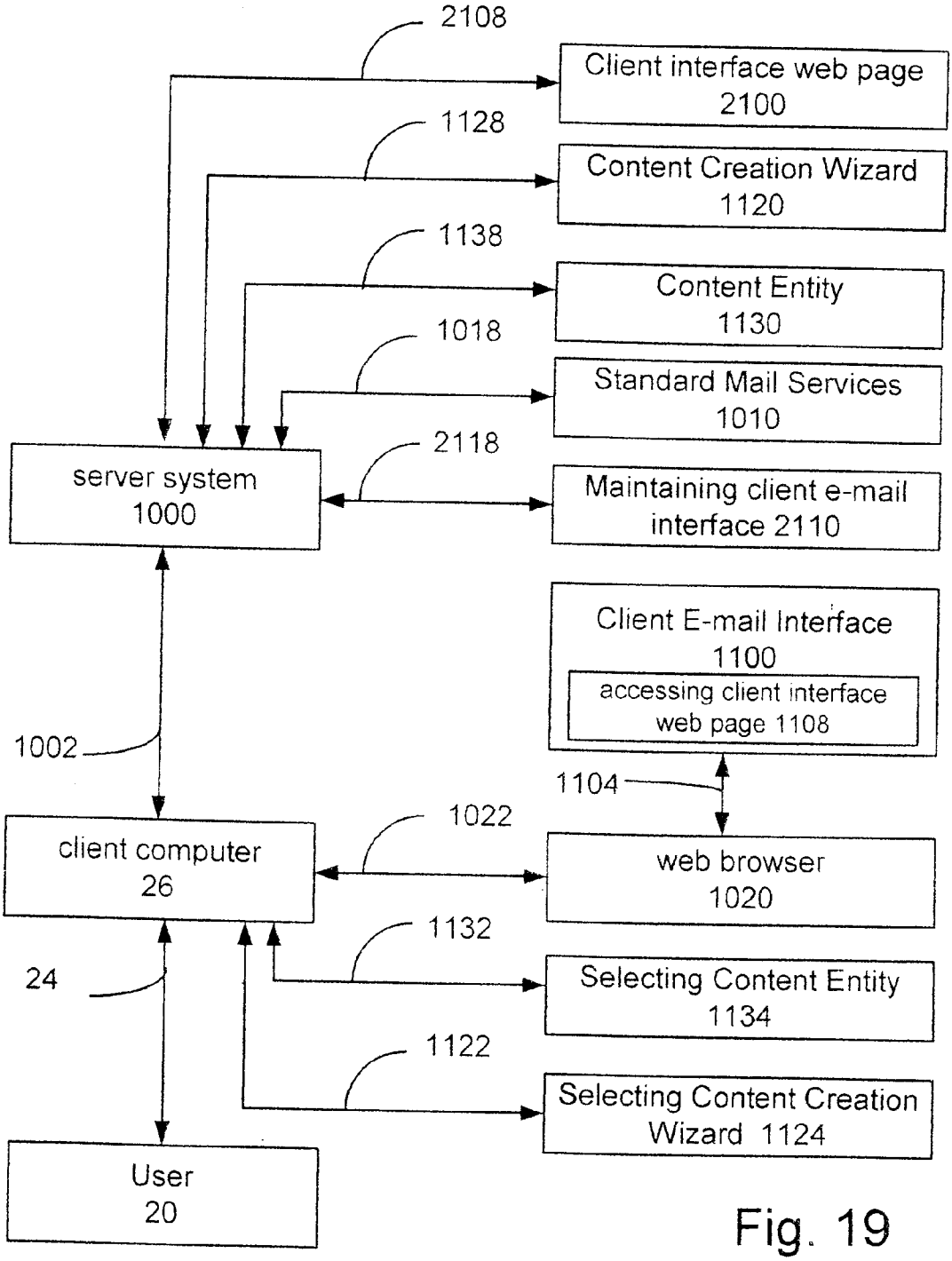

2108
Client interface web page 2100
1128
Content Creation Wizard 1120
1138
Content Entity 1130
1018
Standard Mail Services 1010
2118
server system 1000
Maintaining client e-mail interface 2110
Client E-mail Interface 1100
accessing client interface web page 1108
1002
1104
1022
client computer 26
web browser 1020
1132
24
Selecting Content Entity 1134
1122
Selecting Content Creation Wizard 1124
User 20

Fig. 19

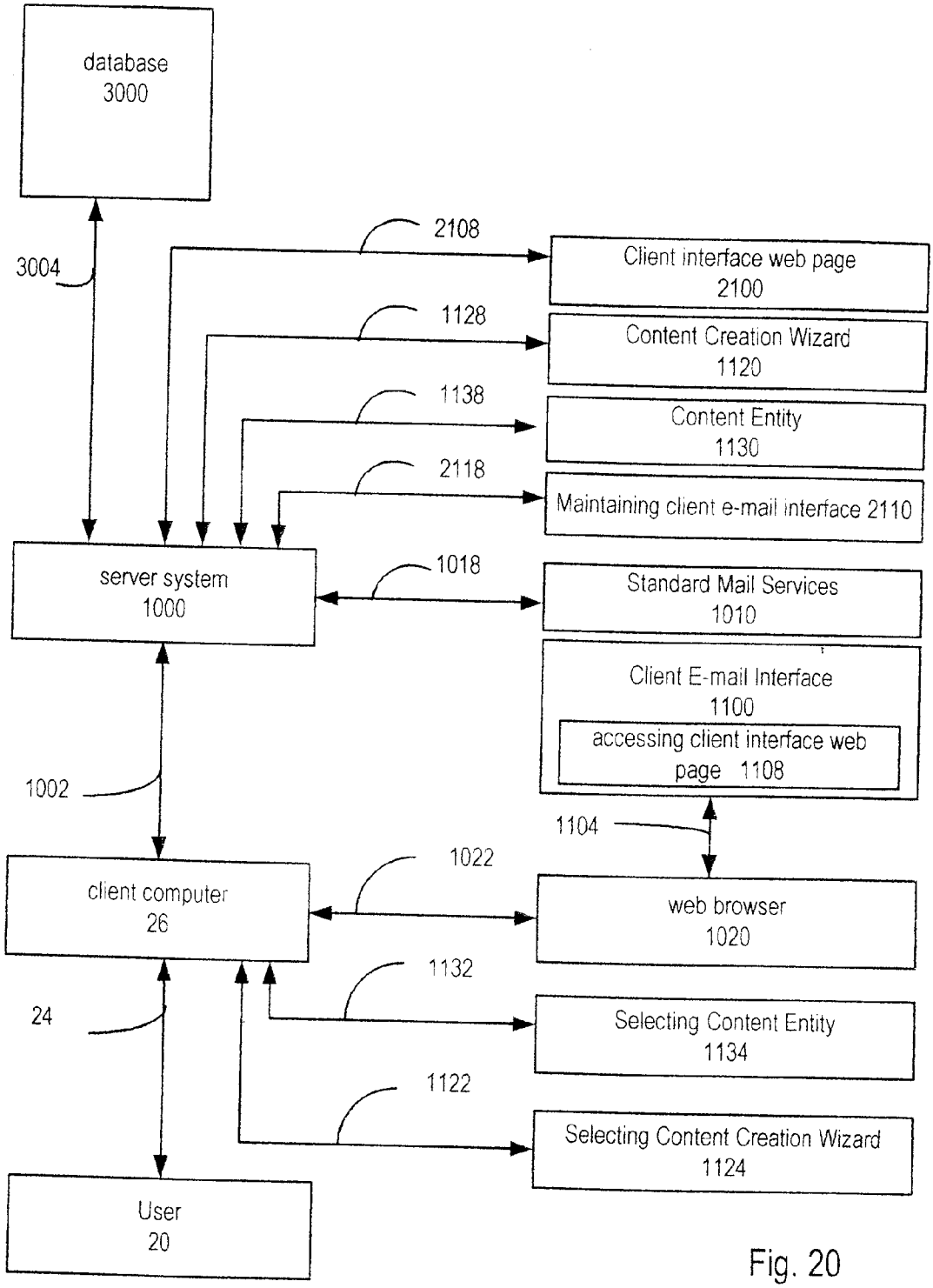

database
3000
3004
2108
Client interface web page
2100
1128
Content Creation Wizard
1120
1138
Content Entity
1130
2118
Maintaining client e-mail interface 2110
server system
1000
1018
Standard Mail Services
1010
Client E-mail Interface
1100
accessing client interface web
page 1108
1002
1104
1022
client computer
26
web browser
1020
1132
24
Selecting Content Entity
1134
1122
Selecting Content Creation Wizard
1124
User
20

Fig. 20

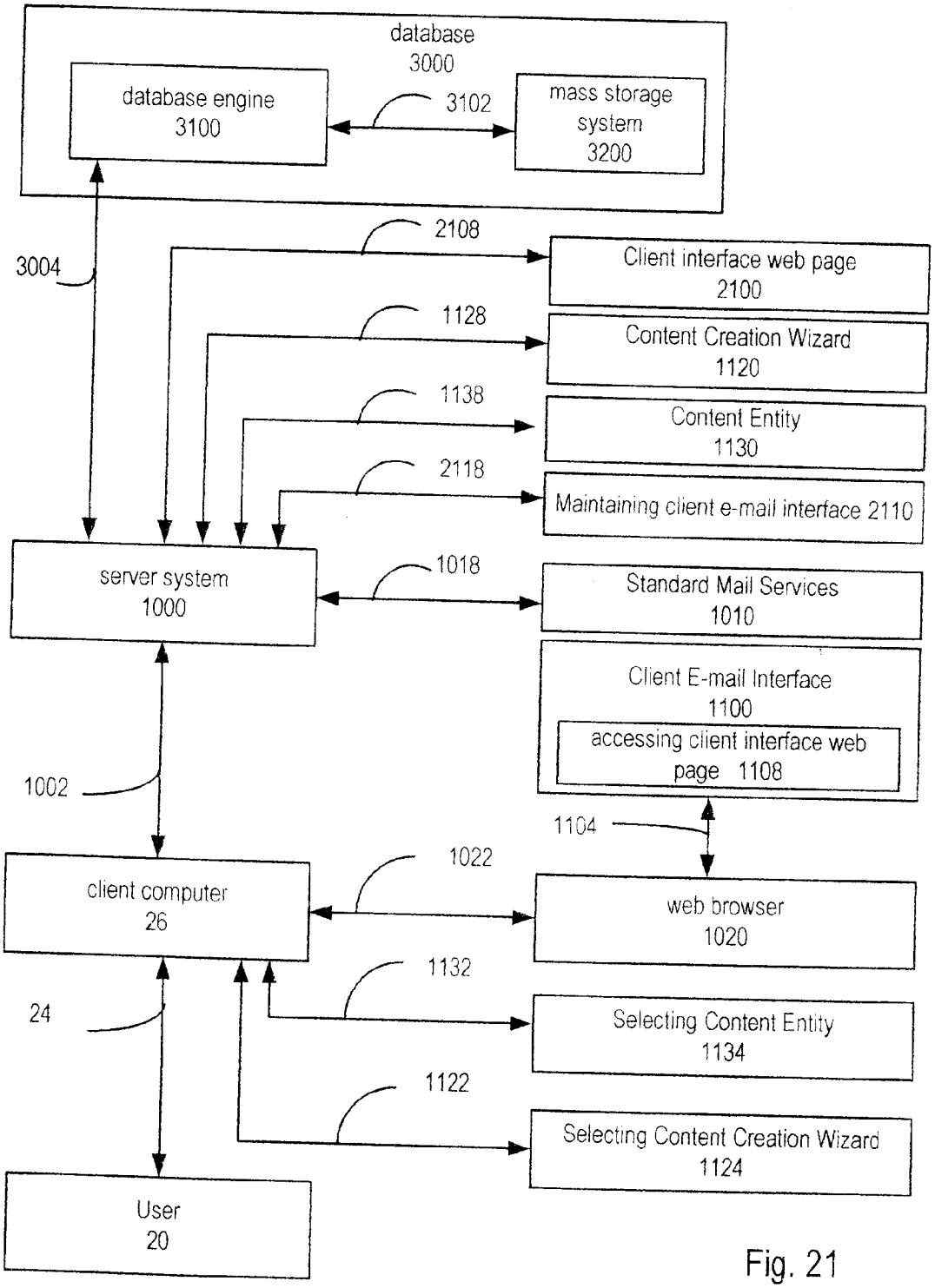

database
3000
database engine
3100
3102
mass storage
system
3200
3004
2108
Client interface web page
2100
1128
Content Creation Wizard
1120
1138
Content Entity
1130
2118
Maintaining client e-mail interface 2110
server system
1000
1018
Standard Mail Services
1010
Client E-mail Interface
1100
accessing client interface web
page 1108
1002
1104
1022
client computer
26
web browser
1020
1132
24
Selecting Content Entity
1134
1122
Selecting Content Creation Wizard
1124
User
20

Fig. 21

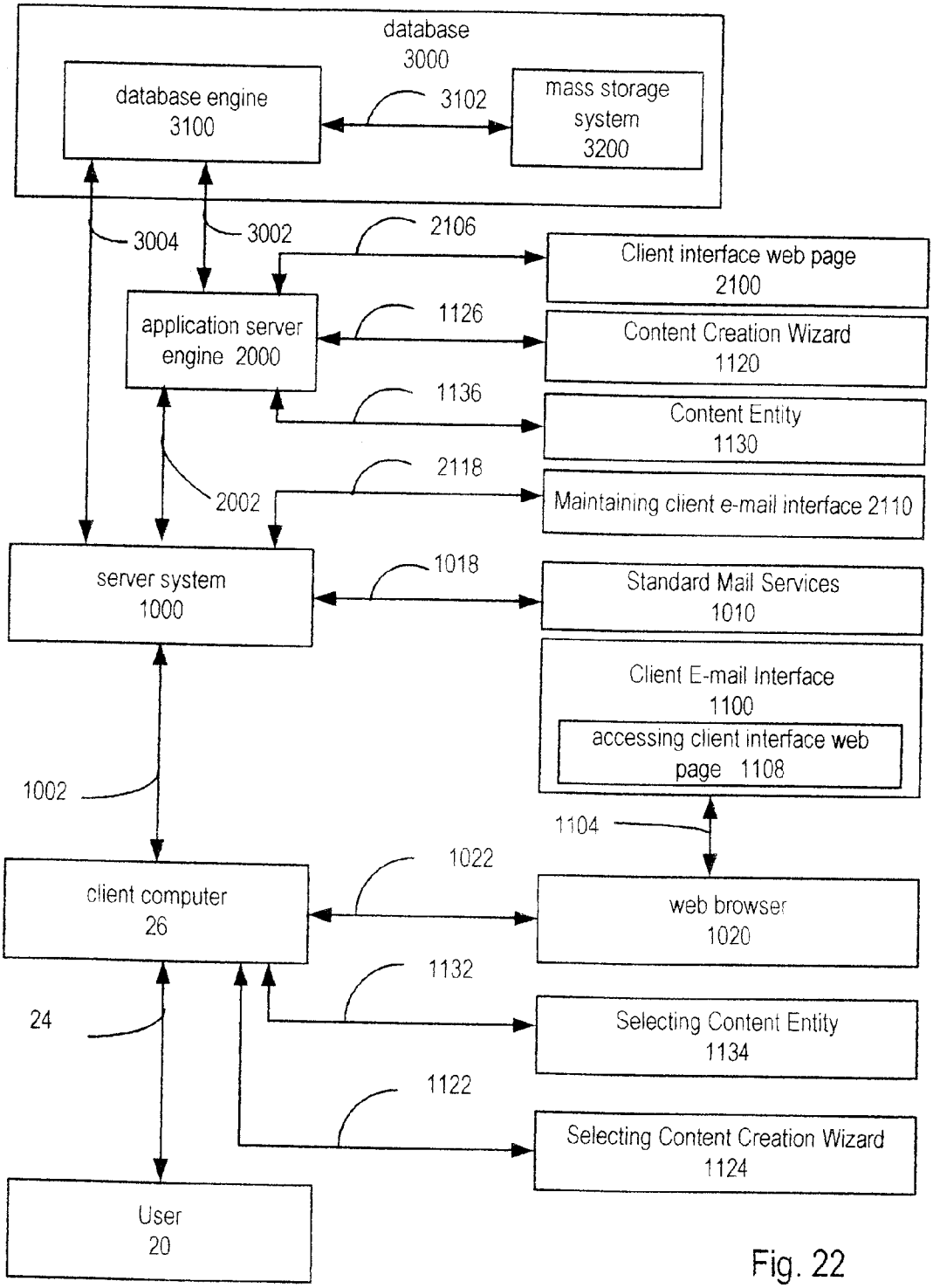

database
3000
database engine
3100
3102
mass storage
system
3200
3004
3002
2106
Client interface web page
2100
application server
engine 2000
1126
Content Creation Wizard
1120
1136
Content Entity
1130
2002
2118
Maintaining client e-mail interface 2110
server system
1000
1018
Standard Mail Services
1010
Client E-mail Interface
1100
accessing client interface web
page 1108
1002
1104
client computer
26
1022
web browser
1020
1132
24
Selecting Content Entity
1134
1122
Selecting Content Creation Wizard
1124
User
20

Fig. 22

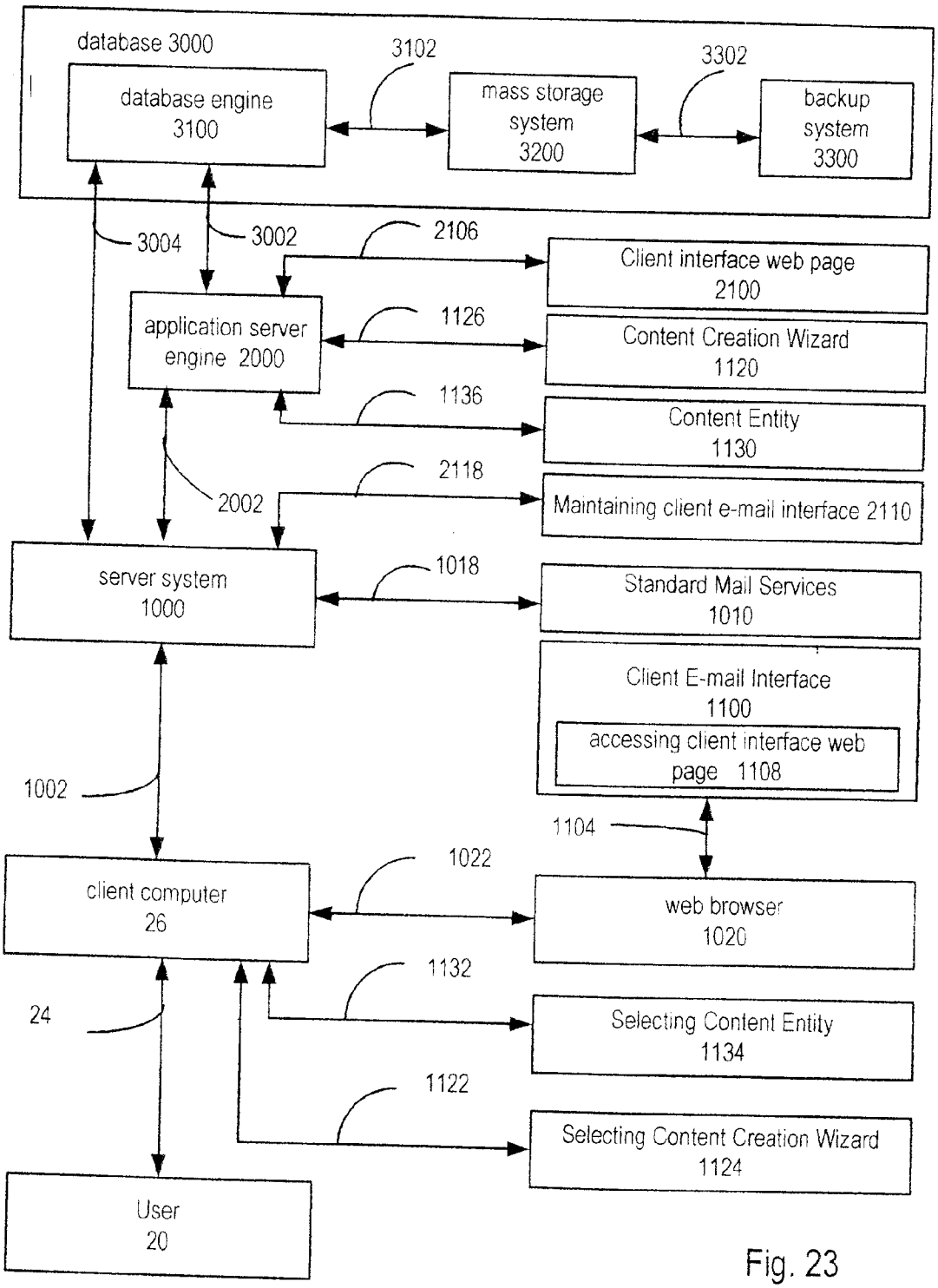

database 3000
database engine 3100
3102
mass storage system 3200
3302
backup system 3300
3004
3002
2106
Client interface web page 2100
application server engine 2000
1126
Content Creation Wizard 1120
1136
Content Entity 1130
2002
2118
Maintaining client e-mail interface 2110
server system 1000
1018
Standard Mail Services 1010
Client E-mail Interface 1100
accessing client interface web page 1108
1002
1104
client computer 26
1022
web browser 1020
1132
24
Selecting Content Entity 1134
1122
Selecting Content Creation Wizard 1124
User 20

Fig. 23

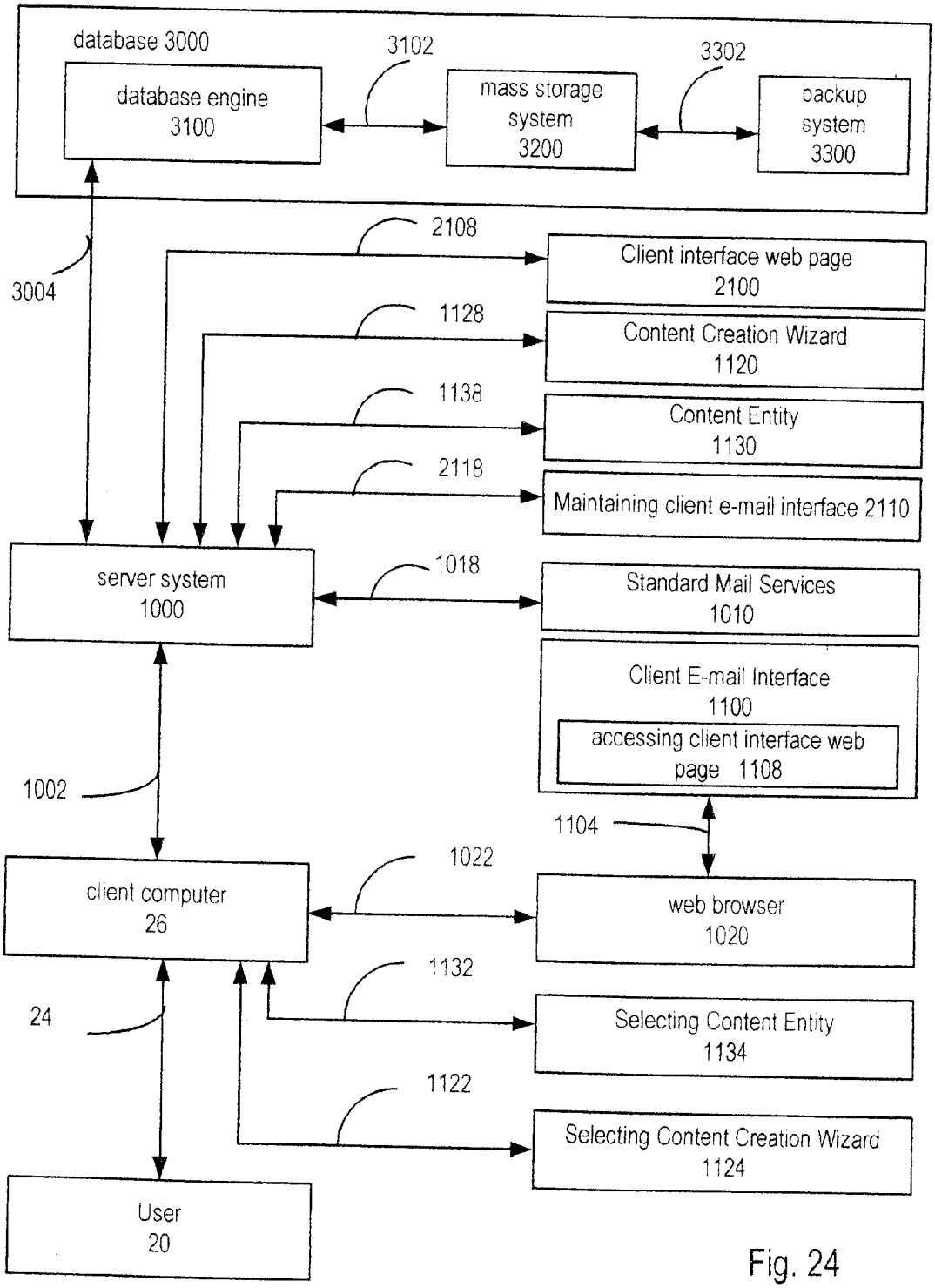

database 3000
database engine 3100
3102
mass storage system 3200
3302
backup system 3300
3004
2108
Client interface web page 2100
1128
Content Creation Wizard 1120
1138
Content Entity 1130
2118
Maintaining client e-mail interface 2110
server system 1000
1018
Standard Mail Services 1010
Client E-mail Interface 1100
accessing client interface web page 1108
1002
1104
1022
client computer 26
web browser 1020
1132
24
Selecting Content Entity 1134
1122
Selecting Content Creation Wizard 1124
User 20

Fig. 24

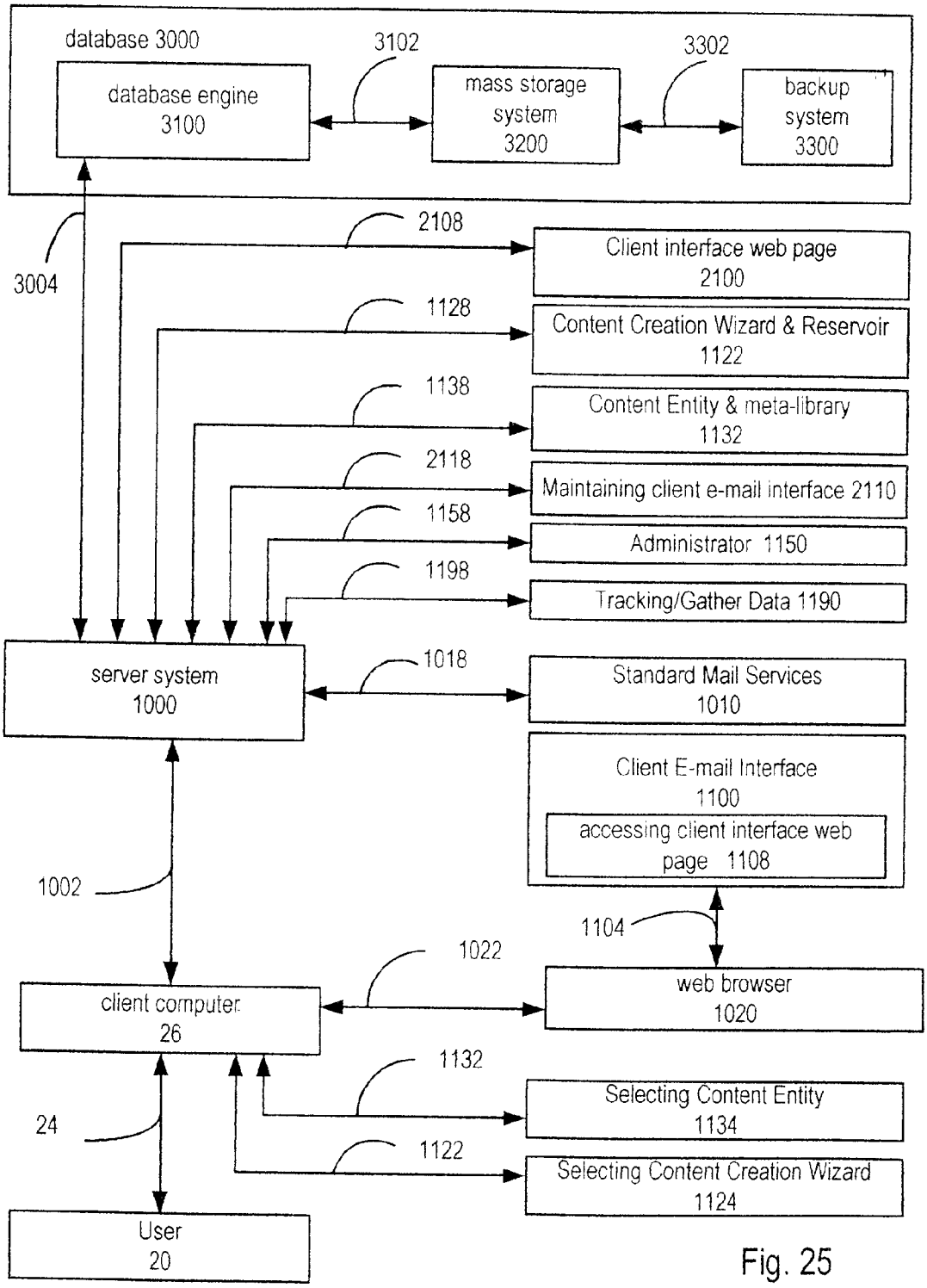

database 3000
database engine 3100
3102
mass storage system 3200
3302
backup system 3300
3004
2108
Client interface web page 2100
1128
Content Creation Wizard & Reservoir 1122
1138
Content Entity & meta-library 1132
2118
Maintaining client e-mail interface 2110
1158
Administrator 1150
1198
Tracking/Gather Data 1190
server system 1000
1018
Standard Mail Services 1010
Client E-mail Interface 1100
accessing client interface web page 1108
1002
1104
1022
client computer 26
web browser 1020
1132
Selecting Content Entity 1134
24
1122
Selecting Content Creation Wizard 1124
User 20

Fig. 25

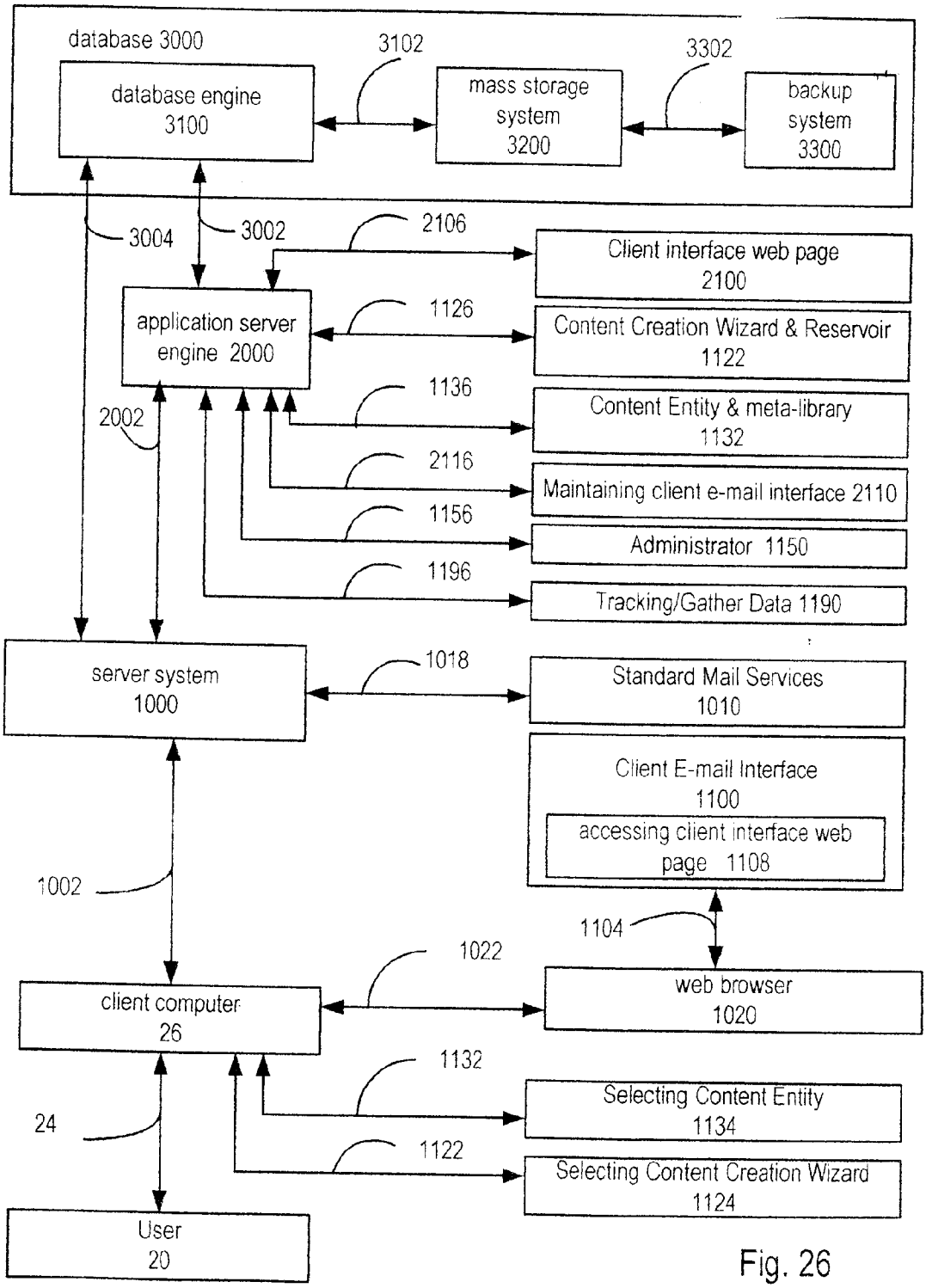

database 3000
database engine 3100
3102
mass storage system 3200
3302
backup system 3300
3004
3002
2106
Client interface web page 2100
application server engine 2000
1126
Content Creation Wizard & Reservoir 1122
2002
1136
Content Entity & meta-library 1132
2116
Maintaining client e-mail interface 2110
1156
Administrator 1150
1196
Tracking/Gather Data 1190
server system 1000
1018
Standard Mail Services 1010
Client E-mail Interface 1100
accessing client interface web page 1108
1002
1104
1022
client computer 26
web browser 1020
1132
Selecting Content Entity 1134
24
1122
Selecting Content Creation Wizard 1124
User 20

Fig. 26

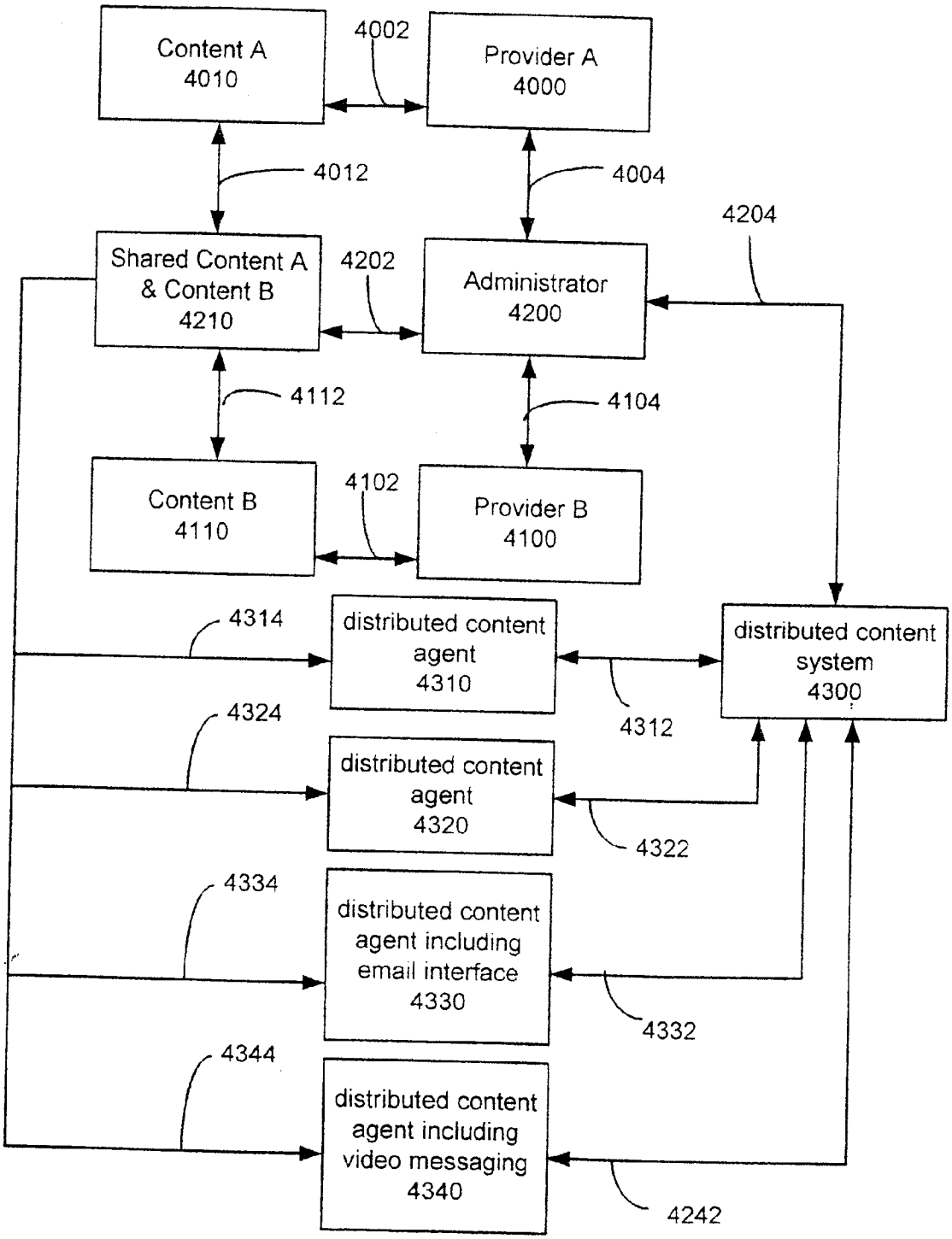

Content A
4010
4002
Provider A
4000
4012
4004
4204
Shared Content A
& Content B
4210
4202
Administrator
4200
4112
4104
Content B
4110
4102
Provider B
4100
4314
distributed content
agent
4310
distributed content
system
4300
4312
4324
distributed content
agent
4320
4322
4334
distributed content
agent including
email interface
4330
4332
4344
distributed content
agent including
video messaging
4340
4242

Fig. 27

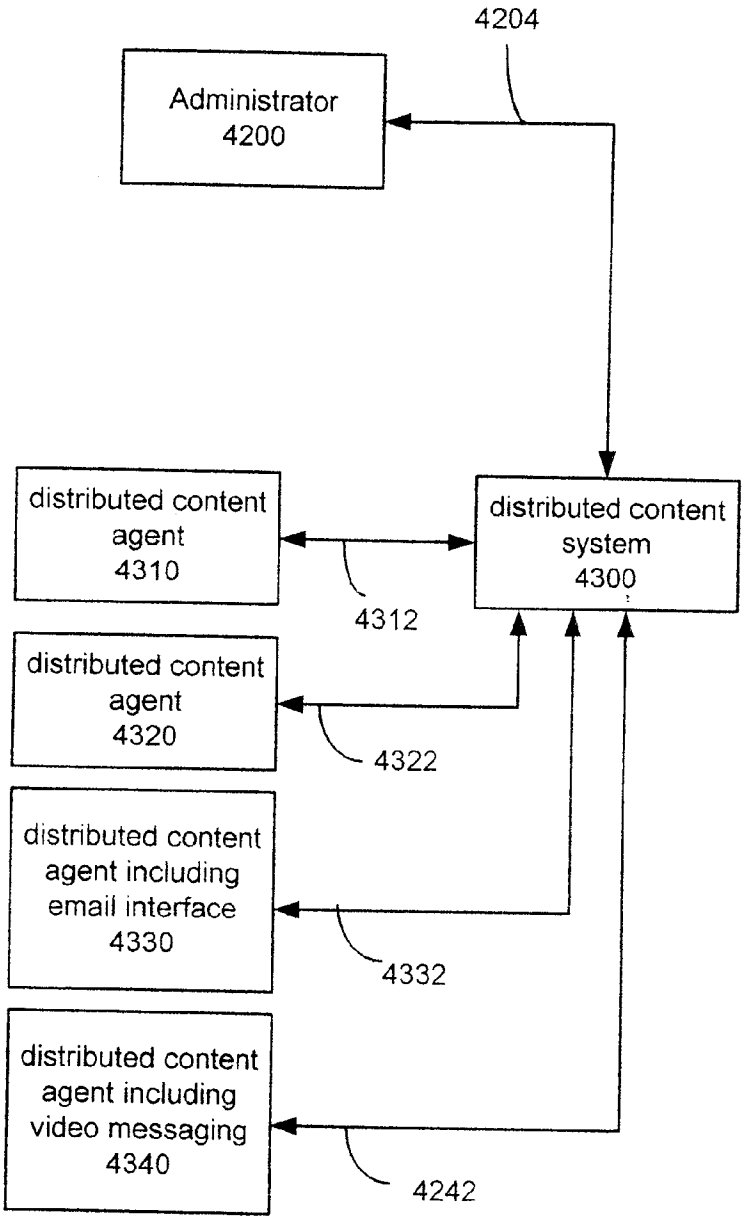

4204
Administrator
4200
distributed content
agent
4310
4312
distributed content
system
4300
distributed content
agent
4320
4322
distributed content
agent including
email interface
4330
4332
distributed content
agent including
video messaging
4340
4242

Fig. 27A

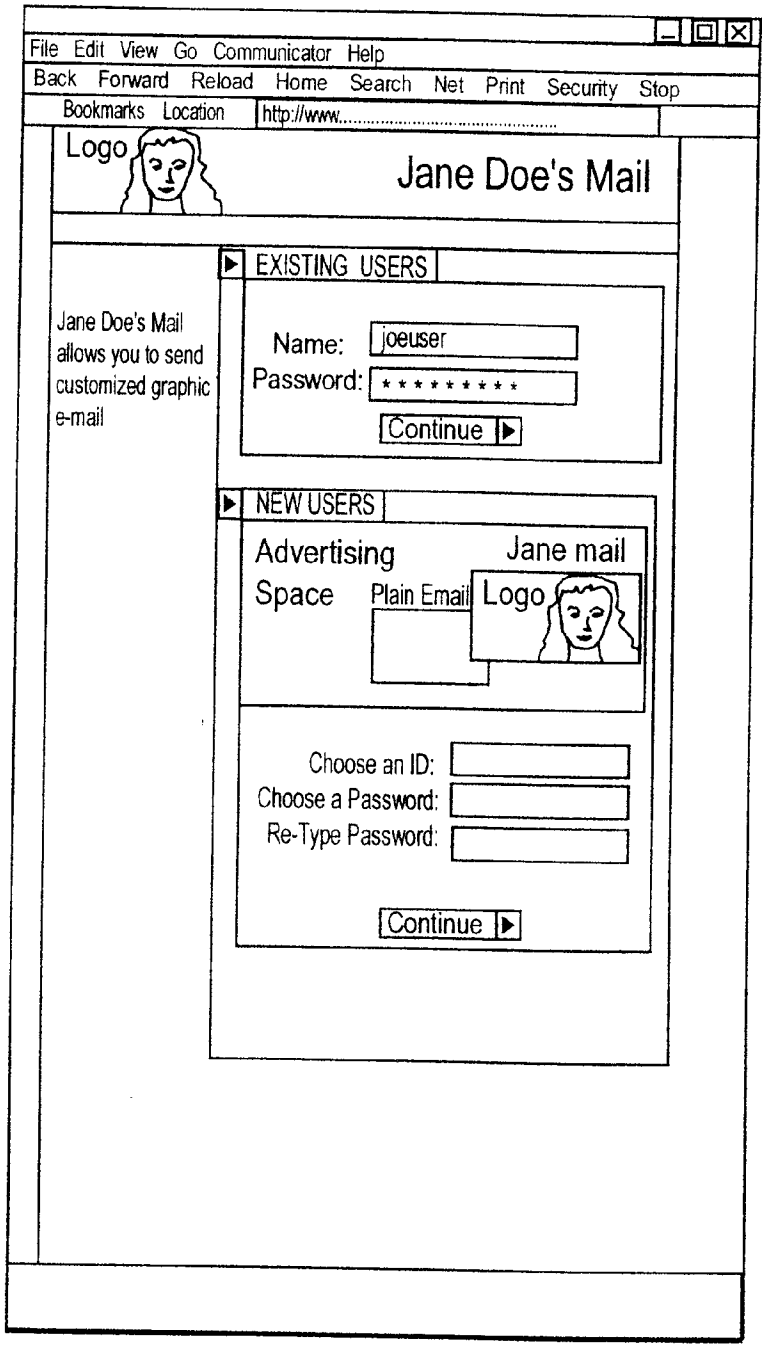

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www.....
Logo
Jane Doe's Mail
EXISTING USERS
Jane Doe's Mail allows you to send customized graphic e-mail
Name: joeuser
Password: *********
Continue
NEW USERS
Advertising Space
Jane mail
Plain Email
Logo
Choose an ID:
Choose a Password:
Re-Type Password:
Continue

FIG. 28

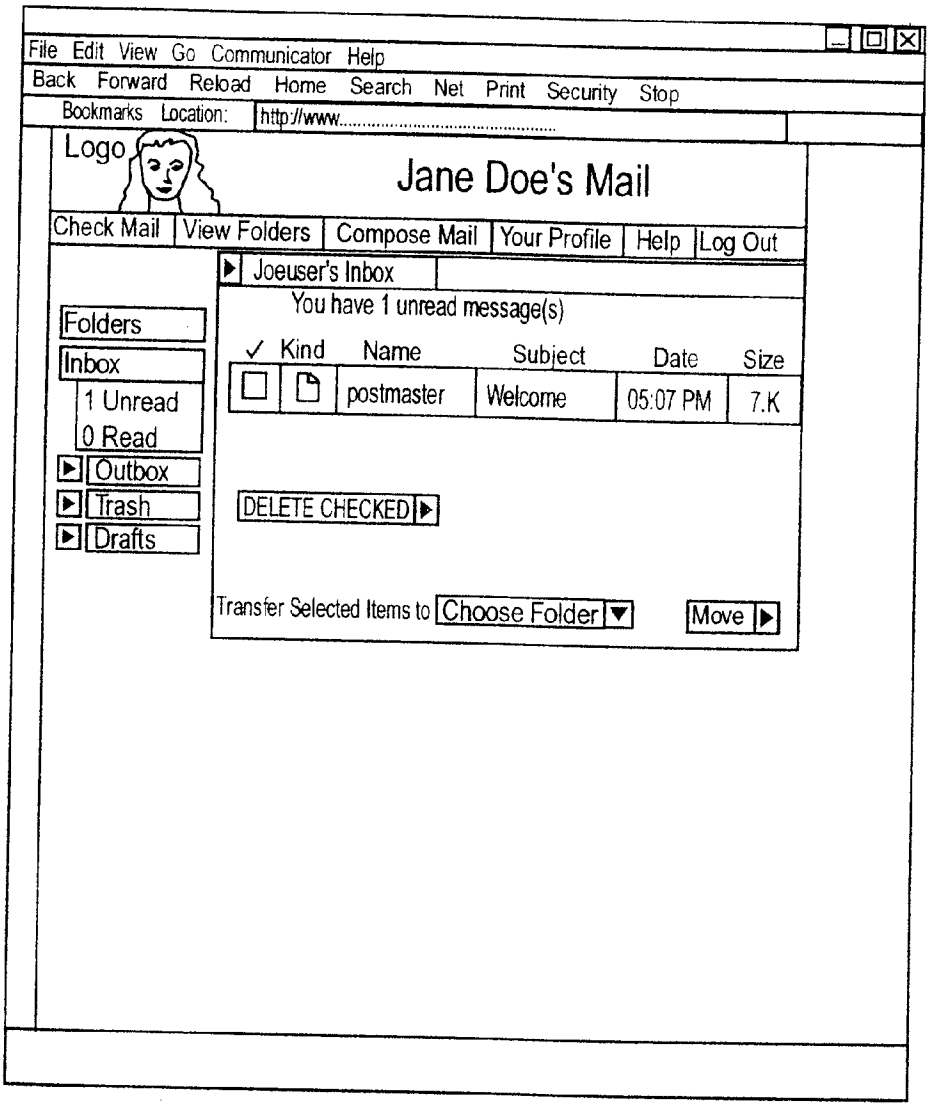

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location: http://www.....
Logo
Jane Doe's Mail
Check Mail
View Folders
Compose Mail
Your Profile
Help
Log Out
Joeuser's Inbox
You have 1 unread message(s)
Folders
Inbox
1 Unread
0 Read
Outbox
Trash
Drafts
✓ Kind
Name
Subject
Date
Size
postmaster
Welcome
05:07 PM
7.K
DELETE CHECKED
Transfer Selected Items to
Choose Folder
Move

FIG. 29A

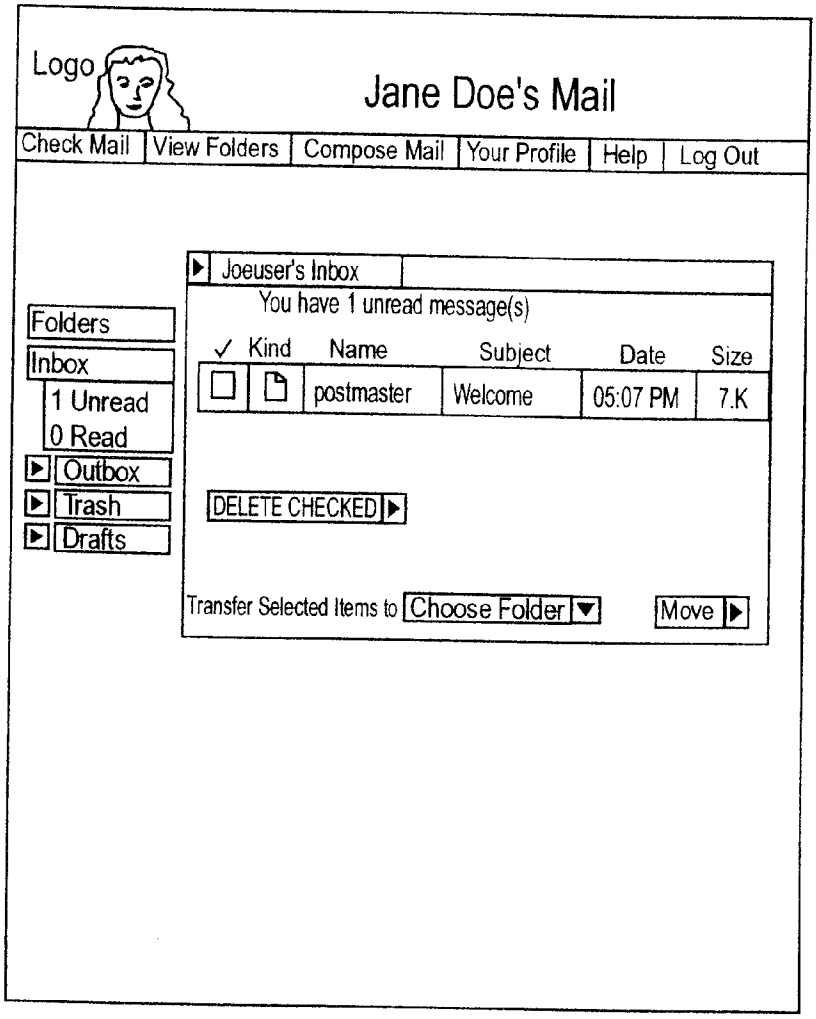

Logo
Jane Doe's Mail
Check Mail
View Folders
Compose Mail
Your Profile
Help
Log Out
Joeuser's Inbox
You have 1 unread message(s)
Folders
Inbox
1 Unread
0 Read
Outbox
Trash
Drafts
✓ Kind
Name
Subject
Date
Size
postmaster
Welcome
05:07 PM
7.K
DELETE CHECKED
Transfer Selected Items to
Choose Folder
Move

FIG. 29B

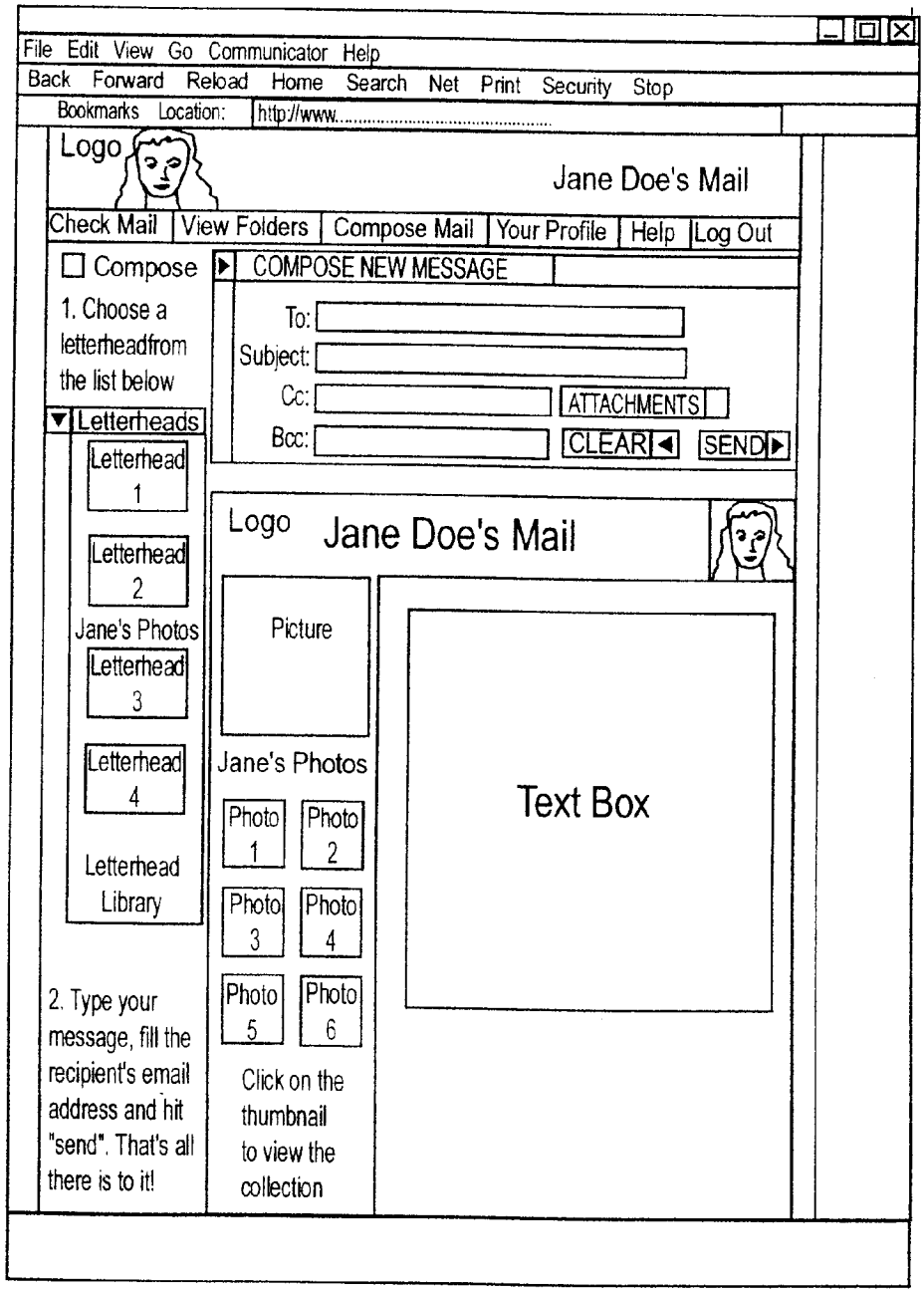

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location: http://www.
Logo
Jane Doe's Mail
Check Mail
View Folders
Compose Mail
Your Profile
Help
Log Out
Compose
1. Choose a letterheadfrom the list below
Letterheads
Letterhead 1
Letterhead 2
Jane's Photos
Letterhead 3
Letterhead 4
Letterhead Library
2. Type your message, fill the recipient's email address and hit "send". That's all there is to it!
COMPOSE NEW MESSAGE
To:
Subject:
Cc:
ATTACHMENTS
Bcc:
CLEAR
SEND
Logo
Jane Doe's Mail
Picture
Jane's Photos
Photo 1
Photo 2
Photo 3
Photo 4
Photo 5
Photo 6
Click on the thumbnail to view the collection
Text Box

FIG. 30

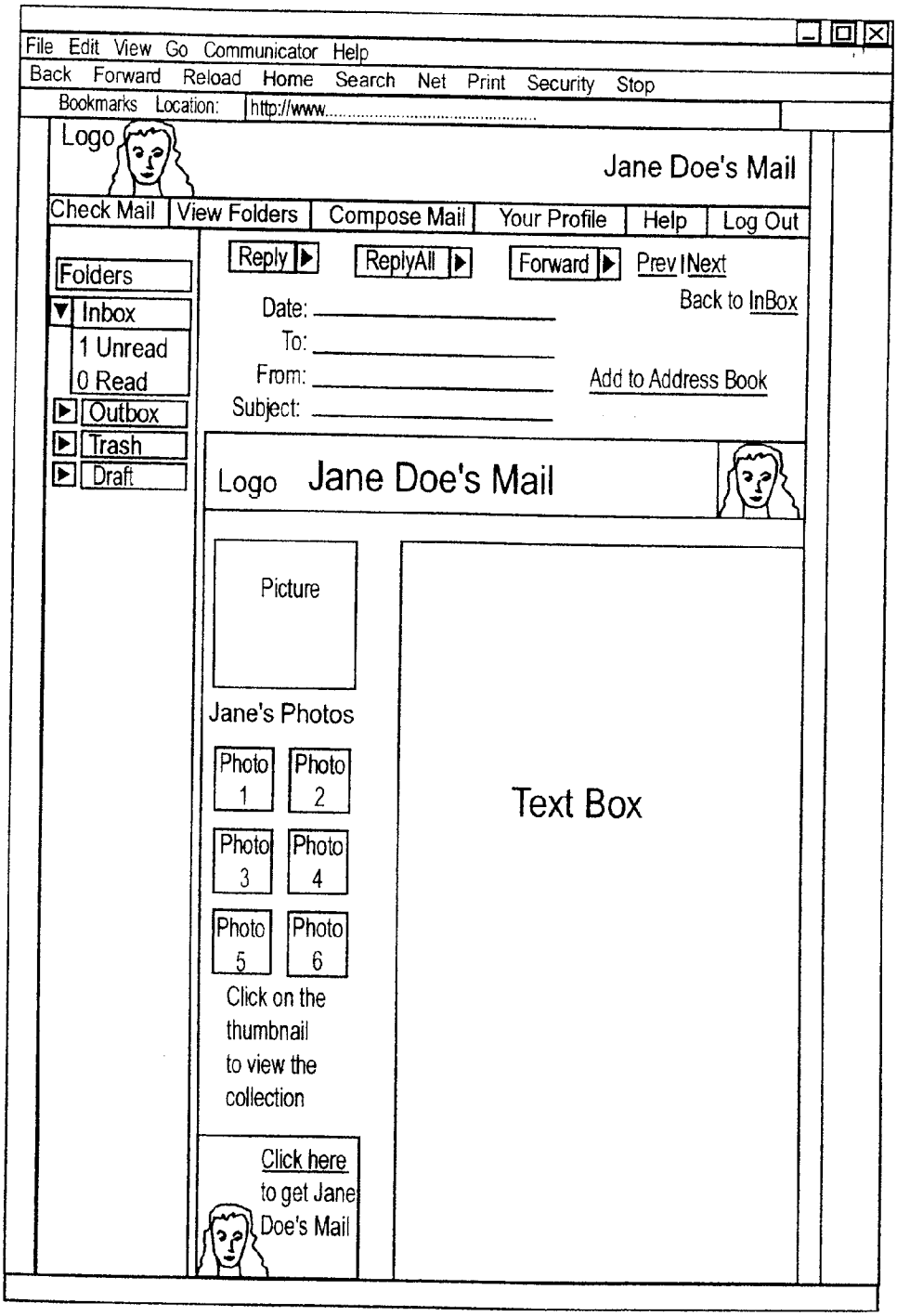

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location: http://www.....
Logo
Jane Doe's Mail
Check Mail
View Folders
Compose Mail
Your Profile
Help
Log Out
Folders
Inbox
1 Unread
0 Read
Outbox
Trash
Draft
Reply
ReplyAll
Forward
Prev | Next
Back to InBox
Date:
To:
From:
Subject:
Add to Address Book
Logo Jane Doe's Mail
Picture
Jane's Photos
Photo 1
Photo 2
Photo 3
Photo 4
Photo 5
Photo 6
Click on the thumbnail to view the collection
Click here to get Jane Doe's Mail
Text Box

FIG. 31

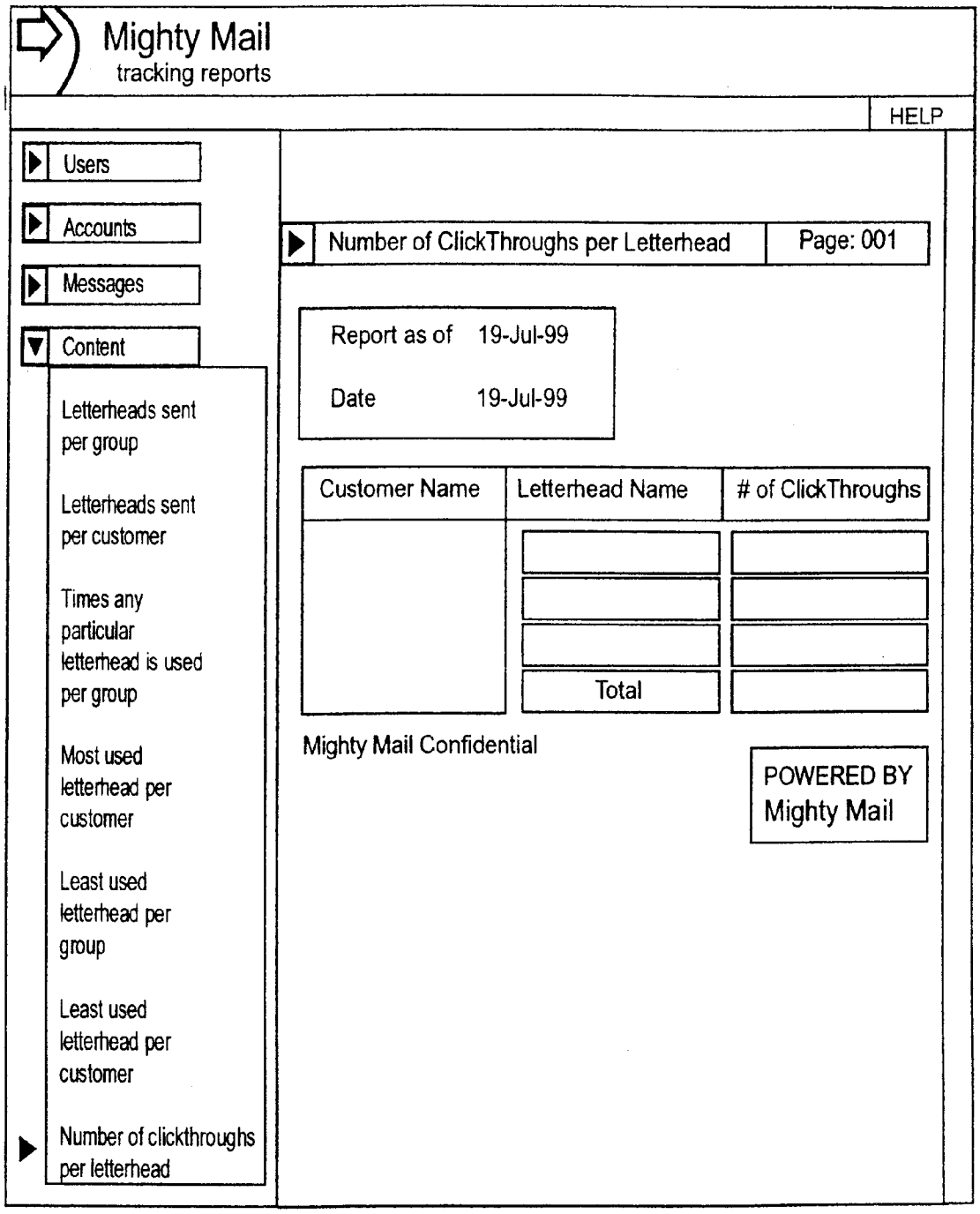

Mighty Mail
tracking reports
HELP
Users
Accounts
Messages
Content
Letterheads sent per group
Letterheads sent per customer
Times any particular letterhead is used per group
Most used letterhead per customer
Least used letterhead per group
Least used letterhead per customer
Number of clickthroughs per letterhead
Number of ClickThroughs per Letterhead
Page: 001
Report as of 19-Jul-99
Date 19-Jul-99
Customer Name
Letterhead Name
# of ClickThroughs
Total
Mighty Mail Confidential
POWERED BY Mighty Mail

Fig. 32

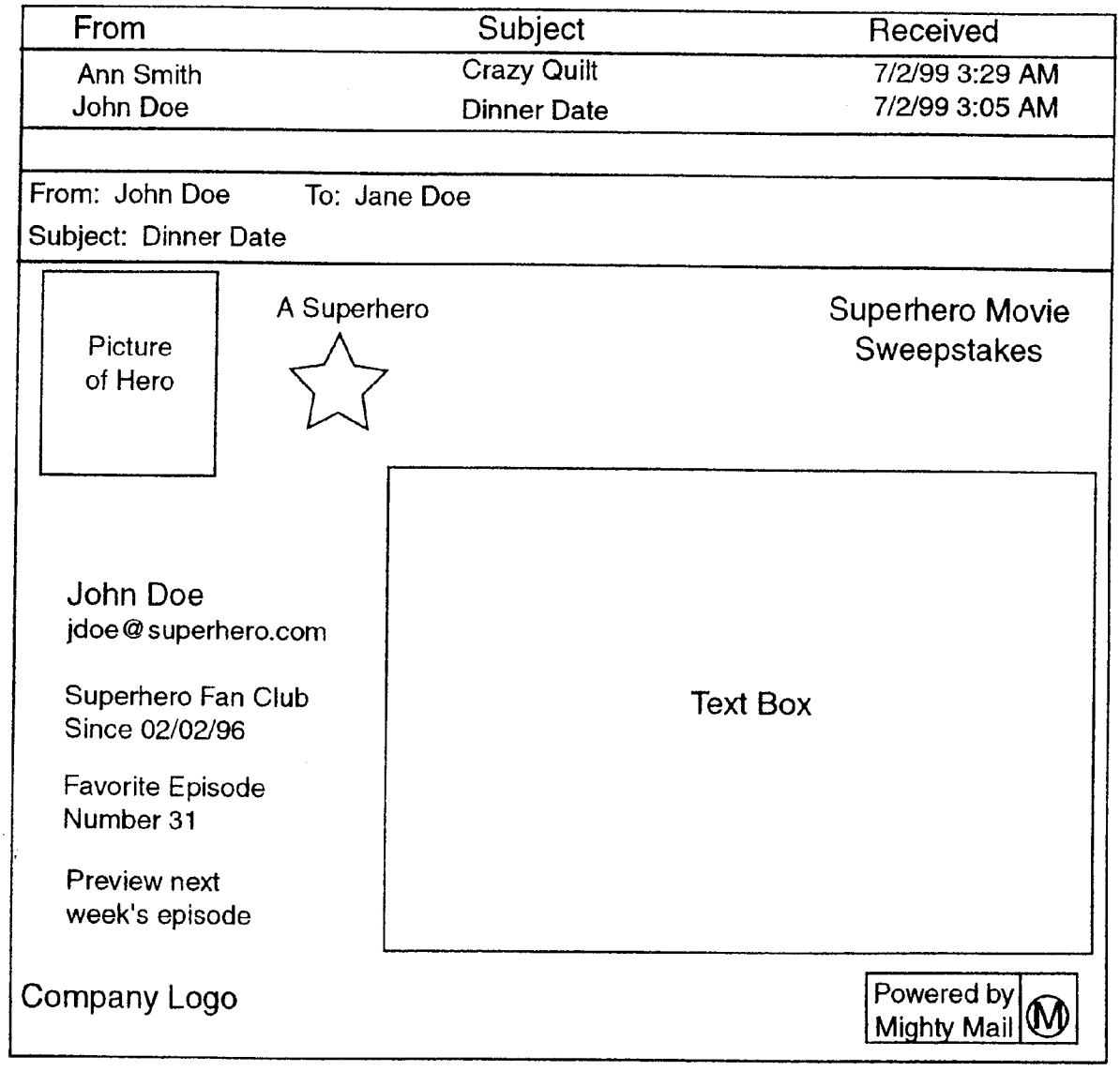

From
Subject
Received
Ann Smith
Crazy Quilt
7/2/99 3:29 AM
John Doe
Dinner Date
7/2/99 3:05 AM
From: John Doe
To: Jane Doe
Subject: Dinner Date
Picture of Hero
A Superhero
Superhero Movie Sweepstakes
John Doe
jdoe@superhero.com
Superhero Fan Club
Since 02/02/96
Favorite Episode
Number 31
Preview next week's episode
Text Box
Company Logo
Powered by Mighty Mail

Fig. 33

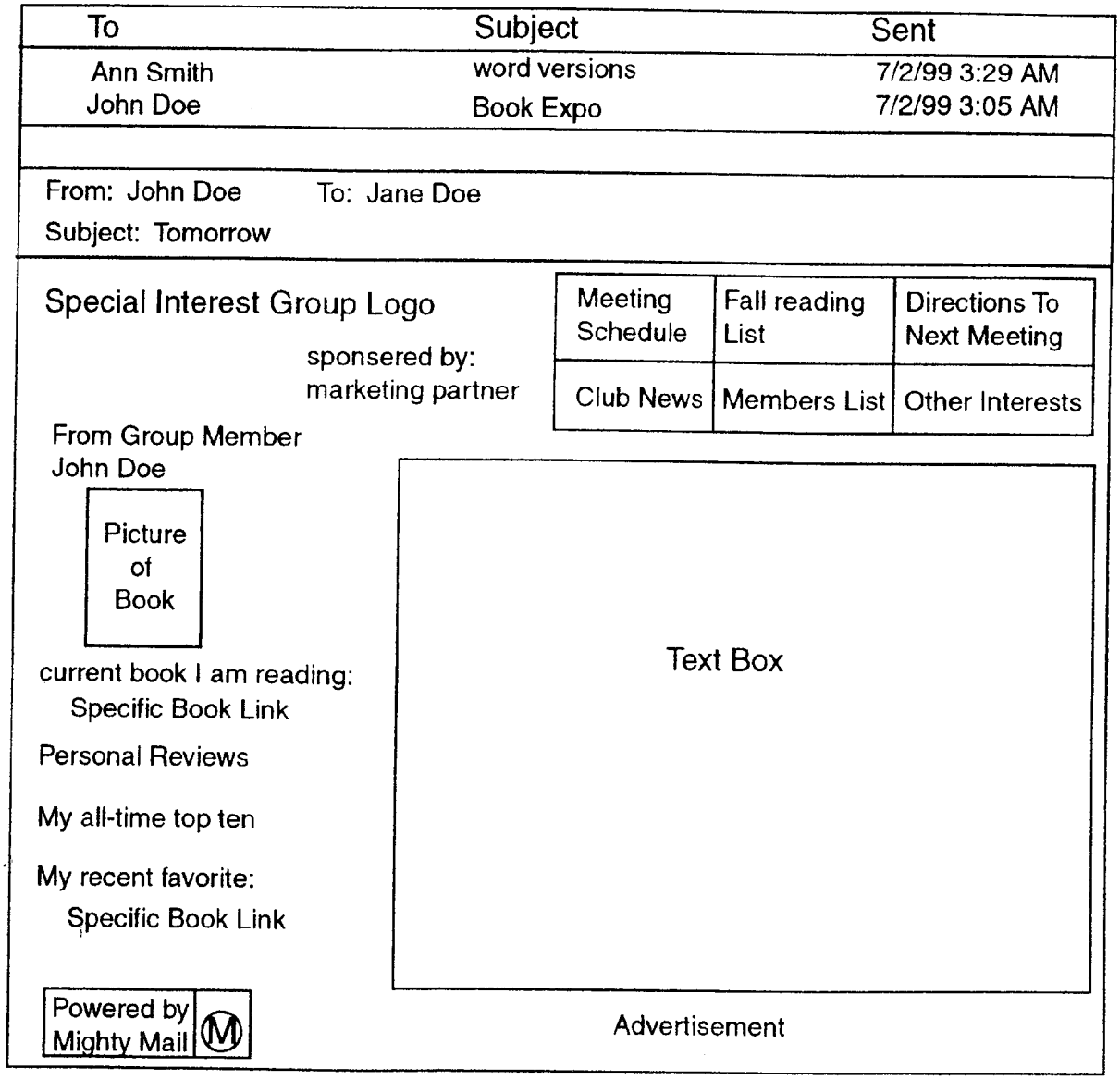

To
Subject
Sent
Ann Smith
word versions
7/2/99 3:29 AM
John Doe
Book Expo
7/2/99 3:05 AM
From: John Doe
To: Jane Doe
Subject: Tomorrow
Special Interest Group Logo
sponsered by:
marketing partner
Meeting Schedule
Fall reading List
Directions To Next Meeting
Club News
Members List
Other Interests
From Group Member
John Doe
Picture of Book
current book I am reading:
Specific Book Link
Personal Reviews
My all-time top ten
My recent favorite:
Specific Book Link
Text Box
Powered by Mighty Mail
Advertisement

Fig. 34

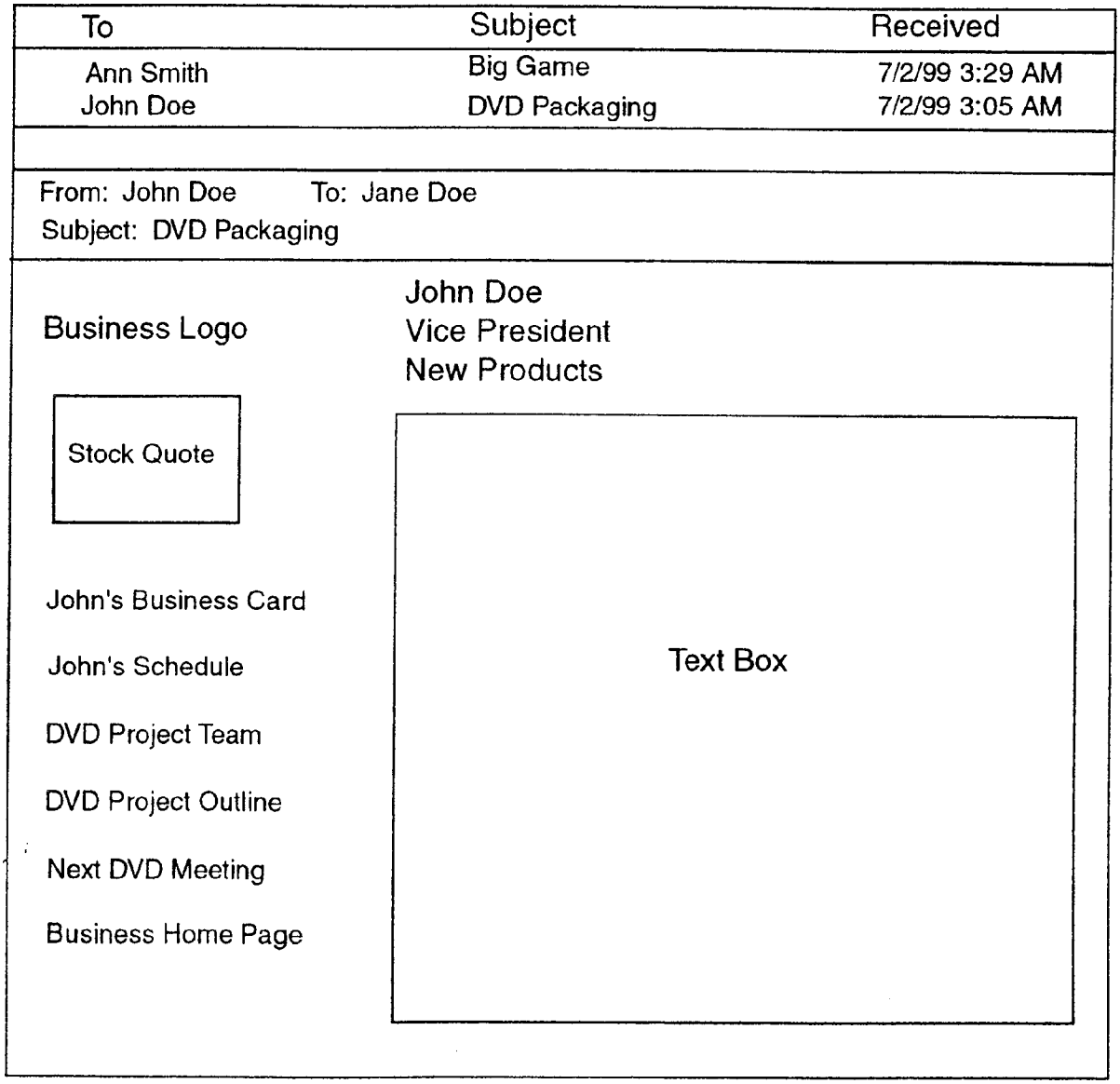

To
Subject
Received
Ann Smith
Big Game
7/2/99 3:29 AM
John Doe
DVD Packaging
7/2/99 3:05 AM
From: John Doe
To: Jane Doe
Subject: DVD Packaging
Business Logo
John Doe
Vice President
New Products
Stock Quote
John's Business Card
John's Schedule
DVD Project Team
DVD Project Outline
Next DVD Meeting
Business Home Page
Text Box

Fig. 35

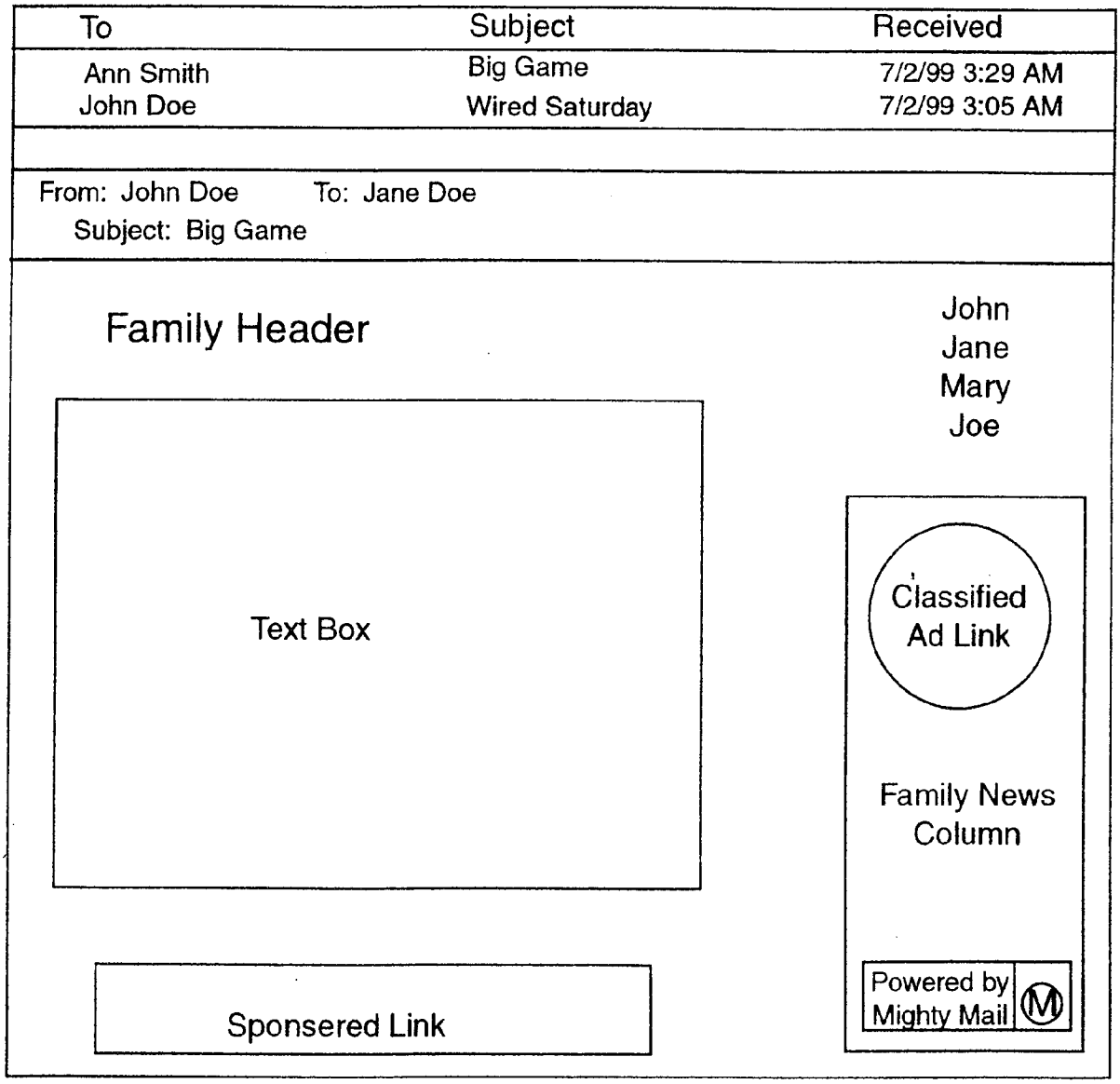

To
Subject
Received
Ann Smith
Big Game
7/2/99 3:29 AM
John Doe
Wired Saturday
7/2/99 3:05 AM
From: John Doe
To: Jane Doe
Subject: Big Game
Family Header
John
Jane
Mary
Joe
Text Box
Classified Ad Link
Family News Column
Sponsered Link
Powered by Mighty Mail

Fig. 36

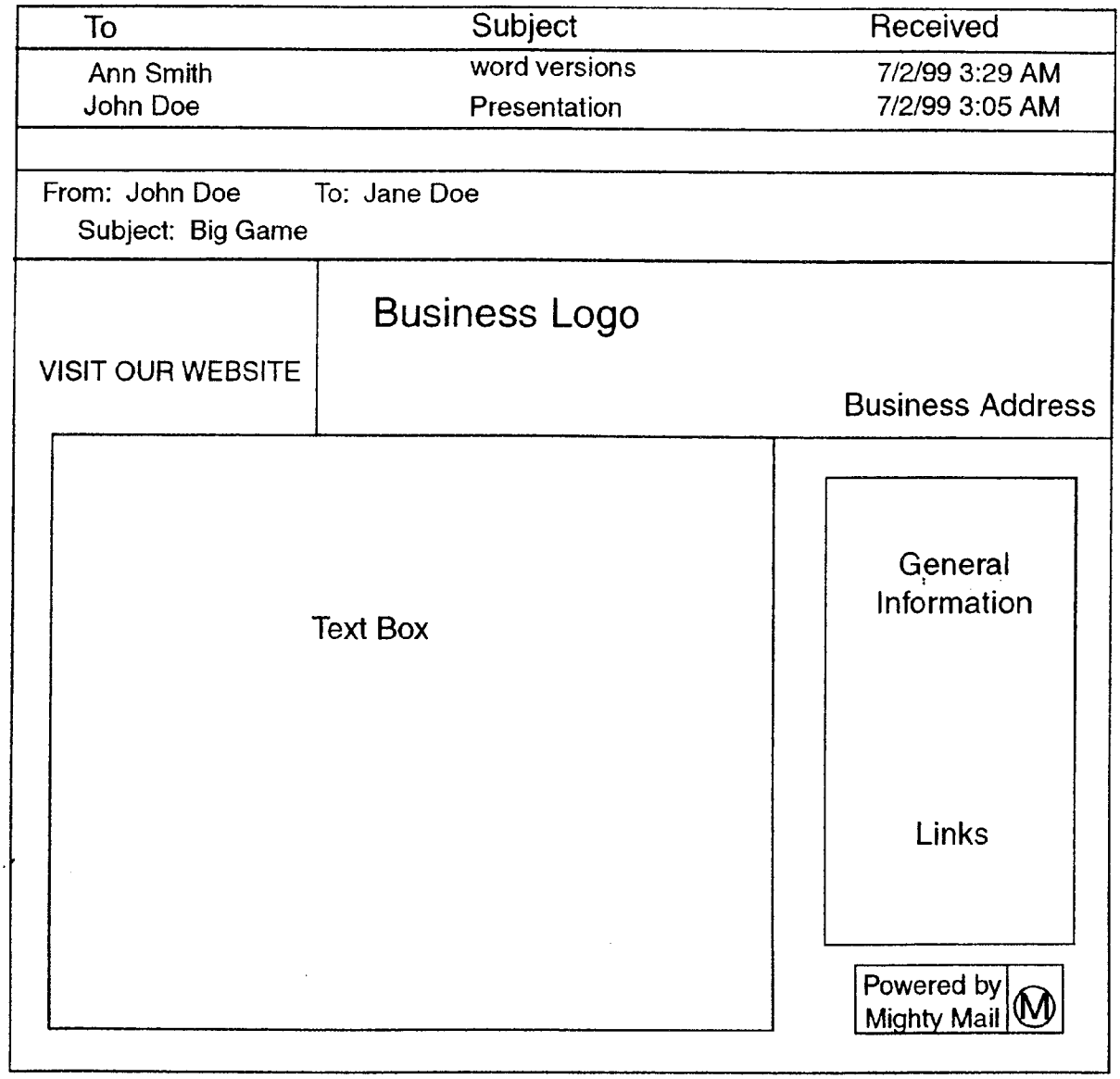

To
Subject
Received
Ann Smith
word versions
7/2/99 3:29 AM
John Doe
Presentation
7/2/99 3:05 AM
From: John Doe
To: Jane Doe
Subject: Big Game
VISIT OUR WEBSITE
Business Logo
Business Address
Text Box
General Information
Links
Powered by Mighty Mail

Fig. 37

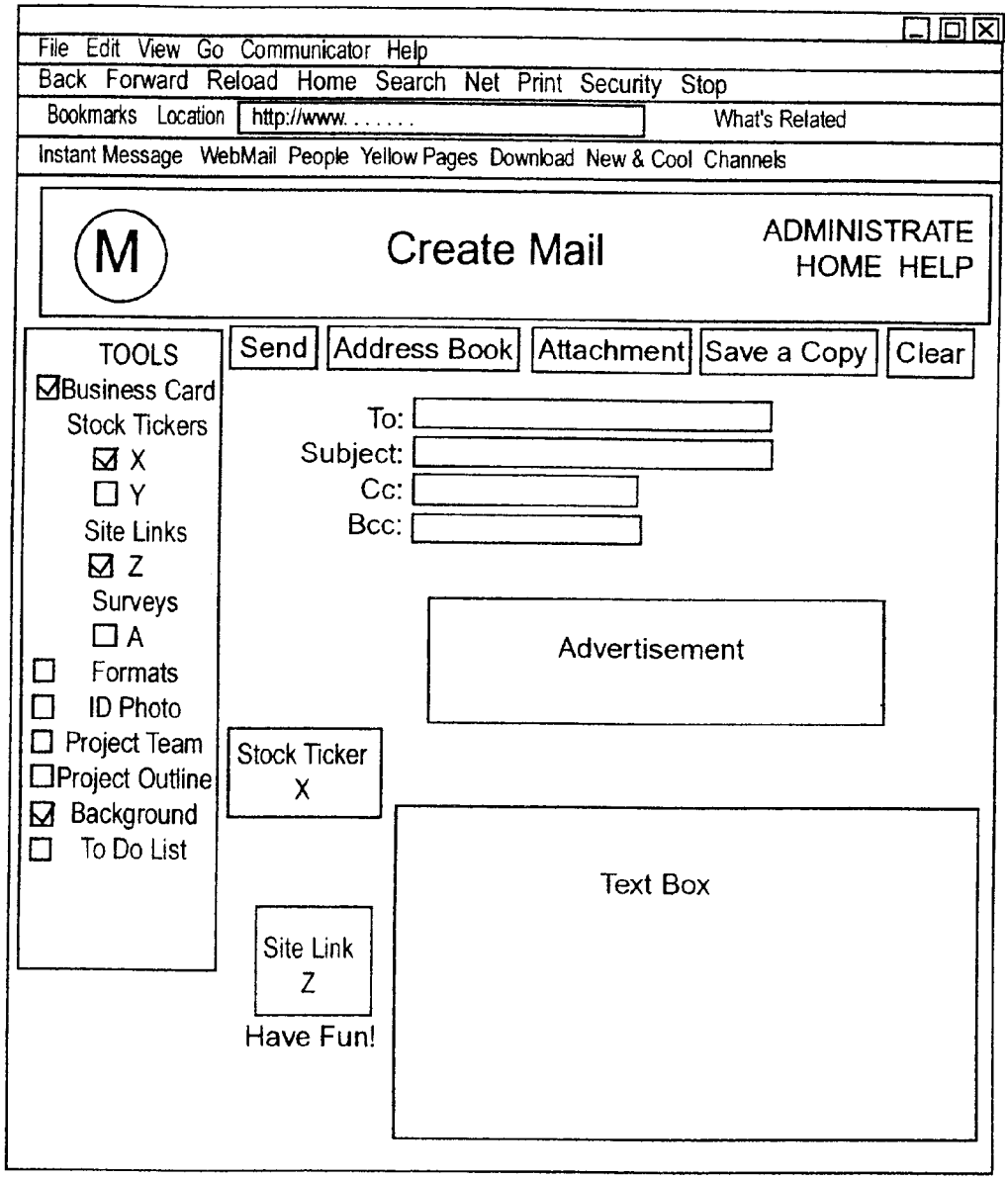

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www. . . . . .
What's Related
Instant Message WebMail People Yellow Pages Download New & Cool Channels
M
Create Mail
ADMINISTRATE
HOME HELP
TOOLS
Business Card
Stock Tickers
X
Y
Site Links
Z
Surveys
A
Formats
ID Photo
Project Team
Project Outline
Background
To Do List
Send
Address Book
Attachment
Save a Copy
Clear
To:
Subject:
Cc:
Bcc:
Advertisement
Stock Ticker
X
Text Box
Site Link
Z
Have Fun!

Fig. 38

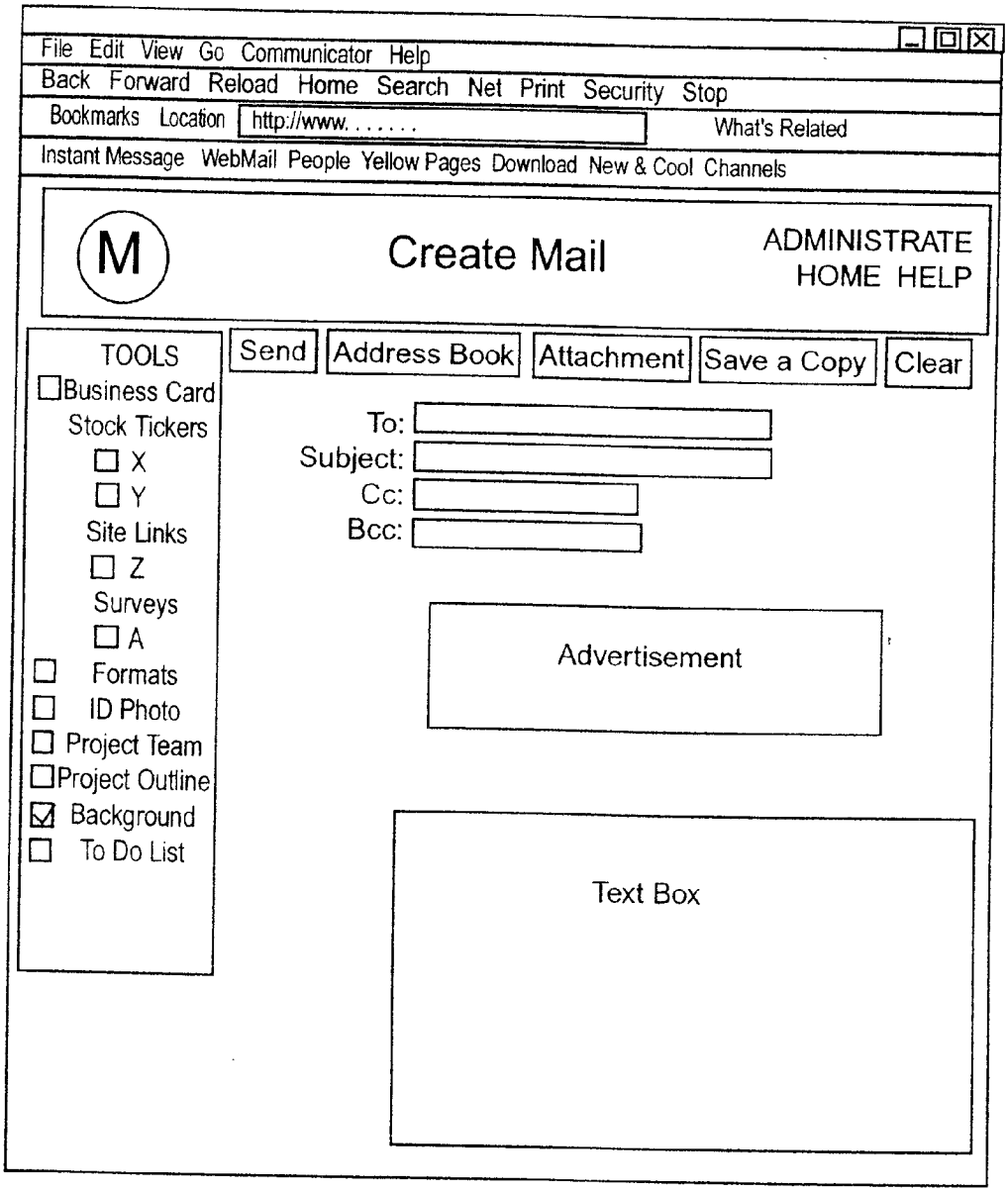

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www. . . . . .
What's Related
Instant Message WebMail People Yellow Pages Download New & Cool Channels
M
Create Mail
ADMINISTRATE
HOME HELP
TOOLS
Business Card
Stock Tickers
X
Y
Site Links
Z
Surveys
A
Formats
ID Photo
Project Team
Project Outline
Background
To Do List
Send
Address Book
Attachment
Save a Copy
Clear
To:
Subject:
Cc:
Bcc:
Advertisement
Text Box

Fig. 39

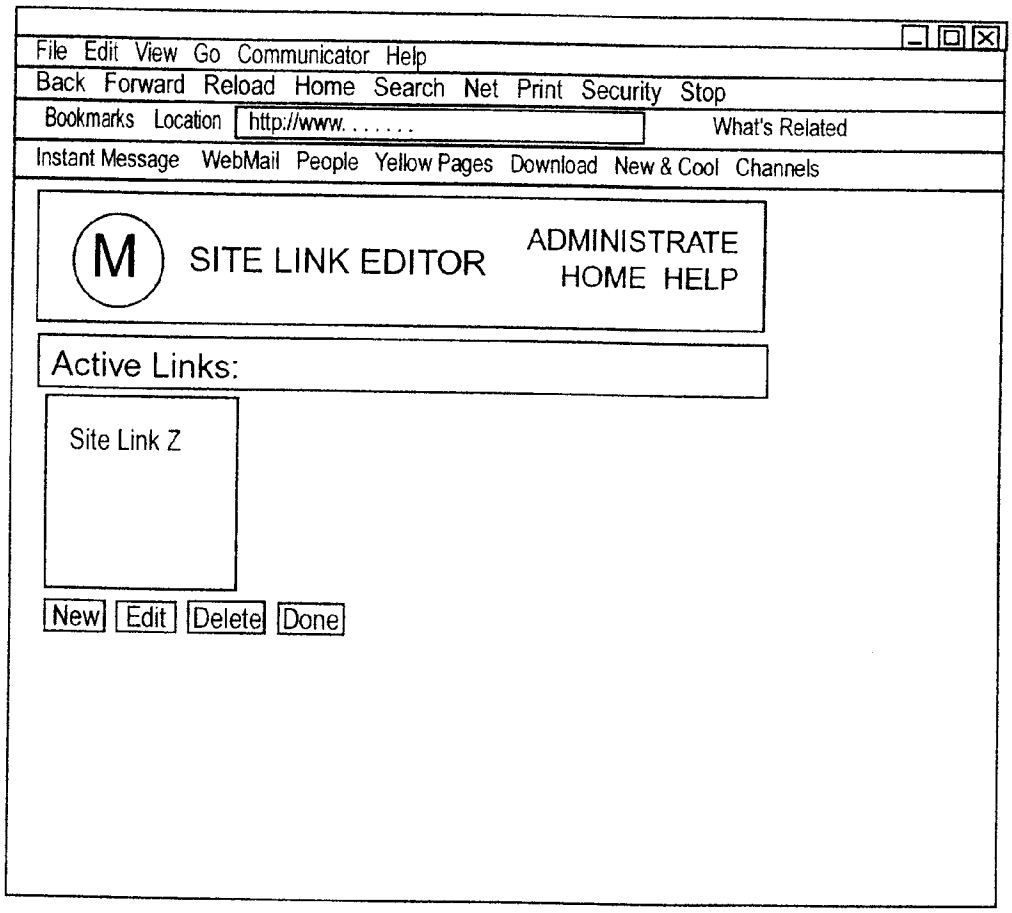

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www. . . . . .
What's Related
Instant Message WebMail People Yellow Pages Download New & Cool Channels
M
SITE LINK EDITOR
ADMINISTRATE
HOME HELP
Active Links:
Site Link Z
New
Edit
Delete
Done

Fig. 40

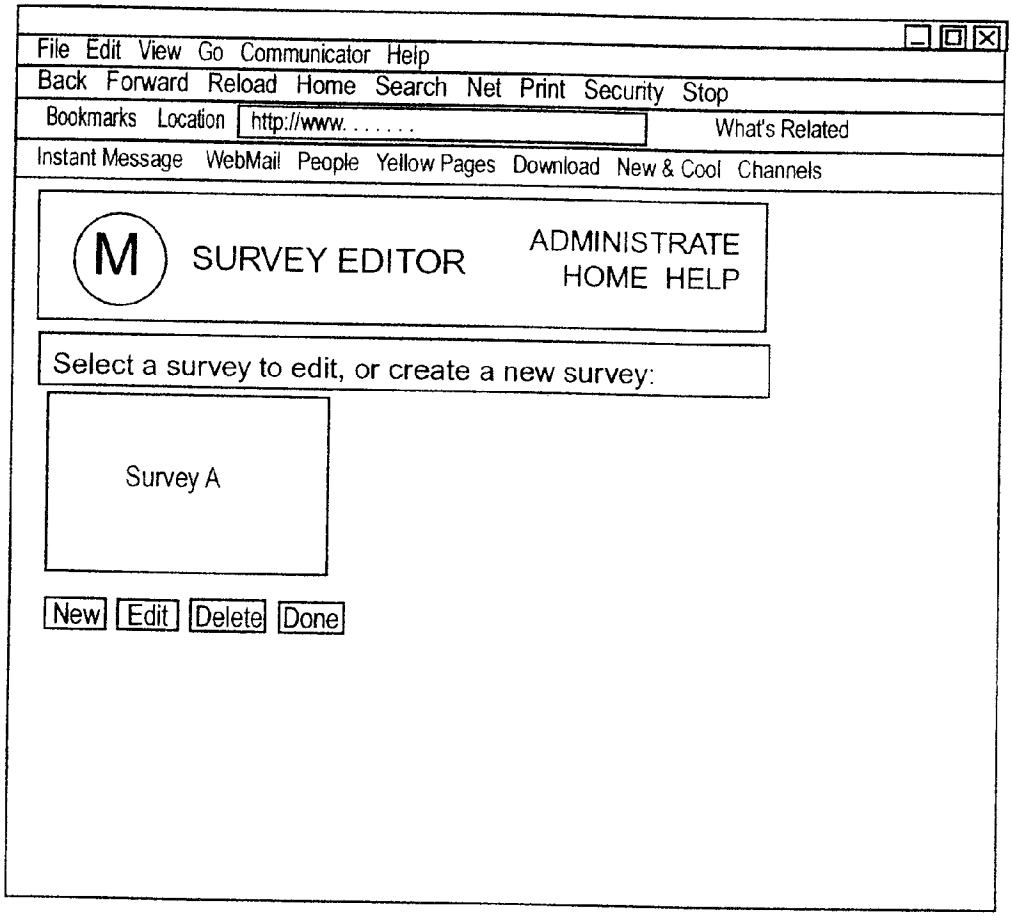

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www. . . . . .
What's Related
Instant Message WebMail People Yellow Pages Download New & Cool Channels
M
SURVEY EDITOR
ADMINISTRATE
HOME HELP
Select a survey to edit, or create a new survey:
Survey A
New
Edit
Delete
Done

Fig. 41

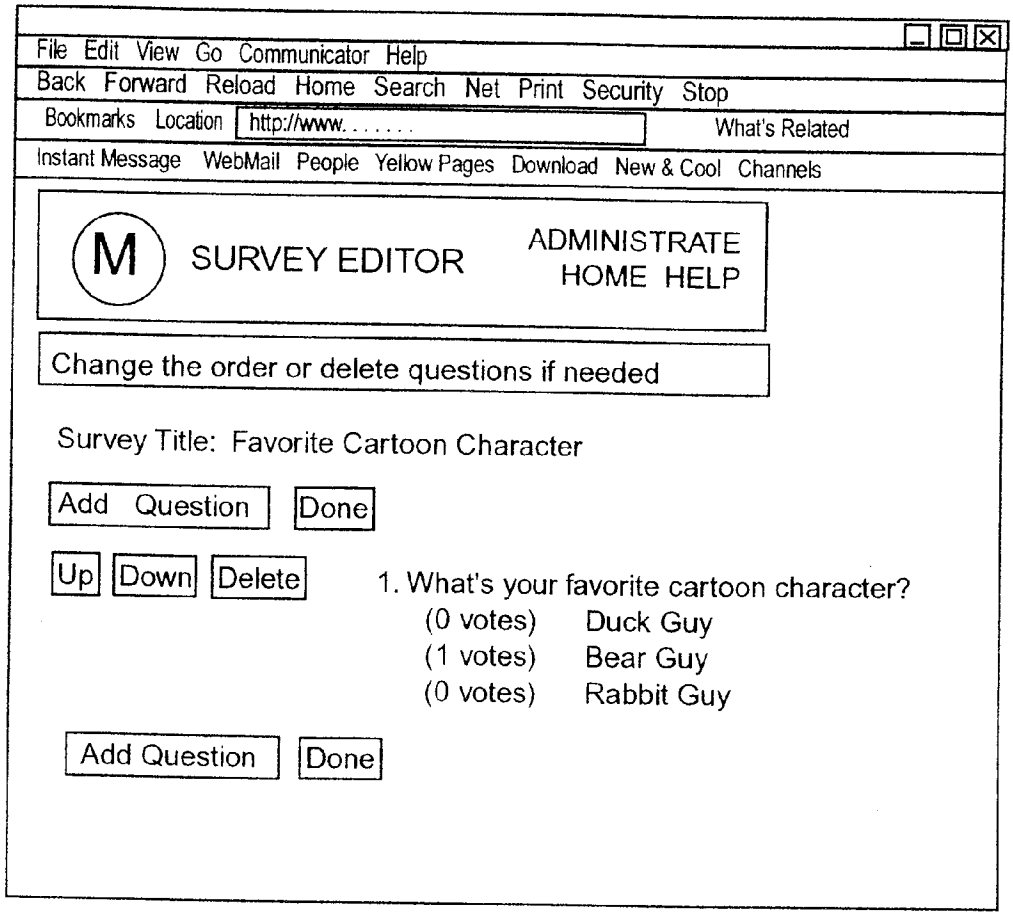

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www.....
What's Related
Instant Message WebMail People Yellow Pages Download New & Cool Channels
M
SURVEY EDITOR
ADMINISTRATE
HOME HELP
Change the order or delete questions if needed
Survey Title: Favorite Cartoon Character
Add Question
Done
Up
Down
Delete
1. What's your favorite cartoon character?
(0 votes) Duck Guy
(1 votes) Bear Guy
(0 votes) Rabbit Guy
Add Question
Done

Fig. 42

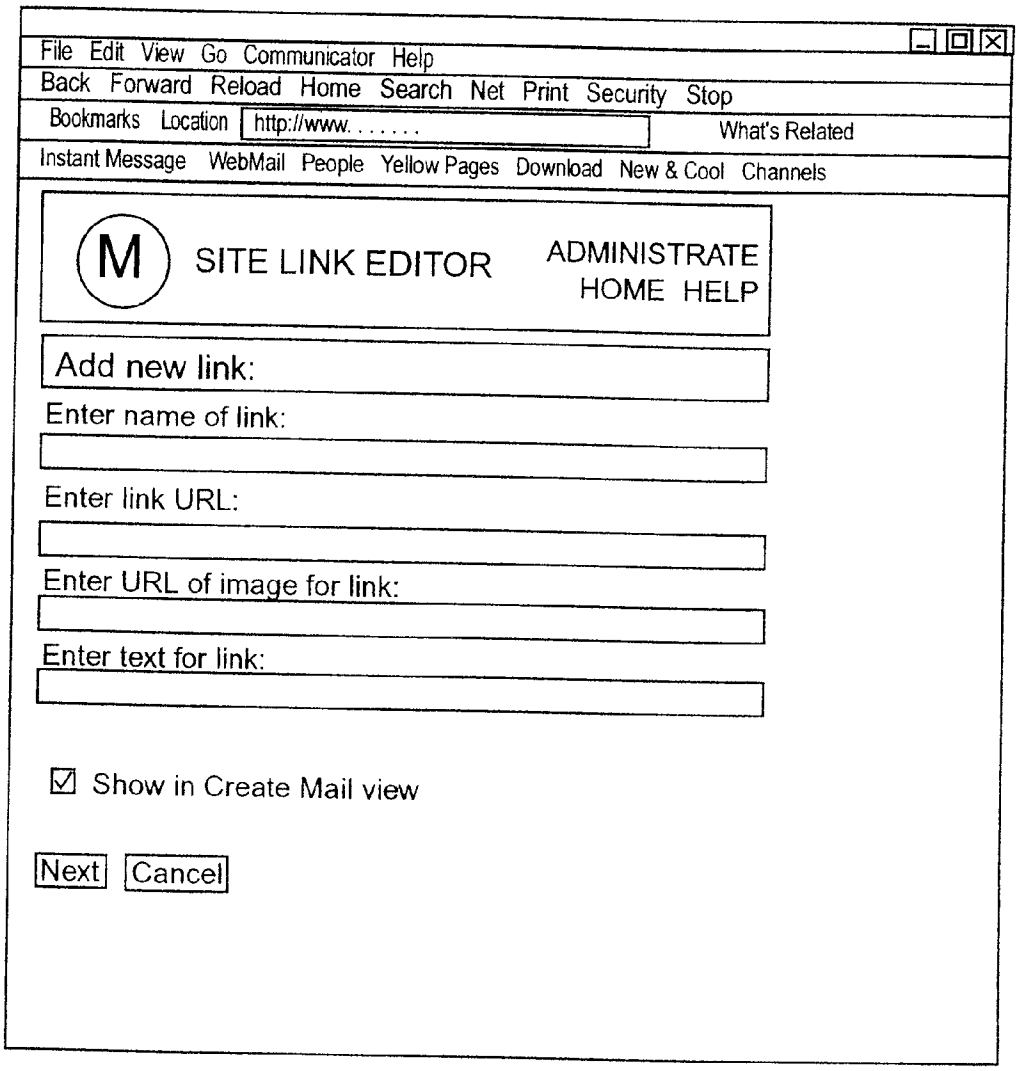

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www. . . . . .
What's Related
Instant Message WebMail People Yellow Pages Download New & Cool Channels
M
SITE LINK EDITOR
ADMINISTRATE
HOME HELP
Add new link:
Enter name of link:
Enter link URL:
Enter URL of image for link:
Enter text for link:
Show in Create Mail view
Next
Cancel

Fig. 43

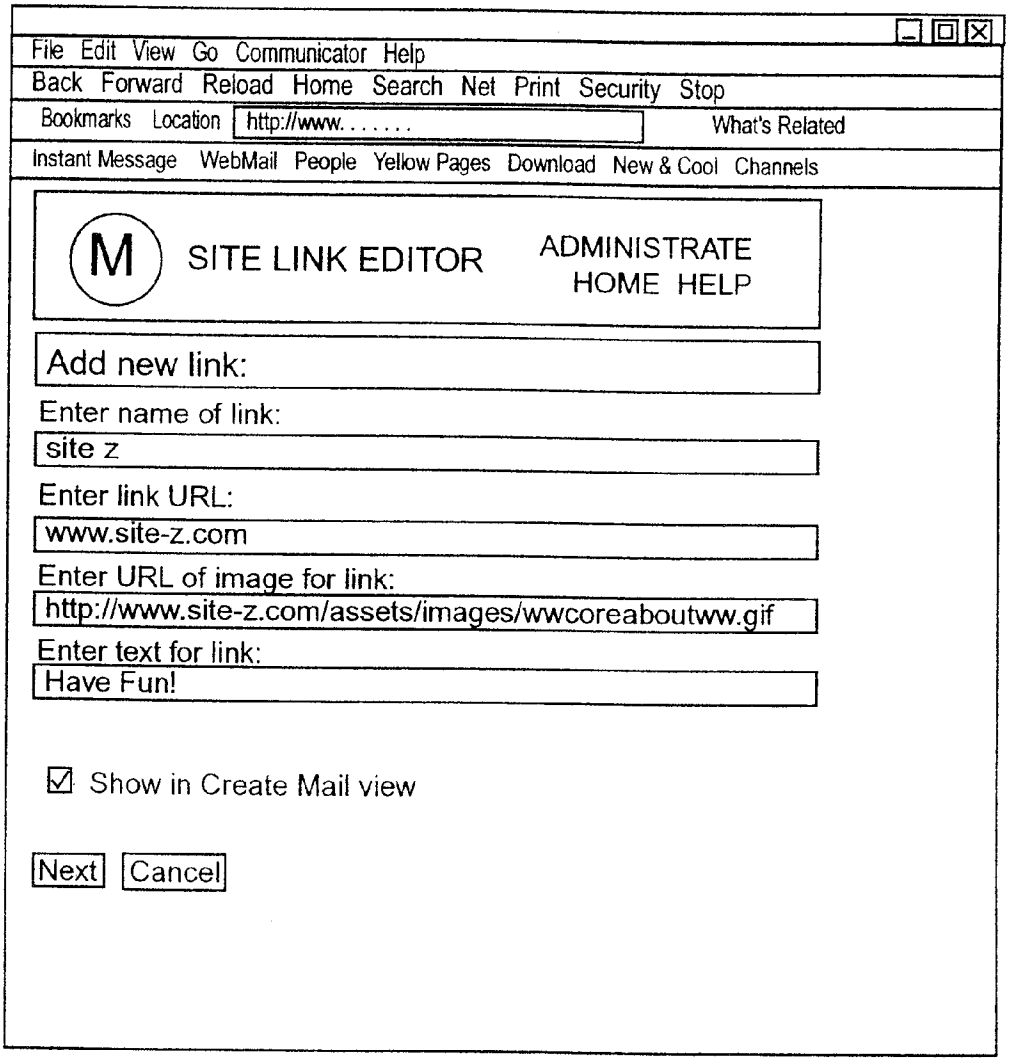

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www.....
What's Related
Instant Message WebMail People Yellow Pages Download New & Cool Channels
M
SITE LINK EDITOR
ADMINISTRATE
HOME HELP
Add new link:
Enter name of link:
site z
Enter link URL:
www.site-z.com
Enter URL of image for link:
http://www.site-z.com/assets/images/wwcoreaboutww.gif
Enter text for link:
Have Fun!
Show in Create Mail view
Next
Cancel

Fig. 44

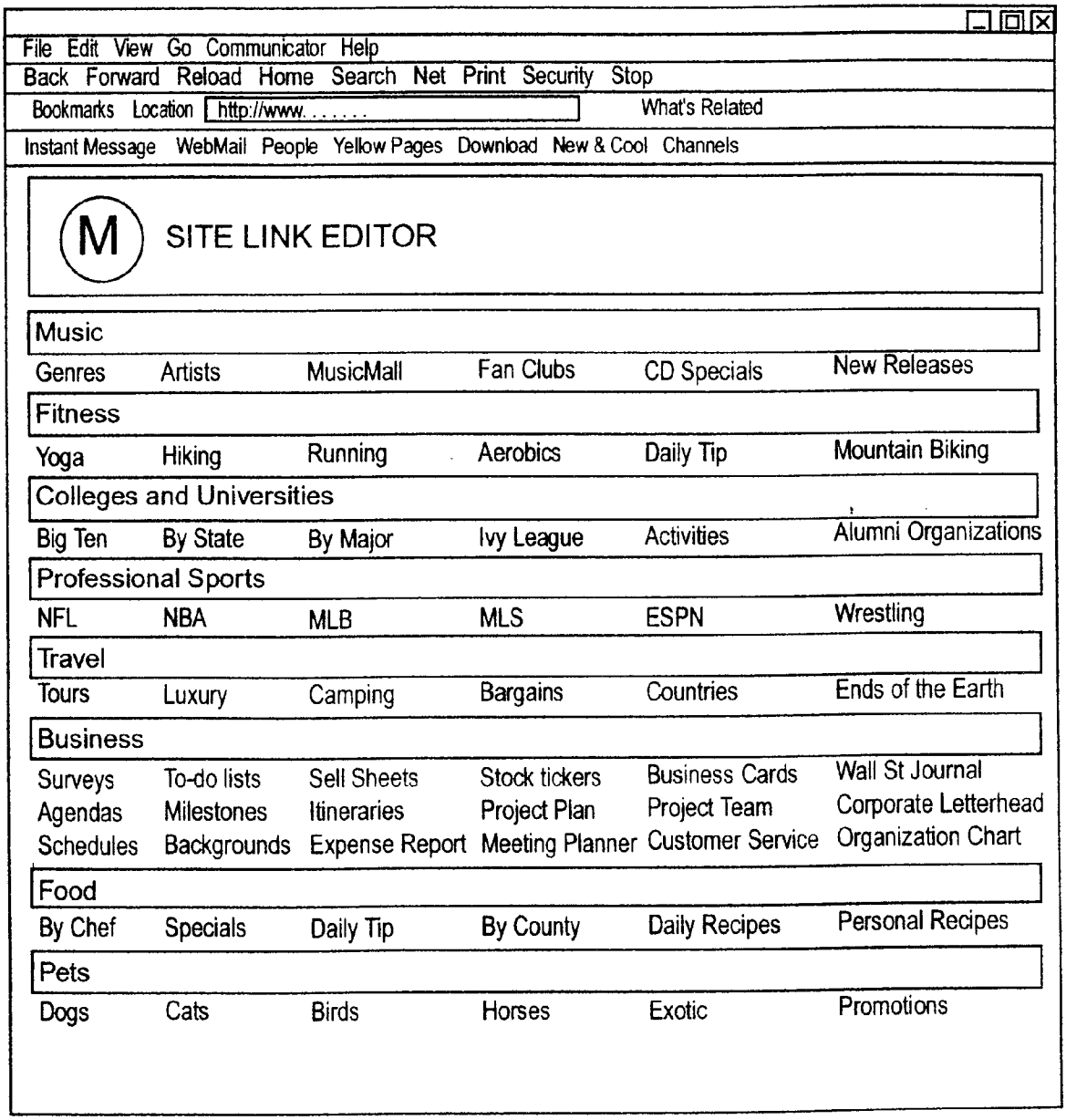

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www.....
What's Related
Instant Message WebMail People Yellow Pages Download New & Cool Channels
M
SITE LINK EDITOR
Music
Genres Artists MusicMall Fan Clubs CD Specials New Releases
Fitness
Yoga Hiking Running Aerobics Daily Tip Mountain Biking
Colleges and Universities
Big Ten By State By Major Ivy League Activities Alumni Organizations
Professional Sports
NFL NBA MLB MLS ESPN Wrestling
Travel
Tours Luxury Camping Bargains Countries Ends of the Earth
Business
Surveys To-do lists Sell Sheets Stock tickers Business Cards Wall St Journal
Agendas Milestones Itineraries Project Plan Project Team Corporate Letterhead
Schedules Backgrounds Expense Report Meeting Planner Customer Service Organization Chart
Food
By Chef Specials Daily Tip By County Daily Recipes Personal Recipes
Pets
Dogs Cats Birds Horses Exotic Promotions

Fig. 45

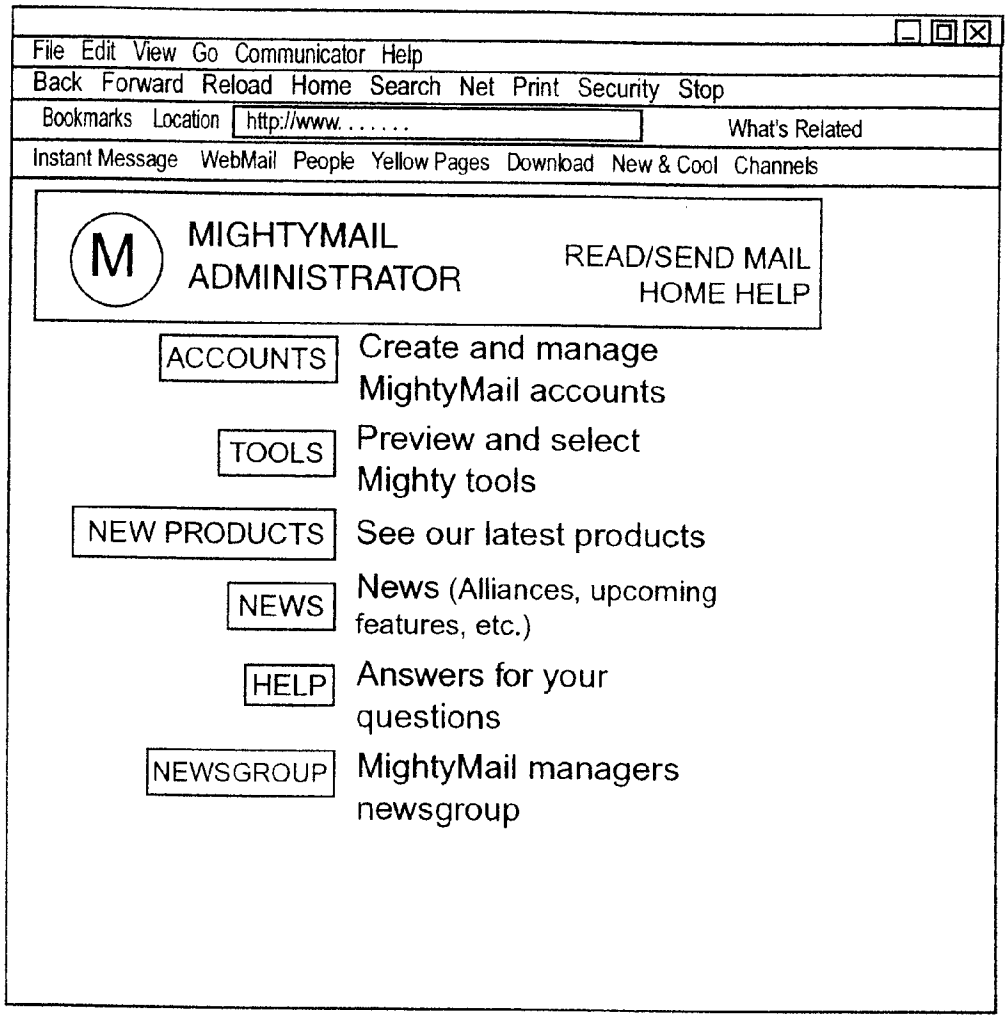
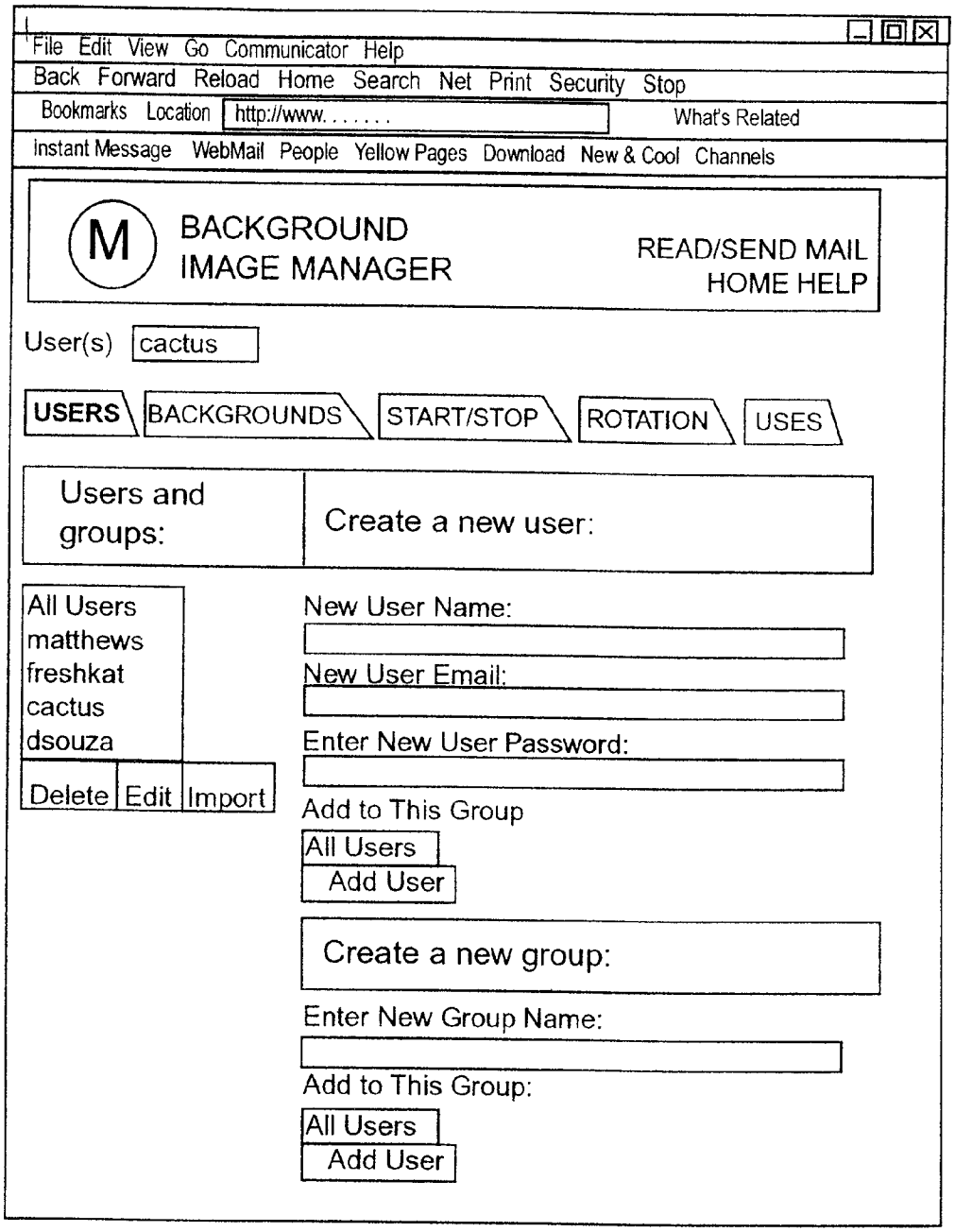

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www.....
What's Related
Instant Message WebMail People Yellow Pages Download New & Cool Channels
M
MIGHTYMAIL ADMINISTRATOR
READ/SEND MAIL
HOME HELP
ACCOUNTS
Create and manage MightyMail accounts
TOOLS
Preview and select Mighty tools
NEW PRODUCTS
See our latest products
NEWS
News (Alliances, upcoming features, etc.)
HELP
Answers for your questions
NEWSGROUP
MightyMail managers newsgroup

Fig. 46


File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www. . . . . .
What's Related
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M
BACKGROUND IMAGE MANAGER
READ/SEND MAIL
HOME HELP
User(s) cactus
USERS
BACKGROUNDS
START/STOP
ROTATION
USES
Users and groups:
Create a new user:
All Users
matthews
freshkat
cactus
dsouza
Delete
Edit
Import
New User Name:
New User Email:
Enter New User Password:
Add to This Group
All Users
Add User
Create a new group:
Enter New Group Name:
Add to This Group:
All Users
Add User

Fig. 47

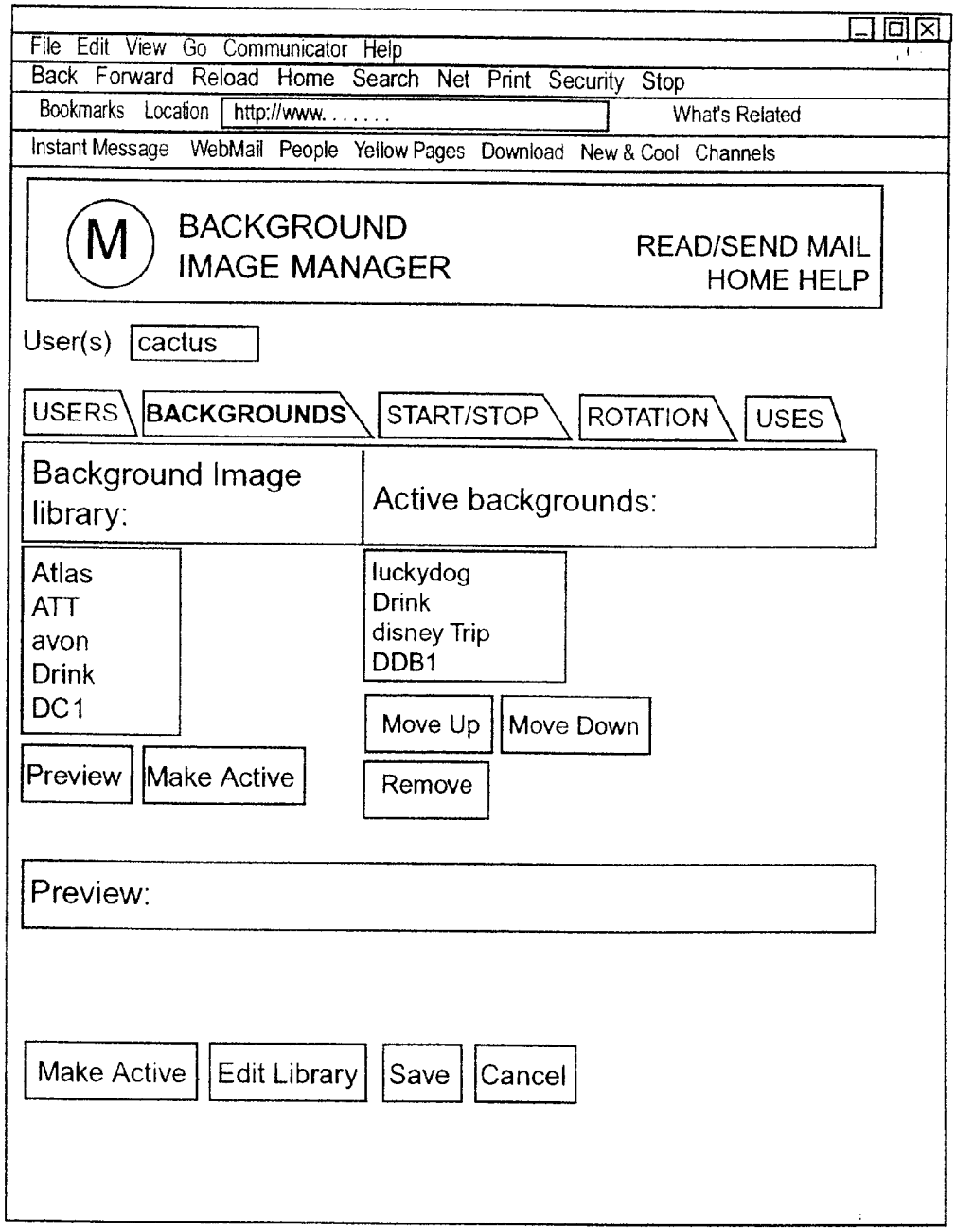

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www.....
What's Related
Instant Message WebMail People Yellow Pages Download New & Cool Channels
M
BACKGROUND IMAGE MANAGER
READ/SEND MAIL
HOME HELP
User(s) cactus
USERS
BACKGROUNDS
START/STOP
ROTATION
USES
Background Image library:
Active backgrounds:
Atlas
ATT
avon
Drink
DC1
luckydog
Drink
disney Trip
DDB1
Move Up
Move Down
Remove
Preview
Make Active
Preview:
Make Active
Edit Library
Save
Cancel

Fig. 48

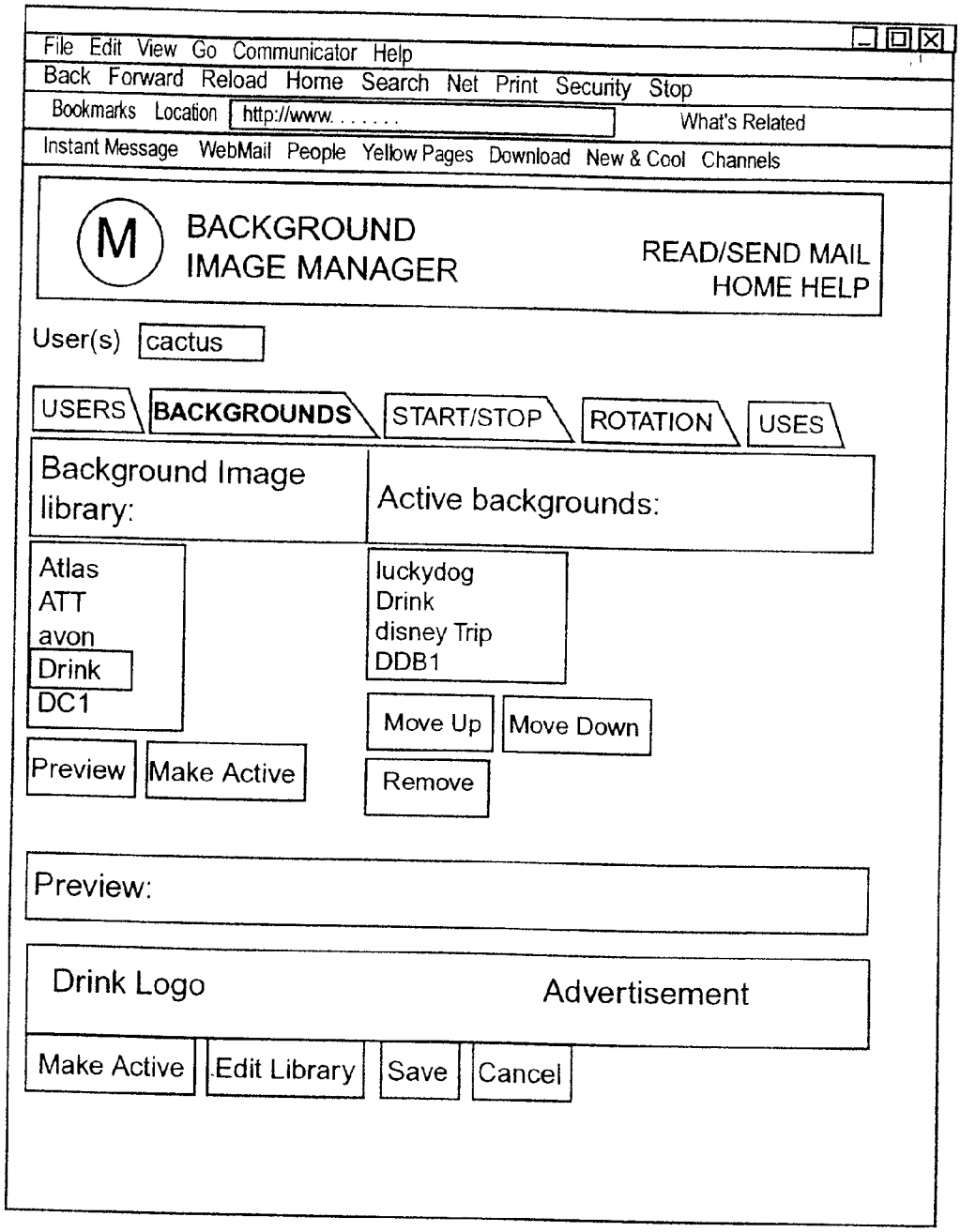

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www. . . . . .
What's Related
Instant Message WebMail People Yellow Pages Download New & Cool Channels
M
BACKGROUND
IMAGE MANAGER
READ/SEND MAIL
HOME HELP
User(s) cactus
USERS
BACKGROUNDS
START/STOP
ROTATION
USES
Background Image library:
Active backgrounds:
Atlas
ATT
avon
Drink
DC1
luckydog
Drink
disney Trip
DDB1
Move Up
Move Down
Preview
Make Active
Remove
Preview:
Drink Logo
Advertisement
Make Active
Edit Library
Save
Cancel

Fig. 49

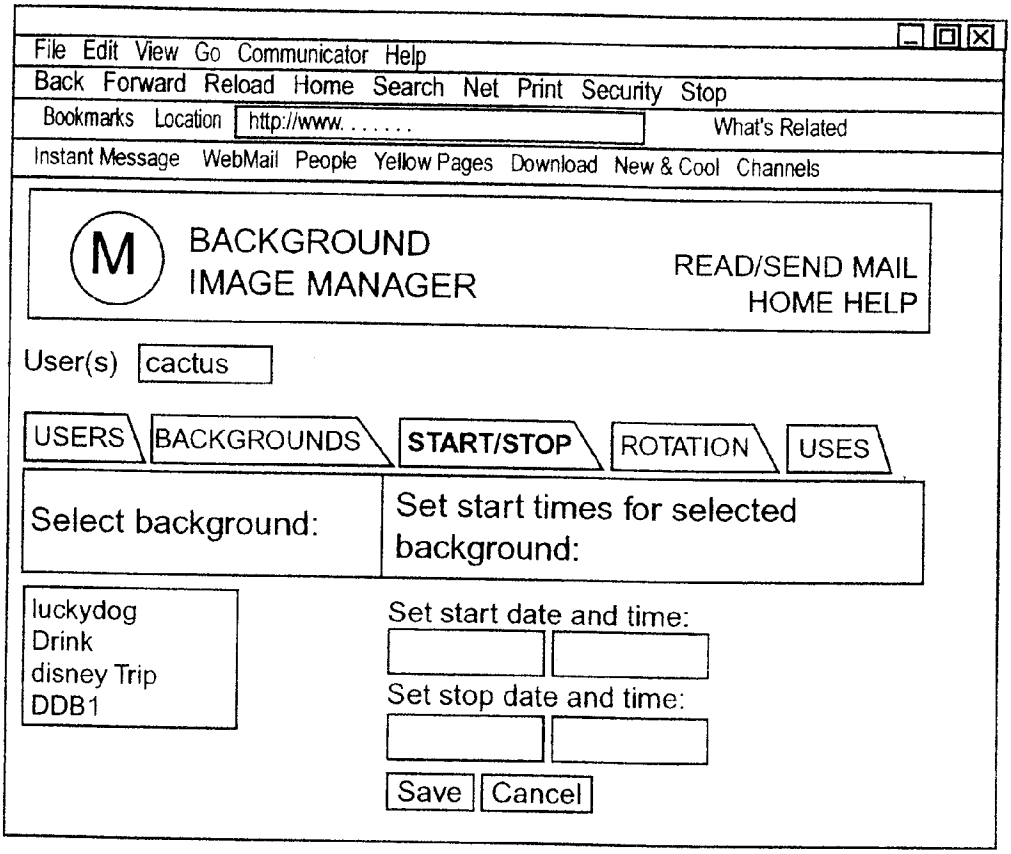
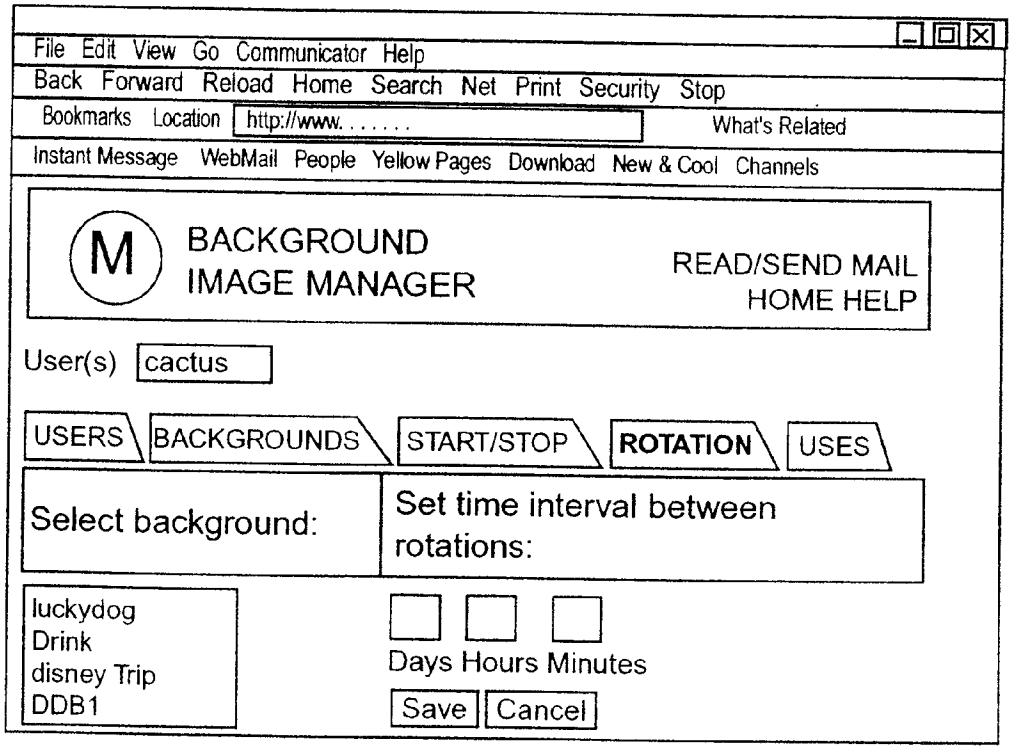

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www. . . . . .
What's Related
Instant Message WebMail People Yellow Pages Download New & Cool Channels
M
BACKGROUND
IMAGE MANAGER
READ/SEND MAIL
HOME HELP
User(s) cactus
USERS
BACKGROUNDS
START/STOP
ROTATION
USES
Select background:
Set start times for selected background:
luckydog
Drink
disney Trip
DDB1
Set start date and time:
Set stop date and time:
Save
Cancel

Fig. 50


File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www.....
What's Related
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M
BACKGROUND
IMAGE MANAGER
READ/SEND MAIL
HOME HELP
User(s) cactus
USERS
BACKGROUNDS
START/STOP
ROTATION
USES
Select background:
Set time interval between rotations:
luckydog
Drink
disney Trip
DDB1
Days Hours Minutes
Save
Cancel

Fig. 51

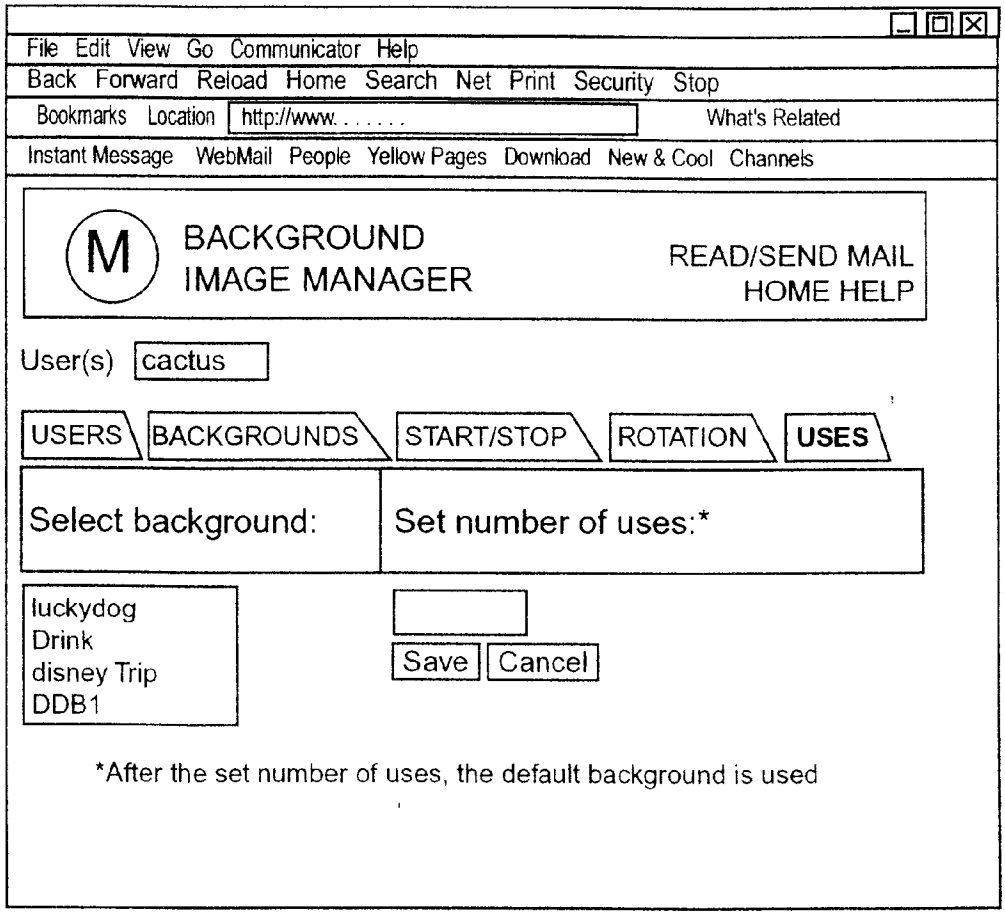

File Edit View Go Communicator Help
Back Forward Reload Home Search Net Print Security Stop
Bookmarks Location http://www.....
What's Related
Instant Message WebMail People Yellow Pages Download New & Cool Channels
M
BACKGROUND
IMAGE MANAGER
READ/SEND MAIL
HOME HELP
User(s) cactus
USERS
BACKGROUNDS
START/STOP
ROTATION
USES
Select background:
Set number of uses:*
luckydog
Drink
disney Trip
DDB1
Save
Cancel
*After the set number of uses, the default background is used

Fig. 52

Espacenet

Bibliographic data: JP2004513460 (A) — 2004-04-30

AN INFORMATION MANAGEMENT SYSTEM

Inventor(s):

Applicant(s):

Classification: - international: ***G06F12/14; G06F21/60; G06Q10/00; G06Q30/00; G09C1/00; H04L12/58;*** (IPC1-7): G06F12/14; G06F15/00; G06F17/60; G09C1/00
- cooperative: **G06F21/606**; **G06Q10/10**; **G06Q20/382**; **G06Q30/06**; **H04L12/5855**; **H04L51/14**; G06F2221/2113; H04L12/585

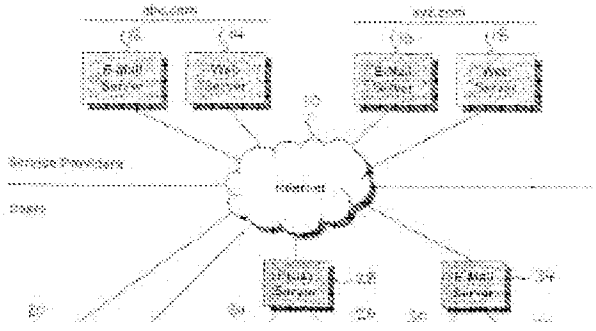
Application number: JP20020541583 20011108

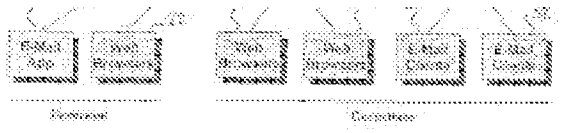
Priority number(s): GB20000027280 20001108 ; WO2001GB04979 20011108 ; US20010923704 20010807

Also published as: JP4354182 (B2) WO0239331 (A2) WO0239331 (A8) US2005216771 (A1) US7685626 (B2) US2005203855 (A1) US7669227 (B2) US2005204172 (A1) US7836482 (B2) ES2299667 (T3) ES2299666 (T3) ES2299665 (T3) ES2299664 (T3) ES2299521 (T3) EP1360623 (A2) EP1360623 (B1) DK1365340 (T3) DK1376436 (T3) DK1378847 (T3) DK1376435 (T3) DK1360623 (T3) CA2428238 (A1) AU1254902 (A) AT383622 (T) AT383623 (T) AT384308 (T) AT382915 (T) AT377810 (T) AT382914 (T) AT384309 (T) AT382913 (T) AT382912 (T) less

Abstract not available for JP2004513460 (A)
Abstract of corresponding document: WO0239331 (A2)

An information management system is described comprising one or more workstations running applications which allow a user of the workstation to connect to a network, such as the Internet. Each application has an analyser, which monitors transmission data that the application is about to transmit to the





network or has just received from the network, and which determines an appropriate action to take regarding that data. The analyser may consult policy data containing a supervisior-defined policy to govern the workstations in order to determine what action to take. Such actions may be extracting data from the transmission data, such as passwords and usernames, digital certificates or eCommerce transaction details for storage and record keeping; ensuring that the transmission data is transmitted at an encryption strength appropriate to the contents of the transmission data; determining whether a check needs to be made as to whether a digital certificate received in transmission is valid; determining whether a transaction about to be made by a user of one of the workstations needs third party approval before it is made; and controlling the transmission of messages, such as e-mails according to a policy.

【公報種別】特許法第１７条の２の規定による補正の掲載
【部門区分】第６部門第３区分
【発行日】平成17年12月22日(2005.12.22)

【公表番号】特表2004-513460(P2004-513460A)
【公表日】平成16年4月30日(2004.4.30)
【年通号数】公開・登録公報2004-017
【出願番号】特願2002-541583(P2002-541583)
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G06F 12/14
G06F 15/00
G06F 17/60
G09C 1/00
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G06F 12/14 320A
G06F 15/00 330A
G06F 17/60 318Z
G06F 17/60 502
G06F 17/60 512
G09C 1/00 660E

【手続補正書】
【提出日】平成16年11月4日(2004.11.4)
【手続補正1】
【補正対象書類名】明細書
【補正対象項目名】特許請求の範囲
【補正方法】変更
【補正の内容】
【特許請求の範囲】
【請求項１】 コンピュータネットワークに接続されるようになっている、各々がメモリを有する複数のワークステーションと、
前記ワークステーションの各々からデータを受信するように構成されたデータリポジトリーと、
発信データを前記ネットワークに送信し、着信データを前記ネットワークから受信するための、各ワークステーションの前記メモリに記憶されたアプリケーションと、
前記データリポジトリーに記憶される関係データを定義する規則を含むポリシーデータと、
前記発信データ及び前記着信データの少なくとも一方をモニタし、前記発信データ及び前記着信データの少なくとも一方において、前記ポリシーデータ内の前記規則に従って前記データリポジトリーに記憶される関係データを識別し、前記関係データを前記データリポジトリーに記憶させるように、前記ポリシーデータと協働して作動可能であるアナライザと、
を含むことを特徴とする情報管理システム。
【請求項２】 前記データリポジトリーに記憶される前記関係データは、前記データリポジトリーに送信される前に暗号化されることを特徴とする請求項１に記載のシステム。
【請求項３】 前記データリポジトリーに記憶されている前記関係データは、暗号化されることを特徴とする請求項１に記載のシステム。
【請求項４】 前記１つ又はそれ以上のワークステーションが接続されるようになっ

ている前記コンピュータネットワークは、「インターネット」であることを特徴とする請求項１に記載のシステム。

【請求項５】　前記アナライザは、ユーザを識別するために使用されるユーザ名及びパスワード、「インターネット」上のウェブページにアクセスするのに使用されるユーザ名及びパスワード、及び、それらのユーザ名及びパスワードが使用されるウェブページの「ＵＲＬ」アドレスのうちの少なくとも１つを関係データとして識別するように作動可能であり、

前記識別されたユーザ名、パスワード、及び、前記識別された「ＵＲＬ」は、前記データリポジトリーに記憶される、

ことを特徴とする請求項４に記載のシステム。

【請求項６】　前記アナライザは、前記発信データ及び前記着信データのうちの少なくとも一方に含まれたデータのフィールド名からユーザ名及びパスワードを識別するように作動可能であることを特徴とする請求項５に記載のシステム。

【請求項７】　ウェブページの入力フィールドの表現は、前記１つ又はそれ以上のワークステーションの前記メモリに記憶され、

前記アナライザは、ユーザ名及びパスワードを前記表現内で識別するように作動可能である、

ことを特徴とする請求項５に記載のシステム。

【請求項８】　前記アナライザは、前記発信データ又は前記着信データに含まれたデータのフィールド形式からユーザ名又はパスワードを識別するように作動可能であることを特徴とする請求項５に記載のシステム。

【請求項９】　前記アナライザは、前記発信データ又は前記着信データのうちの少なくとも一方に含まれるか、又は、前記着信データ又は前記発信データ内の署名入りデータにデジタル署名するために使用されるデジタル証明書、又は、そのようなデジタル証明書を特定するのに十分な記述データを関係データとして識別するように作動可能であり、

前記デジタル証明書及び／又は前記記述データは、前記データリポジトリーに記憶される、

ことを特徴とする請求項４に記載のシステム。

【請求項１０】　前記アナライザは、

前記デジタル証明書が取り消されたか否か、

前記デジタル証明書の保持者の身元、

前記デジタル証明書に関連する実行中の任意の「ｅＣｏｍｍｅｒｃｅ」取引の金額、

前記デジタル証明書を用いて実行中の任意の「ｅＣｏｍｍｅｒｃｅ」取引で販売されている品物又はサービス、及び

前記デジタル証明書の受信日付、

のデータのうちの１つ又はそれ以上を関係データとして識別するように作動可能であり、

前記識別されたデータは、前記データリポジトリーに前記デジタル証明書と共に記憶される、

ことを特徴とする請求項９に記載のシステム。

【請求項１１】　前記アナライザは、「ｅＣｏｍｍｅｒｃｅ」取引が発生していることを識別するように作動可能であり、かつ、「ｅＣｏｍｍｅｒｃｅ」取引が発生中であると識別された場合は、前記発信データ又は前記着信データにおいて、

発信データが送信されているか、又は、着信データが受信されている遠隔ロケーションの「ＵＲＬ」アドレス又は電子メールアドレス、

取引中に前記１つ又はそれ以上のワークステーションのユーザによってアクセスされたウェブページ、

取引の金額、

取引で売買されている品物又はサービス、及び

取引の日付、

のデータのうちの１つ又はそれ以上を、前記データリポジトリーに記憶される関係データとして識別するように作動可能である、

ことを特徴とする請求項４に記載のシステム。

【請求項１２】　前記アナライザは、前記１つ又はそれ以上のワークステーションの各々に位置することを特徴とする請求項１に記載のシステム。

【請求項１３】　前記アプリケーションは、ウェブブラウザであることを特徴とする請求項１に記載のシステム。

【請求項１４】　前記アナライザは、前記ウェブブラウザのプラグイン・モジュールであることを特徴とする請求項１３に記載のシステム。

【請求項１５】　前記ウェブブラウザは、マイクロソフト製の「インターネット・エクスプローラ」であり、前記アナライザは、「ブラウザ・ヘルパー・オブジェクト」であることを特徴とする請求項１４に記載のシステム。

【請求項１６】　前記アプリケーションは、電子メールクライアントであることを特徴とする請求項１に記載のシステム。

【請求項１７】　前記アナライザは、前記電子メールクライアントのプラグイン・モジュールであることを特徴とする請求項１６に記載のシステム。

【請求項１８】　前記電子メールクライアントは、マイクロソフト製の「アウトルック」電子メールクライアントであり、前記アナライザは、「マイクロソフト・エクスチェンジ」クライアント・エクステンションであることを特徴とする請求項１７に記載のシステム。

【請求項１９】　前記アプリケーションは、「インスタントメッセージング」アプリケーションであることを特徴とする請求項１に記載のシステム。

【請求項２０】　前記アナライザは、前記「インスタントメッセージング」アプリケーションのプラグインであることを特徴とする請求項１９に記載のシステム。

【請求項２１】　前記アプリケーションは、「音声メッセージング」アプリケーションであることを特徴とする請求項１に記載のシステム。

【請求項２２】　前記アナライザは、前記「音声メッセージング」アプリケーションのプラグインであることを特徴とする請求項２１に記載のシステム。

【請求項２３】　前記ネットワークはサーバを含み、前記アナライザは、前記１つ又はそれ以上のワークステーションと前記サーバとの中間の前記ネットワーク上の一点に位置するか、又は、前記サーバに位置することを特徴とする請求項１に記載のシステム。

【請求項２４】　前記データリポジトリーにアクセスすることができ、前記データリポジトリーに記憶された前記関係データを閲覧するように作動可能であるスーパバイザ・ワークステーションを更に含むことを特徴とする請求項１に記載のシステム。

【請求項２５】　前記ポリシーデータは、前記スーパバイザ・ワークステーションのユーザが前記ポリシーデータを編集することができるように、前記スーパバイザ・ワークステーションによってアクセス可能であることを特徴とする請求項２４に記載のシステム。

【請求項２６】　前記複数のワークステーションにあるワークステーションは、前記データリポジトリーにアクセスすることができ、前記データリポジトリーに記憶された前記関係データを閲覧するように作動可能であることを特徴とする請求項１に記載のシステム。

【請求項２７】　前記１つ又はそれ以上のワークステーションが接続されるようになっている前記コンピュータネットワークは、公衆コンピュータネットワークであり、

前記１つ又はそれ以上のワークステーションは、互いに私設コンピュータネットワークを形成する、

ことを特徴とする請求項１に記載のシステム。

【請求項２８】　コンピュータネットワークに接続されるようになっている、各々がメモリを有する複数のワークステーションを設ける段階と、

前記ワークステーションの各々からデータを受信するように構成されたデータリポジト

リーを設ける段階と、
発信データを前記ネットワークに送信し、着信データを前記ネットワークから受信するための、各ワークステーションの前記メモリに記憶されたアプリケーションを準備する段階と、
前記データリポジトリーに記憶される関係データを定義する規則を含むポリシーデータを準備する段階と、
前記発信データ及び前記着信データのうちの少なくとも一方において、前記ポリシーデータ内の前記規則に従って前記データリポジトリーに記憶される関係データを識別するために、前記ポリシーデータを参照して前記発信データ及び前記着信データのうちの少なくとも一方を解析する段階と、
前記関係データを前記データリポジトリーに記憶する段階と、
を含むことを特徴とする、情報を管理する方法。
【請求項２９】　前記データリポジトリーに記憶される前記関係データを、前記データリポジトリーに記憶される前に暗号化する段階を更に含むことを特徴とする請求項２８に記載の方法。
【請求項３０】　前記関係データが前記データリポジトリーに記憶された後で、前記データリポジトリーに記憶されているその関係データを暗号化する段階を更に含むことを特徴とする請求項２８に記載の方法。
【請求項３１】　前記１つ又はそれ以上のワークステーションが接続されるようになっている前記コンピュータネットワークは、「インターネット」であることを特徴とする請求項２８に記載の方法。
【請求項３２】　前記解析する段階において、ユーザを識別するために使用されるユーザ名及びパスワード、「インターネット」上のウェブページにアクセスするのに使用されるユーザ名及びパスワード、及び、それらのウェブページの「ＵＲＬ」アドレスのうちの少なくとも１つは、関係データとして識別されることを特徴とする請求項３１に記載の方法。
【請求項３３】　前記解析する段階において、ユーザ名及びパスワードは、前記発信データ及び前記着信データのうちの少なくとも一方に含まれたデータのフィールド名内で識別されることを特徴とする請求項３２に記載の方法。
【請求項３４】　ウェブページの入力フィールドの表現は、前記１つ又はそれ以上のワークステーションの前記メモリに記憶され、
前記解析する段階において、ユーザ名及びパスワードは、前記表現内で識別される、
ことを特徴とする請求項３２に記載の方法。
【請求項３５】　前記解析する段階において、ユーザ名又はパスワードは、前記発信データ又は前記着信データに含まれるデータのフィールド形式内で識別されることを特徴とする請求項３２に記載の方法。
【請求項３６】　前記解析する段階において、前記発信データ又は前記着信データのうちの少なくとも一方に含まれるか、又は、前記着信データ又は前記発信データ内の署名入りデータにデジタル署名するのに使用されたデジタル証明書が、関係データとして特定されるか、又は、そのようなデジタル証明書を特定するのに十分な記述データが、関係データとして識別されることを特徴とする請求項３１に記載の方法。
【請求項３７】　前記解析する段階は、
前記デジタル証明書が取り消されたか否か、
前記デジタル証明書の保持者の身元、
前記デジタル証明書に関連する、行われている任意の「ｅＣｏｍｍｅｒｃｅ」取引の金額、
前記デジタル証明書を用いて行われている任意の「ｅＣｏｍｍｅｒｃｅ」取引で販売される品物又はサービス、及び
前記デジタル証明書の受信日付、
のデータのうちの１つ又はそれ以上を関係データとして識別する段階を含むことを特徴

とする請求項３６に記載の方法。

【請求項３８】　前記解析する段階は、「ｅＣｏｍｍｅｒｃｅ」取引が発生していることを識別する段階と、オンライン「ｅＣｏｍｍｅｒｃｅ」取引が発生中であると識別した場合は、前記発信データ又は前記着信データにおいて、

発信データが送信されているか、又は、着信データが受信されている遠隔ロケーションの「ＵＲＬ」アドレス又は電子メールアドレス、

取引中に前記１つ又はそれ以上のワークステーションのユーザによってアクセスされたウェブページ、

取引の金額、

取引で売買されている品物又はサービス、及び

取引の日付、

のデータのうちの１つ又はそれ以上を関係データとして識別する段階とを含むことを特徴とする請求項３１に記載の方法。

【請求項３９】　前記解析する段階は、前記１つ又はそれ以上のワークステーションで実行されることを特徴とする請求項２８に記載の方法。

【請求項４０】　前記アプリケーションは、ウェブブラウザであることを特徴とする請求項２８に記載の方法。

【請求項４１】　前記解析する段階は、前記ウェブブラウザのプラグイン・モジュールによって実行されることを特徴とする請求項４０に記載の方法。

【請求項４２】　前記ウェブブラウザは、マイクロソフト製の「インターネット・エクスプローラ」であり、前記プラグイン・モジュールは、「ブラウザ・ヘルパー・オブジェクト」であることを特徴とする請求項４１に記載の方法。

【請求項４３】　前記アプリケーションは、電子メールクライアントであることを特徴とする請求項２８に記載の方法。

【請求項４４】　前記解析する段階は、前記電子メールクライアントのプラグイン・モジュールによって実行されることを特徴とする請求項４３に記載の方法。

【請求項４５】　前記電子メールクライアントは、マイクロソフト製の「アウトルック」電子メールクライアントであり、前記プラグイン・モジュールは、「マイクロソフト・エクスチェンジ」クライアント・エクステンションであることを特徴とする請求項４４に記載の方法。

【請求項４６】　前記アプリケーションは、「インスタントメッセージング」アプリケーションであることを特徴とする請求項２８に記載の方法。

【請求項４７】　前記アナライザは、前記「インスタントメッセージング」アプリケーションのプラグインであることを特徴とする請求項４６に記載の方法。

【請求項４８】　前記アプリケーションは、「音声メッセージング」アプリケーションであることを特徴とする請求項２８に記載の方法。

【請求項４９】　前記解析する段階は、前記「音声メッセージング」アプリケーションのプラグインにより実行されることを特徴とする請求項４８に記載の方法。

【請求項５０】　前記ネットワークはサーバを含み、前記解析する段階は、前記１つ又はそれ以上のワークステーションと前記サーバとの中間の前記ネットワーク上の一点で実行されるか、又は、前記サーバで実行されることを特徴とする請求項２８に記載の方法。

【請求項５１】　前記データリポジトリーにアクセスすることができ、前記データリポジトリーに記憶された前記関係データを閲覧するように作動可能であるスーパバイザ・ワークステーションを設ける段階を更に含むことを特徴とする請求項２８に記載の方法。

【請求項５２】　前記ポリシーデータは、前記スーパバイザ・ワークステーションのユーザが前記ポリシーデータを編集することができるように、前記スーパバイザ・ワークステーションによってアクセス可能であることを特徴とする請求項５１に記載の方法。

【請求項５３】　前記複数のワークステーションにあるワークステーションは、前記データリポジトリーにアクセスすることができ、前記データリポジトリーに記憶された前

記関係データを閲覧するように作動可能であることを特徴とする請求項２８に記載の方法。

【請求項５４】　前記１つ又はそれ以上のワークステーションが接続されるようになっている前記コンピュータネットワークは、公衆コンピュータネットワークであり、

前記１つ又はそれ以上のワークステーションは、互いに私設コンピュータネットワークを形成する、

ことを特徴とする請求項２８に記載の方法。

【請求項５５】　複数のコンピュータからのデータと、公衆ネットワークに送信された発信データ又は公衆ネットワークから受信されてデータリポジトリーに記憶された着信データのうちの少なくとも一方から抽出される関係データを定義する規則を含むポリシーデータとを受信するように構成されたデータリポジトリーを有する私設ネットワークにおいて、情報を管理するように複数のコンピュータを制御するコンピュータプログラム製品であって、

プログラムコードが記録された、コンピュータによって読取可能な記録媒体、

を含み、

前記プログラムコードは、複数のコンピュータの各々で実行された時に、

前記コンピュータの各々で実行される、発信データを送信して着信データを受信するように作動可能なアプリケーションと協働して、前記発信データ及び前記着信データのうちの少なくとも一方においてポリシーデータ内の規則に従ってデータリポジトリーに記憶される関係データを識別するために、前記ポリシーデータを参照して前記発信データ及び前記着信データのうちの少なくとも一方を解析し、かつ

前記関係データを前記データリポジトリーに記憶させる、

ように前記コンピュータを構成する、

ことを特徴とするコンピュータプログラム製品。

【請求項５６】　前記コンピュータ上で実行された時の前記プログラムコードは、前記関係データが前記データリポジトリーに記憶される前に、前記データリポジトリーに記憶される前記関係データを暗号化させるように作動可能であることを特徴とする請求項５５に記載のコンピュータプログラム製品。

【請求項５７】　前記コンピュータ上で実行された時の前記プログラムコードは、前記データリポジトリーに記憶されている前記関係データを暗号化させるように作動可能であることを特徴とする請求項５５に記載のコンピュータプログラム製品。

【請求項５８】　前記アプリケーションは、発信データを「インターネット」に送信し、着信データを「インターネット」から受信するようになっていることを特徴とする請求項５５に記載のコンピュータプログラム製品。

【請求項５９】　ユーザを識別するために使用されるユーザ名及びパスワード、「インターネット」上のウェブページにアクセスするのに使用されるユーザ名及びパスワード、及び、それらのウェブページの「ＵＲＬ」アドレスのうちの少なくとも１つは、関係データとして識別されることを特徴とする請求項５８に記載のコンピュータプログラム製品。

【請求項６０】　ユーザ名及びパスワードは、前記発信データ及び前記着信データのうちの少なくとも一方に含まれたデータのフィールド名内で識別されることを特徴とする請求項５９に記載のコンピュータプログラム製品。

【請求項６１】　ウェブページの入力フィールドの表現は、前記１つ又はそれ以上のワークステーションの前記メモリに記憶され、

前記ユーザ名及びパスワードは、前記表現内で識別される、

ことを特徴とする請求項５９に記載のコンピュータプログラム製品。

【請求項６２】　ユーザ名又はパスワードは、前記発信データ又は前記着信データに含まれるデータのフィールド形式内で識別されることを特徴とする請求項５９に記載のコンピュータプログラム製品。

【請求項６３】　前記発信データ又は前記着信データのうちの少なくとも一方に含ま

れるか、又は、前記着信データ又は前記発信データ内の署名入りデータにデジタル署名するのに使用されたデジタル証明書、又は、任意のそのようなデジタル証明書を特定するのに十分な記述データは、関係データとして識別されることを特徴とする請求項５８に記載のコンピュータプログラム製品。

【請求項６４】　前記デジタル証明書が取り消されたか否か、

前記デジタル証明書の保持者の身元、

前記デジタル証明書に関連する、行われている任意の「ｅＣｏｍｍｅｒｃｅ」取引の金額、

前記デジタル証明書を用いて行われている任意の「ｅＣｏｍｍｅｒｃｅ」取引で販売される品物又はサービス、及び

前記デジタル証明書の受信日付、

のデータのうちの１つ又はそれ以上は、関係データとして識別されることを特徴とする請求項６３に記載のコンピュータプログラム製品。

【請求項６５】　前記コンピュータ上で実行された時の前記プログラムコードは、

「ｅＣｏｍｍｅｒｃｅ」取引が発生していることを識別し、

「ｅＣｏｍｍｅｒｃｅ」取引が発生中であると識別された場合は、前記発信データ又は前記着信データにおいて、

発信データが送信されているか、又は、着信データが受信されている遠隔ロケーションの「ＵＲＬ」アドレス又は電子メールアドレス、

取引中に前記１つ又はそれ以上のワークステーションのユーザによってアクセスされたウェブページ、

取引の金額、

取引で売買されている品物又はサービス、及び

取引の日付、

のデータのうちの１つ又はそれ以上を関係データとして識別する、

ように更に作動可能であることを特徴とする請求項５８に記載のコンピュータプログラム製品。

【請求項６６】　前記プログラムコードは、前記コンピュータの各々で実行可能であることを特徴とする請求項６５に記載のコンピュータプログラム製品。

【請求項６７】　前記アプリケーションは、ウェブブラウザであることを特徴とする請求項５５に記載のコンピュータプログラム製品。

【請求項６８】　前記コンピュータ上で実行された時の前記プログラムコードは、前記ウェブブラウザのプラグイン・モジュールであることを特徴とする請求項６７に記載のコンピュータプログラム製品。

【請求項６９】　前記ウェブブラウザは、マイクロソフト製の「インターネット・エクスプローラ」であり、前記プラグイン・モジュールは、「ブラウザ・ヘルパー・オブジェクト」であることを特徴とする請求項６８に記載のコンピュータプログラム製品。

【請求項７０】　前記アプリケーションは、電子メールクライアントであることを特徴とする請求項５５に記載のコンピュータプログラム製品。

【請求項７１】　前記コンピュータ上で実行された時の前記プログラムコードは、前記電子メールクライアントのプラグイン・モジュールであることを特徴とする請求項７０に記載のコンピュータプログラム製品。

【請求項７２】　前記電子メールクライアントは、マイクロソフト製の「アウトルック」電子メールクライアントであり、前記プラグイン・モジュールは、「マイクロソフト・エクスチェンジ」クライアント・エクステンションであることを特徴とする請求項７１に記載のコンピュータプログラム製品。

【請求項７３】　前記アプリケーションは、「インスタントメッセージング」アプリケーションであることを特徴とする請求項５５に記載のコンピュータソフトウエア製品。

【請求項７４】　前記コンピュータ上で実行された時の前記プログラムコードは、前記「インスタントメッセージング」アプリケーションのプラグインであることを特徴とす

る請求項７３に記載のコンピュータソフトウエア製品。

【請求項７５】　前記アプリケーションは、「音声メッセージング」アプリケーションであることを特徴とする請求項５５記載のコンピュータソフトウエア製品。

【請求項７６】　前記コンピュータ上で実行された時の前記プログラムコードは、前記「音声メッセージング」アプリケーションのプラグインであることを特徴とする請求項７５に記載のコンピュータソフトウエア製品。

【請求項７７】　前記ネットワークはサーバを含み、前記プログラムコードは、前記１つ又はそれ以上のワークステーションと前記サーバとの中間の前記ネットワーク上の一点で実行可能であるか、又は、前記サーバで実行可能であることを特徴とする請求項５５に記載のコンピュータプログラム製品。

【請求項７８】　前記複数のコンピュータにおけるコンピュータ上で実行された時、そのコンピュータを、前記データリポジトリーにアクセスすることができ、前記データリポジトリーに記憶された前記関係データを閲覧するように作動可能であるスーパバイザ・ワークステーションとして有効化することができる、前記記録媒体上に記録されたプログラムコードを更に含むことを特徴とする請求項５５に記載のコンピュータプログラム製品。

【請求項７９】　前記ポリシーデータは、前記スーパバイザ・ワークステーションのユーザが前記ポリシーデータを編集することができるように、前記スーパバイザ・ワークステーションによってアクセス可能であることを特徴とする請求項７８に記載のコンピュータプログラム製品。

【請求項８０】　前記複数のコンピュータにおけるコンピュータ上で実行された時、そのコンピュータのユーザが前記データリポジトリーに記憶された前記関係データを閲覧することができるようにそのコンピュータに前記データリポジトリーへのアクセスをもたらす、前記記録媒体上に記録されたプログラムコードを更に含むことを特徴とする請求項５５に記載のコンピュータプログラム製品。

【請求項８１】　「インターネット」に接続されるようになっている、各々がメモリを有する複数のワークステーション、

前記ワークステーションの各々からデータを受信するように構成されたデータリポジトリー、

発信データを送信し、着信データを「インターネット」から受信するための、各ワークステーションの前記メモリに記憶されたアプリケーション、及び／又は、ユーザ入力データを受信するためのアプリケーション、及び

前記入力データ、前記発信データ、及び、前記着信データのうちの少なくとも１つをモニタし、前記ユーザ入力データ、前記発信データ、又は、前記着信データに含まれるユーザ名及びパスワードを識別し、前記ユーザ名及びパスワードを前記データリポジトリーに記憶させるように作動可能なアナライザ、

を含むことを特徴とする、パスワード及びユーザ名を記録するためのシステム。

【請求項８２】　前記アナライザは、前記ユーザ名及びパスワードがウェブページにアクセスするのに使用されるか否かを判断するように作動可能であり、かつ、使用される場合は、前記ウェブページの「ＵＲＬ」アドレスを識別し、その「ＵＲＬ」を前記ユーザ名及びパスワードと共に前記データリポジトリーに記憶させるように作動可能であることを特徴とする請求項８１に記載のシステム。

【請求項８３】　前記関連ユーザ名及びパスワードのデータは、前記データリポジトリーに送信される前に暗号化されることを特徴とする請求項８１に記載のシステム。

【請求項８４】　前記データリポジトリーに記憶されている前記関連ユーザ名及びパスワードは、暗号化されることを特徴とする請求項８１に記載のシステム。

【請求項８５】　前記アナライザは、前記発信データ又は前記着信データのうちの少なくとも一方に含まれたデータのフィールド名から前記関連ユーザ名及びパスワードを識別するように作動可能であることを特徴とする請求項８１に記載のシステム。

【請求項８６】　ウェブページの入力フィールドの表現は、前記１つ又はそれ以上の

ワークステーションの前記メモリに記憶され、
前記アナライザは、前記関連ユーザ名及びパスワードを前記表現内で識別するように作動可能である、
ことを特徴とする請求項８１に記載のシステム。

【請求項８７】　前記アナライザは、前記発信データ又は前記着信データに含まれたデータのフィールド形式から前記関連ユーザ名又はパスワードを識別するように作動可能であることを特徴とする請求項８１に記載のシステム。

【請求項８８】　前記アプリケーションは、選択された時に入力ユーザ名及びパスワードをメモリに記憶する「ｒｅｍｅｍｂｅｒ　ｐａｓｓｗｏｒｄ」オプションが設けられたユーザインタフェースを有し、前記アナライザは、メモリに記憶された前記入力ユーザ名及びパスワード内で前記関連ユーザ名及びパスワードを識別するように作動可能であることを特徴とする請求項８１に記載のシステム。

【請求項８９】　前記アナライザは、前記１つ又はそれ以上のワークステーションの各々に位置することを特徴とする請求項８１に記載のシステム。

【請求項９０】　前記アプリケーションは、ウェブブラウザであることを特徴とする請求項８１に記載のシステム。

【請求項９１】　前記アナライザは、前記ウェブブラウザのプラグイン・モジュールであることを特徴とする請求項９０に記載のシステム。

【請求項９２】　前記ウェブブラウザは、マイクロソフト製の「インターネット・エクスプローラ」であり、前記アナライザは、「ブラウザ・ヘルパー・オブジェクト」であることを特徴とする請求項９１に記載のシステム。

【請求項９３】　前記アプリケーションは、「インスタントメッセージング」アプリケーションであることを特徴とする請求項８１に記載のシステム。

【請求項９４】　前記アナライザは、前記「インスタントメッセージング」アプリケーションのプラグインであることを特徴とする請求項９３に記載のシステム。

【請求項９５】　前記ネットワークはサーバを含み、前記アナライザは、前記１つ又はそれ以上のワークステーションと前記サーバとの中間の前記ネットワーク上の一点に位置するか、又は、前記サーバに位置することを特徴とする請求項８１に記載のシステム。

【請求項９６】　前記データリポジトリーにアクセスすることができ、前記データリポジトリーに記憶された前記関連ユーザ名及びパスワードを閲覧するように作動可能であるスーパバイザ・ワークステーションを更に含むことを特徴とする請求項８１に記載のシステム。

【請求項９７】　前記複数のワークステーションにおけるワークステーションは、前記データリポジトリーにアクセスすることができ、前記データリポジトリーに記憶された前記関連ユーザ名及びパスワードを閲覧するように作動可能であることを特徴とする請求項８１に記載のシステム。

【請求項９８】　「インターネット」に接続されるようになっている、各々がメモリを有する複数のワークステーションを設ける段階と、
前記ワークステーションの各々からデータを受信するように構成されたデータリポジトリーを設ける段階と、
発信データを送信し、着信データを「インターネット」から受信するための、各ワークステーションの前記メモリに記憶されたアプリケーション、及び／又は、ユーザ入力データを受信するためのアプリケーションを設ける段階と、
ユーザ名及びパスワードを識別するために、前記ユーザ入力データ、前記発信データ、及び、前記着信データのうちの少なくとも１つを解析する段階と、
前記ユーザ名及びパスワードを前記データリポジトリーに記憶させる段階と、
を含むことを特徴とする、パスワード及びユーザ名を記録する方法。

【請求項９９】　前記ユーザ名及びパスワードがウェブページにアクセスするのに使用されるか否かを判断する段階と、使用される場合は、前記ウェブページの「ＵＲＬ」アドレスを識別する段階、及び、前記「ＵＲＬ」を前記ユーザ名及びパスワードと共に前記

データリポジトリーに記憶する段階とを更に含むことを特徴とする請求項９８に記載の方法。

【請求項１００】　ユーザ名及びパスワードを前記データリポジトリーに記憶される前に暗号化する段階を更に含むことを特徴とする請求項９８に記載の方法。

【請求項１０１】　前記データリポジトリーに記憶されている前記ユーザ名及びパスワードを暗号化する段階を更に含むことを特徴とする請求項９８に記載の方法。

【請求項１０２】　前記解析する段階において、ユーザ名及びパスワードは、前記発信データ又は前記着信データのうちの少なくとも一方に含まれたデータのフィールド名内で識別されることを特徴とする請求項９８に記載の方法。

【請求項１０３】　ウェブページの入力フィールドの表現は、前記ワークステーションの前記メモリに記憶され、

前記解析する段階において、ユーザ名及びパスワードは、前記表現内で識別される、

ことを特徴とする請求項９８に記載の方法。

【請求項１０４】　前記解析する段階において、ユーザ名又はパスワードは、前記発信データ又は前記着信データに含まれたデータのフィールド形式内で識別されることを特徴とする請求項９８に記載の方法。

【請求項１０５】　前記アプリケーションは、選択された時に入力ユーザ名及びパスワードを前記１つ又はそれ以上のワークステーションの前記メモリに記憶する「ｒｅｍｅｍｂｅｒ　ｐａｓｓｗｏｒｄ」オプションが設けられたユーザインタフェースを有し、

前記解析する段階において、ユーザ名及びパスワードは、前記１つ又はそれ以上のワークステーションの前記メモリに記憶された前記入力ユーザ名及びパスワード内で識別される、

ことを特徴とする請求項９８に記載の方法。

【請求項１０６】　前記解析する段階は、前記１つ又はそれ以上のワークステーションで実行されることを特徴とする請求項９８に記載の方法。

【請求項１０７】　前記アプリケーションは、ウェブブラウザであることを特徴とする請求項９８に記載の方法。

【請求項１０８】　前記解析する段階は、前記ウェブブラウザのプラグイン・モジュールによって実行されることを特徴とする請求項１０７に記載の方法。

【請求項１０９】　前記ウェブブラウザは、マイクロソフト製の「インターネット・エクスプローラ」であり、前記プラグイン・モジュールは、「ブラウザ・ヘルパー・オブジェクト」であることを特徴とする請求項１０８に記載の方法。

【請求項１１０】　前記アプリケーションは、「インスタントメッセージング」アプリケーションであることを特徴とする請求項９８に記載の方法。

【請求項１１１】　前記アナライザは、前記「インスタントメッセージング」アプリケーションのプラグインであることを特徴とする請求項１１０に記載の方法。

【請求項１１２】　前記ネットワークはサーバを含み、前記解析する段階は、前記１つ又はそれ以上のワークステーションと前記サーバとの中間の前記ネットワーク上の一点で実行されるか、又は、前記サーバで実行されることを特徴とする請求項９８に記載の方法。

【請求項１１３】　前記データリポジトリーにアクセスすることができ、前記データリポジトリーに記憶された前記関連ユーザ名及びパスワードを閲覧するように作動可能であるスーパバイザ・ワークステーションを設ける段階を更に含むことを特徴とする請求項９８に記載の方法。

【請求項１１４】　前記複数のコンピュータにおけるコンピュータは、前記データリポジトリーにアクセスすることができ、前記データリポジトリーに記憶された前記関連ユーザ名及びパスワードを閲覧するように作動可能であることを特徴とする請求項９８に記載の方法。

【請求項１１５】　複数のコンピュータからデータを受信するように構成されたデータリポジトリーを有する私設ネットワークにおいて、パスワード及びユーザ名を記録する

ように複数のコンピュータを制御するコンピュータプログラム製品であって、
プログラムコードが記録された、コンピュータによって読取可能な記録媒体、
を含み、
前記プログラムコードは、複数のコンピュータの各々で実行された時に、
発信データを「インターネット」に送信して着信データを「インターネット」から受信するように作動可能な、コンピュータ上で実行されるアプリケーション、及び／又は、ユーザ入力データを受信するための、コンピュータ上で実行されるアプリケーションと協働して、前記ユーザ入力データ、前記発信データ、及び、前記着信データのうちの少なくとも１つにおいてデータリポジトリーに記憶される関係データを識別するために、前記ユーザ入力データ、前記発信データ、及び、前記着信データのうちの少なくとも１つを解析し、かつ
前記関係データを前記データリポジトリーに記憶するように前記コンピュータを制御する、
ように前記コンピュータを構成する、
ことを特徴とするコンピュータプログラム製品。

【請求項１１６】　前記コンピュータ上で実行された時の前記プログラムコードは、更に、前記ユーザ名及びパスワードがウェブページにアクセスするのに使用されるか否かを判断するように作動可能であり、かつ、使用される場合は、前記ウェブページの「ＵＲＬ」アドレスを識別して、前記「ＵＲＬ」を前記ユーザ名及びパスワードと共に前記データリポジトリーに記憶するように前記コンピュータに指示するように作動可能であることを特徴とする請求項１１５に記載のコンピュータプログラム製品。

【請求項１１７】　前記コンピュータ上で実行された時の前記プログラムコードは、更に、前記ユーザ名及びパスワードを、それらが前記データリポジトリーに記憶される前に暗号化させるように作動可能であることを特徴とする請求項１１５に記載のコンピュータプログラム製品。

【請求項１１８】　前記コンピュータ上で実行された時の前記プログラムコードは、更に、前記データリポジトリーに記憶されている前記ユーザ名及びパスワードを暗号化させるように作動可能であることを特徴とする請求項１１５に記載のコンピュータプログラム製品。

【請求項１１９】　前記コンピュータ上で実行された時の前記プログラムコードは、前記発信データ又は前記着信データのうちの少なくとも一方に含まれたデータのフィールド名からユーザ名及びパスワードを識別するように作動可能であることを特徴とする請求項１１５に記載のコンピュータプログラム製品。

【請求項１２０】　ウェブページの入力フィールドの表現は、前記コンピュータのメモリに記憶され、
前記コンピュータ上で実行された時の前記プログラムコードは、ユーザ名及びパスワードを前記表現内で識別するように作動可能である、
ことを特徴とする請求項１１５に記載のコンピュータプログラム製品。

【請求項１２１】　前記コンピュータ上で実行された時の前記プログラムコードは、更に、前記発信データ又は前記着信データに含まれたデータのフィールド形式からユーザ名又はパスワードを識別するように作動可能であることを特徴とする請求項１１５に記載のコンピュータプログラム製品。

【請求項１２２】　ユーザ入力データを受信するための前記アプリケーションは、選択された時に入力ユーザ名及びパスワードを前記コンピュータの前記メモリに記憶する「ｒｅｍｅｍｂｅｒ　ｐａｓｓｗｏｒｄ」オプションが設けられたユーザインタフェースを有し、
前記コンピュータ上で実行された時の前記プログラムコードは、前記コンピュータの前記メモリに記憶された前記入力ユーザ名及びパスワードからユーザ名及びパスワードを識別するように作動可能である、
ことを特徴とする請求項１１５に記載のコンピュータプログラム製品。

【請求項１２３】　前記プログラムコードは、前記コンピュータの各々で実行可能であることを特徴とする請求項１１５に記載のコンピュータプログラム製品。

【請求項１２４】　前記アプリケーションは、ウェブブラウザであることを特徴とする請求項１１５に記載のコンピュータプログラム製品。

【請求項１２５】　前記コンピュータ上で実行された時の前記プログラムコードは、前記ウェブブラウザのプラグイン・モジュールであることを特徴とする請求項１２４に記載のコンピュータプログラム製品。

【請求項１２６】　前記ウェブブラウザは、マイクロソフト製の「インターネット・エクスプローラ」であり、前記プラグイン・モジュールは、「ブラウザ・ヘルパー・オブジェクト」であることを特徴とする請求項１２５に記載のコンピュータプログラム製品。

【請求項１２７】　前記アプリケーションは、「インスタントメッセージング」アプリケーションであることを特徴とする請求項１１５に記載のコンピュータソフトウエア製品。

【請求項１２８】　前記コンピュータ上で実行された時の前記プログラムコードは、前記「インスタントメッセージング」アプリケーションのプラグインであることを特徴とする請求項１２７に記載のコンピュータソフトウエア製品。

【請求項１２９】　前記ネットワークはサーバを含み、前記プログラムコードは、前記コンピュータと前記サーバとの中間の前記ネットワーク上の一点で実行可能であるか、又は、前記サーバで実行可能であることを特徴とする請求項１１５に記載のコンピュータプログラム製品。

【請求項１３０】　前記コンピュータ上で実行された時、そのコンピュータを、前記データリポジトリーにアクセスすることができ、前記データリポジトリーに記憶された前記関連ユーザ名及びパスワードを閲覧するように作動可能であるスーパバイザ・ワークステーションとして有効化するプログラムコードを更に含むことを特徴とする請求項１１５に記載のコンピュータプログラム製品。

【請求項１３１】　前記複数のコンピュータにおけるコンピュータは、前記データリポジトリーにアクセスすることができ、前記データリポジトリーに記憶された前記関連ユーザ名及びパスワードを閲覧するように作動可能であることを特徴とする請求項１１５に記載のコンピュータプログラム製品。

【請求項１３２】　コンピュータネットワークに接続されるようになっている、各々がメモリを有する１つ又はそれ以上のワークステーションと、

発信メッセージを前記ネットワークに送信し、着信メッセージを前記ネットワークから受信するための、各ワークステーションの前記メモリに記憶されたアプリケーションと、

前記発信メッセージの１つ又はそれ以上の詳細を判断し、それらの詳細に基づいて前記発信メッセージの送信を制御するための規則を含むポリシーデータと、

前記発信メッセージの１つ又はそれ以上の詳細を判断して、前記発信メッセージを本来意図された受信者ではなく第三者に選択的に再方向付けするように前記ポリシーデータと協働して作動可能なアナライザと、

を含むことを特徴とする情報管理システム。

【請求項１３３】　コンピュータネットワークに接続されるようになっている、各々がメモリを有する１つ又はそれ以上のワークステーションと、

着信メッセージを前記ネットワークから受信し、受信されたメッセージを発信メッセージとして前記ネットワークに送信するための、各ワークステーションの前記メモリに記憶されたアプリケーションと、

前記発信メッセージの１つ又はそれ以上の詳細を判断し、それらの判断に基づいて前記発信メッセージの送信を制御するための規則を含むポリシーデータと、

前記発信メッセージの１つ又はそれ以上の詳細を判断し、前記ポリシーデータに規定された前記規則に基づいて、前記発信メッセージが別の受信者に転送されるのを選択的に防止するか、又は、メッセージが別の受信者に転送される前に警告を出すように前記ポリシーデータと協働して作動可能なアナライザと、

を含むことを特徴とする情報管理システム。

【請求項１３４】　コンピュータネットワークに接続されるようになっている、各々がメモリを有する１つ又はそれ以上のワークステーションと、

発信メッセージを前記ネットワークに送信し、着信メッセージを前記ネットワークから受信するための、各ワークステーションの前記メモリに記憶されたアプリケーションと、

前記発信メッセージの１つ又はそれ以上の詳細を判断し、それらの詳細に基づいて前記発信メッセージの送信を制御するための規則を含むポリシーデータと、

前記発信メッセージの１つ又はそれ以上の詳細を判断し、送信前に前記メッセージにデジタル署名することを選択的に要求するか、デジタル署名することが推奨されることを前記メッセージの送信者に通知するか、デジタル署名されたメッセージを署名なしで送信するように要求するか、又は、前記メッセージの前記送信者にデジタル署名することが推奨されないことを通知するように前記ポリシーデータと協働して作動可能なアナライザと、

を含むことを特徴とする情報管理システム。

【請求項１３５】　コンピュータネットワークに接続されるようになっている、各々がメモリを有する１つ又はそれ以上のワークステーションと、

発信データを前記ネットワークに送信し、着信データを前記ネットワークから受信するための、各ワークステーションの前記メモリに記憶されたアプリケーションと、

前記発信データの１つ又はそれ以上の詳細を判断し、それらの詳細に基づいて前記発信データの送信を制御するための規則を含むポリシーデータと、

前記発信データの１つ又はそれ以上の詳細を判断し、前記ポリシーデータに従って前記データの送信を制御するように前記ポリシーデータと協働して作動可能なアナライザと、

を含むことを特徴とする情報管理システム。

【請求項１３６】　コンピュータネットワークに接続されるようになっている、各々がメモリを有する１つ又はそれ以上のワークステーションを設ける段階と、

発信メッセージを前記ネットワークに送信し、着信メッセージを前記ネットワークから受信するための、各ワークステーションの前記メモリに記憶されたアプリケーションを設ける段階と、

前記発信メッセージの１つ又はそれ以上の詳細を判断し、それらの詳細に基づいて前記発信メッセージの送信を制御するための規則を含むポリシーデータを準備する段階と、

前記ポリシーデータと協働して前記１つ又はそれ以上の詳細を判断するために前記発信メッセージを解析する段階と、

前記１つ又はそれ以上の詳細に基づいて、前記発信メッセージを本来意図された受信者ではなく第三者に選択的に再方向付けする段階と、

を含むことを特徴とする、情報を管理する方法。

【請求項１３７】　コンピュータネットワークに接続されるようになっている、各々がメモリを有する１つ又はそれ以上のワークステーションを設ける段階と、

着信メッセージを前記ネットワークから受信し、受信されたメッセージを発信メッセージとして前記ネットワークに送信するための、各ワークステーションの前記メモリに記憶されたアプリケーションを設ける段階と、

前記発信メッセージの１つ又はそれ以上の詳細を判断し、それらの詳細に基づいて前記発信メッセージの送信を制御するための規則を含むポリシーデータを準備する段階と、

前記発信メッセージの１つ又はそれ以上の詳細を判断するために、前記ポリシーデータと協働して前記発信メッセージを解析する段階と、

前記ポリシーデータに規定された前記規則、及び、前記１つ又はそれ以上の詳細に基づいて、前記発信メッセージが別の受信者に転送されるのを選択的に防止するか、又は、前記発信メッセージが別の受信者に転送される前に警告を出す段階と、

を含むことを特徴とする、情報を管理する方法。

【請求項１３８】　コンピュータネットワークに接続されるようになっている、各々がメモリを有する１つ又はそれ以上のワークステーションを設ける段階と、

発信メッセージを前記ネットワークに送信し、着信メッセージを前記ネットワークから

受信するための、各ワークステーションの前記メモリに記憶されたアプリケーションを設ける段階と、

前記発信メッセージの１つ又はそれ以上の詳細を判断し、それらの詳細に基づいて前記発信メッセージの送信を制御するための規則を含むポリシーデータを準備する段階と、

前記発信メッセージの１つ又はそれ以上の詳細、特に前記発信メッセージがデジタル署名されているか否かを判断するために、前記ポリシーデータと協働して前記発信メッセージを解析する段階と、

前記発信メッセージが送信前にデジタル署名されるか、又は、デジタル署名されている場合は、前記発信メッセージがデジタル署名されないことを選択的に要求する段階、又は、デジタル署名することが推奨されるか又は推奨されないことを前記メッセージの送信者に通知する段階のいずれかの段階と、

を含むことを特徴とする、情報を管理する方法。

【請求項１３９】　コンピュータネットワークに接続されるようになっている、各々がメモリを有する１つ又はそれ以上のワークステーションを設ける段階と、

発信データを前記ネットワークに送信し、着信データを前記ネットワークから受信するための、各ワークステーションの前記メモリに記憶されたアプリケーションを設ける段階と、

前記発信データの１つ又はそれ以上の詳細を判断し、それらの詳細に基づいて前記発信データの送信を制御するための規則を含むポリシーデータを準備する段階と、

前記発信メッセージの１つ又はそれ以上の詳細を判断するために、前記ポリシーデータと協働して前記発信データを解析する段階と、

前記ポリシーデータ及び前記１つ又はそれ以上の詳細に従って、前記データの送信を制御する段階と、

を含むことを特徴とする、情報を管理する方法。

【請求項１４０】　ネットワークへの発信データの送信を制御する規則を含むポリシーデータにアクセスすることができるネットワークに接続されたコンピュータを、情報を管理するように制御するためのコンピュータソフトウエア製品であって、

プログラムコードが記録された、コンピュータにより読取可能な記録媒体、

を含み、

前記プログラムコードは、前記コンピュータ上で実行された時に、

ポリシーデータの規則と協働して発信メッセージの１つ又はそれ以上の詳細を判断するために、発信メッセージを前記ネットワークに送信して着信メッセージを前記ネットワークから受信するように作動可能な前記コンピュータ上で実行されるアプリケーションと協働して、前記発信メッセージを解析し、

前記１つ又はそれ以上の詳細に基づいて、前記発信メッセージを本来意図された受信者ではなく第三者に選択的に再方向付けする、

ように前記コンピュータを構成する、

ことを特徴とするコンピュータソフトウエア製品。

【請求項１４１】　ネットワークへの発信データの送信を制御する規則を含むポリシーデータにアクセスすることができるネットワークに接続されたコンピュータを、情報を管理するように制御するためのコンピュータソフトウエア製品であって、

プログラムコードが記録された、コンピュータにより読取可能な記録媒体、

を含み、

前記プログラムコードは、前記コンピュータ上で実行された時に、

ポリシーデータの規則と協働して発信メッセージの１つ又はそれ以上の詳細を判断するために、発信メッセージを前記ネットワークに送信して着信メッセージを前記ネットワークから受信するように作動可能な前記コンピュータ上で実行されるアプリケーションと協働して、前記発信メッセージを解析し、

前記ポリシーデータに規定された前記規則に基づいて、前記発信メッセージが別の受信者に転送されるのを選択的に防止するか、又は、メッセージが別の受信者に転送される前

に警告を出す、
　ように前記コンピュータを構成する、
　ことを特徴とするコンピュータソフトウエア製品。
　【請求項１４２】　ネットワークへの発信データの送信を制御する規則を含むポリシーデータにアクセスすることができるネットワークに接続されたコンピュータを、情報を管理するように制御するためのコンピュータソフトウエア製品であって、
　プログラムコードが記録された、コンピュータにより読取可能な記録媒体、
　を含み、
　前記プログラムコードは、前記コンピュータ上で実行された時に、
　ポリシーデータの規則と協働して発信メッセージの１つ又はそれ以上の詳細を判断するために、発信メッセージを前記ネットワークに送信して着信メッセージを前記ネットワークから受信するように作動可能な前記コンピュータ上で実行されるアプリケーションと協働して、前記発信メッセージを解析し、
　送信前に前記発信メッセージがデジタル署名されること、又は、デジタル署名された発信メッセージがデジタル署名されないことを選択的に要求するか、又は、デジタル署名することが推奨されること、又は、デジタル署名されたメッセージの場合は、デジタル署名することは推奨されないことを前記発信メッセージの送信者に通知する、
　ように前記コンピュータを構成する、
　ことを特徴とするコンピュータソフトウエア製品。
　【請求項１４３】　ネットワークへの発信データの送信を制御する規則を含むポリシーデータにアクセスすることができるネットワークに接続されたコンピュータを、情報を管理するように制御するためのコンピュータソフトウエア製品であって、
　プログラムコードが記録された、コンピュータにより読取可能な記録媒体、
　を含み、
　前記プログラムコードは、前記コンピュータ上で実行された時に、
　ポリシーデータの規則と協働して発信データの１つ又はそれ以上の詳細を判断するために、発信データを前記ネットワークに送信して着信データを前記ネットワークから受信するように作動可能な前記コンピュータ上で実行されるアプリケーションと協働して、前記発信データを解析し、
　前記ポリシーデータと前記発信メッセージの前記１つ又はそれ以上の詳細とに従って前記データの送信を制御する、
　ように前記コンピュータを構成する、
　ことを特徴とするコンピュータソフトウエア製品。

Espacenet

Description: JP2004513460 (A) — 2004-04-30

AN INFORMATION MANAGEMENT SYSTEM

Description not available for JP2004513460 (A)
Description of corresponding document: WO0239331 (A2)

A high quality text as facsimile in your desired language may be available amongst the following family members:

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AN INFORMATION MANAGEMENT SYSTEM
BACKGROUND OF THE INVENTION
This invention relates to the provision of extended management functionality for Internet applications, particularly in the areas of information security, transaction auditing and reporting, centralized policy, and application connectivity.

Electronic commerce ("eCommerce"), particularly between businesses ("B2B"), but also between business and consumers ("B2C"), is a fast growing market where buyers and sellers communicate using the Internet, a worldwide network of linked computer systems, instead of by traditional means such as mail, telephone and personal meetings. Sellers advertise products and services using digital brochures and catalogues, which can be viewed or downloaded via an Internet connection, through pages on the World Wide Web, or via electronic marketplaces typically dealing in the goods and services of a particular market sector. Buyers can find suppliers, select goods, obtain quotations, place and track orders, and even make payments entirely electronically and at any time. eCommerce brings the promise of increased flexibility, choice and efficiency, with dramatically reduced procurement costs.

There are two universally accepted means of interfacing users to the Internet. The first of these is the Web Browser'which allows users to view pages on the World Wide Web by accessing individual web sites, the addresses of which are typically widely published either using traditional means, or are referenced in another web site. The most widely

adopted web browser is Microsoft Corporation's "Internet Explorer".

The second means of interfacing is using an
Electronic Mail program, with which the user composes a message, known as an e-mail, which is then electronically routed to the address of the intended recipient over the Internet. Well known Electronic
Mail programs include IBM Corporation's"Lotus Notes" and Microsoft Corporation's"Outlook".

In a typical eCommerce scenario, a buyer might identify a particular product, together with pricing and delivery information, on the sellers'web site.

He may then place an order, either by filling in an electronic order form on the web site, or by sending an e-mail directly to the seller. The order would typically include a commitment to payment, perhaps in the form of Credit Card details, or by some electronic payment means. The seller would then typically send a return e-mail to confirm acceptance of the order.

Web Browsers operate in accordance with recognized standards, in particular Hyper Text Transfer Protocol ("HTTP"), described fully in Internet standards document RFC2616. Electronic Mail programs operate in accordance with recognized standards, in particular
Simple Mail Transfer Protocol ("SMTP"), described fully in Internet standards document RFC0821 and Multipurpose
Internet Mail Extensions ("MIME") described fully in
Internet standards documents RFC2045-2049.

While eCommerce provides enormous benefits, its adoption raises many new issues, which must be addressed in order to ensure its continued adoption, particularly if it is to ultimately replace traditional methods. One of the central issues is security.

The Internet is an open communications network, which is by definition insecure since anyone can use it. Means to secure sensitive information to be exchanged over the Internet (for example in an eCommerce transaction) have been provided by the adoption of secure transmission protocols and messaging. Secure point to point transmission protocols, used for example between a web Server and a web Browser, include the Secure Socket Layer' ("SSL"), defined by Netscape Communications Corporation, and its successor Transport Layer Security' ("TLS") defined in
Internet standards document RFC2246. Secure e-mail message standards include Secure Multipurpose Internet
Mail Extensions' ("S/MIME") described fully in Internet standards document RFC2633 and"Pretty Good Privacy"a public domain secure messaging system developed by Philip Zimmerman.

In order to control access to information on servers connected to the Internet, a system of usernames and passwords has been widely adopted. For example, access to discounted price lists on a particular web server may be restricted to trade users who have previously been given a username and password allowing them access. Similarly, on-line information services typically make extensive use of usernames and passwords to restrict access to those who have paid for the service. By providing each user with a unique username and a changeable password, the service can ensure that only paid subscribers can access the system, and allow users to prevent access by others to

their personal data stored by the service.

In eCommerce applications, a major problem is the issue of identity and trust. When a supplier receives an order via the Internet it is perfectly possible, even likely, that he has no prior knowledge of the customer. The supplier must establish that the customer is a) who he says he is, in other words that he is not masquerading as someone else, and that b) he is to be trusted and will ultimately pay for the goods or service to be supplied. These issues have been addressed in the B2C market principally by the use of credit cards. The customer provides his credit card number and address with the order, which the supplier then verifies with the credit card company, and obtains authorization for the charge. The entire process is typically carried out on-line without human intervention. This method is largely effective where a supplier ships goods to the cardholder address, since a potential thief would not only need to steal the cardholders details, but would also need to intercept delivery of the goods. It is much less effective in the case of services where no physical delivery is involved.

Clearly, the use of credit cards in eCommerce, though widespread, is restricted to small -scale transactions potentially involving amounts, say, up to $10, 000. For those transactions above such amounts (which in aggregate monetary terms far exceed those below them), a mutually trusted third party must be used to establish both identity and trust.

Central to establishing identity is the use of
Digital Certificates. The customer can be issued with a Digital Certificate by a trusted third party, which is then used to electronically sign' communications. On receipt of a signed message, the recipient (in this case the supplier) can positively establish a) the identity of the sender, b) that the message has not been altered, and c) that the sender cannot subsequently deny he sent the message.

Recognized standards for Digital Certificates are described in ITU document X. 509, and their use in
Internet communications in Internet standards documents
RFC2312, RFC2459, RFC2510, RFC2511, RFC2527, RFC2560, RFC2585 and RFC2632.

Chargeable, Third party services, such as that provided by Valicert Inc., can be used to verify that a
Digital Certificate has not been revoked, for example after the certificate has been compromised in some way.

Once authenticity of messages is established, the supplier can use another third party to establish trust, or the same third party can be used to establish both authenticity and trust. For example"Identrus", a consortium of the world's major banks, provide a system such that when a supplier receives a message signed with an Identrus issued Digital Certificate, he can independently verify that the customer is a valid account holder in good standing with a recognized bank.

Ultimately the system is to be extended such that the bank will additionally warrant the transaction, thereby guaranteeing payment to the supplier. It will be appreciated that the terms customer'and supplier' can apply to any two parties engaged in Internet communication.

It can be seen that appropriate combinations of the systems described provide a secure foundation for use of the Internet and the services and functions available through it. However, we have appreciated that there are a number of problems with conducting eCommerce using only these systems. These problems are discussed below.

In the secure transmission protocols and messaging referred to above, data is usually encrypted before transmission and decrypted by the intended recipient prior to viewing. Thus, should the data be intercepted during transmission, it will be safe from viewing by unauthorised third parties unless they know or can ascertain the secret encryption key of the encryption algorithm.

The encryption and decryption of data at each end of a secure link or message requires significant processing power. Additionally both transmitting and receiving parties must be in possession of the same encryption key of the encryption algorithm, at the same cryptographic strength, in order for the system to operate successfully. This often presents a problem, for example where regulations for the import or export of data into or out of a computer system prohibit the use of higher strength algorithms, forcing the link or message to be encrypted at a lower cryptographic strength, or preventing secure communications at all.

Consequently, secure links and messaging are typically used only when necessary.

In the case of communications over the World Wide
Web, the requirement to secure transmissions is determined and initiated by the web Server. If, for example, the server is about to transmit an order form for completion by the user it may initiate a secure link such that the order information will be encrypted when transmitted back to the server. Similarly, once the order is complete the server may terminate the secure link and return to normal unencrypted communication.

Typically, the only indication the user has that a link has been secured is an icon (usually depicting a padlock), which appears in the browser window.. Once the icon has appeared, the user can then typically interrogate the browser to determine the strength of the encryption algorithm being used, and can decide whether or not to enter, and subsequently transmit sensitive information, such as his credit card and address details.

In practice however, users frequently do not check that the link is secure, far less that it is of suitable cryptographic strength to protect the information being transmitted. In order to address this problem, e-mail applications such as Microsoft Corporation's"Outlook"provide the ability to encrypt all e-mails by default.

The wide adoption of usernames and passwords has created a management problem for many Internet users due to the sheer number that need to be remembered, particularly when good security practice requires passwords to be frequently changed. Similarly, users will often need to use a variety of different usernames since someone else may already have taken their favourite'at a given site. Facilities to remember, and to automatically complete username and password fields on subsequent occasions, have been provided in web Browsers such as Microsoft Corporation's"Internet Explorer", and by add-on helper'utilities such as
Gator. com's"Gator". These facilities typically maintain a file of usernames, passwords and the web page to which each applies. These files are encrypted to ensure that only

the appropriate user can access them. If such username and password files are lost or become unavailable, such as when the authorised user has forgotten the encryption key or can no longer be contacted to provide it, or when the file is accidentally or maliciously lost, destroyed, or corrupted then access to Internet accounts and services may be lost, and each site must be approached individually to replace or recover the necessary username and/or password. This can be a very expensive problem for corporations in terms of lost access and administrative time. Additionally, such remembered usernames and passwords are only available for use on the machine on which they were originally used. If the user moves to another machine, or uses multiple machines then the stored usernames and passwords are unavailable to him from those other machines.

All businesses, and many individual users, have a legal obligation to maintain accurate records of the transactions they undertake, but for eCommerce transactions this can prove difficult. Businesses must keep records for auditing purposes, for example to prove the terms upon which goods were ordered in the event of a dispute. Such records are considerably more difficult to maintain in an eCommerce environment, requiring the user to retain, for example, copies of orders sent by e-mail, or to print out the web page receipt from a web site purchase. For the user, this is labour intensive and there is no guarantee that any such created records are complete or reliable.

One automated solution of keeping records of eCommerce transactions is provided by Max Manager
Corporation's AMax Manager@ application. Max Manager captures receipt pages at known web sites, extracts transaction information from those receipt pages, and then stores locally both the receipt page and the extracted transaction information on the machine on which the application is running. However, in order to operate, Max Manager must be supplied with the exact address and layout of the receipt page. Max Manager determines that an eCommerce transaction has taken place either by detecting the address of the receipt page, or by comparing the current page being viewed by a browser with the layout of the receipt page that it has been supplied with. Once it has identified a receipt page, the relevant transactions details are extracted from the receipt page by using the known layout of the page as a template for matching purposes.

A significant drawback with Max Manager is that it may only be used to extract data from those pages for which it has been supplied with details. Moreover, if the layout of the receipt page is changed then Max Manager cannot meaningfully extract any data from the page until it is supplied with a new template for the changed layout. Since web sites change frequently, Max
Manager must be constantly updated to take account of such changes. This is impractical on a large scale and inevitably leads to transactions being missed, or worse reported incorrectly.

Problems also stem from the fact that computer terminals are distributed, often resulting in terminals and users being located at different locations. In multi-user environments, user machines may be physically connected to each other, for example using a
Local Area Network ("LAN"), which provides a gateway for connection to the Internet. They may also be connected to local servers such as Microsoft
Corporation's"Exchange Server", which acts as a central collection and distribution point for e-mail messages, and Microsoft Corporation's"Proxy Server", which acts both

as a cache to improve performance of frequently visited web Sites, and as a filter to prevent access to certain web Sites which may have been designated as undesirable. However, in so far as the exchange of information is concerned, except in the case of a message sent between two local users, each user operates entirely in isolation from others at the same location. This presents a significant management problem for corporate and other organizations, which have no means of centrally controlling employee activity and cannot benefit from the significant cost savings that might be made from the sharing of information. For example, two users in an organization may independently receive e-mail messages digitally signed by the same sender. Both recipients must separately validate the Digital Certificate, incurring two validation charges, at least one of which was unnecessary.

The present invention provides additional functionality to the systems mentioned above to alleviate their inherent problems and to provide a single integrated system for information exchange.

SUMMARY OF THE INVENTION

The invention is set forth in the independent claims to which reference should now be made.

Advantageous features of the invention are set out in the appendant claims.

The information management system provides many advantages in the eCommerce environment to on-line trading companies, who may benefit by being able to regulate the transactions made by their staff according to their instructions encoded in the policy data, automatically maintain records of passwords and business conducted on-line, avoid paying for unnecessary checks on the validity of digital certificates, and ensure that the transmission of data by their staff is always carried out securely.

BRIEF DESCRIPTION OF THE DRAWINGS

The preferred embodiment of the invention will now be described in more detail, by way of example, and with reference to the drawings in which:
Figure 1 is a schematic illustration of the present arrangement of systems and resources making up the Internet according to the prior art;
Figure 2 is schematic illustration of the preferred embodiment of the invention implemented in a corporate environment;
Figure 3 is a schematic illustration of the operation of a web browser in accordance with the preferred embodiment of the invention;
Figure 4 is an illustration of a typical input window generated by a web browser;
Figure 5 is a schematic illustration of the operation of an e-mail client in accordance with the preferred embodiment of the invention;
Figure 6 is a flowchart illustrating the operation of a plug-in module, according to a preferred embodiment of the invention, for capturing username and password values transmitted by a user to a remote web site;
Figure 7 is an illustration of example policy data specifying control conditions for recording data;
Figure 8 is a flowchart illustrating the operation of a plug-in module, according to a preferred embodiment of the invention, for recognizing credit card numbers contained in data transmitted to or from a web server or e-mail client;
Figure 9 is a flowchart illustrating the operation of a plug-in module, according to a preferred embodiment of the invention, for establishing the validity of a digital certificate received by a user;

Figure 10 is an illustration of example policy data for determining whether or not a digital certificate should be verified;
Figure 11 is a flowchart illustrating how the example policy data shown in Figure 10 is used to determine whether or not to verification is required for a digital certificate;
Figure 12 is a flowchart illustrating the operation of a plug-in module, according to a preferred embodiment of the invention, for identifying transmissions from a user or to a user that comprise part of an eCommerce transaction;
Figure 13 is an illustration of example policy data intended to be used with the process illustrated in Figure 12 to identify a transaction;
Figure 14 is a flowchart illustrating the operation of a plug-in module, according to a preferred embodiment of the invention, for recording transmissions identified as comprising part of a single transaction thereby forming a record of the transaction;
Figure 15 is a flowchart illustrating the operation of a plug-in module, according to a preferred embodiment of the invention, for approving or rejecting identified transactions on the basis of a predetermined policy setting; and
Figure 16 is an illustration of example policy data for determining whether an identified transaction requires approval, and for identifying an appropriate approver;
Figure 17 is a flowchart illustrating the operation of a plug-in module, according to a preferred embodiment of the invention, for determining an appropriate level of encryption for a transmission and allowing that transmission to be transmitted only if that level is provided;
Figure 18 is an illustration of example policy data specifying the required encryption strength for various data types;
Figure 19 is an illustration of example policy data for controlling the re-direction of out-bound messages;
Figure 20 is a flowchart illustrating the operation of a plug-in module, according to a preferred embodiment of the invention, for re-directing out-bound messages to a third party for review before transmission, utilizing the policy data shown in Figure 19;
Figure 21 is a flowchart illustrating the operation of a plug-in module, according to a preferred embodiment of the invention, for controlling the upload of information to a site external to the company, utilizing the policy data shown in Figure 19;
Figure 22 is an illustration of example policy data for controlling the forwarding of messages to recipients inside or outside the company;
Figure 23 is a flowchart illustrating the operation of a plug-in module, according to a preferred embodiment of the invention, using the policy data shown in Figure 22;
Figure 24 is an illustration of example policy data for controlling whether or not an out-bound message is digitally signed; and
Figure 25 is a flowchart illustrating the operation of a plug-in module, according to the preferred embodiment of the invention, utilizing the policy data shown in Figure 24.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The preferred system provides users of the
Internet with an automatic way of managing the flow of information on a computer system. It provides facilities to manage the security level at which transmissions occur, facilities to record on-line transactions and to refer transactions that are about to be made to third parties for approval, and means to stop transactions from occurring if approval is refused; it also provides facilities to extract and record pertinent data from any transmissions that are received or are about to be transmitted, and to intelligently manage the transmission of e-mails.

The preferred system provides solutions for many of the problems encountered by eCommerce companies trading over the Internet; consequently the following exemplary

discussion will be directed mostly to the implementation and use of the system by a company of reasonable size conducting at least some of its business over the Internet. It will be appreciated that anyone however, including companies of any size or description and private individuals, who use the
Internet may benefit from the functionality provided by the preferred system.

The functionality of the preferred system is implemented through modules of code which are pluggedin'to the web browser or e-mail client. These'plugin'modules may be used to control and alter the behaviour of the web browser or e-mail client in operation.

Many existing web browsers and e-mail clients may already be readily integrated with such plug-in modules. In the case of Microsoft's Internet Explorer, the plug-in is known as a Browser Helper', and is more fully described in the document"Browser Helper Objects: The Browser the Way You Want It"by Dino
Esposito, published by Microsoft Corporation in January 1999. In the case of Microsoft's Outlook and Exchange e-mail Clients, the plug-in is known as an'Extension' and is more fully described in the document"Microsoft
Outlook and Exchange Client Extensions"by Sharon
Lloyd, published by Microsoft Corporation in March 1998. The use of the Browser Helper Object'and 'Extension, plug-ins made in the preferred system will be described in more detail later.

The use of browser or e-mail client plug-in modules to implement the functionality of the preferred system has the additional advantage that, since encryption of message content is usually carried out by the browser or e-mail client itself, examination of transmission content, to extract password information or to determine the desired level of encryption for example, may take place before the content has been encrypted ready for transmission, or indeed after it has been received and unencrypted.

Figure 1 shows the relationship between service providers, typically companies selling goods and services over the Internet 10, and users wishing to purchase such goods or services. Users equipped with web browsers 22,24 and 26, can connect via the Internet and retrieve web page information from web servers 14 and 18. Alternately users with e-mail applications 20,30 and 32, can send and receive email messages with abc. com and xyz. com via e-mail servers 12 and 16.

In a corporate set up, such as that which is illustrated in the bottom right hand corner of Figure 1, web browsers 24 and 26 of a corporate user are connected to the Internet via proxy server 28. The proxy server 28 is used to. cache web pages and control access to web sites. Similarly, the corporation has email clients 30 and 32, connected to the Internet via e-mail server 34 which acts as a central collection point for e-mails coming into the corporation and which controls distribution of the e-mails to individual users. It will be appreciated that while Figure 1 describes abc. com and xyz. com as sellers, a corporation can be both a buyer and a seller, and as buyers abc. com and xyz. com would be described as corporate users for the purpose of this description.

In the case of e-mails sent and received by personal e-mail application 20, it should be noted that the mail will typically be collected and distributed by a remote e-mail server provided by the supplier of the
Internet connection service to which the personal user subscribes.

While many of the features and functions of this system provide considerable benefit to

an individual user, the system provides the maximum advantage when operating in a multi-user environment where transaction information is gathered from many users. Figure 2 shows a schematic diagram of the preferred configuration of the system in a multi-user environment. The preferred system comprises a Central Management server 40 connected to a database 42 and operator consoles 44. The Central Management Server 40 is also connected to Back Office Application Plug-ins comprising Application Interfaces 50,52 and open Application Program Interface 54, and to Gateway components 60,62 and 64. Gateway component 62 is shown as connected to User Application Plug-ins, located on one or more user's machines, comprising Internet Explorer Plug-in 70, Netscape Navigator Plug-in 72, Microsoft Outlook Plug-in 74, and Lotus Notes Plug-in 76. These plug-ins are used provide the functionality of the preferred system in the hosting program in which they are integrated. Four possible hosting programs are shown, Internet Explorer, Netscape Navigator, Microsoft Outlook and Lotus Notes, but any other program with the capability to connect to the Internet may also be used, providing its behaviour can be modified to implement the functionality of the preferred system.

Connection to the Internet 10 is made via the User application plug-ins and their respective hosting programs.

The gateway components 70,72 and 74 are optional but are preferred as they enable the entire system to scale, with each gateway storing and forwarding information, thereby allowing any number of users to be connected.

Information from the multiple application Plug-Ins 70,72,74 and 76 for the different applications on multiple user machines is gathered by the central management server 40 and stored in an associated database 42.

The Back Office Application Plug-Ins 50,52 and 54 allow the system to interface with third party management applications such as order processing and accountancy systems. This allows transaction information to be automatically entered and processed by such systems.

Operator Consoles 44 are provided for administrative purposes, and in particular for the approval of transactions. While logically depicted as directly attached to the central management server in Figure 2, such consoles could be run on any networked machine. Where an e-mail or web browser plug-in determines that a particular transaction requires approval, a request is sent to the Central Management Server and queued pending approval by an authorized operator.

The operation of the system is controlled by policy data, which stores the corporation's regulations regarding security, authorisation, and the actions that user's are permitted to perform, as well as operating information. Preferably, the policy data is stored in a policy file on the central Management Server for access by any of the Operator Consoles 44, Back Office Application Plug-ins or User Application Plug-ins. The system administrator or network supervisor may define one or more policies or settings of the policy file and may assign individual users or groups of users to different policies, thus controlling a user's ability or even a workstation's ability to

interact with the Internet without the need to set parameters and controls directly at each user's machine. A user in the accounts department of a company for example may be assigned to an accounts policy'; any subsequent change to that policy will then automatically result in a change in the capabilities of all users assigned to that policy.

It is preferred that the capability to edit or set the policy data is restricted to the network supervisor or other authorised person. or persons. This may be achieved by designating one or more supervisor workstations in the network enabled with access to edit the policy data such as Operator Consoles 44.

Preferably, the policy is tree-like in structure, allowing settings to be forced down to individual policy nodes of the tree, and global changes to be rapidly made, for example if the CEO wishes to cause all purchases to require his approval if company cash flow should become a problem. Such a policy based system greatly reduces the latency inherent in both traditional purchasing systems and in current eCommerce purchasing environments.

Each user of the network will have his or her own representation of policy data. Preferably, only the branches and leaves of each user's policy that differ from a master network policy are stored as this allows space in memory to be saved. Although the policy data is preferably stored in file form on the Central
Management Server, it is not intended that storage of the policy data be restricted to file form only. Any other representation or encoding of policy settings may be employed within the preferred system.

The implementation of the system in a web browser or in an e-mail client will now be described in more detail.

Use of the preferred system in a web browser
Figure 3 shows the simplified operation of a web browser. The web browser is launched at step S100 in response to a start request from either the user or automatically from the start-up file of the user's computer. The start-up file contains commands to automatically run specified programs when the computer is booted-up. After the web browser has been started it typically requests a home page', the default web page for viewing, in accordance with a pre-determined setting. This is shown at step S102.

The request is sent to the appropriate web server 90, the exact Internet address of which usually being determined by Domain Name Services; the web server 90 then replies with the appropriate data defining the web page. This process is represented respectively as steps S104 and S106 which result in step S108.

The data defining the web page consists of HTML script, and other possible data types such as XML or
Active, and Javascript which encodes executable programs. The Browser interprets this data, displaying and/or executing it as appropriate at step S110.

The browser then typically waits for user input at step S112. Such input may include filling displayed fields, clicking on a hyper-link, or entering the URL address of a new web page. Ultimately, such actions lead to a further request being sent to the web server 90 at step S114 and step S116. The request may simply be another web page address, or it may contain additional data such as that typed in to displayed fields by

the user.

Figure 4 shows a sample web page display, in which a GUI is presented to the user in order to receive the users name and e-mail address. It will be seen from reference to Figure 4 that the user has entered his name as Fred Smith'into the name request field provided, and his e-mail address as fsmith@xyz. com' into the e-mail address field.

When the user clicks the Submit'button provided on the request window, the details the user entered are included in the command sent to the web server 90.

Such a command might be: http://www. sample. com/sample2. htm? UserID=Fred +Smith & email=fsmithXxyz. com & submit=submit
It can be seen from the above that the user's name is incorporated into the command as the value of a variable called UserID'and his e-mail address is incorporated as the value of a variable called email'.

The command is assembled in step S114, and transmitted to the web server 90 in step S116 where the user name and e-mail address information may be used, for example, to send product information to the user via e-mail, or to gain access to other web pages.

The plug-in module provided by the preferred embodiment of the invention in the form of a Browser
Helper Object (BHO) provides additional functionality to augment that of the standard web browser. The BHO is implemented to respond to a number of significant events that occur as the web browser is operated and directed by the user to interact with various web sites and pages.

The BHO is implemented to monitor navigation requests and data submitted to the web server from the browser and identify data that is unique to the user.

It may do this simply by searching the outbound data stream for the presence of pre-determined words or phrases. In the above case shown in Figure 4, the two variable definitions UserID'and email'may be searched for, and the data that follows them extracted and stored. Alternatively, the BHO may search for the symbol, which indicates the end of the URL address being connected to and indicates that what follows is data. The BHO may also monitor the inbound data stream received from the web site being connected to.

Also, the BHO may be implemented to monitor the operation of the web browser itself. As the web browser operates it generates events'to notify codependent software modules or objects that something significant has just occurred or that an action has just been completed. The name of the event is usually descriptive in its own right of what has just occurred; additional data that describes the event in more detail is normally available. The BHO is implemented to trap these events and to take action in dependence on them.

One such event that the BHO is implemented to respond to is called BeforeNavigate2'which the web browser fires when the user requests the browser navigates to a new page. The event is issued and may be recognised by the BHO before the requested page is downloaded, allowing the BHO to take any pertinent action before the user views the page. One such action might be to record the page

and any data submitted in response to that page in a database. Another such action might be to identify the URL of the requested page from the event and prevent the page being downloaded.

Another event that the BHO traps is the 'DocumentComplete'event, which is fired by the web browser when a new page has been fully downloaded from the web site into memory. The page is encoded in the form of a Document Object, conforming to Microsoft's
Document Object Model (DOM). The DOM provides comprehensive access to the data comprising the page, allowing the BHO to extract data items which are of interest to it. For example, the BHO may request data from the DOM to determine whether the page forms part of an eCommerce transaction. It may do this by searching objects in the DOM for terms such as
Receipt'or Account Number.

The BHO may also use the DOM to determine the field names or field types of data being requested on a web page. The data entered by the user into such fields may then be extracted from the DOM and stored or acted upon. Field names are typically descriptive of what is stored; passwords, for example, are often held in a field called'password'and so may be searched for on a web page. Credit card numbers may be searched for in a similar way. Usually, password fields are of a type such that any entered data is displayed as asterisks. This too may be determined from analysis of the DOM and used to identify pertinent data.

User data would not normally be present in a web page downloaded from a web site, but would be entered by the user into an HTML form. Usually, the potentially sensitive user data is transmitted to the web site via the web server when the user selects a 'Submit'button. At this stage, the BHO can trap the 'Submit'event issued by the web browser, and access the DOM to extract the user data, and, if necessary, prevent the data from being transmitted.

Encryption and decryption on a secure link will take place after point C and before point A in Figure 3 respectively. Thus, the BHO may analyse the data before it is encrypted or after it is decrypted. This is advantageous since there is no need for the BHO to perform any encoding or decoding of data itself. This does not affect the ability to determine if the link is secure or not, since a secure link can be identified by the protocol identifier"https"at the beginning of the current URL. It is preferred that examination of the transmission's content take place before encryption or after decryption occurs.

Discussion of the operation of an e-mail client
With reference to Figure 5 of the drawings, the operation of a typical e-mail client, and the implementation of the preferred embodiment in an e-mail client will now be described.

Figure 5 shows the simplified operation of an email client. Receive and Send operations typically operate independently, and these operations are shown separately on opposite sides of Figure 5, beginning at steps S120 and steps S130 respectively.

An e-mail client's receive message'operation is initiated at step S120. This may be done automatically at predetermined intervals in order to keep the user informed of any new messages that he has received, or it may be done in response to the user

manually selecting a receive messages'icon. Starting this operation causes the e-mail client to poll the e-mail server 95 and download any new messages to the user's machine. In step S122, an e-mail message is received by the e-mail client. Typically, when a new message is received, it is added to an Inbox', with the received message headers (senders name, date and title for example) arranged in a list. The user then clicks on the appropriate entry in the list to read the full message causing it to be displayed on his computer screen. The e-mail message is displayed at step S124.

In the case of an outgoing e-mail, the user selects a compose e-mail'option as step S130. In response, the e-mail client provides an interface comprising a text editor in which the user can enter the text of the body of the message and other information such as destination address, subject and so on. The user composes the message in step S132 and then opts to send it, by selecting an icon or menu option provided by the e-mail client to issue a send command'. The e-mail is sent to the e-mail server for transmission to the recipient in step S134. If any encryption is applied by the e-mail client it is applied in step S134 before transmission.

In the preferred embodiment, additional functionality is provided for the e-mail client via a plug-in module. Preferably, the e-mail client is one of those provided by Microsoft, such as the Microsoft
Exchange client, or the Microsoft Outlook client, and the plug-in module is encoded as an Exchange client extension. These are described in the document "Microsoft Outlook and Exchange Client Extensions"by
Sharon Lloyd mentioned earlier.

An Exchange Client Extension is a component object that complies with the Microsoft Windows Component
Object Model (COM) and that utilizes the Exchange IExchExt interface. This interface provides a number of additional interfaces for modifying the operation of the Exchange e-mail client, such as the
IExchExtCommands interface, which allows existing client behaviour to be replaced or modified and new commands to be added to the client's menus; and the
IExchExtEvents interface which allows custom behaviour to be implemented to handle client events'such as the arrival of new messages, reading, writing, sending messages and reading and writing attached files. The
IExchExtMessageEvents, IExchExtSessionEvents and the
IExchExtAttachmentEvents interfaces are also provided and provide additional functionality for the more specific tasks that each of the interfaces names suggest.

In the preferred embodiment, the Exchange Client
Extension that forms the plug-in module is implemented to respond to client events'that are fired by the client program as it performs operations and completes actions. The events'in question are provided by the
COM interfaces mentioned above. The monitoring of the e-mail client by the plug-in module may therefore be seen to be analogous to the way in which the BHO plugin module monitors the operation of the web browser.

The e-mail client plug-in module is implemented to respond to the OnDelivery'event for example which is fired when a new message is received from the underlying mail delivery system and before it is visible to the user. The OnDelivery'event contains information to access the different parts of the e-mail message that have been downloaded and which are held in memory. The message header, the message body

and any message attachments are encoded in memory as properties of the message object which may be separately accessed through Mail Application Program Interface (MAPI) calls.

Via the information supplied as part of the OnDelivery'event, the plug-in module may access the message header and extract the identity of the sender for example. Furthermore, the plug-in module may utilise information obtained from MAPI calls to scan the body of a received message for keywords or pertinent data. It may search for evidence of an eCommerce transaction, by identifying significant words such as'receipt'or'account number'. The message may then be stored for auditing purposes. In the case of an unapproved sender, or harmful message content, the message may be deleted unseen.

The analysis of a received e-mail occurs therefore at point A in Figure 5 prior to being viewed by the user. Preferably the e-mail is examined before the email is even placed in the Inbox. Where a message is not automatically decrypted before being placed in the
Inbox, for example where the user is required to enter a decryption key, the message is examined immediately following decryption, but before viewing. Digital
Certificates may be included as attachments to the email and can readily be examined prior to viewing, allowing any appropriate actions, such as validation, to be performed.

Another significant client event that the plug-in module is implemented to respond to is the OnWriteComplete'event which is fired when the user has selected the send command'and requested the email client to transmit a new e-mail message to the mail delivery system. This event is fired, at point B in Figure 5, before the transmission and before any encryption takes place. The new message which is to be transmitted is similarly stored in memory as an object which may be accessed by MAPI calls. The plug-in module may use the MAPI calls to scan the content of the outgoing e-mail for sensitive data, such as credit card number, and consequently cause the message to be recorded or even blocked.

Plug-In Module Operation
The preferred implementation of the web browser and e-mail client plug-in modules has been described above with reference to Figures 3 and 5 above. Next, the functionality provided by the plug-in modules will be described in detail and with reference to Figures 6 to 18.

Identifying and Recording Usernames, Passwords and other Information
The preferred system provides means to automatically identify, collect and store data contained in transmissions to and from a user's workstation, in particular, the usernames and passwords entered by a user to access web site pages, File Transfer Protocol (FTP') sites and other such sites on the Internet.

Systems that presently provide facilities to record passwords currently only do so when a user a clicks on the remember password'option provided on the GUI. The password is saved into a protected local file on the user's machine that is only opened when the user is authenticated on that machine, for example, by entering his username and password at boot time. The remember password option causes the system to remember the user's password when he next visits, pre-filling in the password field with that password so that the user does not have to enter it each time it is required. The drawback of the password file being stored locally is that if the user moves to another

machine he does not have access to the stored password file and will have to re-enter the password himself.

The preferred system identifies passwords automatically, without the need for instruction from the user, and stores the identified passwords and usernames in a data repository. Preferably this is central database 42. This allows the passwords of any user to be recalled regardless of the terminal at which the user logs on, providing the terminal has access to the central database.

Any identified passwords and usernames are stored in the database along with the field names in which they are stored on the original web site and the address of the Internet site to which they were transmitted to and at which they are used. Site information can be retrieved straightforwardly as it is included in the HTTP request submitting the password and username information to that site, and in the representation of the web page held in memory.

Preferably, for the sake of security, the information stored in the database is encrypted, so that only a select number of people, such as network supervisors, system administrators or company directors have access to it. They may access the database either through a workstation in the network, by entering a username or a password to identify themselves, or through a supervisor workstation, such as Operate Consoles 44.

This storage of usernames and passwords along with address details presents a significant advantage to companies that use on-line facilities. With existing technologies, if a user forgets his authenticating password preventing access to the protected file, or leaves the company without having disclosed it, the Internet service cannot be accessed. A similar situation occurs if the protected file is damaged, deleted or otherwise lost. Each Internet service must then be approached in order to replace or recover the lost password, which can be expensive both in terms of lost access and administrative time. With the preferred system, the password information may be recovered from the central database, so that access to web sites is not lost.

Figure 6 is a flow diagram which schematically illustrates the operation of a plug-in module implemented to extract user name and password information from data to be transmitted to a web server. In step S150, the plug-in module begins and parses the data about to be transmitted to the web server from the browser. This occurs at point C'in the process illustrated in Figure 3. Control then passes to step S152 where the plug-in module determines whether or not the data which is to be transmitted contains username or password information.

The passwords and usernames may be identified in the manner described above with reference to Figures 3, 4 and 5, by identifying field names in submitted command or by using the DOM, for example, to search for field names, field types, or the display method used to identify the data on web pages. They may also be retrieved from the HTML of web pages, the pop-up windows or GUIs (Graphical User Interfaces) presented by remote servers or providers on the World Wide Web or even by scanning the content of e-mail messages.

Identifying passwords and usernames in transmitted commands or in the DOM of a web page from their field names relies on those field names describing their purpose

with obvious labels such as password'or username'. In cases when the field names are not themselves meaningful, the nature of data being transmitted, may be inferred from the field type of the data, that is String', Integer'and so on, or the display method used to enter the data. Fields that are intended to receive a password can be identified from the representation in by searching for a password' field type in the DOM. Text boxes on a web page into which password data is to be entered, for example, typically display each character input as an asterisk; this property may be determined from the DOM and used to infer that data input into the text box is a password even if there are no other indications.

Although, the password is displayed as a string of asterisks, the representation in memory still contains the character information that was entered by the user.

The password may then be retrieved simply by extracting the input from the field.

Alternatively, passwords and usernames may be identified by referring to those stored by other programs such as Microsoft's'Internet Explorer'when the remember password option is selected by the user.

Such passwords are stored in a local protected fileon the user's computer. This file is unlocked'when the user is authenticated on the computer, and so may be accessed to obtain password and username information by the browser plug-in module of the'preferred system.

If the plug-in module does not detect a username or a password in the data which is to be transmitted, control passes to step S158 at which point the module exits and control is passed back to point C'in Figure 3. The browser may then transmit the data to the web server. If however, a username or a password is detected by the plug-in module at step S152 then control passes to step S154, where the values of the identified username or password and the URL or other identifier of the web page to which the data is to be transmitted are extracted. Control then passes to step S156 where, these values and the URL or other identifier are stored in a predetermined system database 42. Once storage has taken place, control then passes to step S158, where the module'exits and control is passed back to point C'in Figure 3. The browser may then transmit the data to the web server.

The preferred embodiment need not be limited only to the storage of passwords or usernames which have been used as an example because of the immediate advantage that their storage provides. Other types of data, in particular those relating to eCommerce transactions, such as credit card information and digital certificate may also be usefully extracted and stored to provide a database or record. The system for extracting information from transmissions may also be applied to e-mail systems.

The information may be extracted in the manner described above, via the DOM or via MAPI calls to the
COM representation of e-mail content, or may be extracted from the language in which a web page is encoded. Web pages are typically encoded in Hyper-Text Mark-Up Language (HTML), a human readable text based language which may be searched for known key words or indicators using conventional text matching techniques.

In the preferred embodiment, recording of the data may involve recording just

password and username information, recording the URL of a web page being viewed or of an e-mail account, recording any data submitted to the fields of a web page, and recording the HTML of a web page, so that the web page may be retrieved later and viewed.

The plug-in modules provided by the preferred system operate in conjunction with policy data, which may be recorded in a file, database, or software code for example. The policy data provides a user of the preferred system to instruct the operation of each of the plug-in modules thereby controlling their functionality.

A sample representation of policy data, illustrated in Figure 7, shows how a user may control the operation of the plug-in module to record password and username information along with other types of data.

The tree-like structure of the policy data is clearly seen in Figure 7 which shows just one major branch of the policy data entitled ARecording@. The Recording branch is separated into two sub-branches called ABrowser@ and AEmail@ which contain instructions for the operation of web browser and e-mail client plug-in modules respectively.

The browser branch contains three sub-branches called ADataToRecord@, AWhenToStartRecording@ and AWhenToStopRecording@. The DataToRecord branch specifies the type of data that is to be extracted from transmissions to or from the user's workstation and a web server. Four types of data are referred to in the illustration, these being the URL of the web page being viewed, the HTML of the web page being viewed, data that is entered by a user into fields provided on the web page and submitted to a web site, and any passwords and usernames that are entered by the user. These are referred to on four distinct sub-branches of the DataToRecord branch, entitled AURL@, AHTML@, ASubmittedFields@ and APasswords@. A Yes/No option on each of those sub-branches specifies whether or not the indicated data is to be recorded.

The WhenToStartRecording branch sets out a number of conditions which specify the point at which the data specified in the DataToRecord branch is to be recorded.

Five conditions are illustrated in this example each one set out on a separate branch and respectively entitled AWhenBrowserIsOpened@, AIfCreditCardNumberSubmitted@, AIfPasswordSubmitted@, AIfKeywordsReceived@ and AIfKeywordsSent@. Whether or not these conditions are to be used in order to determine when to start recording is indicated by Yes/No markers on each branch.

Similarly, the WhenToStopRecording branch lists three conditions that may be used to determine the point at which the recording of the data specified in the DataToRecord branch is to be stopped. These conditions are AWhenUserClosesBrowser@, AWhenUserChangesSite@ and AWhenUserChangesPage@. The Yes/No status of each of the conditions and for each of the type of data to be recorded may be easily set by a user of the preferred system in order to control the operation of the plug-in module.

The e-mail branch of the policy data is divided into a DataToRecord branch and a WhenToRecord branch.

Each of these branches are sub-divided into branches that deal with Sent Mail and Received Mail. The type of data that may be recorded is set out in the DataToRecord branch and for sent mail may be the message text, any attachments to the message, and in the case of messages signed with a digital signature, a copy of the digital certificate accompanying the signature. Conditions for recording sent mail and received mail are set out in the WhenToRecord branch and may be based on the identification of a credit card number, a keyword or a digital certificate in the mail that is sent or received.

The tree-like structure described is the preferred form for the policy data since it allows the data to be easily organised and referred to. It also allows different users to be assigned to different branches of the tree in order to receive different policies.

Although, the tree like structure is preferred, other arrangements may also be possible. The branches shown in this diagram are only intended to be illustrative.

Identification of Credit Card Numbers
The preferred system also searches for Credit Card numbers or other account information in the data to be transmitted to the web server or e-mail client by searching for a string of numeric digits, typically between 14 and 16 long. It then determines if the string of digits passes one of the tests universally used by credit card companies to validate card numbers.

If a credit card number is found in the transmission, then the preferred system may take a number of actions depending on the settings in the policy file, such as refer the transmission to a third party for approval, renegotiate a higher level of encryption to safe-guard the transmission if the credit card number belongs to the company, or prevent the transmission from taking place altogether.

The most common test to identify a credit card number is defined in ANSI standard X4. 13, and is commonly known as LUHN or Mod 10.

The Luhn formula is applied to credit card numbers in order to generate a check digit, and thus may also be used to validate credit cards, in which case the check digit is figured in as part of the formula. To validate a credit card number using the Luhn formula, the value of every second digit after the first, starting from the right hand side of the number and moving leftwards, is multiplied by two; all of the digits, both those that have been multiplied by two and those that have not are then added together; any digit values that have become greater than or equal to ten as a result of being doubled, are summed as if they were two single digit values, eg :'10'counts as'1+0 = 1', 18'counts as 1 + 8 = 9'. If the total of the sum is divisible by ten, then the credit card is a valid credit card number.

Figure 8 is a flow diagram which illustrates the operation of a plug-in module which detects credit card numbers, using the Luhn formula described above, in data which is about to be transmitted. If a credit card number is identified, the plug-in module implements further policy-based checks, based on the outcome of which, the plug-in module may determine to transmit the data containing the credit card number or to prevent transmission.

The module begins operation at step S160, which follows point C'in the process

illustrated in Figure 3 in the case of browser implementation, or point B in the process illustrated in Figure 5 in the case of an e-mail client implementation. Control passes from step S160 to step S162 in which the module scans the data about to be transmitted to the web server or e-mail service and extracts from it a first string of digits that is likely to be a credit card number.

This is achieved by scanning the data comprising the transmission for strings of digits over a particular number of digits long. Credit card numbers are usually made up of more than 12 digits, and are not usually more than 16 digits long. Thus any strings of digits in this range may be identified as possible credit card numbers.

Following the extraction step S162 control passes to decision step S164 where. a routine end of file check is made. If the data contains no candidate credit card number and the end of the file check is reached before any first candidate number could be found, then at step S164 control passes to step S178 where the transmission of the data is allowed to proceed without any further checks being made. The module then exits at step S180.

Control resumes in the web browser operation shown in
Figure 3 from point C'or in the e-mail client operation shown in Figure 5 from point B.

If a first potential credit card number is found in the data in step S162, then it is extracted and stored in memory. The end of file has not been reached yet so control passes from step S162 to step S164 and then to S166 where a checksum for the stored candidate number is calculated using the Luhn formula. Control then passes to decision step S168, where the checksum is queried.

If the checksum indicates that the candidate number is not a valid credit card number then control passes back to step S162 where the next potential credit card number is extracted from the data. If a second credit card number is not found, then the end of the file is reached and control passes to step S178 where the transmission is allowed to proceed, and then to step S180 where the module exits.

However, if the checksum indicates that the candidate number is a valid credit card number then control passes to decision step S170 where the settings of the policy data are queried for the appropriate action to take. The action may be determined from such factors such as the number itself, the identity of the user transmitting the number and the address to which it is to be sent. The policy data might for example specify that credit cards are not to be transmitted, or that a higher encryption strength is required for the transmission before it may proceed.

This policy checking step allows credit card transactions to be controlled at a higher level than the user making the transaction. Thus financial decisions may be swiftly and easily implemented, and may be enforced automatically without the need for monitoring. An organisation may, for example, wish to restrict the capability to make credit card transactions on the organisation's account to particular authorised people or it may wish to restrict transactions on a particular account altogether.

In step S170, the credit card number, and other details of the transaction are compared to the settings in the policy file and it is determined whether or not transmission may take place. If for any reason, with reference to the policy checks, it is determined that the credit card number should not be transmitted, control passes to step S172 where

transmission of the data is halted, and then to step S174 where the module exits. At this point the system could notify the user that the request has been denied by means of a pop-up message box. Control then returns to point A in Figure 3, in the case of a web browser, or to step S132, compose mail'in Figure 5, in the case of an e-mail client.

If in step S172, it is determined that the credit card number may be transmitted, control passes to step S176 where transmission of the data occurs, and then to step S180 where the module exits. In this case control is resumed from point C in the web browser operation illustrated in Figure 3, or from point B in the e-mail client operation illustrated in Figure 5.

Credit card numbers need not be identified in step S162 solely by scanning the content of the transmission. In web browser implementations the credit card number may for example be directly identified by referring to the field names of any variables that are to be transmitted or also from the representation of the web page in memory. The discussion above about the identification of passwords explains this in more detail.

The preferred system may also be configured to search outgoing transmissions for other pertinent financial details, such as account numbers. Company account numbers from which funds may be deposited may be stored in a separate file. Any likely strings of characters or digits may then be extracted from the outgoing data in the manner described and compared with the entries in the accounts file to determine whether or not it is a valid account number. The transaction may then be allowed to proceed or be refused in the manner described above. Although credit card numbers have been referred to, it will be appreciated that any type of card number for making payment such as debit card numbers may also be used.

Also, although identification of credit card numbers has been explained with reference to data that is to be transmitted, it will be appreciated that similar techniques could be used to identify and extract credit card numbers from transmissions that are being received.

Validation and Authentication support
On-line transactions typically require some form of authentication that the user is who he says he is, and that he is able to pay for the goods ordered.

These requirements are usually met by the purchaser supplying the trader with his credit card number and the cardholder address which can then be verified by the seller with the card issuer. Increasingly however,
Digital Certificates are attached to. electronic transmissions by the user which, in conjunction with a digital signature, allow the receiver to verify that the transmission originated from the person named as sender. Digital certificates from certain issuing authorities, such as Identrus, may also act as a warranty that the holder will honour his commitment to pay a specified amount of money. These certificates are useful when trading on-line.

Digital signatures are a widely used means of establishing an individual's identity on-line when transmitting information or when conducting a transaction. They also provide a guarantee to a recipient of any transmitted information or transaction details that those details and that information have not been tampered with en-route by an unauthorised third party.

Digital certificates are issued to individuals, organisations, or companies by independent Certificate
Authorities, such as Verisign Inc. An organisation may also act as its own Certificate Authority issuing its own digital certificates which may or may not be derived from a root'certificate issued by another
Certificate Authority. A digital certificate typically contains the holder's name, a serial number, an expiration date, a copy of the certificate holder's public key and the digital signature of the certificate issuing authority. A private key is also issued to the certificate holder who should not disclose it to anyone else.

Certificates are unique to each holder and may be revoked by an issuer if the holder is no longer viable; alternatively, a holder may ask to have it revoked if his private key has been compromised.

The public and private keys may both be used in tandem to encrypt or decrypt a message. Anyone may use a certificate holder's public key to encrypt a message so that it may only be read by the certificate holder after decrypting the message with his private key.

Messages may also be digitally signed using software which converts the contents of the message into a mathematical summary, called a hash. The hash is then encrypted using the sender's private key. The encrypted hash may then be used as a digital signature for the message that is being transmitted. The original message, the digital signature and the transmitter's digital certificate are all sent to a recipient who, in order to confirm that the message he has received is, complete and unaltered from its original form, may then produce a hash for the received message. If, the received hash, having been decrypted with the holder's public key, matches the hash produced by the recipient, then the recipient may trust that the message has been sent by the person to whom the certificate was issued, and that the message has not been altered en route from its original form. Digital certificates are therefore of considerable and increasing importance to companies conducting business on the Internet.

In cases where an on-line trader makes use of
Digital Certificates to ensure the identity of its customers, it is necessary to check with the issuer that the certificate is still valid before any transaction is authorised. Such checks can be carried out on-line using an independent verification service such as that provided by Valicert, Inc. A fee is usually charged for such services.

It may be that individual employees of an organisation each receive e-mails from a single client, each signed with his digital certificate, on separate occasions. Presently, there is no way for a information about certificates received by one employee to be shared with another employee unless they share it themselves manually, and as a result, individual employees might request that the same certificate be validated each time that they receive it. This is wasteful however, since once a certificate is revoked by its issuer, it is never again reinstated, so any validation fees spent on an already revoked certificate are unnecessary. Additionally, the recipient may wish to make a business judgement as to whether a previously validated certificate should be re-checked or not.

For example, if a digitally signed order for $1M worth of goods is received one day, and the certificate successfully validated, and on the next day another order for $50 is received, signed with the same certificate, the organisation may consider a second

validation check to be unnecessary, thereby saving the validation charge.

The preferred system provides means to record information about the Digital Certificates that have been received, the status of the certificate at the last check as well as, where applicable, transaction information, such as client, amount, date, goods and so on. This information is stored in a central database to which all users of the system have access. The preferred system also provides means to use the stored information to decide whether or not a validation check is desirable, and to accept or refuse transmissions depending on the status of the digital certificate.

Thus, users of the system may receive and review transmissions without the need to establish their authenticity themselves.

Figure 9 illustrates the operation of a plug-in module of the preferred system implemented to extract digital certificates from transmissions received by company employees and record them in a database along with their validity status and details of any associated transactions such as date, amount, goods and so on. The module first checks to determine if the certificate is obviously invalid, and that the message has been correctly signed by it. The certificate is obviously invalid, for example, if its expiry date has passed, or if it contains an invalid thumbprint'. Such a thumbprint may be a checksum for the certificate itself for example. The message has not been correctly signed if the signature cannot be verified from the information contained within the certificate. Details of certificate validation and message signing are more fully described in the ITU and RFC documents previously referenced. The module then makes-a check to determine whether or not the certificate has already been stored in the database and only records those that have not.

Where a copy of the certificate is already stored, the module checks the database record to determine whether it has been previously identified as revoked in which case the transmission is immediately rejected.

Otherwise, the module then determines, in accordance with policy defining business rules, whether or not to validate the certificate. Taking in to account the results of any such validation, it then determines whether the certificate should be relied upon, and therefore whether or not the transmission signed by the digital certificate should be rejected or accepted. The module is initiated at step S190, following receipt of data containing a digital certificate. Digital certificates are typically transmitted as attachments to messages and may be identified by examining the first few bytes in the header of the attachment. These bytes identify the type of file attached and so will indicate whether an attachment is a digital certificate or not.

The initialisation step S190 occurs after point A in Figure 3 if the module is implemented in a web browser, and after point A in Figure 5 if the module is implemented in an e-mail client. Following initialisation, the module proceeds to step S191 in which the expiry date of the certificate is checked, and the digital signature confirmed as having signed the message. If the certificate has expired, or the message is incorrectly signed, the module proceeds to step S198 and rejects the transmission. Otherwise the module proceeds to step S192 in which the database is searched for a previously received copy of the digital certificate. Control then passes to decision step S194.

If a copy of the certificate has been found in the database then control passes to

decision step S196 where the module determines whether the certificate has previously been marked as revoked. This will have occurred if a previous validity check revealed that a digital certificate has been revoked. If the certificate is not already in the database control passes from step S194 to step S202 where the new certificate and the date on which it was received are stored in the database, together with additional details such as the address from which it was sent and details of any transaction associated with the transmission such as monetary value, account number etc. If the certificate has already been marked as revoked in step S196 then control passes directly to step S198 in which the transmission comprising the digital certificate is automatically rejected. This may involve for example, transmitting an automatically generated message to the initiator of the transmission whose certificate has been found invalid to explain the refusal, and preventing the recipient of the digital certificate from taking any further steps in connection with the refused transmission. The module then exits at step S200.

If, however, the certificate has not been previously marked as revoked in step S196, then control passes to step S204 in which the history of transmissions signed by the certificate, by other certificates from the same company, or used to conduct transactions on the same account are considered with policy data to determine if an on-line validity check of the certificate is required. Control also passes to step S204 after a new digital certificate has been added to the database in step S202.

The policy data contains instructions which when considered in conjunction with the history of signed transmissions previously received and revocation checks previously made indicate whether or not the certificate used to sign a transmission should be verified on this occasion. Example policy data is illustrated in Figure 10 to which reference should now be made.

The policy data is stored on the AcceptanceConfidenceRating branch on the DigitalCertificates branch of the policy data representation. The AcceptanceConfidenceRating branch sub-divides into two separate branches which deal individually with monetary'digital certificates, where a certificate has been used to sign a transmission involving a transaction with the recipient for an amount of money, and Aidentity@ digital certificates which do not involve a monetary transaction with the recipient of the transmission.

Certain certificates are issued only for use in conjunction with monetary transactions. For example, the warranty certificate'issued by some on-line banking organisations, such as Identrus, as a warranty to the receiver of the signed transmission. Such warranty certificates testify that the sender of the transmission is a customer of an Identrus member bank, and that if he or she does not make payment, the bank will accept liability.

Organisations which issue different kinds or classes of digital certificate mark each certificate according to its class. Identifying. a certificate as being of a particular class is then a matter of knowing how different organisations classify their certificates and searching for the appropriate indicator in the certificate received.

Issuers of digital certificates may provide many different classes of certificate suited for different purposes. These may be separately dealt with by the policy data by corresponding sub-branches of the policy datatree.

In the example policy the first branch entitled AIdentityCertificates@ deals with transmissions that do not involve a monetary transaction. The branch comprises four separate sub-branches. The first of these, entitled AAlwaysAcceptFromO contains a reference to a table, table a', which lists the names of individuals and organisations who are considered to be reliable. The names listed in this table will be those known and implicitly trusted by the company, for whom, it is not considered necessary to determine whether or not a digital certificate has been revoked by its issuer.

The second branch entitled AAlwaysCheckFrom@ contains a reference to a separate table, table b, in which the names of organisations and individuals for whom digital certificates should always be checked are stored. Clearly, the contents of table a and table b will depend upon the experience of the user of the preferred system and will be left up to that user to enter.

The third branch entitled ACheckIfDaysSinceCertificateReceived FromCompany@ specifies a period of time following the receipt of a valid digital certificate from a company, within which checks of any further digital certificates received from that company are not considered necessary. In this case, the period of time is set to be 10 days.

The fourth branch entitled ACheckIfDaysSinceLastReceivedThis Certificate@ specifies a similar time period in the case of an individual digital certificate. In the example shown the policy data specifies that validation checks on any given digital certificate need only be made every 30 days. Again, the number of days specified on both of these branches, is left to the user of the preferred system to decide. The amount of time that has passed since a valid digital certificate has been received may be determined by referring to digital certificates and associated data stored in the database. By checking digital certificates periodically, rather than each time they are received allows money spent on making checks to be saved. The MonetaryCertificates branch also contains an AlwaysAcceptFrom and an AlwaysCheckFrom branch which refer to tables x and y respectively. Table x lists all those organisations and individuals for whom no status check of a digital certificate is required; table y lists all those for whom a check is always required. The MonetaryCertificate branch also contains a CheckIfAmountExceeds branch which specifies a threshold transaction amount over which all digital certificates must be checked and lastly an IfRecentlyChecked branch which sets out two conditions for performing checks on a digital certificate that has been recently received and validated. The IfRecentlyChecked branch allows the user to specify that digital certificates received for transactions for a small amount, in this case $5000, received within a specified time, in this case 30 days, of a previous revocation check, need not be validated.

Figure 11 illustrates the plug-in module process which interacts with the policy data shown in figure 9.

This process is a sub-process of that shown in figure 8 and occurs at step S204 resulting in decision step S206 in which the plug-in module determines whether or not to perform an on-line check of the status of the Digital Certificate it has received. The sub-process begins in step S220 from which control passes to decision step S222 in which it is determined if the transmission is

monetary from the class of the Digital
Certificate used to sign the message. If the transmission is monetary then control flows to decision step S232, which is the first in a chain of decision steps corresponding to the branches in the
MonetaryCertificates branch of the
AcceptanceConfidenceRating branch of the policy data.

If in step S222, it is determined that the transmission is not monetary, control passes to decision step S224, which is the first decision step in a chain of decision steps corresponding to the
IdentityCertificates branches of the
AcceptanceConfidenceRating branch of the policy data.

In each of the decision steps in the chain a simple check is made to see whether the conditions specified on each sub-branch of the IdentityCertificates branch of the policy data is satisfied. Depending upon the results of that check control flows either to step S242 in which confidence in the Digital Certificate is established and no on-line check of the Digital
Certificate's status is deemed necessary, or step S244 in which confidence is not established and an on-line check is deemed necessary, or to the next decision step in the chain.

Thus, in decision step S224, in which it is determined whether the sender of the Digital Certificate is listed in table a, that is the AAlwaysAcceptFrom@ table, if the sender of the Digital
Certificate is listed in Table A then control flows from decision step S224 to step S242 where confidence is established in the Certificate and the sub-process ends returning to step S208 in figure 8. If the sender is not listed in table a then control flows from step S224 to the next decision step in the chain step S226 in which it is determined whether the sender of the
Digital Certificate is listed in table b, that is the AAlwaysCheckFrom@ table. Similarly, if the sender is listed in this table control flows to step S244 at which an on-line check of the Digital Certificate's status is deemed necessary. Control returns from step S244 in the sub-process to step S210 in figure 8.

If the sender of the Digital Certificate is not listed in table b then control flows from decision step S226 to the next decision step in the chain which represents the next condition listed as a sub-branch listed in the policy data. Thus, in decision step S228 a check is made as to whether this Digital Certificate has been validated in the last 30 days. This will involve looking up the Digital Certificate in the database of stored Digital Certificates and extracting from the stored information the date on which the
Digital Certificate was last checked. If the status of the Digital Certificate has been checked in the last 30 days, control flows to step S242 where confidence is established. If the information in the database of stored Digital Certificates indicates that the Digital
Certificate has not been checked in the last 30 days then control flows from step S228 to decision step S230 in which a check is made to see if another Digital
Certificate has been received from the same company and if that Digital Certificate has been checked within the last 10 days. This determination again involves checking the database of stored Digital Certificates and information relating to those Digital Certificates.

If the other Digital Certificate has been checked in the last 10 days then control flows to step S242 where confidence in the received Digital Certificate is established. If not, then control flows to step S244.

In the case of a monetary transmission, the conditions set out on the policy data are stepped through in decision steps S232 to. decision step S240.

If in decision step S232 the sender of the Digital
Certificate is found to be listed in table x, which sets out the names of companies and organisations for which no check of the Digital Certificate status is deemed necessary, then confidence is established and control passes to step S242. Otherwise control passes to the next decision step in the chain which is decision step S234. At decision step S234 if the sender of the Digital Certificate is founded listed in table b, that is the AAlwaysCheckFrom@ Table, then confidence is not established and control passes to S244.

Otherwise, control passes to decision step S236, where it is determined whether the amount for which the transaction is being made exceeds $10, 000. This determination is made with reference to the signed transaction data which will contain the monetary amount either in a manner pre-determined by the issuer of the certificate, or contained within the e-mail or associated e-mails forming the transaction or transmissions. If the transaction is found to be for an amount to be in excess of $10, 000, or if the amount of the transaction cannot be determined with a reference to the data transmitted, then confidence is not established and control passes to step S244. Otherwise, control passes to decision step S238 in which it is determined whether the Digital Certificate has been checked within the last 30 days. Again, this determination is made with reference to the database of stored Digital Certificates and data relating to
Digital Certificates. If the certificate has not been checked within the last. 30 days then confidence is not established and control passes to step S244. If it has been checked, then control passes to decision step S240 where, if the previously determined amount of the transaction is deemed to be over $5, 000 then confidence is not established and control passes to step S244. If the amount of the transaction is under $5, 000 then it is classed as an acceptable risk to rely on the Digital
Certificate, confidence is established and control passes to step S242.

These last two conditions allow the system to determine whether to check the certificate's status based on recent trading history. If for example, a transaction is about to be made by a party for a modest sum, i. e. under $5000, and the search of the recorded transaction and certificate details reveals that quite recently, the same party made a transaction and at that time their digital certificate was confirmed as being valid, then it is arguable that checking the validity of the party's certificate again so soon after the first is unnecessary, and it is preferable to trust in the party rather than paying the validation fee a second time.

It will be appreciated that the instructions in the policy file may be set out to reflect the level of confidence the company has in its customers or suppliers, based on the experience of individuals within the company, the amounts of transactions that are deemed allowable without significant risk and so on. The policy file may also be set up to implement more general policies which are to be used in conjunction with a record of transaction details for the holder of that digital certificate. For example, any transaction that is offered by the holder may be compared against the record of those that he has made before to see if the amount and the goods and services requested are in keeping

with his trading history. If they are not, then it may be desirable to check the validity of the certificate to confirm that it is still valid and guarantees the identity of the sender. If it has been revoked, then a third party may have acquired the original holder's private key and be attempting to make fraudulent transactions.

Having checked the policy data in step S204, confidence in the digital certificate will either have been established or will not have been established. In decision step S206, if confidence has been established then control passes to step S208 in which the transmission containing the transaction is accepted.

Control then passes to step S200 where the module exits and control passes back to point A in Figure 3 in the case of a web browser, or point A in Figure 5 in the case of an e-mail client.

If in step S206 confidence in the digital certificate is not established, then control passes to step S210, where an on-line validation check is performed on the digital certificate. This may involve checking to see whether the Digital Certificate has been revoked or whether, in the case of an eCommerce transaction, the issuer of the Digital Certificate will confirm a warranty for the amount promised in the transaction. Control next passes to step S212, in which the validity status stored in the database for that certificate is up-dated. Control then passes to decision step S214 in which, if the certificate was found invalid, control passes to step S198 where the transmission is rejected, or to step S208 where the transmission is accepted. Rejection of the transmission may mean that it is deleted from the recipients mail box before it has been opened, or that the transmission is marked with the word'rejected'or some other indicator. Following either of steps S198 or S208, control passes to step S200 where the module exits. Whenever a transaction is allowed to proceed the database is updated such that it includes information about the transaction, such as date and amount, in order that the information may be used in determining the need for future validation checks.

Recording of information.

The preferred system also provides an automatic way in which to record transaction information for transactions carried out on-line. In this context, the word Atransaction@ and AeCommerce transaction@ are intended to mean an agreement promising money or money's worth made between two parties over the
Internet, or even over the same network of a company.

Normally, the user himself is responsible for maintaining transaction information by making hard copies of the relevant electronic records or by actively storing copies of any electronic records in files on his computer. The reliance on manual methods to ensure these records are maintained is clearly both unreliable and labour intensive.

The preferred system on the other hand scans the information content of all communications processed by the system for indications that a transaction has begun or is taking place. Such indications are numerous. The most straightforward is whether the link is secure or not as most web pages negotiate a secure link before a transaction is carried out and close that link afterwards. Determining whether a link is secure is achieved by examining the URL of the destination web page. A secure link is indicated by an s'after the prefix'http'. Thus, one mode of operation of the preferred system is to record all data transmitted to a web page while a link is secure. The preferred system

also maintains a record of web pages that negotiate secure links but that are not eCommerce sites, i. e. those that are connected to other than to make purchases, and not record any data transmitted to these pages. Such a web page might be Microsoft's Hotmail web page which provides an e-mail service.

Another indication might be simply the URL of the site. In this case the preferred system may be configured to record all data transmitted to a web page which has been identified as that of an on-line trading company. Other indications might be an identified credit card number, an electronic receipt, an e-mail acknowledging the sale, use of a digital certificate, in particular a digital warranty certificate, or a purchase code.

Once a transaction has been identified as occurring, the preferred system may record the details of the transaction by both storing in entirety each communication between a user and the identified trader, or by. scanning the transmissions and extracting particular details, such as date, amount, type of goods, quantity and so on.

Recording of transaction data may be stopped when the end of the transaction is identified or after a predefined number of transmissions between the purchaser and the trader have taken place. Similarly, once a transaction has been identified, the preferred system may record in the database a predefined number of cached transmissions that took place immediately before the first recognised transmission of the transaction.

This will be useful when, for example, the first indication that a transmission is occurring is the detection of a credit card number or an electronic receipt, since these are likely to received at the very end of a transaction. The prior transmissions may, for example consist of web pages containing information regarding the goods or services being purchased, or an exchange of e-mails where specification or delivery terms were agreed. Note that it is perfectly possible for the prior transmissions to be of the same type as that in which the transaction was detected, of a different type, or be a mixture of types. For example a user might visit a web site www. abc. com, obtain details of goods, and then order them in an email sent to orders@abc. com.

The preferred system records the transaction details in a centralised common database 42.

Additionally, the database may be a local file or a service on a network. The information stored. in the database may be encrypted using known encryption techniques so that only a person with the necessary authorisation may access it.

Figure 12 is an illustration of the operation of an example implementation of a module for identifying when an electronic transaction is being conducted online. Figure 14 illustrates the process by which the preferred system records an identified transaction in the database, and Figure 15 illustrates how the preferred system allows an identified transaction to be approved or rejected on the basis of a predetermined approvals policy.

With reference to Figure 12, the operation of a module for identifying when an on-line transaction is occurring will next be described.

The module begins operation at step S250 in response to receiving data or in response to a user initiating transmission of data to a remote site. In the case of a web browser implementation this will be after point A or after point C respectively as shown in

Figure 3; in the case of implementation in an e-mail client it will be after point A or B respectively as shown in Figure 5.

Control then passes to decision step S252 in which it is determined whether, in the case of a web browser, a secure link has been negotiated between the site transmitting data and the site receiving data. This may be achieved by querying the URL address that has been connected to, as mentioned above, or interrogating the web browser to see if encryption is being employed.

In the case of an e-mail message this step is omitted and control passes directly to step S260. Since online web browser transactions usually involve the transmission of personal information, such name and address, credit card number or other account identifying information, secure links are usually negotiated as a matter of course. Thus the presence of a secure link alone is a good indication that a transaction is taking place. However, secure connections may be negotiated for reasons other than the transmission of transaction details. Thus, if in step S252 it is determined that the connection is secure, control passes to step S254, in which the address of the remote site to which the connection has been made is checked against a list of known sites which do not provide facilities for conducting on-line transactions but which do establish secure connections.

Browser based e-mail sites such as Microsoft's Hotmail site is one such example. Control then passes to decision step S256 where a determination based on the previous check is made. If the site address is identified as a non eCommerce site, that is one which does not facilitate the making of a transaction, then it is determined that a transaction may or may not be occurring and control passes to decision step S260 to make further checks on the transmission content. If in step S256 the site address is not identified as a known non eCommerce site, then it is assumed that an on-line transaction is occurring, and the module exits at step S258.

If a secure connection is found not to have been established at step S252, or if a secure connection has been established but to a known non-eCommerce site, as determined at step S256, or the transmission is an email, then control passes to decision step S260. In decision step S260, the first of a number of checks on the content of the transmission are made in order to determine whether or not it is part of a transaction.

In step S260, the transmission is scanned to see if it contains a credit card number. The method for doing this has been described with reference to Figure 8. If a credit card number is found in the transmission then it is assumed that a transaction must be occurring and control passes to step S258 at which the module exits.

If no credit card number is found then control passes instead to decision step S262 where the transmission is scanned to see if it contains an account code. Account codes may be (for example) stored in a separate file which is accessed by the module when performing this step or alternatively an account code may be identified from descriptive data in the transmission such as a field name like"Account Number"or similar characters appearing in the text of a message.

If in decision step S262 an account code is found, then it is assumed that the transmission constitutes part of a transaction and control passes to step S258 where the module exits. If no account code is found then control passes to step S264 where,

in the case of a web browser, the URL is compared with a list of known eCommerce URLs stored in a file or in a database. In decision step S266, a determination on that comparison is made. If the URL is found to be at a known eCommerce page, or within a known set of eCommerce pages, then it is determined that an eCommerce transaction is taking place and control passes to step S258 where the module exits. Similarly, in the case of an e-mail, the destination address may be compared against'a list of known eCommerce e-mail addresses, for example orders@abc. com', and if a match is found then it is determined that an eCommerce transaction is taking place and control passes to step S258 where the module exits.

The checks that have been described are only representative of the possible checks that could be made to determine whether or not a transmission is likely to be part of an eCommerce transaction and are not intended to be exhaustive. Furthermore, the order in which the checks have been illustrated has no special significance. The order is simply dependent on the structure of the policy data as will be seen from reference to Figure 13.

In step S268, a general check is illustrated which represents any further check for an indication of a transaction, in addition to those described above, which a company decides it is desirable to employ, such as searching for purchase codes or embedded codes placed in the data for example. It is preferred that the web browser or e-mail client being used in the preferred system allows the user to mark transmissions with an embedded code to indicate that the transmission is part of a transaction and should be recorded. Also, the embedded code could be placed in the data by the web site or the e -mail client transmitting some of the transaction data to the user's workstation.

Control passes to this step after step S266, if the site is not recognised as a known eCommerce site and if such a transaction indicator is found in step S268, then a transaction is deemed to be occurring and control passes to step S258 where the module exits. If at step S268, no such indicator is found then no transaction is deemed to be occurring and the module exits at step S258. Following exit, the data may be transmitted, following points C and B in Figures 3 and 5 respectively, or be processed following on from its receipt at point A in Figures 3 and 5.

In the example described, the aim is to start recording transmissions and possible transaction details if there is just a suspicion that a transaction is occurring. It is assumed that recording data which is not part of a transaction is preferable to not recording a transaction at all. Figure 13 is an illustration of the policy data used to identify that eCommerce transaction is occurring and to control the way in which the transaction data is recorded. The policy data is represented by a Transactions branch of the policy data tree which sub-divides into two separate sub-branches called AIdentification@ and ATermination@. The Identification branch is itself divided into five sub-branches which correspond to the determinations made in the process illustrated in Figure 12. The first of these sub-branches entitled AIfConnectionGoesSecure@ allows a user to specify whether recording should start when the plug-in module detects that the connection to the web server has become secure. The conditions specified on the this sub-branch corresponds to decision step S252 shown in Figure 12. It will be appreciated with reference to Figures 12 and 13 that the flow of control shown in Figure 12 corresponds to the layout of the conditions specified on the branches of the policy data tree shown in Figure 13. The ExcludedSites branch of the IfConnectionGoesSecure branch contains a reference to table q in which the web sites

known to negotiate secure sites but which are known not to be eCommerce web sites are listed. Table q is referred to in step S256 of the process shown in Figure 12.

The next sub-branch of the identification branch is entitled AIfCreditCardNumberPresent@ and allows the user to specify whether the detection of a credit card number should or should not be used to initiate recording of data being transmitted or received. This sub-branch corresponds to decision step S260. The PreviousPages sub-branch of the IfCreditCardNumberPresent branch lists the number of web pages, prior to the web page in which the credit card number was detected, which should also be recorded. Since credit card numbers are normally submitted at the end of the transaction, the provision of this sub-branch enables previous web pages which are likely to contain the details and request of the transaction to be retrieved and stored. These web pages are cached continuously by the preferred system so that should a transaction be identified they may be retrieved from the cache and stored in the database.

This will be explained in more detail with reference to Figure 14.

The next sub-branch of the Identification branch tree is entitled AIfAccountsCodePresent@ and allows a user to specify whether or not the detection of an account code in the data being transmitted or received is to be taken as an indicator to initiate recording of the data. The accounts codes are identified in step S262 shown in Figure 12 by reference to table r. The reference to this table is contained in the AccountCodes sub-branch of the IfAccountCodePresent branch. Note that this table also shows the number of previous pages to record, in a similar manner to that described above for credit card identification, however in this case the number of previous pages to record is stored in table r allowing a different number of pages to be specified for each detected account code.

The IfKnownECommerceSite branch allows the user to specify a list of URLs corresponding to sites, parts of sites, or even single pages, where eCommerce transactions are known to take place. The current page URL is matched against entries in this list to determine if a transaction is taking place. The KnownSites sub-branch contains a reference to table s in which the URLs of known eCommerce sites are stored.

The determination of whether the URL of the web site is a known eCommerce site is made in decision step S266 following step S264 of Figure 12. Lastly, the IfOtherIndicatorPresent branch provides a way for the user to specify whether or not the determination of other indicators should be used as a starting point for the recording of data. Two sub-branches of this branch entitled KeyWords and PreviousPages specify possible indicators that may be detected, in this case key words listed in table t, and also the number of previous pages that are required to be stored if key words are detected.

The Termination branch of the Transactions branch divides into four sub-branches which specify conditions which are used to end the recording of data being transmitted or received. Each sub-branch sets out a condition by which the end of the transaction may be defined. The first branch entitled AIfConnectionGoesInsecure@ allows a user to specify that the relinquishing of a secure connection by the web browser indicates

the end of a transaction so that recording should be stopped. The other sub-branches specify that when the web site changes recording should stop, if a digital receipt is received recording should stop and recording should stop after the receipt of 20 web pages following identification that a transaction is occurring.

It must be stressed that policy data shown in this diagram, in particular, but also in the other diagrams is unique to each user. Not only may a user specify whether or not particular conditions are to be acted on by setting the Yes or No variable accordingly, or by changing the number of pages that are to be recorded for example, but also the structure and arrangement of branches and conditions specified on those branches may be different from user to user. It will be appreciated that while the example policy describes recording of transactions in a web browser environment, a similar policy would control the e-mail environment, omitting the secure connection option, but allowing policy to be defined for recording e-mails on detection of credit card numbers, account codes or other identifiable information within them, or where e-mails are sent to known eCommerce addresses.

The full benefit of the method for identifying a transaction is realised when the method is utilised along with means for recording transmissions between a user of the preferred system and a remote site. This allows a record of all transactions carried out by a user to be kept and maintained automatically. The records may be kept up to date without the need for making paper copies of each transmission received or sent. Thus, a company's record keeping is made considerably easier and more accurate.

Figure 14 illustrates the operation of a module for recording transmissions which comprise a transaction. The module is initiated at step S270.

If the module is implemented as part of a web browser, step S270 is initiated at point A in Figure 3 after the receipt of data or after point C in Figure 3 directly before transmission data to remote site. If the module is implemented as part of an e-mail client step S270 occurs after point A in Figure 5 after an email has been received or after point B in Figure 5 just before an e-mail composed by the user is sent to a recipient. Following step S270, control passes to step S272, in which the test for identifying a transaction, described above with reference to Figure 9, is performed and a determination is made as to whether an eCommerce transaction is occurring or not.

Control then passes to decision step S274 where, if it is determined that no transaction is occurring control passes directly to step S276 where the module exits.

If a transaction is determined to be occurring however control passes to step S278 in which the policy is consulted against one or more of the means of detection, the identity of the sender, the amount of the transaction, or other parameters to determine which prior transmissions, if any, should be stored with the identified transmission, and in how much detail the transmission should be recorded. The policy might, for example, require that a transaction involving a large sum of money be recorded in more detail than a transaction for a small sum. An example of this in operation might be the recording of every web page accessed during the making of a transaction on an online trader's web site for transactions involving large sums of money, but only recording the transmission containing an electronic receipt for transactions for smaller amounts.

As well as determining the amount of data to be stored, the policy file may also determine the nature of the data to be recorded. The entire transmission or web page

may be recorded as a series of snap shots of the transaction, in the same way as web pages are stored in cache memories for example, or alternatively, individual items of data, such as the date, the trader's identity, the amount and so on, may be extracted from the transmission or web page, and stored either on their own or together with the snap shot data.

In this way, memory for storage can be used most effectively to ensure that the most important transactions have sufficient space to be recorded. The amount of transaction data to be recorded may also depend on the trader's identity, geographical location, trading history with the user's company, and the goods and services on offer.

* In Figure 13, the example policy data shows a simple scenario in which the amount of data to record is specified in terms of the number of web pages that are to be retrieved from the pages cached in memory.

The number differs depending on whether a credit card number, an account code or a keyword is identified.

Furthermore, table r shows that with the recognition of different account codes the number of previous web pages to store might be different, reflecting the relative importance of the account.

Extending this simple case to a more sophisticated one may be achieved by providing a higher level of detail in the policy data. Additional branches to the policy data tree could specify company or individual names, or specific keywords relating to goods and/or services; the amount of data to record depending on these keywords and names as well.

Also, the tables might be expanded to refer to the amount of different types of data that should be stored. Data such as the company name, what was being sold, the quantity and so on could be extracted from email text, from the HTML text defining the web page, or from the DOM representation of the web page and stored in the database.

All web pages or information stored in the cache may be retrieved, or alternatively the system may retrieve only pages that have details in common with the page initially identified as being part of a transaction.

Alternatively, a list of all stored messages may be presented to the user for the user to manually select those transmissions which relate to the identified transaction.

Following determination of how much data to record control passed to decision step S280. In step S280 if earlier transmissions, are to be stored, control passes to step S282 where the transmissions stored in the local cache are retrieved. In the case of a web browser, this may be a determined number of prior pages, as described above. Where the transaction was detected in a web browser, policy may also dictate that the cache is searched for prior e-mail messages relating to the transaction, for example sent to or received from the same organisation. This may be determined by matching portions of the browser URL to portions of the e-mail addresses. Similarly, transactions detected in e-mail messages may cause both prior e-mails and prior web pages to be retrieved from the cache. Control then passes to step S284 in which the identified transaction and any retrieved prior transmissions are stored in the system database 42.

In step S280, if earlier transmissions are not required, control passes directly to step S284 where the transmission identified as a transaction is recorded in the system database. At the same time as the transmissions are stored in step S284, related data such as the user identity, the amount and the other party to the transaction may also be recorded in the system database to form a complete record, although this will depend on the instructions of the policy data. Control then passes to S286 and the module exits.

Following on from step S276 after the module exits, the data may be transmitted, following point A in figures 3 and 5, or be processed following on from being received at points C and B in figures 3 and 5 respectively.

Once a transmission has been identified as taking place all transmission between the user and the other party may be recorded until the system detects that the transaction has been completed. Detecting the end point of a transaction and stopping recording may be done in a manner similar to that described above for identifying whether a transaction is taking place. The most simple implementation is to record transmission information until an electronic receipt or shipping order is received. Alternatively, recording of transmissions may caused to stop after a pre-determined number of transmissions between the user and the other party have occurred, or if a certain amount of time has passed since the transaction was identified.

Transmissions may be made simpler if each time the user changes web site the cache is emptied. This keeps the memory required for the cache memory low, as well as reducing the number of previous transmissions that need to be searched if searching techniques are to be employed.

It will be appreciated that the methods described above can also be used to record associated transmissions which occur after a transaction has been detected and recorded. For example, a transaction made using a web browser will typically be followed by a confirmatory e-mail sent from the seller to the buyer.

This e-mail can be detected as forming part of the transaction, since it will contain common characteristics, such as order number, account number, goods description, price etc. It may also be sent from an address similar to the web site address, for example customerservices@ab ! c. com'when the original web site used to make the purchase was abc. com'. A time element is preferably used such that only subsequent transmissions which occur within a given time period are considered as being associated with the original transaction.

In addition to recording transaction information, it may be advantageous to record other information which provides management with the ability to analyse the behaviour of their users, for example to ensure that the organisation is in fact obtaining real productivity benefit from its adoption of electronic commerce. Such information is not limited to the productivity of the user himself, but to the overall process, allowing for example a comparison of web purchasing sites to determine which are the most efficient in terms of the purchase process, and therefore which will be of greatest benefit in reducing purchasing costs. The preferred system provides for this by recording additional information, such as the amount of time a purchase takes, the number of keystrokes and mouse clicks required to complete a purchase, the amount of idle'time while the user waits for pages to download or responses to be received. This information can be recorded with the transaction record in the database, allowing

statistical analysis to be carried out across a range of transactions.

The time taken for a transaction can be determined by associating a timestamp with each of the transmissions received. When it is determined that the transaction is complete, the timestamp associated with the first transmission (which may have been recovered from the cache in step S282) is subtracted from the timestamp associated with the last transmission, and the result, which will be the overall transaction duration, is stored in the database in step S284.

Alternatively, first and last timestamps could be recorded in the database and the transaction duration calculated later. The number of keystrokes and mouse clicks can be determined in a Microsoft Windows based system by using standard Windows hooks'into the operating system. Such techniques are described more fully in the document"Win 32 Hooks"by Kyle Marsh of the Microsoft Developer Network Technology Group, dated 29 July 1993 available on the Microsoft Corporation web site (http://msdn. microsoft. com/library/default. asp? url=/library/en-us/dnmgmt/html/msdnhooks32. asp).

The preferred system maintains counters of the number of keystrokes (using the WHKEYBOARD hook) and mouse clicks (using the WHMOUSE hook) that occur between each received transmission, associates these totals with the received transmission. Keystrokes and mouse clicks which occur while another application has the focus (for example if the user temporarily switches to another application) are ignored. When it is determined that the transaction is complete, the totals of keystrokes and mouse clicks which occurred between the first transmission (which may have been recovered from the cache in step S282) and the last transmission are added together, and the result, which will be the total number of keystrokes and mouse clicks during the overall transaction, is stored in the database in step S284. Similarly, the web site transaction response time can be measured by noting the time at which each outbound transmission request is sent, and then subtracting it from the time the response transmission is received. Aggregating the response times between the start and end of the transaction will give the total time the user spent waiting for the web site.

Similarly the preferred system also counts the user response time, that is the time between a transmission being received, and the time a response is transmitted.

The preferred system also calculates how much of the user response time is spent entering data, and therefore allows the time required for the user to absorb'the incoming transmission (being the difference) to be determined. The time spent entering data is determined by maintaining a stopwatch'. The stopwatch is reset each time a new transmission is received, and is re-started immediately whenever the user enters a keystroke or clicks the mouse. Should the user not enter a keystroke or click the mouse for a pre-determined period of time, for example 5 seconds, the system assumes that the user is now absorbing details of the previous transmission and stops the watch. The watch is also stopped when the keystroke or mouse click causes an outbound transmission to be sent. Aggregating the time spent entering data between the start and end of the transaction will give the total time the user spent entering data on the web site. The aggregated times can be stored in the database at step S284 for future analysis.

The preferred system also provides means for monitoring transactions that are being made and automatically referring the transaction for approval if that is deemed

necessary. This process allows a large company to monitor and control the transactions being made by its employees using a single set of criteria set out in the policy data. The policy data may be referred to each time a transaction is identified in order to determine whether the user is authorised to make that transaction himself or whether he needs to request authorisation from higher up in the company.

The process is illustrated in Figure 15 to which reference should now be made.

The module embodying this process is initiated at step S290. This initiation preferably takes place as soon as all relevant details of the transaction which need to be considered have been determined, and before the transaction is committed. In the case of an e-mail transaction, details such as goods and price are typically contained within a single e-mail and can be considered prior to transmission of that e-mail. In the case of a web browser transaction, the existence of transaction may be detected before all details are known, in which case initiation does not take place until they are. This does not normally present a problem as final commitment does not occur until the very end of the transaction process, well after all relevant details are known. Detection of the transaction and relevant details may be determined in the manner described above with reference to Figure 12.

Referring briefly to figures 3 and 5, it will be seen that step S290 occurs after point C in figure 3 in the case of web browser implementation, or after point A in figure 5 in the case of e-mail client implementation once the required details are known.

Control passes from step S290 to decision step S292 in which the details of the transaction are compared against the policy settings to determine whether or not approval is required. The determination may be based on the identity or the position of the employee making the transaction, the amount of the transaction, or the other party in the transaction. In some instances, approval might always be required, such as if the financial director of a company wishes to review each transaction before it is made.

Figure 16 is an illustration of example policy data that may be used to determine whether or not a transaction requires approval from a third party and also to determine the identity of an appropriate approver who is to be used. In this case, conditions in the policy data stipulate whether approval is required depending on the transaction amount, and the
URL address of the other party to the transaction.

The relevant policy data is set out on the
Transactions Approval branch of the policy data tree.

This branch sub-divides into four sub-branches. The first branch is entitled MaximumUnapprovedTransactionAmount'and defines a threshold amount for transactions. Transactions for amounts over the threshold must be approved by an approver before they are made.

The second sub-branch entitled MaximumUnapprovedMonthlyAmount'defines a maximum amount for transactions that a user may make within a month. In this case, any transaction made by the user which would cause the monthly total to exceed $2, 500 will require approval from a third party, as will further transactions made after that threshold has been reached.

The third branch entitled ExcludedSites'refers to a table containing web site and e-mail addresses of all sites which always require approval from a third party before a transaction may be made. Finally, the last branch entitled Approvers'refers to a table in which the names of possible third party approvers are listed. Along side each name is the maximum transaction amount for which that approver has the authority to approve, and a list of excluded sites for which that approver may not approve a transaction. In the simplest of cases, approvers will be other computer users logged in on the same network as the user making the transaction such as department managers, or supervisors. The approvers will, by nature of their role, be members of the trading company who assume and who have the authority to assume responsibility for the financial transactions the company makes. It is also possible that approvers might be drawn from a group of people who are employed primarily for this role, such as people in the financial department only.

If the conditions on the first three sub-branches of the transaction branch indicate that approval is required an appropriate approver may be found by scanning through the table of approvers until an approver whose transaction limit is equal to or greater than of the proposed transaction and who is not prohibited from approving transactions to the relevant site is found.

It will be appreciated that the example policy data shown in Figure 16 is policy data that is specific to a single computer user, or group of users, in the network. Other users, or groups, may have different settings and a different list of approvers.

It will be appreciated that the conditions to determine an appropriate approver may be introduced by creating new sub-branches of the policy data tree.

The operation of the approvals process could for example be extended to any kind of transmission, not just those comprising an eCommerce transaction. Such operation may be implemented by having the conditions defined or the sub-branches of the policy data specify usernames, addresses or keywords for example that are to be identified in the transmission and acted upon.

Thus, all e-mail transmissions to a particular company or individual may be caused to require approval, or all e-mails containing predetermined information recognised via keyword identification.

If it is determined in step S292 that no approval is required, control passes directly to step S294 at which the module exits. Following step S294 the transmission of the transaction is permitted and the transaction may be proceed. Control returns from step S294 to point C in figure 3 or to point B in figure 5.

However, if in step S292, after consulting the policy settings, it is determined that approval of the transaction is required, control passes to step S296 in which the particulars of the transaction are used to determine an appropriate approver for. the transaction.

The approver may be a company employee logged on at his workstation, or at a workstation with a dedicated approver function such as Operator consoles 44, as shown in Figure 2, or may even be an automated process.

In the case of a large company with a number of departments, it maybe advantageous

to have a group of approvers for each department, each group monitoring the department's accounts. This allows transactions to be rejected before they are made if, for example if the department head decides that he wishes to temporarily suspend purchases, or purchases of a particular nature.

Control passes from step S296 following determination of an appropriate approver to step S298 where an approval request is transmitted to the designated approver via systems approval queue 100.

Following step S298 control passes to decision step S300 where it is determined if a response from the approver has been received. A timer is started the moment a request for approval is submitted. If a response has not been received in step S300 control passes to step S302 where it is determined from the timer whether or not a time out period has elapsed.

Providing the period has not elapsed, control passes from step S302 back to S300 where the system continues to wait for a response from the approver. Thus decision steps S300 and S302 form a loop in which the system waits until a response is received or until time out expires. In decision step S300 once a response is received, control passes to step S304 in which action is taken depending upon whether the transaction was approved or rejected.

If the transaction was approved control passes from step S304 to step S294 at which the module exits and the transmission is allowed to proceed. If however the transmission is not approved then control passes from step S300 to step S306 at which the module exits.

Exiting at step S306 however prevents the transmission of the transaction from taking place and returns the user to point A in figure 3 in the case of web browser implementation or to step S132"compose e-mail in figure 5 in the case of e-mail client implementation.

Also, if in step S302 the'time-out'is deemed to have expired without a response from the approver having been received then control passes directly to step S306 at which the module exits.

The right hand side of Figure 15 shows the steps involved for the approver. The approval process is initiated in step S310, from which control passes to step S312 in which the approver's machine queries the systems approval queue for any new approval requests.

Control then passes to decision step S314. In step S314 if no request is pending control passes back to step S312 where the system queue is polled once again.

These steps are repeated until an approval request is received or until the approver deactivates the approval process.

In step S314 if an approval request is received, control passes to step S316 in which the approval request is downloaded from the systems queue and the approver himself decides whether to approve the request or refuse it. Control then passes to step S318 in which the approver's response is transmitted back to the system approvals queue and from there back to the users work station.

Control passes from step S318 back to step S312 in which the system approvals queue is queried for new approval requests. It will be appreciated that the approvals process could be entirely automated in some circumstances. For example, transactions may be automatically rejected if the company does not have sufficient funds, if they would cause budget amounts to be exceeded, or if they are simply over a maximum amount. Such automation could alternatively be provided as part of the user process, such that an approvals request is not even made.

In determining whether to approve a given transaction, the approver should ideally be able to have a complete view of it, for example such that he/she can see exactly what is being purchased, rather than simply summary information such as total price and supplier. The preferred system provides for this by combining the features of recording transmissions described above, with the approvals feature. The approvals request submitted at Step S298 is supplemented with a reference to the location in the database of the transaction information stored in Step S284. The approver receives the location details in
Step S316 and the system retrieves the transmissions which constitute the transaction from the database, suitably displaying them such that the approver can consider them in making his/her determination of approval. Operation then continues normally at step S318. Clearly it is important that the recording step S284 takes place before the approval request is made at step S298, otherwise the recorded information will not yet be available. Since at step S284 the transaction will have been identified, but not yet completed (since it has not yet been approved), it is necessary for the database record made in step S284 to contain a flag which identifies the transaction as"pending". This flag can then be updated in Step S316 to show that the transaction has been approved or denied, or alternatively, if approval is denied the database record can be deleted since the transaction did not take place.

Security
The preferred system provides means to assign an appropriate security rating to the transmission in dependence on the identified nature of the data being transmitted. The security rating assigned may be set by the user of the system using the policy data to reflect his needs.

The simplest implementation of the policy data in this case is a list containing in a first column possible types of data, such as employee passwords, employer passwords, credit card numbers, banking details and so on, and containing in a second column, the desired encryption strength (in key bits for example) deemed appropriate for each data type. It will be appreciated that other ways of assigning security levels in dependence on the determined nature of the data may also be employed within the scope of the invention.

Figure 17 shows an example illustration of policy data defining appropriate encryption strengths for various types of data. The policy data takes the form of a number of key-value pairs arranged on separate branches of the policy data tree. The key specifies the type of data that is being transmitted such as passwords, credit card numbers, submitted key words and a general key for any other submitted data. The values that correspond to these keys are the-encryption strength in bits that is deemed appropriate for the transmission of the data specified in the key. The key value pairs are arranged on several branches of the
RequiredEncryptionLevel branch of the

TransmittedDataSecurity branch of the policy data tree.

Thus, in the example, it may be seen that passwords have a desired encryption strength of 40 bits, company credit card numbers and personal credit card numbers both have a desired encryption strength of 128 bits, submitted key words have a desired encryption strength of 40 bits and other submitted data requires no encryption.

The SubmittedKeywords branch refers to particular words or strings or text that have been designated as sensitive and requiring some form of encryption. These may be usernames, address information, financial information or pre-selected words such as 'Confidential'or Secret'. The submitted keywords may be detected by referring to a table or file in which they are stored.

Furthermore, each branch of the policy data may, instead of giving a general encryption strength, refer to a table in which different passwords or credit card numbers, for example, are listed along with corresponding encryption strengths specific to each password or number.

Once a security rating has been assigned, the plug-in module interrogates either the web browser to determine the security of the link that has been established by the web browser with the web server for transmission of that information, or in the case of an e-mail transmission, the encryption settings that the user or application have determined will be applied to the message. Typically, this will be the cryptographic strength of the encryption algorithm used to encode the data for transmission. Such transmission details are received by the web browser as part of the electronic handshake'from the web service provider.

A secure link is usually indicated in a Browser window by the presence of a closed padlock icon in the bottom right corner. A user can click on the icon to interrogate the level of security that has been provided by the handshake. In doing so they may receive a notification of the form ASSL secured. (128 bit). The first part of the notification describes the type of the encryption used while the second part describes the encryption strength. The plug-in module is implemented to automatically obtain this data from the browser so that it may be used to determine whether or not the security level is adequate for a proposed transmission. Similarly, in the case of an e-mail message, the plug-in module determines the encryption settings that the user or application has specified are to be used prior to transmission of the message.

The module compares the specified encryption strength with that of the link or message and depending on the result of the comparison performs one of the following actions: a) If the security of the link is appropriate for the nature of the information being transmitted, the module allows the information to be transmitted; b) If the security of the link is more than that required for the transmission of the information then, the module may either allow the information to be transmitted at that level of security, automatically renegotiate with the web server and the web browser a new appropriate level of security and transmit the information at that level, or prompt the user that the present level of security is unnecessary and invite them to take action. c) If the security of the link is not sufficient for the nature of the information being transmitted then, the module may either prevent the transmission from taking place and warn the user, automatically renegotiate with the web server and the web browser a new appropriate level of security and then transmit the information at that level, or in the case of an e-mail automatically increase the encryption strength setting, or prompt the user that the

present level of security is not sufficient and invite them to confirm that they still wish for transmission to take place.

It will be appreciated that the plug-in module could be configured to respond to a difference in the determined desirable level of security and that being provided in a number of ways and that the actions outlined above are only illustrative.

Further actions that may be taken by the system might include requesting a different web page to be down loaded to the user's machine or modifying the submitted field data such that sensitive information is not transmitted.

The operation of a browser or e-mail plug in module for monitoring the data being transmitted by a user of the preferred system is illustrated in Figure 18, to which reference should be made. The module begins operation at step S320 at point C in Figure 3, just prior to the transmission of the data to a web server or at point B in Figure 5 just prior to transmission of an e-mail. Control then passes to step S322, in which the module parses the data about to be transmitted and searches for credit card numbers. A possible method for doing this was described earlier with reference to Figure 8. If no credit card number is detected in the data then control passes to step S314 in which the module searches for passwords in the data about to be transmitted. A method for doing this has been described above, with reference to Figure 6. If no password is found in the data, then control passes to step S316 in which the module searches for company account or purchase codes in the data. Recognising account or purchase codes may be achieved by storing the codes of the company in a file and attempting to match these codes with any strings of digits found in the outgoing data. If no account code is found then control passes to step S318, where the module searches for indications of other sensitive data in the data to be transmitted. Such indications will need to be defined in advance preferably in a separate file used for detection, and will be dependent on the requirements of the users of the preferred system.

Examples might be specified keywords relating to projects the company is undertaking, project titles themselves, personal details address of the recipient of the data, or of the sender, or even the word confidential'or private'included in the data itself.

If no such indications are found that the data is sensitive and requires stronger protection before it is transmitted, then the transmission is allowed to proceed at the current level of encryption. This may mean that transmission takes place without any encryption being applied.

If however any of the checks in steps S322 to S328 reveal data that is deemed sensitive then control passes to step S332 in which a security rating is assigned to the detected data. This is achieved by comparing the detected data with pre-determined entries in the policy data.

Each entry on the branch of the policy data has a pre-assigned level of encryption which is the minimum level that may be used for transmission of that data.

The entries in the table and the assigned level of encryption, as with all the policy settings, are decided by the company using the preferred system in dependence on their requirements. Assigning a security rating is then simply a matter of looking up password, credit card number or other data in the policy data and reading off the

corresponding rating. References to tables on a sub branch of the policy data may be used to allocate different encryption strengths to different passwords, credit card numbers and so on.

Once the appropriate security level has been determined in step S332, control passes to step S334 in which the module determines the level of encryption that has been negotiated with the web server to which the data is being transmitted, or is to be used by the e-mail application prior to transmitting the message.

This may be achieved by interrogating the web browser or e-mail application, or by setting encryption strength variables at the time the link is established or e-mail encryption requirements determined, both of which will occur prior to transmission.

Control then passes to decision step S336 in which the desired level of security, i. e. the encryption strength, is compared with that determined in the previous step. If the desired level of encryption is lower than or equal to that determined in step S334, then there is deemed to be enough protection for the data to be transmitted and control passes to end step S330, where the module exits. Following step S330, control returns to either point C in Figure 3 or point
B in Figure 5 depending on whether the module is implemented in a web browser or an e-mail client.

Transmission of the data may then proceed in the usual way.

If however in step S336, the desired level of encryption is greater than that currently set, then the module does not allow transmission to go ahead until the proper level of encryption has been negotiated.

Control passes to decision step S338 in which the module determines if it is able to increase the encryption strength, and if so passes control to step S340 where a new stronger encrypted link is negotiated, or in the case of an e-mail a higher encryption strength set.

The highest level of encryption that is available depends on the software being used by both the web server and the web browser, or in the case of an e-mail by the sending and receiving e-mail applications.

There may then be cases in which the appropriate level of encryption is not available by one party and transmission of the data is never allowed to proceed.

Furthermore, certain types of data may be given a security rating that indicates that no level of encryption will ever be high enough to protect it, ie: preventing that data from ever being transmitted.

Having attempted to re-established the link, or changed the e-mail encryption settings, to a higher encryption strength, control passes back to step S334 to ensure the link or settings are now at a suitable strength. If the appropriate encryption level cannot be renegotiated in step S338 or an attempt to increase the encryption strength at step S340 has not been successful, then it is deemed unsafe to transmit the data, and control passes to end step S342 where the module exits. Following exit at step S342, control returns to point A in Figure 3, or to step S132 in
Figure 5 compose e-mail', for the user to reconsider and edit or abort the transmission.

A suitable message may also be displayed to the user explaining the reasons for the transmission being prevented.

The preferred system therefore provides a way of ensuring that transmission of data is as secure as possible. It precludes the possibility of a user forgetting to secure a transmission, and negotiates a more appropriate level of security if that being used is not sufficient.

Web Browsers may provide similar facilities to warn the user that user entered data is about to be sent over an insecure link or provide facilities to encrypt all messages by default. The preferred system however provides the ability to examine the content of data to be transmitted to determine its security requirement, to allow or prevent transmission based on such security requirements, and on the determined security level of the link (encryption strength). It will be appreciated that the preferred system provides a significantly improved system for secure transmission which reduces the possibility of human error.

Monitoring Out-bound E-mails for sensitive information
In addition to the problem of sensitive data being intercepted by a third party between sender and recipient, organisations are at considerable risk from the deliberate release of sensitive information by their users. For example, the practice of "electronically"stealing copies of confidential documents, such as customer lists, before leaving the employ of an organisation is easily achieved, virtually untraceable, and consequently widespread. All that is required is for the user to send the document to his own private email address for later retrieval The document need not even be sent via the organisation's own e-mail system, since an internet mail service, such as"Hotmail"may be used, making tracing the unauthorised leak'virtually impossible by current means.

In addition to providing means to ensure that an appropriate level of encryption is applied to messages, the preferred system allows messages identified as potentially sensitive to be automatically redirected or copied to another destination without the user's knowledge. In determining whether to re-direct such messages the preferred system takes into account a number of factors including the identity of the sender, the identity of the intended recipient, the nature of the intended recipients'address, the nature of the message content, the nature and existence of any attachments to the message, the means by which the message is intended to be transmitted, and whether or not the message, and/or any attachments, are encrypted.

The nature of the message can be determined by scanning it for one or more keywords, or combinations of keywords, or by using standard natural language query'techniques. The nature of the intended recipients'address may be determined by reference to a list of known internet mail service domains. For example"hotmail. com","yahoo. com"and"aol. com" are all predominantly used by individuals, not corporations. Similarly, the address may be examined for similarities to the sender's name, for example an email known to be sent by Fred Smith to the address "smith900@aol. com" could be considered suspicious by the inclusion of both"smith"and"aol. com"in the recipient address. Further examination of the message may support the likelihood of it being an unauthorised release of confidential data, for example if the message consists only of file attachments with the message text and subject blank, an important clue since the sender may be less likely to type text only he will read. The means by which the message is being transmitted is an important factor,

for example a transmission sent using an internet mail service such as hotmail may be considered much more suspect than one sent through the usual corporate e-mail system.

Indeed the uploading'of files to an internet mail service is potentially so suspicious that the preferred embodiment provides means to prohibit the uploading of files to such services altogether.

When re-directing mail, the preferred system adds additional text to the beginning of the mail, for example ----Redirected Mail----\5, together with the addresses of the originally intended recipients, such that the new recipient can determine that it was redirected to him/her, and to whom it was originally sent.

If the forwarded message is to be encrypted, the preferred system may re-direct the message encrypted or unencrypted to the third party. Preferrably, the sender's encryption key is transmitted with the message and means are provided for the third party to, unencrypt the message, if it has already been encrypted, and encrypt the message with the original sender's encryption key for transmission.

The preferred system also identifies incoming mail which has been re-directed (ie sent to a user who is not the originally intended recipient), by searching for the 11----Redirected Mail----11 text. Such mail can be flagged for attention by the new recipient for example by using special icons, or by putting up a message box to notify him/her. Means may also be provided to allow the new recipient to easily approve' the message and have it sent to the originally intended recipient (s). This can be achieved, for example by providing an"Approve"button. If this button is pressed, then the preferred system creates a new message in the same manner as if the user had pressed the normal"Forward"button. However, instead of adding text to the message to note that it has been forwarded, in the case of the"Approve"button, the system extracts the originally intended recipient list from the message, and then strips out the redirection details to leave the message in its original state. The destination fields"To","Cc"and"Bcc"are then automatically filled with the extracted original recipient addresses, and the"From"field (which exists for every message even if it is not normally displayed) is filled with the original sender's name/address. The date/time field can also be adjusted to the date/time of the original message. The message is then sent, either automatically, or when the user presses the"Send"button. In this way, with the press of just one or two buttons, the re-directed mail can be approved and sent, and when delivered, will appear to have come from the original recipient as if redirection had never taken place.

Sample policy data for controlling the operation of a plug-in module implemented to re-direct mail is shown in Figure 19 and a schematic illustration of the operation of such a plug-in module is shown in Figure 20. Figure 19 is a policy data tree having a number of branches which correspond to decision steps in Figure 20.

The plug-in module is initiated at step S350 which corresponds to point B in the illustration of the email client operation in Figure 5. Once initiated, the plug-in module steps through six steps determining different particulars of the outbound e-mail message.

Firstly, in step S351 the identity of the person sending the e-mail is checked against entries in a predetermined list of names or addresses. E-mails from users on this list

are deemed to have the authority to transmit e-mails directly to the intended recipient's regardless of the contents of the message and regardless of the recipient. Anybody, not included on the list may have their e-mail re-directed or not depending on its content. Thus, in decision step S351, if the user's name or address is found on the list, then control passes to step S364 where the e-mail is allowed to be transmitted without further interaction.

If however, the user is not on the list, control passes to step S253 for further checks. In step S352 the recipient of the outbound e-mail message is checked against look-up table s, specified on the Recipients branch of the policy data shown in Figure 19. In the following decision step S354, the text comprising the e-mail message, and any attachments attached to the email message, is compared with entries in a look-up table t. Table t is referred to on the Keywords branch of the policy data and contains words that indicate the nature of the e-mail message might be sensitive to the company. In the next step S356, the e-mail message is checked to see whether or not it is to be encrypted.

It will be remembered that encryption does not occur until the moment the e-mail is transmitted, so at this stage the e-mail will only be flagged for encryption.

In the next decision step S358, it is determined whether or not the e-mail message contains attachments, and in the following decision step S360 whether the email message contains text to accompany the attachments, that is whether the body text of the email message is blank.

In any of the decision steps S352, S354 or S362 where a look-up table is consulted, a match between an entry in the look-up table and an entry in the e-mail indicates that the e-mail should be redirected to a third party for checking before being sent out of the company. For example, if in step S354, the e-mail is found to contain the words confidential' or secret', that will be enough to warrant the e-mail being checked by a third party before it is delivered to its intended recipient. This ensures that sensitive information is not sent out of the company without the company being aware. Control flows therefore from these steps to step S364 where text indicating that the email has been redirected is added to the message, and the recipient address is changed to that of the verifying party to whom the re-directed message should be transmitted. Control then passes to step S366 where the e-mail is transmitted. If the e-mail message has been marked for re-direction, in step S336 it will of course be transmitted to the verifying party for review rather than the original recipient of the message.

In decision step S356 if encryption of the message is detected then that is deemed enough to warrant re-directing the message to a third party for review. Accordingly, if the message is to be encrypted, control passes from step S356 to step S364 where the message is modified for re-direction. In the case of a message flagged for encryption, the encryption flag is preferably cleared, such that the message is redirected without it being encrypted, allowing the new recipient to read it. The re-direction text, added to the message, preferably also includes the encryption key (which is generally the intended recipient's public key, and therefore not sensitive) such that the message can be re-encrypted prior to transmission.

Alternatively, the intended recipient's entire digital certificate could be included with the re-directed message. The public key, or certificate, as the case may be, would then be removed by the automated approval process described above.

If in step S358 the e-mail does not contain attachments then the e-mail is deemed to be unlikely to contain any documents or files of potentially sensitive information, and the e-mail is thus allowed to be transmitted without any further intervention in step S364. If the e-mail does contain attachments, and in step S360, the e-mail is determined not to contain any text entered into the body or the subject of the message, then the message is recognised as one that is likely being sent to a different account of the sender.

The e-mail is then forwarded in step S362 and S364 to a third party for checking.

Figure 21 shows the operation of the plug-in module to block the up-load of information from the company's computer system to an external site. A simple two stage check is used, comprising a check of the external site address in S372, following initiation at step S370, and a check of sensitive keywords in the information being uploaded in step S374. Providing the external site address is not found to be a prohibited site in step S372, and no sensitive keywords are detected in step S374, then up-load is allowed to proceed in step S376. Otherwise, the up-load is blocked in step S378.

The policy data for controlling the operation of the plug-in module for selectively blocking upload of information is straightforward, and is shown at the bottom of Figure 19.

In this way, outbound transmissions containing sensitive information that are being transmitted for reasons that are not in the company's interests can be verified before transmission, and transmission can be prevented if necessary.

Managing Forwarding of E-mails
E-mail applications provide means to "Forward"incoming mail to one or more users. The user typically clicks a"Forward"button, which causes a copy of the incoming mail to be automatically entered into the mail composition window, as if the user had keyed it himself. All that is then required is for the user to enter the names of the intended recipients of the forwarded mail and to click the "Send"button. This is a useful feature allowing a user to easily share the contents of a received e-mail with others.

A problem can arise however in the case of mail containing sensitive information, particularly if the sensitive nature of the mail is not immediately apparent, for example if the sensitive information appears lower down in the mail, such that the user is required to scroll down the viewing window in order to read it. Users frequently forward e-mails after scanning only the first few lines, or in some cases only the subject line, particularly when they have large amounts of e-mails to process. As a consequence, sensitive information is often unintentionally disclosed, both within the organisation, and more dangerously, outside it. There have been several high profile cases where considerable sums have been lost as a result.

The preferred system therefore provides means of controlling the forwarding of e-mails. Such controls include providing warnings to the user before a forwarded e-mail is transmitted and preventing the email from being forwarded altogether. Means to approve the e-mail prior to transmission, or to redirect it to another user, as described above could also be provided.

Preferably, forwarding occurs in accordance with the content of the e-mail, and the addresses of the recipients to whom it has already been sent. For example, the sensitive nature of the e-mail can be determined by a number of methods including

scanning it for keywords such as confidential", or by checking if the sensitivity attribute has been set to "Personal","Private"or"Confidential". Means for the original composer of the message to mark is as unsuitable for future forwarding can also be provided by inserting pre-defined keystrings, such as " < NOFORWARD > " (preventing any forwarding), or " < NOFORWARDEXTERNAL > " (preventing forwarding outside the organisation). Such means could also be provided in the form of an additional attribute to the message.

In addition to content based factors, the preferred system queries the list of previous recipients of the message. If the e-mail has already been sent out of the organisation by the original composer, then it may for example be considered safe to allow it to be further forwarded externally.

Similarly, if the original e-mail was only sent to a single recipient, then it may be determined that the original composer did not intend it to be widely circulated and an appropriate warning could be issued.

The course of action in response to the factors described can be determined in accordance with policy.

The fact that an e-mail that is about to be transmitted is a forwarded e-mail can be readily determined by scanning the e-mail for keystrings such as -----Original Message-----\8 which is automatically added at the beginning of the original mail by the E-Mail program. Similarly, the list of previous recipients can be determined by scanning for the keystrings"To :"and"Cc :"which follow the original message string. The list of recipients is found immediately after these keystrings. Internal and external recipients can be readily distinguished by reference to the domain name (if any). For example, a recipient name shown as"Fred Smith"is typically internal, whereas"fsmith@xyz. com" is typically external.

Policy data for instructing the operation of a plug-in module implemented to control forwarding of e-mail messages is shown in Figure 22, and the operation of such a module in Figure 23.

The policy data tree contains a number of sub-branches specifying parameters against which command values can be set. For example, the first subbranch"PreventAll"when set to YES'instructs the module to prevent all e-mails from being forwarded. The next sub-branch WarnAll when set to YES, requires the module to give a warning to the e-mail client user whenever an e-mail is about to forwarded. The next two sub-branches PreventExternal and WarnExternal contain corresponding parameters for external e-mails only and allow the user of the e-mail client to distinguish between rules affecting forwarding of e-mails within the company and forwarding of e-mails to people outside the company. The"PreventKeywords"branch specifies a look-up table in which keywords indicative of sensitive information are stored. Such keywords may be predefined key strings such as < NOFORWARD > or < NOFORWARDEXTERNAL > , or one or more pre-determined words.

The e-mail is scanned before transmission and if such a keyword is found in the text of the e-mail or in any attachments of the e-mail, the e-mail will not be allowed to be forwarded. The last two sub-branches PreventIfNotSentExternally when sent to YES will inhibit the transmission of the forwarded e-mail outside of the company if it has not been transmitted outside of the

company before. In practice the forwarded e-mail may be transmitted to all of the recipients internal to the company, with the external recipients simply being deleted from the recipient list or alternatively, before transmission, the user may be required to modify the address list such that it does not contain external recipients.

Finally, the parameter set on the PreventIfSingleRecipient branch when sent to YES prevents forwarding of any e-mail messages if the original recipient of the message was a single person.

The operation of the plug-in module is illustrated in Figure 23. The plug-in module is initiated at step S380, again at point B in Figure 5.

In decision step S382, the e-mail is given a preliminary scan to see whether it contains the keystring"----Original message----", since this key string is automatically added at the beginning of the original mail by the e-mail program when generating a message for forwarding. If the e-mail message does not contain this keystring, then it may be deduced that the e-mail message is an original message and is not being forwarded and the message may be transmitted in step S384. If however in step S382 the message is found to contain the key string"----Original message----", then the e-mail message is clearly a forwarded message, and the module takes further steps to determine whether or not to allow the forwarded message to be transmitted. Control then flows to step S386 in which the recipients of the forwarded message are checked to see if any are external to the on-line company. If there is an external recipient, then in step S388, the plug-in module scans the e-mail message to see whether the e-mail has been forwarded to a recipient outside of the company before. If it has not then the e-mail message is prevented from being forwarded in step S390 and the user of the e-mail client is notified. However, if the e-mail message has been sent out of the company before, then a warning is issued to the user in step S392, following which the e-mail message may either be transmitted by the user or may be returned to the user for him to revise the intended recipients.

If in step S386 the forwarded message is not to be sent to an address outside of the company, then control passes to step S394, in which it is determined whether the user was the only recipient of the original message. If he was, then it may be the case that the original composer of the message did not intend for it to be transmitted to a wide audience. Accordingly, control flows to step S390 where the transmission of the forwarded e-mail message is blocked. This is in accordance with the policy data shown in Figure 22, which specifies taking such action. Alternatively, a warning may be issued to the user attempting to forward the message.

The last check made is in decision step S396 in which the contents of the message and any attachments attached to it are compared with entries in a keywords table. If any matches between entries in the e-mail and those in the table are found then the message is considered to contain sensitive information and is not forwarded. The module then ends at step S390. If no sensitive keywords are found then the email is allowed to be forwarded in step S384.

Managing Signing of Out-bound Transmissions

The ability to use a Digital Certificate to sign a message is clearly valuable to the recipient of the message in establishing the identity of the sender, and to both parties in ensuring the message is not tampered with. The sender of the message should however be aware that a digitally signed message potentially constitutes a binding

contract, which cannot be denied or revoked once sent. It is therefore imperative that care is used when digitally signing a document, just as care should be exercised when appending a written signature to a paper document. E-mail applications, such as Microsoft Corporation's"Outlook"provide means to digitally sign messages automatically, and while this may be valuable in confirming the identity of the sender to the recipient, for the reasons described above, it is also potentially dangerous, requiring the user to take extreme care with the message content.

The preferred system provides means to control the signing of outgoing messages, according to policy data.

Sample policy data is shown in Figure 24. Such controls include: enforcing that a message be signed; suggesting to the user that a message be signed; suggesting to the user that a message should NOT be signed ; and preventing a message being signed.

In determining which course of action to take, the preferred system takes into account a number of factors, including the nature of the message content (including any attachments), the identity of the intended recipient and/or his organisation, the identity of the sender, the nature of the digital certificate being used (if the message has already been flagged for signature), and the nature of the digital certificate (s) available to sign the message.

The nature of the message can be determined by scanning it for one or more keywords, or combinations of keywords, or by using standard natural language query'techniques. Similarly, the nature of the intended or available digital certificates can be determined by reference to the issuer and type of certificate.

Figure 25 illustrates the operation of a plug-in module for ensuring that an e-mail is appropriately digitally signed or not. The module is initiated in the step S400, at point B in the operation of the email client illustrated in Figure 5. Control then passes to decision step S402 in which the outbound e mail is scanned to see whether it has been marked for signature already. Actual signing'of the message will not occur until directly before transmission. If it is not marked for signature control passes to S404 where the module consults a Recipients look-up table (table f) to determine whether the Recipient of the outbound e-mail has been identified as one to whom e-mails should always be digitally signed. If the Recipient is in table f, then control passes to step S406 where the user of the e-mail client is notified that the e-mail will not be sent unless it is digitally signed.

Alternatively, the plug-in module may automatically digitally sign the e-mail using the e-mail author's digital certificate.

If in step S404, the recipient of the outbound email is not found in the look-up table, then control passes to decision step S408 where the KeywordsTable on the EnforceSigning branch of the policy tree is then consulted. Should any of the keywords in table g be found in the text of the e-mail or in any of the attachments of the e-mail, digitally signing of the email will be required, and control will pass to step S406 as before. It will be appreciated that decision steps S404 and S406 correspond to look-up commands for consulting look-up Recipients and Keywords tables on the EnforceSigning branch of the policy data.

Such Keywords may be predetermined words like 5Confidential","Secret","Contract", "Quotation","Order"and so on as illustrated in
Figure 24.

If the recipients of the e-mail are not to be found in table f, and the e-mail does not contain
Keywords specified in table g, then control passes to decision step S410, corresponding to a look-up command on the SuggestSigning branch of the sample policy data.

In decision step S410 the recipient's address is checked against those in the look-up table h to determine whether signing of the e-mail is advised. If the recipient's name is found in table h, then control passes to step S412, where the user of the e-mail client is notified of the desirability to digitally sign the outbound e-mail message. However, the user of the e-mail client is not required to digitally sign the e-mail message and the e-mail may therefore be transmitted without signature if the user so chooses.

Following decision step S410, if the recipient's name is not found in table h, control passes to decision step S414, where as before, the e-mail text is searched for a number of keywords which might indicate that it contains sensitive data and requires a digital signature. Depending on whether the e-mail contains such sensitive keywords, the user of the e-mail client is either notified in step S412 of the desirability to digitally sign the message, or alternatively, the email message is transmitted without signature in step S416.

If in step S402 following initiation of the plugin module, the e-mail is found to have been marked for signature then control passes to decision step S418. In decision step S418 the plug-in module consults look-up table m in the DenySigning branch specified under the
DenySigning branch of the policy data. Table m is specified on the CertificatesUsed branch under the
DenySigning branch, and specifies the issuer, type, certificate number or signing key of digital certificates that are deemed of interest. Should the digital certificate or signing key that is to be used to sign the outbound e-mail be found in table m, then further checks as to Recipient and the nature of the outbound e-mail will be made to determine whether it is appropriate to sign the message or not. Control passes to step S420, where the recipient of the outbound email is checked against Recipient table n and then to decision step S422 where the text of the e-mail and any attachments are scanned for various keywords. If in either of decision steps S420 or S422, the recipient or any text in the message match that defined in the lookup tables control passes to step S424 where transmission of the e-mail is blocked. The user of the e-mail client may then be returned to the e-mail text entry stage, and he may be required to re-transmit the message without digitally signing it.

If in either of steps S418 or S422 the certificate or signing key is not found to be one of interest, and the text of the e-mail is found not to contain any sensitive words, control passes to step S426 which corresponds to the first sub-branch on the SuggestNotSigning branch of the policy data tree. As for the DenySigning branch of the policy data tree, the three decision steps S426, S428 and S430, correspond to the look-up commands for checking the digital certificate or signing key used with the e-mail, the recipient of the outbound e-mail and the text of the outbound e-mail against predetermined sensitive entries in look-up tables j, k and 1 respectively. If in step S426

the certificate used to sign the outbound e-mail is found to be one of interest, and in either of steps S428 or step S430, the recipient or the text of the outbound e-mail is found to match entries in the specified look-up tables, control will flow to step S432 in which the user of the e-mail client will be notified of the desirability of not digitally signing the outbound e-mail message. The user however may still be free to send the signed e-mail message if he so wishes.

If in either of decision steps S426, S428 and S430 no match is found then the. e-mail is sent normally in step S416.

Instant Messaging and Telephony Applications
In addition to browser and email activity, additional applications such as Instant Messaging (also known as chat') and digital telephony applications such as"Voice Over IP") are now becoming popular in business situations. Instant Messaging standards are defined in RFC's 2778 and 2779 and by the IETF SIMPLE working group. Voice Over IP standards are defined in
ITU-T Recommendation H. 323 (1998). Many aspects of the present invention can be applied to the data transmitted and received by such applications.

Instant Messaging is conceptually similar to a series of sent and received emails, except that the conversation'is carried out live'with both parties present throughout. For the purposes of the present invention however the procedures are identical.

Figure 5 in the drawings can represent Instant
Messaging by replacing the word"E-mail"in steps S122, S124, S132 and S134 with the word"Message".

The"E-mail Server"description 95 is replaced with "Message Relay". The preferred embodiment is arranged so as to intercept at points A and B as before, by providing a plug-in to the Internet
Messaging application, or by developing an Instant
Messaging application which contains the plug-in functionality. Alternatively, it will be appreciated that the interception could occur at the protocol level, intercepting network packets before they leave the user machine, or as they arrive at the user machine, or at some intermediate point on the network.

Voice Over Internet Protocol (VOIP) is conceptually similar to Instant Messaging, except that the message content consists of digitised speech, which is encoded and transmitted immediately. Message content analysis is impractical, however means to record the message and to place controls at the'call' level are viable and are implemented in a similar manner, either as a plug-in to the voice messaging application, or at the network protocol level, either within the user machine, or at some intermediate point on the network.

Although the implementation of the preferred system has been described with reference to plug-in-modules for existing applications, the invention may be implemented by providing web browsers, e-mail clients, instant messaging applications or Voice Over IP applications in which the functionality of the plug-in modules described here is already coded from the outset.

Espacenet

Claims: JP2004513460 (A) — 2004-04-30

AN INFORMATION MANAGEMENT SYSTEM

Claims not available for JP2004513460 (A) JP2004513460 (A)
Claims of corresponding document: WO0239331 (A2)

A high quality text as facsimile in your desired language may be available amongst the following family members:

CA2428238 (A1) DK1378847 (T3) EP1360623 (B1) ES2299667 (T3) US2005203855 (A1) WO0239331 (A2) DK1360623 (T3) DK1365340 (T3) DK1376435 (T3) DK1376436 (T3) ES2299521 (T3) ES2299664 (T3) ES2299665 (T3) ES2299666 (T3) US2005204172 (A1) US2005216771 (A1)

- Original claims
- Claims tree

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Claims

1. An information management system comprising: a plurality of workstations adapted for connection to a computer network, each workstation having a memory; a data repository arranged to receive data from each of said workstations; an application stored in said memory of each workstation for transmitting outbound data to said network and receiving inbound data from said network; policy data containing rules defining relevant data which is to be stored in said data repository; and an analyser, said analyser being operable in conjunction with said policy data to monitor at least one of said outbound data and said inbound data, to identify in at least one of said outbound data and said inbound data, relevant data that is to be stored in said data repository in accordance with said rules in said policy data, and to cause said relevant data to be stored in said data repository.

2. The system of claim 1 wherein said relevant data that is to be stored in said data repository is encrypted prior to it being transmitted to said data repository.

3. The system of claim 1 wherein said relevant data that is stored in said data repository is encrypted.

4. The system of claim 1 wherein said computer network, to which said one or more workstations are adapted for connection, is the Internet.

5. The system of claim 4 wherein said analyser is operable to identify, as relevant data, at least one of usernames and passwords used to identify a user, and usernames and passwords used to access web pages on the
Internet, and the URL address of the web page at which those usernames and passwords are used, said identified usernames, passwords and said identified URLs being stored in said data repository.

6. The system of claim 5 wherein said analyser is operable to identify usernames and passwords from the field names of data contained in at least one of said outbound data and said inbound data.

7. The system of claim 5 wherein a representation of the input fields of a web page is stored in said memory of said one or more workstations, and wherein said analyser is operable to identify usernames and passwords from said representation.

8. The system of claim 5 wherein said analyser is operable to identify usernames-or passwords from the field types of data contained in said outbound or said inbound data.

9. The system of claim 4 wherein said analyser is operable to identify, as relevant data, digital certificates contained in at least one of said outbound or said inbound data or used to digitally sign signed data in said inbound data or said outbound data, or sufficient descriptive data to identify such digital certificates, said digital certificates and/or said descriptive data being stored in said data repository.

10. The system of claim 9 wherein said analyser is operable to identify one or more of the following data as relevant data: whether or not said digital certificate has been revoked; the identity of the holder of said digital certificate; the amount of any eCommerce transaction being made that is related to said digital certificate; the goods or services being sold in any eCommerce transaction being made with said digital certificate; the date of receipt of said digital certificate ; and wherein said identified data is stored with said digital certificate in said data repository.

11. The system of claim 4 wherein the analyser is operable to identify when an eCommerce transaction is occurring and if an eCommerce transaction is identified as occurring, to identify in said outbound or said inbound data one or more of the following data as relevant data: the URL address or e-mail address of the remote location to which outbound data is being transmitted or inbound data is being received; the web pages accessed by a user of said one or more workstations during the transaction; the amount of the transaction; the goods or services being traded in the transaction; the date of the transaction; and wherein said relevant data is stored in said data repository.

12. The system of claim 1 wherein said analyser is located on each of said one or more workstations.

13. The system of claim 1 wherein said application is a web browser.

14. The system of claim 13 wherein said analyser is a plug-in module of said web browser.

15. The system of claim 14 wherein said web browser is Microsoft's Internet Explorer and said analyser is a Browser Helper Object.

16. The system of claim 1 wherein said application is an e-mail client.

17. The system of claim 16 wherein said analyser is a plug-in module of said e-mail client.

18. The system of claim 17 wherein said e-mail client is Microsoft's Outlook e-mail client and said analyser is a Microsoft Exchange client extension.

19. The system of claim 1 wherein said application is an Instant messaging application.

20. The system of claim 19 wherein said analyser is a plug-in of said Instant messaging application.

21. The system of claim 1 wherein said application is a Voice Messaging application.

22. The system of claim 21 wherein said analyser is a plug-in of said Voice messaging application.

23. The system of claim 1 wherein said network includes a server and said analyser is located at a point on said network intermediate said one or more workstations and said server, or said analyser is located at said server.

24. The system of claim 1 further comprising a supervisor workstation, said supervisor workstation having access to said data repository and being operable to view said relevant data stored in said data repository.

25. The system of claim 24 wherein said policy data is accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

26. The system of claim 1 wherein a workstation of said plurality of workstations has access to said data repository and is operable to view said relevant data stored in said data repository.

27. The system of claim 1 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

28. An information management system comprising: a plurality of workstations adapted for connection to a computer network, each workstation having a memory; storage means for storing data received from each of said workstations; application means, stored in said memory of each workstation, for transmitting outbound data to said network and receiving inbound data from said network; policy storage means for providing policy data containing rules defining relevant data which is to be stored in said storage means; and analysing means, operable in conjunction with said policy means, for monitoring at least one of said outbound data and said inbound data, identifying in at least one of said outbound data and said inbound data, relevant data that is to be stored in said storage means in accordance with said rules in said policy means, and causing said relevant data to be stored in said storage means.

29. The system of claim 28 wherein said relevant data that is to be stored in said storage means is encrypted prior to it being transmitted to said storage means.

30. The system of claim 28 wherein said relevant data that is stored in said storage means is encrypted.

31. The system of claim 28 wherein said computer network, to which said one or more workstations are adapted for connection, is the Internet.

32. The system of claim 31 wherein said analysing means is operable to identify, as relevant data, at least one of usernames and passwords used to identify a user, and usernames and passwords used to access web pages on the Internet, and the URL address of the web page at which those usernames and passwords are used, said identified usernames, passwords and said identified URLs being stored in said storage means.

33. The system of claim 32 wherein said analysing means is operable to identify usernames and passwords from the field names of data contained in at least one of said outbound data and said inbound data.

34. The system of claim 32 wherein a representation of the input fields of a web page is stored in said memory of said one or more workstations, and wherein said analysing means is operable to identify usernames and passwords from said representation.

35. The system of claim 32 wherein said analysing means is operable to identify usernames or passwords from the field types of data contained in said outbound or said inbound data.

36. The system of claim 31 wherein said analysing means is operable to identify, as relevant data, digital certificates contained in at least one of said outbound or said inbound data or used to digitally sign signed data in said inbound data or said outbound data, or sufficient descriptive data to identify such digital certificates, said digital certificates and/or said descriptive data being stored in said storage means.

37. The system of claim 36 wherein said analysing means is operable to identify one or more of the following data as relevant data: whether or not said digital certificate has been revoked; the identity of the holder of said digital certificate; the amount of any eCommerce transaction being made that is related to said digital certificate; the goods or services being sold in any eCommerce transaction being made with said digital certificate; the date of receipt of said digital certificate; and wherein said identified data is stored with said digital certificate in said storage means.

38. The system of claim 31 wherein the analysing means is operable to identify when an eCommerce transaction is occurring and if an eCommerce transaction is identified as occurring, to identify in said outbound or said inbound data one or more of the following data as relevant data: the URL address or e-mail address of the remote location to which outbound data is being transmitted or inbound data is being received; the web pages accessed by a user of said one or more workstations during the transaction; the amount of the transaction; the goods or services being traded in the transaction; the date of the transaction; and wherein said relevant data is stored in said storage means.

39. The system of claim 28 wherein said analysing means is located on each of said one or more workstations.

40. The system of claim 28 wherein said application means is a web browser.

41. The system of claim 40 wherein said analysing means is a plug-in module of said web browser.

42. The system of claim 41 wherein said web browser is Microsoft's Internet Explorer and said analysing means is a Browser Helper Object.

43. The system of claim 28 wherein said application means is an e-mail client.

44. The system of claim 43 wherein said analysing means is a plug-in module of said e-mail client.

45. The system of claim 44 wherein said e-mail client is Microsoft's Outlook e-mail client and said analysing means is a Microsoft Exchange client extension.

46. The system of claim 28 wherein said application is an Instant messaging application.

47. The system of claim 46 wherein said analysing means is a plug-in of said Instant messaging application.

48. The system of claim 28 wherein said application means is a Voice Messaging application.

49. The system of claim 48 wherein said analysing means is a plug-in of said Voice messaging application.

50. The system of claim 28 wherein said network includes a server and said analysing means is located at a point on said network intermediate said one or more workstations and said server, or said analysing means is located at said server.

51. The system of claim 28 further comprising a supervisor workstation, said supervisor workstation having access to said storage means and being operable to view said relevant data stored in said storage means.

52. The system of claim 51 wherein said policy storage means is accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

53. The system of claim 28 wherein a workstation of said plurality of workstations has access to said storage means and is operable to view said relevant data stored in said storage means.

54. The system of claim 28 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

55. A method of managing information comprising the steps of: providing a plurality of workstations adapted for connection to a computer network, each workstation having a memory; providing a data repository arranged to receive data from each of said workstations; providing an application stored in said memory of each workstation for

transmitting outbound data to said network and receiving inbound data from said network; providing policy data containing rules defining relevant data which is to be stored in said data repository; and analysing at least one of said outbound data and said inbound data, with reference to said policy data, to identify in at least one of said outbound data and said inbound data, relevant data that is to be stored in said data repository in accordance with said rules in said policy data; and storing said relevant data in said data repository.

56. The method of claim 55 further comprising the step of encrypting said relevant data that is to be stored in said data repository prior to it being stored in said data repository.

57. The method of claim 55 further comprising the step of encrypting said relevant data that is stored in said data repository after it has been stored in said data repository.

58. The method of claim 55 wherein said computer network, to which said one or more workstations are adapted for connection, is the Internet.

59. The method of claim 58 wherein in the analysing step, at least one of usernames and passwords used to identify a user, and usernames and passwords used access web pages on the Internet, and the URL address of those web pages, are identified as relevant data.

60. The method of claim 59 wherein in said analysing step, usernames and passwords are identified from the field names of data contained in at least one of said outbound data and said inbound data.

61. The method of claim 59 wherein a representation of the input fields of a web page is stored in said memory of said one or more workstations, and wherein in said analysing step usernames and passwords are identified from said representation.

62. The method of claim 59 wherein in said analysing step usernames or passwords are identified from the field types of data contained in said outbound or said inbound data.

63. The method of claim 58 wherein in said analysing step, digital certificates contained in at least one of said outbound or said inbound data or used to digitally sign signed data in said inbound or said outbound data, are identified as relevant data, or sufficient descriptive data to identify such digital certificates, is identified as relevant data.

64. The method of claim 63 wherein said analysing step includes identifying one or more of the following data as relevant data: whether or not said digital certificate has been revoked; the identity of the holder of said digital certificate; the amount of any eCommerce transaction being made that is related to said digital certificate; the goods or services being sold in any eCommerce transaction being made with said digital certificate; and the date of receipt of said digital certificate.

65. The method of claim 58 wherein said analysing step includes identifying when an eCommerce transaction is occurring and if an on-line eCommerce transaction is identified as occurring, identifying in said outbound or said inbound data one or more of the following data as relevant data: the URL address or e-mail address of the remote location to which outbound data is being transmitted or inbound data is being received; the web pages accessed by a user of said one or more workstations during the

transaction; the amount of the transaction; the goods or services being traded in the transaction; the date of the transaction.

66. The method of claim 55 wherein said analysing step is carried out at said one or more workstations.

67. The method of claim 55 wherein said application is a web browser.

68. The method of claim 67 wherein said analysing step is performed by a plug-in module of said web browser.

69. The method of claim 68 wherein said web browser is Microsoft's Internet Explorer and said plugin module is a Browser Helper Object.

70. The method of claim 55 wherein said application is an e-mail client.

71. The method of claim 70 wherein said analysing step is performed by a plug-in module of said e-mail client.

72. The method of claim 71 wherein said e-mail client is Microsoft's Outlook e-mail client and said plug-in module is a Microsoft Exchange client extension.

73. The method of claim 55 wherein said application is an Instant messaging application.

74. The method of claim 73 wherein said analyser is a plug-in of said Instant messaging application.

75. The method of claim 55 wherein said application is a Voice Messaging application.

76. The method of claim 75 wherein said analysing step is performed by a plug-in of said Voice messaging application.

77. The method of claim 55 wherein said network includes a server and said analysing step is performed at a point on said network intermediate said one or more workstations and said server, or said analysing step is performed at said server.

78. The method of claim 55 further comprising the step of providing a supervisor workstation, said supervisor workstation having access to said data repository and being operable to view said relevant data stored in said data repository.

79. The method of claim 78 wherein said policy data is accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

80. The method of claim 55 wherein a workstation of said plurality of workstations has access to said data repository and is operable to view said relevant data stored in said data repository.

81. The method of claim 55 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

82. A computer program product, for controlling a plurality of computers in a private network to manage information, the network having a data repository arranged to receive data from the plurality of computers and policy data containing rules defining relevant data which is to be extracted from at least one of outbound data transmitted to a public network or inbound data received from the public network and stored in the data repository, comprising: a recording medium readable by the computer, having program code recorded thereon which when executed on each of said plurality of computers, configures said computers to: analyse, in conjunction with an application running on each of said computers that is operable to transmit the outbound data and receive the inbound data, at least one of said outbound data and said inbound data, with reference to said policy data, to identify in at least one of said outbound data and said inbound data, relevant data that is to be stored in said data repository in accordance with said rules in said policy data; and cause said relevant data to be stored in said data repository.

83. The computer program product of claim 82 wherein said program code when executed on said computer is operable to cause said relevant data that is to be stored in said data repository to be encrypted prior to it being stored in said data repository.

84. The computer program product of claim 82 wherein said program code when executed on said computer is operable to cause said relevant data that is stored in said data repository to be encrypted.

85. The computer program product of claim 82 wherein said application is adapted to transmit outbound data to the Internet and receive inbound data from the Internet.

86. The computer program product of claim 85 wherein at least one of usernames and passwords used to identify a user, and usernames and passwords used to access web pages on the Internet, and the URL address of those web pages, are identified as relevant data.

87. The computer program product of claim 86 wherein usernames and passwords are identified from the field names of data contained in at least one of said outbound data and said inbound data.

88. The computer program product of claim 86 wherein a representation of the input fields of a web page is stored in said memory of said one or more workstations, and wherein said usernames and passwords are identified from said representation.

89. The computer program product of claim 86 wherein usernames or passwords are identified from the field types of data contained in said outbound or said inbound data.

90. The computer program product of claim 85 wherein digital certificates contained in at least one of said outbound or said inbound data or used to digitally sign signed data in said inbound data or said outbound data, or sufficient descriptive data to identify any such digital certificates, are identified as relevant data.

91. The computer program product of claim 90 wherein one or more of the following data are identified as relevant data: whether or not said digital certificate has been revoked; the identity of the holder of said digital certificate; the amount of any eCommerce transaction being made that is related to said digital certificate; the goods or services being sold in any eCommerce transaction being made with said digital

certificate; and the date of receipt of said digital certificate.

92. The computer program product of claim 85 wherein the program code when executed on said computer is further operable to: identify when an eCommerce transaction is occurring; and if an eCommerce transaction is identified as occurring, to identify in said outbound or said inbound data one or more of the following data as relevant data: the URL address or e-mail address of the remote location to which outbound data is being transmitted or inbound data is being received; the web pages accessed by a user of said one or more workstations during the transaction; the amount of the transaction; the goods or services being traded in the transaction; and the date of the transaction.

93. The computer program product of claim 82 wherein said program code is executable at each of said computers.

94. The computer program product of claim 82 wherein said application is a web browser.

95. The computer program product of claim 94 wherein said program code when executed on said computer is a plug-in module of said web browser.

96. The computer program product of claim 95 wherein said web browser is Microsoft's Internet
Explorer and said plug-in module is a Browser Helper
Object.

97. The computer program product of claim 82 wherein said application is an e-mail client.

98. The computer program product of claim 97 wherein said program code when executed on said computer is a plug-in module of said e-mail-client.

99. The computer program product of claim 98 wherein said e-mail client is Microsoft's Outlook email client and said plug-in module is a Microsoft
Exchange client extension.

100. The computer software product of claim 82 wherein said application is an Instant messaging application.

101. The computer software product of claim 100 wherein said program code when executed on said computer is a plug-in of said Instant messaging application.

102. The computer software product of claim 82 wherein said application is a Voice Messaging application.

103. The computer software product of claim 102 wherein said program code when executed on said computer is a plug-in of said Voice messaging application.

104. The computer program product of claim 82 wherein said network includes a server and said program code is executable at a point on said network intermediate said one or more workstations and said server, or said program code is executable at said server.

105. The computer program product of claim 82 further comprising program code recorded on the recording medium which when executed on a computer in said plurality of computers enables that computer as a supervisor workstation, said supervisor workstation having access to said data repository and being operable to view said relevant data stored in said data repository.

106. The computer program product of claim 105 wherein said policy data is accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

107. The computer program product of claim 82 further comprising program code recorded on the recording medium which when executed on a computer in said plurality of computers provides that computer with access to said data repository such that a users of said computer can view said relevant data stored in said data repository.

108. A system for recording passwords and usernames comprising: a plurality of workstations adapted for connection to the Internet, each workstation having a memory ; a data repository arranged to receive data from each of said workstations; an application stored in said memory of each workstation for transmitting outbound data and receiving inbound data from the Internet; and/or an application for receiving user input data; and an analyser, said analyser being operable to monitor at least one of said input data, said outbound data and said inbound data, to identify usernames and passwords contained in said user input data, said outbound data or said inbound data, and to cause said usernames and passwords to be stored in said data repository.

109. The system of claim 108 wherein said analyser is operable to determine whether the usernames and passwords are used to access a web page, and if they are, to identify the URL address of said web page and cause said URL to be stored in said data repository with said usernames and passwords.

110. The system of claim 108 wherein said relevant usernames and passwords data are encrypted prior to being transmitted to said data repository.

111. The system of claim 108 wherein said relevant usernames and passwords that are stored in said data repository are encrypted.

112. The system of claim 108 wherein said analyser is operable to identify said relevant usernames and passwords from the field names of data contained in at least one of said outbound data or said inbound data.

113. The system of claim 108 wherein a representation of the input fields of a web page is stored in said memory of said one or more workstations, and wherein said analyser is operable to identify said relevant usernames and passwords from said representation.

114. The system of claim 108 wherein said analyser is operable to identify said relevant usernames or passwords from the field types of data contained in said outbound or said inbound data.

115. The system of claim 108 wherein said application has a user interface provided with a remember password'option which when selected stores input usernames and

passwords in memory, and said analyser is operable to identify said relevant usernames and passwords in said input usernames and passwords stored in memory.

116. The system of claim 108 wherein said analyser is located on each of said one or more workstations.

117. The system of claim 108 wherein said application is a web browser.

118. The system of claim 117 wherein said analyser is a plug-in module of said web browser.

'119. The system of claim 118 wherein said web browser is Microsoft's Internet Explorer and said analyser is a Browser Helper Object.

120. The system of claim 108 wherein said application is an Instant messaging application.

121. The system of claim 120 wherein said analyser is a plug-in of said Instant messaging application.

122. The system of claim 108 wherein said network comprises a server and said analyser is located at a point on said network intermediate said one or more workstations and said server, or said analyser is located at said server.

123. The system of claim 108 further comprising a supervisor workstation, said supervisor workstation having access to said data repository and being operable to view said relevant usernames and passwords stored in said data repository.

124. The system of claim 108 wherein a workstation of said plurality of workstations has access to said data repository and is operable to view said relevant and passwords usernames stored in said data repository.

125. A system for recording passwords and usernames comprising : a plurality of workstations adapted for connection to the Internet, each workstation having a memory; storage means for receiving data from each of said workstations; application means, stored in said memory of each workstation, for transmitting outbound data and receiving inbound data from the Internet; and/or application means for receiving user input data; and analysing means for monitoring at least one of said input data, said outbound data and said inbound data, to identify usernames and passwords contained in said user input data, said outbound data or said inbound data, and for causing said usernames and passwords to be stored in said storage means.

126. The system of claim 125 wherein said analysing means is operable to determine whether the usernames and passwords are used to access a web page, and if they are, to identify the URL address of said web page and cause said URL to be stored in said storage means with said usernames and passwords.

127. The system of claim 125 wherein said relevant usernames and passwords data are encrypted prior to being transmitted to said storage means.

128. The system of claim 125 wherein said relevant usernames and passwords that are stored in said storage means are encrypted.

129. The system of claim 125 wherein said analysing means is operable to identify said relevant usernames and passwords from the field names of data contained in at least one of said outbound data or said inbound data.

130. The system of claim 125 wherein a representation of the input fields of a web page is stored in said memory of said one or more workstations, and wherein said analysing means is operable to identify said relevant usernames and passwords from said representation.

131. The system of claim 125 wherein said analysing means is operable to identify said relevant usernames or passwords from the field types of data contained in said outbound or said inbound data.

132. The system of claim 125 wherein said application means has a user interface provided with a remember password'option which when selected stores input usernames and passwords in memory, and said analysing means is operable to identify said relevant usernames and passwords in said input usernames and passwords stored in memory.

133. The system of claim 125 wherein said analysing means is located on each of said one or more workstations.

134. The system of claim 125 wherein said application means is a web browser.

135. The system of claim 134 wherein said analysing means is a plug-in module of said web browser.

136. The system of claim 135 wherein said web browser is Microsoft's Internet Explorer and said analysing means is a Browser Helper Object.

137. The system of claim 125 wherein said application is an Instant messaging application.

138. The system of claim 137 wherein said analyser is a plug-in of said Instant messaging application.

139. The system of claim 125 wherein said network comprises a server and said analyser is located at a point on said network intermediate said one or more workstations and said server, or said analysing means is located at said server.

140. The system of claim 125 further comprising a supervisor workstation, said supervisor workstation having access to said storage means and being operable to view said relevant usernames and passwords stored in said storage means.

141. The system of claim 125 wherein a workstation of said plurality of workstations has access to said storage means and is operable to view said relevant usernames and passwords stored in said storage means.

142. A method for recording passwords and usernames comprising the steps of: providing a plurality of workstations adapted for connection to the Internet, each workstation having a memory; providing a data repository arranged to receive data

from each of said workstations; providing an application stored in said memory of each workstation for transmitting outbound data and receiving inbound data from the Internet; and/or an application for receiving user input data; and analysing at least one of said user input data, said outbound data and said inbound data, to identify usernames and passwords; and causing said usernames and passwords to be stored in said data repository.

143. The method of claim 142 further comprising the steps of determining whether the usernames and passwords are used to access a web page, and if they are, identifying the URL address of said web page, and storing said URL in said data repository with said usernames and passwords.

144. The method of claim 142 further comprising the step of encrypting usernames and passwords prior to being stored in said data repository.

145. The method of claim 142 further comprising the step of encrypting the usernames and passwords that are stored in said data repository.

146. The method of claim 142 wherein in said analysing step usernames and passwords are identified from the field names of data contained in at least one of said outbound data or said inbound data.

147. The method of claim 142 wherein a representation of the input fields of a web page is stored in said memory of said workstation, and wherein in said analyser step usernames and passwords are identified from said representation.

148. The method of claim 142 wherein in said analysing step usernames and passwords are identified from the field types of data contained in said outbound or said inbound data.

149. The method of claim 142 wherein said application has a user interface provided with a remember password'option which when selected stores input usernames and passwords in said memory of said one or more workstations, and wherein in said analysing step usernames and passwords are identified from said input usernames and passwords stored in said memory of said one or more workstations.

150. The method of claim 142 wherein said analysing step is performed on said one or more workstations.

151. The method of claim 142 wherein said application is a web browser.

152. The method of claim 151 wherein said analysing step is performed by a plug-in module of said web browser.

153. The method of claim 152 wherein said web browser is Microsoft's Internet Explorer and said plugin module is a Browser Helper Object.

154. The method of claim 142 wherein said application is an Instant messaging application.

155. The method of claim 154 wherein said analyser is a plug-in of said Instant messaging application.

156. The method of claim 142 wherein said network comprises a server and said analysing step is performed at a point on said network intermediate said one or more workstations and said server, or said analysing step is performed at said server.

157. The method of claim 142 further comprising the step of providing a supervisor workstation, said supervisor workstation having access to said data repository and being operable to view said relevant usernames and passwords stored in said data repository.

158. The method of claim 142 wherein a computer of said plurality of computers has access to said data repository and is operable to view said relevant usernames and passwords stored in said data repository.

159. A computer program product, for controlling a plurality of computers in a private network to record passwords and usernames, the network having a data repository arranged to receive data from the plurality of computers, said computer program product comprising: a recording medium readable by the computer, having program code recorded thereon which when executed on each of said plurality of computers, configures said computers to: analyse, in conjunction with an application running on the computer that is operable to transmit outbound data to the Internet and receive inbound data from the Internet, and/or an application running on the computer for receiving user input data, at least one of said user input data, said outbound data and said inbound data, to identify in at least one of said user input data, said outbound data and said inbound data, relevant data that is to be stored in said data repository; and control said computer to store said relevant data in said data repository.

160. The computer program product of claim 159 wherein said program code when executed on said computer is further operable to determine whether the usernames and passwords are used to access a web page, and if they are, to identify the URL address of said web page and to direct the computer to store said URL in said data repository with said usernames and passwords.

161. The computer program product of claim 159 wherein said program code when executed on said computer is further operable to cause said usernames and passwords to be encrypted prior to them being stored in said data repository.

162. The computer program product of claim 159 wherein said program code when executed on said computer is further operable to cause said usernames and passwords that are stored in said data repository to be encrypted.

163. The computer program product of claim 159 wherein said program code when executed on said computer is operable to identify usernames and passwords from the field names of data contained in at least one of said outbound data or said inbound data.

164. The computer program product of claim 159 wherein a representation of the input fields of a web page is stored in the memory of said computer, and wherein said program code when executed on said computer is operable to identify usernames and passwords from said representation.

165. The computer program product of claim 159 wherein said program code when

executed on said computer is further operable to identify usernames and passwords from the field types of data contained in said outbound or said inbound data.

166. The computer program product of claim 159 wherein said application for receiving user input data has a user interface provided with a remember password'option which when selected stores input usernames and passwords in said memory of said computer, and wherein said program code when executed on said computer is operable to identify usernames and passwords from said input usernames and passwords stored in said memory of said computer.

167. The computer program product of claim 159 wherein said program code is executable at each of said computers.

168. The computer program product of claim 159 wherein said application is a web browser.

169. The computer program product of claim 168 wherein said program code when executed on said computer is a plug-in module of said web browser.

170. The computer program product of claim 169 wherein said web browser is Microsoft's Internet
Explorer and said plug-in module is a Browser Helper
Object.

171. The computer software product of claim 159 wherein said application is an Instant messaging application.

172. The computer software product of claim 171 wherein said program code when executed on said computer is a plug-in of said Instant messaging application.

173. The computer program product of claim 159 wherein said network comprises a server and said program code is executable at a point on said network intermediate said computer and said server, or said program code is executable at said server.

174. The computer program product of claim 159 further comprising program code which when executed on said computer enables that computer as a supervisor workstation, said supervisor workstation having access to said data repository and being operable to view said relevant usernames and passwords stored in said data repository.

175. The computer program product of claim 159 wherein a computer of said plurality of computers has access to said data repository and is operable to view said relevant usernames and passwords stored in said data repository.

176. An information management system comprising: one or more workstations adapted for connection to a computer network, each workstation having a memory; an application stored in said memory of each workstation for transmitting outbound data to said network and receiving inbound data from said network; policy data containing rules specifying an appropriate encryption strength for outbound data, the encryption strength depending on the content of the data; and an analyser, said analyser being operable in conjunction with said policy data to monitor said outbound data and to determine, in accordance with said rules in said policy data, an appropriate encryption

strength for the outbound data ; wherein said analyser controls transmission of said outbound data from said application in dependence upon said determination of an appropriate encryption strength.

177. The system of claim 176 wherein said rules in said policy data define confidential data which can not be transmitted, said analyser being operable in conjunction with said policy data to prevent said confidential data being transmitted from said application.

178. The system of claim 176 wherein said analyser is further operable to determine the present encryption strength in use for transmitting said outbound data; and wherein said analyser controls transmission of said outbound data from said application both in dependence upon said determination of an appropriate encryption strength and in dependence upon said determination of the present encryption strength in use.

179. The system of claim 178 wherein if the analyser determines that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, then said analyser prevents transmission of said outbound data from said application.

180. The system of claim 178 wherein if the analyser determines that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, then said analyser prevents transmission of said outbound data from said application and controls said application to renegotiate an encryption strength for transmission that is appropriate.

181. The system of claim 178 wherein if the analyser determines that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, then said analyser modifies the outbound data such that the present encryption strength is an appropriate encryption strength for the transmission of the modified outbound data.

182. The system of claim 178 wherein if the analyser determines that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, then said analyser controls said application to notify a user of said application that the encryption strength in use is not sufficient.

183. The system of claim 176 wherein the analyser is further operable to identify credit card numbers in said outbound data.

184. The system of claim 183 wherein the analyser is further operable to distinguish a predetermined set of credit card numbers from other credit card numbers, wherein said rules of said policy data define different appropriate encryption strengths for outbound data containing credit card numbers in the predetermined set than for other credit card numbers.

185. The system of claim 184 wherein said rules of said policy data specify that there is no appropriate encryption strength for a pre-determined set of one or more credit card numbers.

186. The system of claim 176 wherein said analyser is further operable to identify at least one or more of, credit card numbers, account codes, usernames, passwords,

names and addresses and other predetermined keywords in the content of said outbound data.

187. The system of claim 176 wherein said rules in said policy data specify an appropriate encryption strength for said outbound data, that is dependent on the address to which said outbound data is to be transmitted.

188. The system of claim 176 wherein said analyser is located on each of said one or more workstations.

189. The system of claim 176 wherein said application is a web browser.

190. The system of claim 189 wherein said analyser is a plug-in module of said web browser.

191. The system of claim 190 wherein said web browser is Microsoft's Internet Explorer and said analyser is a Browser Helper Object.

192. The system of claim 176 wherein said application is an e-mail client.

193. The system of claim 192 wherein said analyser is a plug-in module of said e-mail client.

194. The system of claim 193 wherein said e-mail client is Microsoft's Outlook e-mail client and said analyser is a Microsoft client extension.

195. The system of claim 176 wherein said application is an Instant messaging application.

196. The system of claim 195 wherein said analyser is a plug-in of said Instant messaging application.

197. The system of claim 176 wherein said network comprises a server and said analyser is located at a point on said network intermediate said one or more workstations and said server, or said analyser is located at said server.

198. The system of claim 176 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

199. The system of claim 176 further comprising a supervisor workstation, said policy data being accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

200. An information management system comprising: one or more workstations adapted for connection to a computer network, each workstation having a memory; application means, stored in said memory of each workstation, for transmitting outbound data to said network and receiving inbound data from said network; policy storage means, for storing policy data containing rules specifying an appropriate encryption strength for outbound data, the encryption strength depending on the content of the data; and analysing means, operable in conjunction with said policy data, for monitoring said outbound data to determine, in accordance with said rules in said

policy data, an appropriate encryption strength for the outbound data ; wherein said analysing means controls transmission of said outbound data from said application means in dependence upon said determination of an appropriate encryption strength.

201. The system of claim 200 wherein said rules in said policy data define confidential data which can not be transmitted, said analysing means being operable in conjunction with said policy data to prevent said confidential data being transmitted from said application means.

202. The system of claim 200 wherein said analysing means is further operable to determine the present encryption strength in use for transmitting said outbound data ; and wherein said analysing means controls transmission of said outbound data from said application means both in dependence upon said determination of an appropriate encryption strength and in dependence upon said determination of the present encryption strength in use.

203. The system of claim 202 wherein if the analysing means determines that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, then said analysing means prevents transmission of said outbound data from said application means.

204. The system of claim 202 wherein if the analysing means determines that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, then said analysing means prevents transmission of said outbound data from said application means and controls said application to renegotiate an encryption strength for transmission that is appropriate.

205. The system of claim 202 wherein if the analysing means determines that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, then said analysing means modifies the outbound data such that the present encryption strength is an appropriate encryption strength for the transmission of the modified outbound data.

206. The system of claim 202 wherein if the analysing means determines that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, then said analysing means controls said application means to notify a user of said application means that the encryption strength in use is not sufficient.

207. The system of claim 200 wherein the analysing means is further operable to identify credit card numbers in said outbound data.

208. The system of claim 207 wherein the analysing means is further operable to distinguish a predetermined set of credit card numbers from other credit card numbers, wherein said rules of said policy data define different appropriate encryption strengths for outbound data containing credit card numbers in the predetermined set than for other credit card numbers.

209. The system of claim 208 wherein said rules of said policy data specify that there is no appropriate encryption strength for a pre-determined set of one or more credit card numbers.

210. The system of claim 200 wherein said analysing means is further operable to-identify at least one or more of, credit card numbers, account codes, usernames, passwords, names and addresses and other predetermined keywords in the content of said outbound data.

211. The system of claim 200 wherein said rules in said policy data specify an appropriate encryption strength for said outbound data, that is dependent on the address to which said outbound data is to be transmitted.

212. The system of claim. 200 wherein said analysing means is located on each of said one or more workstations.

213. The system of claim 200 wherein said application means is a web browser.

214. The system of claim 213 wherein said analysing means is a plug-in module of said web browser.

215. The system of claim 214 wherein said web browser is Microsoft's Internet Explorer and said analysing means is a Browser Helper Object.

216. The system of claim 200 wherein said application means is an e-mail client.

217. The system of claim 216 wherein said analysing means is a plug-in module of said e-mail client.

218. The system of claim 217 wherein said e-mail client is Microsoft's Outlook e-mail client and said analysing means is a Microsoft client extension.

219. The system of claim 200 wherein said application is an Instant messaging application.

220. The system of claim 219 wherein said analyser is a plug-in of said Instant messaging application.

221. The system of claim 200 wherein said network comprises a server and said analysing means is located at a point on said network intermediate said one or more workstations and said server, or said analysing means is located at said server.

222. The system of claim 200 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

223. The system of claim 200 further comprising a supervisor workstation, said policy data being accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

224. A method of managing information comprising the steps of: providing one or more workstations adapted for connection to a computer network, each workstation having a memory; providing an application stored in said memory of each workstation for transmitting outbound data to said network and receiving inbound data from said network; providing policy data containing rules specifying an appropriate encryption strength for outbound data, the encryption strength depending on the content of the

data; and analysing said outbound data to determine, in accordance with said rules in said policy data, an appropriate encryption strength for the outbound data; controlling transmission of said outbound data from said application in dependence upon the determination of an appropriate encryption strength in said analysing step.

225. The method of claim 224 wherein said rules in said policy data define confidential data which cannot be transmitted, and wherein in said controlling step transmission of said confidential data is prevented.

226. The method of claim 224 wherein said analysing step further comprising the step of determining the present encryption strength in use for transmitting said outbound data; and wherein in said controlling step the transmission of said outbound data from said application is dependent upon both the determination of an appropriate encryption strength and the determination of the present encryption strength in use.

227. The method of claim 226 wherein if it is determined that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, then in said controlling step transmission of said outbound data from said application is prevented.

228. The method of claim 226 wherein if in said analysing step it is determined that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, then in said controlling step an encryption strength appropriate for transmission of said outbound data is negotiated before transmission.

229. The method of claim 226 wherein if in said analysing step it is determined that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, then in said controlling step the outbound data is modified such that the present encryption strength is an appropriate encryption strength.

230. The method of claim 226 wherein in said analysing step if it is determined that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, then in said controlling step a user of said application is notified that the encryption strength in use is not sufficient.

231. The method of claim 226 wherein said analysing step includes identifying credit card numbers in said outbound data.

232. The method of claim 231 wherein said analysing step includes distinguishing a pre -determined set of one or more credit card numbers from other credit card numbers, and wherein said rules of said policy data define a different appropriate encryption strength for outbound data containing credit card numbers in that pre-determined set than for other credit card numbers.

233. The method of claim 232 wherein said rules of said policy data specifies that there is no appropriate encryption strength for said pre-determined set of one or more credit card numbers.

234. The method of claim 224 wherein said analysing step includes identifying at least one or more of, credit card numbers, account codes, usernames, passwords, names and addresses and other predetermined. keywords in the content of said outbound

data.

235. The method of claim 224 wherein said rules in said policy data specify an appropriate encryption strength for said outbound data, that is dependent on the address to which said outbound data is to be transmitted.

236. The method of claim 224 wherein said analysing step is performed at said one or more workstations.

237. The method of claim 224 wherein said application is a web browser.

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238. The method of claim 237 wherein said analysing step is performed by a plug-in module of said web browser.

239. The method of claim 238 wherein said web browser is Microsoft's Internet Explorer and said plugin module is a Browser Helper Object.

* 240. The method of claim 224 wherein said application is an e-mail client.

241. The method of claim 240 wherein said analysing step is performed by a plug-in module of said e-mail client.

242. The method of claim 241 wherein said e-mail client is Microsoft's Outlook e-mail client and said plug-in module is a Microsoft Exchange client extension.

243. The method of claim 224 wherein said application is an Instant messaging application.

244. The method of claim 243 wherein said analyser is a plug-in of said Instant messaging application.

245. The method of claim 224 wherein said network comprises a server and said analysing step is performed at a point on said network intermediate said one or more workstations and said server, or said analysing step is performed at said server.

246. The method of claim 224 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

247. The method of claim 224 further comprising the step of providing a supervisor workstation, said policy data being accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

248. A computer program product for controlling a computer connected to a public network to manage information, the computer having access to policy data containing rules specifying an appropriate encryption strength for outbound data transmitted to the public network, the encryption strength depending on the content of the data, comprising: a recording medium readable by the computer, having program code recorded thereon which when executed on said computer, configures said computer to: determine, in conjunction with an application running on the computer that is operable at least to transmit outbound data to said public network, with reference to said rules in

said policy data, an appropriate encryption strength for the outbound data; and control the transmission of said outbound data by said application in dependence upon the determination of an appropriate encryption strength.

249. The computer program product of claim 248 wherein said rules in said policy data define confidential data which cannot be transmitted, wherein said program code when executed on said computer is operable to prevent transmission of said confidential data from said application.

250. The computer program product of claim 248 wherein said program code when executed on said computer is further operable to determine the present encryption strength in use for transmitting said outbound data; and to control the transmission of said outbound data from said application in dependence upon both the determination of an appropriate encryption strength and the determination of the present encryption strength in use.

251. The computer program product of claim 250 wherein said program code when executed on said computer is further operable, if it is determined that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, to prevent the transmission of said outbound data from said application.

252. The computer program product of claim 250 wherein said program code when executed on said computer is further operable, if it is determined that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, to negotiate an appropriate encryption strength for transmission of said outbound data before transmission.

253. The computer program product of claim 250 wherein said program code when executed on said computer is further operable, if it is determined that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, to modify the outbound data such that the present encryption strength is an appropriate encryption strength.

254. The computer program product of claim 250 wherein said program code when executed on said computer is further operable, if it is determined that the present encryption strength in use for transmitting outbound data is less than said appropriate encryption strength, to provide notification that the encryption strength in use is not sufficient.

255. The computer program product of claim 248 wherein said program code when executed on said computer is further operable to identify credit card numbers in said outbound data.

256. The computer program product of claim 255 wherein said program code when executed on said computer is further operable to identify a predetermined set of one or more credit card numbers from other credit card numbers, and wherein said rules of said policy data define a different appropriate encryption strength for outbound data containing credit card numbers in that pre-determined set than for other credit card numbers.

257. The computer program product of claim 256 wherein said rules of said policy data

specifies that there is no appropriate encryption strength for said pre-determined set of one or more credit card numbers.

258. The computer program product of claim 248 wherein said program code when executed on said computer is further operable, to identify at least one or more of, credit card numbers, account codes, usernames, passwords, names and addresses and other predetermined keywords in the content of said outbound data.

259. The computer program product of claim 248 wherein said rules in said policy data specify an appropriate encryption strength for said outbound data, that is dependent on the address to which said outbound data is to be transmitted.

260. The computer program product of claim 248 wherein said program code is executable on said computer.

261. The computer program product of claim 248 wherein said application is a web browser.

262. The computer program product of claim 261 wherein said program code when executed on said computer is a plug-in module of said web browser.

263. The computer program product of claim 262 wherein said web browser is Microsoft's Internet
Explorer and said plug-in module is a Browser Helper
Object.

264. The computer program product of claim 248 wherein said application is an e-mail client.

265. The computer program product of claim 264 wherein said program code when executed on said computer is a plug-in module of said e-mail client.

266. The computer program product of claim 265 wherein said e-mail client is Microsoft's Outlook email client and said plug-in module is a Microsoft
Exchange client extension.

267. The computer software product of claim 248 wherein said application is an Instant messaging application.

268. The computer software product of claim 267 wherein said program code when executed on said computer is a plug-in of said Instant messaging application.

269. The computer program product of claim 248 wherein said network includes a server and said program code is executable at a point on said network intermediate said one or more workstations and said server, or program code is executable at said server.

270. An information management system comprising: a plurality of client workstations adapted for connection to a computer network, each workstation having a memory; a data repository arranged to receive data from each of said client workstations; an application stored in said memory of each workstation for transmitting outbound data to said network and receiving inbound data from said network; policy data defining rules

for the recording of data that may comprise part of a transaction conducted between a client workstation and a third party across said computer network; an analyser, said analyser being operable in conjunction with said policy data to analyse at least one of said outbound data and said inbound data, to identify the existence of a transaction occurring between a client workstation and a third party by analysing said outbound or said inbound data, and to cause transaction data that is all or part of said outbound data or said inbound data related to an identified transaction to be stored in said data repository.

271. The system of claim 270 wherein said analyser is operable to determine whether a secure link has been negotiated between said application and a remote site on said network, and to identify the existence of a transaction if said outbound data or said inbound data is transmitted on a secure link.

272. The system of claim 271 wherein said network is the Internet, and said rules of said policy data define the addresses of non-eCommerce web sites and/or non-eCommerce e-mail accounts, said analyser being operable to disregard any transactions that are identified between a client workstation and a noneCommerce web site and/or e-mail account such that no transaction data related to a transaction made to a non-eCommerce web sites or a non-eCommerce e-mail account is stored in the data repository.

273. The system of claim 270 wherein said analyser is operable to identify the existence of a transaction by reference to said rules of said policy data, said rules of said policy data defining the addresses of known eCommerce locations.

274. The system of claim 270 wherein said analyser is operable to identify credit card numbers, and to identify the existence of a transaction by identifying credit card numbers in said outbound data or inbound data.

275. The system of claim 270 wherein said analyser is operable to identify the existence of a transaction by reference to said rules of said policy data, said rules of said policy data defining one or more of predetermined digital certificates, account codes, predetermined keywords, pre-determined names and addresses and embedded codes.

276. The system of claim 270 wherein said analyser is operable to identify embedded codes in said inbound data, said embedded code having been placed in said inbound data to identify it as transaction data.

277. The system of claim 270 wherein said analyser is operable to identify electronic receipts, and to identify the existence of a transaction by identifying an electronic receipt in said outbound or inbound data.

278. The system of claim 270 wherein said analyser is operable to record a pre-determined number of subsequent transmissions of said outbound data or said inbound data following an identification of the existence of a transaction by said analyser, providing that the address or organisation to which the subsequent transmissions are sent, or from which they are received, is the same as the address or organisation to which the outbound data was sent or from which the inbound data was received and in which the existence of a transaction was identified.

279. The system of claim 278, wherein said analyser is operable to detect one or more indicators of the nature of the transaction, and said rules of said policy data define the number of subsequent transmissions of said outbound data and said inbound data that are to be recorded in said data repository based on the identified nature of the transaction.

280. The system of claim 278 wherein said rules of said policy data define the number of subsequent transmissions of said outbound and said inbound data that are to be stored in said data repository in dependence on the indicator by which the existence of a transaction was identified.

281. The system of claim 270 wherein said analyser is operable to record all subsequent transmissions of said outbound data or said inbound data that occur within a pre-determined amount of time following an identification of the existence of a transaction by said analyser, providing that the address or organisation to which the subsequent transmissions are sent, or from which they are received, is the same as the address or organisation to which the outbound data was sent or from which the inbound data was received and in which the existence of a transaction was identified.

282. The system of claim 281, wherein said analyser is operable to detect one or more indicators of the nature of the transaction, and said rules of said policy data define the amount of time for which all subsequent transmissions of said outbound data and said inbound data are to be recorded in said data repository based on the identified nature of the transaction.

283. The system of claim 281 wherein said rules of said policy data define the amount of time for which subsequent transmissions of said outbound and said inbound data are to be stored in said data repository in dependence on the indicator by which the existence of a transaction was identified.

284. The system of claim 270 wherein said analyser is further operable to identify the completion of a transaction by analysing said outbound data or said inbound data, and to cause all or part of said outbound data transmitted by said application and all or part of said inbound data received by said application after said analyser has identified the existence of a transaction and before said analyser has identified the completion of a transaction to be stored in said data repository.

285. The system of claim 284 wherein said analyser is operable to identify subsequent related data in said outbound data transmitted by said application and said inbound data received by said application after said analyser has identified the completion of a transaction, and to cause said subsequent related data to be stored in said data repository with said transaction data already identified.

286. The system of claim 285 wherein said analyser is operable to identify said subsequent related data by identifying common indicators in both said transaction data already identified and said outbound data transmitted by said application and said inbound data received by said application after said analyser has identified the completion of a transaction, said common indicators being one or more of the address of the location to which said outbound data is transmitted or from which said inbound data is received, part of the data path to the location to which said outbound data is transmitted or from which said inbound data is received, account code or reference numbers.

287. The system of claim 270 wherein said application is operable such that a user of said application can indicate said outbound and said inbound data that is related to a transaction, said analyser being operable to identify said outbound and said inbound data so indicated.

288. The system of claim 270 wherein said application is operable to store all of said outbound data and said inbound data in said memory of said workstation as previous data, irrespective of whether it may or may not be part of a transaction and, said analyser is operable, if the existence of a transaction is identified, to retrieve a pre-determined amount of previous data from said outbound data and said inbound data stored in said memory of said workstation, and to cause said previous data to be stored in said data repository with said transaction data.

289. The system of claim 288 wherein said rules of said policy data specify the amount of previous data that is to be retrieved in dependence on the indicator by which the existence of a transaction is identified.

290. The system of claim 288 wherein said network is the Internet and said application is a web browser, said web browser being operable to store each web page that is viewed by said web browser in memory as previous data.

291. The system of claim 290 wherein said rules of said policy data specify the number of web pages that are to be retrieved from those previously stored in memory in dependence on the indicator by which the existence of a transaction is identified.

292. The system of claim 270 wherein said application is operable to store all of said outbound data and said inbound data in memory as previous data, irrespective of whether it may or may not be part of a transaction and, said analyser is operable, if the existence of a transaction is identified, to identify, in said previous data, earlier relevant data that is related to said transaction data already identified, and to cause said earlier relevant data to be stored in said data repository with said transaction data.

293. The system of claim 292 wherein said analyser is operable to identify said earlier relevant data in said previous data, by identifying common indicators in both said transaction data and said outbound data and said inbound data previously stored in said memory of said workstation, said common indicators being one or more of the address of the location to which said outbound data is transmitted or from which said inbound data is received, part of the data path to the location to which said outbound data is transmitted or said inbound data is received, account code or reference number.

294. The system of claim 270 wherein said application is operable to store all of said outbound data and said inbound data in memory as previous data, irrespective of whether it may or may not be part of a transaction, and is further operable such that, if said analyser identifies the existence of a transaction, a user of said application can select earlier relevant data from said previous data, said earlier relevant data selected by the user being stored in said common data repository together with said transaction data.

295. The system of claim 270 wherein said analyser is operable, once it has identified the existence of a transaction, to determine the nature of said transaction by analysing the content of said outbound and inbound data, and said rules of said policy data define

how said transaction data is to be stored in said data repository in dependence on the nature of the transaction determined by said analyser, said transaction data being stored in said database according to said determination and said rules of said policy data.

296. The system of claim 295 wherein said analyser is operable to determine the nature of the transaction by identifying in said outbound data and said inbound data one or more indicators, said indicators being defined in said rules of said policy data, and being one or more of: the address of the network location to which said data'that may be part of a transaction is transmitted or from which it is received; part of the data path to the network location to which said transaction data is transmitted or from which it is received; account codes; reference numbers; credit card numbers; digital certificates and pre-determined keywords.

297. The system of claim 270 wherein said analyser is operable to identify, once the existence of a transaction has been identified, one or more indicators of the nature of said transaction, said transaction data being stored in said data repository such that it is organised by said one or more indicators to form a record.

298. The system of claim 297 wherein said rules of said policy data define said one or more indicators of the nature of a transaction, said indicators being one or more of: the address of the location to which said transaction data is transmitted or from which it is received; part of the data path to the location to which said transaction data is transmitted or from which it is received ; account codes, reference numbers, credit card numbers, digital certificates and predetermined keywords.

299. The system of claim 270 wherein the analyser is operable to determine the length of time taken to complete a transaction, and cause this to be stored in the data repository with the transaction data.

300. The system of claim 270 wherein the analyser is operable to determine the number of keystrokes or mouse-clicks made in order to complete the transaction, and cause this to be stored in the data repository with the transaction data.

301. The system of claim 270 wherein the analyser is operable to determine the length of time spent waiting for data to be downloaded to said application during said transaction, and cause this to be stored in the data repository with the transaction data.

302. The system of claim 270 wherein the analyser is operable to determine the length of time the web server takes to respond to outbound messages sent from said application, and cause this to be stored in said data repository.

303. The system of claim 270 wherein the analyser is operable to determine the length of time a user of said application takes to transmit a response to data downloaded to said application during said transaction, and cause this to be stored in the data repository with the transaction data.

304. The system of claim 303, wherein the analyser is operable to determine from the length of time a user of said application takes to transmit a response to data downloaded to said application, the length of time the user spends entering the data that forms the response, and cause this to be stored in the data repository with the transaction data.

305. The system of claim 270 wherein said data repository is accessible by one or more of an accounts application, an order processing application or other transaction management application.

306. The system of claim 270 wherein any data transmitted to said data repository is encrypted before it is transmitted to said data repository.

307. The system of claim 270 wherein any data stored in said data repository is encrypted.

308. The system of claim 270 wherein said analyser is located on each of said one or more workstations.

309. The system of claim 270 wherein said application is a web browser.

310. The system of claim 309 wherein said analyser is a plug-in module of said web browser.

311. The system of claim 310 wherein said web browser is Microsoft's Internet Explorer and said analyser is a Browser Helper Object.

312. The system of claim 270 wherein said application is an e-mail client.

313. The system of claim 312 wherein said analyser is a plug-in module of said e-mail client.

314. The system of claim 313 wherein said e-mail client is Microsoft's Outlook e-mail client and said analyser is a Microsoft Exchange client extension.

315. The system of claim 270 wherein said application is an Instant messaging application.

316. The system of claim 315 wherein said analyser is a plug-in of said Instant messaging application.

317. The system of claim 270 wherein said network comprises a server, and said analyser is located at a point on said network intermediate said one or more work stations and said server, or said analyser is located at said server.

318. The system of claim 270 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

319. The system of claim 270 further comprising a supervisor workstation, said policy data being accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

320. An information management system comprising: a plurality of client workstations adapted for connection to a computer network, each workstation having a memory; storage means for storing data received from each of said client workstations; application means, stored in said memory of each workstation, for transmitting

outbound data to said network and receiving inbound data from said network; policy storage means for storing policy data defining rules for the recording of data that may comprise part of a transaction conducted between a client workstation and a third party across said computer network; and analysing means, operable in conjunction with said policy data, for analysing at least one of said outbound data and said inbound data, to identify the existence of a transaction occurring between a client workstation and a third party, and for causing transaction data that is all or part of said outbound data or said inbound data related to an identified transaction to be stored in said storage means.

321. The system of claim 320 wherein said analysing means is operable to determine whether a secure link has been negotiated between saidapplication means and a remote site on said network, and to identify the existence of a transaction if said outbound data or said inbound data is transmitted on a secure link.

322. The system of claim 321 wherein said network is the Internet, and said rules of said policy data define the addresses of non-eCommerce web sites and/or non-eCommerce e-mail accounts, said analysing means being operable to disregard any transactions that are identified between a client workstation and a noneCommerce web site and/or e-mail account such that no transaction data related to a transaction made to a non-eCommerce web sites or a non-eCommerce e-mail account is stored in the storage means.

323. The system of claim 320 wherein said analysing means is operable to identify the existence of a transaction by reference to said rules of said policy data, said rules of said policy data defining the addresses of known eCommerce locations.

324. The system of claim 320 wherein said analysing means is operable to identify credit card numbers, and to identify the existence of a transaction by identifying credit card numbers in said outbound data or inbound data.

325. The system of claim 320 wherein said analysing means is operable to identify the existence of a transaction by reference to said rules of said policy data, said rules of said policy data defining one or more of pre-determined digital certificates, account codes, pre-determined keywords, pre-determined names and addresses and embedded codes.

326. The system of claim 320 wherein said analysing means is operable to identify embedded codes in said inbound data, said embedded code having been placed in said inbound data to identify it as transaction data.

327. The system of claim 320 wherein said analysing means is operable to identify electronic receipts, and to identify the existence of a transaction by identifying an electronic receipt in said outbound or inbound data.

328. The system of claim 320 wherein said analysing means is operable to record a pre-determined number of subsequent transmissions of said outbound data or said inbound data following an identification of the existence of a transaction by said analysing means, providing that the address or organisation to which the subsequent transmissions are sent, or from which they are received, is the same as the address or organisation to which the outbound data was sent or from which the inbound data was received and in which the existence of a transaction was identified.

329. The system of claim 328, wherein said analysing means is operable to detect one or more indicators of the nature of the transaction, and said rules of said policy data define the number of subsequent transmissions of said outbound data and said inbound data that are to be recorded in said storage means based on the identified nature of the transaction.

330. The system of claim 328 wherein said rules of said policy data define the number of subsequent transmissions of said outbound and said inbound data that are to be stored in said storage means in dependence on the indicator by which the existence of a transaction was identified.

331. The system of claim 320 wherein said analysing means is operable to record all subsequent transmissions of said outbound data or said inbound data that occur within a pre-determined amount of time following an identification of the existence of a transaction by said analysing means, providing that the address or organisation to which the subsequent transmissions are sent, or from which they are received, is the same as the address or organisation to which the outbound data was sent or from which the inbound data was received and in which the existence of a transaction was identified.

332. The system of claim 331, wherein said analysing means is operable to detect one or more indicators of the nature of the transaction, and said rules of said policy data define the amount of time for which all subsequent transmissions of said outbound data and said inbound data are to be recorded in said storage means based on the identified nature of the transaction.

333. The system of claim 331 wherein said rules of said policy data define the amount of time for which subsequent transmissions of said outbound and said inbound data are to be stored in said storage means in dependence on the indicator by which the existence of a transaction was identified.

334. The system of claim 320 wherein said analysing means is further operable to identify the completion of a transaction by analysing said outbound data or said inbound data, and to cause all or part of said outbound data transmitted by said application means and all or part of said inbound data received by said application means after said analysing means has identified the existence of a transaction and before said analysing means has identified the completion of a transaction to be stored in said storage means.

335. The system of claim 334 wherein said analysing means is operable to identify subsequent related data in said outbound data transmitted by said application means and said inbound data received by said application means after said analysing means has identified the completion of a transaction, and to cause said subsequent related data to be stored in said storage means with said transaction data already identified.

336. The system of claim 335 wherein said analysing means is operable to identify said subsequent related data by identifying common indicators in both said transaction data already identified and said outbound data transmitted by said application means and said inbound data received by said application means after said analysing means has identified the completion of a transaction, said common indicators being one or more of the address of the location to which said outbound data is transmitted or from which said inbound data is received, part of the data path to the location to which said

outbound data is transmitted or from which said inbound data is received, account code or reference numbers.

337. The system of claim 320 wherein said application means is operable such that a user of said application means can indicate said outbound and said inbound data that is related to a transaction, said analysing means being operable to identify said outbound and said inbound data so indicated.

338. The system of claim 320 wherein said application means is operable to store all of said outbound data and said inbound data in said memory of said workstation as previous data, irrespective of whether it may or may not be part of a transaction and, said analysing means is operable, if the existence of a transaction is identified, to retrieve a pre-determined amount of previous data from said outbound data and said inbound data stored in said memory of said workstation, and to cause said previous data to be stored in said storage means with said transaction data.

339. The system of claim 338 wherein said rules of said policy data specify the amount of previous data that is to be retrieved in dependence on the indicator by which the existence of a transaction is identified.

340. The system of claim 338 wherein said network is the Internet and said application means is a web browser, said web browser being operable to store each web page that is viewed by said web browser in memory as previous data.

341. The system of claim 340 wherein said rules of said policy data specify the number of web pages that are to be retrieved from those previously stored in memory in dependence on the indicator by which the existence of a transaction is identified.

342. The system of claim 320 wherein said application means is operable to store all of said outbound data and said inbound data in memory as previous data, irrespective of whether it may or may not be part of a transaction and, said analysing means is operable, if the existence of a transaction is identified, to identify, in said previous data, earlier relevant data that is related to said transaction data already identified, and to cause said earlier relevant data to be stored in said storage means with said transaction data.

343. The system of claim 342 wherein said analysing means is operable to identify said earlier relevant data in said previous data, by identifying common indicators in both said transaction data and said outbound data and said inbound data previously stored in said memory of said workstation, said common indicators being one or more of the address of the.- location to which said outbound data is transmitted or from which said inbound data is received, part of the data path to the location to which said outbound data is transmitted or said inbound data is received, account code or reference number.

344. The system of claim 320 wherein said application means is operable to store all of said outbound data and said inbound data in memory as previous data, irrespective of whether it may or may not be part of a transaction, and is further operable such that, if said analysing means identifies the existence of a transaction, a user of said application means can select earlier relevant data from said previous data, said earlier relevant data selected by the user being stored in said common storage means together with said transaction data.

345. The system of claim 320 wherein said analysing means is operable, once it has identified the existence of a transaction, to determine the nature of said transaction by analysing the content of said outbound and inbound data, and said rules of said policy data define how said transaction data is to be stored in said storage means in dependence on the nature of the transaction determined by said analysing means, said transaction data being stored in said database according to said determination and said rules of said policy data.

346. The system of claim 345 wherein said analysing means is operable to determine the nature of the transaction by identifying in said outbound data and said inbound data one or more indicators, said indicators being defined in said rules of said policy data, and being one or more of: the address of the network location to which said data that may be part of a transaction is transmitted or from which it is received; part of the data path to the network location to which said transaction data is transmitted or from which it is received; account codes; reference numbers; credit card numbers; digital certificates and predetermined keywords.

347. The system of claim 320 wherein said analysing means is operable to identify, once the existence of a transaction has been identified, one or more indicators of the nature of said transaction, said transaction data being stored in said storage means such that it is organised by said one or more indicators to form a record.

348. The system of claim 347 wherein said rules of said policy data define said one or more indicators of the nature of a transaction, said indicators being one or more of: the address of the location to which said transaction data is transmitted or from which it is received; part of the data path to the location to which said transaction data is transmitted or from which it is received; account codes, reference numbers, credit card numbers, digital certificates and predetermined keywords.

349. The system of claim 320 wherein the analysing means is operable to determine the length of time taken to complete a transaction, and cause this to be stored in the storage means with the transaction data.

350. The system of claim 320 wherein the analysing means is operable to determine the number of keystrokes or mouse-clicks made in order to complete the transaction, and cause this to be stored in the storage means with the transaction data.

351. The system of claim 320 wherein the analysing means is operable to determine the length of time spent waiting for data to be downloaded to said application means during said transaction, and cause this to be stored in the storage means with the transaction data.

352. The system of claim 320 wherein the analysing means is operable to determine the length of time the web server takes to respond to outbound messages sent from said application means, and cause this to be stored in said storage means.

353. The system of claim 320 wherein the analysing means is operable to determine the length of time a user of said application means takes to transmit a response to data downloaded to said application means during said transaction, and cause this to be stored in the storage means with the transaction data.

354. The system of claim 353, wherein the analysing means is operable to determine

from the length of time a user of said application means takes to transmit a response to data downloaded to said application means, the length of time the user spends entering the data that forms the response, and cause this to be stored in the storage means with the transaction data.

355. The system of claim 320 wherein said storage means is accessible by one or more of an accounts application, an order processing application or other transaction management application.

356. The system of claim 320 wherein any data transmitted to said storage means is encrypted before it is transmitted to said storage means.

357. The system of claim 320 wherein any data stored in said storage means is encrypted.

358. The system of claim 320 wherein said analysing means is located on each of said one or more workstations.

359. The system of claim 320 wherein said application is a web browser.

360. The system of claim 359 wherein said analysing means is a plug-in module of said web browser.

361. The system of claim 360 wherein said web browser is Microsoft's Internet Explorer and said analysing means is a Browser Helper Object.

362. The system of claim 320 wherein said application means is an e-mail client
363. The system of claim 362 wherein said analysing means is a plug-in module of said e-mail client.

364. The system of claim 363 wherein said e-mail client is Microsoft's Outlook e-mail client and said analysing means is a Microsoft Exchange client extension.

365. The system of claim 320 wherein said application is an Instant messaging application.

366. The system of claim 365 wherein said analyser is a plug-in of said Instant messaging application.

367. The system of claim 320 wherein said network comprises a server, and said analysing means is located at a point on said network intermediate said one or more work stations and said server, or said analysing means is located at said server.

368. The system of claim 320 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

369. The system of claim 320 further comprising a supervisor workstation, said policy data being accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

370. A method of managing information comprising the steps of: providing a plurality of

client workstations adapted for connection to a computer network, each workstation having a memory; providing a data repository arranged to receive data from each of said client workstations; providing an application stored in said memory of each workstation for transmitting outbound data to said network and receiving inbound data from said network; providing policy data defining rules for the recording of data that may comprise part of a transaction conducted between a client workstation and a third party across said computer network; and analysing, at least one of said outbound data and said inbound data to identify, with reference to said rules of said policy data, the existence of a transaction occurring between a client workstation and a third party; and storing transaction data that is all or part of said outbound data or said inbound data related to an identified transaction in said data repository.

371. The method of claim 370 wherein in said analysing step the existence of a transaction is identified by determining whether a secure link has been negotiated between said application and a remote site on said network, and by determining whether said outbound data or said inbound data is transmitted on that link.

. 372. The method of claim 371 wherein said network is the Internet, and said rules of said policy data define the addresses of non-eCommerce web sites and/or non-eCommerce e-mail accounts, wherein said analysing step includes disregarding any transactions that are identified between a client workstation and a noneCommerce web site and/or e-mail account such that no transaction data related to a transaction made to a non-eCommerce web site or a non-eCommerce e-mail account is stored in the data repository.

373. The method of claim 370 wherein said analysing step includes identifying the existence of a transaction by reference to said rules of said policy data, said rules of said policy data defining the addresses of known eCommerce locations.

374. The method of claim 370 wherein said analysing step includes identifying credit card numbers, and the existence of a transaction is identified by identifying credit card numbers in said outbound data or inbound data.

375. The method of claim 370 wherein in said analysing step the existence of a transaction is identified by reference to said rules of said policy data, said rules of said policy data defining one or more of pre-determined digital certificates, account codes, pre-determined keywords, pre-determined names and addresses and embedded codes.

376. The method of claim 370 wherein said analysing step includes detecting an embedded code in said inbound data, said embedded code having been placed in said inbound data to identify it as transaction data.

377. The method of claim 370 wherein in said analysing step, the existence of a transaction is identified by identifying an electronic receipt in said outbound or inbound data.

378. The method of claim 370 further comprising the step of recording a pre-determined number of subsequent transmissions of said outbound data or said inbound data following an identification of the existence of a transaction in said analysing step, providing that the address or organisation to which the subsequent transmissions are sent, or from which they are received, is the same as the address or organisation to

which the outbound data was sent or from which the inbound data was received and in which the existence of a transaction was identified.

379. The method of claim 378, wherein said analysing step includes detecting one or more indicators of the nature of the transaction, and said rules of said policy data define the number of subsequent transmissions of said outbound data and said inbound data that are to be recorded in said data repository based on the identified nature of the transaction.

380. The method of claim 378 wherein said rules of said policy data define the number of subsequent transmissions of said outbound and said inbound data that are to be stored in said data repository in dependence on the indicator by which the existence of a transaction was identified.

381. The method of claim 370 further comprising the step of recording all subsequent transmissions of said outbound data or said inbound data that occur within a pre-determined amount of time following an identification of the existence of a transaction in said analysing step, providing that the address or organisation to which the subsequent transmissions are sent, or from which they are received, is the same as the address or organisation to which the outbound data was sent or from which the inbound data was received and in which the existence of a transaction was identified.

382. The method of claim 381, wherein said analysing step includes detecting one or more indicators of the nature of the transaction, and said rules of said policy data define the amount of time for which all subsequent transmissions of said outbound data and said inbound data are to be recorded in said data repository based on the identified nature of the transaction.

383. The method of claim 381 wherein said rules of said policy data define the amount of time for which subsequent transmissions of said outbound and said inbound data are to be stored in said data repository in dependence on the indicator by which the existence of a transaction was identified.

384. The method of claim 370 wherein said analysing step includes identifying the completion of a transaction by analysing said outbound data or said inbound data, and said storing step includes storing all or part of said outbound data transmitted by said application and all or part of said inbound data received by said application, after the existence of a transaction has been identified and before the completion of a transaction has been identified, in said data repository.

385. The method of claim 384 wherein said analysing step includes identifying subsequent related data contained in said outbound data transmitted by said application and said inbound data received by said application after the completion of a transaction, and said storing step includes storing said subsequent related data in said data repository with said transaction data already identified.

386. The method of claim 385 wherein said analysing step includes identifying said subsequent related data by identifying common indicators in both said transaction data already identified and said outbound data transmitted by said application and said inbound data received by said application after the completion of a transaction has been identified, said common indicators being one or more of the address of the location to which said outbound data is transmitted or from which said inbound data is

received, part of the data path to the location to which said outbound data is transmitted or from which said inbound data is received, account code or reference numbers.

387. The method of claim 370 wherein said application is operable such that a user of said application can indicate said outbound and said inbound data that is related to a transaction, said analysing step including identifying indicated outbound and inbound data.

388. The method of claim 370 further comprising the step of storing all of said outbound data and said inbound data in said memory of said workstation as previous data, irrespective of whether it may or may not be part of a transaction and, said analysing step includes retrieving a pre-determined amount of previous data from said outbound data and said inbound data stored in said memory of said workstation if the e istence of a transaction is identified, and said sling step includes storing said previous data in said data repository with said transaction data.

389. The method of claim 378 wherein said rules of said policy data specify the amount of previous data that is to be retrieved in dependence on the indicator by which the existence of a transaction is identified.

390. The method of claim 388 wherein said network is the Internet and said application is a web browser, said web browser being operable to store each web page that is viewed by said web browser in memory as previous data.

391. The method of claim 390 wherein said rules of said policy data specify the number of web pages that are to be retrieved from those previously stored in memory in dependence on the indicator by which the existence of a transaction is identified.

392. The method of claim 370 further comprising the step of storing all of said outbound data and said inbound data in memory as previous data, irrespective of whether it may or may not be part of a transaction and, said analysing step includes identifying, in said previous data, earlier relevant data that is related to said transaction data already identified, and said storing step includes storing said earlier relevant data in said data repository with said transaction data.

393. The method of claim 392 wherein said analysing step includes identifying said earlier relevant data in said previous data, by identifying common indicators in both said transaction data and said previous data, said common indicators being one or more of the address of the location to which said outbound data is transmitted or from which said inbound data is received, part of the data path to the location to which said outbound data-is transmitted or said inbound data is received, account code or reference number.

394. The method of claim 370 further comprising the steps of storing all of said outbound data and said inbound data in memory as previous data, irrespective of whether it may or may not be part of a transaction; and if the existence of a transaction is identified, providing a user of said application with a selector for selecting earlier relevant data from said previous data, and wherein said storing step includes storing said earlier relevant data selected by the user in said data repository together with said transaction data.

395. The method of claim 370 wherein said analysing step includes, once the existence of a transaction has been identified, determining the nature of said transaction by analysing the content of said outbound and inbound data, said rules of said policy data defining how said transaction data is to be stored in said data repository in dependence on the nature of the transaction determined in said analysing step, said transaction data being stored in said database according to said determination and said rules of said policy data.

396. The method of 395 wherein said analysing step includes determining the nature of the transaction by identifying in said outbound data and said inbound data one or more indicators, said indicators being defined in said rules of said policy data, and being one or more of: the address of the network location to which said data that may be part of a transaction is transmitted or from which it is received; part of the data path to the network location to which said transaction data is transmitted or from which it is received ;. account codes; reference numbers; credit card numbers; digital certificates and pre-determined keywords.

397. The method of claim 370 wherein said analysing step includes identifying, once the existence of a transaction has been identified, one or more indicators of the nature of said transaction, and said storing step includes organising transaction data stored in said data repository by said one or more indicators such that it forms a record.

398. The method of claim 397 wherein said rules of said policy data define said one or more indicators of the nature of a transaction, said indicators being one or more of: the address of the location to which said transaction data is transmitted or from which it is received; part of the data path to the location to which said transaction data is transmitted or from which it is received; account codes, reference numbers, credit card numbers, digital certificates and predetermined keywords.

399. The method of claim 370 wherein said analysing step includes determining the length of time taken to complete a transaction, and causing this to be stored in the data repository with the transaction data.

400. The method of claim 370 wherein said analysing step includes determining the number of keystrokes or mouse-clicks made in order to complete the transaction, and causing this to be stored in the data repository with the transaction data.

401. The method of claim 370 wherein said analysing step includes determining the length of time spent waiting for data to be downloaded to said application during said transaction, and causing this to be stored in the data repository with the transaction data.

402. The method of claim 370 wherein said analysing step includes determining the length of time the web server takes to respond to outbound messages sent from said application, and causing this to be stored in said data repository.

403. The method of claim 370 wherein said analysing step includes determining the length of time a user of said application takes to transmit a response to data downloaded to said application'-during said transaction, and causing this to be stored in the data repository with the transaction data.

404. The method of claim 370, wherein said analysing step includes determining from

the length of time a user of said application takes to transmit a response to data downloaded to said application, the length of time the user spends entering the data that forms the response, and causing this to be stored in the data repository with the transaction data.

405. The method of claim 370 wherein said data repository is accessible by one or more of an accounts application, an order processing application or other transaction management application.

406. The method of claim 370 further comprising the step of encrypting any relevant data identified in said analysing step before it is stored in said data repository.

407. The method of claim 370 further comprising the step of encrypting the data stored in said data repository.

408. The method of claim 370 wherein said analysing step is performed at said one or more workstations.

409. The method of claim 370 wherein said application is a web browser.

410. The method of claim 409 wherein said analysing step is performed by a plug-in module of said web browser.

411. The method of claim 410 wherein said web browser is Microsoft's Internet Explorer and said plugin module is a Browser Helper Object.

412. The method of claim 370 wherein said application is an e-mail client.

413. The method of claim 412 wherein said analysing step is performed by a plug-in module of said e-mail client.

414. The method of claim 413 wherein said e-mail client is Microsoft's Outlook e-mail client and said plug-in module is a Microsoft Exchange client extension.

415. The method of claim 370 wherein said application is an Instant messaging application.

416. The method of claim 415 wherein said analyser is a plug-in of said Instant messaging application.

417. The method of claim 370 wherein said network comprises a server, and said analysing step is performed at a point on said network intermediate said one or more work stations and said server, or said analysing step is performed at said server.

418. The method of claim 370 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

419. The method of claim 370 further comprising the step of providing a supervisor workstation, said policy data being accessible by said, supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

420. A computer program product-for controlling a plurality of computers in a private network to manage information, the network having a data repository arranged to receive data from the plurality of computers, and policy data defining rules for the recording of data that may comprise part of a transaction conducted between a computer in the private network and a third party across a public network, comprising : a recording medium readable by a computer, having program code recorded thereon which when executed on each of said plurality of computers configures said computers to: analyse, in conjunction with an application running on the computer that is operable to transmit outbound data to said public network and receive inbound data from said public network, at least one of said outbound data and said inbound data to identify, with reference to said rules of said policy data, the existence of a transaction occurring between the computer and a third party; and to control said computer to store transaction data that is all or part of said outbound data or said inbound data related to an identified transaction in said data repository.

421. The computer program product of claim 420 wherein said program code when executed on said computer is operable to identify the existence of a transaction by determining whether a secure link has been negotiated between said application and a remote site on said public network, and whether the outbound data or said inbound data is transmitted on that link.

422. The computer program product of claim 421 wherein said public network is the Internet, and said rules of said policy data define the addresses of noneCommerce web sites and/or non-eCommerce e-mail accounts, wherein said program code when executed on said computer is operable to disregard any transactions that are identified between the computer and a noneCommerce web site and/or e-mail account such that no transaction data related to a transaction made to a non-eCommerce web sites or a non-eCommerce e-mail account is stored in the data repository.

423. The computer program product of claim 420 wherein said program code when executed on said computer is operable to identify the existence of a transaction by reference to said rules of said policy data, said rules of said policy data defining the addresses of known eCommerce locations.

424. The computer program product of claim 420 wherein said program code when executed on said computer is operable to identify credit card numbers, and the existence of a transaction is identified by identifying credit card numbers in said outbound data or inbound data.

425. The computer program product of claim 420 wherein said program code when executed on said computer is operable to identify the existence of a transaction by reference to said rules of said policy data, said rules of said policy data defining one or more of pre-determined digital certificates, account codes, pre-determined keywords, pre-determined names and addresses and embedded codes.

426. The computer program product of claim 420 wherein said program code when executed on said computer is operable to identify in said inbound data an embedded code, said embedded code having been placed in said inbound data to identify it as transaction data.

427. The computer program product of claim 420 wherein said program code when executed on said computer is operable to identify the existence of a transaction by

identifying an electronic receipt in said outbound or inbound data.

428. The computer program product of claim 420 wherein said program code when executed on said computer is further operable to control the computer to record a pre-determined number of subsequent transmissions of said outbound data or said inbound data following an identification of the existence of a transaction, providing that the address or organisation to which the subsequent transmissions are transmitted, or from which they are received, is the same as the address or organisation to which the outbound data was sent or from which the inbound data was received and in which the existence of a transaction was identified.

429. The computer program product of claim 428, wherein said program code when executed on said computer is operable to detect one or more indicators of the nature of the transaction, and said rules of said policy data define the number of subsequent transmissions of said outbound data and said inbound data that are to be recorded in the data repository based on the identified nature of the transaction.

430. The computer program product of claim 428 wherein said rules of said policy data define the number of subsequent transmissions of said outbound and said inbound data that are to be stored in said data repository in dependence on the indicator by which the existence of a transaction was identified,.

431. The computer program product of claim 420 wherein said program code when executed on said computer is operable to control the computer to record all subsequent transmissions of said outbound data or said inbound data that occur within a pre-determined amount of time following an identification of the existence of a transaction, providing that the address or organisation to which the subsequent transmissions are transmitted, or from which they are received, is the same as the address or organisation to which the outbound data was transmitted or from which the inbound data was received and in which the existence of a transaction was identified.

432. The computer program product of claim 431 wherein said program code when executed on said computer is operable to detect one or more indicators of the nature of the transaction, and said rules of said policy data define the amount of time for which all subsequent transmissions of said outbound data and said inbound data are to be recorded in said data repository based on the identified nature of the transaction.

433. The computer program product of claim 431 wherein said rules of said policy data define the amount of time for. which subsequent transmissions of said outbound and said inbound data are to be stored in said data repository in dependence on the indicator by which the existence of a transaction was identified.

434. The computer program product of claim 420 wherein said program code when executed on said computer is operable to identify the completion of a transaction, and control the computer to store all or part of said outbound data transmitted by said application and all or part of said inbound data received by said application after the existence of a transaction has been identified and before the completion of a transaction has been in identified in said data repository.

435. The computer program product of claim 434 wherein said program code when executed on said computer is operable to identify subsequent related data contained in said outbound data transmitted by said application and said inbound data received by

said application after the completion of a transaction, and control the computer to store said subsequent related data in the data repository with said transaction data already identified.

436. The computer program product of claim 435 wherein said program code when executed on said computer is operable to identify said subsequent related data by identifying common indicators in both said transaction data already identified and said outbound data transmitted by said application and said inbound data received by said application after the completion of a transaction has been identified, said common indicators being one or more of the address of the location to which said outbound data is transmitted or from which said inbound data is received, part of the data path to the location to which said outbound data is transmitted or from which said inbound data is received, account code or reference numbers.

437. The computer program product of claim 420 wherein said application is operable such that a user of said application can indicate said outbound and said inbound data that is related to a transaction, said program code when executed on said computer being operable to identify said outbound and said inbound data so indicated.

438. The computer program product of claim 420 wherein said program code when executed on said computer is operable to control the computer to store all of said outbound data and said inbound data in memory as previous data, irrespective of whether it may or may not be part of a transaction and, to retrieve a pre-determined amount of previous data from said outbound data and said inbound data stored in memory if the existence of a transaction is identified, and to control the computer to store said previous data in the data repository with said transaction data.

439. The computer program product of claim 438 wherein said rules of said policy data specify the amount of previous data that is to be retrieved in dependence on the indicator by which the existence of a transaction is identified.

440. The computer program product of claim 438 wherein said public network is the Internet and said application is a web browser, said web browser being operable to store each web page that is viewed by said web browser in memory as previous data.

441. The computer program product of claim 440 wherein said rules of said policy data specify the number of web pages that are to be retrieved from those previously stored in memory in dependence on the indicator by which the existence of a transaction is identified.

442. The computer program product of claim 420 wherein said program code when executed on said computer is further operable to control the computer to store all of said outbound data and said inbound data in memory as previous data, irrespective of whether it may or may not be part of a transaction and, to identify, in said previous data, earlier relevant data that is related to said transaction data already identified, and control the computer to store the earlier relevant data in the data repository with said transaction data.

443. The computer program product of claim 442 wherein said program code when executed on said computer is further operable to identify said earlier relevant data in said previous data, by identifying common indicators in both said transaction data and said previous data, said common indicators being one or more of the address of the

location to which said outbound data is transmitted or from which said inbound data is received, part of the data path to the location to which said outbound data is transmitted or said inbound data is received, account codes or reference numbers.

444. The computer program product of claim 420 wherein said program code when executed on said computer is further operable to control the computer to store all of said outbound data and said inbound data in memory as previous data, irrespective of whether it may or may not be part of a transaction; and wherein said computer program product further comprises a selector, recorded on said recording medium, said selector being operable to select earlier relevant data from said previous data in response to input from a user, and wherein said program code when executed on said computer is further operable to control the computer to store said earlier relevant data selected by the user in said data repository together with said transaction data.

445. The computer program product of claim 420 wherein said program code when executed on said computer is operable, once the existence of a transaction has been identified, to determine the nature of said transaction by analysing the content of said outbound and inbound data, said rules of said policy data defining how said transaction data is to be stored in said data repository in dependence on the nature of the transaction that has been determined, said transaction data being stored in said database according to said determination and said rules of said policy data.

446. The computer program product of claim 445 wherein said program code when executed on said computer is further operable to determine the nature of the transaction by identifying in said outbound data and said inbound data one or more indicators, said indicators being defined in said rules of said policy data, and being one or more of: the address of the public network location to which said data that may be part of a transaction is transmitted or from which it is received; part of the data path to the public network location to which said transaction data is transmitted or from which it is received; account codes; reference numbers; credit card numbers; digital certificates and pre-determined keywords.

447. The computer program product of claim 420 wherein said program code when executed on said computer is further operable, once the existence of a transaction has been identified, to identify one or more indicators of the nature of said transaction, and to control the computer to organise the storage of said transaction data by said one or more indicators such that it forms a record.

448. The computer program product of claim 447 wherein said rules of said policy data define said one or more indicators of the nature of a transaction, said indicators being one or more of : the address of the public location to which said transaction data is transmitted or from which it is received; part of the data path to the public location to which said transaction data is transmitted or from which it is received; account codes, reference numbers, credit card numbers, digital certificates and pre-determined keywords.

449. The computer program product of claim 420 wherein said program code when executed on said computer is further operable to determine the length of time taken to complete a transaction, and cause this to be stored in the data repository with the transaction data.

450. The computer program product of claim 420 wherein said program code when

executed on said, computer is further operable to determine the number of keystrokes or mouse-clicks made in order to complete the transaction, and cause this to be stored in the data repository with the transaction data.

451. The computer program product of claim 420 wherein said program code when executed on said computer is further operable to determine the length of time spent waiting for data to be downloaded to said application during said transaction, and cause this to be stored in the data repository with the transaction data.

452. The computer program product of claim 420 wherein said program code when executed on said computer is further operable to determine the length of time the web server takes to respond to outbound messages sent from said application, and cause this to be stored in said data repository.

453. The computer program product of claim 420 wherein said program code when executed on said computer is further operable to determine the length of time a user of said application takes to transmit a response to data downloaded to said application during said transaction, and cause this to be stored in the data repository with the transaction data.

454. The computer program product of claim 420, wherein said program code when executed on said computer is further operable to determine from the length of time a user of said application takes to transmit a response to data downloaded to said application, the length of time the user spends entering the data that forms the response, and cause this to be stored in the data repository with the transaction data.

455. The computer program product of claim 420 wherein the data repository is accessible by one or more of an accounts application, an order processing application or other transaction management application.

456. The computer program product of claim 420 wherein said program code when executed on said computer is further operable to cause any identified relevant data to be encrypted before it is stored in said data repository.

457. The computer program product of claim 420 wherein said program code when executed on said computer is-further operable to cause any relevant data stored in the data repository to be encrypted.

458. The computer program product of claim 420 wherein said program code is executable at each of said computers.

459. The computer program product of claim 420 wherein said application is a web browser.

460. The computer program product of claim 459 wherein said program code when executed on said computer is a plug-in module of said web browser.

461. The computer program product of claim 460 wherein said web browser is Microsoft's Internet
Explorer and said plug-in module is a Browser Helper
Object.

462. The computer program product of claim 420 wherein said application is an e-mail client.

463. The computer program product of claim 462 wherein said program code when executed on said computer is a plug-in module of said e-mail client.

464. The computer program product of claim 463 wherein said e-mail client is Microsoft's Outlook email client and said plug-in module is a Microsoft Exchange client extension.

465. The computer software product of claim 420 wherein said application is an Instant messaging application.

466. The computer software product of claim 465 wherein said program code when executed on said computer is a plug-in of said Instant messaging application.

467. Computer program product of claim 420 wherein said network includes a server and said program code is executable at a point on said network intermediate said one or more workstations and said server, or said program code is executable at said server.

468. The computer program product of claim 420 further comprising program code recorded on the recording medium which when executed on a computer in the plurality of computers enable that computer as a supervisor workstation, said supervisor workstation having access to said data repository and being operable to view said relevant data stored in said data repository.

469. The computer program product of claim 468 wherein said policy data is accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

470. An information management system comprising: one or more workstations adapted for connection to a computer network, each workstation having a memory; an application stored in said memory of each workstation for transmitting outbound data to said network and receiving inbound data from said network; policy data, containing rules for the transmission of outbound data that may be part of a transaction; and an analyser, said analyser being operable in conjunction with said policy data to identify in at least said outbound data, transaction data that may be part of a transaction, and to make a determination in accordance with said rules of said policy data as to whether the transmission of said transaction data would satisfy said rules; and wherein the transmission of said transaction data by said application is dependent on said determination made by said analyser.

471. The system of claim 470, wherein according to said determination made by said analyser, said transaction data is either, transmitted, not transmitted, or sent to an approver who determines whether or not to transmit the transaction data.

472. The system of claim 471 further comprising: one or more approvers, for deciding whether the transmission of said data that may be part of a transaction may be made; wherein said analyser is operable to identify in said data that may be part of a transaction, data that needs approval and to refer said data that needs approval to one of said one or more approvers; and the transmission of said data that needs approval

being dependent on the decision of said one or more approver.

473. The system of claim 472 wherein said analyser is operable to identify said transaction data that needs approval by determining the nature of said transaction data and by checking said rules of said policy data, said rules of said policy data defining whether or not approval is needed in dependence on the determined nature of said transaction data.

474. The system of claim 472 wherein said analyser is operable to determine the nature of said transaction data by identifying at least one of the identity of the transmitter of said data, the identity of the intended recipient of said data, the workstation from which said data is to be transmitted, the sum for which a transaction is to be made, and the account against which a transaction is to be made.

475. The system of claim 472 comprising a recorder, operable in conjunction with said analyser, for recording transaction data, wherein said one or more approvers have access to the transaction data stored by the recorder such that when deciding whether to give approval or not, the one or more approvers can view all of the transaction data, including the data that needs approval.

476. The system of claim 472 wherein said analyser is operable to determine the nature of said transaction data that needs approval and to select said one of said one or more approvers in dependence on that determination.

477. The system of claim 476 wherein said analyser is operable to determine the nature of said transaction data that needs approval by identifying at least one of the identity of the transmitter of said data, the identity of the intended recipient of said data, the work station from which said data is to be transmitted, the sum for which a transaction is to be made, and the account against which the transaction is to be made.

478. The system of claim'470 wherein said analyser is operable to determine whether a secure link has been negotiated between said application and a remote. site on said network, and to identify said outbound data or said inbound data as transaction data, if it is transmitted on a secure link.

479. The system of claim 478 wherein said network is the Internet, and said rules of said policy data define the addresses of web sites or e-mail accounts that negotiate secure links for the transmission of data but which are known not to be eCommerce sites or accounts, said analyser being operable to disregard said outbound data transmitted to those web sites or accounts or said inbound data received from those web sites or accounts, such that no approval is required.

480. The system of claim 470 wherein said analyser is operable to identify transaction data by reference to said rules of said policy data, said rules of said policy data defining the addresses of known eCommerce web sites and e-mail accounts.

481. The system of claim 470 wherein said analyser is operable to identify credit card numbers in said outbound data or said inbound data, and to identify outbound data or inbound data that contains a credit card number as transaction data.

* 482. The system of claim 481 wherein said policy data specifies pre-determined credit card numbers that can never be transmitted.

483. The system of claim 470 wherein said analyser is operable to identify transaction data by reference to said rules of said policy data, said rules of said policy data defining one or more of pre-determined digital certificates, account codes, pre-determined keywords, pre-determined names and addresses and embedded codes.

484. The system of claim 470 wherein said analyser is operable to identify embedded codes in said inbound data, said embedded codes having been placed in said inbound data to mark said inbound data as transaction data.

485. The system of claim 470 wherein said application is operable such that a user of said application can indicate said outbound and said inbound data that is part of a transaction, said analyser being operable to identify said outbound and said inbound data so indicated.

486. The system of claim 470 wherein said analyser is located on each of said one or more workstations.

487. The system of claim 470 wherein said application is a web browser.

488. The system of claim 487 wherein said analyser is a plug-in module of said web browser.

489. The system of claim 488 wherein said web browser is Microsoft's Internet Explorer and said analyser is a Browser Helper Object.

490. The system of claim 470 wherein said application is an e-mail client.

491. The system of claim 490 wherein said analyser is a plug-in module of said e-mail client.

492. The system of claim 491 wherein said e-mail client is Microsoft's Outlook e-mail client and said analyser is a Microsoft Exchange client extension.

493. The system of claim 470 wherein said application is an Instant messaging application.

494. The system of claim 493 wherein said analyser is a plug-in of said Instant messaging application.

495. The system of claim 470 wherein said network comprises a server and said analyser is located at a point on said network intermediate said one or more workstations and said server, or said analyser is located at said server.

496. The system of claim 470 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said'one or more workstations together form a private computer network.

497. The system of claim 470 further comprising a supervisor workstation, said policy data being accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

498. An information management system comprising: one or more workstations adapted for connection to a computer network, each workstation having a memory; application means, stored in said memory of each workstation, for transmitting outbound data to said network and receiving inbound data from said network; policy storage means for storing policy data, containing rules for the transmission of outbound data that may be part of a transaction; and analyser means, operable in conjunction with said policy data, for identifying in at least said outbound data, transaction data that may be part of a transaction, and for determining, in accordance with said rules of said policy data, whether the transmission of said transaction data would satisfy said rules; and wherein the transmission of said transaction data by said application means is dependent on said determination made by said analysing means.

499. The system of claim 498, wherein according to said determination made by said analysing means, said transaction data is either, transmitted, not transmitted, or sent to an approver who determines whether or not to transmit the transaction data.

500. The system of claim 499 further comprising: one or more approvers, for deciding whether the transmission of said data that may be part of a transaction may be made ; wherein said analysing means is operable to identify in said data that may be part of a transaction, data that needs approval and to refer said data that needs approval to one of said one or more approvers; and the transmission of said data that needs approval being dependent on the decision of said one or more approver.

501. The system of claim 500 wherein said analysing means is operable to identify said transaction data that needs approval by determining the nature of said transaction data and by checking said rules of said policy data, said rules of said policy data defining whether or not approval is needed in dependence on the determined nature of said transaction data.

502. The system of claim 500 wherein said analysing means is operable to determine the nature of said transaction data by identifying at least one of the identity of the transmitter of said data, the identity of the intended recipient of said data, the workstation from which said data is to be transmitted, the sum for which a transaction is to be made, and the account against which a transaction is to be made.

503. The system of claim 500 comprising a recorder, operable in conjunction with said analysing means, for recording transaction data, wherein said one or more approvers have access to the transaction data stored by the recorder such that when deciding whether to give approval or not, the one or more approvers can view all of the transaction data, including the data that needs approval.

504. The system of claim 500 wherein said analysing means is operable to determine the nature of said transaction data that needs approval and to select said one of said one or more approvers in dependence on that determination.

505. The system of claim 504 wherein said analysing means is operable to determine the nature of said transaction data that needs approval by identifying at least one of the identity of the transmitter of said data, the identity of the intended recipient of said data, the work station from which said data is to be transmitted, the sum for which a transaction is to be made, and the account against which the transaction is to be made.

506. The system of claim 498 wherein said analysing means is operable to determine

whether a secure link has been negotiated between said application and a remote site on said network, and to identify said outbound data or said inbound data as transaction data, if it is transmitted on a secure link.

507. The system of claim 506 wherein said network is the Internet, and said rules of said policy data define the addresses of'web sites or e-mail accounts that negotiate secure links for the transmission of data but which are known not to be eCommerce sites or accounts, said analysing means being operable to disregard said outbound data transmitted to those web sites or accounts or said inbound data received from those web sites or accounts, such that no approval is required.

508. The system of claim 498 wherein said analysing means is operable to identify transaction data by reference to said rules of said policy data, said rules of said policy data defining the addresses of known eCommerce web sites and e-mail accounts.

509. The system of claim 498 wherein said analysing means is operable to identify credit card numbers in said outbound data or said inbound data, and to identify outbound data or inbound data that contains a credit card number as transaction data.

510. The system of claim 509 wherein said policy data specifies pre-determined credit card numbers that can never be transmitted.

511. The system of claim 498 wherein said analysing means is operable to identify transaction data by reference to said rules of said policy data, said rules of said policy data defining one or more of pre-determined digital certificates, account codes, pre-determined keywords, pre-determined names and addresses and embedded codes.

512. The system of claim 498 wherein said analysing means is operable to identify embedded codes in said inbound data, said embedded codes having been placed in said inbound data to mark said inbound data as transaction data.

513. The system of claim 498 wherein said application is operable such that a user of said application can indicate said outbound and said inbound data that is part of a transaction, said analysing means being operable to identify said outbound and said inbound data so indicated.

514. The system of claim 498 wherein said analysing means is located on each of said one or more workstations.

515. The system of claim 498 wherein said application is a web browser.

516. The system of claim 515 wherein said analysing means is a plug-in module of said web browser.

517. The system of claim 516 wherein said web browser is Microsoft's Internet Explorer and said analysing means is a Browser Helper Object.

518. The system of claim 498 wherein said application is an e-mail client.

519. The system of'claim 518 wherein said analysing means is a plug-in module of said e-mail client.

520. The system of claim 519 wherein said e-mail client is Microsoft's Outlook e-mail client and said analysing means is a Microsoft Exchange client extension.

521. The system of claim 498 wherein said application is an Instant messaging application.

522. The system of claim 521 wherein said analyser is a plug-in of said Instant messaging application.

523. The system of claim 498 wherein said network comprises a server and said analysing means is located at a point on said network intermediate said one or more workstations and said server, or said analysing means is located at said server.

524. The system of claim 498 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

525. The system of claim 498 further comprising a supervisor workstation, said policy data being accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

526. A method for managing information comprising the steps of: providing one or more workstations adapted for connection to a computer network, each workstation having a memory; providing an application stored in said memory of each workstation for transmitting outbound data to said network and receiving inbound data from said network; providing policy data, containing rules for the transmission of outbound data that may be part of a transaction; and analysing at least said outbound data to identify, with reference to said rule of said policy data, transaction data that may be part of a transaction; determining, in accordance with said. rules of said policy data, whether the transmission of said transaction data would satisfy said rules; controlling transmission of said transaction data by said application in dependence on the determination made in said determining step.

527. The method of claim 526, wherein said controlling step includes said transaction data being either, transmitted, not transmitted, or sent to an approver who determines whether or not to transmit the transaction data.

528. The method of claim 527 further comprising the steps of: identifying in said data that may be part of a transaction, data that needs approval; referring said data that need approval to one or more approvers for approval; and monitoring whether or nor approval is received from said one or more approvers; and wherein in said controlling step, the transmission of said transaction data depends on whether or not approval is received from said one or more approvers.

529. The method of claim 528 wherein said analysing step includes identifying said transaction data that needs approval by determining the nature of said transaction data and checking said rules of said policy data, said rules of said policy data defining whether or not approval is needed in dependence on the determined nature of said transaction data.

530. The method of claim 528 wherein said analysing step includes determining the nature of said transaction data by identifying at least one of the identity of the

transmitter of said data, the identity of the intended recipient of said data, the workstation from which said data is to be transmitted, the sum for which a transaction is to be made, and the account from which a transaction is to be made.

531. ~The method of claim 528 comprising recording said data that may be part of a transaction, and transmitting this to said one or more approvers for review when deciding whether to give approval or not.

532. The method of claim 528 wherein said analysing step includes determining the nature of said transaction data that needs approval and selecting said one of said one or more approvers in dependence on that determination.

533. The method of claim 532 wherein said analysing step includes determining the nature of said transaction data that needs approval by identifying at least one of the identity of the transmitter of said data, the identity of the intended recipient of said data, the work station from which said data is to be transmitted, the sum for which a transaction is to be made, and the account from which the transaction is to be made.

534. The method of claim 526 wherein said analysing step includes determining whether a secure link has been negotiated between said application and a remote site on said network, and identifying said outbound data or said inbound data as transaction data, if it is transmitted on a secure link.

535. The method of claim 534 wherein said network is the Internet, and said rules of said policy data define the addresses of web sites or e-mail accounts that negotiate secure links for the transmission of- data but which are known not to be eCommerce sites or accounts, and said analysing step includes disregarding said outbound data transmitted to those web sites or accounts or said inbound data received from those web sites or accounts, such that no approval is required.

536. The method of claim 526 wherein said analysing step includes identifying transaction data by reference to said rules of said policy data, said rules of said policy data defining the addresses of known eCommerce web sites and e-mail accounts.

537. The method of claim 526 wherein said analysing step includes identifying credit card numbers in said outbound data or said inbound data, and identifying outbound data or inbound data that contains a credit card number as transaction data.

538. The method of claim 537 wherein said policy data specifies pre-determined credit card numbers that can never be transmitted.

539. The method of claim 526 wherein said analysing step includes identifying transaction data by reference to said rules of said policy data, said rules of said policy data defining one or more of predetermined digital certificates, account codes, predetermined keywords, pre-determined names and addresses and embedded codes.

540. The method of claim 526 wherein said analysing step includes detecting an embedded code in said inbound data, said embedded code having been placed in said inbound data to mark said inbound data as transaction data.

541. The method of claim 526 further comprising the step of providing a user of said application with a selector to indicate said outbound and said inbound data that is part

of a transaction, said analysing step including identifying selected outbound and inbound data.

542. The method of claim 526 wherein said analysing step is performed at said one or more workstations.

543. The method of claim 526 wherein said application is a web browser.

544. The method of claim 543 wherein said analysing step is a plug-in module of said web browser.

545. The method of claim 544 wherein said web browser is Microsoft's Internet Explorer and said plugin module is a Browser Helper Object.

546. The method of claim 526 wherein said application is an e-mail client.

547. The method of claim 546 wherein said analysing step is performed by a plug-in module of said e-mail client.

548. The method of claim 547 wherein said e-mail client is Microsoft's Outlook e-mail client and said analysing means is a Microsoft Exchange client extension.

549. The method of claim 526 wherein said application is an Instant messaging application.

550. The method of claim 549 wherein said analyser is a plug-in of said Instant messaging application.

551. The method of claim 526 wherein said network comprises a server and said analysing means is located at a point on said network intermediate said one or more workstations and said server, or said analysing means is located at said server.

552. The method of claim 526 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

553. The method of claim 526 further comprising the step of providing a supervisor workstation, said policy data being accessible by said supervisor workstation, such that a user. of said supervisor workstation can edit said policy data.

554. A computer program product, for controlling a computer to manage information, said computer being connected to a public network and having access to policy data containing rules for the transmission to the public network of outbound data that may be part of a transaction, comprising: a recording medium readable by the computer, having program code recorded thereon which when executed on said computer configures the computer to: analyse, in conjunction with an application running on the computer that is operable to transmit outbound data to the public network and receive inbound data from the public network, at least said outbound data to identify, with reference to said rules of said policy data, transaction data that may be part of a transaction to determine, in accordance with said rules of said policy data, whether the transmission of said transaction data would satisfy said rules; and to control the computer to control the transmission of said transaction data by said application in

dependence on the determination made by said analysing means.

555. The computer program product of claim 554 wherein said program code when executed on said computer is operable to control the computer such that said transaction data is either, transmitted, not transmitted, or sent to an approver who determines whether or not to transmit the transaction data.

556. The computer program product of claim 555 wherein the program code when executed on said computer is further operable to identify in said data that may be part of a transaction, data that needs approval; refer said data that needs approval to one or more approvers for approval, and monitor whether or not approval is received from said one or more approvers; and wherein the transmission of said transaction data by said application depends on whether or not approval is received from said one or more approvers;

557. The computer program product of claim 556 wherein said program code when executed on said computer is further operable to identify said transaction data that needs approval by determining the nature of said transaction data and checking said rules of said policy data, said rules of said policy data defining whether or not approval is needed in dependence on the determined nature of said transaction data.

558. The computer program product of claim 556 wherein said program code when executed on said computer is further operable to determine the nature of said transaction data by identifying at least one of the identity of the transmitter of said data, the identity of the intended recipient of said data, the computer in the private network from which said data is to be transmitted, the sum for which a transaction is to be made, and the account from which a transaction is to be made.

559. The computer program product of claim 556 wherein said program code when executed on said computer is further operable to record said data that may be part of a transaction, and cause this to be transmitted to said one or more approvers for their review when deciding whether to give approval or not.

560. The computer program product of claim 556 wherein said program code when executed on said computer is further operable to determine the nature of said transaction data that needs approval and select said one of said one or more approvers in dependence on that determination.

561. The computer program product of claim 560 wherein said program code when executed on said computer is operable to determine the nature of said transaction data that needs approval by identifying at least one of the identity of the transmitter of said data, the identity of the intended recipient of said data, the computer in the private network from which said data is to be transmitted, the sum for which a transaction is to be made, and the account from which the transaction is to be made.

562. The computer program product of claim 554 wherein said program code when executed on said computer is operable to determine whether a secure link has been negotiated between said application and a remote site on said public network, and to identify said outbound data or said inbound data as transaction data, if it is transmitted on a secure link.

563. The computer program product of claim 562 wherein said public network is the Internet, and said rules of said policy data define the addresses of web sites or e-mail

accounts that negotiate secure links for the transmission of data but which are known not to be eCommerce sites or accounts, and said program code when executed on said computer is operable to disregard said outbound data transmitted to those web sites or / accounts or said inbound data received from those web sites or accounts, such that no approval is required.

564. The computer program product of claim 554 wherein said program code when executed on said computer is operable to identify transaction data by reference to said rules of said policy data, said rules of said policy data defining the addresses of known eCommerce web sites and the e-mail accounts.

565. The computer program product of claim 554 wherein said program code when executed on said computer is operable to identify credit card numbers in said outbound data or said inbound data, and to identify outbound data or inbound data that contains a credit card number as transaction data.

566. The computer program product of claim 565 wherein said policy data specifies pre -determined credit card numbers that can never be transmitted.

567. The computer program product of claim 554 wherein said program code when executed on said computer is operable to identify transaction data by reference to said rules of said policy data, said rules of said policy data defining one or more of predetermined digital certificates, account codes, predetermined keywords, pre-determined names and addresses and embedded codes.

568. The computer program product of claim 554 wherein said program code when executed on said computer is operable to detect an embedded code in said inbound data, said embedded code having been placed in said inbound data to mark said inbound data as transaction data.

569. The computer program product of claim 554 further comprising, a selector, recorded on said recording medium, said selector being operable to select data in said outbound and said inbound data that is part of a transaction in response to input from a user, said program code-when executed on said computer being operable to identify said outbound and said inbound data so selected.

570. The computer program product of claim 554 wherein said program code is executable at said computer.

571. The computer program product of claim 554 wherein said application is a web browser.

572. The computer program product of claim 571 wherein said program code when executed on said computer is a plug-in module of said web browser.

573. The computer program product of claim 572 wherein said web browser is Microsoft's Internet
Explorer and said plug-in module is a Browser Helper
Object.

574. The computer program product of claim 554 wherein said application is an e-mail client.

575. The computer program product of claim 574 wherein said program code when executed on said computer is a plug-in module of said e-mail client.

576. The computer program product of claim 575 wherein said e-mail client is Microsoft's Outlook email client and said plug-in module is a Microsoft Exchange client extension.

577. The computer software product of claim 554 wherein said application is an Instant messaging application.

578. The computer software product of claim 577 wherein said program code when executed on said computer is a plug-in of said Instant messaging application.

579. The computer program product of claim 554 wherein said public network includes a server and said program code is executable at a point on said network intermediate said computer and said server, or said program code is executable at said server.

580. An information management system comprising: one or more workstations adapted for connection to a computer network, each workstation having a memory; an application stored in said memory of each workstation for receiving at least inbound data from said network; an analyser, said analyser being operable in conjunction with said application to monitor said inbound data and to identify in at least said inbound data, signed data that has been digitally signed with a digital certificate, to extract one or more details of said signed data and to determine whether or not verification is required for said digital certificate ; policy data, accessible by said analyser, containing rules which define whether or not verification is required for said digital certificate; and wherein said analyser determines whether or not verification is required for said digital certificate in dependence on said rules of said policy data and in dependence on said one or more details of said signed data extracted by said analyser.

582. The system of claim 580 wherein said verification for said digital certificate includes determining whether said digital certificate has been revoked.

583. The system of claim 582 wherein said analyser is further operable to determine whether said signed data is part of an eCommerce transaction, and if it is, to determine the amount of money that is promised in that eCommerce transaction, wherein said verification for the digital certificate also includes determining whether said digital certificate can be taken as a guarantee of receiving the amount of money promised in said eCommerce transaction.

584. The system of claim 580 wherein said analyser is operable to extract as one or more details of said signed data, one or more of said digital certificate holder's identity, the expiry date of said digital certificate, the issue number of said digital certificate, and the domain name from which the signed data was received, and wherein said rules of said policy file define whether or not verification for said digital certificate is required in dependence on the one or more details extracted by said analyser.

585. The system of claim 580 wherein said analyser is operable to determine whether or not an eCommerce transaction is occurring, and to extract, as one or more details of said signed data, the amount of any transaction being made with said digital certificate, the account code from which any payment is being made, a credit card number, one or

more indicators of the nature of the transaction, and wherein said rules of said policy file define whether or not verification is required for a digital certificate in dependence on the one or more details extracted by said analyser.

586. The system of claim 585 further comprising a data repository in which, digital certificates used to digitally sign any previously received signed data or sufficient descriptive data to identify any such digital certificates, and transaction data describing any previous transactions made with those digital certificates are stored, said transaction data being at least one or more of the date of any previous transactions made with a digital certificate, and the amount of any previous transaction made with that digital certificate, and wherein said rules of said policy file define whether or not verification for said digital certificate is required in dependence on said transaction data.

587. The system of claim 580 further comprising a data repository, accessible by said analyser, wherein said analyser is operable to identify any digital certificates that are used to digitally sign signed data in at least said inbound data, and to cause any such digital certificates, or sufficient descriptive data to identify such digital certificates to be stored in said data repository.

588. The system of claim 587 wherein said analyser is operable, to record the results of any verification for an digital certificate in said data repository together with said digital certificate or together with said descriptive data.

589. The system of claim 588 wherein said analyser is operable, if it identifies a digital certificate in said inbound data, to determine whether said digital certificate has been previously stored in said data repository, or whether said descriptive information identifying said digital certificate has been stored in said data repository, and if said digital certificate has been previously stored, to look-up the results of any previous verification of whether said digital certificate has been revoked, wherein said analyser determines whether or not to verify if said digital certificate has been revoked in dependence on said results of any previous verification of whether said identified digital certificate has been revoked.

590. The system of claim 580 wherein said analyser is further operable to verify whether or not a digital certificate has been revoked, and wherein said application is operable to prevent said inbound data being viewed by a user of said application if said analyser determines that said digital certificate has been revoked.

591. The system of claim 580 wherein said analyser is further operable to verify whether or not a digital certificate has been revoked, and said application is operable to notify a user of said application that said inbound data is not to be relied upon if said analyser determines that said digital certificate has been revoked.

592. The system of claim 580 wherein said analyser is located on each of said one or more workstations.

593. The system of claim 580 wherein said application is a web browser.

594. The system of claim 593 wherein said analyser is a plug-in module of said web browser.

595. The system of claim 594 wherein said web browser is Microsoft's Internet Explorer and said analyser is a Browser Helper Object.

596. The system of claim 580 wherein said application is an e-mail client.

597. The system of claim 596 wherein said analyser is a plug-in module of said e-mail client.

598. The system of claim 597 wherein said e-mail client is Microsoft's Outlook e-mail client and said analyser is a Microsoft client extension.

599. The system of claim 580 wherein said application is an Instant messaging application.

600. The system of claim 599 wherein said analyser is a plug-in of said Instant messaging application.

601. The system of 580 wherein said network comprises a server, and said analyser is located at a point on said network intermediate said one or more workstations and said server, or said analyser is located at said server.

602. The system of claim 580 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

603. The system of claim 580 further comprising a supervisor workstation, said policy data being accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

604. An information management system comprising: one or more workstations adapted for connection to a computer network, each workstation having a memory; application means, stored in said memory of each workstation, for receiving at least inbound data from said network; analysing means, being operable in conjunction with said application means, for monitoring said inbound data to identify in at least said inbound data signed data that has been digitally signed with a digital certificate, for extracting one or more'details of said signed data and for determining whether or not verification is required for said digital certificate; policy storage means, accessible by said analysing means, for storing policy data containing rules which define whether or not verification is required for said digital certificate; and wherein said analysing means determines whether or not verification is required for said digital certificate in dependence on said rules of said policy data and in dependence on said one or more details of said signed data extracted by said analysing means.

605. The system of claim 604 wherein said verification for said digital certificate includes determining whether said digital certificate has been revoked.

606. The system of claim 605 wherein said analysing means is further operable to determine whether said signed data is part of an eCommerce transaction, and if it is, to determine the amount of money that is promised in that eCommerce transaction, wherein said verification for the digital certificate also includes determining whether said digital certificate can be taken as a guarantee of receiving the amount of money promised in said eCommerce transaction.

607. The system of claim 604 wherein said analysing means is operable to extract'as one or more details of said signed data, one or more of said digital certificate holder's identity, the expiry date of said digital certificate, the issue number of said digital certificate, and the domain name from which the signed data was received, and wherein said rules of said policy file define whether or not verification for said digital certificate is required in dependence on the one or more details extracted by said analysing means.

608. The-system of claim 604 wherein said analysing means is operable to determine whether or not an eCommerce transaction is occurring, and to extract, as one or more details of said signed data, the amount of any transaction being made with said digital certificate, the account code from which any payment is being made, a credit card number, one or more indicators of the nature of the transaction, and wherein said rules of said policy file define whether or. not verification is required for a digital certificate in dependence on the one or more details extracted by said analysing means.

609. The system of claim 608 further comprising a data repository in which, digital certificates used to digitally sign any previously received signed data or sufficient descriptive data to identify any such digital certificates, and transaction data describing any previous transactions made with those digital certificates are stored, said transaction data being at least one or more of the date of any previous transactions made with a digital certificate, and the amount of any previous transaction made with that digital certificate, and wherein said rules of said policy file define whether or not verification for said digital certificate is required in dependence on said transaction data.

610. The system of claim 604 further comprising a data repository, accessible by said analysing means, wherein said analysing means is operable to identify any digital certificates that are used to digitally sign signed data in at least said inbound data, and to cause any such digital certificates, or sufficient descriptive data to identify such digital certificates to be stored in said data repository.

611. The system of claim 610 wherein said analysing means is operable, to record the results of any verification for an digital certificate in said data repository together with said digital certificate or together with said descriptive data.

612. The system of claim 611 wherein said analysing means is operable, if it identifies a digital certificate in said inbound data, to determine whether said digital certificate has been previously stored in said data repository, or whether said descriptive information identifying said digital certificate has been stored in said data repository, and if said digital certificate has been previously stored, to look-up the results of any previous verification of whether said digital certificate has been revoked, wherein said analysing means determines whether or not to verify if said digital certificate has been revoked in dependence on said results of any previous verification of whether said identified digital certificate has been revoked.

613. The system of claim 604 wherein said analysing means is further operable to verify whether or not a digital certificate has been revoked, and wherein said application means is operable to prevent said inbound data being viewed by a user of said application means if said analysing means determines that said digital certificate has been revoked.

614. The system of claim 604 wherein said analysing means is further operable to verify whether or not a digital certificate has been revoked, and said application means is operable to notify a user of said application means that said inbound data is not to be relied upon if said analysing means determines that said digital certificate has been revoked.

615. The system of claim 604 wherein said analysing means is located on each of said one or more workstations.

616. The system of claim 604 wherein said application means is a web browser.

617. The system of claim 616 wherein said analysing means is a plug-in module of said web browser.

618. The system of claim 617 wherein said web browser is Microsoft's Internet Explorer and said analysing means is a Browser Helper Object.

619. The system of claim 604 wherein said application means is an e-mail client.

620. The system of claim 619 wherein said analysing means is a plug-in module of said e-mail client.

621. The system of claim 620 wherein said e-mail client is Microsoft's Outlook e-mail client and said analysing means is a Microsoft client extension.

622. The system of claim 604 wherein said application is an Instant messaging application.

623. The system of claim 622 wherein said analyser is a plug-in of said Instant messaging application.

624. The system of 604 wherein said network comprises a server, and said analysing means is located at a point on said network intermediate said one or more workstations and said server, or said analysing means is located at said server.

625. The system of claim 604 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

625. The system of claim 604 further comprising a supervisor workstation, said policy data being accessible by said supervisor workstation, such that a user of said supervisor workstation can edit said policy data.

626. A method of managing information comprising the steps of: providing one or more workstations adapted for connection to a computer network, each workstation having a memory; providing an application stored in said memory of each workstation for receiving at least inbound data from said network; providing policy data, containing rules which define whether or not verification is required for a digital certificates used to digitally sign signed data received in said inbound data; identifying in at least said inbound data, signed data that has been digitally signed with a digital certificate ; extracting one or more details of said signed data; and determining whether or not

verification is required for said digital certificate in dependence on said rules of said policy data and in dependence on said one or more details of said signed data extracted in said extracting step.

627. The method of claim 626 wherein said verification for the digital certificate includes determining whether the digital certificate has been revoked.

628. The method of claim 627 further comprising the step of determining whether said signed data is part of an eCommerce transaction, and if it is, determining the amount of money that is promised in that eCommerce transaction, wherein said verification for the digital certificate also includes determining whether said digital certificate can be taken as a guarantee of receiving the amount of money promised in said eCommerce transaction.

629. The method of claim 626 wherein said one or more details of said signed data extracted in said extracting step, include one or more of said digital certificate holder's identity, the expiry date of said digital certificate, the issue number of said digital certificate, and the domain name from which the signed data was received, and wherein said rules of said policy file define whether or not verification for said digital certificate is required in dependence on the one or more details.

630. The method of claim 626 further comprising the step of determining whether or not an eCommerce transaction is occurring, and if it is, extracting in said extracting step, as one or more details of said. inbound data, the amount of any transaction being made with said digital certificate, the account code from which any payment is being made, a credit card number, one or more indicators of the nature of the transaction, and wherein said rules of said policy file define whether or not verification is required for a digital certificate in dependence on said one or more details.

631. The method of claim 630 further comprising the step of providing a data repository in which digital certificates used to digitally sign any previously received signed data or sufficient descriptive data to identify any such digital certificates, and transaction data describing any previous transactions made with those digital certificates are stored; said transaction data being at least one or more of the date of any transactions made with a digital certificate, and the amount of any transaction made with that digital certificate, and wherein said rules of said policy file define whether or not verification for said digital certificate is required in dependence on said transaction data.

632. The method of claim 626 further comprising the steps of identifying digital certificates used to sign signed data in said inbound data or digital certificates transmitted in said inbound data and storing said digital certificates or sufficient descriptive data to identify said digital certificates in said data repository.

633. The method of claim 632 further comprising the steps of recording the results of any verification for a digital certificate in said data repository together with said digital certificate.

634. The method of claim 633 further comprising the step of determining whether said digital certificate has been previously stored in said data repository, and if it has been previously stored, to look-up the results of any previous verification for said digital certificate, wherein said step of determining whether or not verification is required for said digital certificate is dependent on said results of any previous verification for said

digital certificate.

635. The method of claim 626 further comprising the steps of determining whether or not a digital certificate has been revoked, and preventing said inbound data being viewed by a user of said application if said identified digital certificate has been revoked.

636. The method of claim 626 further comprising the steps of determining whether or not a digital certificate has been revoked, and notifying a user of said application that said inbound data is not to be relied upon if said digital certificate has been revoked.

637. The method of claim 626 wherein said steps of identifying a digital certificate, extracting one or more details from said signed data and determining whether or not verification is required are performed at said one or more workstations.

638. The method of claim 626 wherein said application is a web browser.

639. The method of claim 638 wherein said steps of identifying a digital certificate, extracting one or more details from said signed data and determining whether or not verification is required are performed by a plug-in module of said web browser.

640. The method of claim 639 wherein said web browser is Microsoft's Internet Explorer and said plugin module is a Browser Helper Object.

641. The method of claim 626 wherein said application is an e-mail client.

642. The method of claim 641 wherein said steps of identifying a digital certificate, extracting one or more details from said signed data and determining whether or not verification is required are performed by a plug-in module of said e-mail client.

643. The method of claim 642 wherein said e-mail client is Microsoft's Outlook e-mail client and said plug-in module is a Microsoft Exchange client extension.

644. The method of claim 626 wherein said application is an Instant messaging application.

645. The method of claim 644 wherein said analyser is a plug-in of said Instant messaging application.

646. The method of claim 626 wherein said network comprises a server, and said steps of identifying a digital certificate, extracting one or more details from said signed data and determining whether or not verification is. required are performed at a point on said network intermediate said one or more workstations and said server, or said steps of identifying a digital certificate, extracting one or more details from said signed data and determining whether or not verification is required are performed at said server.

647. The method of claim 626 wherein said computer network to which said one or more workstations are adapted for connection is a public computer network, and wherein said one or more workstations together form a private computer network.

648. The method of claim 626 further comprising providing a supervisor workstation, said policy data being accessible by said supervisor workstation, such that a user of

said supervisor workstation can edit said policy data.

649. A computer program product for controlling a computer connected to a public network to manage information, said computer having access to policy data containing rules which define whether or not verification is required for a digital certificate used to digitally sign signed data received in inbound data from the public network, comprising : a recordable medium readable by the computer, having program code recorded thereon which when executed on said computer configures said computer to: analyse, in conjunction with an application running on the computer that is operable to receive at least inbound data from the public network, signed data that has been digitally signed with a digital certificate, to extract one or more details of said signed data; to determine whether or not verification is required for said digital certificate in dependence on said rules of said policy data and in dependence on the one or more extracted details of said signed data; and to control the application in dependence on the determination.

650. The computer program product of claim 649 wherein said verification for the digital certificate includes determining whether the digital certificate has been revoked.

651. The computer program product of claim 650 wherein said program code when executed on said computer is further operable to determine whether said signed data is part of an eCommerce transaction, and if it is, to determine the amount of money that is promised in that eCommerce transaction, wherein said verification for the digital certificate also includes determining whether said digital certificate can be taken as a guarantee of receiving the amount of money promised in said eCommerce transaction.

652. The computer program product of claim 649 wherein said one or more details of said signed data, include one or more of said digital certificate holder's identity, the expiry date of said digital certificate, the issue number of said digital certificate, and the domain name from which the signed data was received, and wherein said rules of said policy file define whether or not verification for said digital certificate is required in dependence on the one or more details.

653. The computer program product of claim 649 wherein said program code when executed on said computer is further operable to determine whether or not an eCommerce transaction is occurring, and if it is, to extract as one or more details of said signed data, the amount of any transaction being made with said digital certificate, the account code from which any payment is being made, a credit card number, one or more indicators of the nature of the transaction, and wherein said rules of said policy file define whether or not verification is required for said digital certificate in dependence on said one or more details.

654. The computer program product of claim 653 wherein the program code when executed on said computer is further operable to control the computer to record digital certificates used to digitally sign any signed data received in said inbound data or sufficient descriptive data to identify any such digital certificates, and transaction data describing any transactions made with those digital certificates in a data repository such that a record is maintained of transactions made with a digital certificate ; said transaction data being at least one or more of the date of any transactions made with a digital certificate, and the amount of any transaction made with that digital certificate, and wherein said rules of said policy file define whether or not verification for said digital certificate is required in dependence on said transaction data.

655. The computer program product of claim 649 wherein said program code when executed on said computer is further operable to control the computer to store digital certificates used to sign signed data in said inbound data or digital certificates transmitted in said inbound data and storing said digital certificates or sufficient descriptive data to identify said digital certificates in a data repository.

656. The computer program product of claim 655 wherein said program code when executed on said computer is further operable control the computer to record the results of any verification for an identified digital certificate in said data repository together with said identified digital certificate.

657. The computer program product of claim 656 wherein said program code when executed on said computer is operable to determine whether said identified digital certificate has been previously stored in said data repository, and if it has been previously stored, to look-up the results of any previous verification for said identified digital certificate, wherein the determination of whether or not verification is required for said identified digital certificate is dependent on said results of any previous verification for said identified digital certificate.

658. The computer program product of claim 649 wherein said program code when executed on said computer is operable to determine whether or not a digital certificate has been revoked, and control said application to prevent said inbound data being viewed by a user of said application if said identified digital certificate has been revoked.

659. The computer program product of claim 649 wherein said program code when executed on said computer is operable to determine whether or not a digital certificate has been revoked, and to control said application to notify a user of said application that said inbound data is not to be relied upon if said identified digital certificate has been revoked.

660. The computer program product of claim 649 wherein said program code is executable at said computer.

661. The computer program product of claim 649 wherein said application is a web browser.

662. The computer program product of claim 661 wherein said program code when executed on said computer is a plug-in module of said web browser.

663. The computer program product of claim 662 wherein said web browser is Microsoft's Internet
Explorer and said plug-in module is a Browser Helper
Object.

664. The computer program product of claim 649 wherein said application is an e-mail client.

665. The computer program product of claim 664 wherein said program code when executed on said computer is a plug-in module of said e-mail client.

666. The computer program product of claim 665 wherein said e-mail client is

Microsoft's Outlook email client and said plug-in module is a Microsoft Exchange client extension.

667. The computer software product of claim 649 wherein said application is an Instant messaging application.

668. The computer software product of claim 667 wherein said program code when executed on said computer is a plug-in of said Instant messaging application.

669. The computer program product of claim 649 wherein said network includes a server and said program code is executable at a point on said network intermediate said computer and said server, or said program code is executable at said server.

670. An information management system comprising: one or more workstations adapted for connection to a computer network, each workstation having a memory; an application stored in said memory of, each workstation for transmitting outbound messages to said network and receiving inbound messages from said network; policy data containing rules for determining one or more particulars of the outbound message, and for controlling the transmission of said outbound message in dependence on those particulars; and an analyser, said analyser being operable in conjunction with said policy data to determine one or more particulars of the outbound message and to selectively re-direct the outbound message to a third party instead of the originally intended recipient.

671. The system of claim 670 wherein the analyser is operable to re-direct the outbound message to said third party if the message is to be sent to one or more of a pre-determined list of recipients or addresses.

672. The system of claim 670 wherein said policy data comprises a list of names of company employees who can use said application to send outbound messages from and receive inbound messages at a company address, and wherein the analyser is operable to redirect the outbound message of any of said employees to said third party, if it determines. that. the intended address of the outbound message contains one of a predetermined list of domain names, and if the intended address comprises at least one of the surname, first names or initials of the employee on said list of names.

673. The system of claim 670 wherein the analyser is operable to re-direct the outbound message to said third party if the message contains one or more pre-determined keywords or combination of keywords.

674. The system of claim 670 wherein the analyser is operable to re-direct the outbound message to said third party if the message or attachments to the message are to be encrypted before transmission.

675. The system of claim 674 wherein the analyser is operable to re-direct the message with its original encryption key to the third party, and wherein the third party has means to approve the message for transmission to the originally intended recipient and re-encrypt the message with the original key.

676. The system of claim 674 wherein the analyser is operable to add text to the message before it is re-directed indicating that it is a re-directed message.

677. The system of claim 670 wherein the analyser is operable to re-direct the outbound message to said third party if the message contains attachments, or particular types of attachments.

678. The system of claim 670 wherein the analyser is operable to re-direct the outbound message to said third party if the message contains attachments and if the body or the subject of the message contains less than a pre-determined amount of text.

679. The system of claim 670 wherein the analyser is operable to re-direct the outbound message to said third party in dependence on the identity of the author of the message.

680. The system of claim 670 wherein means are provided on the re-directed message received by the third party for the third party to approve the message for transmission to the originally intended recipient.

681. The system of claim 670 wherein said analyser is located on each of said one or more workstations.

682. The system of claim 670 wherein said application is a web browser.

683. The system of claim 682 wherein said analyser is a plug-in module of said web browser.

684. The system of claim 683 wherein said web browser is Microsoft's Internet Explorer and said analyser is a Browser Helper Object.

685. The system of claim 670 wherein said application is an e-mail client.

686. The system of claim 685 wherein said analyser is a plug-in module of said e-mail client.

687. The system of claim 686 wherein said e-mail client is Microsoft's Outlook e-mail client and said analyser is a Microsoft Exchange client extension.

689. The system of claim 670 wherein said application is an Instant messaging application.

690. The system of claim 689'wherein said analyser is a plug-in of said Instant messaging application.

691. The system of claim 690 wherein said application is a Voice Messaging application.

692. The system of claim 691 wherein said analyser is a plug-in of said Voice messaging application.

693. The system of claim 670 wherein said network includes a server and said analyser is located at a point on said network intermediate said one or more workstations and said server, or said analyser is located at said server.

694. An information management system comprising : one or more workstations

adapted for connection to a computer network, each workstation having a memory; an application stored in said memory of each workstation for receiving inbound messages from said network and for transmitting a received message as an outbound message to said network; policy data containing rules for determining one or more particulars of, the outbound message, and for controlling the transmission of said outbound message in dependence on those particulars; and an analyser, said analyser being operable in conjunction with said policy data to determine one or more particulars of the outbound message and to selectively prevent the outbound message being forwarded to another recipient, or to issue a warning before a message is forwarded to another recipient, in dependence on the rules defined in said policy data.

695. The system of claim 694 wherein the policy data defines one or more pre-determined keywords, and wherein if the analyser determines that the message contains one or more of the pre-determined keywords or combination of keywords, the message is prevented from being forwarded to another recipient or a warning is issued before the message is forwarded.

696. The system of claim 694 wherein the analyser is operable to prevent a message being forwarded to one or more of a pre-determined list of addresses, or to issue a warning before forwarding the message to one or more of the pre-determined list of addresses.

697. The system of claim 694 wherein the analyser is operable to prevent a message being forwarded to an address outside a pre-determined group of addresses, or to issue a warning before forwarding the message, if previously the message has only been transmitted among the pre-determined group of addresses.

698. The system of claim 694 wherein the received message has a one or more attributes configurable by the sender of the message, one of those attributes being a"do-not-forward"attribute, and the analyser is operable to prevent a received message being forwarded as an outbound message if the sender of the received message set the"do-not-forward" attribute.

699. The system of claim 694 wherein the analyser is operable to prevent forwarding of the message, or to issue a warning before forwarding the message, if the recipient forwarding the message was the only recipient of the original message.

700. The system of claim 694 wherein the analyser is further operable to cause the outbound message that is to be forwarded to first be re-directed to a third party for approval, wherein if the third party gives his approval, the outbound message is forwarded to the originally intended recipients in the normal way.

701. The system of claim 694 wherein said analyser is located on each of said one or more workstations.

702. The system of claim 694 wherein said application is a web browser.

703. The system of claim 702 wherein said analyser is a plug-in module of said web browser.

704. The system of claim 703 wherein said web browser is Microsoft's Internet Explorer and said analyser is a Browser Helper Object.

705. The system of claim 694 wherein said application is an e-mail client.

706. The system of claim 705 wherein said analyser is a plug-in module of said e-mail client.

707. The system of claim 706 wherein said e-mail client is Microsoft's Outlook e-mail client and said analyser is a Microsoft Exchange client extension.

708. The system of claim 694 wherein said application is an Instant messaging application.

709. The system of claim 708 wherein said analyser is a plug-in of said Instant messaging application.

710. The system of claim 694 wherein said application is a Voice Messaging application.

711. The system of claim 710 wherein said analyser is a plug-in of said Voice messaging application.

712. The system of claim 694 wherein said network includes a server and said analyser is located at a point on said network intermediate said one or more workstations and said server, or said analyser is located at said server.

713. An information management system comprising : one or more workstations adapted for connection to a computer network, each workstation having a memory; an application stored in said memory of each workstation for transmitting outbound messages to said network and receiving inbound messages from said network; policy data containing rules for determining one or more particulars of the outbound message, and for controlling the transmission of said outbound message in dependence on those particulars ; and an analyser, said analyser being operable in conjunction with said policy data to determine one or more particulars of the outbound message and to either selectively require that the message be digitally signed before transmission, or to notify the sender of the message that digitally signing is recommended, or to require that a digitally signed message be transmitted without signature, or to notify the sender of the message digitally signing is not recommended.

714. The system of claim 713 wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the intended recipient or address of the message.

715. The system of claim 713 wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on whether the message contains one or more keywords, or combination of keywords, in a pre-determined list of keywords.

716. The system of claim 713 wherein whether the message is required to be digitally

signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the identity author of the outbound message.

717. The system of claim 713 wherein whether the digitally signed message is required to be transmitted without signature, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the type of digital certificate or signing key used to digitally sign the message.

718. The system of claim 713 wherein the analyser is operable to determine what digital certificates, or signing keys, are available to digitally sign an outbound message, and wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the type of certificate or signing key used to digitally sign the message, and on the types of digital certificate or signing key available to sign the message.

719. The system of claim 713 wherein the analyser is further operable to cause the outbound message that is to be forwarded to first be re-directed to a third party for approval, wherein if the third party gives his approval, the outbound message is forwarded to the originally intended recipients in the normal way.

720. The system of claim 713 wherein said analyser is located on each of said one or more workstations.

721. The system of claim 713 wherein said application is a web browser.

* 722. The system of claim 721 wherein said analyser is a plug-in module of said web browser.

723. The, system of claim 722 wherein said web browser is Microsoft's Internet Explorer and said analyser is a Browser Helper Object.

724. The system of claim 713 wherein said application is an e-mail client.

725. The system of claim 724 wherein said analyser is a plug-in module of said e-mail client.

726. The system of claim 725 wherein said e-mail client is Microsoft's Outlook e-mail client and said analyser is a Microsoft Exchange client extension.

727. The system of claim 713 wherein said application is an Instant messaging application.

728. The system of claim 727 wherein said analyser is a plug-in of said Instant messaging application.

729. The system of claim 713 wherein said application is a Voice Messaging application.

730. The system of claim 729 wherein said analyser is a plug-in of said Voice messaging application.

731. The system of claim 713 wherein said network includes a server and said analyser is located at a point on said network intermediate said one or more workstations and said server, or said analyser is located at said server.

732. An information management system comprising: one or more workstations adapted for connection to a computer network, each workstation having a memory; an application stored in said memory of each workstation for transmitting outbound data to said network and receiving inbound data from said network; policy data containing rules for determining one or more particulars of the outbound data, and for controlling the transmission of said outbound data in dependence on those particulars; and an analyser, said analyser being operable in conjunction with said policy data to determine one or more particulars of the outbound data and control the transmission of said data according to said policy data.

733. The system of claim 732 wherein the analyser is operable to prevent outbound data being transmitted to a web site on the Internet, if it determines that the web site is in a pre-determined list of prohibited web sites, and if it is determined that the outbound data contains one or more pre-determined keywords, or combinations of keywords.

734. An information management system comprising : one or more workstations adapted for connection to a computer network, each workstation having a memory; application means, stored in said memory of each workstation, for transmitting outbound messages to said network and receiving inbound messages from said network; policy storage means for storing policy data containing rules for determining one or more particulars of the outbound message, said rules being for controlling the transmission of said outbound message in dependence on those particulars; and analysing means, operable in conjunction with said policy data, for determining one or more particulars of the outbound message and for selectively re-directing the outbound message to a third party instead of the originally intended recipient.

735. The system of claim 734 wherein the analysing means is operable to re-direct the outbound message to said third party if the message is to be sent to one or more of a pre-determined list of recipients or addresses.

736. The system of claim 734 wherein said policy data comprises a list of names of company employees who can use said application means to send outbound messages from and receive inbound messages at a company address, and wherein the analysing means is operable to re-direct the outbound message of any of said employees to said third party, if it determines that the intended address of the outbound message contains one of a pre-determined list of domain names, and if the intended address comprises at least one of the surname, first names or initials of an employee in said list of names.

737. The system of claim 734 wherein the analysing means is operable to re-direct the outbound message to said third party if the message contains one or more pre-determined keywords or combination of keywords.

738. The system of claim 734 wherein the analysing means is operable to re-direct the outbound message to said third party if the message or attachments to the message are to be encrypted before transmission.

739. The system of claim 737 wherein the analysing means is operable to re-direct the message with its original encryption key to the third party, and wherein the third party has means to approve the message for transmission to the originally intended recipient and re-encrypt the message with the original key.

740. The system of claim 737 wherein the analysing means is operable to add text to the message before it is re-directed indicating that it is a redirected message.

741. The system of claim 734 wherein the analysing means is operable to re-direct the outbound message to said third party if the message contains attachments, or particular types of attachments.

742. The system of claim 734 wherein the analysing means is operable to re-direct the outbound message to said third party if the message contains attachments and if the body or the subject of the message contains less than a pre-determined amount of text.

743. The system of claim 734 wherein the analysing means is operable to re-direct the outbound message to said third party in dependence on the identity of the author of the message.

744. The system of claim 734 wherein the third party has means to approve the message for transmission to the originally intended recipient.

745. The system of claim 734 wherein said analysing means is located on each of said one or more workstations.

746. The system of claim 734 wherein said application means is a web browser.

747. The system of claim 746 wherein said analysing means is a plug-in module of said web browser.

748. The system of claim 747 wherein said web browser is Microsoft's Internet Explorer and said analysing means is a Browser Helper Object.

749. The system of claim 734 wherein said application means is an e-mail client.

750. The system of claim 749 wherein said analysing means is a plug-in module of said e-mail client.

751. The system of claim 750 wherein said e-mail client is Microsoft's Outlook e-mail client and said analysing means is a Microsoft Exchange client extension.

752. The system of claim 734 wherein said application means is an Instant messaging application.

753. The system of claim 752 wherein said analysing means is a plug-in of said Instant messaging application.

754. The system of claim 734 wherein said application means is a Voice Messaging application.

755. The system of claim 754 wherein said analysing means is a plug-in of said Voice messaging application.

756. The system of claim 734 wherein said network includes a server and said analysing means is located at a point on said network intermediate said one or more workstations and said server, or said analysing means is located at said server.

757. An information management system comprising: one or more workstations adapted for connection to a computer network, each workstation having a memory; application means, stored in said memory of each workstation, for receiving inbound ! messages from said network and for transmitting a received message as an outbound message to said network; policy storage means for storing policy data containing rules for determining one or more particulars of the outbound message, said rules being for controlling the transmission of said outbound message in dependence on those particulars; and analysing means, operable in conjunction with said policy data, for determining one or more particulars of the outbound message and for selectively preventing the outbound message being forwarded to another recipient, or for issuing a warning before a message is forwarded to another recipient, in dependence on the rules defined in said policy data.

758. The system of claim 757 wherein the policy data defines one or more pre-determined keywords, and wherein if the analysing means determines that the message contains one or more of the predetermined keywords or combination of keywords, the message is prevented from being forwarded to another recipient or a warning is issued before the message is forwarded.

759. The system of claim 757 wherein the analysing means is operable to prevent a message being forwarded to one or more of a pre-determined list of addresses, or to issue a warning before forwarding the message to one or more of the pre-determined list of addresses.

760. The system of claim 757 wherein the analysing means is operable to prevent a message being forwarded to an address outside a pre-determined group of addresses, or to issue a warning before forwarding the message, if previously the message has only been transmitted among the pre-determined group of addresses.

761. The system of claim 757 wherein the received message has a one or more attributes configurable by the sender of the message, one of those attributes being a"do-not-forward attribute, and the analysing means is operable to prevent a received message being forwarded as an outbound message if the sender of the received message set the do-not- forward"attribute.

762. The system of claim 757 wherein the analysing means is operable to prevent forwarding of the message, or to issue a warning before forwarding the message, if the recipient forwarding the message was the only recipient of the original message.

763. The system of claim 757 wherein the analysing means is further operable to cause the outbound message that is to be forwarded to first be re-directed to a third party for approval, wherein if the third party gives his approval, the outbound message is forwarded to the originally intended recipients in the normal way.

764. The system of claim 757 wherein said analysing means is located on each of said

one or more workstations.

765. The system of claim 757 wherein said application means is a web browser.

766. The system of claim 765 wherein said analysing means is a plug-in module of said web browser.

767. The system of claim 766 wherein said web browser is Microsoft's Internet Explorer and said analysing means is a Browser Helper Object.

768. The system of claim 757 wherein said application means is an e-mail client.

769. The system of claim 768 wherein said analysing means is a plug-in module of said e-mail client.

770. The system of claim 769 wherein said e-mail client is Microsoft's Outlook e-mail client and said analysing means is a Microsoft Exchange client extension.

771. The system of claim 757 wherein said application means is an Instant messaging application.

772. The system of claim 771 wherein said analysing means is a plug-in of said Instant messaging application.

773. The system of claim 757 wherein said application means is a Voice Messaging application.

774. The system of claim 773 wherein said analysing means is a plug-in of said Voice messaging application.

775. The system of claim 757 wherein said network includes a server and said analysing means is located at a point on said network intermediate said one or more workstations and said server, or said analysing means is located at said server.

776. An information management system comprising: one or more workstations adapted for connection to a computer network, each workstation having a memory; application means stored in said memory of each workstation for transmitting outbound messages to said network and receiving inbound messages from said network; policy storage means for storing data containing rules for determining one or more particulars of the outbound message, said rules being for controlling the transmission of said outbound message in dependence on those particulars; and analysing means, operable in conjunction with said policy data, for determining one or more particulars of the outbound message and for either selectively requiring that the message be digitally signed before transmission or, for notifying the'sender of the message that digitally signing is recommended, or for requiring that a digitally signed message be transmitted without signature, or notifying the sender of the message that not digitally signing the message is recommended.

777. The system of claim 776 wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature,

are dependent on the intended recipient or address of the message.

778. The system of claim 776 wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on whether the message contains one or more keywords, or combination of keywords, in a pre-determined list of keywords.

779. The system of claim 776 wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the identity of the author of the outbound message.

780. The system of claim 776 wherein whether the digitally signed message is required to be transmitted without signature, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the type of digital certificate or signing key used to digitally sign the message.

781. The system of claim 776 wherein the analysing means is operable to determine what digital certificates, or signing keys, are available to digitally sign an outbound message, and wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the type of certificate or signing key used to digitally sign the message, and on the types of digital certificate or signing key available to sign the message.

782. The system of claim 776 wherein the analysing means is further operable to cause the outbound message that is to be forwarded to first be re-directed to a third party for approval, wherein if the third party gives his approval, the outbound message is forwarded to the originally intended recipients in the normal way.

783. The system of claim 776 wherein said analysing means is located on each of said one or more workstations.

784. The system of claim 776 wherein said application means is a web browser.

785. The system of claim 784 wherein said analysing means is a plug-in module of said web browser.

786. The system of claim 785 wherein said web browser is Microsoft's Internet Explorer and said analysing means is a Browser Helper Object.

787. The system of claim 776 wherein said application means is an e-mail client.

789. The system of claim 787 wherein said analysing means is a plug-in module of said e-mail client.

790. The system of claim 789 wherein said e-mail client is Microsoft's Outlook e-mail client and said analysing means is a Microsoft Exchange client extension.

791. The system of claim 776 wherein said application means is an Instant messaging application.

792. The system of claim 791 wherein said analysing means is a plug-in of said Instant messaging application.

793. The system of claim 776 wherein said application means is a Voice Messaging application.

794. The system of claim 793 wherein said analysing means is a plug-in of said Voice messaging application.

795. The system of claim 776 wherein said network includes a server and said analysing means is located at a point on said network intermediate said one or more workstations and said server, or said analysing means is located at said server.

796. An information management system comprising: one or more workstations adapted for connection to a computer network, each workstation having a memory; application means stored in said memory of each workstation for transmitting outbound data to said network and receiving inbound data from said network; policy storage means for storing data containing rules for determining one or more particulars of the outbound data, said rules being for controlling the transmission of said outbound data in dependence on those particulars; and analysing means, operable in conjunction with said policy data, for determining one or more particulars of the outbound data and controlling the transmission of said outbound data according to said policy data.

797. The system of claim 796 wherein the analysing means is operable to prevent outbound data being transmitted to a web site on the Internet, if it determines that the web site is in a pre-determined list of prohibited web sites, and if it is determined that the outbound data contains one or more predetermined keywords, or combinations of keywords.

798. A method of managing information comprising the steps of: providing one or more workstations adapted for connection to a computer network, each workstation having a memory; providing an application stored in said memory of. each workstation for transmitting outbound messages to said network and receiving inbound messages from said network; providing policy data containing rules for determining one or more particulars of the outbound message, and for controlling the transmission of said outbound message in dependence on those particulars ; and analysing said outbound message to determine, in conjunction with said policy data, said one or more particulars; and selectively re-directing the outbound message to a third party instead of the originally intended recipient in dependence on said one or more particulars.

799. The method of claim 798 wherein the outbound message is re-directed to said third party if the message is to be sent to one or more of a predetermined list of recipients or addresses.

800. The method of claim 798 wherein said policy data comprises a list of names of company employees who can use said application to send outbound messages from and receive inbound messages at a company address, and wherein the outbound message of any of said employees is re-directed to said third party, if it is determined in

the analysing step that the intended address of the outbound message contains one of a pre-determined list of domain names, and if the intended address comprises at least one of the surname, first names or initials of an employee in said list of names.

801. The method of claim 798 wherein the outbound message is re-directed to said third party if the message contains one or more pre-determined keywords or combination of keywords.

802. The method of claim 798 wherein the outbound message is re-directed to said third party if the message or attachments to the message are to be encrypted before transmission.

803. The method of claim 802 comprising the steps of: re-directing the outbound message with its original encryption key to the third party, and providing means for the third party to approve the message for transmission to the originally intended recipient and re-encrypt the message with the original key.

804. The method of claim 802 comprising adding text to the message before it is re-directed indicating that it is a re-directed message.

805. The method of claim 798 wherein the outbound message is re-directed to said third party if the message contain attachments, or particular types of attachments.

806. The method of claim 798 wherein the outbound message is re-directed to said third party if the message contains attachments and if the body or the subject of the message contains less than a predetermined amount of-text.

807.. The method of claim 798 wherein the outbound message is re-directed to said third party in dependence on the identity of the author of the message.

808. The method of claim 798 comprising providing means for the third party to approve the message for transmission to the originally intended recipient.

809. The method of claim 798 wherein said analysing step is performed at each of said one or more workstations.

810. The method of claim 798 wherein said application is a web browser.

811. The method of claim 810 wherein said analysing step is performed by a plug-in module of said web browser.

812. The method of claim 811 wherein said web browser is Microsoft's Internet Explorer and said plugin module is a Browser Helper Object. r'
813. The method of claim 798 wherein said application is an e-mail client.

814. The method of claim 813 wherein said analysing step is performed by a plug-in module of said e-mail client.

815. The method of claim 814 wherein said e-mail client is Microsoft's Outlook e-mail client and said plug-in module is a Microsoft Exchange client extension.

816. The method of claim 798 wherein said application is an Instant messaging

application.

817. The method of claim 816 wherein said analysing step is performed by a plug-in of said
Instant messaging application.

818. The method of claim 798 wherein said application is a Voice Messaging application.

819. The method of claim 818 wherein said analysing step is performed by a plug-in of said Voice messaging application.

820. The system of claim 798 wherein said network includes a server and said analysing step is performed at a point on said network intermediate said one or more workstations and said server, or is performed at said server.

821. A method of managing information comprising the steps of: providing one or more workstations adapted for connection to a computer network, each workstation having a memory; providing an application stored in said memory of each workstation for receiving inbound messages from said network and for transmitting a received message as an outbound message to said network; providing policy data containing rules for determining one or more particulars of the outbound message, and for controlling the transmission of said outbound message in dependence on those particulars; and analysing said outbound message in conjunction with said policy data, to determine one or more particulars of said outbound message; and selectively preventing the outbound message being forwarded to another recipient, or issuing a warning before the outbound message is forwarded to another recipient, in dependence on the rules defined in said policy data and in dependence on said one or more particulars.

822. The method of claim 821 wherein the policy data defines one or more pre-determined keywords, and wherein if it is determined in the analysing step that the message contains one or more of the pre-determined keywords or combination of-keywords, the message is prevented from being forwarded to another recipient or a warning is issued before the message is forwarded.

823. The method of claim 821 wherein the outbound message is prevented from being forwarded, or a warning is issued before forwarding the outbound message, if it is determined that the outbound message is to be forwarded to one or more of a pre-determined list of addresses.

824. The method of claim 821 wherein the outbound message is prevented from being forwarded, or a warning is issued before forwarding the outbound message, if it is determined that the outbound message is to be forwarded to an address outside a predetermined group of addresses, and that previously the message has only been transmitted among that predetermined group of addresses.

825. The method of claim 821 wherein the received message has one or more attributes configurable by the sender of the message, one of those attributes being a"do-not-forward"attribute, and the outbound message is prevented from being forwarded, if it is determined that the sender of the received message set the"do-not-forward"attribute.

826. The method of claim 821 wherein the outbound message is prevented from being forwarded, or a warning is issued before forwarding the outbound message, if it is determined that the recipient forwarding the outbound message was the only recipient of the received message.

827. The method of claim 821 comprising causing the outbound message that is to be forwarded to first be re-directed to a third party for approval, wherein if the third party gives his approval, the outbound message is forwarded to the originally intended recipients in the normal way.

828. The method of claim 821 wherein said analysing step is performed at each of said one or more workstations.

829. The method of claim 821 wherein said application is a web browser.

830. The method of claim 829 wherein said analysing step is performed by a plug-in module of said web browser.

831. The method of claim 830 wherein said web browser is Microsoft's Internet Explorer and said plugin module is a Browser Helper Object.

832. The method of claim 831 wherein said application is an e-mail client.

833. The method of claim 832 wherein said analysing step is performed by a plug-in module of said e-mail client.

834. The method of claim 834 wherein said e-mail client is Microsoft's Outlook e-mail client and said plug-in module is a Microsoft Exchange client extension.

835. The method of claim 821 wherein said application is an Instant messaging application.

836. The method of claim 835 wherein said analysing step is performed by a plug-in of said
Instant messaging application.

837. The method of claim 821 wherein, said application is a Voice Messaging application.

838. The method of claim 837 wherein said analysing step is performed by a plug-in of said Voice messaging application.

839. The method of claim 821 wherein said network includes a server and said analysing step is performed at a point on said network intermediate said one or more workstations and said server, or is performed at said server.

840. A method of managing information comprising the steps of providing one or more workstations adapted for connection to a computer network, each workstation having. a memory; providing an application stored in said memory of each workstation for transmitting outbound messages to said network and receiving inbound messages from said network; providing policy data containing rules for determining one or more

particulars of the outbound message, and for controlling the transmission of said outbound message in dependence on those particulars; analysing, in conjunction with said policy data said outbound messages, to determine one or more particulars of said outbound messages, in particular, whether said outbound message is digitally signed; and either selectively requiring that the outbound message be digitally signed before transmission, or that the outbound message, if digitally signed, not be digitally signed; or notifying the sender of the message that digitally signing is recommended, or is not recommended.

841. The method of claim 840 wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the intended recipient or address of the message.

842. The method of claim 840 wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on whether the message contains one or more keywords, or combination of keywords, in a pre-determined list of keywords.

843. The method of claim 840 wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the identity of the author of the outbound message.

844. The method of claim 840 wherein whether the digitally signed message is required to be transmitted without signature, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the type of digital certificate or signing key used to digitally sign the message.

845. The method of claim 840 comprising determining what digital certificates, or signing keys, are available to digitally sign an outbound message, and wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the type of certificate or signing key used to digitally sign the message, and on the types of digital certificate or signing key available to sign the message.

846. The method of claim 840 comprising causing the outbound message that is to be forwarded to first be re-directed to a third party for approval, wherein if the third party gives his approval, the outbound message is forwarded to the originally intended recipients in the normal way.

847. The method of claim 840 wherein said analysing step is performed at each of said one or more workstations.

848. The method of claim 840 wherein said application is a web browser.

849. The method of claim 848 wherein said analysing step is performed by a plug-in module of said web browser.

850. The method of claim 849 wherein said web browser is Microsoft's Internet Explorer and said plugin module is a Browser Helper Object.

851. The method of claim 840 wherein said application is an e-mail client.

852. The method of claim 851 wherein said analysing step is performed by a plug-in module of said e-mail client.

853. The method of claim 852 wherein said e-mail client is Microsoft's Outlook e-mail client and said plug-in module is a Microsoft Exchange client extension.

854. The method of claim 840 wherein said application is an Instant messaging application.

855. The method of claim 854 wherein said analysing step is performed by a plug-in of said
Instant messaging application.

856. The method of claim 840 wherein said application is a Voice Messaging application.

857. The method of claim 856 wherein said analysing step is performed by a plug-in of said Voice messaging application.

858. The method of claim 840 wherein said network includes a server and said analysing step is performed at a point on said network intermediate said one or more workstations and said server, or is performed at said server.

859. A method of managing information comprising the steps of: providing one or more workstations adapted for connection to a computer network, each workstation having a memory; providing an application stored in said memory of each workstation for transmitting outbound data to said network and receiving inbound data from said network; providing policy data containing rules for determining one or more particulars of the outbound data, and for controlling the transmission of said outbound data in dependence on those particulars ; and analysing, in conjunction with said policy data, said outbound data to determine one or more particulars of the outbound message; and controlling the transmission of said data according to said policy data, and said one or more particulars.

860. The method of claim 859 wherein comprising preventing outbound data being transmitted to a web site on the Internet, if it is determined in the analysing step that the web site is in a pre-determined list of prohibited web sites, and if it is determined that the outbound data contains one or more predetermined keywords, or combinations of keywords.

861. A computer software product, for controlling a computer to manage information, said computer being connected to a network and having access to policy data containing rules for controlling transmission of outbound data to the network, comprising a recording medium readable by the computer, having program code

recorded thereon which when executed on said computer configures the computer to: analyse, in conjunction with an application running on said computer that is operable to transmit outbound messages to said network and receive inbound messages from said network, said outbound messages to determine in conjunction with said rules of said policy data one or more particulars of said outbound message; and selectively re-direct the outbound message to a third party instead of the originally intended recipient in dependence on said one or more particulars.

862. The computer software product of claim 861 wherein the program coded is operable to re-direct the outbound message to said third party if the message is to be sent to one or more of a pre-determined list of recipients or addresses.

863. The computer software product of claim 861 wherein said policy data comprises a list of names of company employees who can use said application to send outbound messages from and receive inbound messages at a company address, and wherein the program code is operable to re-direct the outbound message of any of said employees to said third party, if it determines that the intended address of the outbound message contains one of a pre-determined list of domain names, and if the intended address comprises at least one of the surname, first names, or initials of an employee in said list of names.

864. The computer software product of claim 861 wherein the program code is operable to re-direct the outbound message to said third party if the message contains one or more pre-determined keywords or combination of keywords.

865. The computer software product of claim 861 wherein the program code is operable to re-direct the outbound message to said third party if the message or attachments to the message are to be encryptçed before transmission.

866. The computer software product of claim 865 wherein the program code is operable to re-direct the message with its original encryption key to the third party, and wherein means are provided on the redirected message received by the third party for the third party to approve the message for transmission to the originally intended recipient and re-encrypt the message with the original key.

867. The computer software product of claim 865 wherein the program code is operable to add text to the message before it is re-directed indicating that it is a re-directed message.

868. The computer software product of claim 861 wherein the program code is operable to re-direct the outbound message to said third party if the message or contains attachments, or particular types of attachments.

869. The computer software product of claim 861 wherein the program code is operable to re-direct the outbound message to said third party if the message contains attachments and if the body or the subject of the message contains less than a pre-determined amount of text.

870. The computer software product of claim zu 861 wherein the program code is operable to re-direct the outbound message to said third party in dependence on the identity of the author of the message.

871. The computer software product of claim 861 wherein means are provided on the re-directed message received by the third party for the third party to approve the message for transmission to the originally intended recipient.

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872. The computer program product of claim 861 wherein said program code is executable at each of said computers.

873. The computer program product of claim 861 wherein said application is a web browser.

874. The computer program product of claim 873 wherein said program code when executed on said computer is a plug-in module of said web browser.

875. The computer program product of claim 874 wherein said web browser is Microsoft's Internet
Explorer and said plug-in module is a Browser Helper
Object.

876. The computer program product of claim 861 wherein said application is an e-mail client.

877. The computer program product of claim 876 wherein said program code when executed on said computer is a plug-in module of said e-mail client.

878. The computer program product of claim 877 wherein said e-mail client is Microsoft's Outlook email client and said plug-in module is a Microsoft
Exchange client extension.

879. The computer software product of claim 861 wherein said application is an Instant messaging application.

880. The computer software product of claim 879 wherein said program code when executed on said computer is a plug-in of said Instant messaging application.

881. The computer software product of claim 861 wherein said application is a Voice Messaging application.

882. The computer software product of claim 881 wherein said program code when executed on said computer is a plug-in of said Voice messaging application.

883. The computer program product of claim 861 wherein said network includes a server and said program code is executable at a point on said network intermediate said one or more workstations and said server, or said program code is executable at said server.

884. A computer software product, for controlling a computer to manage information, said computer being connected to a network and having access to policy data containing rules for controlling transmission of outbound data to the network, comprising a recording medium readable by the computer, having program code recorded thereon which when executed on said computer configures the computer to: analyse, in conjunction with an application running on said computer that is operable to

transmit outbound messages to said network and receive inbound messages from said network, said outbound messages to determine in conjunction with said rules of said policy data one or more particulars of said outbound message; and selectively prevent the outbound message being forwarded to another recipient, or to issue a warning before a message is forwarded to another recipient, in dependence on the rules defined in said policy data.

885. The computer software product of claim 884 wherein the policy data defines one or more predetermined keywords, and wherein if it is determined that the message contains one or more of the predetermined keywords or combination of keywords, the message is prevented from being forwarded to another recipient or a warning is issued before the message is forwarded.

886. The computer software product of claim 884 wherein the program code is operable to prevent a message being forwarded to one or more of a predetermined list of addresses, or to issue a warning before forwarding the message to one or more of the pre-determined list of addresses.

887. The computer software product of claim 884 wherein the program code is operable to prevent a message being forwarded to an address outside a predetermined group of addresses, or to issue a warning before forwarding the message, if previously the message has only been transmitted among the predetermined group of addresses.

888. The computer software product of claim 884 wherein the received message has a one or more attributes configurable by the sender of the message, one of those attributes being a"do-not-forward" attribute, and the program code is operable to prevent a received message being forwarded as an outbound message if the sender of the received message set the "do-not-forward"attribute.

889. The computer software product of claim 884 wherein the program code is operable to prevent forwarding of the message, or to issue a warning before forwarding the message, if the recipient forwarding the message was the only recipient of the original message..

890. The computer software product of claim 884 wherein the program code is further operable to cause the outbound message that is to be forwarded to first be re-directed to a third party for approval, wherein if the third party gives his approval, the outbound message is forwarded to the originally intended recipients in the normal way.

891. The computer program product of claim 884 wherein said program code is executable at each of said computers.

892. The computer program product of claim 884 wherein said application is a web browser.

893. The computer program product of claim 892 wherein said program code when executed on said computer is a plug-in module of said web browser.

894. The computer program product of claim 893 wherein said web browser is Microsoft's Internet
Explorer and said plug-in module is a Browser Helper
Object.

895. The computer program product of claim 884 wherein said application is an e-mail client.

896. The computer program product of claim 895 wherein said program code when executed on said computer is a plug-in module of said e-mail client.

897. The computer program product of claim 896 wherein said e-mail client is Microsoft's Outlook email client and said plug-in module is a Microsoft Exchange client extension.

898. The computer software product of claim 884 wherein said application is an Instant messaging application.

899. The computer software product of claim 898 wherein said program code when executed on said computer is a plug-in of said Instant messaging application.

900. The computer software product of claim 884 wherein said application is a Voice Messaging application.

901. The computer software product of claim 900 wherein said program code when executed on said computer is a plug-in of said Voice messaging application.

902. The computer program product of claim 884 wherein said network includes a server and said program code is executable at a point on said network intermediate said one or more workstations and said server, or said program code is executable at said server.

903. A computer software product, for controlling a computer to manage information, said computer being connected to a network and having access to policy data containing rules for controlling transmission of outbound data to the network, comprising a recording medium readable by the computer, having program code recorded thereon which when executed on said computer configures the computer to: analyse, in conjunction with an application running on said computer that is operable to transmit outbound messages to said network and receive inbound messages from said network, said outbound messages to determine in conjunction with said rules of said policy data one or more particulars of said outbound message ; and either selectively require that the outbound message be digitally signed before transmission, or that a digitally signed outbound message not be digitally signed ; or notify the sender of the outbound message that digitally signing is recommended, or that in the case of a digitally signed message, digitally signing is not recommended.

904. The computer software product of claim 903 wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the intended recipient or address of the message.

905. The computer software product of claim 903 wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted

without signature, are dependent on whether the message contains one or more keywords, or combination of keywords, in a predetermined list of keywords.

906. The computer software product of claim 903 wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the author of the outbound message.

907. The computer software product of claim 903 wherein whether the digitally signed message is required to be transmitted without signature, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the type of digital certificate or signing key used to digitally sign the message.

908. The computer software product of claim 903 wherein the program code is operable to determine what digital certificates, or signing keys, are available to digitally sign an outbound message, and wherein whether the message is required to be digitally signed, whether the digitally signed message is required to be transmitted without signature, whether it-is recommended that the message be digitally signed, or whether it is recommended that the digitally signed message be transmitted without signature, are dependent on the type of certificate or signing key used to digitally sign the message, and on the types of digital certificate or signing key available to sign. the message.

909. The computer software product of claim 903 wherein the program code is further operable to cause the outbound message that is to be forwarded to first be re-directed to a third party for approval, wherein if the third party gives his approval, the outbound message is forwarded to the originally intended recipients in the normal way.

910. The computer program product of claim 903 wherein said program code is executable at each of said computers.

911. The computer program product of claim 903 wherein said application is a web browser.

912. The computer program product of claim 911 wherein said program code when executed on said computer is a plug-in module of said web browser.

913. The computer program product of claim 912 wherein said web browser is Microsoft's Internet
Explorer and said plug-in module is a Browser Helper
Object.

914.. The computer program product of claim 903 wherein said application is an e-mail client.

915. The computer program product of claim 914 wherein said program code when executed on said computer is a plug-in module of said e-mail client.

916. The computer program product of claim 915 wherein said e-mail client is Microsoft's Outlook email client and said plug-in module is a Microsoft
Exchange client extension.

917. The computer software product of claim 903 wherein said application is an Instant messaging application.

918. The computer software product of claim 917 wherein said program code when executed on said computer is a plug-in of said Instant messaging application.

919. The computer software product of claim 903 wherein said application is a Voice Messaging application.

920. The computer software product of claim 919 wherein said program code when executed on said computer is a plug-in of said Voice messaging application.

921. The computer program product of claim 903 wherein said network includes a server and said program code is executable at a point on said network intermediate said one or more workstations and said server, or said program code is executable at said server.

922. A computer software product, for controlling a computer to manage information, said computer being connected to a network and having access to policy data containing rules for controlling transmission of outbound data to the network, comprising a recording medium readable by the computer, having program code recorded thereon which when executed on said computer configures the computer to: analyse, in conjunction with an application running on said computer that is operable to transmit outbound data to said network and receive inbound data from said network, said outbound data to determine in conjunction with said rules of said policy data one or more particulars of said outbound data ; and control the transmission of said data according to said policy data and said one or more particulars of said outbound message.

923. The computer software product of claim 922 wherein the program code is operable to prevent outbound data being transmitted to a web site on the Internet, if it determines that the web site is in a pre-determined list of prohibited web sites, and if it is determined that the, outbound data contains one or more pre-determined keywords, or combinations of keywords.

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CUSTOMER INFORMATION MANAGEMENT SYSTEM, CUSTOMER MANAGEMENT UNIT AND CUSTOMER INFORMATION MANAGEMENT METHOD, AND COMMUNICATION TERMINAL

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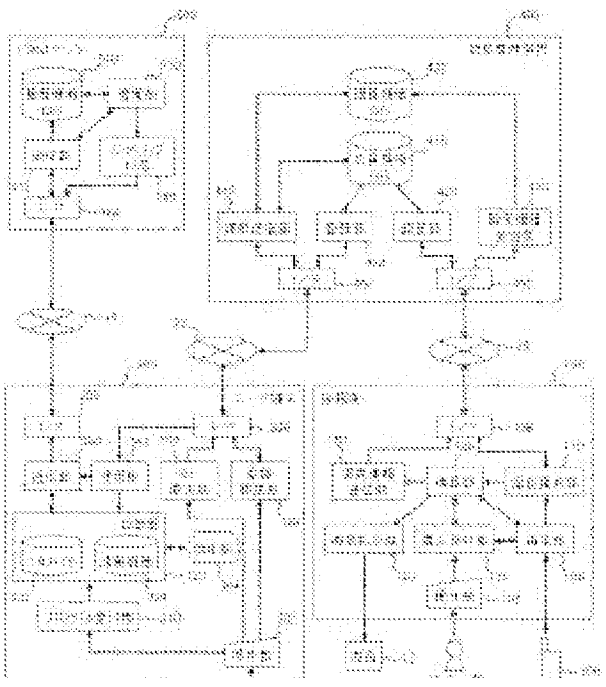
Abstract of JP2007257578 (A)

PROBLEM TO BE SOLVED: To provide a customer information management system for efficiently collecting customer information, while protecting personal information. ;SOLUTION: An authentication management unit 400 includes a member information DB 410 for storing member information of a user 10, an authentication section 420 for authenticating the user 10 requested from a vending machine 100 based on the member information DB 410, a purchase information DB 432 for storing the purchase information when the user 10 purchases merchandise in the vending machine 100, in association with the member information, and a history transmission section 440 for transmitting the purchase information of the user 10 to



a user terminal 300 according to a request from the user 10. A customer information management system comprises: the user terminal 300 including the authentication management unit 400, a reception section 342 for requesting the purchase information of the user 10 and receiving it from the authentication management unit 400, a profile acceptance section 310 for accepting profile information of the user 10, and a transmission section 350 for transmitting the purchase information associated with the profile information to a CRM center 500; and the CRM center 500. ;COPYRIGHT: (C)2008,JPO&INPIT

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(54)【発明の名称】顧客情報管理システム、顧客管理装置および顧客情報管理方法、ならびに通信端末

(57)【特許請求の範囲】
【請求項１】
予め会員登録されたユーザの認証を行う認証管理装置と、
ユーザから商品購入要求を受け付けたとき、前記認証管理装置に問い合わせて前記ユーザの認証を行い前記商品の販売を行う自動販売機と、
前記ユーザが操作する通信端末と、
前記ユーザの前記商品の購入履歴に基づいて、顧客情報を管理する顧客管理装置と、を備えた顧客情報管理システムであって、
前記認証管理装置は、
前記ユーザの会員情報を記憶する会員情報記憶部と、
前記会員情報記憶部の前記会員情報に基づいて前記自動販売機から要求された前記ユーザの第１認証を行う第１認証部と、
前記ユーザが前記自動販売機において前記商品を購入した時の購買情報に、前記ユーザの前記会員情報を関連付けて購買履歴情報として記憶する購買履歴情報記憶部と、
前記ユーザの前記通信端末から、前記ユーザの前記会員情報を受信し、受信した前記会員情報に基づいて前記ユーザの第２認証を行う第２認証部と、
前記第２認証の認証結果を前記ユーザの前記通信端末に通知する通知部と、
認証された前記ユーザの前記通信端末から前記購買履歴情報の送信要求を受け付けたとき、認証された前記ユーザの前記会員情報に対応する前記購買履歴情報を前記購買履歴情報記憶部から抽出する抽出部と、

前記抽出部が抽出した前記購買履歴情報を認証された前記ユーザの前記通信端末に送信する購買履歴情報送信部と、
を含み、
前記通信端末は、
前記ユーザの前記会員情報を記憶する記憶部と、
前記ユーザの前記会員情報を前記認証管理装置に送信し、前記認証管理装置に前記第２認証を要求する認証要求部と、
前記認証管理装置から前記第２認証の認証結果を受信し、受信した前記認証結果が認証か否かを判定する判定部と、
前記判定部により、前記認証結果が前記認証と判定された場合、前記認証管理装置に前記購買履歴情報の送信要求を行う情報要求部と、
認証された前記会員情報に対応する前記購買履歴情報を前記認証管理装置から受信する購買履歴情報受信部と、
前記ユーザのプロファイル情報（前記ユーザの住所、氏名および年齢を除く）を受け付ける受付部と、
前記判定部により前記認証結果が前記認証と判定され、かつ前記ユーザに転送が承諾されている場合、前記顧客管理装置に接続し、前記購買履歴情報受信部が受信した認証された前記会員情報に対応する前記購買履歴情報および前記受付部が受け付けた前記プロファイル情報を関連付けて前記顧客管理装置に転送する顧客情報送信部と、
を含み、
前記顧客管理装置は、
前記ユーザの前記通信端末から、前記プロファイル情報に関連付けられた、認証された前記会員情報に対応する前記購買履歴情報を受信する顧客情報受信部と、
受信した前記購買履歴情報を、認証された前記会員情報毎に対応付けて蓄積する顧客情報データベースと、を含むことを特徴とする顧客情報管理システム。
【請求項２】
請求項１に記載の顧客情報管理システムにおいて、
前記通信端末は、
前記受付部が前記プロファイル情報を受け付けたとき、前記情報要求部が前記認証管理装置に前記購買履歴情報を要求し、前記顧客情報送信部が、前記購買履歴情報受信部が受信した前記購買履歴情報を自動的に前記顧客管理装置に転送することを特徴とする顧客情報管理システム。
【請求項３】
請求項２に記載の顧客情報管理システムにおいて、
前記通信端末において、
前記購買履歴情報を前記顧客管理装置に自動的に転送して良いか否かを予め指定し、自動的に転送して良いと指定された場合、前記顧客情報送信部が、前記購買履歴情報受信部が受信した前記購買履歴情報を自動的に前記顧客管理装置に転送することを特徴とする顧客情報管理システム。
【請求項４】
請求項１に記載の顧客情報管理システムにおいて、
前記通信端末において、
前記購買履歴情報受信部が前記購買履歴情報を受信したとき、前記購買履歴情報を前記顧客管理装置に転送して良いか否かを前記ユーザに確認した後、転送して良いと前記ユーザの承諾を受け付けたとき、前記顧客情報送信部が、前記購買履歴情報受信部が受信した前記購買履歴情報を前記顧客管理装置に転送することを特徴とする顧客情報管理システム。
【請求項５】
請求項１乃至４いずれか１項に記載の顧客情報管理システムにおいて、
前記顧客管理装置は、

前記通信端末から前記購買履歴情報を受信した後、前記ユーザに所定のインセンティブを付与する付与部を含むことを特徴とする顧客情報管理システム。

【請求項６】

請求項１乃至５いずれか１項に記載の顧客情報管理システムにおいて、

前記認証管理装置は、

前記通信端末から前記購買履歴情報が要求されたとき、当該通信端末に対し、所定の質問への回答を促す画面を提示する提示部を含み、

前記通信端末は、

前記通信端末の前記ユーザによる回答の入力を受け付け、前記回答がなされたことを前記認証管理装置に通知する回答受付部を含み、

前記認証管理装置の前記購買履歴情報送信部は、前記通信端末から前記通知を受け付けた後、前記購買履歴情報を前記通信端末に送信し、

前記通信端末の前記購買履歴情報受信部は、前記購買履歴情報を受信し、

前記通信端末の前記顧客情報送信部は、前記回答を受信した前記購買履歴情報とともに前記顧客管理装置に送信することを特徴とする顧客情報管理システム。

【請求項７】

請求項６に記載の顧客情報管理システムにおいて、

前記認証管理装置の前記提示部が提供する前記画面の所定のウェブページのＵＲＬアドレスを含むメールを前記ユーザ宛に送信するメール送信部を含むことを特徴とする顧客情報管理システム。

【請求項８】

請求項１乃至７いずれか１項に記載の顧客情報管理システムにおいて、

前記通信端末の前記情報要求部は、期間を指定して前記購買履歴情報を前記認証管理装置に要求することを特徴とする顧客情報管理システム。

【請求項９】

請求項１乃至８いずれか１項に記載の顧客情報管理システムにおいて、

前記通信端末は、前記購買履歴情報を記憶する購買履歴記憶部を備え、

前記通信端末において、

前記購買履歴情報受信部が受信した前記購買履歴情報を前記購買履歴記憶部に記憶し、

前記顧客情報送信部が、前記ユーザの前記プロファイル情報と前記購買履歴記憶部の前記購買履歴情報を関連付けて前記顧客管理装置に転送することを特徴とする顧客情報管理システム。

【請求項１０】

ユーザの会員情報を記憶する会員情報記憶部および、前記ユーザが自動販売機において商品を購入した時の購買情報に、前記ユーザの前記会員情報を関連付けて購買履歴情報として記憶する購買履歴情報記憶部を含み、前記ユーザの認証を行う認証管理装置と、

前記認証管理装置に問い合わせて前記ユーザの認証を行い商品の販売を行う自動販売機と、

前記ユーザの前記会員情報を記憶する記憶部を有し、前記ユーザが操作する通信端末と、

前記ユーザの前記商品の購入履歴情報を蓄積する顧客情報データベースを含み、前記購買履歴情報に基づいて、顧客情報を管理する顧客管理装置と、を備えた顧客情報管理システムにおける顧客情報管理方法であって、

前記認証管理装置が、

前記会員情報記憶部の前記会員情報に基づいて前記自動販売機から要求された前記ユーザの第１認証を行うステップと、

前記ユーザの前記通信端末から、前記ユーザの前記会員情報を受信し、受信した前記会員情報に基づいて前記ユーザの第２認証を行うステップと、

前記第２認証を行うステップの認証結果を前記ユーザの前記通信端末に通知するステップと、

認証された前記ユーザの前記通信端末から前記購買履歴情報の送信要求を受け付けたとき、認証された前記ユーザの前記会員情報に対応する前記購買履歴情報を前記購買履歴情報記憶部から抽出するステップと、

前記抽出するステップで抽出した前記購買履歴情報を認証された前記ユーザの前記通信端末に送信するステップと、

前記通信端末が、

前記ユーザの前記会員情報を前記認証管理装置に送信し、前記認証管理装置に前記第２認証を要求するステップと、

前記認証管理装置から前記第２認証の認証結果を受信し、受信した前記認証結果が認証か否かを判定するステップと、

前記判定するステップにより、前記認証結果が前記認証と判定された場合、前記認証管理装置に前記購買履歴情報の送信要求を行うステップと、

認証された前記会員情報に対応する前記購買履歴情報を前記認証管理装置から受信するステップと、

前記ユーザのプロファイル情報（前記ユーザの住所、氏名および年齢を除く）を受け付けるステップと、

前記判定するステップにより前記認証結果が前記認証と判定され、かつ前記ユーザに転送が承諾されている場合、前記顧客管理装置に接続し、前記購買履歴情報を受信するステップで前記受信した認証された前記会員情報に対応する前記購買履歴情報および前記プロファイル情報を受け付けるステップで受け付けた前記プロファイル情報を関連付けて前記顧客管理装置に転送するステップと、

前記顧客管理装置が、

前記ユーザの前記通信端末から、前記プロファイル情報に関連付けられた、認証された前記会員情報に対応する前記購買履歴情報を受信するステップと、

受信した前記購買履歴情報を、認証された前記会員情報毎に対応付けて前記顧客情報データベースに蓄積するステップと、

を含むことを特徴とする顧客情報管理方法。

【請求項１１】

予め会員登録して得られた会員情報を記憶する会員情報記憶部と、

商品を購入する際、自動販売機に前記会員情報を送信し、第１認証を要求する第１認証要求部と、

ユーザの前記自動販売機における購買情報を前記会員情報に対応付けて購買履歴情報として記憶する購買情報データベースを含む認証管理装置に、前記ユーザの前記会員情報を送信し、前記認証管理装置に第２認証を要求する認証要求部と、

前記認証管理装置から前記第２認証の認証結果を受信し、受信した前記認証結果が認証か否かを判定する判定部と、

前記判定部により、前記認証結果が前記認証と判定された場合、前記認証管理装置に前記購買履歴情報の送信要求を行う情報要求部と、

認証された前記会員情報に対応する前記購買履歴情報を前記認証管理装置から受信する購買履歴情報受信部と、

前記ユーザのプロファイル情報（前記ユーザの住所、氏名および年齢を除く）を受け付ける受付部と、

前記判定部により前記認証結果が前記認証と判定され、かつ前記ユーザに転送が承諾されている場合、顧客情報を管理する顧客管理装置に接続し、前記購買履歴情報受信部が前記受信した認証された前記会員情報に対応する前記購買履歴情報および前記受付部が受け付けた前記プロファイル情報を関連付けて、前記顧客管理装置に送信する顧客情報送信部と、

を備えたことを特徴とする通信端末。

【請求項１２】

ユーザの会員情報を記憶する会員情報記憶部および、前記ユーザが自動販売機において

商品を購入した時の購買情報に、前記ユーザの前記会員情報を関連付けて購買履歴情報として記憶する購買履歴情報記憶部を含み、前記ユーザの認証を行う認証管理装置に、前記ユーザの前記会員情報を前記認証管理装置に送信し、認証を要求する認証要求部と、

前記認証管理装置から認証結果を受信し、受信した前記認証結果が認証か否かを判定する判定部と、

前記判定部により、前記認証結果が前記認証と判定された場合、前記認証管理装置に前記購買履歴情報の送信要求を行う情報要求部と、

認証された前記会員情報に対応する前記購買履歴情報を前記認証管理装置から受信する購買履歴情報受信部と、

前記ユーザのプロファイル情報（前記ユーザの住所、氏名および年齢を除く）を受け付ける受付部と、

前記判定部により前記認証結果が前記認証と判定され、かつ前記ユーザに転送が承諾されている場合、顧客情報を管理する顧客管理装置に接続し、前記購買履歴情報受信部が受信した認証された前記会員情報に対応する前記購買履歴情報および前記受付部が受け付けた前記プロファイル情報を関連付けて、前記顧客管理装置に転送する顧客情報送信部と、

を備えたことを特徴とする通信端末。

【請求項１３】

請求項１１または１２に記載の通信端末において、

前記購買履歴情報受信部が受信した前記購買履歴情報を表示する表示部を備えたことを特徴とする通信端末。

【請求項１４】

予め会員登録して得られた会員情報を記憶する会員情報記憶部を備えたコンピュータを、

商品を購入する際、自動販売機に前記会員情報を送信し、第１認証を要求する手段、

ユーザの前記自動販売機における購買情報を前記会員情報に対応付けて購買履歴情報として記憶する購買履歴情報データベースを含む認証管理装置に、前記ユーザの前記会員情報を送信し、前記認証管理装置に第２認証を要求する手段、

前記認証管理装置から前記第２認証の認証結果を受信し、受信した前記認証結果が認証か否かを判定する手段、

前記判定する手段で、前記認証結果が前記認証と判定された場合、前記認証管理装置に前記購買履歴情報の送信要求を行う手段、

認証された前記会員情報に対応する前記購買履歴情報を前記認証管理装置から受信する手段、

前記ユーザのプロファイル情報（前記ユーザの住所、氏名および年齢を除く）を受け付ける手段、

前記判定する手段で前記認証結果が前記認証と判定され、かつ前記ユーザに転送が承諾されている場合、顧客情報を管理する顧客管理装置に接続し、前記購買履歴情報を受信する手段で前記受信した認証された前記会員情報に対応する前記購買履歴情報および前記プロファイル情報を受け付ける手段で受け付けた前記プロファイル情報を関連付けて、前記顧客管理装置に送信する手段、として機能させるためのプログラム。

【請求項１５】

コンピュータを、

ユーザの会員情報を記憶する会員情報記憶部および、前記ユーザが自動販売機において商品を購入した時の購買情報に、前記ユーザの前記会員情報を関連付けて購買履歴情報として記憶する購買履歴情報記憶部を含み、前記ユーザの認証を行う認証管理装置に、前記ユーザの前記会員情報を前記認証管理装置に送信し、認証を要求する手段、

前記認証管理装置から認証結果を受信し、受信した前記認証結果が認証か否かを判定する手段、

前記判定する手段で、前記認証結果が前記認証と判定された場合、前記認証管理装置に前記購買履歴情報の送信要求を行う手段、

認証された前記会員情報に対応する前記購買履歴情報を前記認証管理装置から受信する手段、

前記ユーザのプロファイル情報（前記ユーザの住所、氏名および年齢を除く）を受け付ける手段、

前記判定する手段で前記認証結果が前記認証と判定され、かつ前記ユーザに転送が承諾されている場合、顧客情報を管理する顧客管理装置に接続し、前記購買履歴情報を受信する手段で受信した前記購買履歴情報および前記プロファイル情報を受け付ける手段で受け付けた前記プロファイル情報を関連付けて、前記顧客管理装置に転送する手段、として機能させるためのプログラム。

【発明の詳細な説明】

【技術分野】

【０００１】

本発明は、顧客情報管理システム、顧客管理装置および顧客情報管理方法、ならびに通信端末に関し、特に、自動販売機により商品を販売した顧客情報を管理する顧客情報管理システム、装置および方法、ならびに、その顧客が使用する通信端末に関する。

【背景技術】

【０００２】

企業にとって、商品、特に新製品の商品などの効果測定を行うための購買情報収集を如何に効率よく行うかは、重要な課題の一つである。

【０００３】

従来の購買情報管理システムとしては、例えば特許文献１に記載されたものがある。同文献に記載された購買情報管理システムは、個人情報を秘匿しつつ、個人毎の購買情報を収集、分析して、個人に適合した商品情報、広告情報などを提供するものである。

【特許文献１】特開２００４－２９５３２６号公報

【発明の開示】

【発明が解決しようとする課題】

【０００４】

しかしながら、上記文献記載の従来技術は、以下の点で改善の余地を有していた。

【０００５】

商品の精算はＰＯＳ端末により行われるものであり、購入時にレシートがユーザに配布される。ユーザはレシート上に記録されたレシート番号に基づいて、ユーザ端末を用いてレシート番号と予め登録しておいた購買者識別コードにより購買情報を対応付けて入力する。そのため、ユーザが購入毎にわざわざレシートを持ち帰り、ユーザ端末から情報を入力しなければならないという煩雑な手順が必要であった。

【０００６】

ところで、従来のＣＲＭ（Customer Relationship Management）をその沿革から考察した場合は、Ｏｎｅ　ｔｏ　ｏｎｅマーケテイングから脱却したＷＥＢマーケテイングを目指したものの出現を契機に、更に今日では伸張し続け、フロントエンド（モバイル）のチャネルを最大限に活用したモバイルマーケテイングをも包含したものへと変革しつつある。

【０００７】

そのような中で、モバイルキャリアのみを構成要素としたモデルとはせずに、自動販売機（ＶＭ）および認証機能もその構成要素として組み込んだ上で、フロントエンドからの迅速な情報収集を行い、そして迅速なフロントエンドの伝播などを可能とする情報循環型のＣＲＭを可能とするセンター機能を具現化することが望まれる。

【０００８】

本発明は上記事情に鑑みてなされたものであり、その目的とするところは、個人情報を保護しつつ、従来にない手法を用いて顧客情報を効率良く収集可能な顧客情報管理システムを提供することにある。

【課題を解決するための手段】

【０００９】
本発明によれば、予め会員登録されたユーザの認証を行う認証管理装置と、
ユーザから商品購入要求を受け付けたとき、前記認証管理装置に問い合わせて前記ユーザの認証を行い前記商品の販売を行う自動販売機と、
前記ユーザが操作する通信端末と、
前記ユーザの前記商品の購入履歴に基づいて、顧客情報を管理する顧客管理装置と、を備えた顧客情報管理システムであって、
前記認証管理装置は、
前記ユーザの会員情報を記憶する会員情報記憶部と、
前記会員情報記憶部の前記会員情報に基づいて前記自動販売機から要求された前記ユーザの第１認証を行う第１認証部と、
前記ユーザが前記自動販売機において前記商品を購入した時の購買情報に、前記ユーザの前記会員情報を関連付けて購買履歴情報として記憶する購買履歴情報記憶部と、
前記ユーザの前記通信端末から、前記ユーザの前記会員情報を受信し、受信した前記会員情報に基づいて前記ユーザの第２認証を行う第２認証部と、
前記第２認証の認証結果を前記ユーザの前記通信端末に通知する通知部と、
認証された前記ユーザの前記通信端末から前記購買履歴情報の送信要求を受け付けたとき、認証された前記ユーザの前記会員情報に対応する前記購買履歴情報を前記購買履歴情報記憶部から抽出する抽出部と、
前記抽出部が抽出した前記購買履歴情報を認証された前記ユーザの前記通信端末に送信する購買履歴情報送信部と、
を含み、
前記通信端末は、
前記ユーザの前記会員情報を記憶する記憶部と、
前記ユーザの前記会員情報を前記認証管理装置に送信し、前記認証管理装置に前記第２認証を要求する認証要求部と、
前記認証管理装置から前記第２認証の認証結果を受信し、受信した前記認証結果が認証か否かを判定する判定部と、
前記判定部により、前記認証結果が前記認証と判定された場合、前記認証管理装置に前記購買履歴情報の送信要求を行う情報要求部と、
認証された前記会員情報に対応する前記購買履歴情報を前記認証管理装置から受信する購買履歴情報受信部と、
前記ユーザのプロファイル情報（前記ユーザの住所、氏名および年齢を除く）を受け付ける受付部と、
前記判定部により前記認証結果が前記認証と判定され、かつ前記ユーザに転送が承諾されている場合、前記顧客管理装置に接続し、前記購買履歴情報受信部が受信した認証された前記会員情報に対応する前記購買履歴情報および前記受付部が受け付けた前記プロファイル情報を関連付けて前記顧客管理装置に転送する顧客情報送信部と、
を含み、
前記顧客管理装置は、
前記ユーザの前記通信端末から、前記プロファイル情報に関連付けられた、認証された前記会員情報に対応する前記購買履歴情報を受信する顧客情報受信部と、
受信した前記購買履歴情報を、認証された前記会員情報毎に対応付けて蓄積する顧客情報データベースと、を含むことを特徴とする顧客情報管理システムが提供される。
【００１０】
ここで、通信端末は、たとえば、携帯電話機、ＰＤＡ、携帯型ノートパソコンなどを含むことができ、自動販売機で商品購入時に自動販売機と通信を行う。また、認証管理装置および顧客管理装置と通信を行う場合は、特に、携帯可能である必要はなく、デスクトップ型パソコンを含むことができる。
【００１１】

また、自動販売機は、たとえば、酒やたばこなど、成人認証などを必要とする商品を販売する自動販売機である。あるいは、予め会員登録されたユーザを認証した上で商品の販売を行うことができる。また、プロファイル情報とは、ユーザ個人を特定可能な情報は含まない情報であり、ユーザの趣味、趣向、嗜好、思想、思考などの情報を含むことができる。また、プロファイル情報に、ユーザの性別、年代、地域などのユーザ属性情報を含むこともできる。

【００１２】

この発明によれば、ユーザの意志に基づいてダウンロードされたユーザの購買履歴情報に結び付けられたプロファイル情報を顧客管理装置が取得することが可能となる。これにより、個人を特定可能な個人情報は保護しつつ、顧客ニーズを分析するのに必要な情報を効率良く収集することが可能となる。

【００１３】

また、モバイルキャリアのみを構成要素としたモデルとはせずに、自動販売機（ＶＭ）および認証機能もその構成要素として組み込んだ上で、フロントエンドからの迅速な情報収集を行い、そして迅速なフロントエンドの伝播などを可能とする情報循環型のＣＲＭを可能とするセンター機能を具現化することが可能となった。すなわち、従来のＣＲＭセンターが意識していたコールセンターとは、全く異なったものであり、そのＣＲＭセンターを中核としたビジネスモデルを構築することが可能となる。

【００１４】

上記顧客情報管理システムにおいて、前記通信端末は、前記受付部が前記プロファイル情報を受け付けたとき、前記情報要求部が前記認証管理装置に前記購買履歴情報を要求し、前記顧客情報送信部が、前記購買履歴情報受信部が受信した前記購買履歴情報を自動的に前記顧客管理装置に転送することができる。

【００１５】

この構成によれば、自動的に購買情報をＣＲＭセンターなどに送信することができるので、ユーザによる購買履歴情報の転送処理の手間を省くことができるので、利便性がよい。

さらに、上記顧客情報管理システムにおいて、前記通信端末において、前記購買履歴情報を前記顧客管理装置に自動的に転送して良いか否かを予め指定し、自動的に転送して良いと指定された場合、前記顧客情報送信部が、前記購買履歴情報受信部が受信した前記購買履歴情報を自動的に前記顧客管理装置に転送することができる。

また、上記顧客情報管理システムにおいて、前記通信端末において、前記購買履歴情報受信部が前記購買履歴情報を受信したとき、前記購買履歴情報を前記顧客管理装置に転送して良いか否かを前記ユーザに確認した後、転送して良いと前記ユーザの承諾を受け付けたとき、前記顧客情報送信部が、前記購買履歴情報受信部が受信した前記購買履歴情報を前記顧客管理装置に転送してもよい。

【００１６】

上記顧客情報管理システムにおいて、前記顧客管理装置は、前記通信端末から前記購買履歴情報を受信した後、前記ユーザに所定のインセンティブを付与する付与部を含むことができる。

ここで、インセンティブとは、たとえば、ユーザに対する会員特典ポイントの付与や、割引クーポン券の発行、商品の無料提供、賞品や賞金の付与などである。

【００１７】

この構成によれば、購買履歴情報を送信したユーザに対して所定のインセンティブを付与することができるので、ユーザが購買履歴情報を送信する動議付けを行うことができる。

【００１８】

上記顧客情報管理システムにおいて、前記認証管理装置は、前記通信端末から前記購買履歴情報が要求されたとき、当該通信端末に対し、所定の質問への回答を促す画面を提示する提示部を含むことができ、前記通信端末は、前記通信端末の前記ユーザによる回答の

入力を受け付け、前記回答がなされたことを前記認証管理装置に通知する回答受付部を含むことができ、前記認証管理装置の前記購買履歴情報送信部は、前記通信端末から前記通知を受け付けた後、前記購買履歴情報を前記通信端末に送信し、前記通信端末の前記購買履歴情報受信部は、前記購買履歴情報を受信し、前記通信端末の前記顧客情報送信部は、前記回答を受信した前記購買履歴情報とともに前記顧客管理装置に送信することができる。

【００１９】

ここで、認証管理装置の提示部は、たとえば、通信端末のブラウザを使用して認証管理装置が提供する所定のウェブページにアクセスすることによって通信端末に提示することができる。通信端末のユーザは、このページを参照し、必要事項の入力を行い、通信端末から認証管理装置に回答を送信することができる。

この構成によれば、ユーザが質問に回答する形式でユーザのプロファイル情報を取得することができる。

【００２０】

上記顧客情報管理システムにおいて、前記認証管理装置の前記提示部が提供する前記画面の所定のウェブページのＵＲＬアドレスを含むメールを前記ユーザ宛に送信するメール送信部を含むことができる。

【００２１】

この構成によれば、ＣＲＭセンターからユーザに対して認証局のＵＲＬアドレスを含むメールを送信することによって、認証局にアクセスさせ、ユーザの自発的な購買履歴ダウンロードを待たずに、購買履歴ダウンロードの契機をユーザに与えて、購買履歴情報を取得可能な仕組みが実現できる。

さらに、上記顧客情報管理システムにおいて、前記通信端末の前記情報要求部は、期間を指定して前記購買履歴情報を前記認証管理装置に要求することができる。また、上記顧客情報管理システムにおいて、前記通信端末は、前記購買履歴情報を記憶する購買履歴記憶部を備えることができ、前記通信端末において、前記購買履歴情報受信部が受信した前記購買履歴情報を前記購買履歴記憶部に記憶し、前記顧客情報送信部が、前記ユーザの前記プロファイル情報と前記購買履歴記憶部の前記購買履歴情報を関連付けて前記顧客管理装置に転送することができる。

【００２２】

本発明によれば、ユーザの会員情報を記憶する会員情報記憶部および、前記ユーザが自動販売機において商品を購入した時の購買情報に、前記ユーザの前記会員情報を関連付けて購買履歴情報として記憶する購買履歴情報記憶部を含み、前記ユーザの認証を行う認証管理装置と、

前記認証管理装置に問い合わせて前記ユーザの認証を行い商品の販売を行う自動販売機と、

前記ユーザの前記会員情報を記憶する記憶部を有し、前記ユーザが操作する通信端末と、

前記ユーザの前記商品の購入履歴情報を蓄積する顧客情報データベースを含み、前記購買履歴情報に基づいて、顧客情報を管理する顧客管理装置と、を備えた顧客情報管理システムにおける顧客情報管理方法であって、

前記認証管理装置が、

前記会員情報記憶部の前記会員情報に基づいて前記自動販売機から要求された前記ユーザの第１認証を行うステップと、

前記ユーザの前記通信端末から、前記ユーザの前記会員情報を受信し、受信した前記会員情報に基づいて前記ユーザの第２認証を行うステップと、

前記第２認証を行うステップの認証結果を前記ユーザの前記通信端末に通知するステップと、

認証された前記ユーザの前記通信端末から前記購買履歴情報の送信要求を受け付けたとき、認証された前記ユーザの前記会員情報に対応する前記購買履歴情報を前記購買履歴

情報記憶部から抽出するステップと、
前記抽出するステップで抽出した前記購買履歴情報を認証された前記ユーザの前記通信端末に送信するステップと、
前記通信端末が、
前記ユーザの前記会員情報を前記認証管理装置に送信し、前記認証管理装置に前記第２認証を要求するステップと、
前記認証管理装置から前記第２認証の認証結果を受信し、受信した前記認証結果が認証か否かを判定するステップと、
前記判定するステップにより、前記認証結果が前記認証と判定された場合、前記認証管理装置に前記購買履歴情報の送信要求を行うステップと、
認証された前記会員情報に対応する前記購買履歴情報を前記認証管理装置から受信するステップと、
前記ユーザのプロファイル情報（前記ユーザの住所、氏名および年齢を除く）を受け付けるステップと、
前記判定するステップにより前記認証結果が前記認証と判定され、かつ前記ユーザに転送が承諾されている場合、前記顧客管理装置に接続し、前記購買履歴情報を受信するステップで前記受信した認証された前記会員情報に対応する前記購買履歴情報および前記プロファイル情報を受け付けるステップで受け付けた前記プロファイル情報を関連付けて前記顧客管理装置に転送するステップと、
前記顧客管理装置が、
前記ユーザの前記通信端末から、前記プロファイル情報に関連付けられた、認証された前記会員情報に対応する前記購買履歴情報を受信するステップと、
受信した前記購買履歴情報を、認証された前記会員情報毎に対応付けて前記顧客情報データベースに蓄積するステップと、
を含むことを特徴とする顧客情報管理方法が提供される。

【００２３】

本発明によれば、予め会員登録して得られた会員情報を記憶する会員情報記憶部と、
商品を購入する際、自動販売機に前記会員情報を送信し、第１認証を要求する第１認証要求部と、
ユーザの前記自動販売機における購買情報を前記会員情報に対応付けて購買履歴情報として記憶する購買情報データベースを含む認証管理装置に、前記ユーザの前記会員情報を送信し、前記認証管理装置に第２認証を要求する認証要求部と、
前記認証管理装置から前記第２認証の認証結果を受信し、受信した前記認証結果が認証か否かを判定する判定部と、
前記判定部により、前記認証結果が前記認証と判定された場合、前記認証管理装置に前記購買履歴情報の送信要求を行う情報要求部と、
認証された前記会員情報に対応する前記購買履歴情報を前記認証管理装置から受信する購買履歴情報受信部と、
前記ユーザのプロファイル情報（前記ユーザの住所、氏名および年齢を除く）を受け付ける受付部と、
前記判定部により前記認証結果が前記認証と判定され、かつ前記ユーザに転送が承諾されている場合、顧客情報を管理する顧客管理装置に接続し、前記購買履歴情報受信部が前記受信した認証された前記会員情報に対応する前記購買履歴情報および前記受付部が受け付けた前記プロファイル情報を関連付けて、前記顧客管理装置に送信する顧客情報送信部と、
を備えたことを特徴とする通信端末が提供される。

【００２４】

本発明によれば、ユーザの会員情報を記憶する会員情報記憶部および、前記ユーザが自動販売機において商品を購入した時の購買情報に、前記ユーザの前記会員情報を関連付けて購買履歴情報として記憶する購買履歴情報記憶部を含み、前記ユーザの認証を行う認証

管理装置に、前記ユーザの前記会員情報を前記認証管理装置に送信し、認証を要求する認証要求部と、

前記認証管理装置から認証結果を受信し、受信した前記認証結果が認証か否かを判定する判定部と、

前記判定部により、前記認証結果が前記認証と判定された場合、前記認証管理装置に前記購買履歴情報の送信要求を行う情報要求部と、

認証された前記会員情報に対応する前記購買履歴情報を前記認証管理装置から受信する購買履歴情報受信部と、

前記ユーザのプロファイル情報（前記ユーザの住所、氏名および年齢を除く）を受け付ける受付部と、

前記判定部により前記認証結果が前記認証と判定され、かつ前記ユーザに転送が承諾されている場合、顧客情報を管理する顧客管理装置に接続し、前記購買履歴情報受信部が受信した認証された前記会員情報に対応する前記購買履歴情報および前記受付部が受け付けた前記プロファイル情報を関連付けて、前記顧客管理装置に転送する顧客情報送信部と、

を備えたことを特徴とする通信端末が提供される。

【００２５】

本発明によれば、予め会員登録して得られた会員情報を記憶する会員情報記憶部を備えたコンピュータを、

商品を購入する際、自動販売機に前記会員情報を送信し、第１認証を要求する手段、

ユーザの前記自動販売機における購買情報を前記会員情報に対応付けて購買履歴情報として記憶する購買履歴情報データベースを含む認証管理装置に、前記ユーザの前記会員情報を送信し、前記認証管理装置に第２認証を要求する手段、

前記認証管理装置から前記第２認証の認証結果を受信し、受信した前記認証結果が認証か否かを判定する手段、

前記判定する手段で、前記認証結果が前記認証と判定された場合、前記認証管理装置に前記購買履歴情報の送信要求を行う手段、

認証された前記会員情報に対応する前記購買履歴情報を前記認証管理装置から受信する手段、

前記ユーザのプロファイル情報（前記ユーザの住所、氏名および年齢を除く）を受け付ける手段、

前記判定する手段で前記認証結果が前記認証と判定され、かつ前記ユーザに転送が承諾されている場合、顧客情報を管理する顧客管理装置に接続し、前記購買履歴情報を受信する手段で前記受信した認証された前記会員情報に対応する前記購買履歴情報および前記プロファイル情報を受け付ける手段で受け付けた前記プロファイル情報を関連付けて、前記顧客管理装置に送信する手段、として機能させるためのプログラムが提供される。

【００２６】

本発明によれば、コンピュータを、

ユーザの会員情報を記憶する会員情報記憶部および、前記ユーザが自動販売機において商品を購入した時の購買情報に、前記ユーザの前記会員情報を関連付けて購買履歴情報として記憶する購買履歴情報記憶部を含み、前記ユーザの認証を行う認証管理装置に、前記ユーザの前記会員情報を前記認証管理装置に送信し、認証を要求する手段、

前記認証管理装置から認証結果を受信し、受信した前記認証結果が認証か否かを判定する手段、

前記判定する手段で、前記認証結果が前記認証と判定された場合、前記認証管理装置に前記購買履歴情報の送信要求を行う手段、

認証された前記会員情報に対応する前記購買履歴情報を前記認証管理装置から受信する手段、

前記ユーザのプロファイル情報（前記ユーザの住所、氏名および年齢を除く）を受け付ける手段、

前記判定する手段で前記認証結果が前記認証と判定され、かつ前記ユーザに転送が承諾

されている場合、顧客情報を管理する顧客管理装置に接続し、前記購買履歴情報を受信する手段で受信した前記購買履歴情報および前記プロファイル情報を受け付ける手段で受け付けた前記プロファイル情報を関連付けて、前記顧客管理装置に転送する手段、として機能させるためのプログラムが提供される。

【００２７】

以上、本発明の構成について説明したが、これらの各構成の任意の組合せや、本発明の表現を方法、装置、システム、記録媒体、コンピュータプログラムなどの間で変換したものもまた、本発明の態様として有効である。

【発明の効果】

【００２８】

本発明によれば、個人情報を保護しつつ、従来にない手法を用いて顧客情報を効率良く収集可能な顧客情報管理システムが提供される。

【発明を実施するための最良の形態】

【００２９】

以下、本発明の実施の形態について、図面を用いて説明する。尚、すべての図面において、同様な構成要素には同様の符号を付し、適宜説明を省略する。

【００３０】

図１は、本発明の実施の形態に係る顧客情報管理システム１の構成を示す概略ブロック図である。本実施形態の顧客情報管理システム１は、予め会員登録されたユーザの認証を行う認証管理装置４００と、認証管理装置４００に問い合わせてユーザ１０の認証を行い商品の販売を行う自動販売機１００と、ユーザ１０が操作する通信端末（携帯端末２００、ユーザ端末３００）と、ユーザ１０の商品の購入履歴に基づいて、顧客情報を管理する顧客管理装置（ＣＲＭセンター５００）と、を備えた顧客情報管理システム１であって、認証管理装置４００は、ユーザ１０の会員情報を記憶する会員情報記憶部（会員情報データベース４１０）と、会員情報記憶部（会員情報データベース４１０）の会員情報に基づいて自動販売機１００から要求されたユーザ１０の認証を行う認証部４２０と、ユーザ１０が自動販売機１００において商品を購入時の購買情報にユーザ１０の会員情報を関連付けて記憶する購買情報記憶部（購買情報データベース４３２）と、ユーザ１０からの要求に応じて当該ユーザ１０の会員情報に対応する購買情報を当該ユーザ１０の通信端末（携帯端末２００、ユーザ端末３００）に送信する送信部（履歴送信部４４０）と、を含み、通信端末（携帯端末２００、ユーザ端末３００）は、ユーザ１０の会員情報に対応する購買情報を要求して認証管理装置４００から受信する受信部３４２と、ユーザ１０のプロファイル情報を受け付ける受付部（プロファイル受付部３１０）と、受信した購買情報およびプロファイル情報を関連付けて顧客管理装置（ＣＲＭセンター５００）に送信する送信部３５０と、を含む。

【００３１】

具体的には、本実施形態の顧客情報管理システム１は、自動販売機（図中、「自販機」と示す）１００と、ユーザ１０が携行する携帯端末２００と、自動販売機１００に第１ネットワーク２０を介して接続される認証管理装置４００と、認証管理装置４００に第２ネットワーク２２を介して接続するユーザ端末３００と、ユーザ端末３００に第３ネットワーク２４を介して接続するＣＲＭセンター５００と、を備える。

【００３２】

本発明において、認証管理装置４００は、予め会員登録された会員に対して、会員情報に対応付けて蓄積された各ユーザ１０の情報、たとえば、購買履歴情報などを提供するものである。ユーザ１０は、ユーザ端末３００を利用して認証管理装置４００から購買履歴情報を取得できる。本発明において、このとき認証管理装置４００から取得した購買履歴情報を、さらにＣＲＭセンター５００に転送するようユーザ１０に促し、個人を特定可能な情報、たとえば、氏名や生年月日などを含まないプロファイル情報とともに、ユーザ１０の情報をＣＲＭセンター５００が収集する。ユーザ１０に対しては、データ送信の見返りとしてインセンティブを付与する構成とすることで、情報の伝達がよりスムーズに行わ

れることとなる。ここで、プロファイル情報とは、ユーザ個人を特定可能な情報は含まない情報であり、ユーザの趣味、趣向、嗜好、思想、思考などの情報を含むことができる。また、プロファイル情報に、ユーザの性別、年代、地域などのユーザ属性情報を含むこともできる。

【００３３】

また、図１において、認証管理装置４００に第１ネットワーク２０を介して接続されている自動販売機１００が１台のみ記載されているが、実際には複数台の自動販売機１００が接続されている。また、認証管理装置４００に第２ネットワーク２２を介して接続されているユーザ端末３００も１台のみ記載されているが、実際には複数のユーザ１０の複数台のユーザ端末３００が接続可能である。また、ＣＲＭセンター５００に第３ネットワーク２４を介して接続されているユーザ端末３００も１台のみ記載されているが、実際には複数のユーザ１０の複数台のユーザ端末３００が接続可能である。

【００３４】

なお、図１において、本発明の本質に関わらない部分の構成については省略してある。また、顧客情報管理システム１の各構成要素は、任意のコンピュータのＣＰＵ、メモリ、メモリにロードされた本図の構成要素を実現するプログラム、そのプログラムを格納するハードディスクなどの記憶ユニット、ネットワーク接続用インタフェースを中心にハードウエアとソフトウエアの任意の組合せによって実現される。そして、その実現方法、装置にはいろいろな変形例があることは、当業者には理解されるところである。以下説明する各図は、ハードウエア単位の構成ではなく、機能単位のブロックを示している。

【００３５】

図２は、本実施形態の顧客情報管理システム１の概要を説明するための図である。本発明の実施形態に係る顧客情報管理方法において、ユーザ１０の会員情報を記憶する会員情報記憶部（図１の会員情報データベース４１０）およびユーザ１０が自動販売機１００において商品１２を購入時の購買情報にユーザ１０の会員情報を関連付けて記憶する購買情報記憶部（図１の購買情報データベース４３２）を含み、ユーザ１０の認証を行う認証管理装置４００と、認証管理装置４００に問い合わせてユーザ１０の認証を行い商品の販売を行う自動販売機１００と、ユーザ１０が操作する通信端末（携帯端末２００、ユーザ端末３００）と、商品１２の顧客情報を管理する顧客管理装置（ＣＲＭセンター５００）と、を備えた顧客情報管理システム１における顧客情報管理方法であって、認証管理装置４００が、会員情報記憶部（図１の会員情報データベース４１０）の会員情報に基づいて自動販売機１００から要求されたユーザ１０の認証を行うステップ（Ｓ３およびＳ４）と、認証管理装置４００が、ユーザ１０からの要求に応じて当該ユーザ１０の会員情報に対応する購買情報を当該ユーザ１０の通信端末（携帯端末２００、ユーザ端末３００）に送信するステップ（Ｓ６）と、通信端末（携帯端末２００、ユーザ端末３００）が、ユーザ１０の会員情報に対応する購買情報を要求して認証管理装置４００から受信するステップ（Ｓ６）と、通信端末（携帯端末２００、ユーザ端末３００）が、ユーザ１０のプロファイル情報を受け付けるステップ（不図示）と、通信端末が、受信した購買情報およびプロファイル情報を関連付けて顧客管理装置（ＣＲＭセンター５００）に送信するステップ（Ｓ７）と、を含む。

【００３６】

具体的には、図２に示すように、本実施形態の顧客情報管理システム１において、ユーザ１０は、携帯端末２００（またはユーザ端末３００）を用いて、認証管理装置４００に対して会員登録を行う（ステップＳ１）。このとき、携帯端末２００から認証管理装置４００には、たとえば、生年月日を送信する。そして、認証管理装置４００にて会員登録を行い、会員番号が携帯端末２００に発行される。ここでは、たとえば、たばこなど成人認証が必要な商品の販売を行う自動販売機１００にて商品を購入するための会員登録とすることができる。

【００３７】

その後、ユーザ１０は、携帯端末２００を用いて自動販売機１００で商品の購入を行う

（ステップＳ２）。ここでは、商品購入時に、携帯端末２００から自動販売機１００にステップＳ１で登録した会員番号などの会員情報が送信される。

【００３８】

そして、自動販売機１００から携帯端末２００にユーザ１０の会員情報が送信される（ステップＳ３）。そして、認証管理装置４００にて会員認証（成人認証）が行われ（ステップＳ４）、認証されると、自動販売機１００はユーザ１０に商品の販売を行う（ステップＳ５）。認証されなかった場合には、商品の購入はできない。なお、ここでは、商品の決済処理などについては、発明の本質に関わらないので説明は省略する。

【００３９】

その後、ユーザ１０は、ユーザ端末３００（または携帯端末２００）を用いて、認証管理装置４００に対して購買情報のダウンロードを要求し、購買情報を取得する（ステップＳ６）。購買情報には、たとえば、購入日時、自動販売機識別コード、商品コード（たばこ場合、銘柄）、単価、数量などが含まれる。ユーザ１０は、たとえば、たばこの購買履歴情報を参照することができ、自分がどのくらいの頻度でたばこを購入しているか、１ヶ月にどのくらいたばこの購入に費用を費やしているのか、などを知ることができる。

【００４０】

そして、ユーザ端末３００からＣＲＭセンター５００に対して、ステップＳ６でダウンロードされた購買情報にユーザ１０のプロファイル情報が関連付けて送信される（ステップＳ７）。たとえば、ステップＳ６で購買情報を認証管理装置４００からダウンロードする際、予め準備されている質問に回答してから情報のダウンロードを実行可能とする構成とすることにより、質問の回答情報を購買情報とともに、ＣＲＭセンター５００に転送することが可能となる。これにより、企業側がそのとき必要と思われる情報を顧客から引き出しつつ、購買情報と関連付けて取得することが可能となる。

【００４１】

ＣＲＭセンター５００からは、ユーザ１０に対してインセンティブが付与され、携帯端末２００にインセンティブ情報が送信される（ステップＳ８）。

【００４２】

このようにして、ユーザ１０の意志に基づいてダウンロードされたユーザ１０の購買情報に結び付けられたプロファイル情報をＣＲＭセンター５００が取得することが可能となる。これにより、個人を特定可能な個人情報は保護しつつ、ＣＲＭセンター５００は、顧客ニーズを分析するのに必要な情報を効率良く収集することが可能となる。

【００４３】

図１に戻り、はじめに自動販売機１００の構成について説明する。自動販売機１００は、操作部１０２と、購入受付部１０４と、通信部１０６と、インタフェース部（Ｉ／Ｆ）１０８と、認証要求部１１０と、精算部１２０と、商品払出部１３０と、販売情報送信部１４０と、を含む。

【００４４】

本実施形態において、自動販売機１００は、酒やたばこなどの商品の購入時に、たとえば成人認証などのユーザ認証を行い、商品を販売するものである。料金の精算は、現金、クレジットカード、プリペイドカードの何れによるものでもよい。本実施形態において、非接触ＩＣタグや非接触ＩＣカードなどのデータキャリアにて、ユーザ認証および電子決済を行うのが好ましい。特に、これらのＩＣタグやＩＣカードを内蔵させた携帯電話機などの携帯端末２００を用いてユーザ認証および電子決済を行う構成が好ましい。

【００４５】

操作部１０２は、自動販売機１００の前面に設けられた操作ボタン、レバー、タッチパネル、シートキー、キーボード、スイッチ、音声入力および音声認識手段などを含む。操作部１０２をユーザ１０が操作して、たとえば、購入する商品１２を選択する。

【００４６】

購入受付部１０４は、ユーザ１０からの商品購入要求を受け付ける。購入要求は操作部１０２をユーザ１０が操作することにより行われる。通信部１０６は、ユーザ１０が携行

する携帯端末２００と通信を行う。携帯端末２００との通信は、無線あるいは有線いずれであってもよい。通信部１０６および携帯端末２００間の通信は、赤外線通信、非接触ＩＣなどによる通信、無線中継基地を経由した無線通信などを含むことができる。

【００４７】

インタフェース部１０８は、第１ネットワーク２０を介して認証管理装置４００と通信を行うためのインタフェースである。認証要求部１１０は、ユーザ１０が自動販売機１００で商品を購入時、携帯端末２００と通信部１０６を介して通信し、携帯端末２００からユーザ情報を取得する。さらに、認証要求部１１０は、インタフェース部１０８を介して認証管理装置４００に携帯端末２００のユーザ情報を送信し、ユーザ１０の認証要求を行う。このとき、自動販売機１００から認証管理装置４００に送信されるユーザ情報には、たとえば、会員番号（ユーザＩＤ）、および認証情報（たとえば、ユーザ１０の生年月日など）を含むことができる。認証管理装置４００によりユーザ１０が認証されたとき、認証要求部１１０は、精算部１２０に通知する。

【００４８】

精算部１２０は、認証要求部１１０によりユーザ１０が認証されたとき、購入受付部１０４が受け付けていた商品購入要求に従い、商品の払出要求を商品払出部１３０に行うとともに、通信部１０６を介して携帯端末２００と商品の料金の精算処理を行う。携帯端末２００が電子決済機能を有するものであれば、精算部１２０は、通信部１０６を介して携帯端末２００と通信を行い、電子決済処理を行う。

【００４９】

商品払出部１３０は、精算部１２０から商品１２の払出要求を受け取り、自動販売機１００に設けられた商品払出口（不図示）から商品１２を払い出す。販売情報送信部１４０は、精算部１２０から商品購入の精算結果を受け取り、販売情報としてインタフェース部１０８を介して認証管理装置４００に送信する。販売情報としては、たとえば、ユーザ１０の会員番号、販売日時、商品コード、単価、数量、自動販売機識別番号などを含むことができる。

【００５０】

携帯端末２００は、たとえば、携帯電話機、ＰＤＡ、携帯型ノートパソコンなどを含むことができ、自動販売機で商品購入時に自動販売機と通信を行う。あるいは、本実施形態において、自動販売機１００と商品購入時のユーザ認証および決済処理を行う場合、携帯端末２００は、非接触ＩＣタグやＩＣカードを含むデータキャリアを含む。また、携帯端末２００は、ユーザの会員情報を記憶する記憶部（不図示）と、自動販売機１００にて商品を購入時に、会員情報を送信する送信部（不図示）を含む。

【００５１】

次に、ユーザ端末３００の構成について説明する。ユーザ端末３００は、携帯端末２００に含むこともできるが、特に、携帯可能である必要はなく、デスクトップ型パソコンを含むことができる。

【００５２】

本発明の実施形態に係る通信端末（携帯端末２００、ユーザ端末３００）は、予め会員登録して得られた会員情報を記憶する会員情報記憶部（不図示）と、商品を購入する際、自動販売機１００に会員情報を送信する送信部（不図示）と、ユーザ１０の自動販売機１００における購買情報を会員情報に対応付けて記憶する購買情報データベース４３２を含む認証管理装置４００に、購買情報を要求する要求部（ダウンロード要求部３４０、第１インタフェース部３０６）と、購買情報を認証管理装置４００から受信する受信部（受信部３４２、第１インタフェース部３０６）と、ユーザ１０のプロファイル情報を受け付ける受付部（プロファイル受付部３１０、操作部３０２）と、受信した購買情報およびプロファイル情報を関連付けて、顧客情報を管理する顧客管理装置（ＣＲＭセンター５００）に送信する送信部（送信部３５０、第２インタフェース部３０８）と、を備える。

【００５３】

また、本実施形態に係る通信端末（携帯端末２００、ユーザ端末３００）は、ユーザ１

０の会員情報を記憶する会員情報記憶部（不図示）およびユーザが自動販売機１００において商品を購入時の購買情報にユーザ１０の会員情報を関連付けて記憶する購買情報記憶部（購買履歴記憶部３２４）を含み、ユーザ１０の認証を行う認証管理装置４００に、ユーザ１０の会員情報に対応する購買情報を要求する要求部（ダウンロード要求部３４０、第１インタフェース部３０６）と、購買情報を認証管理装置４００から受信する受信部（受信部３４２、第１インタフェース部３０６）と、ユーザ１０のプロファイル情報を受け付ける受付部（プロファイル受付部３１０、操作部３０２）と、受信した購買情報およびプロファイル情報を関連付けて、顧客情報を管理する顧客管理装置（ＣＲＭセンター５００）に送信する送信部（送信部３５０、第２インタフェース部３０８）と、を備える。

上記通信端末（携帯端末２００、ユーザ端末３００）において、受信部（受信部３４２、第１インタフェース部３０６）が受信した購買情報を表示する表示部（表示部３０４）を備えることができる。

【００５４】

ユーザ端末３００は、操作部３０２と、表示部３０４と、第１インタフェース部３０６と、第２インタフェース部３０８と、プロファイル受付部３１０と、記憶部３２０と、登録要求部３３０と、ダウンロード要求部３４０と、受信部３４２と、送信部３５０と、を含む。

【００５５】

操作部３０２は、これらの特に限定されないが、たとえば、キーボード、操作ボタン、スイッチ、レバー、ダイヤルキー、タッチパネル、シートキー、マウス、タブレット、音声入力および音声認識手段などを含む。ユーザ１０が操作して各種設定や入力、選択などを指示するのに使用する。

【００５６】

表示部３０４は、これらの特に限定されないが、たとえば、ＣＲＴ（Cathode Ray Tube）ディスプレイ、液晶ディスプレイ（ＬＣＤ：Liquid Crystal Display）、プラズマディスプレイなどである。

【００５７】

第１インタフェース部３０６は、第２ネットワーク２２を介して認証管理装置４００と通信する。第２インタフェース部３０８は、第３ネットワーク２４を介してＣＲＭセンター５００と通信する。なお、図１において、第２ネットワーク２２および第３ネットワーク２４は、異なるネットワークとしているがこれに限定されない。同じネットワークとすることもできる。

【００５８】

プロファイル受付部３１０は、表示部３０４に表示されたプロファイル情報登録画面（不図示）に従って、操作部３０２を操作して入力されたユーザ１０のプロファイル情報を受け付け、記憶部３２０に記憶する。記憶部３２０は、プロファイル記憶部３２２および購買履歴記憶部３２４を含む。図３にプロファイル記憶部３２２の構造の一例を示す。プロファイル記憶部３２２は、ユーザ１０の保護すべき個人情報（氏名、生年月日など）は含まず、ユーザ１０の会員番号と、性別、年齢層、地域などのプロファイル情報を記憶する。プロファイル受付部３１０で受け付けたプロファイル情報は、記憶部３２０のプロファイル記憶部３２２に格納される。さらに、プロファイル記憶部３２２は、ユーザ１０の趣味、趣向、嗜好、思想、思考、アンケート結果などを含むことができる。

【００５９】

図４は、購買履歴記憶部３２４の構造の一例を示す。購買履歴記憶部３２４は、ユーザ１０が自動販売機１００を利用して商品を購入した購買履歴情報を記憶する。たとえば、商品の購入日時、自動販売機識別番号、商品コード、単価、数量などを含む。これらの情報は後述するように、認証管理装置４００からダウンロードされ記憶部３２０の購買履歴記憶部３２４に記憶される。

【００６０】

図１に戻り、登録要求部３３０は、表示部３０４に表示された会員登録画面（不図示）

に従って、操作部３０２を操作して入力されたユーザ１０の会員情報、たとえば、生年月日を受け付ける。そして、登録要求部３３０は、会員情報を含む会員登録要求を第１インタフェース部３０６を介して認証管理装置４００に送信する。ユーザ登録が終了すると、認証管理装置４００から携帯端末２００に登録済みの会員番号が返送される。

【００６１】

ダウンロード要求部３４０は、ユーザ１０の購買情報ダウンロード要求を操作部３０２を介して受け付け、第１インタフェース部３０６を介して認証管理装置４００に購買情報を要求する。受信部３４２は、認証管理装置４００から第１インタフェース部３０６を介して購買情報をダウンロードし、記憶部３２０の購買履歴記憶部３２４に記憶する。また、受信部３４２は、登録要求部３３０による会員登録時に認証管理装置４００から返信された会員番号を記憶部３２０に記憶する。

【００６２】

送信部３５０は、第２インタフェース部３０８を介してＣＲＭセンター５００にユーザ１０のプロファイル記憶部３２２および購買履歴記憶部３２４を関連付けて、送信する。

【００６３】

本実施形態において、通信端末（携帯端末２００、ユーザ端末３００）は、受付部（プロファイル受付部３１０）がプロファイル情報を受け付けたとき、受信部（ダウンロード要求部３４０）が認証管理装置（認証管理装置４００）に購買情報を要求し、送信部（送信部３５０）が受信部３４２が受信した購買情報を自動的に顧客管理装置（ＣＲＭセンター５００）に転送することができる。

【００６４】

すなわち、ダウンロード要求部３４０が認証管理装置４００に購買情報を要求する際、ユーザ１０に対して、取得した購買情報およびユーザ１０の属性情報をＣＲＭセンター５００へ転送して良いか否かの承諾を取る。転送が承諾された場合、送信部３５０は、受信部３４２が購買情報をダウンロードした時に、自動的に第２インタフェース部３０８を介してＣＲＭセンター５００に購買情報および属性情報を送信する。転送承諾は、予め会員登録したときに、予め指定しておくこともできるし、情報ダウンロード時に毎回確認する構成とすることもできる。

【００６５】

次に、認証管理装置４００の構成について説明する。認証管理装置４００は、第１インタフェース部４０２と、第２インタフェース部４０４と、会員情報データベース（図中、「会員情報ＤＢ」と示す）４１０と、登録部４１２と、認証部４２０と、販売情報受信部４３０と、購買情報データベース（図中、「顧客情報ＤＢ」と示す）４３２と、履歴送信部４４０と、を含む。なお、本実施形態において、認証管理装置４００は、特に成人認証などを要する商品を販売する自動販売機１００にて、ユーザ１０に商品を購入する際のユーザ認証処理を管理する装置である。すなわち、自動販売機１００は商品のメーカまたは商品を販売する企業などが保有するものであり、またＣＲＭセンター５００は、商品のメーカや商品を販売する企業、あるいは広告代理店などが保有することができる。認証管理装置４００は、これらの企業とは独立した別の認証専門機関とすることができる。

【００６６】

第１インタフェース部４０２は、第１ネットワーク２０を介して自動販売機１００と通信する。第２インタフェース部４０４は、第２ネットワーク２２を介してユーザ端末３００と通信する。

【００６７】

会員情報データベース４１０は、図５に示すように、登録された会員毎に、会員番号および生年月日を含むことができる。登録部４１２は、第２インタフェース部４０４を介してユーザ端末３００から会員登録要求を受け付ける。ユーザ端末３００からは会員情報としてたとえば、生年月日が送信される。登録部４１２は、会員番号を発行し、会員情報データベース４１０に会員番号と生年月日を関連付けて登録する。そして、登録部４１２は、会員番号を第２インタフェース部４０４を介してユーザ端末３００に送信する。

【００６８】
認証部４２０は、自動販売機１００からの要求に応じて、会員の認証を行う。具体的には、第１インタフェース部４０２を介して自動販売機１００から会員番号および生年月日を含む会員情報を受信し、会員情報データベース４１０にアクセスし、対応する会員番号および生年月日により認証を行い、認証結果を第１インタフェース部４０２を介して自動販売機１００に送信する。
【００６９】
図６に認証部４２０の詳細を示す。認証部４２０は、認証受付部４２２と、照会部４２４と、通知部４２６と、を含む。認証受付部４２２は、第１インタフェース部４０２を介して自動販売機１００から会員情報を受信する。照会部４２４は、会員情報データベース４１０にアクセスし、認証受付部４２２が受信した会員情報に基づいて照会し、結果を通知部４２６に通知する。通知部４２６は、照会部４２４の結果を受け、第１インタフェース部４０２を介してユーザ１０が認証されたか否かを通知する。
【００７０】
図１に戻り、販売情報受信部４３０は、第１インタフェース部４０２を介して自動販売機１００から販売情報を受信し、購買情報データベース４３２に蓄積する。図７に示すように、購買情報データベース４３２は、会員番号４７０毎に、購買履歴情報を蓄積する。購買履歴情報には、日時４７１、ＶＭコード（自動販売機識別番号）４７３、商品コード４７５、単価４７７、および数量４７９を含む。
【００７１】
図１に戻り、履歴送信部４４０は、ユーザ端末３００からの要求に応じて、購買情報データベース４３２に格納されているユーザ１０の会員番号に対応する購買履歴情報を第２インタフェース部４０４を介してユーザ端末３００に送信する。図８に履歴送信部４４０の詳細を示す。履歴送信部４４０は、ダウンロード要求受付部４４２と、抽出部４４４と、送信部４４６と、を含む。
【００７２】
ダウンロード要求受付部４４２は、第２インタフェース部４０４を介してユーザ端末３００から購買履歴情報のダウンロード要求を受け付ける。抽出部４４４は、ダウンロード要求に含まれる会員番号が会員情報データベース４１０に存在するか否かを調べた後、存在する場合、購買情報データベース４３２にアクセスし、会員番号に対応する購買履歴情報を抽出する。送信部４４６は、抽出部４４４が抽出した購買履歴情報を第２インタフェース部４０４を介してユーザ端末３００に送信する。
【００７３】
図１に戻り、ＣＲＭセンター５００の構成について説明する。ＣＲＭセンター５００は、インタフェース部５０２と、受信部５１０と、顧客情報データベース５２０と、管理部５３０と、インセンティブ付与部５４０と、を含む。
【００７４】
インタフェース部５０２は、第３ネットワーク２４を介してユーザ端末３００と通信する。受信部５１０は、ユーザ端末３００からインタフェース部５０２を介してユーザ１０のプロファイル情報および購買情報を受信する。受信した情報は顧客情報データベース５２０に蓄積される。図９に顧客情報データベース５２０の構造の一例を示す。顧客情報データベース５２０は、会員情報記憶部５２２と、購買情報記憶部５２４と、インセンティブ情報記憶部５２６と、を含む。図９（ａ）に示すように、会員情報記憶部５２２は、会員番号毎に、性別、年齢層、地域などのプロファイルを含む。図９（ｂ）に示すように、購買情報記憶部５２４は、会員番号毎に、商品の購入日時、ＶＭコード、商品コード、単価、数量を含む。図９（ｃ）に示すように、インセンティブ情報記憶部５２６は、会員番号毎に、インセンティブ付与の情報を含み、たとえば、インセンティブ最終付与日、最終付与ポイント、および累計ポイントなどを含む。
【００７５】
顧客情報データベース５２０に蓄積された情報に基づいて、たとえば、ある商品、新製

品などの宣伝、広告を行った結果の効果測定を行うことができる。

【００７６】

管理部５３０は、顧客情報を管理し、たとえば、必要に応じて、ユーザ端末３００に対して購買情報の送信の要求を行ったり、ユーザ端末３００からの購買情報の自主的な送信を検知したりする。管理部５３０は、受信部５１０が顧客情報をユーザ端末３００から受信したとき、ユーザ１０に付与するインセンティブを決定し、インセンティブ付与部５４０に指示する。ユーザ端末３００に付与されたインセンティブは、顧客情報データベース５２０のインセンティブ情報記憶部５２６に記録される。

【００７７】

インセンティブ付与部５４０は、管理部５３０からの指示に従ってインタフェース部５０２を介してユーザ端末３００に対してインセンティブの付与の通知を行う。ここで、インセンティブとは、たとえば、ユーザに対する会員特典ポイントの付与や、割引クーポン券の発行、商品の無料提供、賞品や賞金の付与などを含むことができる。インセンティブ付与の通知は、たとえば、メールにて行うことができる。あるいは、所定の会員専用のウェブページを設け、ユーザ端末３００が会員専用のウェブページにアクセスすることにより、ポイントの確認および利用などを行うことを可能とすることができる。これらの処理は本発明の本質には関係ないので詳細な説明は省略する。

【００７８】

このように構成された本実施形態の顧客情報管理システム１の動作について、以下に説明する。図１０は、本実施形態の顧客情報管理システム１における会員登録および自動販売機１００における商品購入時の動作の一例を示すフローチャートである。以下、図１および図８も用いて説明する。

【００７９】

予めユーザ１０は、携帯端末２００またはユーザ端末３００を用いて、認証管理装置４００に対して会員登録を行う（ステップＳ１１）。たとえば、ユーザ端末３００は、認証管理装置４００に第２ネットワーク２２を介してアクセスし、会員登録要求画面（不図示）を表示部３０４に表示する。会員登録要求画面は、たとえば、所定のＵＲＬで指定されるウェブページなどで提供することができる。ユーザ端末３００は、ウェブページにアクセスし、必要な情報を操作部３０２を用いて入力し、第１インタフェース部３０６を介して会員登録要求として認証管理装置４００に送信する。

【００８０】

認証管理装置４００では、第２インタフェース部４０４を介して登録部４１２がユーザ端末３００から会員登録要求を受信し、登録を行う（ステップＳ１３）。登録部４１２は、受信したユーザ１０の生年月日を会員情報データベース４１０に登録し、会員番号を発行し、第２インタフェース部４０４を介してユーザ端末３００に返信する。そして、ユーザ端末３００では、受信部３４２が会員番号を受信し、記憶部３２０に記憶する。

【００８１】

つづいて、ユーザ１０は、商品を購入すべく、自動販売機１００に向かい、自動販売機１００の操作部１０２を操作して、商品購入の要求を行う（ステップＳ１５）。自動販売機１００では、購入受付部１０４が商品購入要求を受け付ける。同時に、通信部１０６が、ユーザ１０の携帯端末２００と通信を行い、ユーザ認証に必要な情報を取得する。認証要求部１１０がインタフェース部１０８を介して認証管理装置４００に対してユーザ認証要求を行う（ステップＳ１７）。このとき、携帯端末２００からは自動販売機１００に会員番号と生年月日が会員情報として送信され、自動販売機１００から認証管理装置４００に転送される。

【００８２】

認証管理装置４００では、第１インタフェース部４０２を介して認証部４２０が会員情報を受信し、会員情報データベース４１０にアクセスし、受信した会員情報に対応する登録があるか否かを判定する（ステップＳ１９）。会員登録があった場合（ステップＳ１９のＹＥＳ）、販売許可通知を第１インタフェース部４０２を介して自動販売機１００に送

信する（ステップＳ２１）。一方、会員登録がなかった場合（ステップＳ１９のＮＯ）、販売拒否通知を第１インタフェース部４０２を介して自動販売機１００に送信する（ステップＳ２３）。自動販売機１００では、販売が拒否されたことをユーザ１０に通知する表示を行い、販売受け付けを終了する（不図示）。

【００８３】

一方、認証管理装置４００から販売許可通知を自動販売機１００が受信すると、認証要求部１１０は、精算部１２０に精算処理を行うよう通知する。精算部１２０では、ユーザ１０に対して商品代金の精算を要求する（ステップＳ２５）。ユーザ１０は、商品を購入する場合（ステップＳ２７のＹＥＳ）、たとえば、現金、プリペイドカード、キャッシュカードなどにより、代金の支払いを行う（ステップＳ２９）。商品の購入をキャンセルする場合（ステップＳ２７のＮＯ）、自動販売機１００上の取り消しボタン（不図示）を押下し、購入をキャンセルする。

【００８４】

自動販売機１００がユーザ１０からの代金の支払いを受け付けると、精算部１２０は代金の精算処理を行い、販売情報送信部１４０に通知する。販売情報送信部１４０は、販売情報をインタフェース部１０８を介して認証管理装置４００に送信する（ステップＳ３１）。ここで、送信される販売情報とは、たとえば、販売日時、ＶＭコード、商品コード、単価、数量などを含む。

【００８５】

認証管理装置４００では、第１インタフェース部４０２を介して販売情報受信部４３０が販売情報を受信し、購買情報データベース４３２に蓄積する（ステップＳ３３）。そして、自動販売機１００では、精算が終了した商品１２を商品払出部１３０が払い出し（ステップＳ３５）、ユーザ１０は商品１２を受け取る（ステップＳ３７）。

【００８６】

次に、本実施形態の顧客情報管理システム１における購買情報に関連付けられたプロファイル情報収集時の動作について説明する。図１１は、本実施形態の顧客情報管理システム１における購買情報に関連付けられたプロファイル情報収集時の動作を示すフローチャートである。ここで、ユーザ１０は、認証管理装置４００が蓄積している購買情報をダウンロードし、参照することができる。ダウンロードした購買情報は、予め契約により承諾されているＣＲＭセンター５００に対して、ユーザ１０のプロファイル情報と関連付けられて送信される。ユーザ１０は購買情報を送信した見返りとして、ＣＲＭセンター５００からインセンティブの付与を受けることができる。

【００８７】

具体的には、まず、ユーザ１０は、携帯端末２００またはユーザ端末３００を用いて、認証管理装置４００に接続を行う（ステップＳ５１）。たとえば、ユーザ１０は操作部３０２を操作して、認証管理装置４００の所定のウェブページにアクセスし、ログイン画面（不図示）を表示部３０４に表示させる。

【００８８】

ダウンロード要求部３４０は、第１インタフェース部３０６を介して認証管理装置４００にアクセスし、会員情報として、会員番号および生年月日を送信する（ステップＳ５３）。そして、認証管理装置４００において、履歴送信部４４０が第２インタフェース部４０４を介して会員情報を受信し、会員情報データベース４１０にアクセスしてユーザ認証処理を行う（ステップＳ５５）。認証された場合（ステップＳ５５のＹＥＳ）、認証通知をユーザ端末３００に行う（ステップＳ５９）。認証されなかった場合（ステップＳ５５のＮＯ）、ユーザ端末３００にエラー通知を行う（ステップＳ５７）。

【００８９】

ユーザ端末３００において、ダウンロード要求部３４０は、認証通知を受けた場合に（ステップＳ６１のＹＥＳ）、購買情報のダウンロード要求を第１インタフェース部３０６を介して認証管理装置４００に対して行う（ステップＳ６３）。認証管理装置４００では、第２インタフェース部４０４を介して履歴送信部４４０がダダウンロード要求を受け付

け、購買情報データベース４３２にアクセスし、認証された会員番号に該当する購買情報を抽出する（ステップＳ６５）。なお、ここで、抽出する購買情報の期間など指定をユーザ端末３００にて行うこともできる。

【００９０】

履歴送信部４４０は、抽出された購買情報をユーザ端末３００に第２インタフェース部４０４を介して送信する（ステップＳ６７）。ユーザ端末３００では、受信部３４２が第１インタフェース部３０６を介して購買情報を受信し、記憶部３２０の購買履歴記憶部３２４に蓄積する（ステップＳ６９）。受信部３４２は、認証管理装置４００からの購買情報の受信の終了を確認した後、認証管理装置４００からログアウトする（ステップＳ７１）。

【００９１】

つづいて、送信部３５０が第２インタフェース部３０８を介してＣＲＭセンター５００に接続する（ステップＳ７５）。ＣＲＭセンター５００では、ユーザ端末３００からの接続を受け付け、購買情報の受信待ち状態に入る（不図示）。

【００９２】

そして、ユーザ端末３００から送信部３５０が第２インタフェース部３０８を介してＣＲＭセンター５００にプロファイル情報に関連付けられた購買履歴情報を送信する（ステップＳ７７）。ＣＲＭセンター５００では、インタフェース部５０２を介して受信部５１０がプロファイル情報に関連付けられた購買履歴情報を受信し、顧客情報データベース５２０に蓄積する（ステップＳ７９）。

【００９３】

そして、管理部５３０は、受信部５１０がユーザ端末３００から情報を受信したことを検知し、ユーザ端末３００のユーザ１０に付与するインセンティブを決定し、インセンティブ付与部５４０に通知する（ステップＳ８１）。インセンティブ付与部５４０は、ユーザ端末３００にインタフェース部５０２を介して、たとえば、メールなどで付与されたインセンティブを通知する。

【００９４】

なお、ステップＳ６１で、認証管理装置４００からエラー通知が返された場合は、認証管理装置４００からログアウトするとともに（不図示）、処理を終了する。

【００９５】

次に、本実施形態の顧客情報管理システム１において、購買情報を認証管理装置４００からユーザ端末３００に送信する際の他の動作の一例について説明する。図１２は、本実施形態の顧客情報管理システム１における購買情報送信時の動作の他の例を示すフローチャートである。

【００９６】

なお、図１２において、ユーザ１０のユーザ端末３００は、図１１のステップＳ６１、認証管理装置４００は、図１１のステップＳ５９の状態にあるものとする。

【００９７】

すなわち、ユーザ端末３００のユーザ認証がなされた状態となったとき、認証管理装置４００は、ユーザ端末３００に対して、ユーザ１０のプロファイル情報を収集するための質問を提示する（ステップＳ１０１）。具体的には、図１３に示すような入力画面６００をユーザ端末３００の表示部３０４に表示させる（ステップＳ１０３）。図１３に示すように、入力画面６００には、顧客へのアンケートが含まれる。入力画面６００は、たとえば、アンケートの質問に対する回答を選択するリスト６１０と、アンケート結果を認証管理装置４００に送信する指示を行う送信ボタン６１２と、質問には答えないキャンセルボタン６１４と、を含むことができる。なお、キャンセルボタン６１４がユーザ１０により押下された場合は、そのまま処理を終了する（不図示）。

【００９８】

また、この構成において、認証管理装置４００は通信端末（携帯端末２００、ユーザ端末３００）から購買情報が要求されたとき、当該通信端末（携帯端末２００、ユーザ端末

３００）に対し、所定の質問への回答を促す画面（図１３の入力画面６００）を提示する提示部（不図示）を含み、通信端末（携帯端末２００、ユーザ端末３００）は、通信端末（携帯端末２００、ユーザ端末３００）のユーザ１０による回答の入力を受け付ける回答受付部（プロファイル受付部３１０）を含み、送信部３５０は、回答を受け付けた後、回答を購買情報とともに顧客管理装置（ＣＲＭセンター５００）に送信する。

【００９９】

そして、ユーザ１０は、ユーザ端末３００の表示部３０４に表示された入力画面６００を参照し、操作部３０２を操作して回答を入力し、プロファイル受付部３１０が受け付ける（ステップＳ１０５）。入力画面６００の送信ボタン６１２の押下を操作部３０２が受け付けたとき、ダウンロード要求部３４０は、認証管理装置４００に対しては、質問への回答がなされたことのみを通知する（ステップＳ１０７）。すなわち、プロファイル受付部３１０が受け付けた情報は、認証管理装置４００に送信する必要はない。そして、プロファイル受付部３１０が受け付けた情報は、記憶部３２０のプロファイル記憶部３２２に格納される（ステップＳ１０８）。

【０１００】

認証管理装置４００では、回答がなされたことの通知を受け付けると（ステップＳ１０９のＹＥＳ）、購買情報データベース４３２にアクセスし、会員番号に対応する購買履歴情報を抽出する（ステップＳ１１１）。そして、ユーザ端末３００に対して履歴送信部４４０が第２インタフェース部４０４を介して購買履歴情報を送信する（ステップＳ１１３）。

【０１０１】

ユーザ端末３００では、受信部３４２が第１インタフェース部３０６を介して購買履歴情報を受信し、記憶部３２０の購買履歴記憶部３２４に蓄積する（ステップＳ１１５）。そして、認証管理装置４００からログアウトする（ステップＳ１１７）。認証管理装置４００では、ユーザ端末３００との通信を切断する（ステップＳ１１９）。

【０１０２】

そして、ユーザ端末３００では、ＣＲＭセンター５００に第２インタフェース部３０８を介して接続する（ステップＳ１２１）。そして、ユーザ端末３００において、送信部３５０は、認証管理装置４００から取得した購買履歴情報と、ステップＳ１０５で入力した回答をＣＲＭセンター５００に送信する（ステップＳ１２３）。

【０１０３】

ＣＲＭセンター５００では、インタフェース部５０２を介して受信部５１０が購買履歴情報および回答を受信し、顧客情報データベース５２０に蓄積する（ステップＳ１２５）。そして、管理部５３０が情報の受信を検出し、回答の有無に応じてインセンティブを決定し、インセンティブ付与部５４０に通知する（ステップＳ１２７）。そして、インセンティブ付与部５４０は、ユーザ端末３００にメールなどで付与されたポイントなどを通知する（不図示）。

【０１０４】

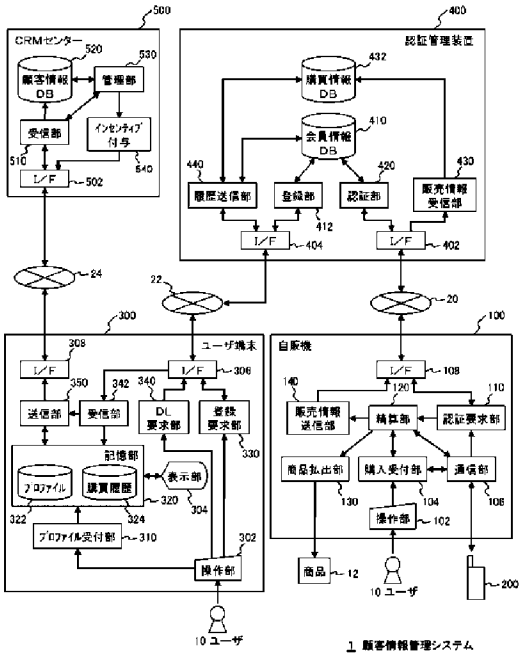
以上説明したように、本実施形態の顧客情報管理システム１によれば、図１４に示すように、ユーザ１０は自動販売機１００にて商品を購入し、その購入履歴を会員情報（属性）と関連付けて認証管理装置４００が管理する。そして、ユーザ１０はユーザ端末３００を使用して、必要に応じて認証管理装置４００に蓄積されている購入履歴情報と会員情報（属性）を照会することができる。さらに、ユーザ端末３００において、ユーザ１０のプロファイル情報を入力することにより、購入履歴にプロファイル情報を関連付けて、ＣＲＭセンター５００に送信することができる。ＣＲＭセンター５００は、ユーザ端末３００からプロファイル情報に関連付けられた購入履歴情報を収集することができ、これらの情報により自動販売機１００による商品販売の効果測定を行うことが可能となる。ＣＲＭセンター５００は、ユーザ１０から購入履歴情報を取得する見返りとして、ユーザ１０に対してインセンティブを付与することにより、より購入履歴情報の収集を促進させることが可能となる。

【０１０５】
このように、本発明の顧客情報管理システム１によれば、従来収集不可能であった自動販売機１００における購入履歴情報にユーザ１０のプロファイル情報を関連付けて収集可能となり、個人を特定可能な個人情報は保護しつつ、顧客ニーズを分析するのに必要な情報を効率良く収集することが可能となる。
【０１０６】
また、モバイルキャリアのみを構成要素としたモデルとはせずに、自動販売機（ＶＭ）および認証機能もその構成要素として組み込んだ上で、フロントエンドからの迅速な情報収集を行い、そして迅速なフロントエンドの伝播などを可能とする情報循環型のＣＲＭを可能とするセンター機能を具現化することが可能となった。すなわち、従来のＣＲＭセンターが意識していたコールセンターとは、全く異なったものであり、そのＣＲＭセンターを中核としたビジネスモデルを構築することが可能となる。
【０１０７】
以上、図面を参照して本発明の実施形態について述べたが、これらは本発明の例示であり、上記以外の様々な構成を採用することもできる。なお、本発明において利用者に関する情報を取得、利用する場合は、これを適法に行うものとする。
【０１０８】
たとえば、他の実施形態において、顧客情報管理システム１において、ＣＲＭセンター５００は、認証管理装置４００の提示部（不図示）が提供する画面の所定のウェブページのＵＲＬアドレスを含むメールをユーザ１０宛に送信するメール送信部（不図示）を含むことができる。
【０１０９】
この構成によれば、ユーザ１０は、受信したメールに含まれるＵＲＬアドレスをアクセスし、所定のウェブページを参照し、たとえば、図１３の入力画面６００のような画面にてプロファイル情報を入力することにより、購買履歴情報のダウンロードを行える。また、同時に、認証管理装置４００からユーザ端末３００を経由して、プロファイル情報に関連付けられた購買履歴情報をＣＲＭセンター５００に転送させることができることとなる。
【０１１０】
また、他の実施形態において、ＣＲＭセンター５００は、収集した購買履歴情報およびプロファイル情報に基づいて、ユーザ１０に適した商品の広告情報やクーポン券の発行などを行うこともできる。
【図面の簡単な説明】
【０１１１】
【図１】本発明の実施の形態に係る顧客情報管理システムの構成を示す概略ブロック図である。
【図２】本実施形態の顧客情報管理システムの概要を説明するための図である。
【図３】本実施形態のプロファイル記憶部の構造の一例を示す図である。
【図４】本実施形態の購買履歴記憶部の構造の一例を示す図である。
【図５】本実施形態の会員情報データベースの構造の一例を示す図である。
【図６】本実施形態の認証管理装置の認証部の詳細な構成を示す機能ブロック図である。
【図７】本実施形態の購買情報データベースの構造の一例を示す図である。
【図８】本実施形態の認証管理装置の履歴送信部の詳細な構成を示す機能ブロック図である。
【図９】本実施形態の顧客情報データベースの構造の一例を示す図である。
【図１０】本実施形態の顧客情報管理システムにおける会員登録および自動販売機における商品購入時の動作の一例を示すフローチャートである。
【図１１】本実施形態の顧客情報管理システムにおける購買情報に関連付けられたプロファイル情報収集時の動作を示すフローチャートである。
【図１２】本実施形態の顧客情報管理システムにおける購買情報送信時の動作の他の一例

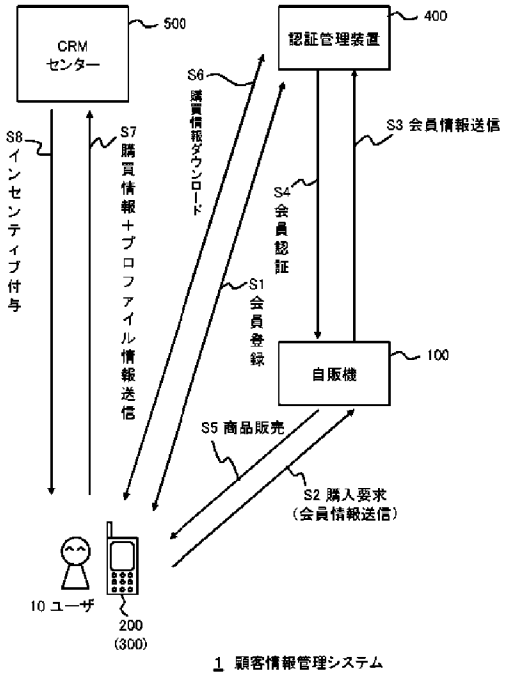
を示すフローチャートである。
【図１３】本実施形態のユーザ端末の表示部に表示されるプロファイル情報入力画面の一例を示す図である。
【図１４】本発明の実施の形態に係る顧客情報管理システムにおける購入履歴情報のデータフローを示す図である。
【符号の説明】
【０１１２】
１　顧客情報管理システム
１０　ユーザ
１２　商品
２０　第１ネットワーク
２２　第２ネットワーク
２４　第３ネットワーク
１００　自動販売機
１０２　操作部
１０４　購入受付部
１０６　通信部
１０８　インタフェース部
１１０　認証要求部
１２０　精算部
１３０　商品払出部
１４０　販売情報送信部
２００　携帯端末
３００　ユーザ端末
３０２　操作部
３０４　表示部
３０６　第１インタフェース部
３０８　第２インタフェース部
３１０　プロファイル受付部
３２０　記憶部
３２２　プロファイル記憶部
３２４　購買履歴記憶部
３３０　登録要求部
３４０　ダウンロード要求部
３４２　受信部
３５０　送信部
４００　認証管理装置
４０２　第１インタフェース部
４０４　第２インタフェース部
４１０　会員情報データベース
４１２　登録部
４２０　認証部
４２２　認証受付部
４２４　照会部
４２６　通知部
４３０　販売情報受信部
４３２　購買情報データベース
４４０　履歴送信部
４４２　ダウンロード要求受付部
４４４　抽出部

４４６　送信部
４７０　会員番号
４７１　日時
４７５　商品コード
４７７　単価
４７９　数量
５００　ＣＲＭセンター
５０２　インタフェース部
５１０　受信部
５２０　顧客情報データベース
５２２　会員情報記憶部
５２４　購買情報記憶部
５２６　インセンティブ情報記憶部
５３０　管理部
５４０　インセンティブ付与部
６００　入力画面
６１０　リスト
６１２　送信ボタン
６１４　キャンセルボタン

【図１】



【図２】



【図３】

322 プロファイル記憶部

会員番号	12346
性別	女
年齢層	30代
地域	関西
:	:

【図４】

324 購買履歴記憶部

会員番号12346

日時	VM	商品コード	単価	数量
YYYYMMDD hh:dd	VM0001	abcd	210	1
YYYYMMDD hh:dd	VM0002	abcd	210	2
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【図５】

410 会員情報DB

会員番号	生年月日
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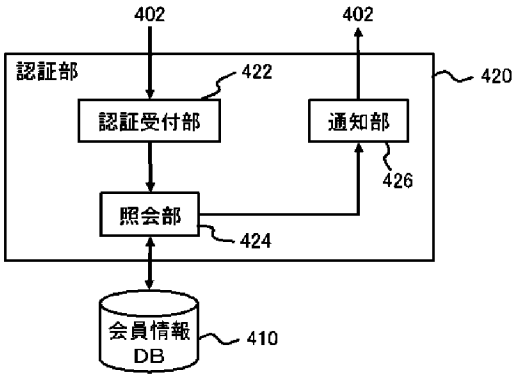
12346	19680818
12347	19610103
:	:

【図６】



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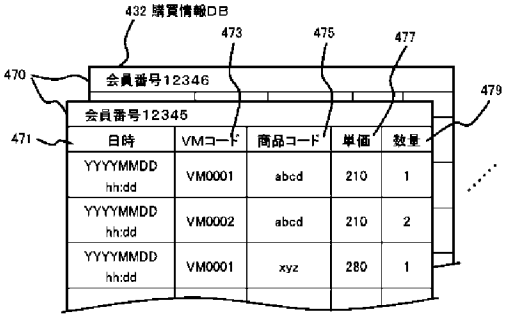

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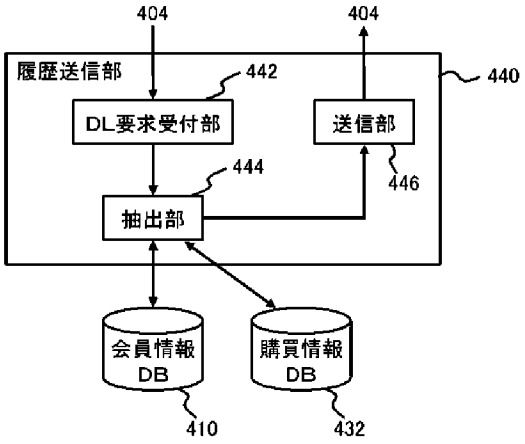
404
404
履歴送信部
442
440
DL要求受付部
送信部
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抽出部
会員情報
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購買情報
DB
410
432

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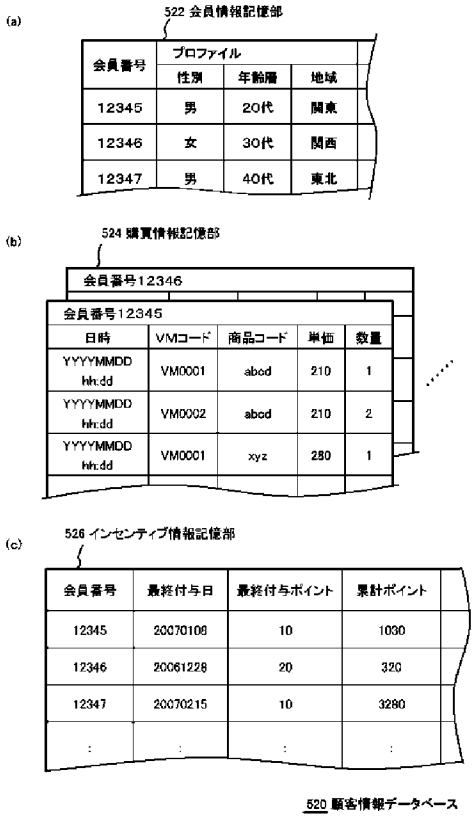
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プロファイル
性別
年齢層
地域
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12346 女 30代 関西
12347 男 40代 東北
(b)
524 購買情報記憶部
会員番号12346
会員番号12345
日時
VMコード
商品コード
単価
数量
YYYYMMDD hh:dd
VM0001 abcd 210 1
VM0002 abcd 210 2
VM0001 xyz 280 1
(c)
526 インセンティブ情報記憶部
会員番号
最終付与日
最終付与ポイント
累計ポイント
12345 20070109 10 1030
12346 20061228 20 320
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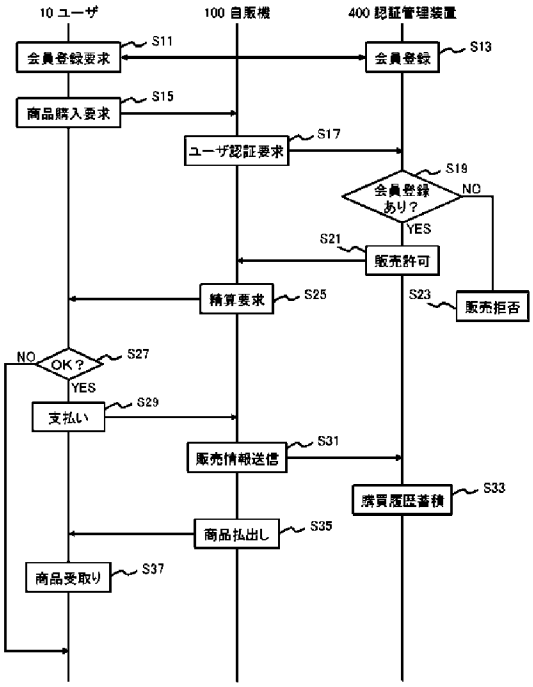
520 顧客情報データベース

【図１０】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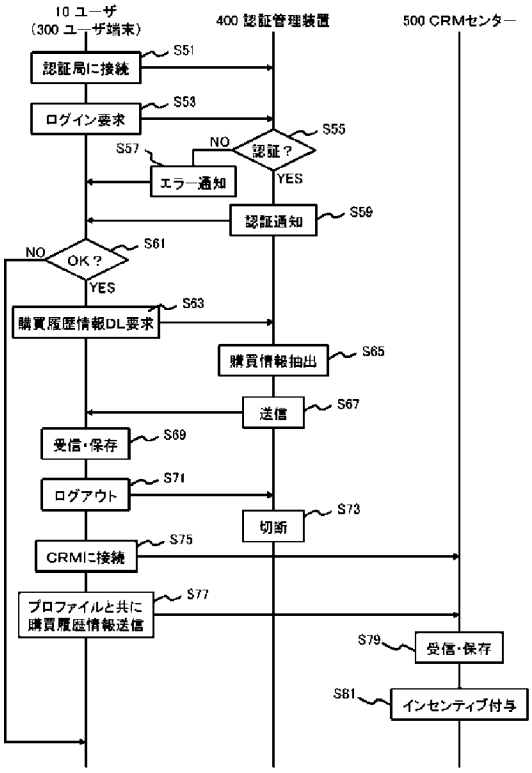
400 認証管理装置
会員登録要求
S11
会員登録
S13
商品購入要求
S15
ユーザ認証要求
S17
会員登録あり？
S19
NO
YES
販売許可
S21
販売拒否
S23
精算要求
S25
NO
OK？
S27
YES
支払い
S29
販売情報送信
S31
購買履歴蓄積
S33
商品払出し
S35
商品受取り
S37

【図１１】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(300 ユーザ端末)
400 認証管理装置
500 CRMセンター
認証局に接続
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ログイン要求
S53
NO
認証？
S55
S57
エラー通知
YES
認証通知
S59
NO
OK？
S61
YES
購買履歴情報DL要求
S63
購買情報抽出
S65
送信
S67
受信・保存
S69
ログアウト
S71
切断
S73
CRMに接続
S75
プロファイルと共に
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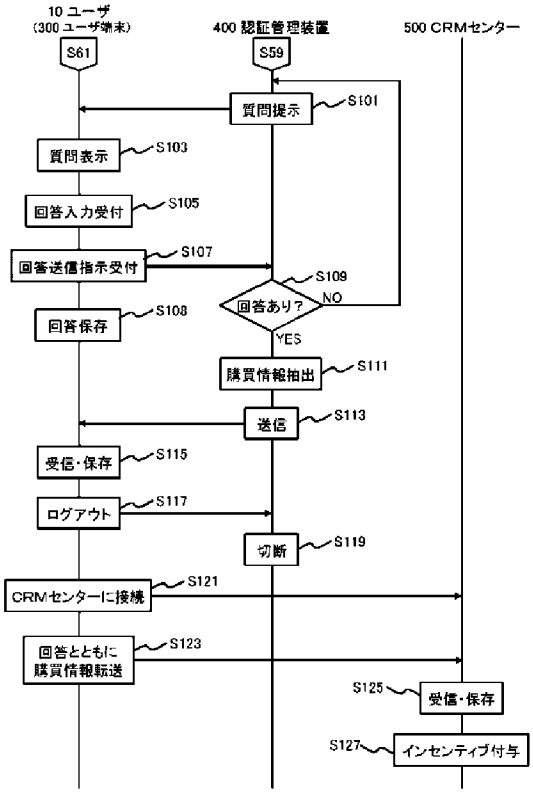
S77
S79
受信・保存
S81
インセンティブ付与

【図１２】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500 CRMセンター
S61
S59
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S101
質問表示
S103
回答入力受付
S105
回答送信指示受付
S107
S109
回答あり？
NO
YES
回答保存
S108
購買情報抽出
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送信
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受信・保存
S115
ログアウト
S117
切断
S119
CRMセンターに接続
S121
回答とともに
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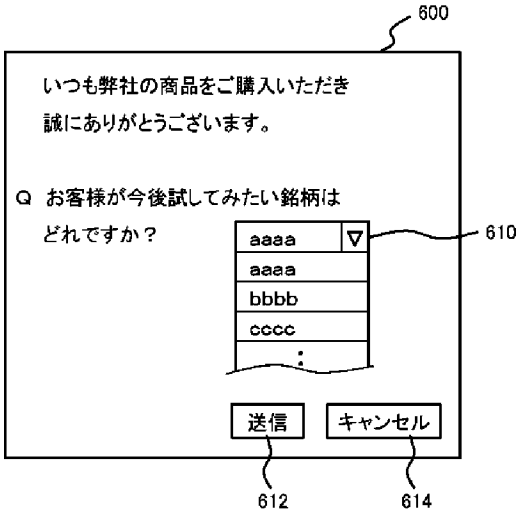
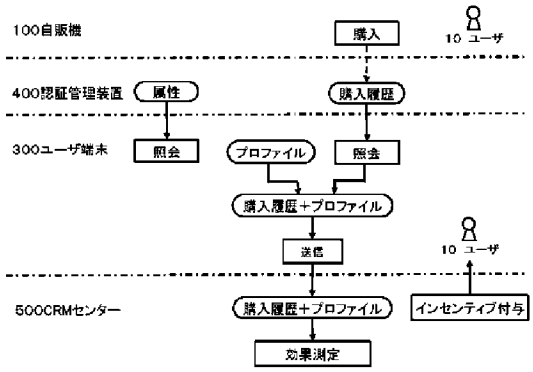
インセンティブ付与

【図１３】


600
いつも弊社の商品をご購入いただき
誠にありがとうございます。
Q お客様が今後試してみたい銘柄は
どれですか？
aaaa
aaaa
bbbb
cccc
610
送信
キャンセル
612
614

【図１４】


100自販機
購入
10 ユーザ
400認証管理装置
属性
購入履歴
300ユーザ端末
照会
プロファイル
照会
購入履歴＋プロファイル
送信
10 ユーザ
500CRMセンター
購入履歴＋プロファイル
インセンティブ付与
効果測定

フロントページの続き

合議体
審判長　金子　幸一
審判官　須田　勝巳
審判官　吉村　和彦

(56)参考文献　特開２００４－２８０３７４（ＪＰ，Ａ）
特開２００２－１５７３１４（ＪＰ，Ａ）
特開２００５－２６７２７３（ＪＰ，Ａ）

(58)調査した分野(Int.Cl.，ＤＢ名)
G06Q10/00-50/00

Patent Translate
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Notice

This translation is machine-generated. It cannot be guaranteed that it is intelligible, accurate, complete, reliable or fit for specific purposes. Critical decisions, such as commercially relevant or financial decisions, should not be based on machine-translation output.

DESCRIPTION JP2007257578

[0001]

Relates to a communication terminal and customer information management method, customer information management systems, and customer management system, in particular, customer information management system for managing customer information has been selling products by vending machines, apparatus and method, as well as the present invention, the related to the communication terminal used by the customer.

[0002]

For companies, either perform efficiently how the purchase information collection for the goods, make the effect measurement of such items of new products in particular, it is one of the most important problems.

[0003]

The purchasing information management system of the related art, there is disclosed, for example, in Patent Document 1.

Purchasing information management system described in this document is such that while confidential personal information, and collecting purchase information of each individual, and

then analyzed to provide product information, advertising information suitable for the individual.

Japanese Patent Publication No. 2004-295326

[0004]

However, the above conventional technique is described in literature, has room for improvement in the following aspects.

[0005]

Settlement of the product is intended to be performed by the POS terminal, the receipt is delivered to the user at the time of purchase.

Based on the receipt number recorded on the receipt on, the user inputs in association with purchase information by purchaser identification code previously stored in the receipt number by using the user terminal.

Therefore, a complicated procedure user brought back all the way to the purchase receipt for each, does not need to enter information from the user terminal was required.

[0006]

By the way, if you were considered from the History CRM conventional (Customer Relationship Management), was aimed at WEB marketing that break away from the One to one marketing although in triggered by the appearance, continues to stretch Today In addition, the front-end (mobile I reshaping into something that also encompasses mobile marketing you to fully exploit the channel).

[0007]

On without the model in such, was a component only mobile carriers, incorporating as its components may also authentication function Times vending machines and (VM), to perform rapid collection of information from the front-end , and to implement the function center that enables CRM information recycling which enables such rapid propagation of the front end is desired.

[0008]

The present invention has been made in view of the above circumstances, and has as its object, while protecting the personal information and provide collectible Customer Information Control System efficient customer information using a nonconventional technique I is that.

[0009]

In accordance with the present invention, an authentication management apparatus for authenticating a user who is registered as a member in advance,

When receiving a purchase request from a user, an automatic vending machine which sells the commodity to be authenticated the user in contact with the authentication management apparatus,

and communication terminal by the user to manipulate,

A customer information management system and a customer management device based on the purchase history of the goods of the user, for managing customer information,

The authentication management apparatus,

A member information storage unit for storing the member information of the user,

An authentication unit which performs authentication of the user is requested from the vending machine based on the member information in the member information storage section,

and purchasing information storage unit in which the user is stored in association with the membership information of the user to purchase information at the time of purchase the item in the vending machine,

A transmission unit for transmitting to the communication terminal of the user and the purchase information corresponding to the membership information of the user in response to a request from the user,

And a,

The communication terminal,

A receiver for receiving from the authentication management device by requesting the purchase information corresponding to the membership information of the user,

A reception unit which receives the profile information of the user,

A transmission unit to be transmitted to the customer management system in association with the profile information and the purchase information has been received,

Customer information management system characterized in that it comprises is provided.

[0010]

Here, for example, it can include a cellular phone, PDA, and portable notebook computers, communication terminal communicates with the vending machine to purchase goods from the

vending machine.

When performing the communication with the customer management system and the authentication management apparatus, in particular, need not be portable, and may include a desktop personal computer.

[0011]

Also, for example, a vending machine is a vending machine that sells products that require such as tobacco and alcohol, and adult authentication.

Alternatively, it is possible to carry out the sale of goods on it authenticates a user who is registered as a member in advance.

Further, the profile information is information which does not include information capable of specifying an individual user, and can include information on user interests, tastes, preferences, ideas and thoughts.

Also, the profile information, it is also possible to include user attribute information user's gender, age, and local.

[0012]

According to the invention, it is possible that a customer management apparatus acquires the profile information associated with the purchase information of the user is downloaded on the basis of the will of the user.

Thus, it is possible identifiable personal information while protecting the individual, and efficiently collect information necessary to analyze customer needs.

[0013]

In addition, if it is determined that without the model as a component only mobile carrier, incorporating as its components may also authentication function hourly vending machines and (VM), and a rapid and performs rapid data collection from the front end it becomes possible to implement the function center that enables CRM information of recycling that allows propagation and the front-end.

That is, the call centers aware the CRM center of the related art, is quite different, it is possible to build a business model centered on the CRM center.

[0014]

In the customer information management system, when the receiving unit has received the profile information, the receiving unit requests the purchase information to the authentication management apparatus, the communication terminal, wherein said transmitting unit has received the reception unit can be transferred to the customer management system to automatically purchase information.

[0015]

According to this configuration, it is possible to send to and CRM center purchase information automatically, it is possible to save the trouble of transferring processing of purchase information by the user, convenience is good.

[0016]

In the above customer information management system, after receiving the purchase information from the communication terminal, the customer management apparatus may include a unit for granting incentives given to the user.

Here, the incentive, for example, to grant and membership benefits point to the user, the issuance of discount coupons, free provision of products, and the like grant of prize money and prizes.

[0017]

According to this configuration, it is possible to incentives given to the user that transmitted the purchase information, it is possible to perform a motion with the user transmits purchase information.

[0018]

In the above-mentioned customer information management system, when the purchase information is requested from the communication terminal, for the communication terminal, and a presentation unit that presents a screen prompting the answers to the questions given, the authentication management apparatus, the communication It is possible to include a response receiver for receiving the input of the answer by the user of the terminal, after receiving the reply, the transmission unit can be transmitted to the communication terminal together with the purchase information and the reply.

[0019]

Here, for example, presentation of the authentication management apparatus can be presented to a communication terminal by accessing a predetermined web page provided by the authentication management apparatus by using the browser of the communication terminal.

The user of the communication terminal can refer to this page, performs input of necessary information, and sends a response to the authentication management apparatus from the communication terminal.

According to this configuration, it is possible to obtain the profile information of the user in a format that the user answers the question.

[0020]

In the above customer information management system, it is possible to include a mail transmitting unit configured to transmit to the user addressed to the mail containing the URL address of the web page given in the screen of the presentation unit of the authentication management apparatus is provided.

[0021]

According to this configuration, by sending the mail containing the URL address of the certificate authority to the user from the CRM center, to have access to the certificate authority, without waiting for the purchase history download voluntary user, the purchase history Download giving the user an opportunity, it is possible to realize a mechanism capable of acquiring purchase information.

[0022]

In accordance with the present invention, the member information storage unit for storing the member information of the user and, on the purchase information at the time of purchase products, purchase information storing section for storing in association with the member information of the user in the vending machine the user an authentication management apparatus and a, performs authentication of the user,

Vending machines and to perform the sale of goods to perform authentication of the user by querying the authentication management apparatus,

and communication terminal by the user to manipulate,

A customer information management method for a customer information management system and a customer management device based on the purchase history of the goods of the user, for managing customer information,

and performing authentication of the user to the authentication management apparatus, requested by the vending machine based on the member information in the member information storage section,

sending to the communication terminal of the user and the purchase information of the authentication management apparatus, corresponding to the member information of the user in response to a request from the user,

The communication terminal includes the steps of receiving from the authentication management device by requesting the purchase information corresponding to the membership information of the user,

The communication terminal includes a step of receiving the profile information of the user,

Said communication terminal, and sending to the customer management system in association with the profile information and the purchase information has been received,

Customer information management method which is characterized in that it comprises is provided.

[0023]

In accordance with the present invention, the member information storage unit for storing member information obtained by the member registration in advance,

When purchasing a product, a transmission unit for transmitting the member information in the vending machine,

The authentication management apparatus includes a purchase information database that is stored in association with the member information and purchase information in the vending

machine of the user, a request unit for requesting the purchase information,

A receiver for receiving from the authentication management device the purchasing information,

A reception unit which receives the profile information of the user,

A transmission unit for transmitting to the customer management system in association with the profile information and the purchase information has been received, and manages customer information,

A communication terminal which is characterized by comprising a are provided.

[0024]

In accordance with the present invention, the member information storage unit for storing the member information of the user and, on the purchase information at the time of purchase products, purchase information storing section for storing in association with the member information of the user in the vending machine the user the authentication management apparatus includes, performs authentication of the user, a request unit for requesting the purchase information corresponding to the membership information of the user,

A receiver for receiving from the authentication management device the purchasing information,

A reception unit which receives the profile information of the user,

A transmission unit for transmitting to the customer management system in association with the profile information and the purchase information has been received, and manages customer information,

A communication terminal which is characterized by comprising a are provided.

[0025]

In accordance with the present invention, a computer with a member information storage unit for storing the member information obtained by the member registration in advance,

When you purchase products, means for transmitting the member information to the vending machine,

The authentication management apparatus including the purchase information database that is stored in association with the member information and purchase information in the vending machine of the user, and means for requesting the purchase information,

Means for receiving from the authentication management device the purchasing information,

Means for accepting the profile information of the user,

Program to function as a means for sending to the customer management system in association with the profile information and the purchase information has been received, and manages customer information is provided.

[0026]

In accordance with the present invention, a computer,

Member information storage unit for storing the member information of the user and, on the purchase information at the time of purchase products, including purchase information storage unit that stores in association with the member information of the user, the user of the user in the vending machine the authentication management device to perform authentication, and means for requesting the purchase information corresponding to the membership information of the user,

Means for receiving from the authentication management device the purchasing information,

Means for accepting the profile information of the user,

Program to function as a means for sending to the customer management system in association with the profile information and the purchase information has been received, and manages customer information is provided.

[0027]

The foregoing has described a configuration of the present invention is also intended changed among methods, apparatuses, and any combination of each of these configurations, the expressions of the present invention, system, recording medium, and computer program of the present invention It is effective as an embodiment.

[0028]

In accordance with the present invention, while protecting the personal information is provided that can be collected efficiently Customer Information Control System customer information using a nonconventional technique.

[0029]

Hereinafter, embodiments of the present invention will be described with reference to the drawings.

In all the drawings, same reference numerals are given to the same components and will not be further described.

[0030]

Figure 1 is a schematic block diagram showing a configuration of a customer information management system 1 according to an embodiment of the present invention.

Customer information management system 1 of this embodiment, the vending machine 100 for the sale of goods and the authentication management apparatus 400 for authenticating a user who is registered as a member in advance, to authenticate the user 10 to contact the authentication management apparatus 400 , customer information with (the mobile terminal 200, the user terminal 300) and the communication terminal that the user 10 to operate, customer management device based on the purchase history of the product of the user 10, to manage customer information, and (CRM Center 500) A management system 1, the authentication management apparatus 400, automatically on the basis of member information storage unit for storing the member information of the user 10 and (member information database 410), the member information member information storage unit (member information database 410) an authentication unit 420 performs authentication of the user 10 that is requested by the vending machine 100, purchase information storing section for storing in association with the member information of the user 10 to purchase information at the time of purchase the products in the vending machine 100 by the user 10 (Purchasing the information database 432), a transmitter for transmitting (portable terminal 200, the user terminal 300) the user's communication terminal 10 the purchase information corresponding to the member information of the user 10 in response to a request from the user 10 (history transmission unit includes, and 440), (portable terminal 200, user terminal 300) the communication terminal,A receiving unit 342 for receiving from the authentication management apparatus 400 requests the purchase information corresponding to the member information of the user 10, receiver for receiving a user's profile information 10 and (profile receiving unit 310), profile information and purchase information received including, a transmitter 350 for transmitting (CRM 500 center) customer management system in association with.

[0031]

Specifically, vending machines (in the figure, is shown as "vending machine") 100, the mobile terminal 200 by the user 10 is carried by, the customer information management system 1 of this embodiment, the first network to the vending machine 100 a user terminal 300 to the authentication management apparatus 400 connected via the 20, connected through a second network 22 to the authentication management apparatus 400, a CRM center 500 is connected via a third network 24 to the user terminal 300, I include a.

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[0032]

In the present invention, information of each user 10 to members which is a member registered in advance, stored in association with the member information, for example, the authentication management apparatus 400, is to provide and purchase history information.

The user 10 can obtain purchase history information from the authentication management apparatus 400 by using the user terminal 300.

In the present invention, prompts the user 10 to forward to the CRM center 500 further, the purchase history information acquired from the authentication management apparatus 400 at this time, identifiable information, for example, profile-free and date of birth and full name and personal along with the information, CRM center 500 to collect information of the user 10.

10 to the user, by using a configuration that incentives in exchange for data transmission, whereby the transmission of information is carried out more smoothly.

Here, the profile information is information which does not include information capable of specifying an individual user, and can include information on user interests, tastes, preferences, ideas and thoughts.

Also, the profile information, it is also possible to include user attribute information user's gender, age, and local.

[0033]

Also, in Figure 1, the vending machine 100 is connected via a first network 20 to the authentication management apparatus 400 has been described only one, the vending machine 100 of the plurality are connected to the fact there.

The user terminal 300 connected via the second network 22 to the authentication management

apparatus 400 also describes only one, but the user terminal 300 of the plurality of users 10 several can be connected to the fact .

The user terminal 300 are connected via a third network 24 to the CRM center 500 also describes only one, but the user terminal 300 of the plurality of users 10 several can be connected in practice.

[0034]

It should be noted that, in Figure 1, it is omitted for the construction of a portion unrelated to the subject matter of the present invention.

The storage unit program for realizing the components of the diagram are loaded CPU of an arbitrary computer, memory, and memory, such as a hard disk that stores the program, each component of the one customer information management system, a network connection is realized by a combination of any of the hardware and software around the interface.

Then, its implementation, that there are various modifications to the apparatus is will be obvious to those skilled in the art.

Rather than the configuration of the hardware unit, the drawings described below shows a block of a functional unit.

[0035]

Figure 2 is a diagram for explaining an overview of the customer information management system 1 of the present embodiment.

In customer information management method according to an embodiment of the present invention, a user 10 and (member information database 410 in Figure 1) member information storage unit for storing the member information of the user 10 purchases at the time of purchase products 12 in the vending machine 100 and authentication management apparatus 400

EX1003, Page 475

includes a (purchase information database 432 of Figure 1) Purchasing information storage unit for storing in association with the member information of 10 user information, performs the authentication of the user 10, of the user 10 to contact the authentication management apparatus 400 the vending machine 100 for the sale of goods to authenticate, (the mobile terminal 200, the user terminal 300) and the communication terminal that the user 10 to operate, customer management apparatus for managing customer information of the product 12 (CRM Center 500), A customer information management method according to the first customer information management system with the authentication management apparatus 400 has been requested from the vending machine 100 on the basis of the member information (member information database 410 in Figure 1) member information storage unit the user's communication terminal 10 the (mobile terminal 200 purchase information and (S4 and S3) steps for authenticating a user 10, the authentication management apparatus 400 corresponds to the member information of the user 10 in response to a request from the user 10 step of transmitting to the user terminal 300) and (S6), (the portable terminal 200, the user terminal 300) the communication terminal,Step of receiving the profile information of the user 10 receiving from the authentication management apparatus 400 requests the purchase information corresponding to the member information of the user 10 and (S6), (the portable terminal 200, user terminal 300) the communication terminal (not and shown), including the step of communication terminal transmits to the (CRM 500 center) customer management system in association with the profile information and purchase information has been received, and (S7).

[0036]

Specifically, as shown in Figure 2, the customer information management system 1 of the present embodiment, by using the (user terminal 300) or the mobile terminal 200, the user 10, the member registration to the authentication management apparatus 400 is carried out (step S1).

At this time, the authentication management apparatus 400 from the mobile terminal 200, for example, I send a date of birth.

Then, to perform the member registration in the authentication management apparatus 400, the membership number is issued to the portable terminal 200.

Here, for example, may be a member registration to purchase goods at the vending machine 100 for the sale of products requiring authentication and adult tobacco.

[0037]

Then, making a purchase of goods from the vending machine 100 using a mobile terminal 200 user 10 (step S2).

Here, the goods at the time of purchase, membership information, such as membership number that was registered in step S1 the vending machine 100 from the mobile terminal 200 is sent.

[0038]

And, membership information of the user 10 is transmitted to the portable terminal 200 from the vending machine 100 (step S3).

Then, (step S4), and is authenticated by the authentication member authentication management apparatus 400 (adult authentication) is performed, and which sells goods to the user 10 the vending machine 100 (step S5).

If it has not been authenticated, it can not buy the product.

The description is omitted here, and for the settlement of the product, because unrelated to the subject matter of the invention.

[0039]

Then, using the (mobile terminal 200) or the user terminal 300, and requests the download of the purchase information to the authentication management apparatus 400 obtains the purchase information of the user 10 (step S6).

The purchasing information, for example, (if tobacco, issues), unit price, and quantity is included purchase date and time, vending machine identification code, product code.

User 10, knowing, for example, it is possible to refer to the purchase history information of tobacco, he or have purchased a cigarette how often, and the like, whether they spend the cost to purchase tobacco how much a month I could.

[0040]

It is then sent profile information of the user 10 in association with the purchase information for the CRM center 500 from the user terminal 300, and downloaded in step S6 (step S7).

For example, when downloading from the authentication management apparatus 400 and purchase information at step S6, by a configuration that can execute the downloading of information from the answer to the question which is previously prepared, together with the purchase information and response information for the question , it is possible to transfer to the center CRM 500.

It is possible to pull out while the customer information considered This company side is necessary at that time are obtained by association with purchase information.

[0041]

The center 500 from the CRM, incentive is given to the user 10, incentive information is transmitted to the portable terminal 200 (step S8).

[0042]

In this way, it is possible to center CRM 500 acquires the profile information associated with the purchase information of the user 10 that is downloaded on the basis of the will of the user 10.

Thus, while protecting the personal identifiable information personally, CRM center 500, it is possible to efficiently collect the information necessary to analyze customer needs.

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[0043]

Referring back to Figure 1, the following describes the configuration of the vending machine 100 first.

An operation unit 102, a purchase reception unit 104, a communication unit 106, an interface (I / F) 108, an authentication request unit 110, a payment unit 120, an article dispensing unit 130, the vending machine 100, sold I include, and information transmission unit 140.

[0044]

In the present embodiment, the vending machine 100 is one in which at the time of purchase of products such as tobacco and alcohol, for example, performs user authentication, such as adult authentication, to sell the goods.

Fare payment may be due to either cash, credit card, prepaid card.

It is preferred in this embodiment, by the data carrier such as a non-contact IC card and contactless IC tag, to conduct electronic payment and user authentication.

In particular, configuration for electronic payment and user authentication using a portable terminal 200 such as a cellular phone which is built-in IC cards and IC tags thereof.

[0045]

Operation unit 102, including speech recognition means operating buttons provided on the front of the vending machine 100, a lever, a touch panel, key sheet, keyboard, switches, and audio input.

10 user operates the operation unit 102, for example, to select a product 12 to be purchased.

[0046]

Order receiving unit 104 receives the purchase request from the user 10.

The purchase request is made by the user 10 operates the operation unit 102.

The communication unit 106 communicates with the mobile terminal 200 user 10 is carried.

The communication with the portable terminal 200 may be either wireless or wired.

Communication between the mobile device 200 can include such as a wireless communication via infrared transmission communication, due to the non-contact IC, a wireless base station at a communication unit 106.

[0047]

Interface unit 108 is an interface for communicating with the authentication management apparatus 400 via the first network 20.

Purchase, the user 10 may communicate via the communication unit 106 and the mobile terminal 200 items in vending machine 100, the authentication request unit 110 acquires the user information from the mobile terminal 200.

Furthermore, transmits the user information of the mobile terminal 200 to the authentication management apparatus 400 via the interface unit 108, the authentication request unit 110 performs the authentication request of the user 10.

At this time, the user information transmitted to the authentication management apparatus 400

from the vending machine 100, for example, can include membership number (user ID), authentication information (such as date of birth of the user 10) a.

When the user 10 has been authenticated by the authentication management apparatus 400, the authentication request unit 110 notifies the settlement unit 120.

[0048]

When the user 10 is authenticated by the authentication request unit 110, in accordance with purchase requests purchase acceptance unit 104 accepts and performs the article dispensing unit 130 withdrawal request of goods, payment unit 120 through the communication unit 106 I do settlement processing of the fee of the product and the mobile terminal 200.

as long as the mobile terminal 200 has an electronic settlement function and communicates with the mobile terminal 200 via the communication unit 106, settlement unit 120 performs the electronic payment process.

[0049]

Article dispensing unit 130 pays out the goods article dispensing opening 12 for receiving the withdrawal request 12 from the commodity settlement unit 120, provided in the vending machine 100 (not shown).

Receives the payment results from the purchase settlement unit 120, sales information transmitting unit 140 transmits to the authentication management apparatus 400 via the interface unit 108 as the sales information.

The sales information, for example, can include the membership number of the user 10, sales date, product code, unit price, quantity, and vending machine identification number.

[0050]

For example, it can include a cellular phone, PDA, and portable notebook PCs, mobile terminal 200 communicates with the vending machine to purchase goods from the vending machine.

Alternatively, if in the present embodiment performs payment processing and user authentication purchased goods vending machine 100, the mobile terminal 200 includes a data carrier that includes the IC card and non-contact IC tag.

The mobile terminal 200 includes a (not shown) transmitting unit storage unit that stores the member information of the user (not shown), when purchasing goods at the vending machine 100 transmits the member information.

[0051]

Next, I will describe the configuration of the user terminal 300.

The user terminal 300 may also be included in the mobile terminal 200, and in particular, need not be portable, and may include a desktop personal computer.

[0052]

(Mobile terminal 200, user terminal 300) The communication terminal according to an embodiment of the present invention, when the member information storage unit that stores member information obtained by the member registration in advance (not shown), and purchase products, auto the authentication management apparatus 400 includes the purchase information database 432 stores in association with the member information transmitting unit for transmitting the member information in the vending machine 100 (not shown), the purchase information in the vending machine 100 of the user 10, purchase information (download request section 340, the first interface unit 306) and request section that requests, (receiving section 342, the first interface unit 306) and receiving unit for receiving from the authentication management apparatus 400 purchase information, the profile information of the user 10 (transmission unit 350, second transmission unit that transmits to the (CRM center 500) customer management system (profile receiving unit 310, operation unit 302) a receiver for receiving, in association with profile information and purchase information received, to manage

customer information I comprises, an interface unit 2 308).

[0053]

Also, (the mobile terminal 200, user terminal 300) The communication terminal according to the present embodiment, a user (not shown) and member information storage unit for storing the member information of the user 10 purchases the purchase items in vending machine 100 the authentication management apparatus 400 includes a (purchase history storage unit 324) purchase information storage unit that stores in association with the member information of the user 10 to the information, performs authentication of the user 10, and requests the purchase information corresponding to the member information of the user 10 (download request section 340, the first interface unit 306) a request unit for, (the receiving unit 342, a first interface unit 306) and the receiving section for receiving from the authentication management apparatus 400 and purchase information, reception for receiving the profile information of the user 10 (transmission section 350, the second interface transmitting unit to be sent to the (CRM Center 500) customer management device (profile receiving unit 310, the operation unit 302) and section, in association with the profile information and purchase information has been received, to manage customer information I comprise, and part 308).

(Mobile terminal 200, the user terminal 300) in, can be provided with a (display unit 304) display unit that displays the purchase information (receiving section 342, the first interface unit 306) receiving unit receives the communication terminal.

[0054]

An operation unit 302, a display unit 304, a first interface unit 306, a second interface unit 308, a profile reception unit 310, a storage unit 320, a registration request unit 330, the user terminal 300, the download request section 340 and, I am including a receiving unit 342, and a transmission unit 350.

[0055]

Operation unit 302 is not particularly limited in these, for example, including voice recognition means a keyboard, an operation button, a switch, a lever, a dial key, a touch panel, key sheet, mouse, tablet, voice input.

Is used to denote input and various settings, and the user selection 10 is operated.

[0056]

Display section 304 is not particularly limited in these, for example, CRT (Cathode Ray Tube) display, a liquid crystal display (LCD: Liquid Crystal Display), is a plasma display.

[0057]

The first interface unit 306 communicates with the authentication management apparatus 400 via the second network 22.

The second interface unit 308 communicates with the CRM center 500 via the third network 24.

In FIG 1, it is a network different third network 24 and second network 22 is not limited thereto.

It can also be the same network.

[0058]

Profile information registration screen displayed on the display unit 304 in accordance with (not shown), and accepts the user's profile information 10 entered by operating the operation unit 302, profile receiving unit 310, the storage unit 320.

Storage unit 320 includes a purchase history storage unit 324 and the profile storage unit 322.

I shows an example of the structure of the profile storage unit 322 in Figure 3.

Not included (name, date of birth, etc.) personal information to be protected of the user 10, profile storage unit 322 stores and membership number of the user 10, the profile information gender, age, and regional.

Profile information received by the profile receiving unit 310 is stored in the profile storage section 322 of the storage unit 320.

In addition, the profile storage unit 322 can include hobbies of the user 10, tastes, preferences, ideas, thoughts, and survey results.

[0059]

Figure 4 shows an example of the structure of the purchase history storage unit 324.

Purchasing history storage unit 324 stores the purchase history information equipment was purchased user 10 using the vending machine 100.

Including, for example, date on purchase of goods, vending machine identification number, product code, unit price, and quantity.

These pieces of information as described below, and stored in the purchase history storage unit 324 of the storage 320 is downloaded from the authentication management apparatus 400.

[0060]

Referring back to Figure 1, the member registration screen displayed on the display unit 304 in accordance with (not shown), member information of the user 10 that is input by operating the operation unit 302, for example, the registration request unit 330 receives a date of birth .

The registration request unit 330, to the authentication management apparatus 400 via the first interface unit 306 member registration request including the member information.

User registration is completed, the membership number registered is sent back to the mobile terminal 200 from the authentication management apparatus 400.

[0061]

Received through the operation unit 302 purchase information download request of the user 10, download request section 340, to request purchase information to the authentication management device 400 via the first interface unit 306.

Download and purchase information via the first interface unit 306 from the authentication management apparatus 400, the receiving unit 342 stores in the purchase history storage unit 324 of the storage unit 320.

The receiving unit 342, is stored in the storage unit 320 a membership number that is returned from the authentication management apparatus 400 to the member registration by the registration request unit 330.

[0062]

In association with a purchase history storage unit 324 and the profile storage section 322 of the user 10 to the CRM center 500 via the second interface unit 308, the transmission unit 350 transmits.

[0063]

In the present embodiment, the (mobile terminal 200, the user terminal 300) communication terminal, when the receiving unit (profile receiving unit 310) has accepted the profile

information, authentication management device receiving section (download request section 340) is (authentication management device it is possible to request the purchase information to 400), the transmission unit (transmission section 350) to transfer customer management device (CRM Center 500) to automatically purchase information receiving section 342 has received.

[0064]

That is, when the download request unit 340 requests the purchase information to the authentication management apparatus 400, the consent as to whether or not may be transferred to the CRM Center 500 the attribute information of the user 10 and purchasing information to the user 10, was acquired take.

If the transfer is accepted, when the receiving unit 342 has downloaded purchase information, the transmission unit 350 transmits the attribute information and purchase information to the CRM center 500 via the second interface unit 308 automatically.

It is also possible that when it is registered as a member in advance specified in advance, the transfer acceptance may also be configured to check every information downloaded.

[0065]

Next, I will describe the configuration of authentication management apparatus 400.

A first interface unit 402, a second interface unit 404 (in the figure, referred to as "member information DB") 410, a registration unit 412, an authentication unit 420, the authentication management apparatus 400, sales information member information database a receiving unit 430, (in the figure, indicated as "customer information DB") I'm including the 432, and a history transmitting unit 440 purchase information database.

In the present embodiment, the authentication management apparatus 400 is a device in the vending machine 100 that sells products that require and adult authentication in particular, managing the user authentication process at the time of a purchase to the user 10.

In other words, CRM center 500, the vending machine 100 that such advertising agencies or companies, selling products and manufacturer of the goods held and also, is one such company that sells goods or manufacturer of the goods held possible.

Authentication management apparatus 400 may be a specialized agency certification of another independent of these companies.

[0066]

The first interface unit 402 communicates with the vending machine 100 via the first network 20.

The second interface unit 404 communicates with the user terminal 300 via the second network 22.

[0067]

As shown in Figure 5, the member for each of the registered member information database 410 may include a member number and date of birth.

Registration unit 412 receives a member registration request from the user terminal 300 through the second interface unit 404.

For example, date of birth is transmitted as member information from the user terminal 300.

Issue the membership number, registration unit 412 registered in association with a membership number and date of birth in the member information database 410.

The registration unit 412 transmits, to the user terminal 300 via the second interface unit 404 the membership number.

[0068]

In response to a request from the vending machine 100, the authentication unit 420 authenticates the members.

Specifically, the authentication by birth member number and receives member information including the date of birth and membership number from the vending machine 100 via the first interface unit 402, access to the member information database 410, the corresponding is performed, and transmits to the vending machine 100 via the first interface unit 402 the authentication result.

[0069]

I shows the details of the authentication unit 420 in FIG.

The authentication unit 420 includes a receiving unit 422 authentication, an inquiry unit 424, and a notification unit 426.

Authentication receiving unit 422 receives member information from the vending machine 100 via the first interface unit 402.

Accesses the member information database 410, the query based on the member information receiving unit 422 authentication is received, inquiry unit 424 notifies the notifying unit 426 result.

In response to the results of the query section 424, the notification unit 426 notifies the user 10 whether or not it is authenticated through the first interface unit 402.

[0070]

Referring back to Figure 1, the sales information reception unit 430, receives sales information from vending machine 100 via the first interface unit 402, and stores the purchase information database 432.

As shown in Figure 7, the membership number 470 each, purchasing information database 432 stores the purchase history information.

The purchase history information, (vending machine identification number) 473, product code 475, 477 unit price, and including the quantity 479 471, VM code date and time.

[0071]

Referring back to Figure 1, the history sending unit 440, via the second interface unit 404 and purchase history information corresponding to the membership number of the user 10 in response to a request from the user terminal 300, is stored in the purchase information database 432 I sent to the user terminal 300.

I shows the details of the history transmitting unit 440 in FIG.

The history sending unit 440 includes a download request reception unit 442, an extracting unit 444, and a transmission unit 446.

[0072]

Download request receiving unit 442 receives a download request for the purchase history information from the user terminal 300 through the second interface unit 404.

After checking membership number included in the download request whether or not there is a member information database 410, if present, extracting section 444 extracts the purchase history information for accessing the purchase information database 432, corresponding to the membership number to.

Transmitting unit 446 transmits, to the user terminal 300 via the second interface unit 404 and purchase history information extraction unit 444 is extracted.

[0073]

Referring back to Figure 1, the following describes the configuration of the center CRM 500.

CRM Center 500 includes an interface unit 502, a receiver 510, a customer information database 520, a management unit 530, and an incentive grant section 540.

[0074]

Interface unit 502 communicates with the user terminal 300 via the third network 24.

Receiving unit 510 receives the purchase information and profile information of the user 10 via the interface unit 502 from the user terminal 300.

The received information is stored in the customer information database 520.

I shows an example of a structure of a customer information database 520 in FIG.

Customer information database 520 includes a member information storage unit 522, and purchasing information storage unit 524, and an incentive information storage unit 526.

As shown in Figure 9 (a), the member number for each member information storage unit 522 includes a profile gender, age, and local.

As shown in Figure 9 (b), the membership number for each purchase information storage unit

524, including purchase date of the product, VM code, product code, unit price, and quantity.

To 9 (c), the membership number basis, and includes information on incentives, for example, incentive information storage unit 526, including accumulated points Incentives last date of grant, and a final grant points.

[0075]

It can be based on the information stored in the customer information database 520, for example, to perform effective measurement of the result of performing some promotional products, such as new products, and advertising.

[0076]

Manages the customer information, for example, if necessary, allowing it to request the transmission of purchase information to the user terminal 300, management unit 530 can detect the transmission voluntary purchase information from the user terminal 300 to.

When the receiving unit 510 is received from the user terminal 300 customer information, determines the incentive to be granted to the user 10, the management unit 530 instructs the incentives section 540.

Incentives given to the user terminal 300 is recorded in the incentive information storage unit 526 of the customer information database 520.

[0077]

Incentives 540 notifies the application of the incentive for the user terminal 300 via the interface unit 502 in accordance with instructions from the management unit 530.

Here, the incentive, for example, it is possible to include grant and membership benefits point to

the user, the issuance of discount coupons, free provision of products, such as the granting of prizes and prize money.

Notification of incentives, can be carried out, for example, by e-mail.

Alternatively, by providing the web pages of members-only given, the user terminal 300 accesses to web page members only, it may be possible to make such use and check point.

A detailed description is omitted because it is not related to the essence of the present invention these processes.

[0078]

For operation of the customer information management system of the present embodiment constituted as described above, I described below.

Figure 10 is a flowchart showing an example of the operation of the purchased goods in the vending machine 100 and membership in one customer information management system of this embodiment.

Will be described below with reference also to Figure 8 and Figure 1.

[0079]

In advance by using the user terminal 300 or the portable terminal 200 to perform the member registration to the authentication management apparatus 400 the user 10 (Step S11).

For example, access via the second network 22 to the authentication management apparatus 400, the user terminal 300 displays, on the display unit 304 requesting member registration screen (not shown).

For example, member registration request screen may be provided, such as a web page specified by the URL given.

Access to the Web page, input using the operation unit 302 the necessary information, the user terminal 300 transmits to the authentication management apparatus 400 as the member registration request via the first interface unit 306.

[0080]

The authentication management apparatus 400, the registration unit 412 receives a member registration request from the user terminal 300 through the second interface unit 404 performs a registration (step S13).

Is registered in the member information database 410 the date of birth of the user 10 received, issue the membership number, registration unit 412, and returns to the user terminal 300 via the second interface unit 404.

Then, in the user terminal 300, the receiving unit 342 receives a membership number, I stored in the storage unit 320.

[0081]

Subsequently, in order to buy the product, towards the vending machine 100, by operating the operation unit 102 of the vending machine 100, and makes a request for purchase user 10 (step S15).

The vending machine 100, buy reception unit 104 accepts the purchase request.

At the same time, communicates with the mobile terminal 200 of the user 10, the communication unit 106 acquires information necessary for user authentication.

Authentication request unit 110 performs user authentication request to the authentication management apparatus 400 via the interface unit 108 (step S17).

At this time, date of birth and the member number is sent as member information in the vending machine 100 from the mobile terminal 200, and transferred to the authentication management apparatus 400 from the vending machine 100.

[0082]

The authentication management apparatus 400 determines (step whether or not a registration authentication unit 420 receives member information through the first interface unit 402 accesses the member information database 410 corresponding to the member information received S19).

If there are registered and send to the vending machine 100 via the first interface unit 402 (YES in step S19), the marketing approval notice (step S21).

On the other hand, if there is no member registration is transmitted to the vending machine 100 via the first interface unit 402 (NO in step S19), the sales rejection notification (step S23).

The vending machine 100, display is performed to notify the user 10 that the sales is rejected and discontinued reception (not shown).

[0083]

On the other hand, the vending machine 100 receives marketing approval notification from the authentication management apparatus 400, the authentication request unit 110 notifies to perform settlement processing in the settlement unit 120.

In the settlement section 120, to request a settlement of commodity price to 10 user (step S25).

If you want to buy the item (YES in step S27), for example, cash, prepaid cards, such as by cash card, and make a payment of the price the user 10 (step S29).

The pressed (NO in step S27), a cancel button of the vending machine 100 on the (not shown), to cancel a purchase if you cancel the purchase of the product.

[0084]

Vending machine 100 accepts a payment for the user 10, and performs settlement processing of the price, the settlement unit 120 notifies the sales information transmitting unit 140.

To the authentication management apparatus 400 via the interface unit 108 and sales information sales information transmitting unit 140 (step S31).

Here, the sales information to be transmitted, for example, includes sales date, VM code, product code, unit price, and quantity.

[0085]

The authentication management apparatus 400, sales information receiving unit 430 receives the sales information via the first interface unit 402, and stores the purchase information database 432 (step S33).

Then, the vending machine 100, the article dispensing unit 130 is paid out a payment item 12 has been completed and receives the products 12 (step S35), the user 10 (step S37).

[0086]

Next, I will describe the operation of the profile information collected at the time associated with the purchase information in customer information management system 1 of the present

embodiment.

Figure 11 is a flowchart showing the operation of the profile information collected at the time associated with the purchase information in the customer information management system 1 of the present embodiment.

Here, the user 10 can download the purchase information to the authentication management apparatus 400 is stored and referenced.

Center for CRM 500, which is accepted by the contract in advance, purchasing information downloaded is sent associated with the profile information of the user 10.

User 10 may in return that transmitted the purchase information, and receives a grant of incentives from CRM center 500.

[0087]

Specifically, first, by using the user terminal 300 or the portable terminal 200, to make a connection to the authentication management apparatus 400 the user 10 (Step S51).

For example, by operating the operation unit 302, accesses the web page given in the authentication management apparatus 400, the user 10 causes the display unit 304 login screen (not shown).

[0088]

Accesses the authentication management apparatus 400 via the first interface unit 306, a member information, and transmits membership number and date of birth download request section 340 (step S53).

Then, the authentication management apparatus 400, the history sending unit 440 receives

member information through the second interface unit 404, performs the user authentication process by accessing the member information database 410 (step S55).

Is performed in the user terminal 300 (YES in step S55), the authentication notification if authenticated (step S59).

And an error notification (NO in step S55), the user terminal 300 when it is not authenticated (step S57).

[0089]

In the user terminal 300, is performed on the 400 authentication management apparatus via the first interface unit 306 (YES in step S61), the download request purchase information when receiving an authentication notification download request section 340 (step S63).

The authentication management apparatus 400, and extracts purchase information history sending unit 440 accepts the da download request via the second interface unit 404 accesses the purchase information database 432, corresponding to the membership number that has been authenticated (step S65) .

It is also possible to here is performed by the user terminal 300 and the specified time period to extract the purchase information.

[0090]

It is sent via the second interface unit 404 to the user terminal 300 purchasing information extracted history transmitting unit 440 (step S67).

In the user terminal 300, the receiving unit 342 receives the purchase information via the first interface unit 306 stores the purchase history storage unit 324 of the storage unit 320 (step S69).

After confirming the completion of the receipt of purchase information from the authentication management apparatus 400, to log out from the authentication management apparatus 400 receiving unit 342 (step S71).

[0091]

Then, to connect to the CRM center 500 transmission unit 350 via the second interface unit 308 (step S75).

In CRM Center 500, accepts connections from the user terminal 300, it enters the waiting state of purchase information (not shown).

[0092]

Then transmits the purchase history information associated with the profile information to the CRM center 500 via the second interface unit 308 transmitting unit 350 from the user terminal 300 (step S77).

The CRM center 500, and receives the purchase history information associated with the profile information receiving unit 510 via the interface 502, and stores the customer information database 520 (step S79).

[0093]

Then determines the incentives it is detected that the receiving unit 510 receives information from the user terminal 300, to give a user 10 of the user terminal 300, and notifies the incentive 540 management unit 530 (step S81).

Via the interface unit 502 to the user terminal 300, for example, incentives section 540, to notify the incentives that have been granted, such as e-mail.

[0094]

In the case where in step S61, the error notification is returned from the authentication management apparatus 400, and ends (not shown), the process as well as log out from the authentication management apparatus 400.

[0095]

Next, the customer information management system 1 of this embodiment will be described an example of the operation of the other when transmitting to the user terminal 300 from the authentication management apparatus 400 and purchase information.

Figure 12 is a flowchart showing another example of the operation of the purchase information transmission in the customer information management system 1 of the present embodiment.

[0096]

In FIG 12, the steps of FIG 11 S61, the authentication management apparatus 400, the user terminal 300 of the user 10 must be in the state of step S59 of FIG.

[0097]

That is, when a state has been achieved the user authentication of the user terminal 300, the user terminal 300, to present the questions to collect profile information of the user 10 authentication management apparatus 400 (step S101).

Specifically, is displayed on the display unit 304 of the user terminal 300 an input screen 600 as shown in Fig 13 (step S103).

As shown in Figure 13, the input screen 600, customer surveys, and the like.

For example, the input screen 600, it includes a list 610 to select an answer to the question of the questionnaire, and submit button 612 for instructing to be sent to the authentication management apparatus 400 results of the survey, and a cancel button 614 that does not answer the question I could.

Note, if the cancel button 614 is pressed by the user 10, and the process ends as it is (not shown).

[0098]

Also, in this configuration, when the purchase information is requested (the mobile terminal 200, user terminal 300) from the communication terminal (portable terminal 200, user terminal 300) with respect to the communication terminal, the authentication management apparatus 400 to the question given reply receiving unit for presentation section for presenting the (input screen 600 in FIG 13) screen prompting a response (not shown), receives an input of the answer by the user 10 (mobile terminal 200, user terminal 300) of the communication terminal (profile accepted and a part 310), after receiving the reply, the transmission unit 350 transmits (portable terminal 200, the user terminal 300) with the communication terminal purchase information responses.

[0099]

Then, referring to the input screen 600 is displayed on the display unit 304 of the user terminal 300, type the answers by operating the operation unit 302, profile receiving unit 310 receives the user 10 (step S105).

When the operating unit 302 accepts the depression of the transmission button 612 on the input screen 600, for authentication management apparatus 400, and notifies only the answer to the question is made download request section 340 (step S107).

That is, the profile information receiving unit 310 is received, there is no need to transmit to the authentication management apparatus 400.

It is then stored in the profile storage section 322 of the storage unit 320 profile information receiving unit 310 is received (step S108).

[0100]

The authentication management apparatus 400, when receiving a notification that the responses have been made to extract the purchase history information is accessed (YES in step S109), the purchase information database 432, corresponding to the membership number (step S111).

The history sending unit 440 transmits the purchase history information via the second interface unit 404 for user terminal 300 (step S113).

[0101]

In the user terminal 300, the receiving unit 342 receives the purchase history information via the first interface unit 306 stores the purchase history storage unit 324 of the storage unit 320 (step S115).

Then, log out from the authentication management unit 400 (step S117).

The authentication management apparatus 400, and disconnects the communication with the user terminal 300 (step S119).

[0102]

Then, the user terminal 300, is connected through the second interface unit 308 to the CRM center 500 (step S121).

Then, the user terminal 300, and transmits it to the center CRM 500 and purchase history

information acquired from the authentication management apparatus 400, an answer entered in step S105 the transmission unit 350 (step S123).

[0103]

The CRM 500 center, receives a response receiver unit 510 and purchase history information via the interface unit 502 stores the customer information database 520 (step S125).

The management unit 530 detects the reception of information, determines the incentive depending on the presence or absence of a reply, and notifies the incentive portion 540 (step S127).

Then notifies and points given in an email to the user terminal 300 incentives 540 (not shown).

[0104]

As described above, according to the customer information management system 1 of this embodiment, as shown in Figure 14, the user 10 purchases goods at the vending machine 100, the member information (attribute) and the purchase history authentication management apparatus 400 is managed in association with.

The user 10 can query the member information and purchase history information by using the user terminal 300, stored in the authentication management apparatus 400 as needed (attribute).

Furthermore, the user terminal 300, by inputting the user's profile information 10, it is possible to associate the profile information in the purchase history, and transmits to the center 500 CRM.

CRM center 500 is possible to be able to collect the purchase history information associated with the profile information from the user terminal 300, thereby effect measurement of the goods sold by the vending machine 100 by the information.

In return for obtaining the purchase history information from the user 10, by providing an incentive for the user 10, CRM center 500 is able to promote the collection of the purchase history information from.

[0105]

Thus, according to the customer information management system 1 of the present invention, it will be collected and will allow association with profile information of the user 10 in the purchase history information in the vending machine 100 were collected conventionally impossible, identifiable to individual personal while protecting information, it is possible to efficiently collect the information necessary to analyze customer needs.

[0106]

In addition, if it is determined that without the model as a component only mobile carrier, incorporating as its components may also authentication function hourly vending machines and (VM), and a rapid and performs rapid data collection from the front end it becomes possible to implement the function center that enables CRM information of recycling that allows propagation and the front-end.

That is, the call centers aware the CRM center of the related art, is quite different, it is possible to build a business model centered on the CRM center.

[0107]

The foregoing has described an embodiment of the present invention with reference to the drawings, they are illustrative of the present invention, they can be adopted various configurations other than those described above.

In the case of obtaining the information related to the user in the present invention is utilized, it is assumed to carry out this legal.

[0108]

For example, in other embodiments, the customer information management system 1, CRM centers 500, 10 directed to the user an e-mail containing the URL address of the web page given in the screen presentation unit of the authentication management apparatus 400 (not shown) is provided and may include (not shown) mail transmitting unit that transmits the.

[0109]

According to this configuration, access the URL address included in the received mail, refers to the predetermined web page, for example, user 10 may enter profile information on the screen such as the input window 600 of FIG 13 by, I can perform the download of purchase history information.

At the same time, it means that it is possible via the user terminal 300 from the authentication management apparatus 400, it is forwarded to the CRM center 500 and purchase history information associated with the profile information.

[0110]

Also, in other embodiments, CRM center 500 may also be based on the profile information and purchase history information collected, to perform such as issuing coupon and advertising information of a product that is suitable for the user 10.

[0111]

Is a schematic block diagram showing a configuration of a customer information management system according to an embodiment of the present invention.

Is a diagram for explaining the outline of the customer information management system of this embodiment.

Is a diagram showing an example of the structure of the profile storage unit according to the present embodiment.

Is a diagram showing an example of the structure of a purchase history storage unit of the present embodiment.

Is a diagram showing an example of the structure of the member information database in the embodiment.

Is a functional block diagram showing a detailed configuration of the authentication unit of the authentication management apparatus of this embodiment.

Is a diagram showing an example of the structure of the purchase information database according to this embodiment.

Is a functional block diagram showing a detailed configuration of the transmission history of the authentication management apparatus of this embodiment.

Is a diagram showing an example of the structure of the customer information database in the embodiment.

Is a flow chart showing an example of the operation of the purchased goods in vending machines and membership in the customer information management system of this embodiment.

Is a flow chart showing the operation of the profile information collected at the time associated with the purchase information in the customer information management system of this embodiment.

Is a flow chart showing another example of the operation of the purchase information transmission in the customer information management system of this embodiment.

Is a diagram showing an example of a profile information input screen displayed on the display unit of the user terminal of the embodiment.

Is a diagram showing the data flow of the purchase history information in the customer information management system according to an embodiment of the present invention.

[0112]

1 Customer Information Control System

10 user

12 items

20 first network

22 second network

24 third network

100 vending machines

102 operating section

104 purchase receiving unit

106 communication unit

EX1003, Page 507

108 interface unit

110 authentication request unit

120 checkout unit

130 items payout section

140 sales information transmitting unit

The mobile terminal 200

300 user terminal

302 operating section

304 display unit

306 first interface unit

308 second interface unit

310 profile receiving unit

320 storage unit

322 profile storage unit

324 purchasing history storage unit

330 registration request unit

340 download request unit

342 receiving section

350 transmission section

400 authentication management device

402 first interface unit

404 second interface unit

410 member information database

412 registration unit

420 authentication unit

422 authentication receiving unit

424 inquiry unit

426 notification unit

430 sales information receiving section

432 purchasing information database

440 history transmitting unit

442 download request receiving unit

444 extraction unit

446 transmission section

470 membership number

471 date and time

475 Product Code

477 unit price

479 Quantity

500 CRM Center

502 interface unit

510 receiving section

520 customer information database

522 member information storage unit

524 purchase information storage unit

526 incentive information storage unit

530 management section

540 incentive section

600 input screen

610 List

612 send button

614 Cancel button

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CLAIMS JP2007257578

[0001]

An authentication management apparatus for authenticating a user who is registered as a member in advance,

When receiving a purchase request from a user, an automatic vending machine which sells the commodity to be authenticated the user in contact with the authentication management apparatus,

and communication terminal by the user to manipulate,

A customer information management system and a customer management device based on the purchase history of the goods of the user, for managing customer information,

The authentication management apparatus,

A member information storage unit for storing the member information of the user,

An authentication unit which performs authentication of the user is requested from the vending machine based on the member information in the member information storage section,

and purchasing information storage unit in which the user is stored in association with the membership information of the user to purchase information at the time of purchase the item in the vending machine,

A transmission unit for transmitting to the communication terminal of the user and the purchase information corresponding to the membership information of the user in response to a request from the user,

And a,

The communication terminal,

A receiver for receiving from the authentication management device by requesting the purchase information corresponding to the membership information of the user,

A reception unit which receives the profile information of the user,

A transmission unit to be transmitted to the customer management system in association with the profile information and the purchase information has been received,

Customer information management system characterized in that it comprises.

[0002]

In the customer information management system according to claim 1,

The communication terminal,

when the receiving unit has received the profile information, the receiving unit requests the purchase information to the authentication management apparatus, the customer management apparatus automatically the purchase information to the transmission unit has received the reception unit customer information management system characterized by transferring.

[0003]

In the customer information management system according to claim 1,

The customer management device,

After receiving the purchase information from the communication terminal, a customer information management system characterized in that it comprises a unit for granting incentives given to the user.

[0004]

In customer information management system according to any one of three claims 1,

The authentication management apparatus,

When the purchase information is requested from the communication terminal, for the communication terminal, and a presentation unit that presents a screen prompting the answers to the questions given,

And a reply acceptance unit for accepting input of answers by the user of the communication terminal,

After receiving the responses, the transmitting unit, a customer information management system characterized by to be transmitted to the communication terminal together with the purchase information and the reply.

[0005]

In the customer information management system according to claim 4,

Customer information management system comprising a mail transmitting unit configured to transmit to the user addressed to the mail containing the URL address of the web page given in the screen of the presentation unit of the authentication management apparatus is provided.

[0006]

Member information storage unit for storing the member information of the user and, on the purchase information at the time of purchase products, including purchase information storage unit that stores in association with the member information of the user, the user of the user in the vending machine an authentication management apparatus for authenticating,

Vending machines and to perform the sale of goods to perform authentication of the user by querying the authentication management apparatus,

and communication terminal by the user to manipulate,

A customer information management method for a customer information management system and a customer management device based on the purchase history of the goods of the user, for managing customer information,

and performing authentication of the user to the authentication management apparatus, requested by the vending machine based on the member information in the member information storage section,

sending to the communication terminal of the user and the purchase information of the authentication management apparatus, corresponding to the member information of the user in

response to a request from the user,

The communication terminal includes the steps of receiving from the authentication management device by requesting the purchase information corresponding to the membership information of the user,

The communication terminal includes a step of receiving the profile information of the user,

Said communication terminal, and sending to the customer management system in association with the profile information and the purchase information has been received,

Customer information management method which is characterized in that it comprises.

[0007]

A member information storage unit for storing member information obtained by the member registration in advance,

When purchasing a product, a transmission unit for transmitting the member information in the vending machine,

The authentication management apparatus includes a purchase information database that is stored in association with the member information and purchase information in the vending machine of the user, a request unit for requesting the purchase information,

A receiver for receiving from the authentication management device the purchasing information,

A reception unit which receives the profile information of the user,

A transmission unit for transmitting to the customer management system in association with the

profile information and the purchase information has been received, and manages customer information,

A communication terminal which is characterized by comprising a.

[0008]

Member information storage unit for storing the member information of the user and, on the purchase information at the time of purchase products, including purchase information storage unit that stores in association with the member information of the user, the user of the user in the vending machine the authentication management device to perform authentication, and a request unit for requesting the purchase information corresponding to the membership information of the user,

A receiver for receiving from the authentication management device the purchasing information,

A reception unit which receives the profile information of the user,

A transmission unit for transmitting to the customer management system in association with the profile information and the purchase information has been received, and manages customer information,

A communication terminal which is characterized by comprising a.

[0009]

The communication terminal according to claim 7 or 8,

a communication terminal which is characterized by comprising a display unit for displaying the purchase information received by the reception unit.

[0010]

A computer with a member information storage unit for storing the member information obtained by the member registration in advance,

When you purchase products, means for transmitting the member information to the vending machine,

The authentication management apparatus including the purchase information database that is stored in association with the member information and purchase information in the vending machine of the user, and means for requesting the purchase information,

Means for receiving from the authentication management device the purchasing information,

Means for accepting the profile information of the user,

Program to function as a means for sending to the customer management system in association with the profile information and the purchase information has been received, and manages customer information.

[0011]

The computer,

Member information storage unit for storing the member information of the user and, on the purchase information at the time of purchase products, including purchase information storage unit that stores in association with the member information of the user, the user of the user in the vending machine the authentication management device to perform authentication, and means for requesting the purchase information corresponding to the membership information of the user,

Means for receiving from the authentication management device the purchasing information,

Means for accepting the profile information of the user,

Program to function as a means for sending to the customer management system in association with the profile information and the purchase information has been received, and manages customer information.

Espacenet

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SEALING DOCUMENT PREPARATION MANAGEMENT SYSTEM AND METHOD

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Applicant(s): NEXTAGE KK ± (NEXTAGE:KK)

Classification: **- international:** ***G06F17/21; G06Q10/00; G06Q10/06; G06Q50/00; H04L9/32***

- cooperative:

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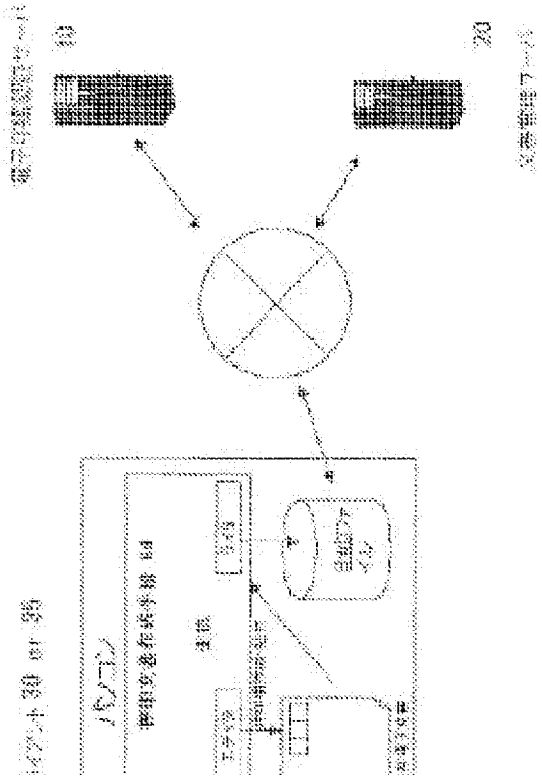
Abstract of JP2010211830 (A)

PROBLEM TO BE SOLVED: To provide a system and a method for preparing and managing a sealing document capable of making the best use of an existing electronic document when preparing the electronic sealing document, capable of setting a approval workflow, and capable of confirming an advancing situation of sealing. ;SOLUTION: This sealing document preparation system takes the existing electronic document in to prepare the electronic sealing document, and includes a template preparing means for preparing or editing a pattern or a text including a sealing frame of the sealing document to prepare a template including those, an existing electronic document pseudo-printing means for outputting a printing output of the existing electronic document prepared by an existing document preparation device in a mode to



be taken into the sealing document preparation system, and a document integration means for carrying out integration with the template, and the sealing frame prepared by the template preparing means has the information of an approval rank as to an order for a sealing procedure executed by a plurality of sealing users, as an attribute. ;COPYRIGHT: (C)2010,JPO&INPIT

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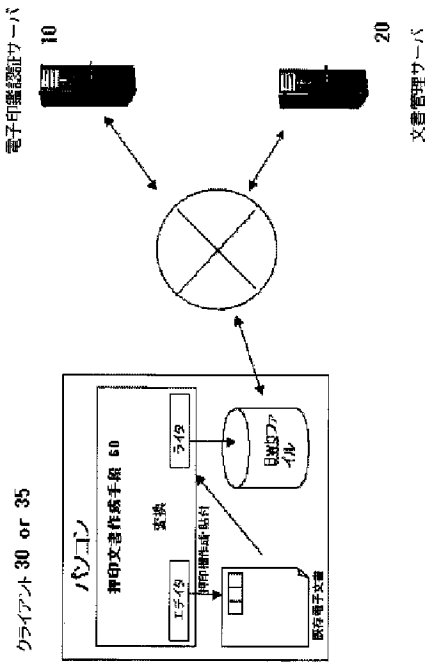
最終頁に続く

(54)【発明の名称】押印文書作成管理システム及び方法

(57)【要約】
【課題】電子押印文書を作成するにあたって既存電子文書の有効活用を図り、承認ワークフローの設定、押印の進行状況の確認が可能な押印文書作成及び管理のためのシステム及び方法を提供する。
【解決手段】既存の電子文書を取り込んで、電子押印文書を作成する押印文書作成システムであって、押印文書の押印枠を含む図形又はテキストを作成又は編集してそれらを含むテンプレートを作成するテンプレート作成手段と、既存の文書作成装置により作成された既存の電子文書の印刷出力を該押印文書作成システムに取り込み可能な形式に出力する既存電子文書擬似印刷手段と、該既存電子文書擬似印刷手段により出力された既存電子文書の出力を、前記テンプレートと合体させる文書合体手段と、を有し、前記テンプレート作成手段が作成する押印枠は、その属性として、押印すべき複数の利用者がどの順序で押印手続きをするかに関する承認順位の情報をもつ。
【選択図】図１４



【特許請求の範囲】
【請求項1】
電子印鑑と、該電子印鑑を読み取るタブレットと、該タブレットが接続された複数のクライアントコンピュータであって既存の文書を作成したアプリケーションプログラムからなる既存文書作成装置と該既存文書作成装置により作成された既存文書の電子ファイルと該既存文書を取り込んで押印文書を作成する押印文書作成手段とを有するクライアントコンピュータと、前記タブレットが接続された複数のクライアントコンピュータであって前記押印文書作成手段により作成された押印文書を承認する者が用いる押印文書閲覧手段を有するクライアントコンピュータと、該及び前記双方のクライアントコンピュータにコンピュータネットワークを介して接続された電子印鑑認証サーバと、該電子印鑑認証サーバにて押印の当否を認証する押印文書を管理すべく前記コンピュータネットワークに接続された文書管理サーバとを有し、押印文書を作成・管理する押印文書作成管理システムであって、
前記電子印鑑は、
前記タブレットとやり取りする回路と、
個々の電子印鑑を識別可能なＩＤ番号が組み込まれた内蔵ＩＣチップと、
押印時にクリックする押印ボタンと、
現実の紙の上に押印することも可能な押印面と
を有し、
前記タブレットは、
前記電子印鑑の位置、前記ＩＤ、前記押印ボタンのクリックを前記クライアントコンピュータに通知する装置
を有し、
前記押印文書作成手段は、
前記電子印鑑認証サーバに問い合わせて押印文書作成許可を取得するログイン手段と、
該ログイン手段にて押印文書作成許可を取得後に、用紙サイズの選択・カバーページの有無・有効期間・帳票形式・パスワードの設定に関する基本設定と、サーバーコンピュータの特定・会社名・アプリケーション名・自動採番・押印の同期に関するサーバー設定とを実行する初期設定手段と、
文書のタイトル・項目名のテキストを入力・編集するテキスト作成手段、多角形・円・楕円・直線を含む図形を作図する図形作成手段、図形としての押印枠を作成するとともに承認ルート・押印順序を設定しその情報を管理する押印枠のプロパティ情報をも作成する押印欄作成手段、テキスト・図形・押印枠のレイアウトを調整するレイアウト調整手段を備え、タイトル・罫線・押印枠からなるテンプレートを、前記既存文書作成装置により前記既存電子文書を表示させた上に重ねて作成するテンプレート作成手段と、
前記電子印鑑認証サーバ・文書管理サーバの情報を参照してワークフローに関する情報を生成し前記押印欄作成手段と協働して前記押印枠のプロパティ情報を設定するワークフロー設定手段と、
前記テンプレート作成手段が作成した罫線・押印枠・文字抽出枠を含むテンプレートを元の既存電子文書とは切り離した独立の電子ファイルとして保存するテンプレート保存手段と、
前記テンプレート作成手段が作成したテンプレートと表計算ソフト・ワードプロセッサソフトの既存文書との重ね合わせを実現すべく仮想的なプリンタとしてインストールされ、前記既存文書作成装置にて前記既存電子文書の印刷メニューからプリント先として指定され、前記テンプレート保存手段にて保存されたテンプレートファイルを重ね合わせ対象として選択して、押印文書ファイルとして出力する擬似印刷手段と、
前記電子印鑑認証サーバ・前記文書管理サーバとの通信手段と
を有し、
前記クライアントコンピュータのうち、前記押印文書を承認する者が用いるクライアン

トコンピュータは、
　前記電子印鑑認証サーバに問い合わせて押印文書閲覧許可を取得するログイン手段と、
　押印を必要とする文書を表示する押印文書表示手段と、
　前記クライアントコンピュータにつながる前記タブレット上で前記電子印鑑の押印ボタンをクリックするイベントを取得する押印イベント取得手段と、
　前記電子印鑑認証サーバが持っている印影情報を取得し、それに基づいて前記クライアントコンピュータの押印文書に印影を表示する印影表示手段と、
　前記電子印鑑ＩＤを公開鍵を用いて暗号化してやりとりし、押印履歴情報・印影情報を前記クライアントコンピュータと前記電子印鑑認証サーバとの間でやり取りする電子印鑑認証サーバとの通信手段と
　からなる押印文書閲覧手段を有し、
　前記電子印鑑認証サーバは、
　このシステムを使用する者のうち、自分の組織に属するものの会社名・部署・名前・役職・電話・メールアドレス・有効期限・パスワードを含むマスタ情報を登録するユーザマスタと、押印権限に関する情報・組織内の決められた手続にしたがって回覧・押印する流れであるワークフローに関する情報・回覧順に関する情報を登録するアプリケーションマスタとを備えたデータベース部と、
　サーバにアクセスする権限を有する者のみがアクセスし設定することができる部分であるサーバ設定管理部と、
　前記電子印鑑ＩＤ番号と印影情報とを登録して管理する電子印鑑登録管理部と、
　前記クライアントコンピュータから受信した電子印鑑ＩＤ番号とサーバに登録されている電子印鑑ＩＤ番号及びマスタ情報と一致しているか否かを照合し、一致していれば会社コード・ユーザコード・サーバ番号・会社名・ユーザ名・認証種・受付日・受付時刻を含む情報である認証履歴をサーバへ書込み、前記クライアントコンピュータには押印許可を与え登録印影を送信する電子印鑑認証部と
　を有し、
　前記文書管理サーバは、
　前記押印文書を様々な情報と関連付けて管理する文書管理データベースと、
　前記押印文書に押印すべきワークフローがどこまで進んでいるかを管理する押印状況管理手段と、
　次の押印すべき者に前記押印文書をメールに添付して送る電子メール配信手段と、
　イントラネット又はインターネットを介して他のコンピュータと通信する通信手段と
　を有し、
　前記押印文書閲覧手段にて、押印者が押印すると、当該押印文書を前記文書管理サーバに送り、前記文書管理サーバは当該押印文書を前記文書管理データベースに登録すること
　を特徴とする押印文書作成管理システム。
【請求項2】
　請求項１に記載した押印文書作成管理システムであって、
　前記テンプレート作成手段が作成したテンプレートと表計算ソフト・ワードプロセッサソフトの既存文書との重ね合わせを実現すべく仮想的なプリンタとしてインストールされ、前記既存文書作成装置にて前記既存電子文書の印刷メニューからプリント先として指定され、前記テンプレート保存手段にて保存されたテンプレートファイルを重ね合わせ対象として選択して、押印文書ファイルとして出力する擬似印刷手段は、
　ファイルの種類を選択することにより押印文書ファイルの出力も、前記テンプレートファイルの出力もいずれもできることとすることにより、
　前記テンプレート作成手段は、前記擬似印刷手段が兼ねること
　を特徴とする押印文書作成管理システム。
【請求項3】
　請求項１または２のいずれか一に記載した押印文書作成管理システムであって、
　前記押印文書作成手段は、前記テンプレートファイル及び前記押印文書ファイルのいず

れをも読み込んで編集対象とし、その編集結果は前記テンプレートファイル及び前記押印文書ファイルのいずれの形式をも出力対象とする
　ことを特徴とする押印文書作成管理システム。
【請求項4】
　請求項１に記載した押印文書作成管理システムであって、
　前記押印履歴情報をクライアントコンピュータとサーバとの間でやりとりし、前記押印文書の押印枠プロパティ情報として保存することにより前記文書管理サーバに保存することを特徴とする押印文書作成管理システム。
【請求項5】
　請求項１に記載した押印文書作成管理システムであって、
　前記押印文書閲覧手段は、ログイン権限の認証の後、承認者が押印処理をしてワークフロー・アプリフェーズの変更を欲する場合、前記電子印鑑認証サーバからアプリフェーズを取得し、ワークフロー設定処理を実行し、新規な押印文書が生成された場合、前記文書管理サーバに情報送信して文書番号を取得して、押印文書の登録を実行することを特徴とする押印文書作成管理システム。
【請求項6】
　請求項１に記載した押印文書作成管理システムであって、
　前記押印文書閲覧手段は、ログイン権限の認証の後、承認者が押印処理を実行すると、一つの押印処理の実行のたびに、前記文書管理サーバにその情報を送信して、文書管理サーバは押印文書のファイルを更新することを特徴とする押印文書作成管理システム。
【請求項7】
　請求項１に記載した押印文書作成管理システムであって、
　前記アプリフェーズのユーザの有効期限、前記押印文書の有効期限が設けられて、期限後のログインは認証失敗として処理されることを特徴とする押印文書作成管理システム。
【請求項8】
　タブレットとやり取りする回路と、個々の電子印鑑を識別可能なＩＤ番号が組み込まれた内蔵ＩＣチップと、押印時にクリックする押印ボタンと、現実の紙の上に押印することも可能な押印面とを有する電子印鑑と、
　該電子印鑑の位置、前記ＩＤ、前記押印ボタンのクリックを読み取りクライアントコンピュータに通知する装置を有するタブレットと、
　該タブレットが接続された複数のクライアントコンピュータであって、
　既存の文書を作成したアプリケーションプログラムからなる既存文書作成装置と、
　該既存文書作成装置により作成された既存文書の電子ファイルと、
　該既存文書を取り込んで押印文書を作成すべく、
　前記電子印鑑認証サーバに問い合わせて押印文書作成許可を取得するログイン手段と、
　該ログイン手段にて押印文書作成許可を取得後に、用紙サイズの選択・カバーページの有無・有効期間・帳票形式・パスワードの設定に関する基本設定と、サーバーコンピュータの特定・会社名・アプリケーション名・自動採番・押印の同期に関するサーバー設定とを実行する初期設定手段と、
　文書のタイトル・項目名のテキストを入力・編集するテキスト作成手段、多角形・円・楕円・直線を含む図形を作図する図形作成手段、図形としての押印枠を作成するとともに承認ルート・押印順序を設定しその情報を管理する押印枠のプロパティ情報をも作成する押印欄作成手段、テキスト・図形・押印枠のレイアウトを調整するレイアウト調整手段を備え、タイトル・罫線・押印枠からなるテンプレートを、前記既存文書作成装置により前記既存電子文書を表示させた上に重ねて作成するテンプレート作成手段と、
　前記電子印鑑認証サーバ・文書管理サーバの情報を参照してワークフローに関する情報を生成し前記押印欄作成手段と協働して前記押印枠のプロパティ情報を設定するワークフロー設定手段と、
　前記テンプレート作成手段が作成した罫線・押印枠・文字抽出枠を含むテンプレートを元の既存電子文書とは切り離した独立の電子ファイルとして保存するテンプレート保存手

段と、
　前記テンプレート作成手段が作成したテンプレートと表計算ソフト・ワードプロセッサソフトの既存文書との重ね合わせを実現すべく仮想的なプリンタとしてインストールされ、前記既存文書作成装置にて前記既存電子文書の印刷メニューからプリント先として指定され、前記テンプレート保存手段にて保存されたテンプレートファイルを重ね合わせ対象として選択して、押印文書ファイルとして出力する擬似印刷手段と、
　前記電子印鑑認証サーバ・前記文書管理サーバとの通信手段と
　からなる押印文書作成手段と
　を有するクライアントコンピュータと、
　前記タブレットが接続された複数のクライアントコンピュータであって、
　前記電子印鑑認証サーバに問い合わせて押印文書閲覧許可を取得するログイン手段と、
　押印を必要とする文書を表示する押印文書表示手段と、
　前記クライアントコンピュータにつながる前記タブレット上で前記電子印鑑の押印ボタンをクリックするイベントを取得する押印イベント取得手段と、
　前記電子印鑑認証サーバが持っている印影情報を取得し、それに基づいて前記クライアントコンピュータの押印文書に印影を表示する印影表示手段と、
　前記電子印鑑ＩＤを公開鍵を用いて暗号化してやりとりし、押印履歴情報・印影情報を前記クライアントコンピュータと前記電子印鑑認証サーバとの間でやり取りする電子印鑑認証サーバとの通信手段と
　からなり、前記押印文書作成手段により作成された押印文書を承認する者が用いる押印文書閲覧手段
　を有するクライアントコンピュータと、
　このシステムを使用する者のうち、自分の組織に属するものの会社名・部署・名前・役職・電話・メールアドレス・有効期限・パスワードを含むマスタ情報を登録するユーザマスタと、押印権限に関する情報・組織内の決められた手続にしたがって回覧・押印する流れであるワークフローに関する情報・回覧順に関する情報を登録するアプリケーションマスタとを備えたデータベース部と、
　サーバにアクセスする権限を有する者のみがアクセスし設定することができる部分であるサーバ設定管理部と、
　前記電子印鑑ＩＤ番号と印影情報とを登録して管理する電子印鑑登録管理部と、
　前記クライアントコンピュータから受信した電子印鑑ＩＤ番号とサーバに登録されている電子印鑑ＩＤ番号及びマスタ情報と一致しているか否かを照合し、一致していれば会社コード・ユーザコード・サーバ番号・会社名・ユーザ名・認証種・受付日・受付時刻を含む情報である認証履歴をサーバへ書込み、前記クライアントコンピュータには押印許可を与え登録印影を送信する電子印鑑認証部と
　を有し、該及び前記双方のクライアントコンピュータにコンピュータネットワークを介して接続された電子印鑑認証サーバと、
　前記押印文書を様々な情報と関連付けて管理する文書管理データベースと、
　前記押印文書に押印すべきワークフローがどこまで進んでいるかを管理する押印状況管理手段と、
　次の押印すべき者に前記押印文書をメールに添付して送る電子メール配信手段と、
　イントラネット又はインターネットを介して他のコンピュータと通信する通信手段と
　を有し、前記電子印鑑認証サーバにて押印の当否を認証する押印文書を管理すべく前記コンピュータネットワークに接続された文書管理サーバと
　を有する押印文書作成管理システムにおける押印文書作成管理方法であって、
　前記押印文書閲覧手段にて、押印者が前記電子印鑑を用いて前記押印文書に押印することを読み取る押印イベント取得ステップと、
　該押印イベント取得ステップによる押印イベントの取得に基づいて、当該押印文書を前記文書管理サーバに送る押印文書送信ステップと、
　該押印文書送信ステップにて送られた押印文書を前記文書管理サーバが前記文書管理デ

ータベースに登録するデータベース登録ステップと
を有する押印文書作成管理方法。
【請求項9】
請求項８に記載した押印文書作成管理方法であって、
前記テンプレート作成手段が作成したテンプレートと表計算ソフト・ワードプロセッサソフトの既存文書との重ね合わせを実現すべく仮想的なプリンタとしてインストールされ、前記既存文書作成装置にて前記既存電子文書の印刷メニューからプリント先として指定され、前記テンプレート保存手段にて保存されたテンプレートファイルを重ね合わせ対象として選択して、押印文書ファイルとして出力する擬似印刷手段が、ファイルの種類を選択することにより押印文書ファイルの出力も、前記テンプレートファイルの出力もいずれもできることとすることにより、前記テンプレート作成手段は、前記擬似印刷手段が兼ねるものであって、
前記テンプレート作成手段が作成したテンプレートファイルを前記擬似印刷手段が保存するテンプレートファイル保存ステップと、
前記既存文書作成装置にて前記既存電子文書の印刷メニューからプリント先として前記擬似印刷手段を指定する既存電子文書出力先指定ステップと、
該既存電子文書出力先選択ステップにて印刷対象となる前記既存電子文書に重ね合わせる対象として前記テンプレートファイル保存ステップにて保存されたテンプレートファイルを選択するテンプレートファイル選択ステップと、
該テンプレートファイル選択ステップにて選択したテンプレートファイルと前記既存電子文書出力先指定ステップにて指定した既存電子文書とを重ね合わせて出力することにより押印文書を作成する押印文書作成ステップと、
をさらに有し、該押印文書作成ステップの後に、前記押印イベント取得ステップがなされることを特徴とする押印文書作成管理方法。
【請求項10】
請求項８または９のいずれか一に記載した押印文書作成管理方法であって、
前記押印文書作成手段は、前記テンプレートファイル及び前記押印文書ファイルのいずれをも読み込んで編集対象とし、その編集結果は前記テンプレートファイル及び前記押印文書ファイルのいずれの形式をも出力対象とするものであって、
押印文書ファイルを読み込む押印文書読込ステップと、
該押印文書読込ステップにて読み込んだ押印文書ファイルから、テンプレートファイルを抽出して、テンプレートファイルを保存するテンプレート抽出保存ステップと、
をさらに有し、該テンプレート抽出保存ステップにて保存されたテンプレートを用いて押印文書を作成することを特徴とする押印文書作成管理方法。
【請求項11】
請求項８に記載した押印文書作成管理方法であって、
前記押印文書送信ステップは、
前記押印履歴情報をクライアントコンピュータとサーバとの間でやりとりする押印履歴情報通信処理と、
該やりとりされた押印履歴情報を前記押印文書の押印枠プロパティ情報として保存する押印枠プロパティ情報保存処理と、
を含み、
該押印枠プロパティ情報として押印履歴情報が保存された前記押印文書を前記文書管理サーバの文書管理データベースに保存することを特徴とする押印文書作成管理方法。
【請求項12】
請求項８に記載した押印文書作成管理方法であって、
前記押印文書閲覧手段を用いて、ログイン権限の認証を得る契約書押印者ログイン処理ステップと、
該契約書押印者ログイン処理ステップの後、該契約書押印者がワークフロー・アプリフェーズの変更を欲する場合にワークフロー・アプリフェーズ変更処理選択ステップと、

前記電子印鑑認証サーバからアプリフェーズを取得するアプリフェーズ取得ステップと、

該アプリフェーズ取得ステップにて取得したアプリフェーズに基づいてワークフローを設定するワークフロー設定ステップと、

該ワークフロー設定ステップにて、新規な押印文書が生成された場合に、前記文書管理サーバに情報送信して文書番号を取得する文書番号取得ステップと、

該文書番号取得ステップにて取得した文書番号を用いて押印文書の登録を前記文書管理サーバに対して実行する押印文書登録ステップと

をさらに有し、こうして作成された押印文書に対して前記押印イベント取得ステップ、押印文書送信ステップ、データベース登録ステップを実行することを特徴とする押印文書作成管理方法。

【請求項13】

請求項８に記載した押印文書作成管理方法であって、

前記押印イベント取得ステップ、前記押印文書送信ステップ、前記データベース登録ステップの一連の処理の流れを、一つの押印処理の実行のたびに繰返して行うことを特徴とする押印文書作成管理方法。

【請求項14】

請求項８に記載した押印文書作成管理方法であって、

前記アプリフェーズのユーザの有効期限、前記押印文書の有効期限が設けられて、

前記押印イベント取得ステップ前に、当該ユーザの有効期限及び当該押印文書の有効期限をチェックし、期限後のログインは認証失敗として処理することを特徴とする押印文書作成管理方法。

【発明の詳細な説明】

【技術分野】

【0001】

本発明は、既存電子文書を有効活用して押印文書を作成し、それを管理するシステム及び方法に関する。

【背景技術】

【0002】

従来の電子印鑑認証システムでは、押印モジュールを組み込んだ専用の電子文書を作成しなければならなかった。

そのため、電子印鑑を活用するまでの準備構成が必要で、既存の電子文書の資産を有効活用できなかった。

【0003】

特許文献１には、表示装置の画面に表示された複合文書についてその任意の断面でデータ領域の階層構造をパターン化して表示可能とし、また表示された階層構造のパターン上で任意の階層のデータ領域を編集操作対象として選択可能にする複合文書編集方法及び装置が開示されている。

特許文献２には、少なくとも一つのレイヤを含んでなる文書ファイルを各利用者ごとに設けられた利用者側装置を用いて回覧するための文書処理システムであって、利用者側装置が当該回覧対象の文書ファイルを受信して表示し、書き込みの支持を受けると文書ファイル内に新規のレイヤを生成し、書き込まれた文書要素を当該生成したレイヤに書き直し、当該レイヤに格納された文書要素の閲覧又は編集に関連する属性を設計する文書処理システムが開示されている。

【図面の簡単な説明】

【0015】

【図1】管理者権限で電子印鑑認証システムにログインする際のログイン画面である。

【図2】電子印鑑認証システムのメニュー画面である。

【図3】ユーザマスタの画面である。

【図4】印影登録処理の画面である。

【図5】アプリケーションマスタの画面である。

【図6】電子印鑑認証サーバとクライアントパソコンとの基本プロトコルを示す図である。
【図7】電子印鑑認証システムのハードウェア構成を示す図である。
【図8】電子印鑑認証サーバのハードウェア構成を示す図である。
【図9】電子印鑑５０を詳細に説明した図である。
【図10】クライアントパソコンが電子印鑑認証サーバとの協働により電子印鑑によるログイン処理を実行する際のフローを示す図である。
【図11】クライアントパソコンが電子印鑑認証サーバとの協働により電子印鑑による押印処理を実行する際のフローを示す図である。
【図12】認証サーバ管理権限を与えられた管理者がログインする処理を示す図である。
【図13】クライアントパソコンと、電子印鑑認証サーバとの協働により、印影登録処理を実行するフローチャートである。
【図14】クライアントパソコンがコンピュータネットワーク（インターネット又はイントラネット）を介して、電子印鑑認証サーバ及び文書管理サーバと協働する様子を示した図である。
【図15】押印文書作成手段の有する３つの機能を表示した機能ブロック図である。
【図16】文書管理サーバの有する４つの機能を表示した機能ブロック図である。
【図17】クライアントパソコンにおいて押印処理を実行する際のフローチャートである。
【図18】サーバとクライアントパソコンとの間をインターネットまたはＬＡＮで結ぶ様子を示した図である。
【図19】クライアントパソコンで押印文書を作成する際のログイン画面である。
【図20】押印文書の初期設定のうち基本設定をする画面を示している図である。
【図21】押印文書の初期設定のうち、サーバー設定の画面を示した図である。
【図22】押印文書に文書番号が付される様子を示した図である。
【図23】押印文書に押印すべき者が係長、課長、部長の３人である場合、３人がそれぞれ印鑑を押す際にサーバとのやりとりを行って押印権限を、電子印鑑認証サーバにおいて照合し押印文書中の押印履歴情報を書き換えて文書管理サーバに保存することを示す図である。
【図24】押印すべき押印者がクライアントパソコンを用いて押印手続を行おうとする際の文書管理サーバ及び電子印鑑認証サーバとのやり取りを示す図である。
【図25】クライアントパソコンを用いて押印しようとする者がアプリケーションの内容に変更を加えようとする場合のフローチャートである。
【図26】押印文書閲覧手段を用いて押印者がまさに押印した場合のフローチャートである。
【図27】押印文書閲覧手段の初期設定を示す図である。
【図28】押印文書作成手段において押印文書のテンプレートの初期設定を行う場合にテンプレートとして３ページで構成されるものを作成し、３枚目以降を繰り返しを指定して普通伝票の設定を用いるケースを示した説明図である。
【図29】納品先、品名、数量、金額などが入力された１ページだけで構成される文書を元に請求書、納品書、受領書で構成される３枚綴りの請求納品書を作成する場合に複写伝票を選択して３枚複写を指定する場合を説明する図である。
【図30】設計図などの元になる文書にカバーページを付ける場合を説明する図である。
【図31】押印文書作成手段６０を起動してテンプレートを作成しようとする際に表示される初期画面である。
【図32】テンプレートを元になる文書と合体させないで単独で保存する場合の保存画面である。
【図33】電子押印文書を作る際に元になる文書を作成したプログラムにおいて印刷メニューを選択しプリンタとして現実のプリンタではなく仮想的に作られた擬似プリンタに出力する操作を示す画面である。
【図34】擬似プリンタのプロパティの設定画面である。

【図35】テンプレートの選択画面である。
【図36】パスワードの入力画面である。
【図37】ｂｗｂファイルの保存画面である。
【図38】「請求納品書サンプルイメージ」という名前の押印文書を押印文書作成手段で開いた画面である。
【図39】押印文書作成手段がテンプレートファイルを開く画面である。
【図40】テンプレートファイルを開いた状態で更にさきほど作った「請求納品書サンプルイメージ」というｂｗｂファイルを開く画面である。
【図41】テンプレートファイルを開いた状態で更にｂｗｂファイルを開いて重ね合わせて表示した図である。
【図42】サンプルイメージを参照しつつ前述の図形作成手段やテキスト作成手段を用いてテンプレートを編集する様子を示した図である。
【図43】押印枠を作成する様子を示した図である。
【図44】テンプレートファイルのファイル情報の表示画面である。
【図45】完成させたテンプレートファイルのプレビュー表示画面である。
【図46】押印文書作成手段の有する印鑑メニューを説明する図である。
【図47】押印枠の設定画面である。
【図48】印鑑タブの設定画面である。
【図49】印鑑ダイアログボックスの印鑑タブでのワークフローの指定をする部分図である。
【図50】複数の押印者の誰から押印してもよく押印順序を指定しない場合の承認ルートグループ及び承認順位を示す図である。
【図51】複数の押印者間で押印順序を指定する場合の承認ルートグループ及び承認順位を示す図である。
【図52】複数の承認ルートを設ける場合の押印枠を示す図である。
【図53】複数の承認ルートを設ける場合の承認ルートグループ及び承認順位を示す図である。
【図54】押印枠を一旦作成した後にその大きさの変更をする予想を示した図である。
【図55】レイアウトの調整の画面である。
【図56】図形の属性を変更するためのプロパティ画面である。
【図57】新たな押印文書の作成をするために元となる文書を表計算ソフトにより作成した画面である。
【図58】表計算ソフトの印刷メニュー画面である。
【図59】擬似プリンタのプロパティ画面である。
【図60】テンプレート選択画面である。
【図61】パスワード入力画面である。
【図62】電子押印文書の保存画面である。
【図63】出来上がった電子押印文書の押印欄を示す図である。
【図64】ｂｗｂファイルのアイコンを示す図である。
【図65】係長が押印手続きをした後の押印欄を示す図である。
【図66】押印文書作成手段６０の機能ブロック図である。
【図67】押印文書表示手段８２０の構成を示す機能ブロック図である。
【産業上の利用可能性】
【0063】
押印申請書に本発明による電子印鑑で押印し認証を受けると、押印行為が認証履歴としてクライアント側で作成した押印欄に記録されるだけでなく、電子印鑑認証サーバにも同様に保存されるので、誰が何時押印したのか押印文書に明示できる。押印した履歴を保存明示できることから押印行為に対する押印者の押印責任を明確にすることができる。電子印鑑は紛失すればすぐに気付くことができるので、紛失中に押印された場合であってもすぐに認証履歴を調べることで悪用されたかどうかの調査が迅速にできる。本発明で使用す

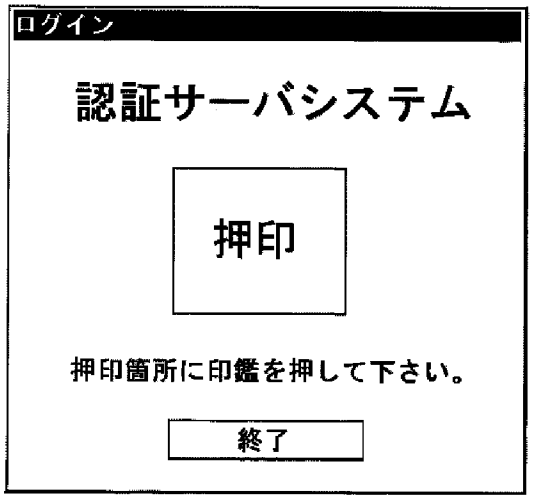
る電子印鑑は、日常使用している印鑑の中にＩＣチップを埋め込むだけで製造できるものだから認印、銀行印、実印などの作成ができ、日常と同様な使い勝手で紙文書と同様な使い分けができる。また押印責任の明確化の上では紙文書による管理以上の効果が期待できる。完全なペーパレス化の実現が可能となる。

【符号の説明】

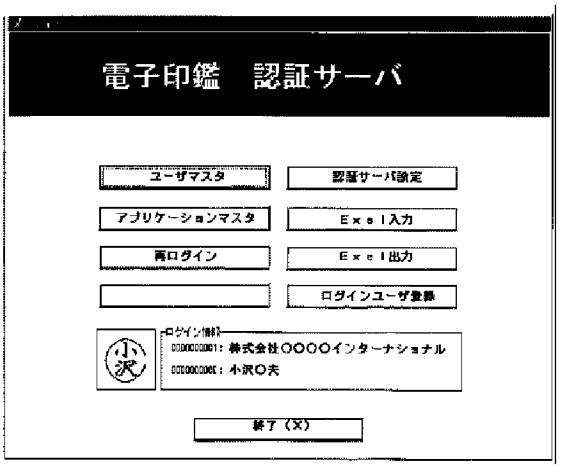
【0064】

１０ 電子印鑑認証サーバ
２０ 文書管理サーバ
３０，３５ パソコン
４０ タブレット
５０ 電子印鑑
５１ 内蔵ＩＣチップ
５２ 押印ボタン
５３ 押印面
６０ 押印文書作成手段
８０ 押印文書閲覧手段
９０ インターネット
１００ データベース部
１１０ ユーザマスタ
１２０ アプリケーションマスタ
１７０ サーバ設定管理部
１８０ 電子印鑑登録管理部
１９０ 電子印鑑認証部
２１０ 文書管理データベース
２２０ 押印状況管理手段
２３０ 電子メール配信手段
２４０ 押印文書作成手段または電子印鑑認証サーバとの通信手段
６１０ テンプレート作成手段
６１１ テキスト作成手段
６１２ 図形作成手段
６１３ 押印欄作成手段
６１４ レイアウト調整手段
６１５ ワークフロー設定手段
６１６ 擬似印刷手段
６１７ テンプレート保存手段
８２０ 押印文書表示手段
８３０ 押印イベント取得手段
８４０ 印影表示手段
８５０ 電子印鑑認証サーバとの通信手段

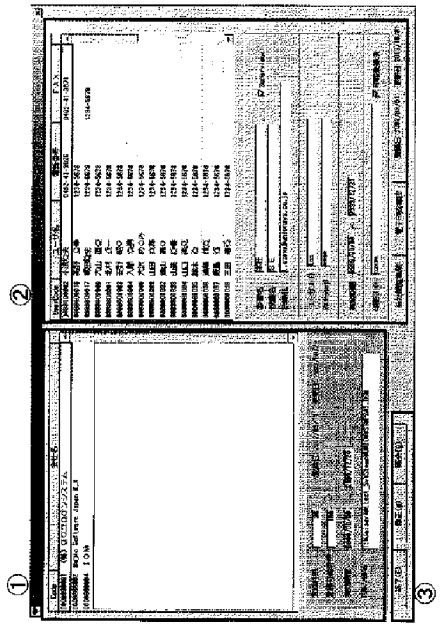
【図1】



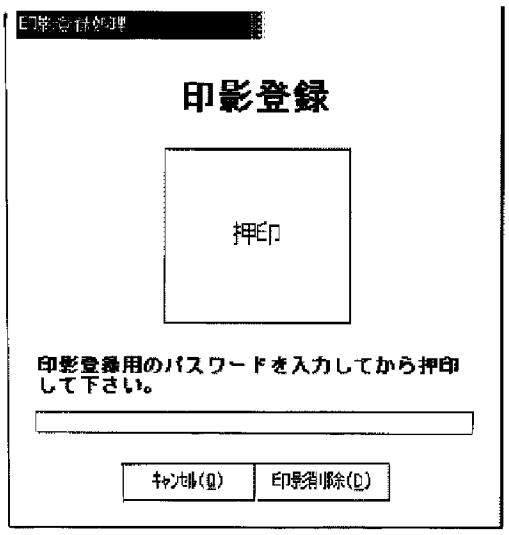
【図2】


電子印鑑　認証サーバ
ユーザマスタ
認証サーバ設定
アプリケーションマスタ
Ｅｘｃｌ入力
再ログイン
Ｅｘｃｌ出力
ログインユーザ登録
ログイン情報
株式会社○○○○インターナショナル
小沢○夫
終了（Ｘ）

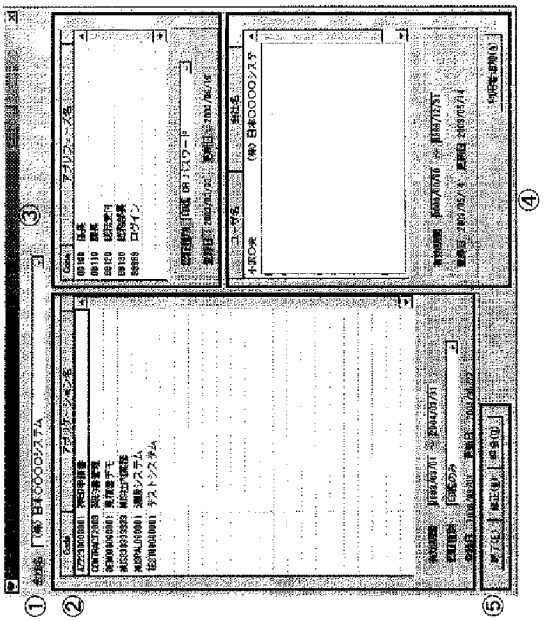
【図3】



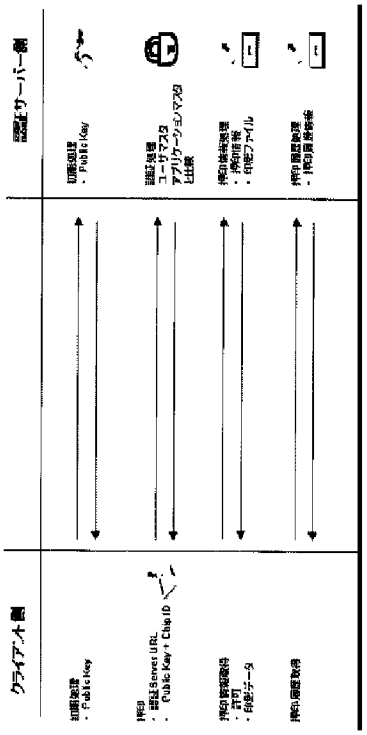
【図4】



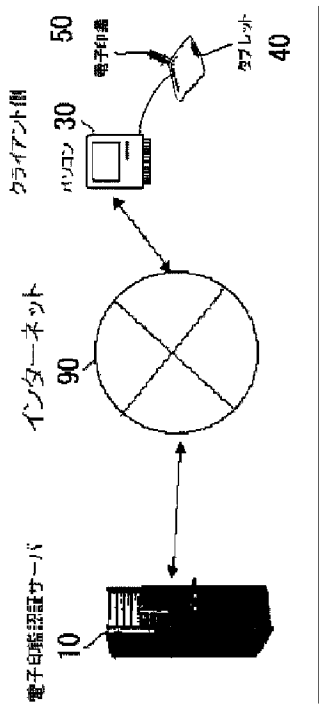
【図5】



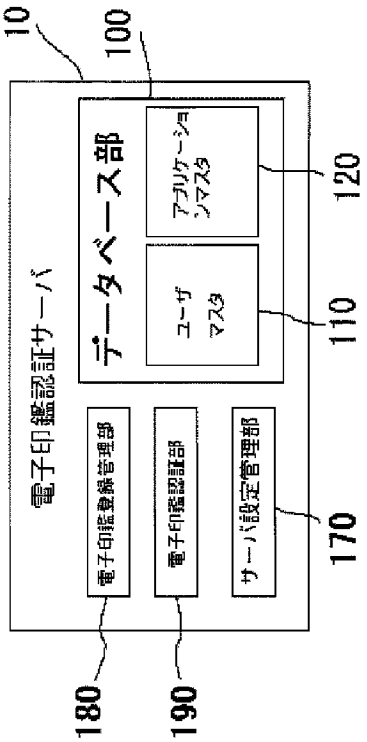
【図6】



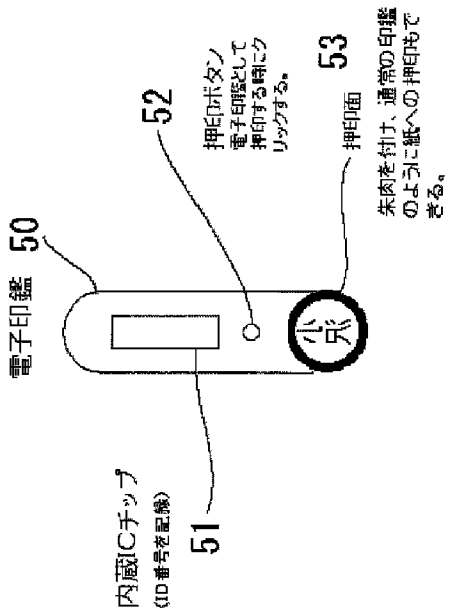
【図7】



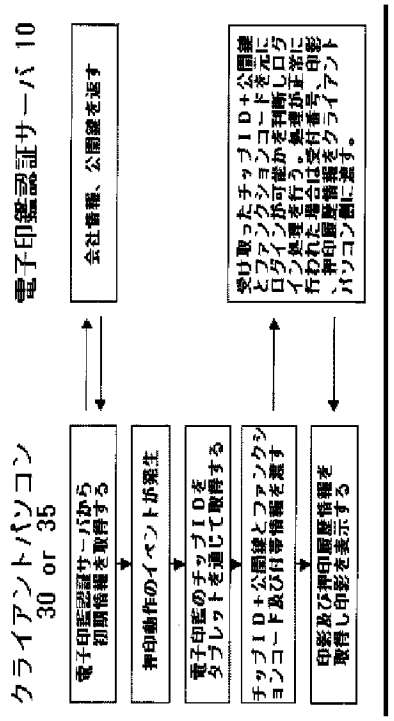
【図8】


10
100
電子印鑑認証サーバ
データベース部
アプリケーション
マスタ
ユーザ
マスタ
120
110
電子印鑑登録管理部
電子印鑑認証部
サーバ設定管理部
170
180
190

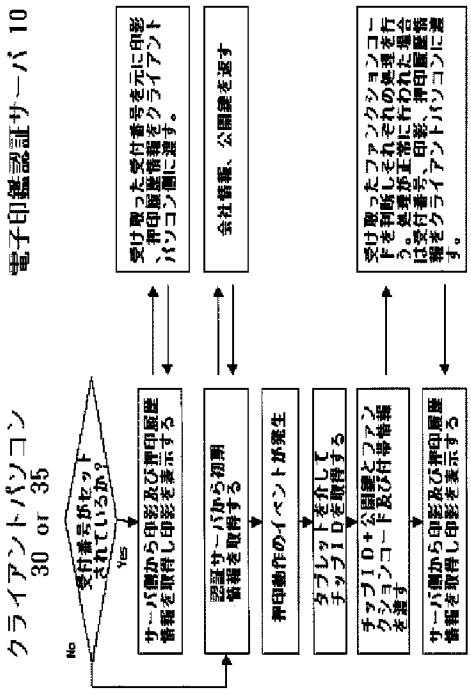
【図9】


電子印鑑
50
52
押印ボタン
電子印鑑として
押印する時にク
リックする。
53
押印面
朱肉を付け、通常の印鑑
のように紙への押印もで
きる。
内蔵ICチップ
(ID番号を記録)
51

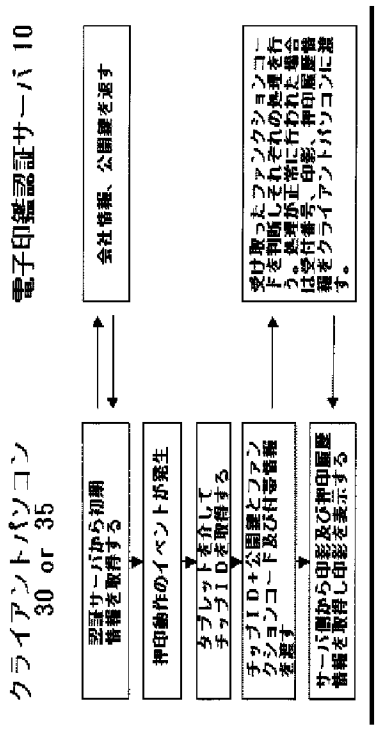
【図10】


クライアントパソコン
30 or 35
電子印鑑認証サーバ 10
電子印鑑認証サーバから
初期情報を取得する
会社情報、公開鍵を返す
押印動作のイベントが発生
電子印鑑のチップＩＤを
タブレットを通じて取得する
チップＩＤ+公開鍵とファンクション
コードＦ及び印章情報を送す
受け取ったチップＩＤ+公開鍵
とファンクションコードを元に
ログイン可能かを判断しログ
イン処理を行う。処理が正常に
行われた場合は署名書式、印影
、押印履歴情報をクライアント
パソコン側に送す。
印影及び押印履歴情報を
取得し印影を表示する

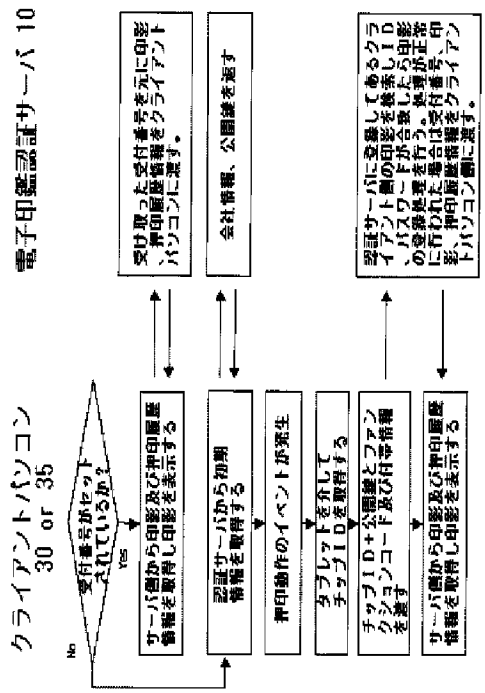
【図11】


電子印鑑認証サーバ 10
クライアントパソコン
30 or 35
受付番号がセットされているか?
No
Yes
サーバ側から印影及び押印履歴情報を取得し印影を表示する
受け取った受付番号を元に印影、押印履歴情報をクライアントパソコン側に渡す。
認証サーバから初期情報を取得する
会社情報、公開鍵を返す
押印動作のイベントが発生
タブレットを介してチップIDを取得する
チップID+公開鍵とファンクションコード及び付帯情報を渡す
受け取ったファンクションコードを判断しそれぞれの処理を行う。処理が正常に行われた場合は受付番号、印影、押印履歴情報をクライアントパソコンに渡す。
サーバ側から印影及び押印履歴情報を取得し印影を表示する

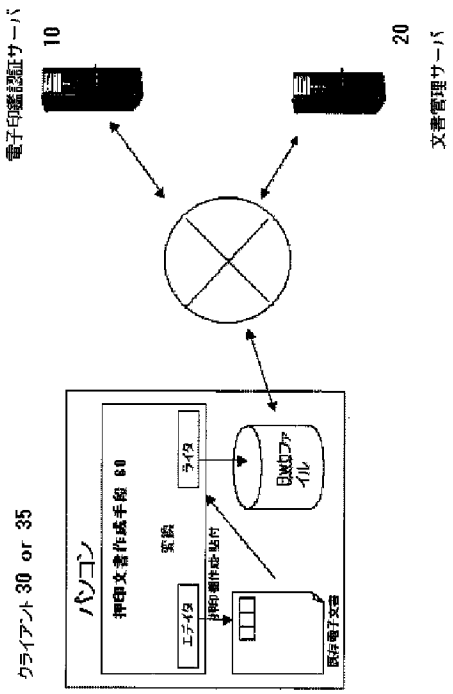
【図12】


クライアントパソコン
30 or 35
電子印鑑認証サーバ 10
認証サーバから初期情報を取得する
押印動作のイベントが発生
タブレットを介してチップＩＤを取得する
チップＩＤ+公開鍵とファンクションコード及び付帯情報を送る
サーバ側から印影及び押印履歴情報を取得し印影を表示する
会社情報、公開鍵を返す
受け取ったファンクションコードを判断しそれぞれの処理を行う。処理が正常に行われた場合は受付番号、印影、押印履歴情報をクライアントパソコンに送る。

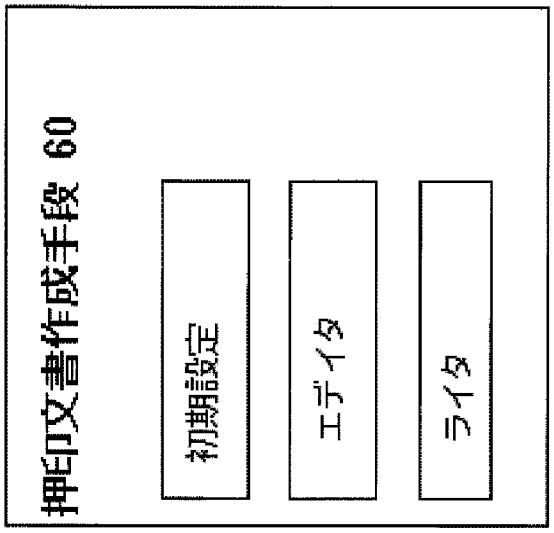
【図13】


クライアントパソコン
30 or 35
電子印鑑認証サーバ 10
受付番号がセットされているか？
No
Yes
サーバ側から印影及び押印履歴情報を取得し印影を表示する
認証サーバから初期情報を取得する
押印動作のイベントが発生
タブレットを介してチップＩＤを取得する
チップＩＤ＋公開鍵とファンクションコード及び付帯情報を渡す
サーバ側から印影及び押印履歴情報を取得し印影を表示する
受け取った受付番号を元に印影、押印履歴情報をクライアントパソコンに渡す。
会社情報、公開鍵を返す
認証サーバに登録してあるクライアント側の印影を検索しＩＤ、パスワードが合致したら印影の登録処理を行う。処理が正常に行われた場合は受付番号、印影、押印履歴情報をクライアントパソコン側に渡す。

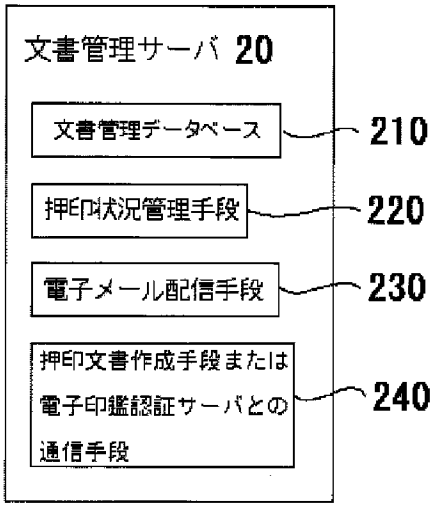
【図14】


電子印鑑認証サーバ
10
20
文書管理サーバ
クライアント 30 or 35
パソコン
押印文書作成手段 60
変換
エディタ
ライタ
押印個作成貼付
既存電子文書
Bwdファイル

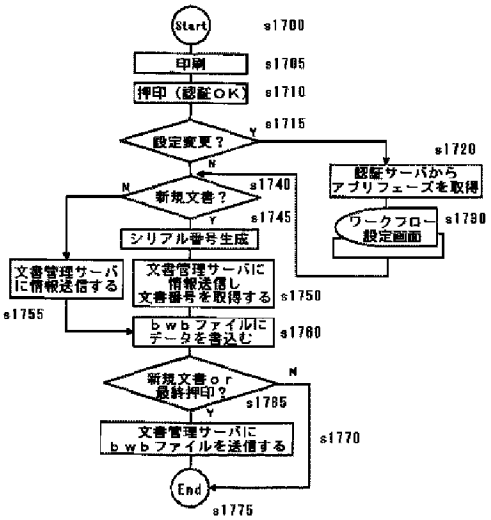
【図15】



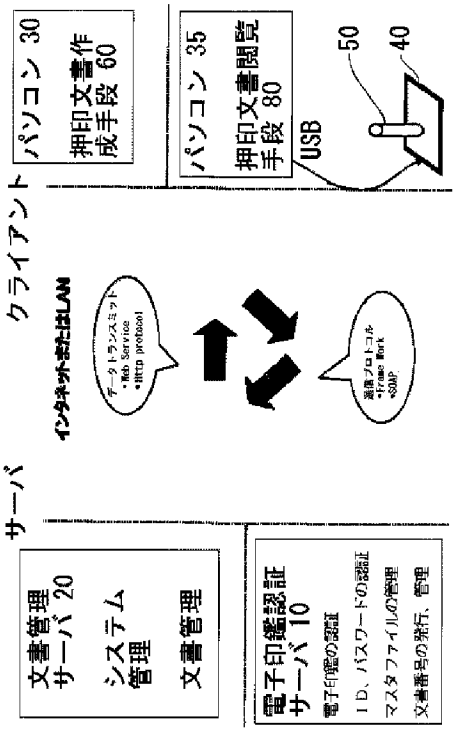
【図16】


文書管理サーバ 20
文書管理データベース
210
押印状況管理手段
220
電子メール配信手段
230
押印文書作成手段または
電子印鑑認証サーバとの
通信手段
240

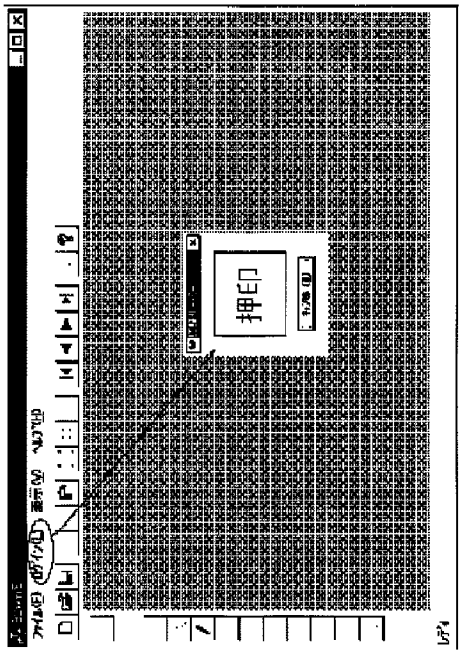
【図17】


Start
s1700
印刷
s1705
押印（認証OK）
s1710
設定変更？
s1715
Y
N
s1720
認証サーバから
アプリフェーズを取得
新規文書？
s1740
N
Y
s1745
シリアル番号生成
ワークフロー
設定画面
s1780
文書管理サーバ
に情報送信する
文書管理サーバに
情報送信し
文書番号を取得する
s1750
s1755
ｂｗｂファイルに
データを書込む
s1760
新規文書ｏｒ
最終押印？
s1765
N
Y
文書管理サーバに
ｂｗｂファイルを送信する
s1770
End
s1775

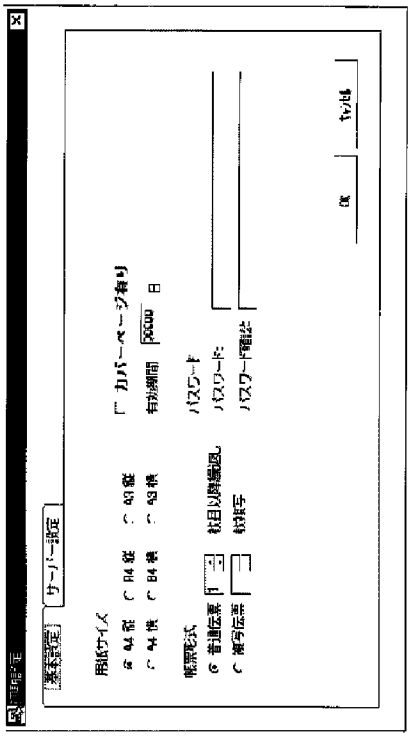
【図18】


サーバ
文書管理
サーバ 20
システム
管理
文書管理
電子印鑑認証
サーバ10
電子印鑑の認証
ＩＤ、パスワードの認証
マスタファイルの管理
文書番号の発行、管理
インターネットまたはLAN
クライアント
パソコン 30
押印文書作
成手段 60
パソコン 35
押印文書閲覧
手段 80
USB
50
40

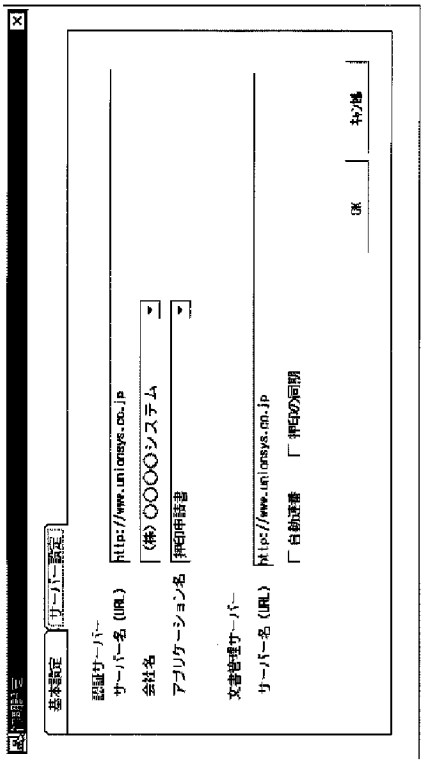
【図19】



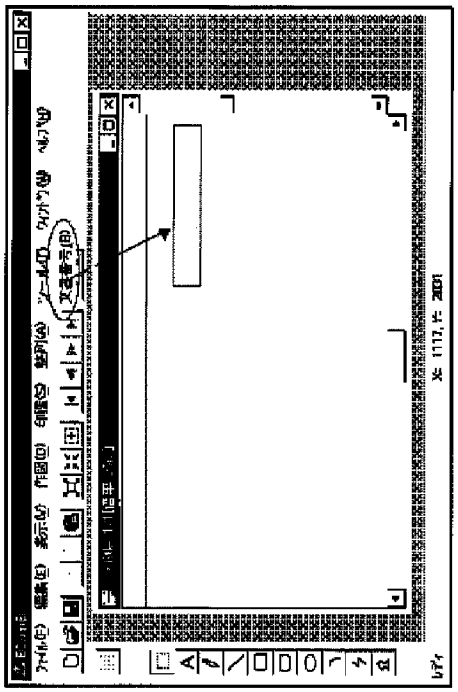
【図20】



【図21】

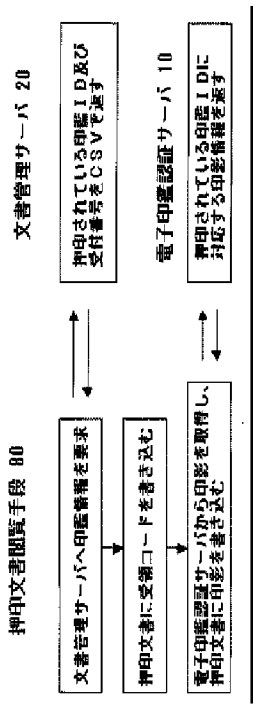


【図22】

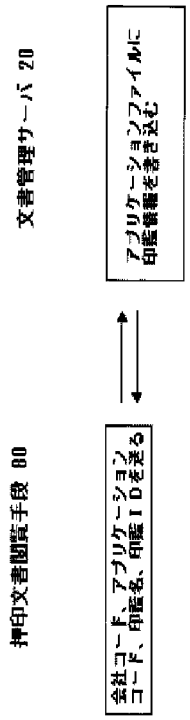


【図23】

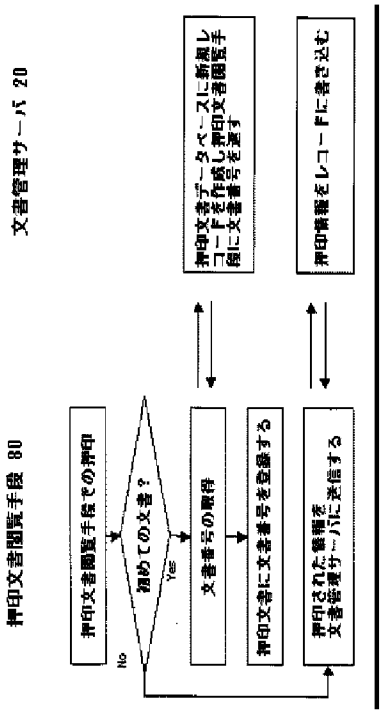
【図24】



【図25】



【図26】



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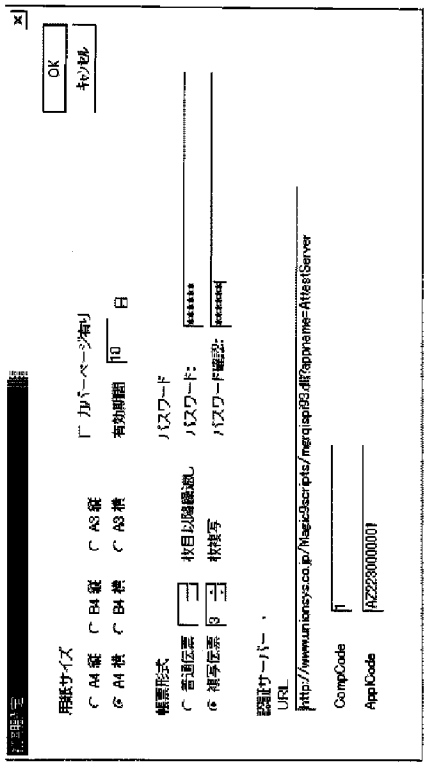

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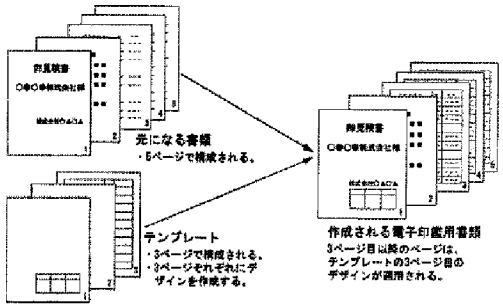

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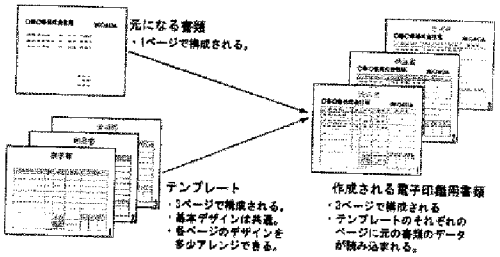

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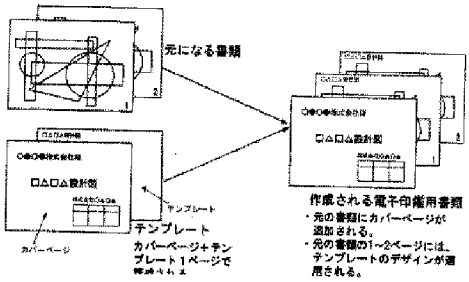

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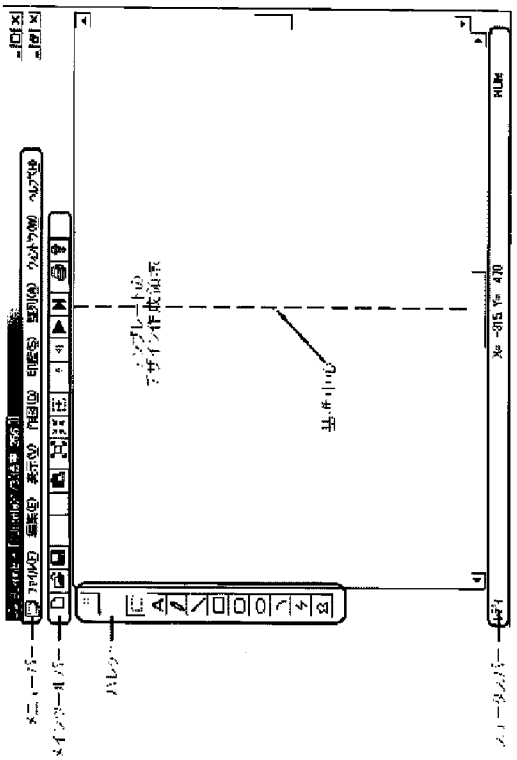

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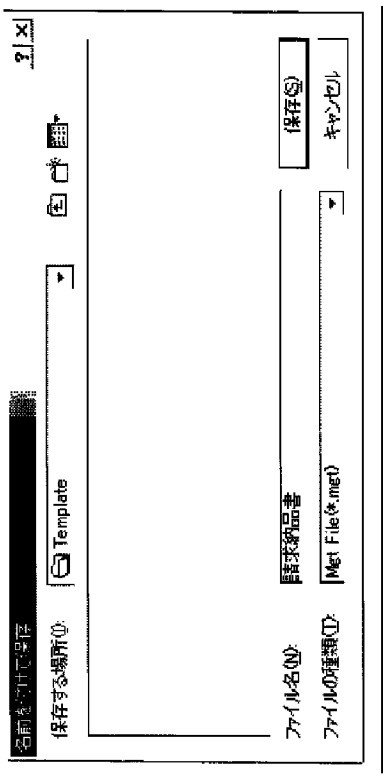

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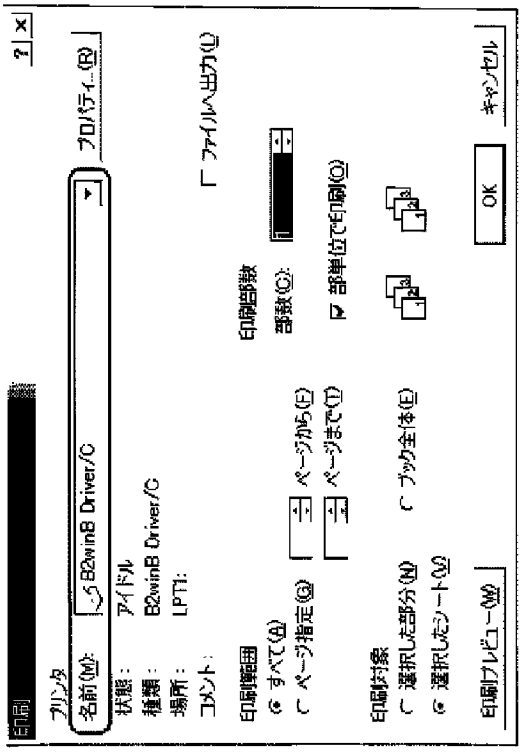

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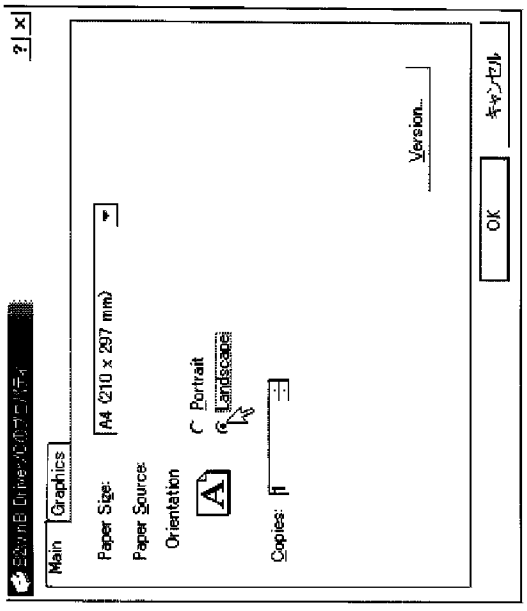

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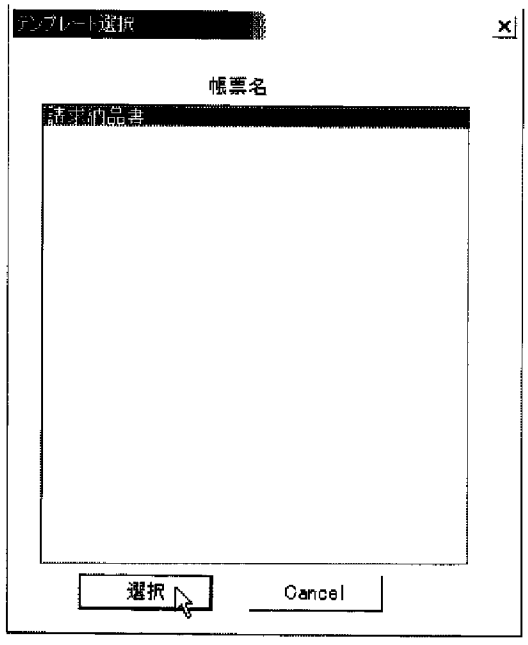

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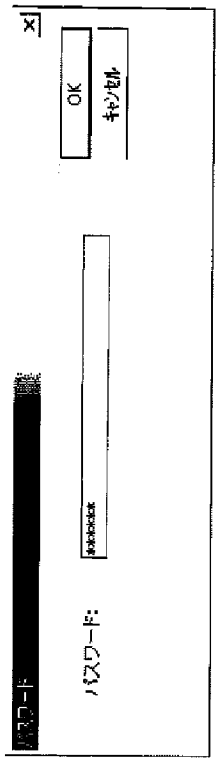

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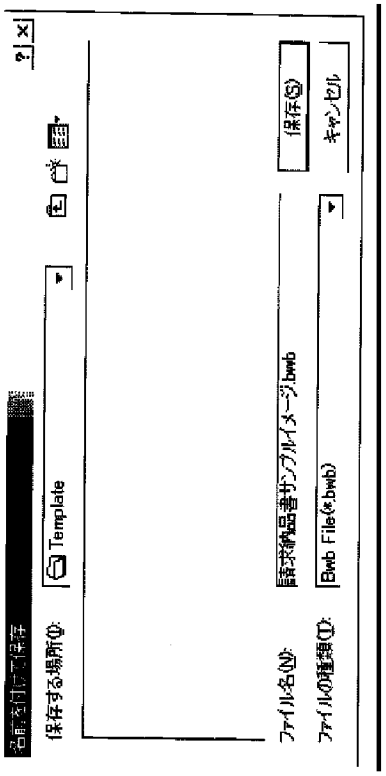

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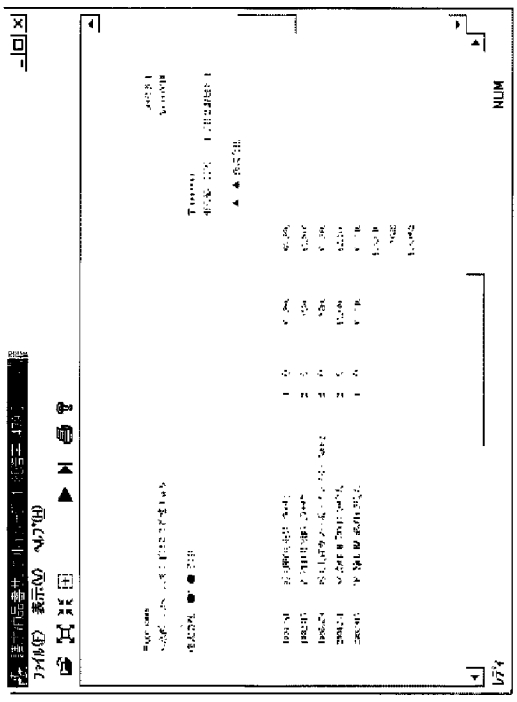

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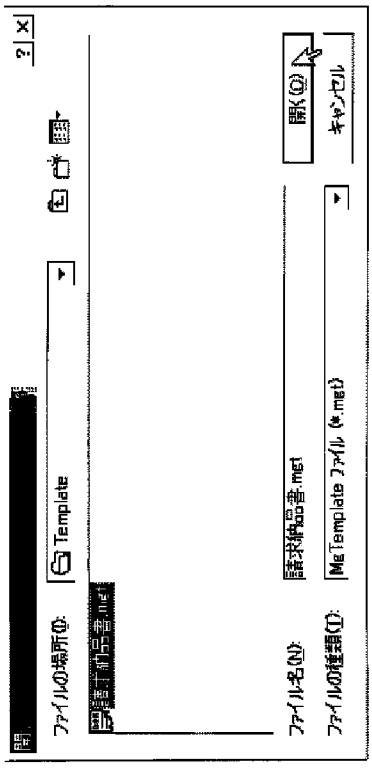

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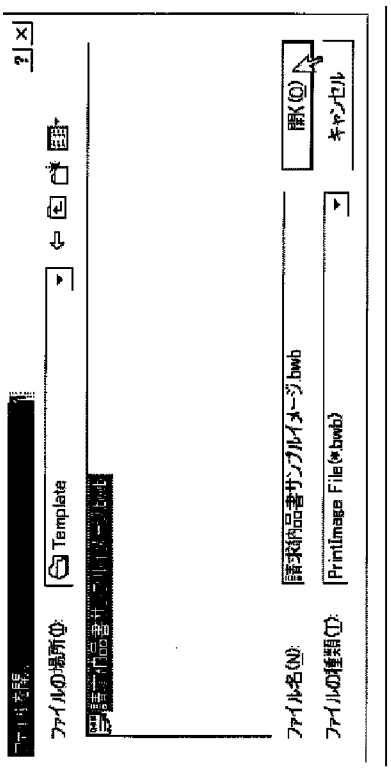

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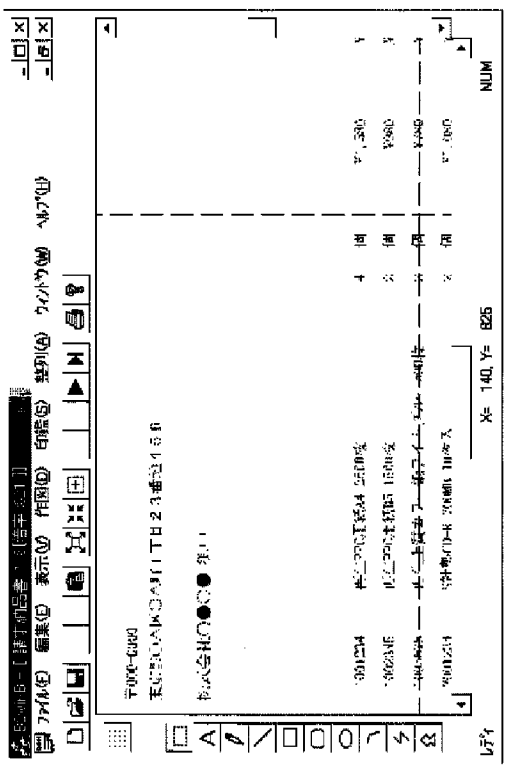

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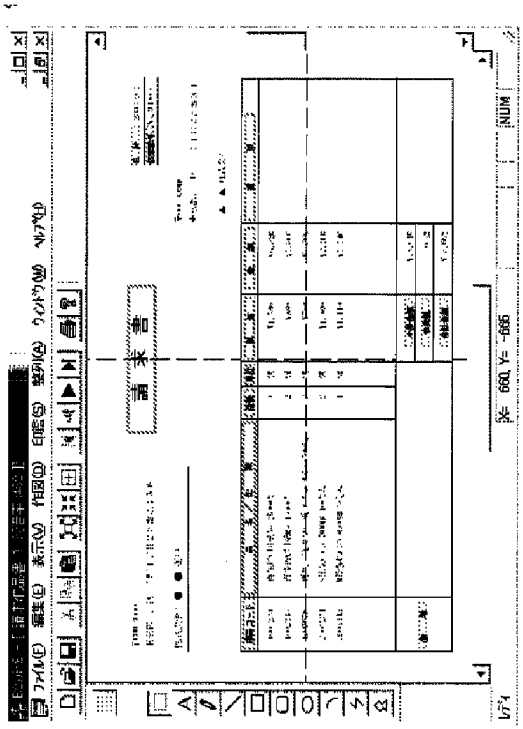

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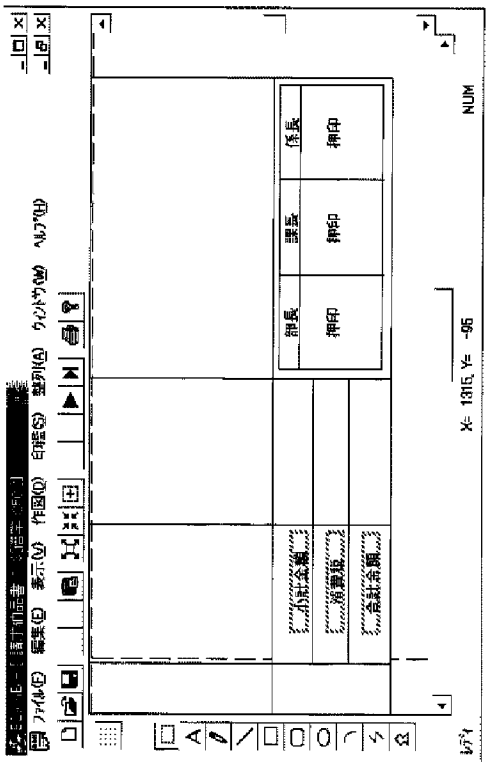

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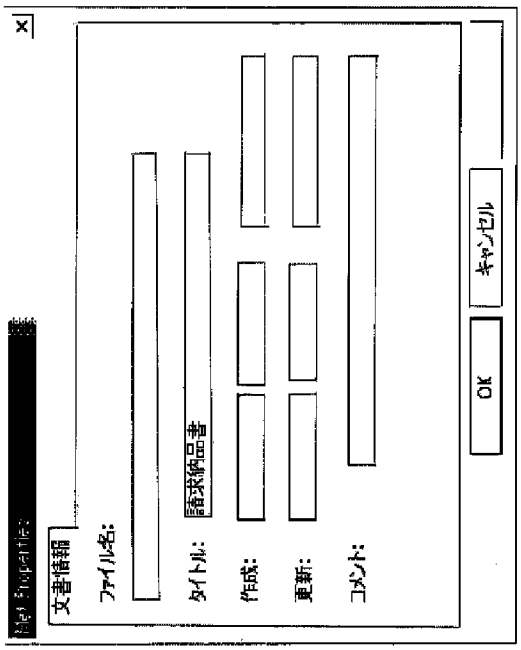

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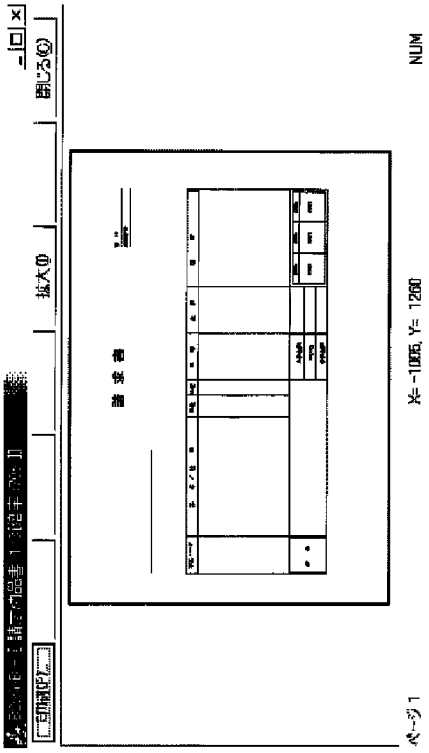

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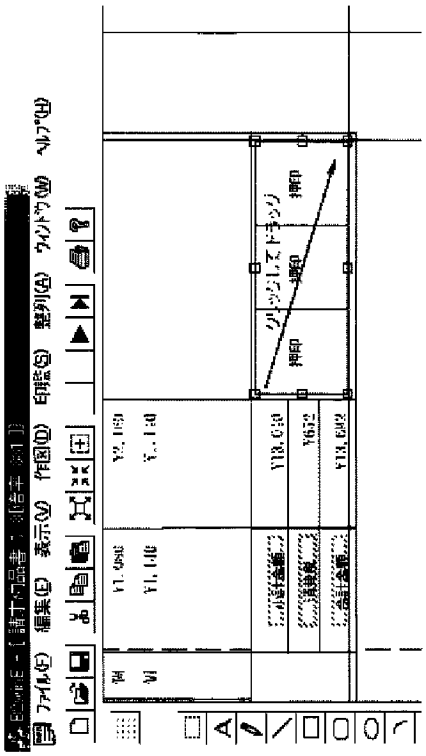

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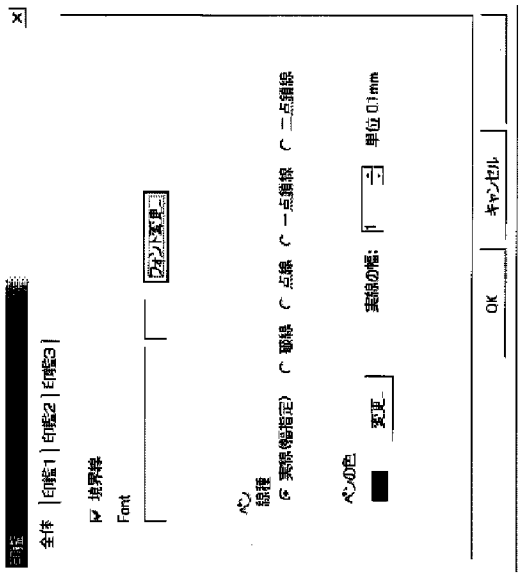


【図48】

【図49】

【図50】

山田	佐藤	田中	鈴木	秋山
押印	押印	押印	押印	押印

タブ	印鑑1	印鑑2	印鑑3	印鑑4	印鑑5
Name	山田	佐藤	田中	鈴木	秋山
承認ルートグループ	A	A	A	A	A
承認順位	0	0	0	0	0

【図51】

部長	課長	係長
未承認	未承認	押印

タブ	印鑑1	印鑑2	印鑑3
Name	部長	課長	係長
承認ルートグループ	A	A	A
承認順位	2	1	0

【図52】

【図53】

・押印欄1の設定

タブ	印鑑1	印鑑2	印鑑3
Name	営業部長	一課課長	二課課長
承認ルートグループ	A	A	B
承認順位	3	2	2

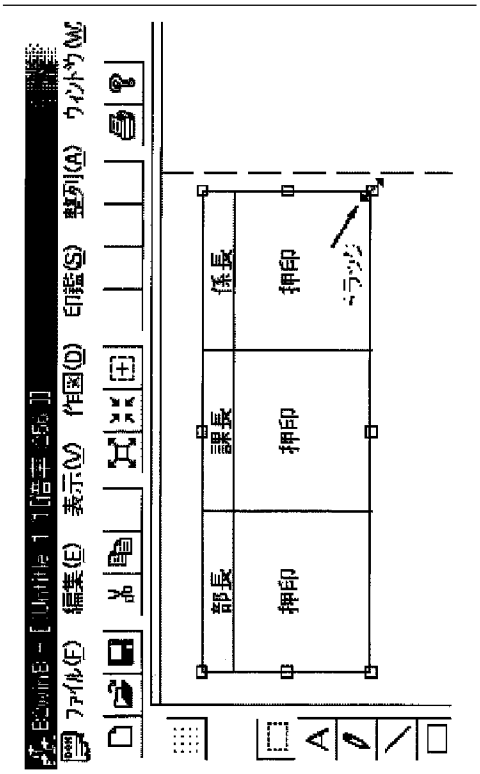
・押印欄2の設定

タブ	印鑑1	印鑑2	印鑑3
Name	一課課長	一課係長	一課担当者
承認ルートグループ	A	A	A
承認順位	2	1	0

・押印欄3の設定

タブ	印鑑1	印鑑2	印鑑3
Name	二課課長	二課係長	二課担当者
承認ルートグループ	B	B	B
承認順位	2	1	0

【図54】



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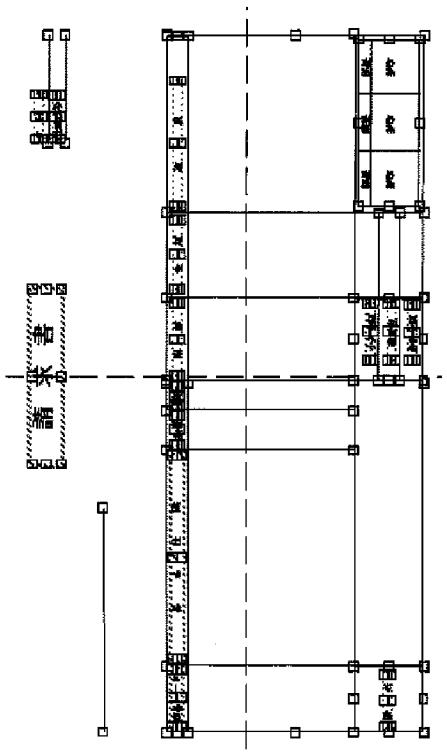

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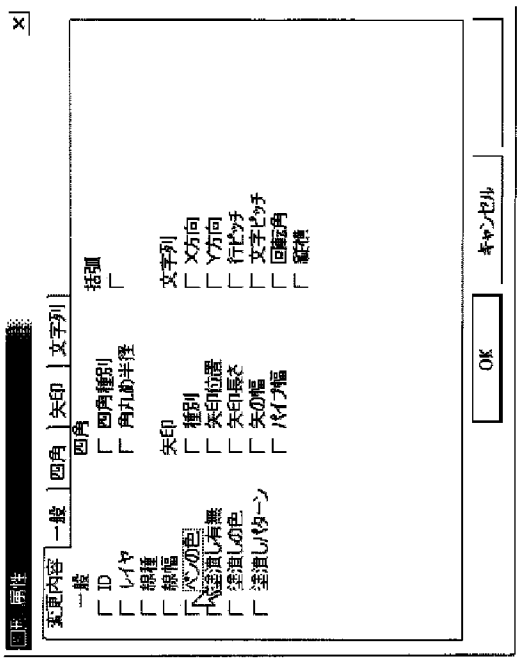

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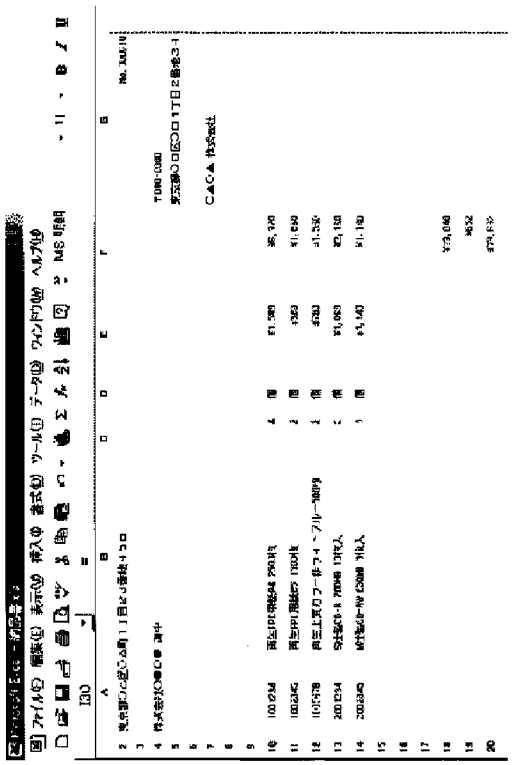

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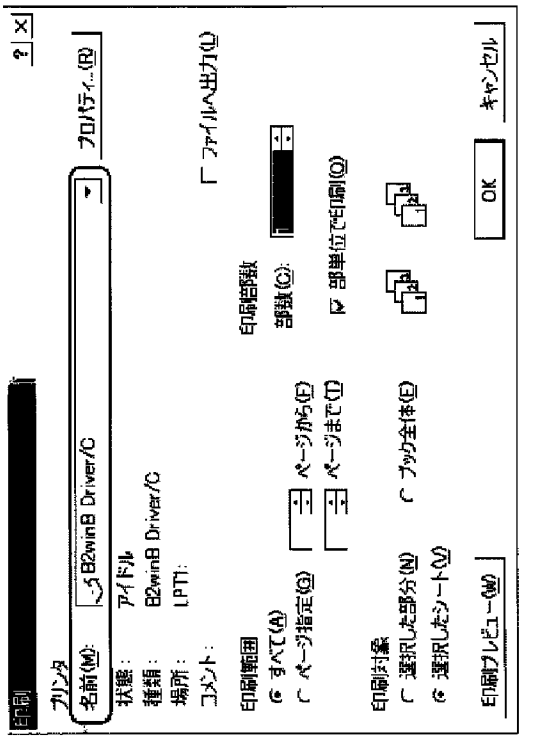

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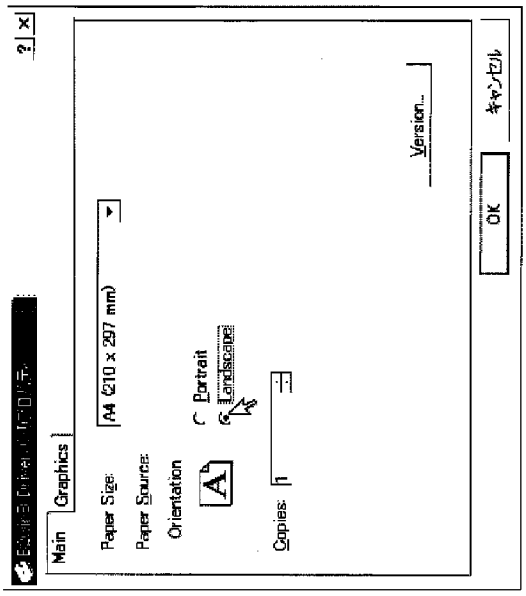

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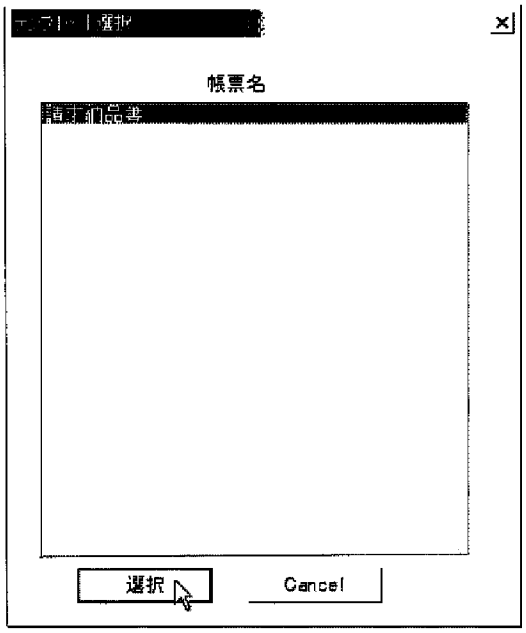
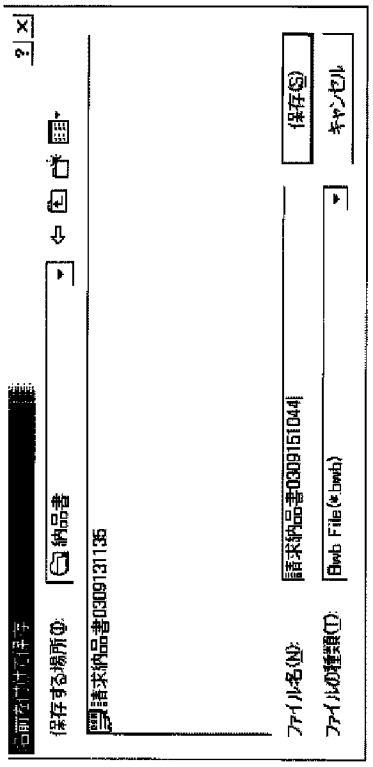


【図61】

【図62】



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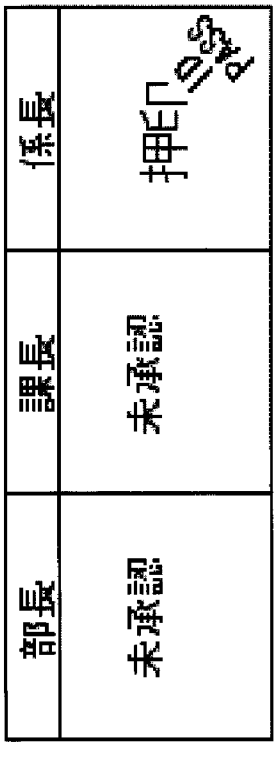

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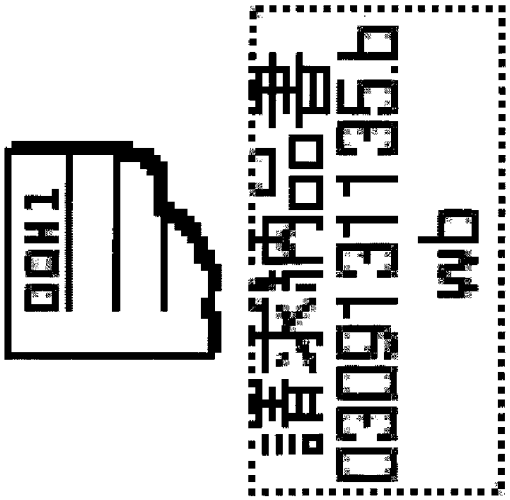

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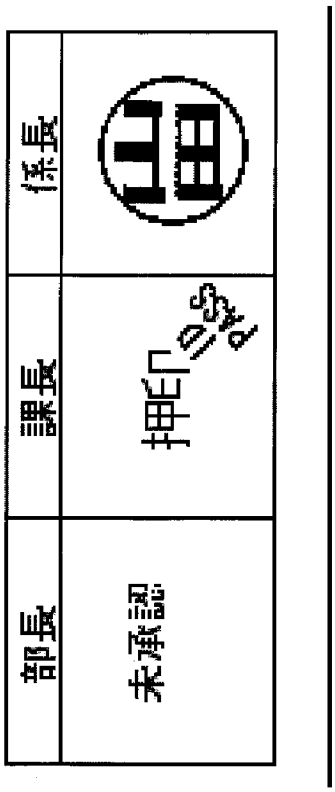

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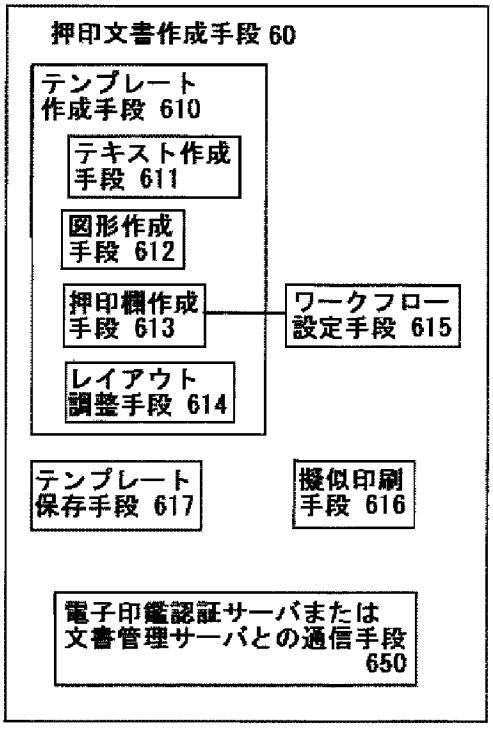
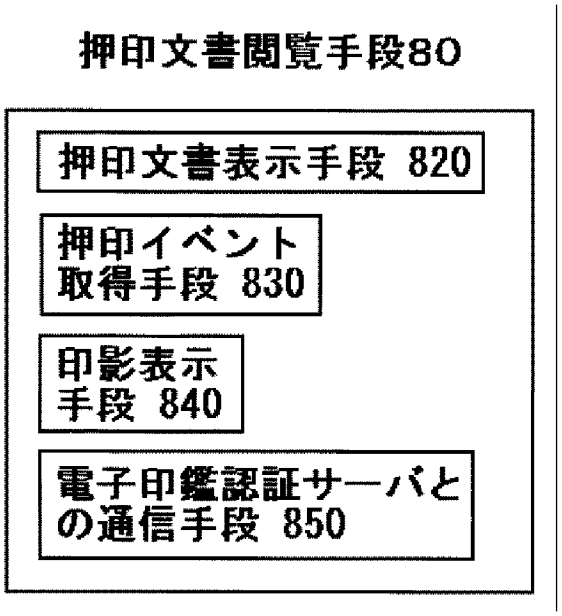


【図67】



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Ｆターム(参考) 5B109 NA04 ND01 NG02 SA14 TB13 VC03
5J104 AA07 KA01 KA04 MA01 NA05 NA38 PA14

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DESCRIPTION JP2010211830

[0001]

The present invention relates to a system and method for creating a seal document by effectively utilizing the existing electronic document, to manage it.

[0002]

The electronic seal authentication conventional systems, it was necessary to create a dedicated electronic document which incorporates a seal module.

Therefore, prepare for the configuration of up to take advantage of electronic seal is required, I could not effectively utilize the assets of an electronic document existing.

[0003]

Patent Document 1, data of an arbitrary level on the pattern of the hierarchy are displayed, and also can be displayed by patterning the hierarchical structure of the data area in the cross section of the any the compound document that is displayed on the screen of the display device devices and compound document editing method can be chosen as the editing operation target area is

disclosed.

Patent Document 2, there is provided a document processing system to circulate by using the user-side device provided for each user for each document file comprising a layer of at least one user-side equipment the circulation generating a layer of the new document file and receives and displays the document file of interest, and receives the support of the write, rewrite the layer that generated the document elements written, the document elements stored in the layer document processing system to design the attributes associated with the editing has been disclosed or browsing.

[0004]

8-161519 JP 2004-46414 JP

[0005]

The object of the present invention is to provide, and promote effective use of existing electronic document when creating an electronic seal document, setting the approval workflow, check the progress of the seal is and systems for the management and stamped document creation possible It is another object to provide a method.

[0006]

A seal document production system to capture electronic documents existing, creates an electronic stamp document stamp document preparation system of the present invention comprising them and create or edit a text or graphics, including the imprint frame seal documents templates and creating means for creating a template, and existing electronic document pseudo print means for outputting to a format that can capture to the pressing mark document preparation system printout of an electronic document existing that have been created by the document creating apparatus of existing, the existing electronic and a, and document merging means for merging with the template, the output of the existing electronic document output by the document pseudo printing unit, as its attributes, seal frame the template creating

means to create, use of multiple to be stamped I have the information of the order's approval on whether to seal proceedings in any order.

[0007]

In addition, In addition, the seal frame, with information about the approval route group that was with the group by more than one organization in accordance with the user to imprint a plurality of users as its attributes.

[0008]

A stamped document management system that captures electronic documents existing, create an electronic seal documents and managed by the document management server on a computer network it, stamped document management system of the present invention, an electronic seal that is managed document has coalesced with the electronic document and the existing template having an imprint frame, the pressing mark frame has as its attribute information about the authorization rank, is the document management server, seal frame as an attribute according to the information regarding the approval order to have, in which the user should be authorized to facilitate stamping procedure.

[0009]

The document management server has a stamp history information management unit for managing the stamp history information about who was stamped when in any document.

[0010]

Stamped document preparation method of the present invention, the sky and a stamped document preparation method in the stamped document preparation system that captures electronic documents existing, creating an electronic seal documents, then save them to name the template with information empty and sample image printing step of output by the pseudo printing means and template storage step, the sample image of an electronic document existing at the sky template storage step, the sample image of an electronic document of existing output

by the sample image output means Sora seal document creation step that combines the template stored, with reference to empty imprint document is combined with the air-seal document preparation step, with respect to the empty template, to create graphic elements, including stamping frame, template that was the complete templates and complete step to be saved, and the original document printing step of printing out a pseudo-read the original document, which wants to create a stamped document, the electronic document existing that is output at 該元 document printing step I have a seal and document creation step to be merged with.

[0011]

Not only identify the location of the seal simply stamp frame to create the template in the finished step has information regarding the approval order as the attribute.

[0012]

Stamped document management method of the present invention, there is provided a stamped document management method in the stamp document management systems that incorporate electronic documents existing, create an electronic seal documents and managed by the document management server on a computer network it, according to the information about the approval order possessed by the electronic seal documents, and imprint procedures promote steps to encourage imprint procedure to the user should seal the electronic seal documents, and based on that it has prompted the imprint procedure at the pressing mark proceedings promotion step Te, imprint history to be available upon request of the user, and stamped history information obtaining step of obtaining the information that the stamping procedure the user should seal the the imprint history information acquired by the pushing sign history information acquisition step I have an information providing step.

[0013]

Also, the seal document management method can if all users to be stamped has completed seal, further comprising a seal completion notification step of sending a notification to the authors that created the electronic seal document.

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In addition, there is provided a stamped document management method in the stamp document management systems that incorporate electronic documents existing, create an electronic seal documents and managed by the document management server on a computer network it, stamped document management method, the according to the information about the approval order with the electronic seal documents, and imprint procedures promote steps to encourage imprint procedure to the user should seal the electronic seal document, on the basis that it was prompted the imprint procedure at the pressing mark proceedings promotion step , and seal history information obtaining step of obtaining information that the seal procedures user should seal the, on the basis of the imprint history information acquired by the pushing marks history information acquisition step, and distributed already users to be stamped other can be assumed to have an electronic document stamp rewriting step of rewriting the electronic document stamp you.

In addition, there is provided a stamped document management method in the stamp document management systems that incorporate electronic documents existing, create an electronic seal documents and managed by the document management server on a computer network it, stamped document management method, the according to the information about the approval order with the electronic seal documents, and imprint procedures promote steps to encourage imprint procedure to the user should seal the electronic seal document, on the basis that it was prompted the imprint procedure at the pressing mark proceedings promotion step , and seal history information obtaining step of obtaining information that the seal procedures user should seal the, on the basis of the imprint history information acquired by the pushing marks history information acquisition step, as events imprint complete seal's workflow can be assumed to have the electronic seal document distribution step of distributing it as an attachment to e-mail the document to seal imprint's next based.

[0014]

The present invention, because they are composed of above, it is possible to create an electronic document stamp by the effective use of the existing electronic document.

Also, since stores and manages an electronic document stamp on the server, it is possible to

grasp the progress of the stamping procedure by accessing the server.

Update of the progress of the imprint stamp document at hand is possible by to achieve synchronization with the seal of the state management server side.

[0015]

It is a login screen when you log in to the electronic seal authentication system with administrator privileges.

It is a menu screen of the electronic seal authentication system.

It is a screen in the user master.

It is a screen imprint of the registration process.

Is a master screen for the application.

Is a diagram showing the basic protocol of the client computer and the electronic seal authentication server.

Is a diagram showing a hardware configuration of the electronic seal authentication system.

Is a diagram showing a hardware configuration of the electronic seal authentication server.

It is a view that has been described in detail the electronic seal 50.

EX1003, Page 567

is a diagram showing a flow when the client computer executes the login process with the electronic seal in cooperation with the electronic seal authentication server.

is a diagram showing a flow when the client computer executes the seal processing by the electronic seal in cooperation with the electronic seal authentication server.

Is a diagram showing processing manager that received the authentication server administrative rights logs.

Is a flow chart that the client PC, in cooperation with electronic seal authentication server, to run the imprint registration process.

It is a diagram showing how the client PC via the (Internet or Intranet) computer network, cooperating with the document management server and the electronic seal authentication server.

Is a functional block diagram that displays the three functions with the stamp document creation means.

Is a functional block diagram that displays the four functions possessed by the document management server.

Is a flow chart at the time of executing the imprint process in the client PC.

Is a diagram showing a state that connects a LAN or the Internet and from the client PC and server.

Is a login screen when creating a seal at the client computer document.

Is a diagram which shows a screen for the basic setting of the initialization document of the seal.

It is a view of an initial set of stamped document, showed the screen of the server settings.

It is a view showing how the article is attached to seal the document.

If the person who is supposed to seal to seal the document is three chief, section chief, director, and stamped document collated in electronic seal authentication server, the imprint authority to go to interact with the server when the three presses a seal, respectively and shows to be stored in the document management server rewrites the imprint history information.

Is a diagram showing an exchange of the electronic seal and the authentication server and the document management server when trying to seal stamping procedures have to be stamped by using the client computer.

Is a flowchart of a person who intends to seal using a client computer to attempt to make changes to the contents of the application.

Is a flow chart of when the imprint's imprinted just by using the stamp document browsing means.

And shows a stamp initialization document browsing means.

Description showing cases to create what is composed of three pages as a template for the initial setting of the template imprint document in stamping document creation means, using a common setup documents by specifying the repeat three subsequent is a diagram.

The copy slip if you want to create a billing invoice composed of three spelling invoice original invoice, a receipt composed document in only one page delivery destination, name of product, quantity, and amount of money has been inputted is a diagram for explaining a case you want to specify a three copy by selecting the.

Is a diagram describing the case of attaching a cover page the document on which it is based, such as blueprints.

It is the initial screen that is displayed when you are trying to create a template to start the stamping document creation means 60.

Is the save screen for saving alone is not combined with the document to those of the original template.

Is a screen showing the operation of outputting the pseudo printer has made a virtual rather than a printer real as a printer, select the Print menu in the program that created the document that is the source in making the electronic seal document.

It is a setting screen of the properties of the pseudo-printer.

It is a selection screen of the template.

It is the password input screen.

It is a conservative screen of bwb file.

It is the open screen in the stamp document creation means the imprint document named "billing invoice sample image".

It is a screen imprint document creation means to open a template file.

It is a screen to open the file bwb made just further opened the template file called "billing invoice sample image".

It is a view that you want to view and superimposed open the file bwb further state that opened the template file.

Is a diagram showing how to edit the template using the text creating means and means for making a pattern described above with reference to the sample image.

Is a diagram showing how to create a seal frame.

It is a display screen of the file information in the template file.

It is a preview display screen template file completed.

And a diagram illustrating a menu seal with the stamp document creation means.

The setting screen is a duplicate of frame.

It is a setting screen of the tab seal.

Is a partial view for the specification of workflow in the seal of the seal tab dialog box.

It is a figure showing the approval order and approval route group if you do not specify a seal order well from anyone imprint multiple people even stamped.

It is a figure showing the approval order and approval route group if you want to specify a seal stamped in order among multiple.

And shows a seal ring when providing authorization multiple routes.

It is a figure showing the order approval and approval route group in the case of providing an approval multiple routes.

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Is a diagram showing expected that the change in the magnitude Once created the seal frame.

It is a screen of the adjustment of the layout.

It is a property screen for changing the shape attributes.

It is a screen created by a spreadsheet document as the source to create a new document stamping.

It is a print menu of a spreadsheet.

It is a property of the pseudo-screen printer.

Is a template selection screen.

Is the password entry screen.

It is a conservative screen of the electronic seal document.

And shows a stamp field of the electronic seal the finished document.

is a view showing the icon of the file bwb.

and shows a stamp field after the chief has a seal procedures.

Is a functional block diagram of the stamp document creation means 60.

Is a functional block diagram showing a configuration of a document display stamp means 820.

[0016]

The following will explain the best mode for with reference to the drawings, the invention may be practiced.

Figure 7 is a diagram showing a hardware configuration of the authentication system of the present invention.

Client-side configuration consists of a personal computer 30 Metropolitan and 40 tablet and electronic seal 50.

The electronic seal 50, and the coordinate pointing device and IC chip is built.

The chip IC, ID number of the electronic seal 50 is recorded.

This is a device for reading the position of the electronic seal 50, and is connected to the personal computer 30 via the USB cable, to a friend to notify the PC 30 the ID number and position of the electronic seal 50 events imprint tablet 40 (Tablet 40 It is one that is able to notify information) electronic seal 50 that is pressed above.

Was described in detail the electronic seal 50 is shown in FIG 9.

Circuitry required to interact with the tablet 40 is included in the interior of the electronic seal 50, can be identified ID number is incorporated an electronic seal of the individual internal IC chip 51 in particular.

The same thing does not exist is a unique data to each seal This ID number.

I used seal 52 button to click to imprint upon.

Stamping surface 53 is intended to be possible to imprint on paper the real name has been engraved.

It is possible to select whether to seal it with the ink pad, or those of the built-in ink type.

Via the Internet 90 events stamping and ID number of the electronic seal 50 obtained by the computer 30, is sent to the electronic seal the authentication server 10.

Electronic seal authentication server 10 has the database unit 100, the server configuration management unit 170, and an electronic seal authentication unit 190 and the electronic seal registration management unit 180.

Figure 8 is a diagram showing a hardware configuration of the electronic seal the authentication server 10.

Database section 100 is omitted (not the user master 110, Excel input-output unit and the master application 120.

The trademark of Microsoft Corporation in the United States is "Excel".

I inclusive).

User master 110 is a part that registers the master information such as the one (if using) company name of the person you want to use this system, department, name, title, phone, e-mail address, expiration date, password.

Applications Master 120 is a portion for registration and information about the information flow and Approval stamp authority, about the circulation order.

Excel output unit is a portion that controls the input and output interface between the client computer.

[0017]

Server setting management unit 170 is a part that can only person who has the permission to access the server to configure access.

To set permissions authority level of the database and server setup by identifying the administrator hierarchically since you might be shared by multiple companies this electronic seal authentication server.

It is possible to perform login to the electronic seal the authentication server 10 is also used electronic seal.

Electronic seal registration management unit 180 is a part that you want to manage to register the imprint information and electronic seal ID number.

Electronic seal authentication unit 190 the authentication history collates whether they are consistent with the master information and electronic seal ID number registered in the server and the electronic seal ID number of electronic seal authentication server 10 has received, if the match The write to the server, and sends a registration seal image given permission to seal the client.

Client to obtain a permit imprint to write to a file that was stamped the seal impression received.

(Any one of, or both ID password or electronic seal) company code, user code, server number, company name, user name, authentication type, reception date, information including accepting time and authentication history here can also be included, such as MAC address or IP address of the client-side PC and if necessary the method comprising.

Communicating data between the client and the server can avoid the risk of tampering by performing a cryptographic process using the public key.

[0018]

I will describe the operation of the electronic seal authentication server when the company organization that next was introduced this system.

Be authenticated by the electronic seal stamped on the login screen system administrator of the company the user is logged in to the electronic seal authentication server first.

I want to register the user information to use it and ID number of the electronic seal of all the users of the company.

I will prepare a flexible disk and save the seal image data and the electronic seal to connect the tablet to the computer of the client.

To login to connect to the electronic seal authentication server with administrator privileges (Figure 1).

login is possible by the operation to press to seal the column electronic seal their own if the system administrator has already registered the electronic seal their own.

It will be used to login ID and password, if not yet registered.

Menu screen appears login is completed (Figure 2).

Now because the system administrator has to register the user information to select the button in the menu screen of Figure 2 the "master user" user master screen appears by clicking (Figure 3).

Company information, user code, user name, phone number company code, such as a company name, fax number, department name, job title, whether or not the supervisor, password e-mail address, user ID, user master, validity period, I want to set the information of the user of the presence or absence imprint ID, and registration, registration, and management.

The supervisor, it is possible for the user to say the presence of the company inspection authority, has this authority only to set the company viewing rights and supervisor privileges for other users here.

This item is not displayed if the user is not authorized to login.

To register a new electronic seal proceed on the screen of the imprint registration process by pressing the button of "electronic seal registration" from the screen of the user master (Figure 4).

[0019]

By registering after you enter the password for the registration imprint, imprint registration process is made.

The imprint is registered ID information of the ID chip is in the electronic seal is associated.

When you remove the imprint already registered, click on the Delete button imprint of Figure 4.

By selecting the button of the master application in the menu screen of FIG 2, the application master screen appears (Figure 5).

To select a company by clicking on the pull-down button in the field of company name at the top of the screen.

Thus, applications that are registered company that was selected is displayed.

It refers to the application, some that it pass as internal documents in the company seal application, contract management, quotation demo, internal operations, mail order system, such as a test system here.

Application phase, which is registered in the application that you selected is displayed in the space at the top right-hand corner.

The application phase, I say the title should imprint has the authority to approve chief, section chief, General Affairs accepted, such as general manager, the document here.

Users registered in the application phase of the selected is displayed in the field thereunder.

Will be displayed with a specific user name any human corresponding to the title of every single application phase is whether the user, such as a company name.

It is possible to determine the expiration date of a user of the application phase of the selected and displayed under the user name.

Query button and correction button is provided next to the end button in the lower right.

Changing the correction mode by pressing the correction button when it is necessary to correct the data.

It is the query mode by default.

The menu shown in Figure 2, Excel input buttons are provided, in addition to input using the function of the electronic seal authentication server application information and the master information of the user master computer other Excel (Microsoft in the United States can also be sent to other computers by Excel outputs the information entered by using the function of the electronic seal authentication server and vice versa, it is also possible to capture those filed by

the input R) of the company is.

[0020]

Figure 6 illustrates the basic protocol of the client computer and the electronic seal authentication server.

Client PC side to run the imprint process in the initialization process is obtained from the electronic seal authentication server information of the public key.

When seal the electronic seal, such as a tablet, which is connected via a USB cable to the client computer, is sent to the electronic seal the authentication server by encrypting the public key that has been previously acquired ID information included in the chip ID in the electronic seal inside the client computer.

The electronic seal authentication server received it, it is done by comparing the master application or user master electronic seal authentication process.

Depression event occurs on the client PC side, and sends it to the client side imprint information by acquiring the information in the electronic seal authentication server side.

Client to display the imprint that is stamped on the screen to obtain the information imprint.

It is exchanged with the electronic seal authentication client and server side also stamped history information.

The imprint history information is information for specifying who when and where it was stamped into which documents.

[0021]

Figure 10 illustrates a flow when the client PC 35 or 30 performs the login process with the electronic seal by the electronic seal the authentication server 10 in cooperation with.

Initial processing is performed first, to get the initial information from the electronic seal authentication server (electronic seal authentication server 10 is returned to the client PC and the public key company information at this time).

Depression event occurs someone when the user the imprint operation for login using a client computer, the client computer to get through the tablet chip ID of the electronic seal that was used for the imprint.

Is sent to the electronic seal authentication server 10 along with the auxiliary information and the function code by encrypting the ID chip of the electronic seal using the public key obtained in the initial process.

Electronic seal authentication server 10 determines the user whether they have permission to log on the basis of the function code (one that is encrypted with the public key) chip ID received.

It is desirable that the judgment of the validity of this (login privileges is to compare while applying the encryption.

This is to avoid the risk of a stolen ID number.

is returned to the client computer reception number, seal image information, and imprint history information) If the login process was successful.

On the client PC, to display the imprint on the login screen to get the stamp history information and imprint information.

[0022]

Figure 11 illustrates a flow when the client PC 35 or 30 performs a seal processing by the electronic seal by the electronic seal the authentication server 10 in cooperation with.

I judge accepted number whether it is set to 35 or 30 client PC first.

If it has been, and sends to the server the reception number.

Electronic seal authentication server 10 and passes it to the client PC side imprint history information and imprint based on the receipt number that you received.

Get the imprint history information and imprint from the server side, or 35 client PC 30 displays the imprint that was pressed already stamped imprint column document.

Since usually more than one stamp field, if any reception number has not yet been set within the seal section of the plurality, the initial process is performed as in FIG 10, to obtain the initial information from the electronic seal authentication server (e- seal authentication server 10 is returned to the client PC and the public key company information at this time).

Depression event occurs someone the user to the stamping operation using the client PC, the client PC is acquired through the tablet chip ID of the electronic seal, which is used for the seal.

Is sent to the electronic seal authentication server 10 along with the auxiliary information and the function code by encrypting the ID chip of the electronic seal using the public key obtained in the initial process.

Electronic seal authentication server 10 determines the user whether they have permission to log on the basis of the function code (one that is encrypted with the public key) chip ID received.

is returned to the client computer reception number, seal image information, and imprint history information when the login process was successful.

On the client PC, to display the imprint to imprint document to get the stamp history information and imprint information.

[0023]

In Figure 12, it illustrates the process of the administrator that received the authentication server administrative rights logs.

Flowchart login and general users as shown in Figure 10 is almost the same, but the content and function of the code, and the difference of the supervisor function.

[0024]

13 is a flow of 35 or 30 client PCs, by electronic seal authentication server 10 cooperation, to run the imprint registration process.

This is similar to the flow shown in Fig 11, except that the process performed in the electronic seal 10 authentication server is registered in the imprint process and the seal ID is different.

[0025]

Figure 14 is a diagram showing a state in which through the (intranet or Internet) computer network, or the client PC 35 30 20 cooperates with the document management server and the authentication server electronic seal 10.

In the interior of the 35 or 30 client PC, there is a stamp document creation means 60, stamp document creation means 60 includes a writer and editor.

Editor has the ability to create on the template stamp column.

Also has a pseudo printer stamp document creation means 60 as described below, (having a seal section) template it then output to the printer on a pseudo output of the word processor or spreadsheet documents general It is intended to make (having an extension bwb here) a single file, to create an electronic document stamp coalescing the functionality of the writer.

[0026]

To create an electronic stamp document to be able to seal the electronic seal, to the user, it is necessary to use a 35 or a client computer 30 which stamp document creation means 60 is installed, to browse the electronic seal document simply users only need to seal may be used for the stamp document viewing means 80 without a stamp document creation means 60.

Stamp document browsing means 80 can not modify the contents of the document.

This is what can be, or to display the imprint you can add a seal to seal history information field.

[0027]

Figure 15 is a functional block diagram that displays the three functions with the stamp document creation means 60.

Three functions default, editor, the writer is to be understood to be implemented by a computer program, respectively, and shows spatially convenience function to fulfill with the instrument in other computer CPU time to time.

[0028]

Figure 16 is a functional block diagram displaying the four functions possessed by the document management server 20 shown in Figure 14.

Document management database 210 is a portion to be managed in association with a variety of information stamped document.

Imprint status management means 220 is a part to manage far workflow in-house should be stamped on the seal document whether the proceeding.

E-mail distribution unit 230 is a portion having a function to send an e-mail with an attached document stamp people to be stamped following.

Communication means 240 and the electronic seal or stamp authentication server document creating means is a portion that has the capability to communicate with other computers through the Internet or an intranet.

[0029]

Figure 17 is a flow chart at the time of executing the seal processing at 35 or 30 client PCs.

Begins at step 1700, it is printed at step 1705.

The printing means to the screen by creating a document bwb described above.

Result of interaction with the electronic seal the authentication server 10 (not shown) in step 1710, the process proceeds to step 1715, which assumes the user login process is performed, accepted there login privileges.

In step 1715, if this user wants to change settings such as the application phase workflow and stamped document, changing the setting process (step 1720) Workflow Settings screen to get the application phase from the authentication server (step 1730).

If the seal documents has resulted from the so becomes the new document in the case of (YES at step 1740) and sends the information (step 1745), the document management server generates

a serial number, and obtains a document ID (data is written to step 1750), the bwb file (step 1760).

If it is determined not to be the new document at step 1740, data is written (step 1755), the file bwb transmit information to the document management server (step 1760).

When was the last or seal when a new document is a result by sending a bwb file in the document management server (step 1765) and ends (step 1775).

If it is not even in the final seal without the same in the new document process is completed once, but the processing from step 1700 is repeated by the imprint's next.

[0030]

Figure 18 is a diagram showing a state that connects a LAN or the Internet and from the client PC and server.

I have painted and 35 client PC 30 to the right Yes depict electronic seal authentication server 10 and document management server 20 to the left.

A server that manages the stamped document, nature, document management server 20 e-mail has a system management functions that need to get a stamp procedure that stamped document is approved by more than one person in addition to document management functions and a function for managing communication such.

Electronic seal authentication server 10 is a server that performs authentication of the electronic seal, authentication of the ID password, management of the master file, issue the document number, the management.

And are drawn separately two servers in this figure, the embodiment combines both functions in one server computer is also possible.

The client computer 30, a computer with a stamping means 60 documentation, stamping document is created using this function.

Client PC 35 is a computer and a computer having a stamping document browsing means 80, does not have the function of rewriting the stamp paper is used to perform the stamping procedure the user should accept the seal document using the electronic seal there.

HTTP protocol and the web service is used as the data transmit, it is exchanged with a communication protocol framework, soap etc. (SOAP) to the client computer side and the server side as shown in Figure 18.

[0031]

Figure 19 is a login screen for creating a seal in documents client computer 30.

It means that you begin to get the document creation permissions on that has been ascertained by such collation of the master file by querying the electronic seal authentication server that the person who created the seal documents, have the appropriate permissions.

Figure 20 shows a screen for the basic setting of the default document imprint.

The set as a basic set configuration selection of paper size, the presence or absence of the cover page, the validity period, document format, and password.

The validity period, and a numerical value that is set on the predicted whether with how long the stamping document to be approved by the end seal's, if Sugire its lifetime, and an attempt to seal to this document can not be stamped.

I can choose whether or copying slip usually slip in the document format.

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Usually slip, for example, there are multiple pieces of invoices, is used when there is a need to be approved together against it.

Copy voucher, used when title such as different colors and borders of slip contents are the same invoice, bill, such as receipts.

The password is used in order not to show the document stamp who do not know the password and a function to be set if necessary.

And to confirm by pressing the OK button the contents of the basic configuration Once you have decided.

[0032]

Figure 21 is one in which one of the initial set of documents stamped, showed the screen of the server settings.

Identification of the server computer to authenticate the electronic seal that issued the document number of the stamp paper has been imprinted by describing the URL of the electronic seal authentication server, the authentication of the ID password, a reference master file is made.

If the administrator has the authority to supervise across multiple companies to see, company name is selected by clicking on the pull-down button.

It is not possible to select only the company can also click on this button pull-down exchange imprint document since it is made by only one company, usually.

Kind of internal documents that have been used routinely in the house imprint application, invoices, approval documents, such as business plan can be selected by clicking on the pull-down button in the application name.

Identification of the server computer should be stored to the document seal is made by describing the URL of the document management server.

Numbering the document number is automatically by clicking the check button for automatic sequence number.

Also by clicking the check button synchronization imprint, facts stamped imprint by others is reflected instantly.

The synchronization of this imprint, I be made to rely on the article number.

The document management server, imprint information so gathered, when you open the document in each client PC, as the imprint history the same information as the document management server, to imprint the same as the document management server-side e-stamp documents with the help of document number to perform the process of writing the imprint to imprint electronic document on the client PC side to be.

Setting is established by clicking on the OK button in the screen of the server configuration in Figure 21.

[0033]

Figure 22 is a diagram showing how the article is attached to seal the document.

get the document number is made by the interaction with the electronic seal authentication server and 10 client PC 30 in the process of stamping the document is created, to which it is subjected to the appropriate location, such as the upper right corner of the stamped document.

Database is constructed to rely on this document number is also in the document management server 20, management of the document is made.

[0034]

If the person who is supposed to seal to seal the document is three chief, section chief, director, Figure 23, in electronic seal authentication server 10, the seal authority to go to interact with the server when the three presses a seal, respectively and shows to be stored in the document management server 20 rewrites the imprint stamp history information document matches.

[0035]

Figure 24 is a diagram showing an exchange of the electronic seal the authentication server 10 and the document management server 20 when trying to seal procedures seal's to be stamped by using a (stamp document viewing means 80) the client PC 35.

It is assumed that synchronization imprint is not selected in the initial setting of the document stamp here.

In that case, stamp document browsing means 80 to request a stamp information to the document management server 20.

This is to reflect the document stamp procedure others have to seal the document.

Document management server 20 is returned to the client PC 35 in CSV format accepted number of seal and seal ID are stamped imprint in documents you have stored there.

Client PC 35 to request the electronic seal authentication server 10 imprint information of the electronic seal to write a receipt corresponding to the imprint code document.

Electronic seal authentication server is passed to the client PC 35 imprint information to the corresponding client PC side writes the imprint to seal documents get it.

Resulting in ease of use equivalent to stamp paper documents imprint a result, it was stamped on

the screen of the client computer 35 is displayed from.

[0036]

Figure 25 is a flowchart of a person who intends to seal using a client computer 35 is going to make changes to the contents of the application.

I will send the document management server 20 (company code, application code, name seal, seal ID) what you try to change the settings for an application.

The document management server 20 writes the application file to the information.

[0037]

Figure 26 shows a flowchart for stamping individual has just seal with a stamp document browsing means 80.

If it was a document of the first time stamped document did not get the article number still, to request a document number for the document management server 20.

Create a new record to seal document database, document management server 20, return the article number to stamp document browsing means.

Stamped document viewing means 80 to register the article number to seal documents to get the document number.

Document browsing means 80 is transmitted to the document management server information that is stamped, the document management server 20 is written in the record of the document information database seal if the document is imprinted is not the first document.

[0038]

Figure 27 is a screen showing the initial setting of the stamp document browsing means in the same manner as Figure 20, I shows an example configuration of the application code and company code is also made possible in this example.

[0039]

Create what is composed of three pages as a template for the initial setting of the template imprint document in stamping document creation means 60, Figure 28, uses a set of common documents by specifying a repeat three subsequent is an explanatory view showing the case.

Stamped document creation means 60 has the ability to create a template that contains the field, such as stamp borders and using it has a graphic means creating text and create means to be described later.

The second piece (This estimate quote the actual 5th four eyes and three eyes in the description written on the cover is the first piece and a quote here documents from which shown in the upper left of Figure 28 such as stamp column borders and are not included in the book.

Is).

And this document was probably created in the spreadsheet or word processing software in general, is at hand also the electronic file.

Stamp document creation means 60, is to create an electronic template over three pages as shown in the bottom left of Figure 28.

Stamp field is provided on the template of the first sheet, stamp field is also provided in the template of the third sheet, if necessary.

By selecting the print menu after having launched the program that was used to create it documents underlying, and destination pseudo printing means having seals are document creation means 60 rather than the printer real as a printer it is possible to save as (stamped document) one file and coalescing with the document as the original template created here.

An electronic file of the extension bwb, stamping documents thus stored is intended to be rewritten information on the seal only (imprint history information) can not be rewritten content of the document here.

If you have specified the three subsequent repetition in a common setup for slip now, page 3 onward the design of the third and subsequent pages of the template in the electronic imprint document that has been created as shown on the right-hand side of Figure 28 It is created by applying.

[0040]

Figure 29, to create a billing invoice composed of three spelling invoice original invoice, a receipt document composed in only one page delivery destination, name of product, quantity, and amount of money has been inputted is a diagram for explaining a case of specifying the three copy by selecting the document when copying.

In this case, is comprised of three pages, the color of the border and the title is different only to be one which follow substantially the same design, each of the template.

Electronic seal documents that are created when you apply a template to the original document consisting of one page in this setting is made as a document that has been read delivery destination, name of product, quantity, amount of money to each of the billing invoice of three spelling.

[0041]

Figure 30 is a diagram illustrating a case of attaching a cover page the document on which it is based, such as blueprints.

Documents underlying are only blueprints, but the right side of Figure 30 by specifying "with cover page" template is composed of one page template and cover page, "normal slip", and "repeat 1 and subsequent sheets" electronic seal document such as that shown in is created.

[0042]

Figure 31 is an initial screen that is displayed when you are trying to create a template to start the stamping document creation means 60.

And means for setting a workflow in response thereto and means for creating a stamp field press seal addition to functions for creating a normal drawing and text editing and graphic creation, as shown in Figure 31 is included .

Is displayed in a white state still something like template is not made, as shown in Figure 31 When you are creating a template from scratch, but it creates the screen shown in Figure 31 when opening a file template established templates that are already displayed.

[0043]

Figure 32 is a screen saving when saving alone is not combined with the document to those of the original template.

It shows a case that is saved with the name billing invoice in a folder named templates here, the extension has become a mgt.

Template saved in this way are versatile that could be used in different departments Internally.

Also, those that might be used on a long-term.

[0044]

Pseudo printer made in virtual rather than a printer real as the printer to select the print menu in the program that created the (spreadsheet or word processing document), a document that is the source in making an electronic stamp document 33 is (here So is a screen showing the operation to be output to the B2winB Driver / C).

It has become a print output screen of spreadsheet software in this figure in particular.

It becomes possible to capture electronic stamp document creation means in a form that is independent of the program that created it print image of the document to be based by this operation.

Figure 34, is selected to be output next to A4 size here is a setting screen of this property pseudo printer.

Figure 35 is displayed if you press the OK button in the Print screen further back to the print screen by pressing the OK button here.

Figure 35 is a template selection screen.

Template stored in the template folder described above can be selected, "billing invoice" are selectable now.

If you click the Select button to select it, the screen in Figure 36 is displayed.

Figure 36, this screen is displayed on the case where the selected template now is the password input screen requires a password.

Whereby the file of the electronic seal documents that the extension bwb coalescence of the template and the original document has been made on the computer by pressing the OK button

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to enter the correct password is created.

Figure 37 is a screen saving bwb file that can be in this way.

In Figure 37, the file name is in the billing invoice sample image.

[0045]

Stamp document creation means 60 is one having a stamp field creating means and text creating means and drawing generation means as described above is not only capable of (extension mgt) to be loaded for the purpose of editing the template files, can also be (extension bwb) to be loaded for the purpose of editing the file of stamping documents.

It is also saved as a template to the editing results can be saved as a document stamp.

In the case where it is saved as a template and stored independently as a template is separate from the original document that was created by the word processor or spreadsheet software.

If you are creating a template from scratch at all, as it was the "billing invoice sample image" to indicate that this is the work in progress in Figure 37 because require trial and error to determine the layout, etc. there.

[0046]

In Figure 38, it is the open screen in the stamped document creation means 60 stamped document named "billing invoice sample Image" (bwb file).

Here, it is also ruled state stamp column also not to be a blank template while the contents of the template is not yet available.

Therefore document image that was created in spreadsheet or word processing software is displayed as it is.

However, since it only is displayed as an image regardless of the program that created the original document, editing the details thereof can not.

[0047]

Open to complete by editing the template file named "Billing invoice" Now it temporarily closed the file bwb of Figure 38.

Figure 39 is a screen imprint document creation means 60 to open a template file.

Figure 40 is a screen to open the file bwb made just further opened the template file called "billing invoice sample image".

Can be superimposed and displayed by opening a further bwb file open, file template to stamp the document creating means 60 (Figure 41).

Creating a template with the appropriate layout to the original document that has been made in a spreadsheet or word processor This is made possible.

[0048]

Figure 42 is a diagram showing how to edit the template using the text creating means and means for making a pattern described above with reference to the sample image.

Figure 43 is a diagram showing how to create a seal frame.

Seal frame 3 director, manager, the chief are created here.

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Adjustment of the overall design can be achieved by using, for example, scaling function and layout function.

First page of the template is complete, but also such as the creation of a cover page and the second page if necessary.

Figure 44 is a file information in the template file.

Creation date or file name, modified date is entered automatically.

It is possible to put such as anything that describes and identifies the information that template in the comments section and title, if necessary for the convenience of management.

Figure 45 is a preview display screen template file completed.

You can also print if necessary by checking voila.

To save the template which was completed if there is no problem by reviewing the ready.

The only stored template is separated from the sample image and by executing the stored template without having to worry about the particular sample image at this time.

[0049]

Figure 46 is a diagram illustrating a menu with seal stamp of document creation means 60.

It is connected to 3 is provided by a couple lined 5 is usually made the seal frame.

By So menu triplicate quadruplicate, and 5 stations are ready to drag to the lower right of the space should be stamped drop the mouse cursor once in the upper left corner of the space should be stamped, for example, by selecting a menu of triplicate imprint frame of three will be created automatically.

Word "seal" is displayed in the center of the stamp frame, respectively.

Display of character that this imprint is meant to seal who should seal its position.

Readjustment is also possible on made once.

[0050]

Setting screen imprint frame Figure 47 is a (seal dialog box).

Seal frame is intended not only to seal the seal simply, it also has the information (the order of the imprint or circulars) and workflow (imprint date and time information, such as about the place) stamp history information in the present invention.

Seal dialog box is displayed by double-clicking the imprint frame or select the property on which you have selected a seal frame.

Specify font of the characters in the imprint's name, the color of the line of stamping frame, the line type of imprint stamp frame for the entire frame to be created in the "whole tab".

Seal tab is prepared the same number of stamp frames, since the triplicate here, tab seal 1, seal 2, three seals 3 are prepared.

Figure 48 is a set of screen seal tab.

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It is a set of caption that displays imprint's name, to stamp column.

The caption of the seal area, and a character to be displayed in the seal frame, it displays a "seal" for example, when the seal user can seal workflow on the imprint's order before the approval route is still here can be set in the seal tab setting screen the string to display its good to be displayed as "unauthorized" if it can not seal to the seal box because it does not seal.

Therefore, the "Please press the mark" in part are presented in Figure 48 of the "imprint", it is displayed on the street to seal frame of the electronic seal document it is assumed that the "not be pressed yet," in the place of "unapproved" continually cause the.

I can do with screen settings are also workflow.

To set the route A, and the route B, but to be described later with reference to another drawing for it.

[0051]

Figure 49 is a partial view of the specification of the workflow in the seal of the seal tab dialog box.

Consists of two box to enter a number with the column to select the alphabet from A to Z by the pull-down button, as shown in Figure 49.

Designation of the alphabet is a specification of a group of approval route, split A group, B group, C, etc. group due to differences in internal departments.

I want to specify a numeric value starting from zero approval order of approval route group within the same specified numeric.

In the same approval route group, approval is carried out in the order specified in the approval order.

People of rank later to be stamped can not be stamped people before approval order.

If the approval route group there is more than one, approved those route groups to operate in parallel.

That is, when the group of ABC3 exists, approval is carried out separately in each of the approval route.

[0052]

Figure 50 is a diagram showing the approval order and approval route group if you do not specify a seal order well from anyone imprint multiple people even stamped.

Approval route group has all zeros and approval ranking belongs to A all here.

Letters all stamped even five are displayed on the seal frame in response to it.

Caption for the imprint Allowed is because you specify the character display of the "seal".

Figure 51 is a diagram showing the approval order and approval route group if you want to specify a seal stamped in order among multiple.

Director 2, section chief 1, approval order has become a 0 is the chief Because you specify the order in the order stamped chief, section chief, director.

Manager can not be stamped chief unless the seal, director can not be stamped manager if it does not seal.

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Only imprint frame of the chief has become a "seal" in the state in which no one has stamped still the characters that appear on the stamp frame, it is displayed as "unapproved" in the frame of the other.

Approval route groups have the same A group all.

The following describes the case of providing the approval multiple routes with reference to Figure 53 and Figure 52.

There are two Division 1 and Division in the department of business, I assume that are sales manager, 1 Division Chief, Division 2 section chief, chief of Division 1, Division 2 chief, Division 1 person, 2 Division personnel.

In the B Group A Group, the approval route group of Division 2 approval route group of Division 1, as shown in Figure 53 if you want to do the approval in parallel in Division 2 and Division 1, 0 personnel approval order, 1, 2, and 3, headed by the chief manager, approval route group director as A convenience.

As a result, the Division 1 sales, approval is carried out in the order of the person in charge, chief, section chief in parallel at the same time each of the two Division business, approval of the sales manager is carried out after the manager Division 1, of Division 2 approved both.

Is displayed as "seal" only two Division personnel and 1 Division personnel in the seal frame, it is displayed as "unauthorized" in the seal frame and the other in the early stages.

[0053]

Figure 54 is a diagram showing expected that changes in the magnitude Once created the seal frame.

(Small square) handle that can be gripped by the mouse in the middle of the sides and four corners of its periphery is displayed while selecting the seal frame click with the mouse.

Size adjustments are possible by dragging it.

[0054]

Figure 55 is a screen of the adjustment of the layout.

It is possible to select by clicking on text or graphics, stamped frame you wish to adjust the out of shape that you created, and change the subject.

If you want to change the attributes rather than appearance changes such as color and pitch, the character is also possible by selecting the Properties.

Figure 56 is a property screen for changing the shape attributes.

By saving by pressing the Apply button after you enter all the changes, the template is completed.

Save the template folder with the appropriate name template finished.

[0055]

Figure 57 shows a screen created by a spreadsheet document as the source to create a new document stamping.

I choose the print menu in the spreadsheet software on a document as an original is complete.

Figure 58 is a print menu of a spreadsheet.

It is executed by clicking the pull-down button to select the printer, selecting (printer driver hypothetical prepared electronic document creation device stamp) pseudo printer previously installed.

Properties screen of the pseudo-printer is displayed when you click the Properties button next to the printer selection box (Figure 59).

I will be the size of the paper, the setting of either vertical or horizontal.

Setting of the property is complete, press the OK button to return to the print menu, where you click the OK template selection screen appears (Figure 60).

I click the selection button to select the required form from the template stored in the template folder because it is displayed in the column of document names.

The process of merging the documents and templates of the original is made password input screen shown in Figure 61 appears, click the OK button to enter the correct password, if a password has been set in the template you chose.

to name and save the electronic seal documents in this way it was possible (Figure 62).

The file name is automatically generated by those already Date added, the time after the template name.

It is possible to change the file name if necessary.

Extension of this file has become a bwb.

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[0056]

Figure 63 shows the display of the electronic seal stamp column document the finished of (bwb file).

That since it is set that can not be stamped manager, director imprint chief is not in this example, the field manager and director is shown as "not approved", the column of the chief of the seal is expected Display "ID" of the "PASS" and the letter "seal" has been made to show.

It is displayed in the icon as shown in Figure 64 Closing this bwb file.

After the chief has the imprint procedure, stamp column is displayed as shown in Figure 65.

Imprint is displayed on the stamp field of the chief, display "ID" of the "PASS" and the letter "seal" is made in the column of the manager.

Display is the "unapproved" director can not be stamped imprint of section chief to be made.

[0057]

The foregoing has been described step-by-step using the actual stamping document creating means 60, and will be described below with reference to the functional block diagram of the electronic document creation device stamp 60.

Figure 66 is a functional block diagram of a stamping document creation means 60.

Stamped document creation means 60 includes a communication means 650, the workflow setting means 615 template creation means 610, template storage means 617, pseudo printing means 616, with the document management server or electronic seal authentication server.

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And means for creating a seal frame and title and borders, template creation means 610 has text creating means 611, 612 graphic creation means, stamp field creation means 613, such as the layout adjustment means 614.

Text creating means 611 is a means of input text, such as the title of the document, to edit.

It is one that has a drawing function polygon, circle, ellipse, such as straight line, such as creating borders also possible graphic creation means 612.

Stamp field creating means 613, the properties of the imprint frame to not only create a seal frame as a figure simply set approval routing, and seal sequence in cooperation with the workflow setting unit 615, and manages the information I also create the information.

Workflow setting means 615, workflow by reference (user master, application master) information server side through the communication unit 650 with the document management server or electronic seal authentication server as needed when setting up the seal and order stamp authority I want to generate information on.

Layout adjustment means 614 is a means for adjusting the layout of the graphic text, graphics, and stamped frame.

[0058]

Template storage means 617 is a means to be saved as an electronic file of independent detached from the original document (one that has a border, and stamped frame) template that you created in stamp document creation means 60.

The template is stored as (tmg file extension) tmg file here, as described above.

Stamping a document is created by overlapping the template on the electronic data created by word processor or spreadsheet software, is stored as (file bwb extension) bwb file here.

Plays an important role in the processing of the superposition is a pseudo-printing means 616.

Pseudo printing means 616 is a program that is installed on your computer as a printer driver.

Is a virtual printer, it is not a printer to be printed on paper to reality.

This stamp document creation means 60 is activated to enter the print menu in the state read the necessary documents by invoking the word-processing software or spreadsheet software, running the printing Select this pseudo printing means 616 as a printer, select the template I encourage.

So stamp document creation means 60 to the process of coalescence and documents and templates of the original imprint document creator to select a template.

And the document is saved through the communication means 650 with the document management server or electronic seal authentication server.

[0059]

seal documents thus saved, has information on the workflow as a property of the stamp frame, the document management server 20 to the stamp by means such as attach a file to an e-mail to the user to be imprinted according to the workflow it is a process to encourage.

After that, the stamping procedure may proceed with the document management server 20 cooperation of the electronic seal authentication server 10 and the client-side computer, as described above.

[0060]

Figure 67 is a functional block diagram showing a configuration of a document display stamp

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means 820.

There is no need to install the seal document creation means 60 to the client computer a person without creating a seal documents themselves out of the imprint's, only to seal procedures used.

Stamped document viewing means 80 is a means for processing the imprint proceedings to browse the document need be installed.

And a communication means 850 depression event acquisition means 830 stamp document viewing means 80 and stamped document display means 820, the seal image display means 840, and the electronic seal authentication server.

Stamped document display means 820 is a means for displaying a document that requires a seal.

Depression event acquisition means 830 is a means for acquiring the press events for the electronic seal on the tablet which is connected to the client PC 35.

Imprint display means 840 is a means for obtaining a seal print information possessed by the electronic seal authentication server 10, to display the imprint stamp on a document on the client computer side based on it.

Communication means 850 of the electronic seal authentication server is a means to run in between the client-side and server-computer exchange of imprint information and imprint history information or interact with encrypted using the public key an electronic seal ID.

[0061]

The seal procedure mentioned above, seal who was assumed to be a choice between whether or not to approve it by viewing stamped documents, but the tablet is connected to the client computer 35, the hand from the tablet Since also possible to enter the line, examples and workflow that approval on you have added a handwritten comment is also possible.

Be synchronous display also for additional information on this handwritten comment is more preferable.

In other words, what is modified when you open the electronic seal document information of the handwritten comments added is transmitted to other users of the same e-stamped document has been circulated one of the imprint's added a handwritten comment display is.

[0062]

Also, it is assumed to be imprinted only in the seal frame authors created a seal procedure described above, but other embodiments which will be used as a correct sign as many times stamped in a free place of stamping frame than I also contemplated.

To the synchronous display similarly for the correct mark is desired.

That is, the information about it you press the correct mark is also transmitted to the imprint's other through the document management server.

[0063]

Upon receiving the authentication imprinted with electronic seal according to the present invention seal application, it is not only recorded in the stamp fields stamping action is created on the client side as the authentication history is saved also in the electronic seal authentication server , I can clearly document the seal who what time whether imprinted.

It is possible to clarify the responsibility of the imprint stamp to stamp's behavior because it can store a history clearly imprinted.

Electronic seal so you can notice immediately If I lost, investigation of whether it has been exploited by examining the authentication history immediately even if it is stamped in the loss during can be quickly.

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It can create private seal, bank marks, such as official seal, similar to the paper document with ease similar to that of everyday electronic seal for use in the present invention, because those which can be produced simply by embedding an IC chip in a seal that is routinely used I could distinguish such.

The effect of management by more than a paper document can be expected in terms of clarification of imprint responsibility.

Realization of a complete paperless becomes possible.

[0064]

10 electronic seal authentication server

20 document management server

30, 35 PC

40 tablet

50 electronic seal

51 Built-in IC chip

52 stamped button

53 seal surface

60 stamp document creation means

80 stamp document browsing means

90 Internet

100 database section

110 user master

120 applications master

170 server setting management unit

180 electronic seal registration management unit

190 electronic seal authentication unit

210 document management database

220 stamp status management means

230 e-mail delivery means

Means of communication with the electronic seal or authentication server 240 stamp document creation means

610 template creation means

611 text creating means

612 graphic creation means

613 stamp field creating means

614 layout adjustment means

615 workflow setting means

616 pseudo printing means

617 template storage means

820 stamped document display means

830 depression event acquisition means

840 imprint display means

Means of communication with 850 electronic seal authentication server

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CLAIMS JP2010211830

[0001]

Existing it is created by the existing document creating device and an existing document creating apparatus comprising an application program that created the existing document and the electronic seal, and a tablet for reading the electronic seal, and a plurality of client computers to which the tablet is connected seal created by the seal document creation means and a client computer having a stamp document creation means for creating a seal document incorporating the existing document and electronic file of the document, and a plurality of client computers to which the tablet is connected a client computer having a stamped document browsing means the person to approve the document is used, and the electronic seal authentication server that is connected via a computer network to the client computer of the both and said, spruce of imprint in the electronic seal authentication server A seal documentation management system and a document management server connected to the computer network in order to manage the imprint document to authenticate, to create and manage a document stamp,

The electronic seal stamp,

A circuit that interacts with the tablet,

Built-in IC chip built into discernable ID number the electronic seal of the individual,

And seal button that you click to imprint upon,

Be stamped on the paper of the reality and possible seal surface

And a,

The tablet,

Apparatus for notifying the client computer click position of the electronic seal, said ID, and the imprint button

And a,

The stamp document creation means,

Login and means to get the stamp document creation permissions by querying the electronic seal authentication server,

After obtaining the seal document creation permissions at the log-in means, the basic setting for the presence or absence, the validity period, the document format password of the selected cover page of the paper size, and adopted specific, company name, application name, automatic server computer the initial setting means for executing the server settings for the synchronization of Van imprint,

The approval routing stamp order graphic creation means to draw text creating means for inputting and editing text in the title item name of the document, the shape that contains the polygon, circle, ellipse, straight line, as well as create a seal frame as a figure and a stamp field creating means for creating even the property information of the seal frame that manages the information set, the layout adjustment means for adjusting the layout of text, figures, stamped frame, it said, a template consisting of a title border-stamped frame a template creating means to create on top that has been displayed to the existing electronic document by an existing document creating device,

Workflow setting means for setting the property information of the frame seal in cooperation with the stamp field producing means generates information about the workflow using the information in the electronic seal authentication server, a document management server,

and template storage means for storing as an electronic file of independence was separate from the existing electronic document based on a template that includes a border-stamped frame, text extraction frame the template creation means created,

It is installed as a virtual printer to realize the superposition of the existing document spreadsheet software word processor software templates and the template creation means is created, and print from the print menu of the existing electronic document in the existing document creating apparatus a pseudo printing means that can be selected for overlay template file that is specified as above, stored in the template storage means, and outputs a document file stamp,

And means of communication with the electronic seal authentication server the document management server

And a,

Among the client computer, the client computer that the person who approved the imprint document is used,

Login and means for obtaining a permit imprint document browsing Contact the electronic seal the authentication server,

And stamped document display means for displaying a document that requires a seal,

And depression event acquisition means for acquiring an event to click on the button imprint of the electronic seal by the tablet on which is connected to the client computer,

a seal image display means for acquiring the information that the imprint electronic seal authentication server has to display the imprint stamp on a document of the client computer on the basis thereof,

And means of communication with electronic seal authentication server to interact with encrypted using the public key and the electronic seal ID, and exchanged between the electronic seal authentication server and the client computer the imprint history information and imprint information

Has a stamp document viewing means comprising,

The electronic seal authentication server,

Among those who use this system, and the user master to create the master information, including company name, department, name, title, telephone, e-mail address, expiration date, password belonging to your organization, information and organizations related to stamp authority and database unit and a master application to register the information about the information and circulation on the order workflow is a stream that circulated-stamped in accordance with the procedure with a predetermined internal,

Server and setting management unit is a part that can only person who has the authority to access the server is set to access,

And electronic seal registration management unit that manages Sign up and imprint information and the electronic seal ID number,

Matches whether they match with the master information and electronic seal ID number registered in the server and the electronic seal ID number received from the client computer, the company code, user code, server number, company If they match The electronic seal and authentication unit configured to transmit the registration imprint given a seal write permissions to the server, to the client computer authentication history is information including the name, user name and authentication type and reception date-time receptionist

And a,

The document management server,

Document management and database to be managed in association with a variety of information the imprint document,

And imprint status management means to manage far workflow that should be stamped on the seal document whether the proceeding,

And e-mail delivery means to send an e-mail with an attached seal the document to the person designated imprint the next,

A communication means for communicating with other computers via the Internet or Intranet

And a,

At the stamp document browsing means, seal's and stamped, is sent to the document management server the imprint document, the document management server can be registered in the document management database the stamped document

Stamped document preparation management system characterized.

[0002]

A seal documentation management system as set forth in claim 1,

It is installed as a virtual printer to realize the superposition of the existing document spreadsheet software word processor software templates and the template creation means is created, and print from the print menu of the existing electronic document in the existing

document creating apparatus Pseudo printing means can be selected as a target overlay the template file that is specified as above, stored in the template storage means, and outputs a document file stamp,

By an output of the document stamp file, the output of the template files may either by selecting the type of file,

The template generation means, that the pseudo-printing means also serves as

Stamped document preparation management system characterized.

[0003]

A seal documentation management system as set forth in any one of claims 1 or 2,

The edited by reading any of the stamped document file and the template file, the stamped document creation means the output target is also a form of one of the stamped document file and the template file is the result of editing

Stamped document preparation management system, which is characterized by.

[0004]

A seal documentation management system as set forth in claim 1,

Seal documentation management system characterized by storing in the document management server by interacting with the server and the client computer the imprint history information, and stored as a seal frame property information of the stamp paper.

[0005]

A seal documentation management system as set forth in claim 1,

After authentication of login privileges, if you want a change of workflow application phase approver to the imprint process, get the application phase from said electronic seal authentication server, the stamp document browsing means, to run the workflow setting process If the stamped documents new is created, stamped documentation management system characterized in that it obtains a document ID by the information transmitted to the document management server, and performs registration of the stamp paper.

[0006]

A seal documentation management system as set forth in claim 1,

After authentication of login privileges, approver When you run a stamping process, for each execution of the stamping process of one, send the information to the document management server, the stamp document browsing means, seal the document management server seal documentation management system characterized by updating the document file.

[0007]

A seal documentation management system as set forth in claim 1,

Seal documentation management system being characterized in that the expiration date of expiration of the user application phase, the stamp paper is provided, after login date is treated as an authentication failure.

[0008]

A circuit that interacts with the tablet, and the built-in IC chip built into discernable ID number the electronic seal of the individual, and seal button that you click to stamp the time, to be

stamped on the paper of the reality and possible seal surface and electronic seal having,

And tablet with a device to notify the client computer read the click position of the electronic seal, the ID, and the imprint button,

A plurality of client computers to which the tablet is connected,

And existing document creating apparatus consisting of the application program that created the existing document,

And electronic file of the existing document that was created by the existing document creating apparatus,

In order to create a seal documents by incorporating the existing document,

Login and means to get the stamp document creation permissions by querying the electronic seal authentication server,

After obtaining the seal document creation permissions at the log-in means, the basic setting for the presence or absence, the validity period, the document format password of the selected cover page of the paper size, and adopted specific, company name, application name, automatic server computer the initial setting means for executing the server settings for the synchronization of Van imprint,

The approval routing stamp order graphic creation means to draw text creating means for inputting and editing text in the title item name of the document, the shape that contains the polygon, circle, ellipse, straight line, as well as create a seal frame as a figure and a stamp field creating means for creating even the property information of the seal frame that manages the information set, the layout adjustment means for adjusting the layout of text, figures, stamped frame, it said, a template consisting of a title border-stamped frame a template creating means to create on top that has been displayed to the existing electronic document by an existing document creating device,

Workflow setting means for setting the property information of the frame seal in cooperation with the stamp field producing means generates information about the workflow using the information in the electronic seal authentication server, a document management server,

and template storage means for storing as an electronic file of independence was separate from the existing electronic document based on a template that includes a border-stamped frame, text extraction frame the template creation means created,

It is installed as a virtual printer to realize the superposition of the existing document spreadsheet software word processor software templates and the template creation means is created, and print from the print menu of the existing electronic document in the existing document creating apparatus a pseudo printing means that can be selected for overlay template file that is specified as above, stored in the template storage means, and outputs a document file stamp,

And means of communication with the electronic seal authentication server the document management server

A stamp document creation means comprising

A client computer having a,

A plurality of client computers to which the tablet is connected,

Login and means for obtaining a permit imprint document browsing Contact the electronic seal the authentication server,

And stamped document display means for displaying a document that requires a seal,

And depression event acquisition means for acquiring an event to click on the button imprint of the electronic seal by the tablet on which is connected to the client computer,

a seal image display means for acquiring the information that the imprint electronic seal authentication server has to display the imprint stamp on a document of the client computer on the basis thereof,

And means of communication with electronic seal authentication server to interact with encrypted using the public key and the electronic seal ID, and exchanged between the electronic seal authentication server and the client computer the imprint history information and imprint information

Consists, stamp document browsing means the person to approve the seal documents that have been created by the stamp document creation means is used

A client computer having a,

Among those who use this system, and the user master to create the master information, including company name, department, name, title, telephone, e-mail address, expiration date, password belonging to your organization, information and organizations related to stamp authority and database unit and a master application to register the information about the information and circulation on the order workflow is a stream that circulated-stamped in accordance with the procedure with a predetermined internal,

Server and setting management unit is a part that can only person who has the authority to access the server is set to access,

And electronic seal registration management unit that manages Sign up and imprint information and the electronic seal ID number,

Matches whether they match with the master information and electronic seal ID number registered in the server and the electronic seal ID number received from the client computer, the company code, user code, server number, company If they match The electronic seal and authentication unit configured to transmit the registration imprint given a seal write permissions to the server, to the client computer authentication history is information including the name,

user name and authentication type and reception date-time receptionist

An electronic seal authentication server has been connected through a computer network to said client computer and said both,

Document management and database to be managed in association with a variety of information the imprint document,

And imprint status management means to manage far workflow that should be stamped on the seal document whether the proceeding,

And e-mail delivery means to send an e-mail with an attached seal the document to the person designated imprint the next,

A communication means for communicating with other computers via the Internet or Intranet

And document management server connected to the computer network in order to manage the document stamp having a authenticates spruce imprint by said electronic seal authentication server

A stamped document preparation management method in the stamp document preparation management system with,

At the stamp document browsing means, a depression event acquisition step of reading to be stamped on the document stamp seal person using the electronic seal,

And stamped document transmission step on the basis of the acquisition of depression event marked by the pressing step event acquisition, send to the document management server the stamped document,

And database registration step in which the document management server is registered in the

document management database imprint document sent by the pressing mark document transmission step

Stamped document preparation management method having the.

[0009]

A seal documentation management method as set forth in claim 8,

It is installed as a virtual printer to realize the superposition of the existing document spreadsheet software word processor software templates and the template creation means is created, and print from the print menu of the existing electronic document in the existing document creating apparatus Also the output of the stamp document file by the pseudo printing means can be selected as a target overlay the template file that is specified as above, stored in the template storage means, and outputs a seal document file, to select the type of file , by the fact that both can be the output of the template file, the template generation means, there is provided the pseudo printing means also functions,

template file and save the step of the pseudo printing means to save the template file to the template creation means created,

And existing electronic document output destination specification step of specifying the pseudo printing means as the print destination from the print menu of the existing electronic document in the existing document creating apparatus,

And template file selection step of selecting a template file that has been stored at the template file storage step as target superimposed on the existing electronic document to be printed in the existing electronic document output destination selection step,

And seal documentation step of creating a stamp document by outputting by superposing the existing electronic document specified by the existing electronic document output destination designation step as a template file that was selected in the template file selection step,

Seal documentation management method further comprising, characterized in that after the pressing step marked document creation, the depression event acquisition step is performed.

[0010]

A seal documentation management method as set forth in any one of claims 8 or 9,

And edited by reading any of the stamped document file and the template file, the stamped document creation means, was intended to be the output target is also a form of one of the stamped document file and the template file is the result of editing Te,

And stamped document reading step of reading the imprint document file,

And save template extraction step from the imprint document file that is read by the pressing mark documents read step, extract the template file, to save the template file,

Seal documentation management method characterized by further comprising, creating a seal document using the template stored in the template storage step extraction.

[0011]

A seal documentation management method as set forth in claim 8,

The imprint document transmission step,

And stamp history information communication process that is exchanged between the client and the server computer the imprint history information,

And stamped frame property information storing process to save as a seal frame property

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information of the document stamped imprint history information that has been the exchange,

And a,

Seal documentation management method is characterized in that it is stored in the document management database of the document management server the document stamp imprint history information is stored as the pressing frame mark property information.

[0012]

A seal documentation management method as set forth in claim 8,

And contract seal's login process step by using the stamp document browsing means, get the authentication of login privileges,

After the contract seal's login process step, a workflow application phase change process selection step in if the contract's imprint wants to change the workflow application phase,

App and phase acquiring the app phase from said electronic seal authentication server,

Workflow and setting step of setting a workflow based on application phase that is acquired in the application phase acquisition step,

At the workflow setting step, when the imprint new document is created, the document ID acquiring the article number in the information transmitted to the document management server,

And stamped document registration step to be performed on the document management server to register the imprint document by using the document number that is acquired in the document number acquisition step

Seal documentation management method characterized by executing the depression event acquisition step, stamping document transmission step, the database registration step for stamping documents further comprising, thus created.

[0013]

A seal documentation management method as set forth in claim 8,

Seal documentation management method is characterized in that repeatedly performs for each execution of the stamping process one, the sequential processing flow of the depression event acquisition step, the seal document transmission step, the database registration step.

[0014]

A seal documentation management method as set forth in claim 8,

Expiration date expiration date of a user of the application phase, the seal documents provided,

To the depression event acquisition step before, check the expiration date of the document and stamped expiration date of the user, log in after the due date is stamped document preparation management method is characterized in that it be treated as an authentication failure.

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Espacenet

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BASED ON TEMPLATE USER AUTHORING SYSTEM AND SERVICE METHOD THEREFOR

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PURPOSE: A template-based user authoring system and a service method thereof are provided to build an authoring template and to use authoring tools by a simple selection operation such as a dragging operation. CONSTITUTION: A content source storage unit(130) stores a content source. An authoring unit(120) classifies the stored contents sources by block units of a fixed standard.. The authoring unit creates a plurality of authoring templates. The authoring unit maps a keyword or a number according to the correlation between the plurality of authoring templates. A template-based storage unit (140) separately stores the plurality of authoring templates.

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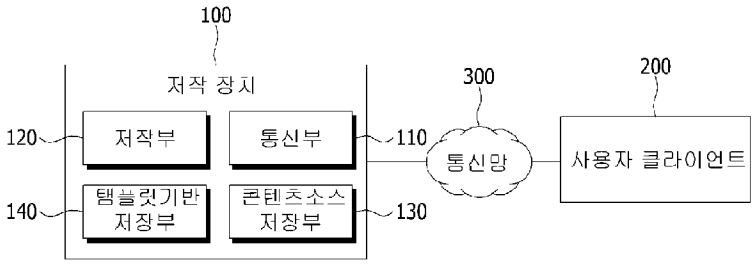
전체 청구항 수 : 총 18 항

(54) 발명의 명칭 **템플릿 기반 사용자 저작 시스템 및 그 서비스 방법**

(57) 요 약

본 발명은 프로그래밍 언어로 짜여진 콘텐츠 소스를 일정 기준의 블록 단위로 구분하여 템플릿화하고 템플릿화된 각 저작 템플릿을 키워드 또는 숫자 체계로 정의함으로써 사용자가 저작 툴을 이용하여 제작한 때 저작 템플릿을 쉽게 인지할 수 있고 원하는 저작 템플릿을 드래그함에 의해 편리하게 제작 및 편집할 수 있도록 제공하는 템플릿 기반 사용자 저작 시스템 및 그 서비스 방법을 제공한다.

대 표 도 - 도1



특허청구의 범위

청구항 1

애플리케이션 또는 콘텐츠 제작에 필요한 객체에 대하여 프로그래밍 언어로 코딩한 콘텐츠 소스를 저장하는 콘텐츠 소스 저장부;

상기 콘텐츠 소스 저장부에 기 저장된 콘텐츠 소스를 일정 기준의 블록 단위로 구분하여 템플릿화한 다수의 저작 템플릿을 생성하고, 상기 다수의 저작 템플릿간 연관성에 따라 키워드 또는 숫자를 매핑하는 저작부;

상기 저작부에서 생성한 다수의 저작 템플릿을 별도 저장하는 템플릿 기반 저장부

를 포함하는 것을 특징으로 하는 템플릿 기반 사용자 저작 장치.

청구항 2

제 1 항에 있어서,

상기 저작부는

다수의 저작 템플릿간 계층적 연관성을 숫자 체계로 표시하는 것을 특징으로 하는 템플릿 기반 사용자 저작 장치.

청구항 3

제 1 항에 있어서,

상기 다수의 저작 템플릿은 동영상 콘텐츠, 문서 콘텐츠, 이미지 콘텐츠를 제작하기 위한 객체인 것을 특징으로 하는 템플릿 기반 사용자 저작 장치.

청구항 4

애플리케이션 또는 콘텐츠 제작에 필요한 객체를 템플릿화한 다수의 저작 템플릿을 제공하여 제작 및 편집 기능을 수행하는 콘텐츠 저작툴(authoring tool);

상기 콘텐츠 저작툴을 이용하여 선택한 저작 템플릿을 미리 설정된 영역에 표시하는 콘텐츠 뷰어를 포함하고,

사용자가 상기 콘텐츠 저작툴을 이용하여 원하는 저작 템플릿을 선택하면 상기 콘텐츠 뷰어에서 선택된 저작 템플릿에 해당하는 콘텐츠 소스를 리드하여 표시하는 것을 특징으로 하는 사용자 클라이언트.

청구항 5

제 4 항에 있어서,

상기 다수의 저작 템플릿에 해당하는 콘텐츠 소스는 네트워크 기반의 저장부로부터 제공받는 것을 특징으로 하는 사용자 클라이언트.

청구항 6

제 4 항에 있어서,

상기 다수의 저작 템플릿에 해당하는 콘텐츠 소스를 저장한 저장부를 더 포함하는 것을 특징으로 하는 사용자 클라이언트.

청구항 7

제 4 항에 있어서,

상기 콘텐츠 저작툴은 상기 다수의 저작 템플릿을 상호 저작 템플릿간 연관성에 따라 계층적 구조로 제공하거나 또는 상기 다수의 저작 템플릿에 매핑된 숫자로 표시하여 제공하는 것을 특징으로 하는 사용자 클라이언트.

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청구항 8

제 4 항에 있어서,

사용자 인증을 수행하는 사용자 인증부와,

상기 사용자 인증을 통해 승인 받은 사용자에게 상기 다수의 저작 템플릿에 대한 이름 변경이 가능하도록 제공하는 저작 템플릿 변경부와,

상기 사용자가 임의로 변경한 저작 템플릿의 이름 정보를 저장하는 저장부

를 더 포함하는 것을 특징으로 하는 사용자 클라이언트.

청구항 9

저작할 블록을 생성하는 단계;

생성한 각 블록에 애플리케이션 또는 콘텐츠의 제작에 필요한 객체를 프로그래밍한 콘텐츠 소스를 삽입하여 블록을 정의하는 단계;

상기 콘텐츠 소스가 정의된 상호 블록간의 연관성을 고려하여 각 블록에 숫자 블록명을 매핑하는 단계;

매핑된 각 블록을 템플릿화하는 단계

를 포함하는 저작 장치에서의 템플릿 기반의 사용자 저작 방법.

청구항 10

제 9 항에 있어서,

상기 각 블록에 숫자 블록명을 매핑하는 단계는, 블록간 계층적 구조에 따라 숫자를 매핑시키는 것을 특징으로 하는 저작 장치에서의 템플릿 기반의 사용자 저작 방법.

청구항 11

제 9 항 또는 제 10 항의 어느 한 항의 방법을 실행시키기 위한 프로그램을 기록한 컴퓨터로 읽을 수 있는 기록매체.

청구항 12

애플리케이션 또는 콘텐츠 제작에 위해 콘텐츠 저작툴을 실행하는 단계;

상기 애플리케이션 또는 콘텐츠 제작에 필요한 객체에 대하여 템플릿화한 다수의 저작 템플릿을 제공하는 단계;

사용자가 원하는 저작 템플릿을 선택하는 단계;

선택한 저작 템플릿에 정의된 콘텐츠 소스를 리드(read)하는 단계;

리드한 콘텐츠 소스를 토대로 미리 설정된 영역에 표시하는 단계

를 포함하는 사용자 클라이언트에서의 템플릿 기반 사용자 저작 서비스 방법.

청구항 13

제 12 항에 있어서,

상기 다수의 저작 템플릿을 제공하는 단계는,

상기 다수의 저작 템플릿을 상호 저작 템플릿간 연관성에 따라 계층적 구조로 제공하거나 또는 상기 다수의 저작 템플릿에 매핑된 숫자로 표시하여 제공하는 것을 특징으로 하는 사용자 클라이언트에서의 템플릿 기반 사용자 저작 서비스 방법.

청구항 14

제 12 항에 있어서,

상기 선택한 저작 템플릿에 정의된 콘텐츠 소스를 리드하는 단계는,

상기 콘텐츠 소스를 네트워크 기반의 저장부에 요청하고 상기 요청에 의해 네트워크 기반의 저장부로부터 제공받는 단계를 포함하는 것을 특징으로 하는 사용자 클라이언트에서의 템플릿 기반 사용자 저작 서비스 방법.

청구항 15

제 12 항에 있어서,

상기 선택한 저작 템플릿에 정의된 콘텐츠 소스를 리드하는 단계는,

상기 사용자 클라이언트 내에 기 저장된 콘텐츠 소스를 조회하는 단계를 포함하는 것을 특징으로 하는 사용자 클라이언트에서의 템플릿 기반 사용자 저작 서비스 방법.

청구항 16

제 12 항에 있어서,

사용자 인증을 수행하는 단계와,

상기 사용자 인증을 통해 승인 받은 사용자로부터 상기 다수의 저작 템플릿에 대한 이름 변경 요청을 수신하는 단계;

상기 변경 요청한 저작 템플릿의 이름 정보를 저장하는 단계

를 더 포함하는 것을 특징으로 하는 사용자 클라이언트에서의 템플릿 기반 사용자 저작 서비스 방법.

청구항 17

상기 사용자 인증을 수행하는 단계는,

상기 콘텐츠 저작툴을 실행하는 단계 전에 수행하거나, 또는 상기 콘텐츠 저작툴이 실행되고 있는 중에도 수행 가능한 것을 특징으로 하는 사용자 클라이언트에서의 템플릿 기반 사용자 저작 서비스 방법.

청구항 18

에플리케이션 또는 콘텐츠 제작에 필요한 객체에 대하여 템플릿화한 다수의 저작 템플릿을 화면에 제공하는 단계;

사용자의 조작에 의해 상기 다수의 저작 템플릿이 선택되면 선택된 저작 템플릿에 정의된 콘텐츠 소스를 리드(read)하는 단계;

리드한 콘텐츠 소스를 토대로 미리 설정된 영역에 표시하는 단계

를 실현시키기 위한 프로그램을 기록한 컴퓨터로 읽을 수 있는 기록 매체.

명 세 서

기 술 분 야

[0001] 본 발명은 콘텐츠 저작 시스템에 관한 것으로서, 더욱 상세하게는 프로그래밍 언어로 짜여진 콘텐츠 소스를 일정 기준의 블록 단위로 구분하여 템플릿화하고 템플릿화된 각 저작 템플릿을 키워드 또는 숫자 체계로 정의함으로써 사용자가 저작 툴을 이용하여 제작할 때 저작 템플릿을 쉽게 인지할 수 있고 원하는 저작 템플릿을 드래그함에 의해 편리하게 제작 및 편집할 수 있도록 제공하는 템플릿 기반 사용자 저작 시스템 및 그 서비스 방법에 관한 것이다.

배 경 기 술

[0002] 종래에는 일반 사용자가 애플리케이션이나 콘텐츠를 제작할 경우 프로그래밍 언어를 이용해야 하는 경우가 일반적이다. 이는 애플리케이션이나 콘텐츠를 제작하기 위해 프로그래밍 언어까지 이해해야 하므로 일반 사용자가 사용하기에는 제한적일 수 밖에 없다.

[0003] 현재, 콘텐츠 저작 도구(Authoring tool)로는 마야, 3D Max 등이 있으나 이 또한 저작 도구에 대한 이해가 있어야 사용이 가능하기 때문에 일반인들이 손쉽게 접근하기에는 어려움이 있다.

[0004] 그런데, 만일 템플릿 형태의 저작 도구를 콘텐츠 제작시 이용하면, 템플릿을 이용한 콘텐츠 또는 애플리케이션 제작 서비스는 인터넷과 연계하여 사용자에게 편의를 제공할 수 있다.

발명의 내용

해결하려는 과제

[0005] 본 발명은 상기의 필요성에 의해 창안된 것으로서, 기존 프로그래밍 언어로 짜여진 콘텐츠 소스를 일정 기준의 블록 단위로 나누어 템플릿화하고 템플릿화한 각 저작 템플릿에 키워드 또는 숫자 체계를 기반으로 한 이름을 정의함으로써 일반 사용자가 저작 툴을 이용하여 제작할 때 저작 템플릿을 쉽게 인지할 수 있고 각 저작 템플릿을 드래그함에 의해 이용할 수 있어 편리하게 제작 및 편집이 가능한 템플릿 기반 사용자 저작 시스템 및 그 서비스 방법을 제공하는 데 그 목적이 있다.

과제의 해결 수단

[0006] 이를 위하여, 본 발명의 제1 측면에 따르면, 본 발명에 따른 템플릿 기반 사용자 저작 장치는, 애플리케이션 또는 콘텐츠 제작에 필요한 객체에 대하여 프로그래밍 언어로 코딩한 콘텐츠 소스를 저장하는 콘텐츠 소스 저장부; 상기 콘텐츠 소스 저장부에 기 저장된 콘텐츠 소스를 일정 기준의 블록 단위로 구분하여 템플릿화한 다수의 저작 템플릿을 생성하고, 상기 다수의 저작 템플릿간 연관성에 따라 키워드 또는 숫자를 매핑하는 저작부; 상기 저작부에서 생성한 다수의 저작 템플릿을 별도 저장하는 템플릿 기반 저장부를 포함하는 것을 특징으로 한다.

[0007] 본 발명의 제2 측면에 따르면, 본 발명에 따른 사용자 클라이언트는, 애플리케이션 또는 콘텐츠 제작에 필요한 객체를 템플릿화한 다수의 저작 템플릿을 제공하여 제작 및 편집 기능을 수행하는 콘텐츠 저작툴(authoring tool); 상기 콘텐츠 저작툴을 이용하여 선택한 저작 템플릿을 미리 설정된 영역에 표시하는 콘텐츠 뷰어를 포함하고, 사용자가 상기 콘텐츠 저작툴을 이용하여 원하는 저작 템플릿을 선택하면 상기 콘텐츠 뷰어에서 선택된 저작 템플릿에 해당하는 콘텐츠 소스를 리드하여 표시하는 것을 특징으로 한다.

[0008] 본 발명의 제3 측면에 따르면, 본 발명에 따른 저작 장치에서의 템플릿 기반의 사용자 저작 방법은, 저작할 블록을 생성하는 단계; 생성한 각 블록에 애플리케이션 또는 콘텐츠의 제작에 필요한 객체를 프로그래밍한 콘텐츠 소스를 삽입하여 블록을 정의하는 단계; 상기 콘텐츠 소스가 정의된 상호 블록간의 연관성을 고려하여 각 블록에 숫자 블록명을 매핑하는 단계; 매핑된 각 블록을 템플릿화하는 단계를 포함하는 것을 특징으로 한다.

[0009] 본 발명의 제4 측면에 따르면, 본 발명에 따른 사용자 클라이언트에서의 템플릿 기반 사용자 저작 서비스 방법은, 애플리케이션 또는 콘텐츠 제작에 위해 콘텐츠 저작툴을 실행하는 단계; 상기 애플리케이션 또는 콘텐츠 제작에 필요한 객체에 대하여 템플릿화한 다수의 저작 템플릿을 제공하는 단계; 사용자가 원하는 저작 템플릿을 선택하는 단계; 선택한 저작 템플릿에 정의된 콘텐츠 소스를 리드(read)하는 단계; 리드한 콘텐츠 소스를 토대로 미리 설정된 영역에 표시하는 단계를 포함하는 것을 특징으로 한다.

발명의 효과

[0010] 본 발명에 따르면, 애플리케이션 또는 콘텐츠 제작에 사용되는 콘텐츠 객체를 템플릿화한 저작 템플릿을 구축하여 드래그 등의 간단한 선택 조작에 의해서도 이용할 수 있어 일반 사용자가 쉽게 제작에 이용할 수 있는 효과가 있다.

[0011] 또한, 저작 템플릿의 이름을 사용자가 알기 쉬운 이름이나 숫자 체계로 부여함으로써 일반 사용자가 저작 툴에 대한 이질감을 최소화하여 저작 툴의 기능을 쉽게 인지할 수 있는 효과가 있다.

[0012] 또한, 애플리케이션 또는 콘텐츠를 제작한 후에도 저작 템플릿의 이름을 통해 특히 숫자의 계층 구조를 통해 제작의 전체 시나리오뿐만 아니라 저작 템플릿의 동작 및 특성을 예측할 수 있는 효과가 있다.

도면의 간단한 설명

[0013] 도 1은 본 발명의 실시 예에 따른 템플릿 기반 사용자 저작 시스템의 구성도.

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도 2는 본 발명의 실시 예에 따른 저작을 통해 저작한 템플릿의 구조를 나타낸 도면.

도 3은 본 발명의 실시 예에 따른 저작 템플릿에 숫자 체계 기반 이름을 부여한 도면.

도 4는 본 발명의 실시 예에 따른 템플릿 기반 사용자 저작 방법을 나타낸 순서도.

도 5는 본 발명의 실시 예에 따른 사용자 클라이언트의 구성도.

도 6은 본 발명의 실시 예에 따른 사용자 클라이언트에서 저작 툴을 통해 활용하는 예를 보인 도면.

도 7은 본 발명의 실시 예에 따른 사용자 클라이언트에서의 템플릿 기반 사용자 저작 서비스 방법을 나타낸 순서도.

도 8은 본 발명의 실시 예에 따른 사용자 클라이언트에서 저작 템플릿을 사용자별로 변경 가능한 과정을 나타낸 순서도.

발명을 실시하기 위한 구체적인 내용

[0014] 이하, 첨부된 도면을 참조하여 본 발명에 따른 실시 예를 상세하게 설명한다. 본 발명의 구성 및 그에 따른 작용 효과는 이하의 상세한 설명을 통해 명확하게 이해될 것이다. 본 발명의 상세한 설명에 앞서, 동일한 구성 요소에 대해서는 다른 도면 상에 표시되더라도 가능한 동일한 부호로 표시하며, 공지된 구성에 대해서는 본 발명의 요지를 흐릴 수 있다고 판단되는 경우 구체적인 설명은 생략하기로 함에 유의한다.

[0015] 본 발명에서 언급하는 콘텐츠는 동영상, 텍스트, 문서(파워포인트 등), 이미지 등을 의미하고, 콘텐츠 소스는 상기 콘텐츠를 제공하기 위해 프로그래밍 언어로 코딩한 소스 데이터를 의미한다.

[0016] 이를 참조하여 본 발명에 따른 실시 예를 살펴본다.

[0017] 도 1은 본 발명의 실시 예에 따른 템플릿 기반 사용자 저작 시스템과 사용자 클라이언트의 구성도이고, 도 2는 본 발명의 실시 예에 따른 저작을 통해 저작한 템플릿의 구조를 나타낸 도면이다.

[0018] 먼저 도 1을 참조하면, 본 발명의 실시 예에 따른 템플릿 기반 사용자 저작 시스템은 저작 장치(100) 및 사용자 클라이언트(200)를 포함하여 구성된다.

[0019] 저작 장치(100)는 통신망(300)을 통해 사용자 클라이언트(200)와 연계되어, 애플리케이션 또는 콘텐츠 제작에 필요한 객체를 초보자가 쉽게 이용할 수 있도록 저작하여 사용자 클라이언트(200)에게 제공한다. 그러면, 사용자 클라이언트(200)는 저작 장치(100)에서 저작한 저작 툴(authoring tool)을 제공하여 초보자가 저작 툴에 대한 지식이 없이도 편리한 제작 서비스를 이용하도록 한다.

[0020] 이를 위한 저작 장치(100)는 도 1에 도시한 바와 같이 통신부(110)와 저작부(120), 콘텐츠 소스 저장부(130), 템플릿 기반 저장부(140)를 포함한다.

[0021] 통신부(110)는 통신망(300)을 통해 저작 장치(100)에서 저작한 저작툴 및 저작 템플릿을 사용자 클라이언트에 제공하고, 사용자 클라이언트(200)로부터 저작 템플릿에 대한 콘텐츠 소스의 요청이 수신되면 해당 콘텐츠 소스를 통신망(300)을 통해 사용자 클라이언트(200)로 제공한다.

[0022] 콘텐츠 소스 저장부(130)는 애플리케이션 또는 콘텐츠 제작에 필요한 객체에 대하여 프로그래밍 언어로 코딩한 콘텐츠 소스를 저장한다.

[0023] 템플릿 기반 저장부(140)는 콘텐츠 소스 저장부(130)에 기저장된 콘텐츠 소스에 대하여 템플릿화한 저작 템플릿을 별도 저장한다.

[0024] 여기서, 저작 템플릿은 동영상 콘텐츠, 문서 콘텐츠, 이미지 콘텐츠 등을 제작하기 위한 모든 객체가 대상이 된다.

[0025] 저작부(120)는 콘텐츠 소스 저장부(130)에 기저장된 콘텐츠 소스를 일정 기준의 블록 단위로 구분하여 템플릿화한 다수의 저작 템플릿을 생성하고, 생성한 저작 템플릿간 연관성에 따라 키워드 또는 숫자를 매핑한다. 여기서, 키워드 또는 숫자는 각 저작 템플릿을 일반 사용자가 쉽게 인지할 수 있게 하기 위해 부여하는 이름(nickname)이다.

[0026] 각 저작 템플릿의 이름으로 숫자 이름을 이용하면 숫자의 순번 체계를 통해 저작 템플릿간 계층적 구조를 표현할 수 있다. 이를 테면, 1-1, 1-2는 1이라는 상위 저작 템플릿에 종속되는 하위 저작 템플릿이고, 1-1-1,

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1-1-2는 1-1이라는 하위 템플릿에 종속되는 2차 하위 템플릿이 될 수 있다.

[0027] 도 2의 예를 살펴보면, 가상 캐릭터 이미지 제작에 관한 것으로서, 저작부(120)는 먼저 블록을 캐릭터의 신체 부위별로 분류하여 정의할 수 있다. 따라서, 상위 분류로는 얼굴 저작 템플릿(142), 상체 저작 템플릿(144), 하체 저작 템플릿(146) 등으로 생성하고, 또 각 저작 템플릿(142,144,146)은 해당 신체 부위(얼굴, 상체, 하체)를 세부적으로 분류한 하위 템플릿을 생성할 수 있다. 즉, 얼굴 저작 템플릿(142)은 얼굴형에 관한 얼굴형 저작 템플릿(1421), 눈에 관한 눈 저작 템플릿(1422), 코에 관한 코 저작 템플릿(1423), 눈썹에 관한 눈썹 저작 템플릿(1424) 등을 하위 분류 템플릿으로 생성하고, 눈 저작 템플릿(1422)은 눈 깜박, 눈 감음 등의 눈 동작에 따라 하위 분류 템플릿을 생성할 수 있다. 이렇게 생성한 저작 템플릿에, 저작부(120)는 저작 템플릿간 연관성을 고려하여 상위의 얼굴 저작 템플릿(142)은 1이라는 숫자 이름을 매핑하고, 이의 하위 저작 템플릿(1421,1422,1423,1424)에는 1-1(얼굴형 저작 템플릿), 1-2(눈 저작 템플릿), 1-3(코 저작 템플릿), 1-4(눈썹 저작 템플릿) 등의 체계로 매핑한다. 그리고, 각 하위 저작 템플릿(1421,1422,1423,1424)에 종속하는 저작 템플릿은 1-1-1, 1-1-2 등의 계층 체계로 매핑할 수 있다.

[0028] 상기 매핑 구조에 따르면, 저작부(120)에서 저작 완료한 각 저작 템플릿은 도 3에 도시한 표와 같이 숫자 이름으로도 저작 템플릿의 동작 및 특성을 한 눈에 파악할 수 있다.

[0029] 도 4는 본 발명의 실시 예에 따른 저작 장치에서의 템플릿 기반 사용자 저작 방법을 나타낸 순서도이다.

[0030] 먼저 콘텐츠 소스 저장부(130)에 저작에 필요한 객체에 대하여 프로그래밍 언어로 코딩한 콘텐츠 소스를 저장해 두고, 콘텐츠 소스가 갱신될 때마다 콘텐츠 소스 저장부(130)에 갱신한다.

[0031] 저작부(120)는 저작을 위해, 저작할 블록을 생성한다(S100). 이때, 저작부(120)는 생성한 블록에 대하여 임의의 블록명을 부여할 수 있다.

[0032] 여기서의 블록은 하나의 단위로 취급되는 관련 데이터(콘텐츠 소스)를 모아 두기 위한 레코드(record) 영역으로, 추후 저작 템플릿이 된다.

[0033] 이후, 저작부(120)는 생성한 블록에 저작하고자 하는 객체에 해당하는 콘텐츠 소스를 삽입하여 정의한다(S110). 이를 테면, 가상 캐릭터 이미지 저작을 위해 각 신체 부위별로 블록을 생성하고 생성한 블록에 얼굴형, 눈, 코, 눈썹, 입술 등 기존 콘텐츠 소스를 각각 매핑하여 정의할 수 있다.

[0034] 그리고, 저작부(120)는 정의된 블록간 상호 연관성을 설정하여 키워드 또는 숫자 이름을 매핑한다(S120).

[0035] 예를 들면, 얼굴형, 눈, 코, 눈썹 등은 신체 부위 중 얼굴과 연관성이 있으며, 얼굴형은 눈, 코, 눈썹보다 우선 순위가 될 수 있다. 따라서 얼굴을 1이라는 숫자 이름과 매핑하면, 얼굴형은 우선순위를 두어 1-1, 이외 나머지인 눈, 코, 눈썹은 1-2, 1-3, 1-4 등으로 매핑할 수 있다.

[0036] 저작부(120)는 이렇게 매핑된 각 블록을 실행하면 얼굴형, 눈, 코, 눈썹 또는 이들을 포함한 얼굴이 이미지로 표시되도록 템플릿화한다(S130).

[0037] 따라서, 사용자는 제작시 템플릿화된 블록(저작 템플릿)을 선택하여 적용하고 그 외 세부적으로 필요한 부분은 사용자가 직접 콘텐츠 소스를 변경함으로써 작성한다.

[0038] 도 5는 본 발명의 실시 예에 따른 사용자 클라이언트의 구성도이다.

[0039] 사용자 클라이언트(200)는 통신망(도 1의 300)을 통해 저작 장치(도 1의 100)과 통신이 가능하고 애플리케이션 프로그램의 실행이 가능한 어떠한 종류의 단말도 포함할 수 있다. 예를 들어, 이동 단말기, PDA, 노트북, 네비게이션, PMP, 스마트폰, 전자사전 및 MPS 등이 될 수 있다.

[0040] 사용자 클라이언트(200)는 사용자 콘텐츠 저작을 위한 콘텐츠 저작툴(authoring tool)(210) 및 콘텐츠 저작툴(210)을 통해 제작한 콘텐츠 또는 저작 장치로부터 제공되는 저작 템플릿을 표시하기 위한 콘텐츠 뷰어(220)를 포함한다.

[0041] 그리고, 사용자 클라이언드(200)는 저작 장치에서 저작한 저작 템플릿에 대하여 사용자 변경이 가능하도록 제공하는 사용자 인증부(230), 저작 템플릿 변경부(240), 저장부(250)를 포함할 수 있다.

[0042] 콘텐츠 저작툴(210) 및 콘텐츠 뷰어(220)는 독립적인 프로그램일 수도 있으며 웹 브라우저와 연동하는 액티브엑스(ActiveX) 컨트롤 형태의 프로그램일 수도 있다.

[0043] 콘텐츠 저작툴(210)은 다양한 콘텐츠를 저작할 수 있는 수단을 제공한다. 수단은 도 6에 도시한 것처럼 저작

장치에서 템플릿화된 저작 템플릿 형태로 제공하여 일반 사용자가 원하는 저작 템플릿을 드래그하여 선택하는 조작만으로도 저작 템플릿에 해당하는 이미지를 저작할 수 있다.

[0044] 또한, 콘텐츠 저작툴(210)은 도 6에 도시한 것처럼 저작 장치에서 템플릿화된 다수의 저작 템플릿을 계층적 구조로 제공하거나 또는 다수의 저작 템플릿에 매핑된 숫자로 표시하여 제공할 수 있다. 이 경우, 콘텐츠 저작툴(210)은 각 저작 템플릿에 대하여 숫자와 매핑되는 저작 템플릿의 동작, 또는 동작을 대표할 수 있는 이름 등에 관하여 미리 설정되어 있어야 한다.

[0045] 이러한 콘텐츠 저작툴(210)은 원하는 저작 템플릿을 이용하여 제작을 완료하면 제작된 콘텐츠에 대한 시나리오를 쉽게 작성할 수 있다. 즉, 각 저작 템플릿에 매핑된 숫자 이름만 간추려도 숫자 순번 체계를 통해 내포된 저작 템플릿간의 연관성을 파악할 수 있으므로 저작 템플릿의 속성, 및 저작 템플릿간의 동작 흐름을 예측할 수 있다.

[0046] 콘텐츠 뷰어(220)는 콘텐츠 저작툴(210)에서 선택된 저작 템플릿을 사용자가 볼 수 있도록 미리 설정된 영역에 표시하는 기능을 한다. 이를 위해, 콘텐츠 뷰어(220)는 콘텐츠 저작툴(210)에서 선택된 저작 템플릿과 매핑되는 콘텐츠 소스를 리드하여 프로그래밍 언어로 코딩된 콘텐츠 소스를 디코딩함으로써 표시할 수 있다. 이 경우, 각 저작 템플릿과 매핑되는 콘텐츠 소스는 사용자 클라이언트 내 저장부(250)에 미리 저장될 수 있고 또는 네트워크 기반의 저작 장치(도 1의 100)에 구축되어 통신망(도 1의 300)을 통해 해당 콘텐츠 소스를 요청하고 수신할 수 있다.

[0047] 또한, 콘텐츠 뷰어(220)는 하나의 저작 템플릿으로만 이루어진 콘텐츠를 표시할 수도 있으며, 다수의 저작 템플릿을 조합하여 이루어진 콘텐츠를 표시할 수도 있다. 다수의 저작 템플릿을 조합하여 이루어진 콘텐츠를 표시하기 위해 콘텐츠 뷰어(220)는 각 저작 템플릿의 객체가 표시될 레이아웃이 미리 설정될 수 있으며, 사용자에 의해 변경될 수도 있을 것이다.

[0048] 사용자 인증부(230)는 사용자 클라이언트의 로그인을 통해 인증을 수행한다. 인증 과정은 콘텐츠 저작툴(210)을 실행하기 전에 수행할 수 있고, 또는 저작 템플릿을 사용자 임의로 변경하는 등 사용자별 설정이 필요할 때 수행할 수 있다.

[0049] 저작 템플릿 변경부(240)는 콘텐츠 저작툴(210)을 통해 제공되는 다수의 저작 템플릿에 대하여 이름을 변경하여 적용한다.

[0050] 즉, 저작 템플릿 변경부(240)는 사용자로부터 자신의 기호나 주로 이용하는 저작 템플릿에 대하여 이름 변경 요청을 수신하면 기설정된 이름을 사용자가 요청한 변경 이름으로 변경하고 이를 저장부(250)에 저장한다. 따라서, 변경 후부터 사용자 로그인이 있으면 저작 템플릿 변경부(240)는 저작 템플릿의 사용자별 변경 여부가 있는지를 체크하여 사용자별로 변경된 이름으로 제공한다.

[0051] 저장부(250)는 저작 템플릿 변경부(240)를 통해 변경한 정보를 저장하고, 필요에 따라 콘텐츠 저작툴(210)을 통해 제공되는 다수의 저작 템플릿에 해당하는 콘텐츠 소스를 저장할 수 있다. 또한, 저장부(250)에 콘텐츠 저작툴(210)을 실행하기 위한 응용 프로그램이 탑재될 수 있다.

[0052] 이렇게 구성되는 사용자 클라이언트를 통해 템플릿 기반의 콘텐츠 저작 방법에 대하여 도 7 및 도 8를 참조하여 구체적으로 설명한다.

[0053] 도 7은 본 발명의 실시 예에 따른 사용자 클라이언트에서의 템플릿 기반 사용자 저작 서비스 방법을 나타낸 순서도이다.

[0054] 먼저 사용자 클라이언트는 애플리케이션 또는 콘텐츠 제작에 위해 콘텐츠 저작툴을 실행한다(S200).

[0055] 콘텐츠 저작툴을 실행하기 전에 사용자 클라이언트는 로그인을 통해 사용자 인증을 수행할 수도 있다(S250). 사용자 인증을 거친 사용자는 저작 템플릿의 이름을 임의 변경하는 등의 사용자별 설정 과정을 수행할 수 있다. 이의 세부 과정은 하기에서 설명한다.

[0056] 사용자 클라이언트는 콘텐츠 저작툴의 실행과 동시에 애플리케이션 또는 콘텐츠 제작에 필요한 객체에 대하여 템플릿화한 다수의 저작 템플릿을 제공한다(S210). 다수의 저작 템플릿은 도 6에 도시한 것처럼 계층적 구조에 기반하여 제공하거나 또는 다수의 저작 템플릿에 매핑된 숫자로 표시하여 제공할 수 있다.

[0057] 이후, 사용자 클라이언트는 사용자로부터 저작 템플릿의 선택이 수신되면(S220) 선택한 저작 템플릿에 정의된 콘텐츠 소스를 리드(read)한다(S230).

[0058] 그리고, 사용자 클라이언트는 리드한 콘텐츠 소스를 토대로 선택된 저작 템플릿을 미리 설정된 영역에 표시한다(S240).

[0059] 상기 S230에서 해당 콘텐츠 소스를 리드하는 단계에서는 콘텐츠 소스가 저장된 위치에 따라 다를 수 있다.

[0060] 즉, 콘텐츠 소스가 사용자 클라이언트 내 저장부에 저장되면 저장부에 해당 콘텐츠 소스를 조회함으로써 얻을 수 있으나, 콘텐츠 소스가 네트워크 기반의 저작 장치에 저장된 경우, 사용자 클라이언트가 해당 콘텐츠 소스를 네트워크 기반의 저장부로 요청하고 상기 저장부로부터 제공받는 단계를 포함할 수 있다.

[0061] 도 8은 본 발명의 실시 예에 따른 사용자 클라이언트에서 저작 템플릿을 사용자별로 변경 가능한 과정을 나타낸 순시도이다.

[0062] 사용자 클라이언트는 사용자별 설정을 위해 사용자 인증 과정을 수행한다(S300). 사용자 인증 과정은 콘텐츠 저작 툴을 실행 하기 전에 수행한 경우 생략할 수 있다.

[0063] 이후, 사용자 클라이언트가 사용자 인증을 통해 승인받은 사용자로부터 다수의 저작 템플릿에 대한 이름 변경 요청을 수신하면, 저작 템플릿 변경부에서 기 설정된 이름을 사용자가 변경 요청한 이름으로 변경한다(S310).

[0064] 이후, 변경된 이름 정보를 저장부에 저장한다(S320).

[0065] 이는 변경 이후부터 사용자 로그인이 있으면 저작 템플릿 변경부(240)에서 변경된 사항을 체크하여 사용자별로 차별화된 서비스를 제공할 수 있다.

[0066] 이후, 사용자 클라이언트는 추가적으로 네트워크 기반의 저작 장치에 전달하여 저작 장치에서도 사용자별 관리가 가능하도록 할 수 있다(S330).

[0067] 한편, 본 발명은 이상에서 설명한 템플릿 기반 사용자 저작 방법을 소프트웨어적인 프로그램으로 구현하여 컴퓨터로 읽을 수 있는 소정 기록 매체에 기록해 둠으로써 다양한 재생 장치에 적용할 수 있다.

[0068] 다양한 재생 장치는 앞서 설명한 사용자 단말로서 이동 단말기, PDA, 노트북, 네비게이션, PMP, 스마트폰, 전자사전 및 MPS 등일 수 있다.

[0069] 예컨대, 기록 매체는 각 재생 장치의 내장형으로 하드 디스크, 플래시 메모리, RAM, ROM 등이거나, 외장형으로 CD-R, CD-RW와 같은 광디스크, 콤팩트 플래시 카드, 스마트 미디어, 메모리 스틱, 멀티미디어 카드일 수 있다.

[0070] 이 경우, 저작 장치에서의 템플릿 기반 사용자 저작 방법에 대하여 컴퓨터로 읽을 수 있는 기록 매체에 기록한 프로그램은, 저작할 블록을 생성하는 과정과, 생성한 각 블록에 애플리케이션 또는 콘텐츠의 제작에 필요한 객체를 프로그래밍한 콘텐츠 소스를 삽입하여 블록을 정의하는 과정과, 상기 콘텐츠 소스가 정의된 상호 블록간의 연관성을 고려하여 각 블록에 숫자 블록명을 매핑하는 과정과, 매핑된 각 블록을 템플릿화하는 과정을 포함하여 실행될 수 있다.

[0071] 또한, 사용자 클라이언트에서의 템플릿 기반 사용자 저작 서비스 방법에 대하여 컴퓨터로 읽을 수 있는 기록 매체에 기록한 프로그램은, 애플리케이션 또는 콘텐츠 제작에 필요한 객체에 대하여 템플릿화한 다수의 저작 템플릿을 화면에 제공하는 과정과, 사용자의 조작에 의해 상기 다수의 저작 템플릿이 선택되면 선택된 저작 템플릿에 정의된 콘텐츠 소스를 리드(read)하는 과정과, 리드한 콘텐츠 소스를 토대로 미리 설정된 영역에 표시하는 과정을 포함하여 실행될 수 있다.

[0072] 이상의 설명은 본 발명을 예시적으로 설명한 것에 불과하며, 본 발명이 속하는 기술 분야에서 통상의 지식을 가진 자에 의해 본 발명의 기술적 사상에서 벗어나지 않는 범위에서 다양한 변형이 가능할 것이다.

[0073] 예를 들면, 본 발명의 저작 장치는 콘텐츠 저작을 위한 저작부 및 콘텐츠 소스 저장부, 템플릿 기반 저장부와 관련한 하드웨어 및 소프트웨어의 컴퓨팅 자원을 네트워크 상의 서버에 저장해 두고, 사용자 클라이언트로부터 해당 서비스의 요청이 있으면 저작 장치가 네트워크 상의 서버에 접속하여 해당 서비스를 제공받아 사용자 클라이언트로 전달하는 클라우드 컴퓨팅(Cloud computing) 형태로 구현될 수 있다. 이 경우, 서비스 제공자는 네트워크 상의 서버에 저장된 하드웨어 및 소프트웨어 등의 컴퓨팅 자원을 자신이 필요한 만큼 빌려 쓰고 이에 대한 사용 요금을 지급함으로써 컴퓨터 시스템을 유지택맑値관리하기 위하여 들어가는 비용과 서버의 구매 및 설치 비용, 업데이트 비용, 소프트웨어 구매 비용 등 엄청난 비용과 시간 및 인력을 줄일 수 있고, 에너지 절감에도 기여할 수 있다.

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[0074] 따라서 본 발명의 명세서에 개시된 실시 예들은 본 발명을 한정하는 것이 아니다. 본 발명의 범위는 아래의 특허청구범위에 의해 해석되어야 하며, 그와 균등한 범위 내에 있는 모든 기술도 본 발명의 범위에 포함되는 것으로 해석해야 할 것이다.

산업상 이용가능성

[0075] 종래 콘텐츠 저작 도구는 프로그래밍 언어를 이용함으로써 일반 사용자가 이용하기에 제한적이었으나, 본 발명은 프로그래밍 언어로 짜여진 콘텐츠 소스를 템플릿화하고 템플릿화된 저작 템플릿에 키워드 또는 숫자 체계를 기반으로 한 이름을 정의함으로써 초보자가 쉽게 템플릿화된 저작 템플릿을 인지할 수 있고 저작 툴을 이용하여 제작할 때에도 드래그 등에 의해 편리하게 제작 및 편집이 가능하다. 이러한 저작 도구를 통해 현재 온라인 상에서 제공되는 가상 체험 서비스나 e-러닝(learning) 서비스 등 필요한 분야에 응용 가능하다.

부호의 설명

[0076] 100: 저작 장치 200: 사용자 클라이언트

300: 통신망 110: 통신부

120: 저작부 130: 템플릿 기반 저장부

140: 콘텐츠 소스 저장부 142: 얼굴 저작 템플릿

1421: 얼굴형 저작 템플릿 1422: 눈 저작 템플릿

1423: 코 저작 템플릿 1424: 눈썹 저작 템플릿

144: 상체 저작 템플릿 146: 하체 저작 템플릿

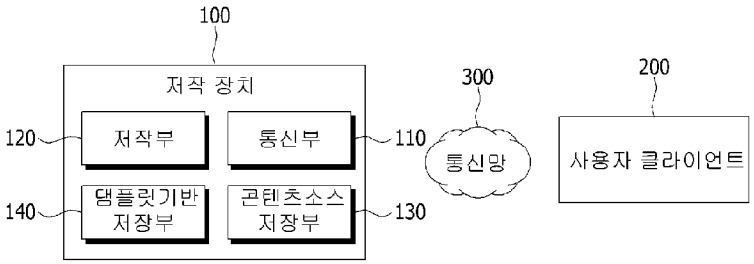
210: 콘텐츠 저작툴 220: 콘텐츠 뷰어

230: 사용자 인증부 240: 저작 템플릿 변경부

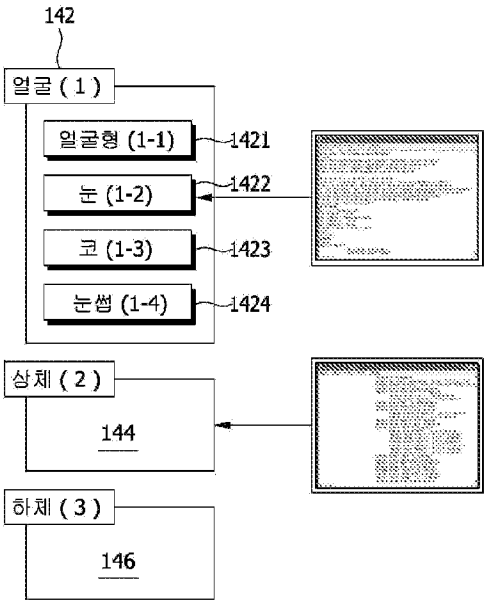
250: 저장부

도면

도면1



도면2



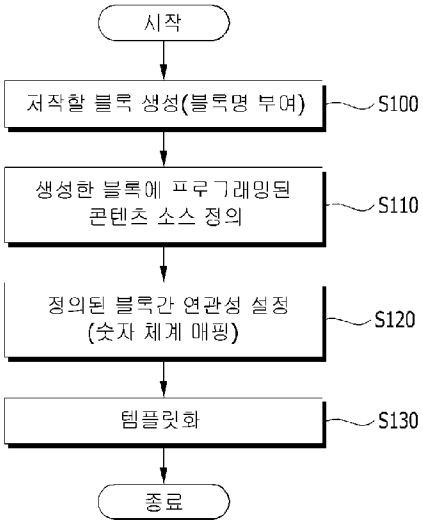
도면3

Mapping 구조

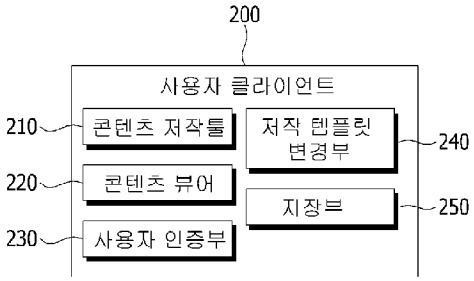
얼굴			
	얼굴형		
	눈	눈 깜빡	
	코	코 벌림	
	눈썹		
	입술	입술 Open	입술 Close
	귀		

1			
	1.1		
	1.2	1.2.1	1.2.1.1
	1.3	1.3.1	
	1.4	1.4.1	
	1.5	1.5.1	
	1.6	1.6.1	

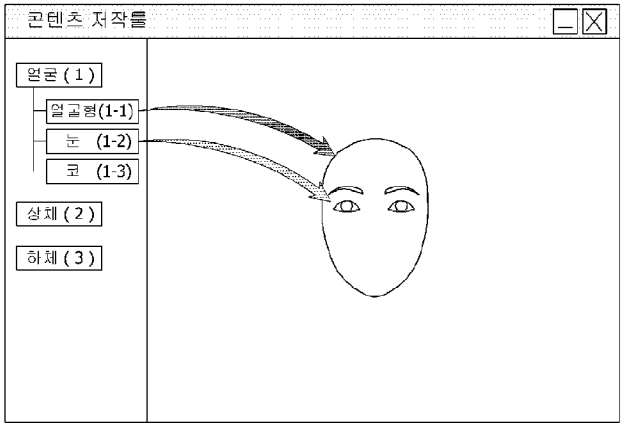
도면4



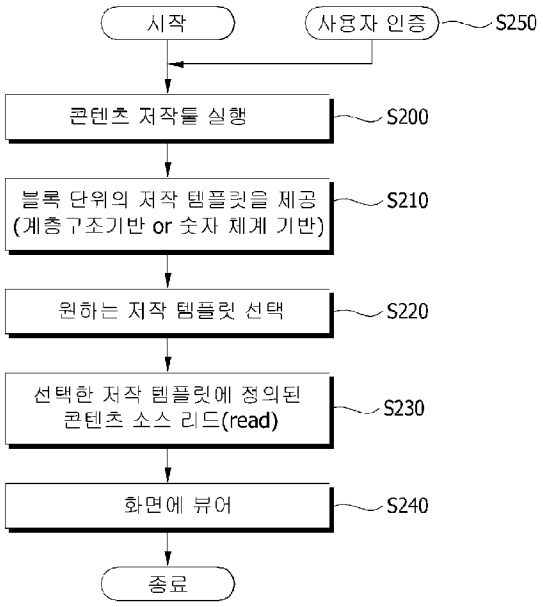
도면5


200
사용자 클라이언트
210
콘텐츠 저작툴
220
콘텐츠 뷰어
230
사용자 인증부
저작 템플릿 변경부
240
지장브
250

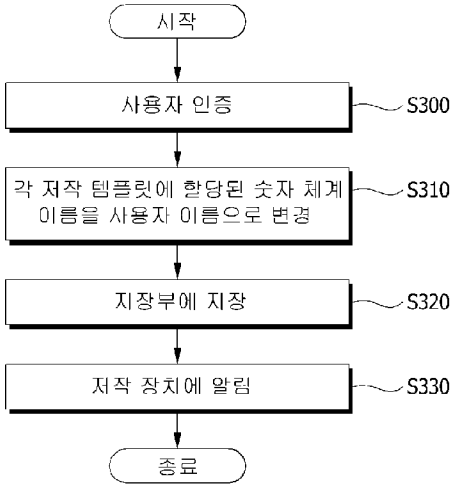
도면6


콘텐츠 저작툴
얼굴(1)
얼굴형(1-1)
눈 (1-2)
코 (1-3)
상체(2)
하체(3)

도면7


시작
사용자 인증
S250
콘텐츠 저작툴 실행
S200
블록 단위의 저작 템플릿을 제공
(계층구조기반 or 숫자 체계 기반)
S210
원하는 저작 템플릿 선택
S220
선택한 저작 템플릿에 정의된
콘텐츠 소스 리드(read)
S230
화면에 뷰어
S240
종료

도면8


시작
사용자 인증
S300
각 저작 템플릿에 할당된 숫자 체계 이름을 사용자 이름으로 변경
S310
지장부에 지장
S320
저작 장치에 알림
S330
종료

Espacenet

Bibliographic data: KR20080111175 (A) — 2008-12-23

SYSTEM AND METHOD FOR ADVERTISEMENT USING FREE SMS

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Applicant(s): OMNITEL CO LTD [KR] ± (OMNITEL CO., LTD)

Classification: **- international:** ***G06Q30/02; H04W4/12***
- cooperative:

Application number: KR20070031682 20070330

Priority number (s): KR20070031682 20070330

Abstract of KR20080111175 (A)

An advertisement marketing system through free origination messages and a method thereof are provided to enable a caller to use the message service free of charge, a callee to timely utilize an advertisement, and an advertiser to dramatically improve the advertisement marketing effect. An advertisement marketing system through free origination messages comprises a portable phone terminal(70), a mobile switching center(20), a customer relationship managing server(30) and a short message switching center(40). The mobile switching center transmits an origination message transmitted from the portable phone terminal through a mobile communication network to the customer relationship managing server. The server analyzes the received message from the mobile switching center, and then searches for an advertisement suitable for a callee(60) to add an advertisement text to the origination message. The short message switching center transmits the origination message outputted from the customer relationship managing server to a portable phone terminal of the callee through the mobile switching center and a base station.

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전체 청구항 수 : 총 10 항

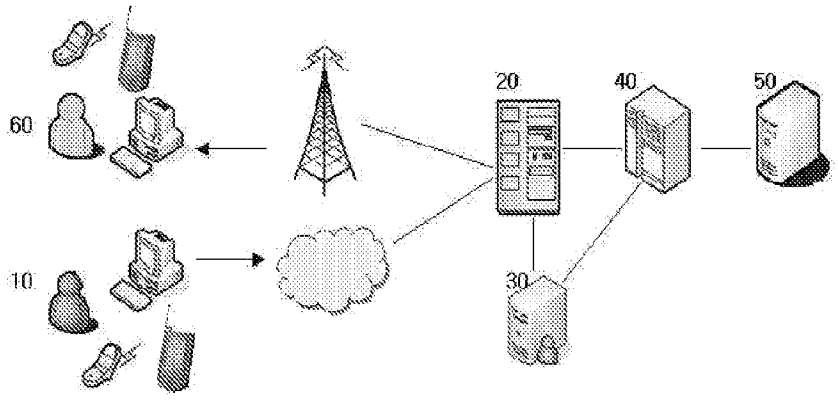
(54) 무료 발신메시지를 통한 광고마케팅 시스템 및 그 방법

(57) 요 약

본 발명은 무료 발신메시지 서비스를 통한 광고마케팅 시스템 및 방법에 관한 것으로서, 휴대폰 단말기와; 상기 휴대폰 단말기에서 전송되는 발신메시지를 이동통신망을 통해 하기 고객관계관리 서버로 송신하는 이동교환국과; 상기 이동교환국으로부터 수신된 발신메시지를 분석하여 수신자에게 적절한 광고를 검색하는 한편, 상기 발신메시지에 광고문자를 추가하는 고객관계관리 서버; 및 상기 고객관계관리 서버에서 출력되는 발신메시지를 이동교환국 및 기지국을 통하여 착신측 휴대용 무선전화기로 단문 메시지형식으로 송신하는 단문메시지 스위칭 센터로 이루어진 것을 특징으로 한다.

이러한 본 발명은 모바일 광고에 대한 불신을 깨고 올바른 광고를 접할 수 있는 기회를 제공하는 한편, 스팸 광고와 차별되는 광고를 유통할 수 있도록 함으로써, 광고주와 기업은 계획한 의도에 따른 마케팅 효과를 얻을 수 있고, 발신자는 메시지를 무료로 전송할 수 있으며, 수신자는 필요했던 광고를 적시에 활용할 수 있는 효과가 있다.

대 표 도 - 도4



특허청구의 범위

청구항 1

발신메시지를 무료로 전송하는 시스템에 있어서,

휴대폰 단말기(70)와; 상기 휴대폰 단말기(70)에서 전송되는 발신메시지를 이동통신망을 통해 하기 고객관계관리 서버(30)로 송신하는 이동교환국(20)과; 상기 이동교환국(20)으로부터 수신된 발신메시지를 분석하여 수신자(60)에게 적절한 광고를 검색하는 한편, 상기 발신메시지에 광고문자를 추가하는 고객관계관리 서버(30); 및 상기 고객관계관리 서버(30)에서 출력되는 발신메시지를 이동교환국(20) 및 기지국을 통하여 착신측 휴대용 무선전화기로 단문 메시지형식으로 송신하는 단문메시지 스위칭 센터(40)로 구성된 것을 특징으로 하는 무료 발신메시지를 통한 광고마케팅 시스템.

청구항 2

제1항에 있어서,

상기 휴대폰 단말기(70)는 이미지나 동영상과 같이 대용량의 광고자료를 저장할 수 있는 메모리를 포함하고, 발신문자메시지를 압축하고 압축을 해제할 수 있는 기능, 및 수신한 메시지에서 단어를 조회하여 상기 메모리에 저장된 광고를 검색하고 표시하는 기능을 더 포함하는 것을 특징으로 하는 무료 발신메시지를 통한 광고마케팅 시스템.

청구항 3

제1항에 있어서,

상기 고객관계관리 서버(30)는 수신자(60)의 위치를 확인할 수 있는 위치기반서비스(Location Based Service, LBS)기능과, 사용자의 CRM 데이터를 저장하고 그 사용자의 성향을 분석하는 기능과, 최대가능한 무료문자의 잔여 분량을 계산하고 제한하는 기능과, 제공된 광고의 통계를 산출하여 광고주에게 보고하는 기능을 더 포함하는 것을 특징으로 하는 무료 발신메시지를 통한 광고마케팅 시스템.

청구항 4

제1항에 있어서,

상기 단문메시지 스위칭 센터(40)는 상기 고객관계관리 서버(30)에서 출력되는 메시지를 수신하여 상기 메시지에 광고하고자 하는 웹사이트 주소정보를 첨부하여 출력하는 WAP푸쉬 서버(50)를 더 포함하는 것을 특징으로 하는 무료 발신메시지를 통한 광고마케팅 시스템.

청구항 5

문자메시지를 무료로 전송하는 방법에 있어서,

발신자(10)가 기존의 문자메시지 입력방법과 동일하게 수신자 전화 번호·발신자 전화 번호·메시지를 입력하고 전송버튼을 눌러 발신메시지를 이동교환국(20)으로 전송하는 단계; 및 상기 이동교환국(20)은 고객관계관리 서버(30)와 연동시켜 발신자(10)가 작성한 상기 메시지에 시기 적절한 광고를 덧붙여 단문메시지 스위칭 센터(40)와 기지국을 통해 수신자(60) 휴대폰 단말기(70)로 전송하는 단계로 이루어진 것을 특징으로 하는 무료 발신메시지를 통한 광고마케팅 시스템의 운용방법.

청구항 6

제5항에 있어서,

상기 고객관계관리 서버(30)가 연동되어 시기 적절한 광고를 덧붙여 단문메시지 스위칭 센터(40)와 기지국을 통해 수신자(60) 휴대폰 단말기(70)로 전송하는 단계는,

상기 고객관계관리 서버(30)가 수신자(60)의 무료문자 잔여 분량을 계산하는 A-2단계와; 수신자(60)의 무료문자 잔여 분량이 존재하지 않을 때에는 상기 고객관계관리 서버(30)는 발신메시지를 종래와 동일하게 단문메시지 스위칭 센터(40) 및 기지국을 통해 수신자(60) 휴대폰 단말기(70)로 전송하고, 문자메시지 사용료를 발신자(10)에게 청구하는 A-3단계와; 무료문자의 잔여분량이 존재할 때에는 CRM데이터를 조회하여 수신자(60)의 연령대와 취

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향을 분석하고, 발신메시지에서 광고별 키워드와 매치 되는 단어가 있는지 검토하며, 위치기반서비스 기능을 이용해 수신자(60)의 현위치를 확인한 뒤, 종합적인 검토결과를 바탕으로 수신자(60)에게 시기 적절한 광고를 조회하는 A-4단계와; 상기 고객관계관리 서버(30)가 상기 조회된 광고 문구를 발신메시지에 덧붙여 단문메시지 스위칭 센터(40)로 출력하는 A-5단계; 및 해당 광고의 광고주에게 비용을 청구하는 A-6단계를 더 포함하는 것을 특징으로 하는 무료 발신메시지를 통한 광고마케팅 시스템의 운용방법.

청구항 7

문자메시지를 무료로 전송하는 방법에 있어서,

고객관계관리 서버(30)에서 유휴(IDLE)시간에 휴대폰 단말기(70)로 광고데이터를 전송하는 단계와; 발신자(10)가 기존의 문자메시지 입력방법과 동일하게 수신자 전화 번호·발신자 전화 번호·메시지를 입력하고 전송버튼을 눌러 발신메시지를 고객관계관리 서버(30)로 전송하는 단계와; 상기 고객관계관리 서버(30)가 수신자(60)에게 적절한 광고를 조회하여 상기 발신메시지에 광고데이터 혹은 광고 호출정보를 덧붙여 수신자(60) 휴대폰 단말기(70)로 전송하는 단계; 및 상기 수신자(60) 휴대폰 단말기(70)가 무료 발신메시지가 수신될 때 미리 저장된 상기 광고데이터에서 적절한 광고를 검색하여 발신자(10)가 작성한 메시지와 함께 화면에 표시하는 단계로 이루어진 것을 특징으로 하는 무료 발신메시지를 통한 광고마케팅 시스템의 운용방법.

청구항 8

제7항에 있어서,

상기 고객관계관리 서버(30)에서 유휴(IDLE)시간에 휴대폰 단말기(70)로 광고데이터를 전송하는 단계는,

고객관계관리 서버(30)는 CRM데이터를 바탕으로 수신자(60)의 취향에 맞는 광고를 조회하는 B-1단계와; 호 사용량이 적은 이동통신시스템의 IDLE시간(보통 새벽 시간)에 광고데이터(동영상, FLASH, 이미지, URL 등 광고를 표현할 수 있는 매체)를 단문메시지 스위칭 센터(40) 및 기지국을 통해 휴대폰 단말기(70)로 전송하는 B-2단계; 및 상기 광고데이터를 전송받은 휴대폰 단말기(70)는 광고데이터를 내부 메모리에 저장하는 B-3단계를 포함하는 것을 특징으로 하는 무료 발신메시지를 통한 광고마케팅 시스템의 운용방법.

청구항 9

제7항에 있어서,

상기 고객관계관리 서버(30)는 수신자(60)에게 적절한 광고를 조회하여 상기 발신메시지에 광고데이터 혹은 광고 호출정보를 덧붙여 수신자(60) 휴대폰 단말기(70)로 전송하는 단계는,

상기 고객관계관리 서버(30)가 발신자(10)의 무료문자 잔여 분량을 계산하는 B-5단계와; 발신자(60)의 무료문자 잔여 분량이 존재하지 않을 때에는 상기 고객관계관리 서버(30)가 발신메시지를 종래와 동일하게 단문메시지 스위칭 센터(40) 및 기지국을 통해 수신자(60) 휴대폰 단말기(70)로 전송하고, 문자메시지 사용료를 발신자(10)에게 청구하는 B-6단계와; 잔여분량이 존재할 시에는 CRM데이터를 조회하여 수신자(60)의 연령대와 취향을 분석하고, 발신메시지에서 광고별 키워드와 매치 되는 단어가 있는지 검토하며, 위치기반서비스 기능을 이용해 수신자(60)의 현위치를 확인한 뒤, 종합적인 검토결과를 바탕으로 수신자(60)에게 시기 적절한 광고를 조회하는 B-7단계와; 상기 조회된 광고가 장 문장일 경우 광고 문장을 발신메시지에 덧붙여 압축 알고리즘을 사용하여 발신메시지를 압축하는 B-8단계와; 상기 조회된 광고가 URL일 경우 광고의 URL콜백데이터를 발신문자메시지에 추가하는 B-9단계와; 상기 조회된 광고가 이미지, 동영상, FLASH 등의 대용량 데이터인 경우 해당 광고의 호출정보를 발신문자메시지에 추가하는 B-10단계; 및 상기 고객관계관리 서버(30)가 상기 발신문자메시지를 단문메시지 스위칭 센터(40)로 출력하고, 해당 광고의 광고주에게 비용을 청구하는 B-11단계로 이루어진 것을 특징으로 하는 무료 발신메시지를 통한 광고마케팅 시스템의 운용방법.

청구항 10

제7항에 있어서,

상기 수신자(60) 휴대폰 단말기(70)가 무료 발신메시지가 수신될 때 미리 지장된 상기 광고데이터에서 적절한 광고를 검색하여 발신자(10)가 작성한 메시지와 함께 화면에 표시하는 단계는,

수신자(60)의 휴대용 단말기가 수신한 발신문자메시지에 압축된 광고가 포함되는 경우 압축을 해제하여 메시지

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내용과 광고문장을 액정화면에 표시하는 B-13단계와; 상기 수신된 발신문자메시지에 URL콜백데이터가 포함되는 경우 메시지내용과 URL접속을 유도하는 문장을 액정화면에 표시하는 B-14단계; 및 상기 수신된 발신문자메시지에 광고 호출정보가 포함된 경우 상기 호출정보와 일치하는 광고를 수신자(60) 휴대폰 단말기(70)의 메모리에서 읽어들여 액정화면에 표시하는 B-15단계로 이루어진 것을 특징으로 하는 무료 발신메시지를 통한 광고마케팅 시스템의 운용방법.

명 세 서

발명의 상세한 설명

발명의 목적

발명이 속하는 기술 및 그 분야의 종래기술

<10> 본 발명은 휴대폰의 무료 발신메시지 서비스를 통한 광고마케팅 시스템 및 그 방법에 관한 것으로, 보다 상세하게는 무료 발신메시지를 받을 수신자(60)의 연령이나 메시지 내용 및 위치장소에 적합한 광고를 발신메시지와 함께 전송함으로써, 발신자(10)는 유료로 제공되던 발신메시지 서비스 비용을 광고주로 하여금 부담케 하여 무료로 공급받을 수 있고, 광고주는 저렴한 가격으로 광고를 유통시켜 효율적인 홍보효과를 할 수 있으며, 수신자(60)는 시기 적절한 광고를 보고 편리하게 이용할 수 있도록 한 무료 발신메시지를 통한 광고마케팅 시스템 및 그 방법에 관한 것이다.

<11> 최근 모바일의 보급은 현대인의 생활과 문화속에서 필수품으로 자리 잡으면서, 모바일은 현대인의 손 안에서 실시간 커뮤니케이션은 물론, 정보의 습득과 교환, 상품의 구매나 판매, 광고, 등 우리 생활의 거의 모든 분야에 걸쳐 이용되는 미디어가 되었다.

<12> 특히 모바일 광고는 기존의 다른 매체(TV, 인터넷, 라디오 등)와 달리 쌍방향 채널로서 즉각적인 효과를 유발할 수 있는 장점으로 인해 뛰어난 광고매체의 하나로 부각되기 시작하면서 각 기업에서는 마케팅 전략의 하나로 모바일을 이용한 광고서비스를 활발하게 진행하고 있다.

<13> 그러나 현재 모바일 광고는 사용자의 연령층이나 개인의 취향을 무시한 일방적인 광고방식으로 인해 관심 밖의 귀찮은 스팸 광고도 천대받거나, 성을 자극하는 선정적인 광고들을 청소년에게까지 무분별하게 난발하여 부적절한 호기심을 불러일으키게 하는 등 사회적 문제로 거론되고 있다. 더욱이 무료 할인 쿠폰을 빙자하여 URL 접속료를 부당하게 수취하고자 하는 목적의 광고와 같이 모바일 광고를 오용하는 일부 광고주들로 인해 피해자들이 속출하면서 대중이 모바일 광고를 신뢰하지 않는 지경에 이르렀다.

<14> 그러나 현재 모바일 광고는 모바일 기기의 기술적 한계로 인해 현재 사용 중에 있는 모바일 광고의 형식은 짧은 문자(SMS)방식에서 벗어나지 못하고 있다. 더욱이 설득 혹은 정보 전달이라는 광고 본연의 메시지를 담지 못하고 사용자의 연령층이나 개인의 취향을 무시한 광고주의 메시지를 일방적으로 전달함으로써, 광고를 접하는 수신자로 하여금 관심 밖의 귀찮은 스팸 광고로 천대받고 있다.

<15> 또한 모바일 광고는 성을 자극하는 선정적인 광고들을 청소년에게까지 무분별하게 난발하여 부적절한 호기심을 불러일으키고 있을 뿐만 아니라, 무료 할인 쿠폰을 빙자하여 URL콜백 접속료를 부당하게 수취하고자 하는 목적의 사기성 광고와 같이 모바일 광고를 오용하는 일부 광고주들로 인해 피해자들이 속출하고 있는 실정이다.

<16> 그러나 아직까지 이러한 스팸 또는 사기성 광고를 제재할 수 있는 시스템이 마련되어 있지 않아 정작 올바른 홍보를 하고자 하는 광고주나 기업에게 까지 악영향을 끼쳐 의도했던 모바일을 활용한 광고효과를 얻지 못하여 광고비용만 낭비되는 문제점이 있다.

<17> 또한 광고를 접하는 수신자는 취향에 맞지 않은 일방적이고 무분별한 광고로 인해 문자메시지를 저장하는 모바일 수신함이 용량을 초과하여 기다리는 메시지를 수신하지 못하게 되거나 수신함을 수시로 정리해야 하는 번거로움을 감수해야 하는 한편, 인증되지 않은 사기성 광고에 노출되어 피해를 보는 문제점이 있다.

<18> 따라서 수신자의 연령별, 성별, 취향에 따라 광고를 선별하여 수신자가 광고를 편리하게 이용할 수 있을 뿐만 아니라, 이미지·동영상·FLASH 등 다양한 컨텐츠로 광고함으로써, 광고주와 기업은 모바일을 활용한 광고효과를 더욱 높이는 동시에 모바일 이용자들의 인식을 고양하는 시스템이 마련되어야 한다.

발명이 이루고자 하는 기술적 과제

<19> 본 발명은 상기와 같은 종래기술의 문제점을 해결하기 위한 것으로, 모바일 광고에 대한 불신을 깨고 올바른 광고문화를 조성함과 아울러, 광고를 접하는 대중에게는 올바른 광고를 접할 수 있는 기회를 제공하는 한편, 스팸광고와 차별되는 광고를 유통할 수 있도록 하여 광고주와 기업의 이미지를 쇄신하고 계획한 의도에 따른 마케팅 효과를 얻을 수 있도록 하는 것을 그 목적으로 한다.

<20> 본 발명의 다른 목적은 발신자(10)가 무료로 메시지를 이용할 수 있도록 함으로써, 시스템 이용자를 다수 확보하고 발신자(10)에 의해 작성된 메시지와 함께 광고를 보여줄 수 있도록 하는 것이다.

<21> 본 발명의 또 다른 목적은 수신자(60)의 연령, 성별, 현재위치, 취향 및 메시지내용에 적절한 광고를 조회하고 광고할 수 있도록 하는 것이다.

<22> 본 발명에 의한 무료 발신메시지를 통한 광고마케팅 시스템 및 그 방법은 휴대폰 단말기(70)와; 상기 휴대폰 단말기(70)에서 전송되는 발신메시지를 이동통신망을 통해 하기 고객관계관리 서버로 송신하는 이동교환국(20)과; 상기 이동교환국(20)으로부터 수신된 발신메시지를 분석하여 수신자(60)에게 적절한 광고를 검색하는 한편, 상기 발신메시지에 광고문자를 추가하는 고객관계관리 서버(30); 및 상기 고객관계관리 서버(30)에서 출력되는 발신메시지를 이동교환국(20) 및 기지국을 통하여 착신측 휴대용 무선전화기로 단문 메시지형식으로 송신하는 단문메시지 스위칭 센터(40)로 이루어진 것을 특징으로 한다.

발명의 구성 및 작용

<23> 상기의 목적을 달성하기 위한 본 발명을 설명하기에 앞서, 설명에 참고가 되는 첨부 도면으로, 도 1을 본 발명에 의한 전체 시스템 블록도로, 도 2는 본 발명에 대한 운용방법의 일실시 예를 나타낸 순서도로, 도 3을 본 발명에 대한 운용방법의 다른 실시 예를 나타낸 순서도로 한다.

<24> 이와 같이 제시하는 첨부 도면을 통해 본 발명을 설명하면 다음과 같다.

<25> 먼저, 본 발명은 첨부 도면 도 1에서 보는 바와 같이, 휴대폰 단말기(70)와; 상기 휴대폰 단말기(70)에서 전송되는 발신메시지를 이동통신망을 통해 하기 고객관계관리 서버(30)로 송신하는 이동교환국(20)과; 상기 이동교환국(20)으로부터 수신된 발신메시지를 분석하여 수신자(60)에게 적절한 광고를 검색하는 한편, 상기 발신메시지에 광고문자를 추가하는 고객관계관리 서버(30); 및 상기 고객관계관리 서버(30)에서 출력되는 발신메시지를 이동교환국(20) 및 기지국을 통하여 착신측 휴대용 무선전화기로 단문 메시지형식으로 송신하는 단문메시지 스위칭 센터(40)로 구성된다.

<26> 상기 휴대폰 단말기(70)는 이미지나 동영상과 같이 대용량의 광고자료를 저장할 수 있는 메모리를 포함하고, 발신문자메시지를 압축하고 압축을 해제할 수 있는 기능, 및 수신한 메시지에서 단어를 조회하여 상기 메모리에 저장된 광고를 검색하고 표시하는 기능을 더 포함한다.

<27> 상기 고객관계관리 서버(30)는 수신자(60)의 위치를 확인할 수 있는 위치기반서비스(Location Based Service, LBS)기능과, 사용자의 CRM데이터를 저장하고 그 사용자의 성향을 분석하는 기능과, 최대가능한 무료문자의 잔여분량을 계산하고 제한하는 기능과, 제공된 광고의 통계를 산출하여 광고주에게 보고하는 기능을 더 포함한다.

<28> 상기 단문메시지 스위칭 센터(40)는 상기 고객관계관리 서버(30)에서 출력되는 메시지를 수신하여 상기 메시지에 광고하고자 하는 웹사이트 주소정보를 첨부하여 출력하는 WAP푸쉬 서버(50)를 더 포함한다.

<29> 이러한 본 발명의 작용 과정을 설명하기에 앞서 발신메시지를 이용한 광고는 발신메시지에 단 문장 혹은 장 문장의 텍스트를 포함하여 작성된 광고와, 발신메시지에 이미지를 포함하여 작성된 광고와, 발신메시지에 동영상을 포함하여 작성된 광고, 및 수신된 문자에서 바로 접속할 수 있도록 발신메시지에 URL을 포함하는 웹 광고로 분류된다.

<30> 이어서 상기 각 광고를 휴대폰 단말기로 구현하는 두 가지 실시 예를 도 2 내지 도 3을 참조하여 차례로 설명한다.

<31> 먼저, 첫 번째는 휴대폰 단말기(70)를 별도로 수정할 필요 없이 고객관계관리 서버(30)와 연계하여 발신메시지에 광고를 덧붙이는 방법이며,

<32> 두 번째는 휴대폰 단말기(70)를 수정하여 압축·압축해제·단어조회·광고검색·URL접속 기능을 추가하고, 고객관계관리 서버(30) 및 WAP푸쉬 서버(50)와 연계하여 유휴(IDLE)시간에 휴대폰 단말기(70)로 광고를 미리 저장함으로써, 수신자(60)의 휴대폰에 기 저장된 큰 텍스트·이미지·동영상광고를 자동으로 매치하여 불러 들여 휴대

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폰 단말기(70)에 표시하는 방법이다.

<33> 우선, 상기 통상의 휴대폰 단말기(70)를 고객관계관리 서버(30)와 연동시켜 광고를 덧붙이는 방법을 설명한다.

<34> 발신자(10)는 기존의 문자메시지 입력방법과 동일하게 수신자 전화 번호·발신자 전화 번호·메시지를 입력하고 전송버튼을 눌러 발신메시지를 전송한다.(A-1단계)

<35> 상기 발신메시지가 기지국 및 이동교환국(20)을 통해 고객관계관리 서버(30)로 전송되면, 상기 고객관계관리 서버(30)는 발신자(60)의 무료문자 잔여 분량을 계산하여(A-2단계) 발신자(10)의 무료문자 잔여 분량이 존재하지 않을 때에는 상기 고객관계관리 서버(30)는 발신메시지를 종래와 동일하게 단문메시지 스위칭 센터(40) 및 기지국을 통해 수신자(60) 휴대폰 단말기(70)로 전송하고, 문자메시지 사용료를 발신자(10)에게 청구한다(A-3단계).

<36> 한편, 상기 발신자(10)의 무료문자 잔여분량이 존재할 때에는 CRM데이터를 조회하여 수신자(60)의 연령대와 취향을 분석하고, 발신메시지에서 광고별 키워드와 매치 되는 단어가 있는지 검토하며, 위치기반서비스 기능을 이용해 수신자(60)의 현위치를 확인한 뒤, 종합적인 검토결과를 바탕으로 수신자(60)에게 시기 적절한 광고를 조회한다(A-4단계).

<37> 이후, 상기 고객관계관리 서버(30)는 상기 조회된 광고 문구를 발신메시지에 덧붙여 단문메시지 스위칭 센터(40)로 출력하고(A-5단계), 해당 광고의 광고주에게 비용을 청구한다(A-6단계).

<38> 상기 단문메시지 스위칭 센터(40)는 광고가 포함된 발신메시지를 기지국으로 보내 수신자(60) 휴대폰 단말기(70)로 전송하고(A-7단계), 수신자(60)는 문자 메시지를 확인한 후 메시지의 마지막에 덧붙여진 광고를 자연스럽게 읽게 된다.

<39> 여기서 시기 적절한 광고란 예를 들어 명동에 위치한 수신자(60)가 18세 여고생이라면 고객관계관리 서버(30)의 광고데이터에서 미성년자가 출입할 수 없는 곳이나 상품은 제외하고, 명동 주위의 음식점, 쇼핑몰, 서점, 영화관 등의 광고를 조회한다거나, '영화 보러가자 신촌역 3번 출구에서 봐' 등의 발신메시지 내용에서 단어('영화','신촌역')를 검색하여 색인어가 일치하는 광고를 조회한다. 이와 같은 기능은 고객관계관리 서버(30)에 최초에 광고데이터를 입력할 때 각 광고 마다 광고연령대, 위치, 성별 등의 분류코드와 색인어를 함께 부여함으로써 구현될 수 있다.

<40> 마지막으로, 상기 수신자(60) 휴대폰 단말기(70)에 각종 광고를 미리 저장한 뒤 무료 발신메시지가 수신될 때 적절한 광고를 출력하는 방법을 설명한다.

<41> 고객관계관리 서버(30)는 CRM데이터를 바탕으로 수신자(60)의 취향에 맞는 광고를 조회하고(B-1단계), 호 사용량이 적은 이동통신시스템의 IDLE시간(보통 새벽 시간)에 광고데이터(동영상, FLASH, 이미지, URL 등 광고를 표현할 수 있는 매체)를 단문메시지 스위칭 센터(40) 및 기지국을 통해 휴대폰 단말기(70)로 전송하면(B-2단계), 상기 광고데이터를 전송받은 휴대폰 단말기(70)는 광고데이터를 내부 메모리에 저장한다(B-3단계).

<42> 발신자(10)는 기존의 문자메시지 입력방법과 동일하게 수신자 전화 번호·발신자 전화 번호·메시지를 입력하고 전송버튼을 눌러 발신메시지를 전송한다.(B-4단계)

<43> 상기 발신메시지가 기지국 및 이동교환국(20)을 통해 고객관계관리 서버(30)로 전송되면, 상기 고객관계관리 서버(30)는 발신자(10)의 무료문자 잔여 분량을 계산하여(B-5단계) 발신자(10)의 무료문자 잔여 분량이 존재하지 않을 때에는 상기 고객관계관리 서버(30)는 발신메시지를 종래와 동일하게 단문메시지 스위칭 센터(40) 및 기지국을 통해 수신자(60) 휴대폰 단말기(70)로 전송하고, 문자메시지 사용료를 발신자(10)에게 청구한다(B-6단계).

<44> 한편, 발신자(10)의 무료문자 잔여분량이 존재할 시에는 CRM데이터를 조회하여 수신자(60)의 연령대와 취향을 분석하고, 발신메시지에서 광고별 키워드와 매치 되는 단어가 있는지 검토하며, 위치기반서비스 기능을 이용해 수신자(60)의 현위치를 확인한 뒤, 종합적인 검토결과를 바탕으로 수신자(60)에게 시기 적절한 광고를 조회한다(B-7단계).

<45> 여기서 상기 조회된 광고가 장 문장일 경우 광고 문장을 발신메시지에 덧붙여 압축 알고리즘을 사용하여 발신메시지를 압축시킨다(B-8단계).

<46> 그렇지 않고 상기 조회된 광고가 URL일 경우 광고의 URL콜백데이터를 발신문자메시지에 추가한다(B-9단계).

<47> 그렇지 않고 상기 조회된 광고가 이미지, 동영상, FLASH 등의 대용량 데이터인 경우 조회된 광고의 호출정보를 발신문자메시지에 추가한다(B-10단계).

<48> 이후 상기 고객관계관리 서버(30)는 상기 발신문자메시지를 단문메시지 스위칭 센터(40)로 출력하고, 해당 광고의 광고주에게 비용을 청구한다(B-11단계).

<49> 상기 단문메시지 스위칭 센터(40)는 광고가 포함된 발신메시지를 기지국으로 보내 수신자(60) 휴대폰 단말기(70)로 전송한다(B-12단계).

<50> 수신자(60)의 휴대폰 단말기(70)는 발신문자메시지를 수신하여 발신문자메시지가 압축된 경우 압축을 해제하여 메시지내용과 광고문장을 액정화면에 표시한다(B-13단계).

<51> 또는 상기 수신된 발신문자메시지에 URL콜백 데이터가 포함된 경우 메시지내용과 URL접속을 유도하는 문장을 액정화면에 표시한다(B-14단계).

<52> 또는 상기 수신된 발신문자메시지에 광고 호출정보가 포함되는 경우 상기 호출정보와 일치하는 광고를 수신자(60) 휴대폰 단말기(70)의 메모리에서 읽어 들여 액정화면에 표시한다(B-15단계).

<53> 이후 수신자(60)는 문자메시지와 광고를 확인한 후 웹 접속버튼을 눌러 특정 사이트에 접속하거나, 기존과 동일한 방법으로 통화버튼을 눌러 발신자(10)에게 전화통화를 시도한다.

<54> 이상에서와 같은 방법과 동작에 따르면 종래에 50자 이내의 텍스트위주의 데이터를 전송할 수밖에 없던 것을 최대 400자까지 송출할 수 있고, 대용량의 텍스트를 비롯한 동영상·FLASH·이미지·URL 등으로 만들어진 광고를 표현할 수 있게 된다.

<55> 그리고, 고객관계관리 서버(30)에서 발송된 광고의 시간대, 연령대, 위치 분포도를 분석하여 다른 광고의 마케팅 전략에 기초 정보로 활용할 수도 있다.

<56> 이상에서 설명한 바와 같이 본 발명은 고객관계관리 서버(30)의 CRM데이터를 이용하여 시기 적절하게 양질의 광고를 휴대폰 단말기(70)로 전송하는 것이므로, 비록 발명의 상세한 설명에서는 두 가지 방법을 실시 예로 들었지만, 본 발명은 이와 같이 도시되고 설명된 그대로의 구성 및 작용에만 국한되는 것이 아니며, 도 4와 같이 발신자(10)와 수신자(60)의 단말기가 휴대폰(70)뿐만 아니라 인터넷, PDA이외의 다양한 단말기로 대체할 수 있음은 당업자들은 잘 이해할 수 있을 것이다. 따라서 그러한 모든 적절한 변경 및 수정과 균등 물들도 본 발명의 범주에 속하는 것으로 간주되어야 할 것이다.

발명의 효과

<57> 이상과 같이 본 발명에 의하면, 발신자(10)의 동의를 받은 광고가 모바일을 통해 올바르게 유통됨으로써, 모바일 광고에 대한 불신을 깨고 올바른 광고문화를 조성함과 아울러, 광고를 접하는 대중에게는 올바른 광고를 접할 수 있는 기회를 제공하는 한편, 스팸 광고와 차별되는 광고를 유통할 수 있도록 하여 광고주와 기업의 이미지를 쇄신하고 계획한 의도에 따른 마케팅 효과를 얻을 수 있다.

<58> 그리고 발신자(10)는 무료로 메시지 서비스를 이용할 수 있고, 수신자(60)는 적시에 광고를 활용할 수 있으며, 광고주는 광고마케팅 효과를 크게 향상시킬 수 있는 이점이 있다.

<59> 또한 종래에는 50자 이내의 텍스트위주의 데이터를 전송할 수밖에 없던 것을 최대 400자까지 송출할 수 있고, 대용량의 텍스트를 비롯한 동영상·FLASH·이미지·URL 등으로 만들어진 홍보자료로 광고할 수 있는 이점이 있다.

<60> 그리고 광고주는 고객관계관리 서버에서 발송된 광고의 시간대, 연령대, 위치 분포도를 분석하여 다른 광고의 마케팅 전략에 기초 정보로 활용할 수 있는 이점이 있다.

도면의 간단한 설명

<1> 도 1은 본 발명에 의한 전체 시스템 블록도.

<2> 도 2는 본 발명에 대한 운용방법의 일실시 예를 나타낸 순서도.

<3> 도 3은 본 발명에 대한 운용방법의 다른 실시 예를 나타낸 순서도.

<4> 도 4는 본 발명을 여러 단말기로 응용한 실시 예의 시스템 블록도.

<5> <도면의 주요 부분에 대한 부호의 설명>

<6> 10: 발신자 20: 이동교환국

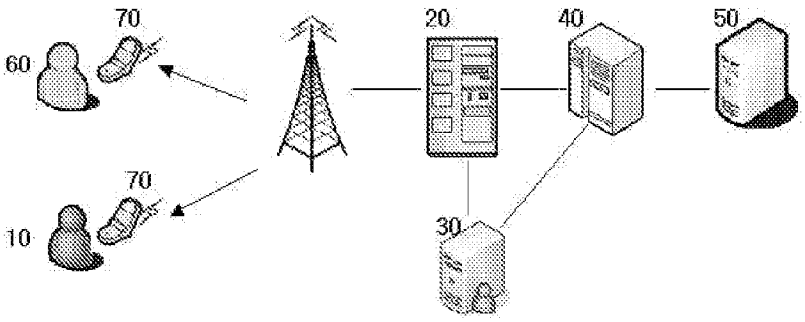
<7> 30: 고객관계관리 서버(Customer Relationship Mamagement Server)

<8> 40: 단문메시지 스위칭 센터 50: WAP푸쉬 서버

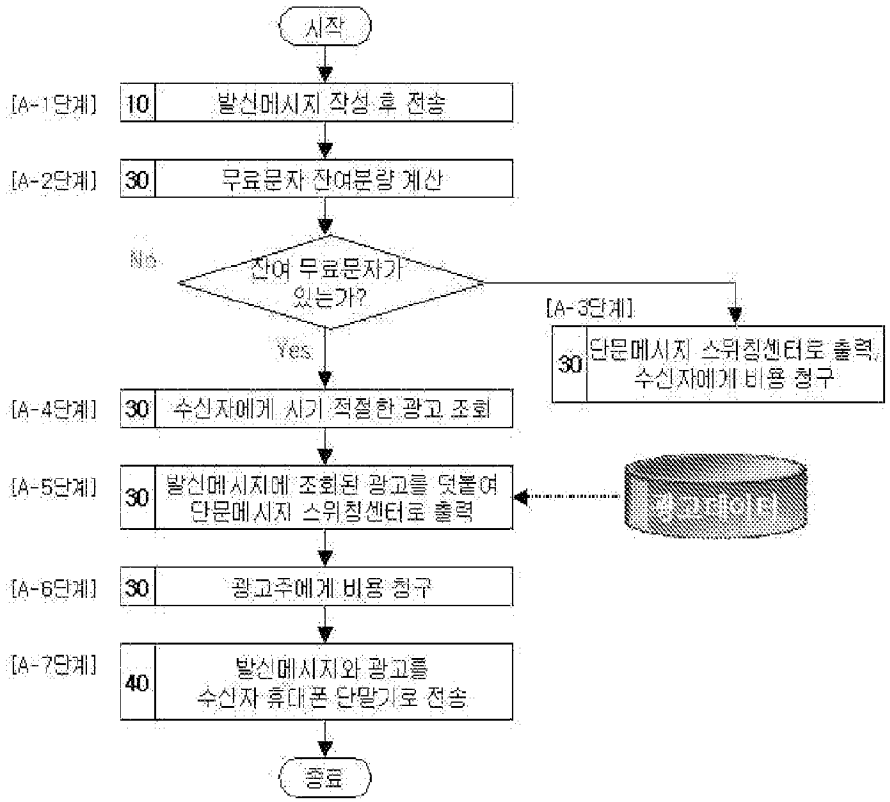
<9> 60: 수신자 70: 휴대폰 단말기

도면

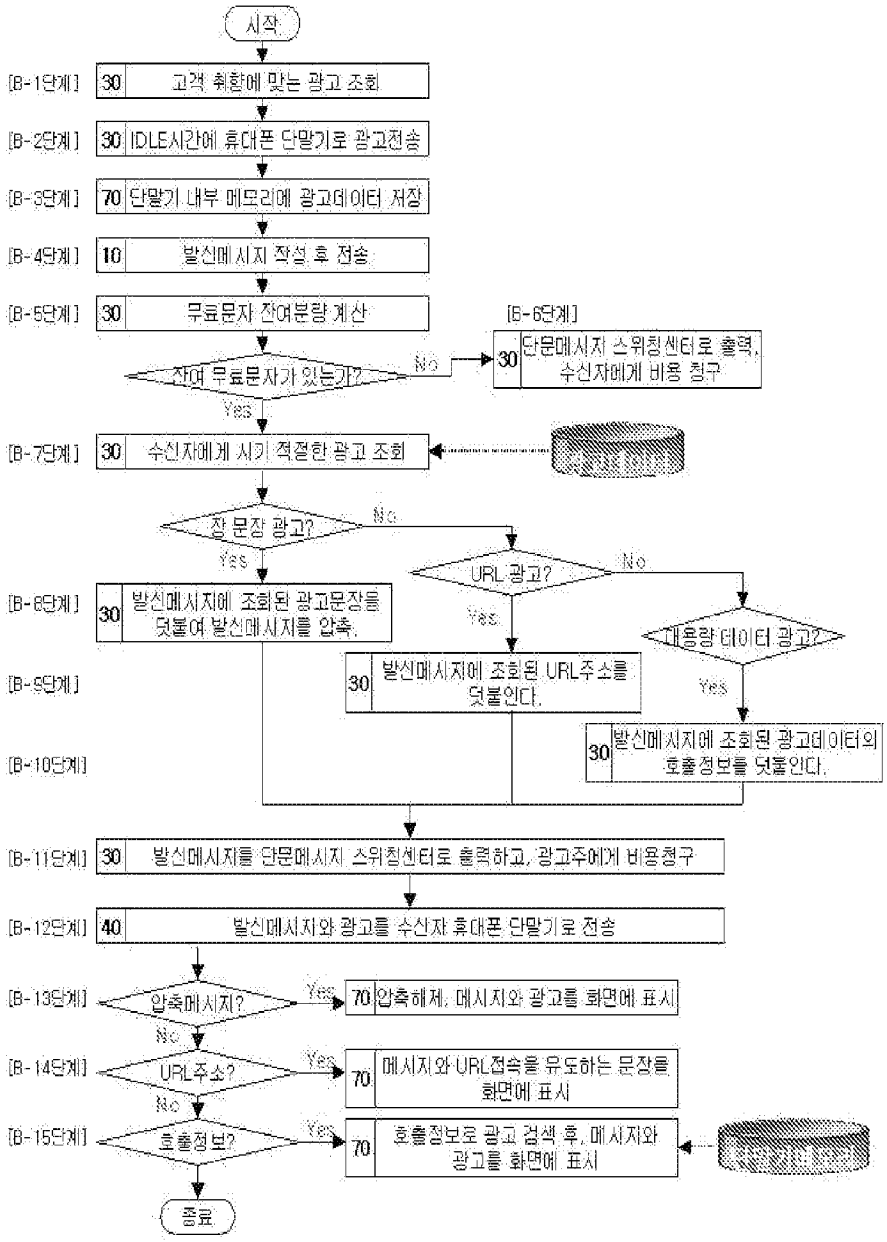
도면1



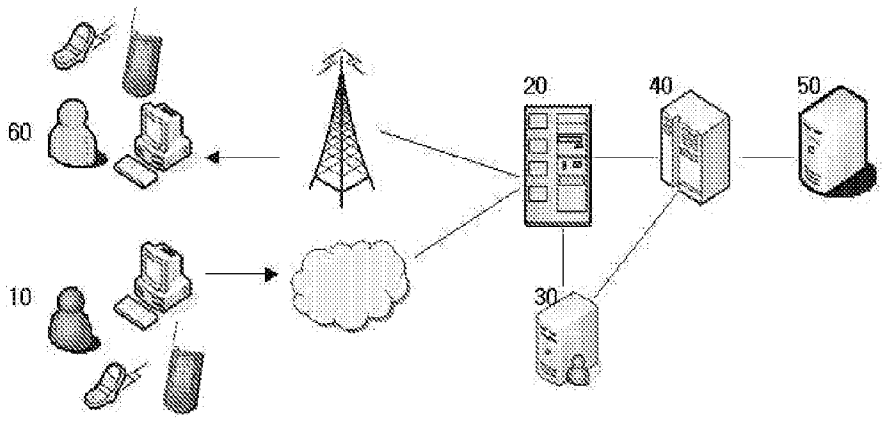
도면2



도면3


시작
[B-1단계] 30 고객 취향에 맞는 광고 조회
[B-2단계] 30 IDLE시간에 휴대폰 단말기로 광고전송
[B-3단계] 70 단말기 내부 메모리에 광고데이터 저장
[B-4단계] 10 발신메시지 작성 후 전송
[B-5단계] 30 무료문자 잔여분량 계산
잔여 무료문자가 있는가?
No
[B-6단계]
30 단문메시지 스위칭센터로 출력, 수신자에게 비용 청구
Yes
[B-7단계] 30 수신자에게 시기 적절한 광고 조회
장 문장 광고?
No
Yes
URL 광고?
No
Yes
[B-8단계] 30 발신메시지에 조회된 광고문장을 덧붙여 발신메시지를 압축.
대용량 데이터 광고?
[B-9단계] 30 발신메시지에 조회된 URL주소를 덧붙인다.
Yes
30 발신메시지에 조회된 광고데이터의 호출정보를 덧붙인다.
[B-10단계]
[B-11단계] 30 발신메시지를 단문메시지 스위칭센터로 출력하고, 광고주에게 비용청구
[B-12단계] 40 발신메시지와 광고를 수신자 휴대폰 단말기로 전송
[B-13단계] 압축메시지?
Yes
70 압축해제, 메시지와 광고를 화면에 표시
No
[B-14단계] URL주소?
Yes
70 메시지와 URL접속을 유도하는 문장을 화면에 표시
No
[B-15단계] 호출정보?
Yes
70 호출정보로 광고 검색 후, 메시지와 광고를 화면에 표시
종료

도면4



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This translation is machine - generated. It cannot be guaranteed that it is intelligible, accurate, complete, reliable or fit for specific purposes. Critical decisions, such as commercially relevant or financial decisions, should not be based on machine - translation output.

DESCRIPTION KR20080111175

[1]

1 is a whole system according to the present invention, a block diagram.

[2]

Shows an embodiment of the operating method of the invention Figure 2 is a flow chart.

[3]

Is a flow chart showing another embodiment of the operating method of the present invention;

[4]

4 is a block diagram of the device of the invention applied in various embodiments the system.

[5]

<Description of the Related drawings>

[6]

10: 20 Sender: mobile switching center

[7]

30: Customer Relationship Management Server (Customer Relationship Mamagement Server)

[8]

40: Short Message Switching Center 50: WAP push server

[9]

60: Toll 70: Mobile handset

With relates to marketing systems and method of the mobile phone through the free outgoing message service, and more particularly for advertising messages and send the recipient's (60) receive a free outgoing message age, message content, and a place where the present invention is By sending, and can be powered by the release of a free service offered to pay outgoing messages cost cable allows the advertisers pay the sender (10), Retail Advertising at affordable prices to the advertisers can promote effective and efficient, the recipient (60 relates to a system and method for marketing through a free outgoing message to be convenient to report timely advertisement) is.

EX1003, Page 653

Recent dissemination of the mobile is located to catch up in the life and culture of the modern necessities, a mobile is in the hands of modern real - time communication, as well as almost all areas of our lives learning and the exchange of information, purchase or sale of goods, advertising, etc. The media was used throughout.

In particular, the mobile ad advertising with mobile marketing as one of the companies in each began to be highlighted as one of the great advertising medium because of the advantage, unlike other traditional media (TV, internet, radio, etc.) that can lead to a two - way channel with immediate effect The actively carried out for service.

However, as other units of interest or annoying spam ads advertising method due to unilateral neglect the individual users of all ages and tastes, to Storuman indiscriminately to the youth of the province called sensational advertising to stimulate curiosity causes the current mobile advertising is inappropriate has been mentioned as a social problem, etc.

Moreover reached the point that you do not trust the popular mobile advertising due to some misuse of mobile advertising as advertisers and advertising for the purposes of interconnection to the URL you want to receive unfairly bingja free discount coupons with victims after another.

However, mobile advertising is currently not escape characters in the short (SMS) scheme for mobile ad format that is in use due to the technical limitations of current mobile devices.

Moreover, not supporting the original message of advertising persuasion or communication by conveying the message of the advertiser unilaterally ignore the preferences of individual users and of all ages, causes the recipient to contact the ad has been thousands of other annoying spam advertising interest.

Also be inappropriate curiosity sparked by Storuman indiscriminately to the youth of sensational advertising to stimulate the castle, as well as mobile advertising as deceptive advertising and unfair receipt of purpose to the callback URL to bingja free discount vouchers mobile interconnection The situation after another that victims of abuse due to some advertisers ads.

EX1003, Page 654

But get this mothayeo using mobile advertisers who intend to apologize for the Company to adverse jeongjak to still do not have the right to promote this system to sanction such spam or fraudulent advertising advertising advertising is wasted, but the cost issue The.

Also, while you need to take the hassle to have to clean up the inbox often beyond the capacity of the receiving mobile text messages are saved because of the unilateral and reckless ads that fit your taste, or prevent receiving messages waiting contacting the advertisement receiver, authentication a problem that is not exposed to fraudulent advertisement viewing the damage it.

Therefore, the recipient age, gender, be convenient screening the ads according to the taste of the recipient as well as the advertising, by advertising images and videos and a wide variety of content, such as FLASH, the more advertisers using mobile advertising company system should be established to enhance the awareness of mobile users while improving.

Conceived to solve the problems occurring in the prior art as described above the present invention is to break the distrust of the appropriate advertisement to the mobile advertisement culture and at the same time, to the public in contact with the advertisement provided by the advertising opportunities that can access the right hand, spam and for that purpose to allow distributors to help get the ads that discriminate on the effects of marketing and advertising for advertisers and corporate image makeover and a plan intended.

To show an ad is to obtain a system with a message number and by the user to take advantage of a free message sender 10 is created by the sender 10 is a further object of the present invention.

The look up the appropriate advertisement to advertise the age of the recipient 60, the gender, the current position, orientation, and message content, and a further object of the present invention.

Through the free outgoing message in accordance with the present invention system and

EX1003, Page 655

method for marketing the cellular handset (70) and; A mobile switching center 20 and to be sent to a customer relationship management server through a mobile communication network sends a message that is sent from the mobile phone terminal 70; To retrieve the appropriate advertisement to the receiver 60 analyzes the received from the mobile switching center (20) outgoing message the other hand, adding a character to said outgoing message advertising customer relationship management server 30; Characterized in that consisting of transmitting a short message format, outgoing messages, and the output from the customer relationship management server 30 through the mobile switching center 20 and the base station to the destination portable wireless telephone short message switching center (40).

Before a description of the present invention for achieving the above object, as being useful to the description accompanying the drawings, the overall system block diagram according to Figure 1 the present invention, Fig 2 is an embodiment of the operating method of the present invention; The flow chart shown by a flow chart illustrating another embodiment of a method for operating, a third invention is also present.

This will be described in this way with the accompanying drawings which present invention.

First, the present invention as shown in the accompanying drawings, Figure 1, mobile phone terminal 70 and the; A mobile switching center 20 and to be transmitted through the mobile communication network to customer relationship management server 30 sends a message that is sent from the mobile phone terminal 70; To retrieve the appropriate advertisement to the receiver 60 analyzes the received from the mobile switching center (20) outgoing message the other hand, adding a character to said outgoing message advertising customer relationship management server 30; Is composed of a short message form to be transmitted to the caller a message that is output from said customer relationship management server 30 through the mobile switching center 20 and the base station to the destination portable wireless telephone short message switching center (40).

The mobile phone terminal 70 includes a large capacity for storing the advertisement data, such as images, and video memory, and display the word in the ability to decompress the message and sending the compressed character, and the received message to the memory, include the ability to search and display ads are stored in more.

The customer relationship management and the ability to store and to check the position of the receiver 60, the location - based service (Location Based Service, LBS) function, CRM data and analyzing the user's tendencies of the user server 30, up to includes a function to report to the advertiser's statistics for advertising provided that the remaining amount of free text can be computed, and limiting, by calculating more.

Further comprising 50 to WAP push server which outputs attached to the web address information to said advertisement to the message by receiving a message that is output from a customer relationship management server 30 the short message switching center (40).

Advertising with outgoing message Prior to describing the operation process of the invention is a video and created, including only text, or text of the sentence section on the outgoing message, advertisement, and written in the image on outgoing messages, including advertisements, outgoing message Web ads are sorted in the origination message containing a URL to be accessed just created, including advertisements, and the received symbols.

Next will be described in turn with reference to Figure 2 through an embodiment for implementing the two telephones with each advertisement.

First, the obtained cellular phone 70 separately from the terminal without the need to add the advertisement to modify in conjunction with customer relationship management server 30 in the first origination message, the second decompressed and compressed by modifying the cell phone terminal 70 and advertising the search query and the words and by a URL access function, and added in conjunction with customer relationship management and the server (30) WAP push server 50, an idle (IDLE) to the time a cellular phone terminal 70, the advertisement pre - stored, the recipient big text and pre - stored in the mobile phone (60) and a method for displaying images on mobile handsets (70) called automatically indent to match the video ad.

First, a description of the customer relationship management server 30 by a conventional interlocking device 70, a mobile phone is adding an advertisement method.

EX1003, Page 657

Pressing the transfer button caller 10 inputs the recipient's phone number and the caller telephone number and the same text message and the message type of an existing method, and transmits the outgoing message.

A base station and a mobile switching center is transferred to the customer relationship management server 30 through 20, calculates the residual free character of the sender 60, the amount of the customer relationship management server 30 (A - 1 step), wherein the outgoing message When there is no residual free character to (A - 2 step), the caller 10 is the amount of the customer relationship management server 30 via a short message switching center 40 and the base station in the same conventional and the outgoing message recipient (60) sent to the mobile phone terminal 70, and the charge to the sender 10, the access text message (A - 3 step).

On the other hand, when there are characters remaining free of the sender (10) amounts to analyze the age and tastes of the recipient (60) to query CRM data, and review the words that match specific keywords and ads in outgoing messages, location - based services The back with the function check the current position of the receiver 60, based on a comprehensive review of the receiver 60 when the appropriate advertising research (step A - 4).

Thereafter, the customer relationship management server 30 in addition to the outbound message that is output to the lookup promotional text short message switching center (40) and (A - 5 step), the charge to the advertiser of the advertisement (A - step 6).

The short message switching center 40 is sent to the base station that contains the advertisements transmitted to the outgoing message recipient (60), mobile phone terminal 70, and (A - 7 levels), the receiver 60 includes a message after checking a text message is appended to the last ad read naturally.

This ad is a timely example, if the receiver (60) is located in Myeong - dong 18 - year - old high school girl, except for areas or items not permitted in the advertising data customer relationship management server (30) is a minor, restaurants, shopping malls around Myeongdong , bookshops, cinemas, etc. handageona ads viewed, 'Let's go to the movies Sinchon Station exit 3 Look at' The index terms are viewed ads matching your search word ('movie', 'Sinchon') in the outgoing message content, such as the.

Can be implemented by providing advertisements with information such as age, location, sex, classification code and advertisement for each index term when the input data to the first advertisement on the customer relationship management server 30, such as this function.

Finally, a method for outputting various kinds of advertisements to the appropriate advertising recipient 60, the mobile phone terminal 70 is stored in advance, and after the outgoing message is received for free.

Customer relationship management server 30, based on the query and CRM data to advertisement data (B - 1 step), arc - peak IDLE time (usually morning hours) in a mobile communication system in the ad fit the taste of the recipient (60) is transmitted to the cellular phone terminal 70 via the short message switching center 40 and the base station (medium to express an advertisement videos, FLASH, image, URL, etc.) to (B - 2 step), the advertisement data transmitted to mobile phone The (B - 3 step), the advertisement data stored in the internal memory device 70.

Pressing the transfer button caller 10 inputs the recipient's phone number and the caller telephone number and the same text message and the message type of an existing method, and transmits the outgoing message.

A base station and a mobile switching center is transferred to the customer relationship management server 30 through 20, calculates the residual free character of the sender 10, the amount of the customer relationship management server 30 (B - 4 step), the outgoing message When there is no residual free text to (B - 5 step), the caller 10 is the amount of customer relationship management server 30 via a short message switching center 40 and the base station in the same conventional and the outgoing message recipient (60) sent to the mobile phone terminal 70, and the charge to the sender 10, the access text message (Step B - 6).

On the other hand, when there is a residual of free text sender (10) to analyze the amount of ages and tastes of the recipient (60) to query CRM data, and review the words that match specific keywords and ads in outgoing messages, location - based services The back with the function check the current position of the receiver 60, based on a comprehensive review of the receiver 60 when the appropriate advertising

research (B - 7 steps).

This ad has been viewed, if the chapter in addition to sending text message advertising text message The outgoing compressed using the compression algorithm (B - 8 levels).

Otherwise, if the URL of the ad is viewed is added to the originating text message, the advertisement URL callback data (B - 9 levels).

Otherwise, if a large amount of data such as images, video, FLASH ads that the query is added to outgoing text messages, call information of the query ad (B - 10 level).

Thereafter, the customer relationship management server 30 is output to the short message switching center (40) the originating text message, and the cost to the advertiser of the advertisement (B - 11 step).

The short message switching center 40 transmits the receiver 60 to the mobile phone terminal 70 to the base station to send an origination message including advertisements (B - 12 step).

If the compressed receives outgoing text messages originating text message in the receiver (60) telephones 70 and extract the message content and advertising text on the liquid crystal display (B - 13 step).

Or if it is included in the received outgoing callback URL text message data is displayed on the LCD panel leads to the statement that the message content and the URL connection (B - 14 step).

Or if it is included in the received outgoing call information is a text message advertisement is displayed on the liquid crystal display to be read in the memory the receiver 60 of the cellular phone terminal 70, an advertisement that matches the call information (B - 15 step).

After pressing the call button in the same old way and try a phone call to the sender (10) connected to a particular site, click the Web Access button after checking the advertising text message, or the recipient (60).

According to the same manner as in the above action, such as the advertising made up to 400 characters can be sent that were not forced to transfer data within 50 characters of text based on prior art, including large amounts of text, images and video and FLASH and URL it is possible to express.

Also, the information may be used as a basis for the different marketing strategy by analyzing the time zone of the advertisement sent in a customer relationship management server 30, the age, the location distribution.

Since the transfer to the cell phone terminal 70 by using the customer relationship management server (30) CRM data in a timely fashion to the advertisement of quality as described above invention, even in the present detailed description of example embodiments of two methods heard, is not to be limited to the shown and described in this way as the construction and operation of this invention, a variety of non - Internet, PDA phone 70, as well as the sender 10 and the recipient device 60 as 4, and Those skilled in the art will appreciate that the device can be replaced by the.

Therefore, it should be considered to belong to the scope of the present invention, all such suitable changes or modifications and equivalents also stained.

Distribution through mobile advertising being correctly according to the present invention as described above, received the consent of the sender (10), breaking the distrust of mobile ad advertising the correct culture and at the same time, accessible to the public in contact with the right advertising ads which provides an opportunity to the other hand, it is possible to obtain the marketing effect of renewing an image of a letter to the advertiser to the advertisement distribution is apart from the ad and the planned intended spam.

And a message service can be used free of charge sender 10, the ads at the right time and to utilize the receiver 60, which can greatly improve the marketing effects advantages advertisers.

In addition, up to 400 characters can be sent to the prior art were not forced to transfer data within 50 characters of text - based, which can be made of such advertising to promotional materials, including a large amount of text and image and video and FLASH URL advantage .

And this information can be used as a basis to analyze the age of the other marketing strategies, the advertising zone, where the distribution was sent from the customer relationship management server advantages advertisers.

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CLAIMS KR20080111175

[0001]

A system for transmitting a free outgoing message,

Handsets (70); A mobile switching center 20 and to be transmitted through the mobile communication network to customer relationship management server 30 sends a message that is sent from the mobile phone terminal 70; To retrieve the appropriate advertisement to the receiver 60 analyzes the received from the mobile switching center (20) outgoing message the other hand, adding a character to said outgoing message advertising customer relationship management server 30; Characterized in that consists of free to send a short message format, outgoing messages are output, and the customer relationship management server 30 via the mobile switching center 20 and the base station to the destination portable wireless telephone short message switching center (40) marketing system through the outgoing message.

[0002]

The method of claim 1,

The mobile phone terminal 70 includes a large capacity for storing the advertisement data, such as images, and video memory, and display the word in the ability to

decompress the message and sending the compressed character, and the received message to the memory, marketing system based free origination message further comprises a function to search and display an advertisement stored in the.

[0003]

The method of claim 1,

The customer relationship management and the ability to store and to check the position of the receiver 60, the location - based service (Location Based Service, LBS) function, CRM data and analyzing the user's tendencies of the user server 30, up to marketing system based free outgoing message further comprising a function to report to the advertiser's statistics for advertising provided that the remaining amount of free text can be calculated and limiting, is calculated.

[0004]

The method of claim 1,

Further comprising 50 to WAP push server which outputs attached to the web address information to the advertising message, receiving a message that is output from a customer relationship management server 30 the short message switching center (40) marketing system is characterized by a free outgoing message.

[0005]

A method for transmitting text messages on a free,

Step, enter a phone number and the phone number the caller and the recipient, the message and enter the same text message and click the Send button, the conventional method of transmitting Caller (10) is a mobile switching center (20), the outgoing message; Interlocked relationship with the customer management server 30 in addition

EX1003, Page 664

to the message advertising the appropriate time by the sender 10 and the mobile switching center 20 through a short message switching center 40 and the base station receiver (60) telephones (How the operation of the system with a free marketing wherein the outgoing message consisting of transmitting up to 70) step.

[0006]

The method of claim 5,

The customer relationship is linked to the server 30 is added when the appropriate advertising and transmitting to the receiver 60, mobile phone terminal 70 through a short message switching center 40 and the base station management,

Server 30, wherein the customer relationship management and the A - 2 step for calculating the residual amount of free text receiver (60); When there is no residual free character of the receiver 60, the amount of the customer relationship management server 30 is the same as a conventional SMS message and an origination message via the switching center 40 and the base station receiver (60), the cell phone terminal 70 A - 3 comprising the steps of transmitting to, and charged to the sender 10, the access text message; If there is a residual amount of free text analysis, and the age and preference of the recipient (60) to query CRM data, and review the words that match specific keywords and ads in outgoing messages, use the location - based service capabilities recipient (60) After verifying the current location, the time to retrieve the appropriate ad to the recipient (60), based on a comprehensive review of A - 4 step; Outputting a short message switching center (40) in addition to the outgoing message with the query phrase advertising server 30, wherein the customer relationship management step A - 5; How the operation of the system with a free marketing origination message further comprising the steps of: A - 6 cost to the advertiser and its advertising.

[0007]

A method for transmitting text messages on a free,

Comprising the steps of: a mobile phone terminal 70, the advertisement data transmission an idle (IDLE) to the time the customer relationship management server 30; Step and enter the phone number and the phone number the caller and the recipient, the message is the same text message and enter the conventional method and click the Send button to send to the customer relationship management server (30), the outgoing message sender (10); And transmitting to the receiver 60, mobile phone terminal 70, server 30, wherein the customer relationship management, query the appropriate advertisement to the receiver (60) In addition, the advertisement data or the advertisement information to said call originating message; Characterized in that the screen made up of a step with the message by the sender 10 retrieves the appropriate advertisement from the advertisement data when the received message, and the toll free calling (60) the cell phone terminal 70 is stored in advance in the How to operate the marketing system through a free outgoing message.

[0008]

The method of claim 7,

The step of a mobile phone terminal 70 to the advertisement data transmission an idle (IDLE) to the time the customer relationship management server 30,

Customer relationship management server 30 B - 1 comprising the steps of: querying the advertisement to fit the tastes of the receiver 60 based on CRM data; Advertisement data (medium to express the advertising video, FLASH, image, URL, etc.) to the IDLE time of a mobile communication system during off - peak arc (usually morning hours) telephones via a short message switching center 40 and the base station (70 B - 2 and transmitting) a; How the operation of the system with a free marketing outgoing message, characterized in that it comprises a B - 3 and storing the advertisement data transmitted to the internal memory, and the advertisement data, mobile handset 70.

[0009]

The method of claim 7,

The customer relationship management is a method comprising: transmitting to the receiver 60, mobile phone terminal 70 in addition to the advertisement data or the advertisement information to the call origination message by looking up the appropriate advertisement to the receiver 60, the server 30 includes a

Server 30, wherein the customer relationship management B - 5 comprising the steps of: calculating the residual amount of free text sender (10); When there is no residual free character of the sender (60) worth of the server 30 is an outbound message, the customer relationship management with the prior art in the same short message switching center 40 and the base station receiver (60), the cell phone terminal 70 B - 6 comprising the steps of transmitting to, and charged to the sender 10, the access text message; Prefecture of the recipient (60) when there is a residual amount of analysis and the ages and tastes of the recipient (60) to query CRM data, and review the words that match specific keywords and ads in outgoing messages, use the location - based service capabilities After verifying the location, based on a comprehensive review of B - 7 steps to query the timely advertisements to the recipient (60); If the above query text ads section B - 8 in addition to the step of sending the message advertising text to compress outgoing message with a compression algorithm; If the above queries ad URL B - 9 comprising the steps of: adding to the outgoing callback URL text message data of the advertisement; If the ad is viewed a large amount of data such as images, video, FLASH to add to outgoing text messages, call information in the ad B - 10 level; Output to the short message switching center (40) the originating text message, the outgoing message via a free characterized in that step consisting of 11 B - to charge the advertiser of the advertisement and the server 30, wherein the customer relationship management How to operate the marketing system.

[0010]

The method of claim 7,

A step of displaying on the screen the receiver 60, the cell phone terminal 70 is searched for a suitable advertisement in the advertisement data to be received for free outgoing message previously stored with the message created by the sender (10),

If it is included in the received outgoing compressed text message of the recipient (60) is a portable device for displaying advertisements on the liquid crystal display of the

EX1003, Page 667

message content and the advertising text to extract the phase and B - 13; If it is included in the received outgoing callback URL text message data to B - 14 in the liquid crystal display step of displaying the text message content and the URL to derive the connection; Characterized in that if it is included in the originating text message, and the received advertisement information is called B - 15 made by the steps of displaying on the liquid crystal display to be read from memory, the receiver 60 of the cellular phone terminal 70, an advertisement that matches the call information How to operate the marketing system through a free outgoing messages to.

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:
MCCORMACK, BRIAN C.

BAKER & MCKENZIE LLP 2001 ROSS AVENUE, SUITE 2300 DALLAS TX 75201 USA

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OCT 06 2014
BAKER & McKENZIE DALLAS

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

	Date of mailing *(day/month/year)* 24 September 2014 (24.09.2014)
Applicant's or agent's file reference VEEVA-4	**FOR FURTHER ACTION** See paragraphs 1 and 4 below
International application No. **PCT/US2014/036990**	International filing date *(day/month/year)* **06 May 2014 (06.05.2014)**
Applicant **VEEVA SYSTEMS INC.**	

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

   Filing of amendments and statement under Article 19:

   The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

   When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

   How? Directly to the International Bureau of WIPO preferably through ePCT or on paper to, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Facsimile No.: +41 22 338 82 70

   For more detailed instructions, see *PCT Applicant's Guide*, International Phase, paragraphs 9.004 . 9-011.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3. ☐ **With regard to any protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

   ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with any request to forward the texts of both the protest and the decision thereon to the designated Offices.

   ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. Following the expiration of 30 months from the priority date, these comments will also be made available to the public.

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau before the completion of the technical preparations for international publication (Rules 90*bis*.1 and 90*bis*.3).

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices. In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months. For details about the applicable time limits, Office by Office, see www.wipo.int/pct/en/texts/time_limits.html and the *PCT Applicant's Guide*, National Chapters.

Within **19 months** from the priority date, the applicant may request that a supplementary international search be carried out by an International Searching Authority, that offers this service (Rule 45*bis*.1). The procedure for requesting supplementary international search is described in the *PCT Applicant's Guide*, International Phase, paragraphs 8.006-8.032.

DOCKETED
By
Action
Due Date
Reviewed By
Date

Name and mailing address of the ISA/KR International Application Division Korean Intellectual Property Office 189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan City, 302-701, Republic of Korea	Authorized officer COMMISSIONER
Facsimile No. 82-42-472-7140	Telephone No. 82-42-481-8751

Form PCT/ISA/220 (July 2014)

* Attention

Copies of the documents cited in the international search report can be searched in the following Korean Intellectual Property Office English website for six months(expire date : **2015.03.24**) from the date of mailing of the international search report.

http://www.kipo.go.kr/en/ => PCT Services => PCT Services

ID : PCT international application number
PW : **2LA39M69**

Inquiries related to PCT International Search Report or Written Opinion prepared by KIPO as an International Searching Authority can be answered not only by KIPO but also through IPKC (Intellectual Property Korea Center), located in Vienna, VA, which functions as a PCT Help Desk for PCT applicants.

Homepage: http://www.ipkcenter.com

Email: ipkc@ipkcenter.com

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference VEEVA-4	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. **PCT/US2014/036990**	International filing date *(day/month/year)* **06 May 2014 (06.05.2014)**	(Earliest) Priority Date *(day/month/year)* 06 May 2013 (06.05.2013)
Applicant **VEEVA SYSTEMS INC.**		

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of **4** sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**
   a. With regard to the **language**, the international search was carried out on the basis of :
      ☒ the international application in the language in which it was filed
      ☐ a translation of the international application into _____ , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))
   b. ☐ This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6*bis*(a)).
   c. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.
2. ☐ **Certain claims were found unsearchable** (See Box No. II)
3. ☐ **Unity of invention is lacking** (See Box No. III)
4. With regard to the **title,**
   ☒ the text is approved as submitted by the applicant.
   ☐ the text has been established by this Authority to read as follows:
5. With regard to the **abstract,**
   ☒ the text is approved as submitted by the applicant.
   ☐ the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.
6. With regard to the drawings,
   a. the figure of the **drawings** to be published with the abstract is Figure No. **1**
      ☐ as suggested by the applicant.
      ☒ as selected by this Authority, because the applicant failed to suggest a figure.
      ☐ as selected by this Authority, because this figure better characterizes the invention.
   b. ☐ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2014/036990

A. CLASSIFICATION OF SUBJECT MATTER

G06Q 30/02(2012.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
G06Q 30/02; G06F 15/00; G06Q 30/06; G06F 12/14; G06F 17/21; G06Q 50/10; G06Q 10/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean utility models and applications for utility models
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & Keywords: email, CRM, message, hyperlink

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2004-513460 A (ORCHESTRIA LIMITED) 30 April 2004 See abstract, paragraphs [0008],[0017]-[0018],[0046],[0051],[0138],[0167] [0175]-[0176],[0180],[0185], claims 55, 588-591, 695-698 and figure 23.	1,4,8-15,17-20
Y		2-3,5-7,16
Y	JP 04980636 B2 (JAPAN TOBACCO INC.) 18 July 2012 See abstract, paragraphs [0021], [0032], claim 1 and figure 2.	2-3,5-7,16
A	JP 2010-211830 A (NEXTAGE K.K.) 24 September 2010 See abstract, claims 1, 5, 8, 12 and figures 11-14, 65.	1-20
A	KR 10-2012-0076490 A (SK PLANET CO., LTD.) 09 July 2012 See abstract, claims 1, 3-4, 8, 16-17 and figures 5, 8.	1-20
A	KR 10-2008-0111175 A (OMNITEL CO., LTD.) 23 December 2008 See abstract, claims 1, 3-4, 6 and figures 1, 3.	1-20

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents,such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
23 September 2014 (23.09.2014)	**24 September 2014 (24.09.2014)**

Name and mailing address of the ISA/KR	Authorized officer
International Application Division Korean Intellectual Property Office 189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan City, 302-701, Republic of Korea	KIM, Sung Gon
Facsimile No. +82-42-472-7140	Telephone No. +82-42-481-8746

Form PCT/ISA/210 (second sheet) (July 2009)

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2004-513460 A	30/04/2004	AT 377810 T	15/11/2007
		AT 382912 T	15/01/2008
		AT 382913 T	15/01/2008
		AT 382914 T	15/01/2008
		AT 382915 T	15/01/2008
		AT 383622 T	15/01/2008
		AT 383623 T	15/01/2008
		AT 384308 T	15/02/2008
		AT 384309 T	15/02/2008
		AU 1254902 A	21/05/2002
		CA 2428238 A1	16/05/2002
		CA 2565876 A1	16/05/2002
		CA 2565876 C	15/09/2009
		CA 2565895 A1	16/05/2002
		CA 2565929 A1	16/05/2002
		CA 2565949 A1	16/05/2002
		CA 2566201 A1	16/05/2002
		CA 2566201 C	14/10/2008
		CA 2566262 A1	16/05/2002
		CA 2566262 C	30/06/2009
		CA 2567147 A1	16/05/2002
		CA 2567147 C	03/06/2008
		CA 2571516 A1	16/05/2002
		DE 60131300 D1	20/12/2007
		DE 60132251 D1	14/02/2008
		DE 60132252 D1	14/02/2008
		DE 60132253 D1	14/02/2008
		DE 60132254 D1	14/02/2008
		DE 60132365 D1	21/02/2008
		DE 60132369 D1	21/02/2008
		DE 60132493 D1	06/03/2008
		DE 60132495 D1	06/03/2008
		DK 1360623 T3	19/05/2008
		DK 1365340 T3	30/06/2008
		DK 1376435 T3	19/05/2008
		DK 1376436 T3	26/05/2008
		DK 1378847 T3	28/04/2008
		EP 1360623 A2	12/11/2003
		EP 1360623 B1	02/01/2008
		EP 1365340 A2	26/11/2003
		EP 1365340 A3	10/12/2003
		EP 1365340 B1	09/01/2008
		EP 1369800 A1	10/12/2003
		EP 1369800 B1	02/01/2008
		EP 1369801 A1	10/12/2003
		EP 1369801 B1	07/11/2007
		EP 1369802 A1	10/12/2003
		EP 1369802 B1	16/01/2008
		EP 1372100 A1	17/12/2003

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		EP 1372100 B1	16/01/2008
		EP 1376435 A2	02/01/2004
		EP 1376435 A3	07/01/2004
		EP 1376435 B1	02/01/2008
		EP 1376436 A1	02/01/2004
		EP 1376436 B1	09/01/2008
		EP 1378847 A1	07/01/2004
		EP 1378847 B1	02/01/2008
		ES 2299521 T3	01/06/2008
		ES 2299664 T3	01/06/2008
		ES 2299665 T3	01/06/2008
		ES 2299666 T3	01/06/2008
		ES 2299667 T3	01/06/2008
		JP 04354182 B2	28/10/2009
		JP 2009-146454 A	02/07/2009
		JP 2009-146455 A	02/07/2009
		JP 2009-146456 A	02/07/2009
		JP 2009-169960 A	30/07/2009
		US 2002-0087479 A1	04/07/2002
		US 2004-0078334 A1	22/04/2004
		US 2005-0203855 A1	15/09/2005
		US 2005-0204172 A1	15/09/2005
		US 2005-0216771 A1	29/09/2005
		US 2008-0162225 A1	03/07/2008
		US 2008-0172338 A1	17/07/2008
		US 2008-0172717 A1	17/07/2008
		US 2008-0300904 A1	04/12/2008
		US 2008-0301297 A1	04/12/2008
		US 2008-0301454 A1	04/12/2008
		US 2008-0301761 A1	04/12/2008
		US 2008-0301762 A1	04/12/2008
		US 7333956 B2	19/02/2008
		US 7669227 B2	23/02/2010
		US 7685626 B2	23/03/2010
		US 7797240 B2	14/09/2010
		US 7836482 B2	16/11/2010
		US 7908224 B2	15/03/2011
		US 7945519 B2	17/05/2011
		US 8219815 B2	10/07/2012
		WO 02-39331 A2	16/05/2002
JP 4980636 B2	18/07/2012	JP 2007-257578 A	04/10/2007
JP 2010-211830 A	24/09/2010	None	
KR 10-2012-0076490 A	09/07/2012	None	
KR 10-2008-0111175 A	23/12/2008	None	

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
MCCORMACK, BRIAN C.

BAKER & MCKENZIE LLP 2001 ROSS AVENUE, SUITE 2300 DALLAS TX 75201 USA

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing *(day/month/year)*	**24 September 2014 (24.09.2014)**
Applicant's or agent's file reference: VEEVA-4	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2014/036990	**06 May 2014 (06.05.2014)**	06 May 2013 (06.05.2013)

International Patent Classification (IPC) or both national classification and IPC

G06Q 30/02(2012.01)i

Applicant

VEEVA SYSTEMS INC.

1. This opinion contains indications relating to the following items:

- [X] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [X] Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220.

DOCKETED
By _____ Date 11/6
Action Written Opinion
Due Date 3-26-15
Reviewed By _____ Date _____

Name and mailing address of the ISA/KR	Date of completion of this opinion	Authorized officer
International Application Division Korean Intellectual Property Office 189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan City, 302-701, Republic of Korea Facsimile No. +82-42-472-7140	23 September 2014 (23.09.2014)	KIM, Sung Gon Telephone No. +82-42-481-8746

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2014/036990

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of :

   ☒ the international application in the language in which it was filed

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

   ☐ on paper

   ☐ in electronic form

   b. (time)

   ☐ in the international application as filed.

   ☐ together with the international application in electronic form.

   ☐ subsequently to this Authority for the purposes of search.

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additioanl copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2014/036990

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-20	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YES
	Claims	NONE	NO

2. Citations and explanations :

Reference is made to the following documents:

D1: JP 2004-513460 A (ORCHESTRIA LIMITED) 30 April 2004
D2: JP 04980636 B2 (JAPAN TOBACCO INC.) 18 July 2012

1. Novelty and Inventive Step

1.1 Claims 1-17

1.1.1 Independent claim 1

D1, which is considered to be the closest prior art to the subject matter of **claim 1**, discloses a method comprising the steps of: providing a data repository arranged to receive data from each of workstations (See claim 55 in D1); providing an application stored in a memory of the workstation for transmitting outbound data to a network and receiving inbound data from said network and providing policy data containing rules defining relevant data which is to be stored in a data repository (See claim 55 in D1); storing the relevant data in a data repository (See claim 55 in D1); and clicking a "Forward" button, which causes a copy of an incoming mail to be automatically entered into a mail composition window (See paragraph [0175] in D1).

Claim 1 differs from D1 in the feature of aligning an approved content within a controlled content repository with information from an information management system. However, said feature is under the general knowledge of a person skilled in the art. Accordingly, claim 1 would have been obvious over D1. Therefore, claim 1 lacks an inventive step under PCT Article 33(3).

The additional feature of **claim 2** is identical to the feature of D2 in transmitting, from a CRM center to a user, an e-mail including a URL (See paragraph [0021] in D2). Accordingly, claim 2 would have been obvious over a combination of D1 and D2. Therefore, claim 2 lacks an inventive step under PCT Article 33(3).

Continued on Supplemental Box

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of: Box No. V

The additional feature of **claim 3** is identical to the feature of D2 in receiving user profile information (See claim 1, figure 2 in D2). Accordingly, claim 3 would have been obvious over a combination of D1 and D2. Therefore, claim 3 lacks an inventive step under PCT Article 33(3).

The additional feature of **claim 4** is identical to the feature of D1 in that an e-mail client provides an interface comprising a text editor in which a user can enter a text of a body of a message and other information such as destination address, subject and so on (See paragraph [0046] in D1). Accordingly, claim 4 would have been obvious over D1. Therefore, claim 4 lacks an inventive step under PCT Article 33(3).

The additional feature of **claim 5** is virtually suggested by the feature of D2 in transmitting, from the CRM center to the user, the e-mail including the URL (See paragraph [0021] in D2). Accordingly, claim 5 would have been obvious over a combination of D1 and D2. Therefore, claim 5 lacks an inventive step under PCT Article 33(3).

Claim 6 further comprises the feature of directing a first customer to a customer portal through which a first piece of approved content can be accessed. However, the additional feature of claim 6 is merely a matter of design option when the general technical knowledge in relevant field of the art is used. Accordingly, claim 6 would have been obvious over a combination of D1 and D2. Therefore, claim 6 lacks an inventive step under PCT Article 33(3).

The additional feature of **claim 7** is virtually suggested by the feature of D1 in that a Max Manager must be constantly updated to take account of changes (See paragraph [0018] in D1). Accordingly, claim 7 would have been obvious over a combination of D1 and D2. Therefore, claim 7 lacks an inventive step under PCT Article 33(3).

The additional feature of **claim 8** is identical to the feature of D1 in that a nature of the intended recipients' address may be determined by reference to a list of known internet mail service domains (See paragraph [0167] in D1). Accordingly, claim 8 would have been obvious over D1. Therefore, claim 8 lacks an inventive step under PCT Article 33(3).

The additional feature of **claim 9** is identical to the feature of D1 in providing warnings to the user before a forwarded e-mail is transmitted and preventing the e- mail from

Continued on The Next Page

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: Previous Page

being forwarded altogether (See paragraphs [0176], [0180], claims 695-698, figure 23 in D1). Accordingly, claim 9 would have been obvious over D1. Therefore, claim 9 lacks an inventive step under PCT Article 33(3).

The additional feature of **claim 10** is identical to the feature of D1 in determining whether or not to verify if a digital certificate has been revoked in dependence on results of any previous verification of whether an identified digital certificate has been revoked (See claims 588-591 in D1). Accordingly, claim 10 would have been obvious over D1. Therefore, claim 10 lacks an inventive step under PCT Article 33(3).

The additional features of **claims 11-12** are virtually suggested by the feature of D1 in that access to discounted price lists on a particular web server may be restricted to trade users who have previously been given a username and password allowing them access (See paragraph [0008] in D1). Accordingly, claims 11-12 would have been obvious over D1. Therefore, claims 11-12 lack an inventive step under PCT Article 33(3).

Claims 13-14 further specify that the controlled content repository is adapted to provide development and distribution of promotional materials as related to regulatory restricted products and the regulatory restricted products are prescription drugs. However, the additional features of claims 13-14 are merely matters of design option when the general technical knowledge in relevant field of the art is used. Accordingly, claims 13-14 would have been obvious over D1. Therefore, claims 13-14 lack an inventive step under PCT Article 33(3).

The additional feature of **claim 15** is identical to the feature of D1 in that E-mail applications, such as Microsoft Corporation's "Outlook", provide means to digitally sign messages automatically (See paragraph [0185] in D1). Accordingly, claim 15 would have been obvious over D1. Therefore, claim 15 lacks an inventive step under PCT Article 33(3).

The additional feature of **claim 16** is virtually suggested by the feature of D2 in that the user profile information includes gender and location, etc. (See paragraph [0032] in D2). Accordingly, claim 16 would have been obvious over a combination of D1 and D2. Therefore, claim 16 lacks an inventive step under PCT Article 33(3).

The additional feature of **claim 17** is identical to the feature of D1 in that businesses must keep records for auditing purposes, for example to prove terms upon which goods

Continued on The Next Page

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of : Previous Page

were ordered in an event of a dispute (See paragraph [0017] in D1). Accordingly, claim 17 would have been obvious over D1. Therefore, claim 17 lacks an inventive step under PCT Article 33(3).

1.2 Claims 18-19

D1, which is considered to be the closest prior art to the subject matter of **claim 18**, discloses a system comprising: a data repository arranged to receive data from each of workstations (See claim 55 in D1); a "Forward" button to cause a copy of an incoming mail to be automatically entered into a mail composition window (See paragraph [0175] in D1).

Claim 18 differs from D1 in an access protocol based on regulatory restrictions; and at least one set of alignment rules for determining if a first piece of approved content within a controlled content repository can be made available to a first customer via an electronic message. However, said feature is virtually suggested by the same document considering a means to keep business records for auditing purposes, for example to prove terms upon which goods were ordered in the event of a dispute (See paragraph [0017] in D1); and policy data containing rules defining relevant data which is to be stored in the data repository (See claim 55 in D1). Accordingly, claim 18 would have been obvious over D1. Therefore, claim 18 lacks an inventive step under PCT Article 33(3).

The additional feature of **claim 19** is virtually suggested by the feature of D1 in that businesses must keep records for auditing purposes, for example to prove the terms upon which the goods were ordered in the event of the dispute (See paragraph [0017] in D1). Accordingly, claim 19 would have been obvious over D1. Therefore, claim 19 lacks an inventive step under PCT Article 33(3).

1.3 Claim 20

D1, which is considered to be the closest prior art to the subject matter of **claim 20**, discloses a medium comprising: a means to select a 'compose e-mail' option; an interface comprising a text editor in which a user can enter a text of a body of a message and other information such as destination address, subject and so on (See paragraph [0046] in D1); a means to compose the message by the user (See paragraph [0046] in D1); and a "Forward" button by clicking to cause a copy of an incoming mail to be automatically entered into the mail composition window (See paragraph [0175] in D1).

Claim 20 differs from D1 in the feature of : accessing an information management system

Continued on The Next Page

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of: Previous Page

for customer information; and determining if a selected customer is approved to receive a selected template according to an access protocol. However, said feature is virtually suggested by the same document considering a plug-in module to access a message header and extract an identity of a sender (See paragraph [0051] in D1); and a means to compare details of a transaction against policy settings to determine whether or not approval is required (See paragraph [0138] in D1). Accordingly, claim 20 would have been obvious over D1. Therefore, claim 20 lacks an inventive step under PCT Article 33(3).

2. Industrial Applicability

Claims 1-20 are industrially applicable under PCT Article 33(4).

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	14271134
Filing Date	2014-05-06
First Named Inventor	Timothy S. Murphy, et al.
Art Unit	2447
Examiner Name	Jude Jean Gilles
Attorney Docket Number	VEV-001

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	8171077	B2	2012-05-01	Huynh, et al.	
	2	6789108	B1	2004-09-07	McMillan	
	3	6650890	B1	2003-11-18	Irlam, et al.	
	4	7966374	B2	2011-06-21	Huynh, et al.	
	5	7707317	B2	2010-04-27	Huynh, et al.	
	6	7584251	B2	2009-09-01	Brown, et al.	
	7	7155436	B2	2006-12-26	Hegde, et al.	
	8	8296378	B2	2012-10-23	Huynh, et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	14271134
	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy, et al.
	Art Unit	2447
	Examiner Name	Jude Jean Gilles
	Attorney Docket Number	VEV-001

	9	7149964	B1	2006-12-12	Cottrille, et al.	
	10	7634556	B2	2009-12-15	Huynh, et al.	
	11	7333956	B2	2008-02-19	Malcolm	Corresponds to JP2004-513460

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

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20040093429	A1	2004-05-13	Henry Burton, et al.	
	2	20010052019	A1	2001-12-13	Walters, et al.	
	3	20010054059	A1	2001-12-20	Marks, et al.	
	4	20010031454	A1	2001-10-18	Mintz	

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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]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	14271134
	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy, et al.
	Art Unit	2447
	Examiner Name	Jude Jean Gilles
	Attorney Docket Number	VEV-001

	1	00/30009	WO	A2	2000-05-25	XOOM.COM		☐
	2	2004-513460	JP	A	2004-04-30	Orchestria Limited		☒
	3	4980636	JP	B2	2012-07-18	Japan Tobacco Inc.		☒
	4	2010-211830	JP	A	2010-09-24	Nextage KK		☒
	5	10-2012-0076490	KR	A	2012-07-09	SK Planet Co., Ltd.		☐
	6	10-2008-0111175	KR	A	2008-12-23	Omnitel Co., Ltd.		☒

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.	T5
	1	U.S. Provisional Application 60/393,176, filed July 1, 2002, 41 pages.	☐
	2	U.S. Provisional Application 60/633,832, filed December 6, 2004, 25 pages.	☐
	3	International Search Report and Written Opinion, PCT/US2014/036990, dated September 24, 2014, 13 pages.	☐

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	14271134
	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy, et al.
	Art Unit	2447
	Examiner Name	Jude Jean Gilles
	Attorney Docket Number	VEV-001

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	14271134
	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy, et al.
	Art Unit	2447
	Examiner Name	Jude Jean Gilles
	Attorney Docket Number	VEV-001

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	/Brian C. McCormack, Reg. No. 36601/	Date (YYYY-MM-DD)	2014-10-13
Name/Print	Brian C. McCormack	Registration Number	36601

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:	14271134
Filing Date:	06-May-2014
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Filer:	Brian Charles McCormack
Attorney Docket Number:	VEV-001

Filed as Large Entity

Utility under 35 USC 111(a) Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Claims in Excess of 20	1202	5	80	400
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
		Total in USD ($)		**580**

Electronic Acknowledgement Receipt

EFS ID:	20395866
Application Number:	14271134
International Application Number:	
Confirmation Number:	1557
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Customer Number:	23562
Filer:	Brian Charles McCormack
Filer Authorized By:	
Attorney Docket Number:	VEV-001
Receipt Date:	13-OCT-2014
Filing Date:	06-MAY-2014
Time Stamp:	16:47:13
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$580
RAM confirmation Number	11160
Deposit Account	130480
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)

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Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		Veeva_3_OAR.pdf	132633 517ee5c139b15dcd59a85a73a5015cb2a681c9ba	yes	9

Multipart Description/PDF files in .zip description

Document Description	Start	End
Amendment/Req. Reconsideration-After Non-Final Reject	1	1
Claims	2	7
Applicant Arguments/Remarks Made in an Amendment	8	8
Applicant summary of interview with examiner	9	9

Warnings:					
Information:					
2	Foreign Reference	WO0030009A2.pdf	12970020 f6b7d4e41de656a50594984fa4cc61ccaf2eecdd	no	152
Warnings:					
Information:					
3	Foreign Reference	JP2004513460A_PTO.pdf	5370768 e1f23abb2a75a6bb4a1e983a73170fb598e4a1e1	no	152
Warnings:					
Information:					
4	Foreign Reference	JP4980636B2_PTO.pdf	2934297 43de32ea73b65e4d1ab53cc637ca2b8ac5c29e3a	no	90
Warnings:					
Information:					
5	Foreign Reference	JP2010211830A_PTO.pdf	1995734 c055fd284d67c337d9ea60629a54908ae0e23ec8	no	107
Warnings:					
Information:					

6	Foreign Reference	KR20120076490A_PTO.pdf	1175122 8c257a75d9e53f7e0d8d1b1c37bcc0fefe5b87c7	no	14
Warnings:					
Information:					
7	Foreign Reference	KR20080111175A_PTO.pdf	1293629 7149a96db1f8eb913ae355501661bb6bc486d9eb	no	28
Warnings:					
Information:					
8	Non Patent Literature	NPL_ProvAppl_60393176.pdf	4857800 bdcb0b6f6c067f32e7a74cf1d784b12eb7abbcd4	no	41
Warnings:					
Information:					
9	Non Patent Literature	NPL_Provisional_Filing_60633832.pdf	3506585 0dc23ca87a74ed1639ee0baec8bc53bf2967ddc2	no	25
Warnings:					
Information:					
10	Non Patent Literature	ISR_WrittenOpinion_PCTUS2014036990.pdf	1947892 2c5be8cd3457ab6d75c3e6e48cae92852108113d	no	13
Warnings:					
Information:					
11	Information Disclosure Statement (IDS) Form (SB08)	VEV_001_IDS.pdf	613135 bd25c3eaa42c0e5463617c1b540f8e99ef165a01	no	6
Warnings:					
Information:					
12	Fee Worksheet (SB06)	fee-info.pdf	31522 f1127f4c5ea9681faed01fe631c39c32eb74c71b	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	36829137	

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
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/271,134	Filing Date 05/06/2014	☐ 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	10/13/2014	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 25	Minus	** 20	= 5	X $80 =	400
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $420 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	**400**

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
/CHARRISSA BROWN/

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

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

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/271,134	05/06/2014	Timothy S. Murphy	VEV-003

CONFIRMATION NO. 1557

PUBLICATION NOTICE

23562
BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201

Title: System and method for controlling electronic communications

Publication No.US-2014-0330915-A1
Publication Date:11/06/2014

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

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UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/271,134	05/06/2014	Timothy S. Murphy	VEV-003	1557

23562 7590 12/04/2014

BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201

EXAMINER
JEAN GILLES, JUDE

ART UNIT	PAPER NUMBER
2447	

NOTIFICATION DATE	DELIVERY MODE
12/04/2014	ELECTRONIC

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

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

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

docket@bakermckenzie.com

Office Action Summary	Application No. 14/271,134	Applicant(s) MURPHY ET AL.	
	Examiner JUDE JEAN GILLES	Art Unit 2447	AIA (First Inventor to File) Status Yes

-- 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 *10/13/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

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

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

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

Disposition of Claims*

5)☒ Claim(s) *1-25* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-25* is/are rejected.

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

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

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

Application Papers

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

11)☐ The drawing(s) filed on _____ 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 *10/13/2014*.

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

4) ☐ Other: _____.

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

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 10/13/2014 was filed after the mailing date of the original application filed on 05/06/2014. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

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

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

4. Claims 1-13, 15-18, and 20-25 are rejected under 35 U.S.C. 103 as being unpatentable over Reed, US 2007/0073699 A1, in view of Crasmaru et al., US 20130138487 A1.

Regarding claim 1, Reed teaches a machine-implemented method for generating approved electronic messages, the method comprising: establishing a controlled content repository, the controlled content repository being securely and controllably accessed (0004, 0005, and 0018); establishing an access protocol for the controlled content repository, whereby approved content is stored in the controlled content repository according to the access protocol and whereby the access protocol comprises at least one set of alignment rules for determining if a first item of approved content within the controlled content repository

can be made available to a first customer via an electronic message (0024, 0050-0051); storing the approved content within the controlled content repository, the approved content further being accessible according to the established access protocol; aligning the approved content within the controlled content repository with information from an information management system (0018); and providing an approved electronic message generating system which generates an electronic message according to the established access protocol for sending the provided first item of approved content to the first customer (figs. 6a-d; 0050-0051). However, Reed fails to disclose the details of *providing the first item of approved content for selection by a sender after a determination that the first item of approved content is authorized to be made available to the first customer in accordance with the at least one set of alignment rules*. This feature is well-known in the art as evidenced by Crasmaru. In the same field of endeavor, Crasmaru teaches a publisher that reviews and approves a particular content item that has been selected for distribution through a content slot, prior to sending it to a particular user for viewing (see Crasmaru, par. 0003, 0010, 0021, and 0022). Accordingly, it would have been obvious for an ordinary skilled in the art, to have incorporated this teaching of Crasmaru within the system of Reed for the purpose of reviewing content items to determine whether content items are acceptable as stated by Crasmaru (see par. 0020 and Abstract). By this rationale, claim 1 is rejected.

Regarding claims 2-25, the combination Reed-Crasmaru discloses:

2. The method of claim 1, wherein the information management system is a customer relationship management (CRM) system or a closed loop marketing (CLM) system (Reed, See the IDM of 0004 and 0025; fig. 1).

3. The method of claim 1, wherein the information from the information management system comprises information related to a customer profile, customer preferences or regulatory limitations (Reed, 0023).

4. The method of claim 1, further comprising: providing a template for the electronic message, wherein the template is pre-generated with approved content and has at least one customizable area (Reed, 0050).

5. The method of claim 1, further comprising: providing a hyperlink to the first item of approved content and including the hyperlink in the electronic message (Reed, 0029 and 0040).

6. The method of claim 5, further comprising: directing the first customer to a customer portal through which the first item of approved content can be accessed (Reed, fig. 1,0023).

7. The method of claim 6, wherein when the first item of approved content is updated after the electronic message is generated, the first customer is automatically directed to the updated version (Reed, 0050, 0053, 0064).

8. The method of claim 1, further comprising: determining a domain the electronic message is delivered through (Reed, 0030 and 0033).

9. The method of claim 1, further comprising: displaying a warning when it is determined that the first item of approved content can't be made available to a second customer (Reed, 0050, 0053, 0064).

10. The method of claim 1, further comprising: verifying content in the generated

electronic message just before releasing it to a server for sending the electronic message (Reed, 0050, 0053, 0064).

11. The method of claim 1, wherein the access protocol is based on regulatory restrictions (Reed, 0023).

12. The method of claim 11, wherein the access protocol is further based on customer profile information (Reed, 0023).

13. The method of claim 1, wherein the controlled content repository is adapted to provide development and distribution of promotional materials as related to regulatory restricted products (Reed, 0037, 0042, and 0043).

15. The method of claim 1, further comprising: a signature interface to register a customer's "opt in" input to receive the electronic message (Reed, 0023).

16. The method of claim 1, further comprising: reporting life cycle analytics relating to review cycles of the approved content (Reed, 0064).

17. The method of claim 1, further comprising: storing audit trail information relative

to the controlled content repository whereby compliance with government regulations for access of such controlled content can be audited (Reed, 0032).

18. A system for generating approved electronic messages, comprising:

a controlled content repository for storing approved content according to an access protocol, wherein the access protocol is based on regulatory restrictions, and comprises at least one set of alignment rules for determining if a first item of approved content within the controlled content repository can be made available to a first customer via an electronic message; and an approved electronic message generator, coupled to the controlled content repository, coupled to an application over a network, providing the first item of approved content for selection by a sender after a determination that the first item of approved content is authorized to be made available to the first customer in accordance with the at least one set of alignment rules, and generating an electronic message according to the access protocol for sending the first item of approved content within the controlled content repository to the first customer (Reed, 0004, 0005, 0024, 0050-0051, and 0018; See also Crasmaru, par. 0003, 0010, 0021, and 0022). The same motivation and reason to combine used for the rejection of claim 1 is also valid for this claim. By this rationale, this claim is rejected.

20. A non-transitory computer-readable medium for generating approved emails, the computer-readable medium comprising instructions that, when executed by a computer, cause the computer to: access an information management system for customer information; receive selection of a customer and a template; determine if selected customer is approved to receive selected template according to an access protocol; provide the selected template for selection by a sender after a determination that the selected template is authorized to be made available to a selected customer; construct an email template; access a controlled content repository, according to the access protocol, for content that the selected customer is approved to access;
and generate an electronic message to the selected customer, which enables the selected customer to access content that the selected customer is approved to access,

wherein the access protocol is based on regulatory restrictions (Reed, 0004, 0005, 0024, 0050-0051, and 0018; See also Crasmaru, par. 0003, 0010, 0021, and 0022). The same motivation and reason to combine used for the rejection of claim 1 is also valid for this claim. By this rationale, this claim is rejected.

21. The method of claim 1, further comprising:

receiving a selection by a sender for the first item of approved content after the determination that the first item of approved content is authorized to be made available to a first customer (See Crasmaru, par. 0003, 0010, 0021, and 0022).

22. The method of claim 1, wherein the electronic message is generated at least in part based on a selection by a sender for the first item of approved content (See Crasmaru, par. 0003, 0010, 0021, and 0022).

23. The method of claim 1, wherein the determination that the first item of approved content is authorized to be made available to a first customer is based at least in part on regulatory limitations for a regulatory restricted product

24. The method of claim 1, wherein the determination that the first item of approved content is authorized to be made available to a first customer is based at least in part on a customer profile, customer preferences, and an "opt-in" customer selection (See Crasmaru, par. 0003, 0010, 0021, and 0022).

25. The method of claim 1, further comprising:

sending the electronic message to the first customer (See Crasmaru, par. 0003, 0010, 0021, and 0022).

Claim Rejections - 35 USC § 103

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

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

6. Claims 14 and 19 are rejected under 35 U.S.C. 103 as being unpatentable over Reed, US 2007/0073699 A1, and Crasmaru et al., US 20130138487 A1 as stated in claim 1 above, and in further view of KUNO, US 20090254449 A1.

Regarding claim 14, Reed and Crasmaru teaches the limitations of claim 13, but fail to disclose the details wherein the regulatory restricted products are prescription drugs. This feature is well-known in the art as evidenced by Murphy. In the same filed of invention, Murphy teaches access to drugs data which requires approval from the government and regulatory parties in the jurisdictions (see KUNO, 0030, 0048, 0063, and 0079). Accordingly, it would have been obvious for an ordinary skilled in the art, at the time the invention was made, to have incorporated this technique of KUNO, within the combined system of Reed and Crasmaru, for the purpose of using regulatory guidelines to advance drugs items development as stated by KUNO. Claim 14 is rejected.

Regarding claim 19, the comination Reed-Crasmaru-KUNO teaches:

19. The system of claim 18, further comprising: a regulatory compliance engine for checking that the item of approved content is in compliance with government regulations (see Reed, 0004, 0005, 0024, 0050-0051, and 0018; Crasmaru, par. 0003, 0010,

0021, and 0022; KUNO, 0030, 0048, 0063, and 0079). The same motivation and reason to combine used for the rejection of claim 1 and 14 is also valid for this claim.

Conclusion

6. This action is made Final. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Hwang, can be reached on (571) 272-4036. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3301.

Any inquiry of *a general* nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

/JUDE JEAN GILLES/
Primary Examiner, Art Unit 2447
November 30, 2014

Notice of References Cited	Application/Control No. 14/271,134	Applicant(s)/Patent Under Reexamination MURPHY ET AL.	
	Examiner JUDE JEAN GILLES	Art Unit 2447	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2013/0138487	05-2013	Crasmaru et al.	705/14.4
*	B	US-2011/0213658	09-2011	Joa et al.	705/14.52
*	C	US-2009/0254449	10-2009	KUNO, Sachiko	705/26
*	D	US-2008/0243724	10-2008	Voorhees, Dorothy A.	705/400
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
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	R					
	S					
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NON-PATENT DOCUMENTS

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

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	14271134
Filing Date	2014-05-06
First Named Inventor	Timothy S. Murphy, et al.
Art Unit	2447
Examiner Name	Jude Jean Gilles
Attorney Docket Number	VEV-001

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	8171077	B2	2012-05-01	Huynh, et al.	
	2	6789108	B1	2004-09-07	McMillan	
	3	6650890	B1	2003-11-18	Irlam, et al.	
	4	7966374	B2	2011-06-21	Huynh, et al.	
	5	7707317	B2	2010-04-27	Huynh, et al.	
	6	7584251	B2	2009-09-01	Brown, et al.	
	7	7155436	B2	2006-12-26	Hegde, et al.	
	8	8296378	B2	2012-10-23	Huynh, et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JJ/

Receipt date: 10/13/2014	Application Number	14271134 14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy, et al.
	Art Unit	2447
	Examiner Name	Jude Jean Gilles
	Attorney Docket Number	VEV-001

	9	7149964	B1	2006-12-12	Cottrille, et al.	
	10	7634556	B2	2009-12-15	Huynh, et al.	
	11	7333956	B2	2008-02-19	Malcolm	Corresponds to JP2004-513460

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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	20040093429	A1	2004-05-13	Henry Burton, et al.	
	2	20010052019	A1	2001-12-13	Walters, et al.	
	3	20010054059	A1	2001-12-20	Marks, et al.	
	4	20010031454	A1	2001-10-18	Mintz	

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Receipt date: 10/13/2014	Application Number	14271134 14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy, et al.
	Art Unit	2447
	Examiner Name	Jude Jean Gilles
	Attorney Docket Number	VEV-001

	1	00/30009	WO	A2	2000-05-25	XOOM.COM		☐
	2	2004-513460	JP	A	2004-04-30	Orchestria Limited		☒
	3	4980636	JP	B2	2012-07-18	Japan Tobacco Inc.		☒
	4	2010-211830	JP	A	2010-09-24	Nextage KK		☒
	5	10-2012-0076490	KR	A	2012-07-09	SK Planet Co., Ltd.		☐
	6	10-2008-0111175	KR	A	2008-12-23	Omnitel Co., Ltd.		☒

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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.	T5
	1	U.S. Provisional Application 60/393,176, filed July 1, 2002, 41 pages.	☐
	2	U.S. Provisional Application 60/633,832, filed December 6, 2004, 25 pages.	☐
	3	International Search Report and Written Opinion, PCT/US2014/036990, dated September 24, 2014, 13 pages.	☐

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Receipt date: 10/13/2014	Application Number	14271134 14271134 - GAU: 2447
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	First Named Inventor	Timothy S. Murphy, et al.
	Art Unit	2447
	Examiner Name	Jude Jean Gilles
	Attorney Docket Number	VEV-001

EXAMINER SIGNATURE			
Examiner Signature	/Jude Jean Gilles/ (12/01/2014)	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.

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Receipt date: 10/13/2014	Application Number	14271134 14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy, et al.
	Art Unit	2447
	Examiner Name	Jude Jean Gilles
	Attorney Docket Number	VEV-001

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	/Brian C. McCormack, Reg. No. 36601/	Date (YYYY-MM-DD)	2014-10-13
Name/Print	Brian C. McCormack	Registration Number	36601

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

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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.

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Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14271134	MURPHY ET AL.
	Examiner	**Art Unit**
	JUDE JEAN GILLES	2447

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

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

CLAIM		DATE								
Final	Original	09/14/2014	12/01/2014							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
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	23		✓							
	24		✓							
	25		✓							

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	(provid$3 send$3) adj4 (item resource)near10 (approv$3 adj7 (select$3 coice choos$3) adj5 (content mesag$3 information data))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:36
L9	0	"20130138487" and government	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:39
L10	0	(distribut$3 adj4 approv$3 adj3 (content data information)) near30 ((comply$3 compliance)adj6 (government adj4 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:40
L11	0	(distribut$3 adj4 approv$3 adj3 (content data information)) near30 ((comply$3 compliance)adj6 (government adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:41
L12	0	(distribut$3 adj4 approv$3 adj3 (content data information)) with ((comply$3 compliance)adj6 (government adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:41
L13	0	(distribut$3 adj4 approv$3 adj3 (content data information))same((comply$3 compliance)adj6 (government adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:41
L14	0	(distribut$3 adj4 approv$3 adj3 (content data information))same((government adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:42
L15	11	(approv$3 adj3 (content data information))same((government adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:42
L16	1	content adj5 distribut$3 and (approv$3 adj3 (content data information))same((government adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:43
L17	4	(approv$3 adj3 (content data information))same((government adj7 (rules guidelines regulations))) and drugs	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:49

S1	61645	((content messag3 data information) adj4 repository)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S2	523180	((content messag3 data information) adj4 (repository database))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S3	576624	((content messag3 data information) adj4 (repository database log))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S4	615982	((content messag3 data information) adj4 (repository database log queue))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S5	1015995	((content messag3 data information) adj4 (repository database host server))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S6	816	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:12
S8	164	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol and ((avail$4 approv$3)near7 (customer client member subscriber))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:14
S9	314	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol and ((avail$4 approv$3)near7 (user customer client member subscriber))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:14
S10	32	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol and ((avail$4 approv$3)near7 (user customer client member subscriber)) same (email e-mail (electronic adj3 messag$3))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:14
S11	4	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol same ((avail$4 approv$3)near7 (user customer client member subscriber)) same (email e-mail (electronic adj3 messag$3))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:15
S12	8	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol same ((avail$4	US-PGPUB; USPAT; EPO;	OR	ON	2014/09/14 10:15

		approv$3 select$3)near7 (user customer client member subscriber)) same (email e-mail (electronic adj3 messag$3))	DERWENT			
S13	1	approv$3 adj3 (email e-mail (electronic adj2 mail)) adj3 template	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 17:44
S14	0	approv$3 adj3 access$3 adj5 (content data information messag$3)same (email e-mail (electronic adj2 mail)) adj3 template	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:15
S15	65	approv$3 adj3 access$3 adj5 (content data information messag$3)same (email e-mail (electronic adj2 mail))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:15
S16	0	approv$3 adj3 access$3 adj5 (content data information messag$3) near30 template same (email e-mail (electronic adj2 mail))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:16
S17	0	approv$3 adj3 access$3 adj5 (content data information messag$3) same template same (email e-mail (electronic adj2 mail))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:16
S18	27	(approv$3 control$4)adj3 access$3 adj5 (content data information messag$3) same template same (email e-mail (electronic adj2 mail))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:17
S19	12	(approv$3 control$4)adj3 access$3 adj5 (content data information messag$3) same template same (email e-mail (electronic adj2 mail)) and (profile preference)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:18
S20	12	(approv$3 control$4)adj3 access$3 adj5 (content data information messag$3) same template same (email e-mail (electronic adj2 mail)) and (profile preference) same (user customer member participant subscriber)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:26
S21	2	"20070073699" and resource near30 (control$4 manag$5) near30 access$3	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:09
S22	2	"20070073699" and resource near30 (control$4 manag$5) same database	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:16
S25	32610	resource near30 (control$4 manag$5) same database	US-PGPUB; USPAT; EPO;	OR	ON	2014/09/14 22:18

			DERWENT			
S26	17737	resource near30 (control$4 manag$5) near30 database	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:18
S27	2	"20070073699" and resource near30 (control$4 manag$5) near30 database	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:18
S28	1	"20070073699" and rules same access$3 same (user participant subscriber)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:20
S29	1	"20070073699" and stor$3 same rules same access$3 same (user participant subscriber)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:23
S30	1	"20070073699" and ("IDM")	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:32
S32	1	"20070073699" and customer	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:36
S33	1	"20070073699" and template	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:37
S36	1	"20070073699" and messag$3	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:39
S37	1	"20070073699" and messag$3 same approv$3	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:39
S40	1	"20070073699" and internet	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:40
S43	2	"20070073699" and resource same (email e-mail)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:45
S45	2	"20070073699" and (email e-mail)	US-PGPUB; USPAT; EPO;	OR	ON	2014/09/14 22:49

			DERWENT			
S49	2	"20070073699" and resources	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:58
S53	1	"20070073699" and messag$3 same (email e-mail)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 23:03
S54	1	"20070073699" and audit$3	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 23:03
S56	57	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol and ((avail$4 approv$3)near7 customer)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 23:23
S57	29	S56 AND ((H04N21/4345 OR H04L65/4076 OR H04L12/2836 OR H04L29/06027).CPC.)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 23:31
S58	25	(provid$3 send$3) adj4 (item resource)near10 (approv$3 adj4 (content mesag$3 information data))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/11/30 16:53
S59	1	(provid$3 send$3) adj4 (item resource)near10 (approv$3 adj7 (select$3 coice choos$3) adj5 (content mesag$3 information data))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/11/30 16:54

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Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14271134	MURPHY ET AL.
	Examiner	Art Unit
	JUDE JEAN GILLES	2447

CPC- SEARCHED		
Symbol	Date	Examiner
G06F 27/30; H04N21/4345	9/14/2014	JG

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner
(H04N21/4345 OR H04L65/4076 OR H04L12/2836 OR H04L29/06027).CPC.	9/14/2014	JG

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	206	9/14/2014	JG
705	26, 43, 35, 14, and 58	12/1/2014	JG

SEARCH NOTES		
Search Notes	Date	Examiner
EAST text and claim seach	9/14/2014	JG
EAST text and claim seach and claim search	12/1/2014	JG

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

	/JUDE JEAN GILLES/ Primary Examiner.Art Unit 2447

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	VEEVA SYSTEMS INC.	**Group Art No.:**	2447
Serial No.:	14/271,134	**Examiner:**	Jean-Gilles, Jude
Filed:	May 6, 2014	**Atty. Docket No.:**	68277411-000003
For:	System and method for controlling electronic communications	**Confirmation No.:**	1557

Submitted via EFS

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

CERTIFICATE OF FILING ELECTRONICALLY VIA EFS 37 CFR 1.8

I HEREBY CERTIFY THAT I HAVE A REASONABLE BASIS FOR BELIEF THAT THIS CORRESPONDENCE IS BEING SUBMITTED TO THE UNITED STATES PATENT AND TRADEMARK OFFICE VIA EFS (ELECTRONICALLY) ON THE DATE INDICATED BELOW, AND IS ADDRESSED TO:

COMMISSIONER FOR PATENTS
PO BOX 1450
ALEXANDRIA, VA 22313-1450

/Brian C. McCormack, Reg. No. 36601/
Brian C. McCormack
Reg. Number 36,601
DATE OF SUBMISSION: MARCH 6, 2015
ELECTRONIC FILING (EFS)

RESPONSE TO FINAL OFFICE ACTION AND REQUEST FOR PARTICIPATION IN THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0

This paper is submitted in response to the final Office Action mailed December 4, 2014 ("Office Action"). Applicants respectfully request reconsideration of the above-identified application and participation in the After Final Consideration Pilot Program 2.0. If the Examiner has any questions or comments, Applicants invite the Examiner to contact the below-signed attorney of record via telephone. The three-month response deadline expired on March 4, 2015. Accordingly, this response is submitted with a request for a one-month extension of time.

Listing of the Claims begins on page **2** of this paper.

Remarks and Arguments begin on page **8** of this paper.

After Final Consideration Pilot Program 2.0 statement begins on page **10** of this paper.

LISTING OF THE CLAIMS

Below is the entire set of pending claims pursuant to 37 C.F.R. § 1.121(c)(3)(i).

1. (Currently Amended) A machine-implemented method for generating approved electronic messages, the method comprising:

establishing a controlled content repository, the controlled content repository being securely and controllably accessed;

establishing an access protocol for the controlled content repository, whereby approved content is stored in the controlled content repository according to the access protocol and whereby the access protocol comprises at least one set of alignment rules for determining if a first item of approved content within the controlled content repository can be made available to a first customer via an electronic message;

storing the approved content within the controlled content repository, the approved content further being accessible according to the established access protocol;

aligning the approved content within the controlled content repository with information from an information management system;

providing the first item of approved content within the controlled content repository for selection by a sender after a determination that the first item of approved content within the controlled content repository is authorized to be made available to the first customer in accordance with the at least one set of alignment rules; and

providing an approved electronic message generating system which generates an electronic message according to the established access protocol for sending the provided first item of approved content within the controlled content repository to the first customer.

2. (Original) The method of claim 1, wherein the information management system is a

customer relationship management (CRM) system or a closed loop marketing (CLM) system.

3. (Original) The method of claim 1, wherein the information from the information management system comprises information related to a customer profile, customer preferences or regulatory limitations.

4. (Original) The method of claim 1, further comprising: providing a template for the electronic message, wherein the template is pre-generated with approved content and has at least one customizable area.

5. (Previously Presented) The method of claim 1, further comprising: providing a hyperlink to the first item of approved content and including the hyperlink in the electronic message.

6. (Previously Presented) The method of claim 5, further comprising: directing the first customer to a customer portal through which the first item of approved content can be accessed.

7. (Previously Presented) The method of claim 6, wherein when the first item of approved content is updated after the electronic message is generated, the first customer is automatically directed to the updated version.

8. (Original) The method of claim 1, further comprising: determining a domain the electronic message is delivered through.

9. (Previously Presented) The method of claim 1, further comprising: displaying a warning

when it is determined that the first item of approved content can't be made available to a second customer.

10. (Original) The method of claim 1, further comprising: verifying content in the generated electronic message just before releasing it to a server for sending the electronic message.

11. (Original) The method of claim 1, wherein the access protocol is based on regulatory restrictions.

12. (Original) The method of claim 11, wherein the access protocol is further based on customer profile information.

13. (Original) The method of claim 1, wherein the controlled content repository is adapted to provide development and distribution of promotional materials as related to regulatory restricted products.

14. (Original) The method of claim 13, wherein the regulatory restricted products are prescription drugs.

15. (Original) The method of claim 1, further comprising: a signature interface to register a customer's "opt in" input to receive the electronic message.

16. (Original) The method of claim 1, further comprising: reporting life cycle analytics relating to review cycles of the approved content.

17. (Original) The method of claim 1, further comprising: storing audit trail information relative to the controlled content repository whereby compliance with government regulations for access of such controlled content can be audited.

18. (Currently Amended) A system for generating approved electronic messages, comprising:

a controlled content repository for storing approved content according to an access protocol, wherein the access protocol is based on regulatory restrictions, and comprises at least one set of alignment rules for determining if a first item of approved content within the controlled content repository can be made available to a first customer via an electronic message; and

an approved electronic message generator, coupled to the controlled content repository, coupled to an application over a network, providing the first item of approved content within the controlled content repository for selection by a sender after a determination that the first item of approved content within the controlled content repository is authorized to be made available to the first customer in accordance with the at least one set of alignment rules, and generating an electronic message according to the access protocol for sending the first item of approved content within the controlled content repository to the first customer.

19. (Previously Presented) The system of claim 18, further comprising: a regulatory compliance engine for checking that the item of approved content is in compliance with government regulations.

20. (Currently Amended) A non-transitory computer-readable medium for generating approved emails, the computer-readable medium comprising instructions that, when executed by a computer,

cause the computer to:

access an information management system for customer information;

receive selection of a customer and a template;

determine if a selected customer is approved to receive a selected template according to an access protocol;

provide the selected template for selection by a sender after a determination that the selected template is authorized to be made available to a selected customer;

construct an email template;

access a controlled content repository, according to the access protocol, for a first item of approved content within the controlled content repository that the selected customer is approved to access; and

generate an electronic message to the selected customer, which enables the selected customer to access the first item of approved content within the controlled content repository that the selected customer is approved to access,

wherein the access protocol is based on regulatory restrictions.

21. (Previously Presented) The method of claim 1, further comprising:

receiving a selection by a sender for the first item of approved content after the determination that the first item of approved content is authorized to be made available to a first customer.

22. (Previously Presented) The method of claim 1, wherein the electronic message is generated at least in part based on a selection by a sender for the first item of approved content.

23. (Previously Presented) The method of claim 1, wherein the determination that the first item of approved content is authorized to be made available to a first customer is based at least in part on regulatory limitations for a regulatory restricted product.

24. (Previously Presented) The method of claim 1, wherein the determination that the first item of approved content is authorized to be made available to a first customer is based at least in part on a customer profile, customer preferences, and an "opt-in" customer selection.

25. (Previously Presented) The method of claim 1, further comprising:

sending the electronic message to the first customer.

REMARKS AND ARGUMENTS

The status of the claims is set forth in the above listing of claims. Claims 1, 18, and 20 are currently amended. Support for the amendments and the new claims can be found in the specification at least at ¶¶ [0029], [0048]-[0055]. Claims 1-25 remain pending in this application.

In the Office Action, claims 1-13, 15-18, and 202-25 were rejected under 35 U.S.C. § 103 as allegedly unpatentable over U.S. Publication No. 2007/0073699 to Reed ("*Reed*") in view of U.S. Publication No. 2013/0138487 to Crasmaru et al. ("*Crasmaru*"). Claims 14 and 19 were rejected under 35 U.S.C. § 103 as unpatentable over *Reed* in view of *Crasmaru*, and further in view of U.S. Publication No. 2009/0254449 to Kuno ("*Kuno*"). Applicants respectfully disagree and request reconsideration in view of the following remarks and arguments, as well as participation in the After Final Consideration Pilot Program 2.0.

Independent claim 1 as amended recites "***establishing an access protocol for the controlled content repository . . . providing the first item of approved content within the controlled content repository for selection by a sender after a determination that the first item of approved content within the controlled content repository is authorized to be made available to the first customer in accordance with the at least one set of alignment rules***." Independent claims 18 and 20 as amended recite similar language. Applicants respectfully submit that at least these features are wholly missing from the cited references.

The Office Action relies on *Reed* as allegedly disclosing such feature. Specifically, the Office Action alleges that Figures 6a-d and paragraphs [0050]-[0051] of *Reed* disclose "sending the provided first item of approved content to the first customer." Office Action, page 3. The cited passages describe "access[ing] a rules library for rules" that "define the specific processing tasks to be performed." *Reed*, [0050]-[0051]. At the outset, Applicant respectfully submit that the Office Action fails to identify or explain which features in the disclosure of *Reed* allegedly correspond to which

features recited in the pending claims. Nevertheless, Applicants respectfully submit that the disclosures in the cited potions of *Reed* fail to disclose the features of the pending claims.

If the Office Action contends that "access[ing] a rules library" in *Reed* corresponds to the "an access protocol for the controlled content repository," then *Reed* fails to disclosure "***providing the first item of approved content within the controlled content repository for selection by a sender after a determination that the first item of approved content within the controlled content repository is authorized to be made available to the first customer.***" *Reed* is directed to a resources and identity management system. *Reed*, Abstract. Thus, in *Reed*, it is resources that are provided to the recipient – not rules. Thus, *Reed* fails to provide a first item of approved content within a controlled content repository after a determination that the first item of approved content within the controlled content repository is authorized to be made available to the first customer. Accordingly, independent claims 1, 18, and 20 are is patentably distinct over *Reed*.

Conversely, if the Office Action contends that the "rules" in *Reed* are a "first item of approved content," then *Reed* fails to disclosure "**an access protocol for the controlled content repository**." Nothing in *Reed* discloses or contemplates an access protocol for the described rules. Rather, in *Reed*, it is the rules themselves that dictate which actions the system will take. Thus, under this interpretation, independent claims 1, 18, and 20 are also patentably distinct over *Reed*.

Applicants respectfully submit that nothing in *Crasmaru* and/or *Kuno* cure the aforementioned deficiencies in *Reed*. Accordingly, independent claims 1, 18, and 20 are patentably distinct over *Reed*, *Crasmaru*, and *Kuno*, either alone or in any combination thereof.

Dependent claims 2-17, 19, and 21-25 depend from independent claims 1 and 18. Thus, dependent claims 2-17, 19, and 21-25 include all the features of their respective independent claims. Accordingly, dependent claims 2-17, 19, and 21-25 are also patentably distinct over *Reed*, *Crasmaru*, and *Kuno*, either alone or in any combination thereof. Applicants respectfully request withdrawal of

the pending rejection and a Notice of Allowance.

AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0

Applicants respectfully request reconsideration of the present application under the After Final Consideration Pilot Program 2.0. Applicants respectfully submit that the above-identified application is an eligible non-provisional application, that the present paper is in response to an outstanding final rejection, and that amendments have been made to independent claims 1, 18, and 20. Furthermore, Applicants are willing and available to participate in any interview requested by the examiner concerning the present response. Lastly, the present response is being submitted with the necessary PTO/SB/434 Form.

CONCLUSION

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and remarks. If it is determined that additional fees are due, or if an overcharge has occurred, please charge or credit deposit account no. 13-0480, referencing Attorney Docket No. 68277411-000003.

Respectfully submitted,

Date: March 6, 2015

/Brian C. McCormack, Reg. No. 36601/

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Document Description: After Final Consideration Pilot Program Request

PTO/SB/434 (05-13)

CERTIFICATION AND REQUEST FOR CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0

Practitioner Docket No.:	Application No.:	Filing Date:
68277411-000003	14/211075	3/14/2014
First Named Inventor:	**Title:**	
Timothy S. Murphy	System and method for controlling electronic communications	

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0 (AFCP 2.0) OF THE ACCOMPANYING RESPONSE UNDER 37 CFR 1.116.

1. The above-identified application is (i) an original utility, plant, or design nonprovisional application filed under 35 U.S.C. 111(a) [a continuing application (*e.g.*, a continuation or divisional application) is filed under 35 U.S.C. 111(a) and is eligible under (i)], or (ii) an international application that has entered the national stage in compliance with 35 U.S.C. 371(c).
2. The above-identified application contains an outstanding final rejection.
3. Submitted herewith is a response under 37 CFR 1.116 to the outstanding final rejection. The response includes an amendment to at least one independent claim, and the amendment does not broaden the scope of the independent claim in any aspect.
4. This certification and request for consideration under AFCP 2.0 is the only AFCP 2.0 certification and request filed in response to the outstanding final rejection.
5. Applicant is willing and available to participate in any interview requested by the examiner concerning the present response.
6. This certification and request is being filed electronically using the Office's electronic filing system (EFS-Web).
7. Any fees that would be necessary consistent with current practice concerning responses after final rejection under 37 CFR 1.116, *e.g.*, extension of time fees, are being concurrently filed herewith. [There is no additional fee required to request consideration under AFCP 2.0.]
8. By filing this certification and request, applicant acknowledges the following:

- Reissue applications and reexamination proceedings are not eligible to participate in AFCP 2.0.
- The examiner will verify that the AFCP 2.0 submission is compliant, *i.e.*, that the requirements of the program have been met (see items 1 to 7 above). For compliant submissions:
  - The examiner will review the response under 37 CFR 1.116 to determine if additional search and/or consideration (i) is necessitated by the amendment and (ii) could be completed within the time allotted under AFCP 2.0. If additional search and/or consideration is required but cannot be completed within the allotted time, the examiner will process the submission consistent with current practice concerning responses after final rejection under 37 CFR 1.116, *e.g.*, by mailing an advisory action.
  - If the examiner determines that the amendment does not necessitate additional search and/or consideration, or if the examiner determines that additional search and/or consideration is required and could be completed within the allotted time, then the examiner will consider whether the amendment places the application in condition for allowance (after completing the additional search and/or consideration, if required). If the examiner determines that the amendment does not place the application in condition for allowance, then the examiner will contact the applicant and request an interview.
    - The interview will be conducted by the examiner, and if the examiner does not have negotiation authority, a primary examiner and/or supervisory patent examiner will also participate.
    - If the applicant declines the interview, or if the interview cannot be scheduled within ten (10) calendar days from the date that the examiner first contacts the applicant, then the examiner will proceed consistent with current practice concerning responses after final rejection under 37 CFR 1.116.

Signature	Date
/Brian C. McCormack/	3/6/2015
Name (Print/Typed) Brian C. McCormack	Practitioner Registration No. 36601

***Note**: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.*

[✓] * Total of 1 forms are submitted.

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

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

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2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
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 Patent Application Fee Transmittal

Application Number:	14271134
Filing Date:	06-May-2014
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Filer:	Brian Charles McCormack
Attorney Docket Number:	VEV-003

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

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

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 1 month with $0 paid	1251	1	200	200
Miscellaneous:				
		Total in USD ($)		**200**

Electronic Acknowledgement Receipt

EFS ID:	21700951
Application Number:	14271134
International Application Number:	
Confirmation Number:	1557
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Customer Number:	23562
Filer:	Brian Charles McCormack
Filer Authorized By:	
Attorney Docket Number:	VEV-003
Receipt Date:	06-MAR-2015
Filing Date:	06-MAY-2014
Time Stamp:	17:24:38
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$200
RAM confirmation Number	4414
Deposit Account	130480
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		Vev-003_RTF_AFC2_0.pdf	113071 219efe09f7e673f9b412e2a3ebbe6aab1f7e3b09	yes	10

Multipart Description/PDF files in .zip description

Document Description	Start	End
Response After Final Action	1	1
Claims	2	7
Applicant Arguments/Remarks Made in an Amendment	8	10

Warnings:					
Information:					
2	After Final Consideration Program Request	sb0434.pdf	226736 0ff1bd6855223b36f13686b5c278ce2ac54eadfd	no	2
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30038 a6e197e99c23b882e673363f7482b457965d4843	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	369845		

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	Filing Date	☐ To be Mailed
14/271,134	05/06/2014	

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 **03/06/2015**

	(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))	* 25	Minus	** 25	= 0	X $80 =	0
Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X $420 =	0
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	0

AMENDMENT

	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
☐ Application Size Fee (37 CFR 1.16(s))						
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
					TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/GAIL WOOTEN/

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.

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

23562 7590 03/20/2015

BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201

EXAMINER
JEAN GILLES, JUDE

ART UNIT	PAPER NUMBER
2447	

DATE MAILED: 03/20/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/271,134	05/06/2014	Timothy S. Murphy	VEV-003	1557

TITLE OF INVENTION: System and method for controlling electronic communications

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	06/22/2015

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

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

HOW TO REPLY TO THIS NOTICE:

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

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

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

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

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

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

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

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
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)

23562 7590 03/20/2015
BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201

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.
14/271,134	05/06/2014	Timothy S. Murphy	VEV-003	1557

TITLE OF INVENTION: System and method for controlling electronic communications

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	06/22/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
JEAN GILLES, JUDE	2447	709-206000

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. _____

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

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/271,134	05/06/2014	Timothy S. Murphy	VEV-003	1557

23562 7590 03/20/2015

BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201

EXAMINER	
JEAN GILLES, JUDE	

ART UNIT	PAPER NUMBER
2447	

DATE MAILED: 03/20/2015

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

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

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

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

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

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

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

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

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

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 14/271,134	Applicant(s) MURPHY ET AL.	
	Examiner JUDE JEAN GILLES	Art Unit 2447	AIA (First Inventor to File) Status Yes

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

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

1. ☒ This communication is responsive to *03/06/2015*.
   ☐ 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 *1-25*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

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

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

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

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 10/13/2014
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 *AFCP 2.0 Decision Form*.

/JUDE JEAN GILLES/
Primary Examiner, Art Unit 2447

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

After Final Consideration Pilot 2.0 Program

2. A request for After Final Consideration Pilot 2.0 Program filed on 03/06/2015 has been considered and entered by the Examiner.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance: the closest prior art of record, Reed, US 2007/0073699 A1 and Crasmari et al, 2013/0138487 A1, do not teach nor suggest in detail of "…*aligning the approved content within the controlled content repository with information from an information management system; providing the first item of approved content within the controlled content repository, for selection by a sender after a determination that the first item of approved content within the controlled content repository, is authorized to be made available to the first customer in accordance with the at least one set of alignment rules; and providing an approved electronic message generating system which generates an electronic message according to the established access protocol for sending the provided first item of approved content within the controlled content repository, to the first customer.*" in combination with all the elements of each independent claim as filed by Applicant on

03/06/2015. The claim has been considered persuasive, in light of its limitations, as well as enabling portions of the specification.

4. The dependent claims further limit the independent claims and are considered allowable on the same basis as the independent claims as well as for the further limitations set forth.

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

Allowed Claims

5. Claims 1-25 are allowed.

Conclusion

6. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Hwang, can be reached on **(571) 272-4026**. The fax phone number for the organization where this application or proceeding is assigned is **(571) 273-3301.**

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

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)?

/JUDE JEAN GILLES/

Primary Examiner, Art Unit 2447

March 12, 2015

Notice of References Cited	Application/Control No. 14/271,134	Applicant(s)/Patent Under Reexamination MURPHY ET AL.	
	Examiner JUDE JEAN GILLES	Art Unit 2447	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2013/0294322	11-2013	YUN et al.	370/312
*	B	US-2008/0320568	12-2008	Hawkins et al.	726/5
*	C	US-2002/0169670	11-2002	Barsade et al.	705/14
*	D	US-2013/0232550	09-2013	Kihara et al.	726/3
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

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

NON-PATENT DOCUMENTS

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

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

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14271134	MURPHY ET AL.
	Examiner	**Art Unit**
	JUDE JEAN GILLES	2447

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

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

CLAIM		DATE								
Final	Original	09/14/2014	12/01/2014	03/12/2015						
	1	✓	✓	=						
	2	✓	✓	=						
	3	✓	✓	=						
	4	✓	✓	=						
	5	✓	✓	=						
	6	✓	✓	=						
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	22		✓	=						
	23		✓	=						
	24		✓	=						
	25		✓	=						

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14271134	MURPHY ET AL.
	Examiner	**Art Unit**
	JUDE JEAN GILLES	2447

CPC						
Symbol					**Type**	**Version**
H04L		51	/	36	F	2013-01-01
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CPC Combination Sets							
Symbol					**Type**	**Set**	**Ranking**	**Version**
			/					
			/					

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	25	
/JUDE JEAN GILLES/ Primary Examiner.Art Unit 2447	03/12/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14271134	MURPHY ET AL.
	Examiner	**Art Unit**
	JUDE JEAN GILLES	2447

US ORIGINAL CLASSIFICATION	
CLASS	**SUBCLASS**
709	206

CROSS REFERENCE(S)					
CLASS	**SUBCLASS (ONE SUBCLASS PER BLOCK)**				
709	204				
725	146	145	116		
705	5	51			
726	1	2	3		

INTERNATIONAL CLASSIFICATION					
CLAIMED					**NON-CLAIMED**
H	0	4	L	12 / 58 (2006.01.01)	
H	0	4	L	51 / 36	

NONE		Total Claims Allowed: 25	
(Assistant Examiner)	(Date)		
/JUDE JEAN GILLES/ Primary Examiner.Art Unit 2447	03/12/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14271134	MURPHY ET AL.
	Examiner	**Art Unit**
	JUDE JEAN GILLES	2447

☒ **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												
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	14														
	15														
	16														

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 25	
/JUDE JEAN GILLES/ Primary Examiner.Art Unit 2447 (Primary Examiner)	03/12/2015 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	14271134
Filing Date	2014-05-06
First Named Inventor	Timothy S. Murphy, et al.
Art Unit	2447
Examiner Name	Jude Jean Gilles
Attorney Docket Number	VEV-001

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	8171077	B2	2012-05-01	Huynh, et al.	
	2	6789108	B1	2004-09-07	McMillan	
	3	6650890	B1	2003-11-18	Irlam, et al.	
	4	7966374	B2	2011-06-21	Huynh, et al.	
	5	7707317	B2	2010-04-27	Huynh, et al.	
	6	7584251	B2	2009-09-01	Brown, et al.	
	7	7155436	B2	2006-12-26	Hegde, et al.	
	8	8296378	B2	2012-10-23	Huynh, et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JJ/

Receipt date: 10/13/2014	Application Number	14271134 14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy, et al.
	Art Unit	2447
	Examiner Name	Jude Jean Gilles
	Attorney Docket Number	VEV-001

	9	7149964	B1	2006-12-12	Cottrille, et al.	
	10	7634556	B2	2009-12-15	Huynh, et al.	
	11	7333956	B2	2008-02-19	Malcolm	Corresponds to JP2004-513460

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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	20040093429	A1	2004-05-13	Henry Burton, et al.	
	2	20010052019	A1	2001-12-13	Walters, et al.	
	3	20010054059	A1	2001-12-20	Marks, et al.	
	4	20010031454	A1	2001-10-18	Mintz	

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

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Receipt date: 10/13/2014	Application Number	14271134 14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy, et al.
	Art Unit	2447
	Examiner Name	Jude Jean Gilles
	Attorney Docket Number	VEV-001

	1	00/30009	WO	A2	2000-05-25	XOOM.COM		☐
	2	2004-513460	JP	A	2004-04-30	Orchestria Limited		☒
	3	4980636	JP	B2	2012-07-18	Japan Tobacco Inc.		☒
	4	2010-211830	JP	A	2010-09-24	Nextage KK		☒
	5	10-2012-0076490	KR	A	2012-07-09	SK Planet Co., Ltd.		☐
	6	10-2008-0111175	KR	A	2008-12-23	Omnitel Co., Ltd.		☒

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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T5
	1	U.S. Provisional Application 60/393,176, filed July 1, 2002, 41 pages.	☐
	2	U.S. Provisional Application 60/633,832, filed December 6, 2004, 25 pages.	☐
	3	International Search Report and Written Opinion, PCT/US2014/036990, dated September 24, 2014, 13 pages.	☐

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Receipt date: 10/13/2014	Application Number	14271134 14271134 - GAU: 2447
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	First Named Inventor	Timothy S. Murphy, et al.
	Art Unit	2447
	Examiner Name	Jude Jean Gilles
	Attorney Docket Number	VEV-001

EXAMINER SIGNATURE			
Examiner Signature	/Jude Jean Gilles/ (12/01/2014)	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.

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Receipt date: 10/13/2014	Application Number	14271134 14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy, et al.
	Art Unit	2447
	Examiner Name	Jude Jean Gilles
	Attorney Docket Number	VEV-001

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	/Brian C. McCormack, Reg. No. 36601/	Date (YYYY-MM-DD)	2014-10-13
Name/Print	Brian C. McCormack	Registration Number	36601

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

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The 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.

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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.

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	61645	((content messag3 data information) adj4 repository)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S2	523180	((content messag3 data information) adj4 (repository database))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S3	576624	((content messag3 data information) adj4 (repository database log))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S4	615982	((content messag3 data information) adj4 (repository database log queue))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S5	1015995	((content messag3 data information) adj4 (repository database host server))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:11
S6	816	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:12
S8	164	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol and ((avail$4 approv$3)near7 (customer client member subscriber))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:14
S9	314	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol and ((avail$4 approv$3)near7 (user customer client member subscriber))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:14
S10	32	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol and ((avail$4 approv$3)near7 (user customer client member subscriber)) same (email e-mail (electronic adj3 messag$3))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:14
S11	4	((content messag3 data information)	US-	OR	ON	2014/09/14

		adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol same ((avail$4 approv$3)near7 (user customer client member subscriber)) same (email e-mail (electronic adj3 messag$3))	PGPUB; USPAT; EPO; DERWENT			10:15
S12	8	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol same ((avail$4 approv$3 select$3)near7 (user customer client member subscriber)) same (email e-mail (electronic adj3 messag$3))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 10:15
S13	1	approv$3 adj3 (email e-mail (electronic adj2 mail)) adj3 template	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 17:44
S14	0	approv$3 adj3 access$3 adj5 (content data information messag$3)same (email e-mail (electronic adj2 mail)) adj3 template	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:15
S15	65	approv$3 adj3 access$3 adj5 (content data information messag$3)same (email e-mail (electronic adj2 mail))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:15
S16	0	approv$3 adj3 access$3 adj5 (content data information messag$3) near30 template same (email e-mail (electronic adj2 mail))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:16
S17	0	approv$3 adj3 access$3 adj5 (content data information messag$3) same template same (email e-mail (electronic adj2 mail))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:16
S18	27	(approv$3 control$4)adj3 access$3 adj5 (content data information messag$3) same template same (email e-mail (electronic adj2 mail))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:17
S19	12	(approv$3 control$4)adj3 access$3 adj5 (content data information messag$3) same template same (email e-mail (electronic adj2 mail)) and (profile preference)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:18
S20	12	(approv$3 control$4)adj3 access$3 adj5 (content data information messag$3) same template same (email e-mail (electronic adj2 mail)) and (profile preference) same (user customer member participant subscriber)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 18:26
S21	2	"20070073699" and resource near30 (control$4 manag$5) near30 access$3	US-PGPUB; USPAT; EPO;	OR	ON	2014/09/14 22:09

			DERWENT			
S22	2	"20070073699" and resource near30 (control$4 manag$5) same database	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:16
S25	32610	resource near30 (control$4 manag$5) same database	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:18
S26	17737	resource near30 (control$4 manag$5) near30 database	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:18
S27	2	"20070073699" and resource near30 (control$4 manag$5) near30 database	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:18
S28	1	"20070073699" and rules same access$3 same (user participant subscriber)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:20
S29	1	"20070073699" and stor$3 same rules same access$3 same (user participant subscriber)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:23
S30	1	"20070073699" and ("IDM")	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:32
S32	1	"20070073699" and customer	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:36
S33	1	"20070073699" and template	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:37
S36	1	"20070073699" and messag$3	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:39
S37	1	"20070073699" and messag$3 same approv$3	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:39
S40	1	"20070073699" and internet	US-PGPUB; USPAT; EPO;	OR	ON	2014/09/14 22:40

			DERWENT			
S43	2	"20070073699" and resource same (email e-mail)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:45
S45	2	"20070073699" and (email e-mail)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:49
S49	2	"20070073699" and resources	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 22:58
S53	1	"20070073699" and messag$3 same (email e-mail)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 23:03
S54	1	"20070073699" and audit$3	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 23:03
S56	57	((content messag3 data information) adj4 (repository database host server)) near9 (manag$3 control$4) same access$3 adj4 protocol and ((avail$4 approv$3)near7 customer)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 23:23
S57	29	S56 AND ((H04N21/4345 OR H04L65/4076 OR H04L12/2836 OR H04L29/06027).CPC.)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/09/14 23:31
S58	25	(provid$3 send$3) adj4 (item resource)near10 (approv$3 adj4 (content mesag$3 information data))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/11/30 16:53
S59	1	(provid$3 send$3) adj4 (item resource)near10 (approv$3 adj7 (select$3 coice choos$3) adj5 (content mesag$3 information data))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/11/30 16:54
S60	1	(provid$3 send$3) adj4 (item resource)near10 (approv$3 adj7 (select$3 coice choos$3) adj5 (content mesag$3 information data))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:36
S68	0	"20130138487" and government	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:39
S69	0	(distribut$3 adj4 approv$3 adj3 (content data information)) near30 ((comply$3 compliance)adj6 (government adj4 (rules guidelines	US-PGPUB; USPAT; EPO;	OR	ON	2014/12/01 08:40

		regulations)))	DERWENT			
S70	0	(distribut$3 adj4 approv$3 adj3 (content data information)) near30 ((comply$3 compliance)adj6 (government adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:41
S71	0	(distribut$3 adj4 approv$3 adj3 (content data information)) with ((comply$3 compliance)adj6 (government adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:41
S72	0	(distribut$3 adj4 approv$3 adj3 (content data information))same((comply$3 compliance)adj6 (government adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:41
S73	0	(distribut$3 adj4 approv$3 adj3 (content data information))same((government adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:42
S74	11	(approv$3 adj3 (content data information))same((government adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:42
S75	1	content adj5 distribut$3 and (approv$3 adj3 (content data information))same((government adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:43
S76	4	(approv$3 adj3 (content data information))same((government adj7 (rules guidelines regulations))) and drugs	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2014/12/01 08:49
S77	2	content adj5 distribut$3 and (approv$3 adj3 (content data information))same((customer adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 20:42
S78	5	((Brian adj3 Longo).inv. (Timothy adj3 Murphy).inv. VEEVA.asn.)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 20:49
S79	2024	content adj5 distribut$3 and (approv$3 adj3 (content data information))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 20:56
S80	4390	(content data information)adj5 distribut$3 and (approv$3 adj3 (content data information))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 20:56
S81	509	(content data information)adj5 distribut$3 same(approv$3 adj3 (content data information))	US-PGPUB; USPAT; EPO;	OR	ON	2015/03/11 20:57

			DERWENT			
S82	17	(content data information)adj5 distribut$3 same(approv$3 adj3 (content data information item resource))same ((first initial) adj4 (content data information))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 20:59
S83	17	(content data information)adj5 distribut$3 same(approv$3 adj3 (content data information item resource))same ((first initial) adj4 (content data information item resource))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 21:00
S84	0	(content data information)adj5 distribut$3 same(approv$3 adj3 (content data information item resource))same ((first initial) adj4 (content data information item resource))same suthoriz$5	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 21:00
S85	4	(content data information)adj5 distribut$3 same(approv$3 adj3 (content data information item resource))same ((first initial) adj4 (content data information item resource))same authoriz$5	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 21:00
S86	34602	709/206	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 21:11
S87	34602	709/206	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 21:11
S88	57127	((709/206) or (709/204) or (725/146) or (725/116) or (725/14.31) or (725/14.4) or (705/5) or (705/51) or (705/14.47) or (705/1.1) or (705/14.31) or (726/1) or (726/2) or (726/3)).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2015/03/11 21:14
S89	68	S88 and S81	US-PGPUB; USPAT	OR	ON	2015/03/11 21:17
S90	280	S88 and S79	US-PGPUB; USPAT	OR	ON	2015/03/11 21:17
S91	10	S88 and S82	US-PGPUB; USPAT	OR	ON	2015/03/11 21:18
S92	0	(distribut$3 adj4 approv$3 adj3 (content data information)) same ((comply$3 compliance)adj6 (government adj7 (rules guidelines regulations)))	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 21:23
S93	2934	access$3 adj4 protocol near7 control$4 adj4 (content data inforamtion)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 21:23

S94	1	access$3 adj4 protocol near7 control$4 adj4 (content data inforamtion) same approv$3 adj4 (content item resource data information)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 21:24
S95	8	access$3 adj4 protocol near7 control$4 adj4 (content data inforamtion) and approv$3 adj4 (content item resource data information)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 21:24
S96	1	access$3 adj4 protocol near7 control$4 adj4 (content data inforamtion) and approv$3 adj4 (content item resource data information)same authoriz$5	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2015/03/11 21:24

3/ 12/ 2015 3:16:16 AM
C:\ Users\ jjeangilles\ Documents\ EAST\ Workspaces\ 14271134.wsp

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14271134	MURPHY ET AL.
	Examiner	Art Unit
	JUDE JEAN GILLES	2447

CPC- SEARCHED		
Symbol	Date	Examiner
G06F 27/30; H04N21/4345	9/14/2014	JG

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner
(H04N21/4345 OR H04L65/4076 OR H04L12/2836 OR H04L29/06027).CPC.	9/14/2014	JG

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
709	206	9/14/2014	JG
705	26, 43, 35, 14, and 58	12/1/2014	JG

SEARCH NOTES		
Search Notes	Date	Examiner
EAST text and claim seach	9/14/2014	JG
EAST text and claim seach and claim search	12/1/2014	JG
EAST text and claim seach and claim search; NPLs	3/12/2015	JG

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
709	204 and 206	3/12/2015	JG
725	145, 146, 116, 14.31, and 14.4	3/12/2015	JG
705	5, 51, 14.47, 1.1 and 14.31	3/12/2015	JG
726	1, 2, and 3	3/12/2015	JG

	/JUDE JEAN GILLES/ Primary Examiner.Art Unit 2447

AFCP 2.0 Decision	Application No.	Applicant(s)
	14/271,134	MURPHY ET AL.
	Examiner	Art Unit
	JUDE JEAN GILLES	2447

This is in response to the After Final Consideration Pilot request filed 06 March 2015.

1. **Improper Request** – The AFCP 2.0 request is improper for the following reason(s) and the after final amendment submitted with the request will be treated under pre-pilot procedure.

   ☐ An AFCP 2.0 request form PTO/SB/434 (or equivalent document) was not submitted.

   ☐ A non-broadening amendment to at least one independent claim was not submitted.

   ☐ A proper AFCP 2.0 request was submitted in response to the most recent final rejection.

   ☐ Other:

2. **Proper Request**

   A. After final amendment submitted with the request will not be treated under AFCP 2.0.
   The after final amendment cannot be reviewed and a search conducted within the guidelines of the pilot program.

   ☐ The after final amendment will be treated under pre-pilot procedure.

   B. Updated search and/or completed additional consideration.
   The examiner performed an updated search and/or completed additional consideration of the after final amendment within the time authorized for the pilot program. The result(s) of the updated search and/or completed additional consideration are:

   ☒ 1. All of the rejections in the most recent final Office action are overcome and a Notice of Allowance is issued herewith.

   ☐ 2. The after final amendment would not overcome all of the rejections in the most recent final Office action. See attached interview summary for further details.

   ☐ 3. The after final amendment was reviewed, and it raises a new issue(s). See attached interview summary for further details.

   ☐ 4. The after final amendment raises new issues, but would overcome all of the rejections in the most recent final Office action. A decision on determining allowability could not be made within the guidelines of the pilot. See attached interview summary for further details, including any newly discovered prior art.

   ☐ 5. Other:

   Examiner Note: Please attach an interview summary when necessary as described above.

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BIB DATA SHEET

CONFIRMATION NO. 1557

SERIAL NUMBER	FILING or 371(c) DATE RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
14/271,134	05/06/2014	709	2447	VEV-003

APPLICANTS

VEEVA SYSTEMS INC., Pleasanton, CA, Assignee (with 37 CFR 1.172 Interest);

INVENTORS

Timothy S. Murphy, Berkeley, CA;
Brian C. Longo, Danville, CA;

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

This appln claims benefit of 61/820,029 05/06/2013
and claims benefit of 61/828,034 05/28/2013

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

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

05/28/2014

Foreign Priority claimed ☐ Yes ☑ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /JUDE JEAN GILLES/ Examiner's Signature	☐ Met after Allowance JG Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		CA	18	20	3

ADDRESS

BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201
UNITED STATES

TITLE

System and method for controlling electronic communications

FILING FEE RECEIVED		
2140	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2014-05-06
First Named Inventor	Timothy S. Murphy
Art Unit	
Examiner Name	
Attorney Docket Number	Veeva-3

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	7584251	B2	2009-09-01	Brown et al.	
	2	7865394	B1	2011-01-04	Calloway et al.	
	3	6449634	B1	2002-09-10	Capiel	
	4	7363384	B2	2008-04-22	Chatani et al.	
	5	7149964	B1	2006-12-12	Cottrille et al.	
	6	6167435		2000-12-26	Druckenmiller et al.	
	7	7065555	B2	2006-06-20	Foulger et al.	
	8	6360221	B1	2002-03-19	Gough et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JJ/

Receipt date: 05/06/2014	Application Number	14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy
	Art Unit	
	Examiner Name	
	Attorney Docket Number	Veeva-3

	9	7904922	B1	2011-03-08	Haberman et al.	
	10	6295058	B1	2001-09-25	Hsu et al.	
	11	6978417	B1	2005-12-20	Kohn et al.	
	12	6789108	B1	2004-09-07	McMillan	
	13	6438584	B1	2002-08-20	Powers	
	14	6775689	B1	2004-08-10	Raghunandan	
	15	7730165	B2	2010-06-01	Shapiro	
	16	7523167	B2	2009-04-21	Thomas et al.	

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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	20040093429	A1	2004-05-13	Burton et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JJ/

Receipt date: 05/06/2014	Application Number	14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy
	Art Unit	
	Examiner Name	
	Attorney Docket Number	Veeva-3

	2	20020019849	A1	2002-02-14	Tuvey et al.	

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Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	WO01/93509	WO	A1	2001-12-06	Yong-Tae Kim		☐
	2	WO00/65762	WO	A2	2000-11-02	HIJK		☐
	3	WO0030009	WO	A2	2000-05-25	XOOM.COM		☐

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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	U.S. Provisional Patent Application number 60/261,712 filed on January 12, 2001 entitled Method and System for Creating Presentation Packages.	☐
	2	U.S. Provisional Patent Application number 60/326,776 filed on October 3, 2001 entitled Methods and Apparatus for a Dynamic Messaging Engine.	☐

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

EXAMINER SIGNATURE

Examiner Signature	/Jude Jean Gilles/ (04/28/2015)	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

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JJ/

Receipt date: 05/06/2014	Application Number	14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy
	Art Unit	
	Examiner Name	
	Attorney Docket Number	Veeva-3

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

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Receipt date: 05/06/2014	Application Number	14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy
	Art Unit	
	Examiner Name	
	Attorney Docket Number	Veeva-3

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	/Brian C. McCormack, Reg. No. 36601/	Date (YYYY-MM-DD)	2014-05-06
Name/Print	Brian C. McCormack	Registration Number	36601

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

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The 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:

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

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

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

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.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/271,134	05/06/2014	Timothy S. Murphy	VEV-003	1557

23562 7590 05/01/2015

BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201

EXAMINER
JEAN GILLES, JUDE

ART UNIT	PAPER NUMBER
2447	

NOTIFICATION DATE	DELIVERY MODE
05/01/2015	ELECTRONIC

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

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Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
14/271,134	06 May, 2014	MURPHY ET AL.	VEV-003

BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201

EXAMINER	
JUDE JEAN GILLES	
ART UNIT	PAPER
2447	20150427

DATE MAILED:

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Commissioner for Patents

Information Disclosure Statement (IDS) Form (SB08) filed on 10/13/2014 has been considered and entered by the Examiner.

/JUDE JEAN GILLES/
Primary Examiner, Art Unit 2447

PTO-90C (Rev.04-03)

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2014-05-06
First Named Inventor	Timothy S. Murphy
Art Unit	
Examiner Name	
Attorney Docket Number	Veeva-3

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Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	7584251	B2	2009-09-01	Brown et al.	
	2	7865394	B1	2011-01-04	Calloway et al.	
	3	6449634	B1	2002-09-10	Capiel	
	4	7363384	B2	2008-04-22	Chatani et al.	
	5	7149964	B1	2006-12-12	Cottrille et al.	
	6	6167435		2000-12-26	Druckenmiller et al.	
	7	7065555	B2	2006-06-20	Foulger et al.	
	8	6360221	B1	2002-03-19	Gough et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JJ/

Receipt date: 05/06/2014	Application Number	14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy
	Art Unit	
	Examiner Name	
	Attorney Docket Number	Veeva-3

	9	7904922	B1	2011-03-08	Haberman et al.	
	10	6295058	B1	2001-09-25	Hsu et al.	
	11	6978417	B1	2005-12-20	Kohn et al.	
	12	6789108	B1	2004-09-07	McMillan	
	13	6438584	B1	2002-08-20	Powers	
	14	6775689	B1	2004-08-10	Raghunandan	
	15	7730165	B2	2010-06-01	Shapiro	
	16	7523167	B2	2009-04-21	Thomas et al.	

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

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20040093429	A1	2004-05-13	Burton et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JJ/

Receipt date: 05/06/2014	Application Number	14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy
	Art Unit	
	Examiner Name	
	Attorney Docket Number	Veeva-3

	2	20020019849	A1	2002-02-14	Tuvey et al.	

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FOREIGN PATENT DOCUMENTS Remove

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	WO01/93509	WO	A1	2001-12-06	Yong-Tae Kim		☐
	2	WO00/65762	WO	A2	2000-11-02	HIJK		☐
	3	WO0030009	WO	A2	2000-05-25	XOOM.COM		☐

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	U.S. Provisional Patent Application number 60/261,712 filed on January 12, 2001 entitled Method and System for Creating Presentation Packages.	☐
	2	U.S. Provisional Patent Application number 60/326,776 filed on October 3, 2001 entitled Methods and Apparatus for a Dynamic Messaging Engine.	☐

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

EXAMINER SIGNATURE

Examiner Signature	/Jude Jean Gilles/ (04/28/2015)	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.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JJ/

Receipt date: 05/06/2014	Application Number	14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy
	Art Unit	
	Examiner Name	
	Attorney Docket Number	Veeva-3

[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. /JJ/

Receipt date: 05/06/2014	Application Number	14271134 - GAU: 2447
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99**)	Filing Date	2014-05-06
	First Named Inventor	Timothy S. Murphy
	Art Unit	
	Examiner Name	
	Attorney Docket Number	Veeva-3

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	/Brian C. McCormack, Reg. No. 36601/	Date (YYYY-MM-DD)	2014-05-06
Name/Print	Brian C. McCormack	Registration Number	36601

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. /JJ/

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. /JJ/

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)

23562 7590 03/20/2015
BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201

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.
14/271,134	05/06/2014	Timothy S. Murphy	VEV-003	1557

TITLE OF INVENTION: System and method for controlling electronic communications

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	06/22/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
JEAN GILLES, JUDE	2447	709-206000

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 Baker & McKenzie 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: VEEVA SYSTEMS INC.

(B) RESIDENCE: (CITY and STATE OR COUNTRY): Pleasanton, CA

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

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

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☒ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 13-0480 (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 /Brian C. McCormack, Reg. No. 36601/ Date May 6, 2015

Typed or printed name Brian C. McCormack Registration No. 36601

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

Electronic Patent Application Fee Transmittal

Application Number:	14271134
Filing Date:	06-May-2014
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Filer:	Brian Charles McCormack
Attorney Docket Number:	VEV-003

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl Issue Fee	1501	1	960	960

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

Electronic Acknowledgement Receipt

EFS ID:	22268685
Application Number:	14271134
International Application Number:	
Confirmation Number:	1557
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Customer Number:	23562
Filer:	Brian Charles McCormack
Filer Authorized By:	
Attorney Docket Number:	VEV-003
Receipt Date:	06-MAY-2015
Filing Date:	06-MAY-2014
Time Stamp:	14:30:42
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$960
RAM confirmation Number	9834
Deposit Account	130480
Authorized User	MC CORMACK, BRIAN 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 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	Veeva_Issue_Fee_payment.pdf	1009054 aa6a671e0a30ba5c20550e39df8ddd75e9bc3223	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30107 4ada32b1da999f9392d1f099d5b7e558d0a4cb53	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1039161		

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.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/271,134	06/09/2015	9055023	VEV-003	1557

23562 7590 05/20/2015

BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

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

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

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

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

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

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

Timothy S. Murphy, Berkeley, CA;
VEEVA SYSTEMS INC., Pleasanton, CA;
Brian C. Longo, Danville, 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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Timothy S. Murphy et al.	§	**Group Art No.:**	2447
		§		
Patent No.:	9,055,023	§	**Examiner:**	Jude Jean Gilles
		§		
Issued:	June 9, 2015	§	**Atty. Docket No.:**	VEV-003
		§		
For:	System and method for controlling electronic communications	§	**Confirmation No.:**	1557

Submitted via EFS
Certificate of Corrections Branch
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR ISSUANCE OF CERTIFICATE OF CORRECTION

Dear Sir:

Upon review of the above-identified issue patent, Patentee notes errors to the patent that should be corrected as shown on the attached Certificate of Correction.

The mistakes noted on the attached Certificate of Correction were incurred through the fault of the Applicant. Accordingly, the fee for the certificate of correction is submitted herewith.

Patentee respectfully solicits the issuance of the requested Certificate of Correction.

Respectfully submitted,

Date: February 3, 2016

/Brian C. McCormack, Reg. No. 36601/

Brian C. McCormack
Registration No. 36,601
BAKER & MCKENZIE LLP
2300 Trammell Crow Center
2001 Ross Avenue
Dallas, TX 75201
Phone: 214-978-3007
Fax: 214-978-3099

PTO/SB/44 (09-07)
Approved for use through 08/31/2013. OMB 0651-0033
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.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 9,055,023
APPLICATION NO. : 14/271,134
ISSUE DATE : June 9, 2015
INVENTOR(S) : Timothy S. MURPHY, Brian C. LONGO, Ling LAM

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Inventor Ling LAM was added as co-inventor after grant of patent.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

Baker & McKenzie LLP
2001 Ross Avenue
Suite 2300
Dallas, TX 75201

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. 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 1.0 hour to complete, including gathering, preparing, and submitting the completed application for 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: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**.

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

Electronic Patent Application Fee Transmittal

Application Number:	14271134
Filing Date:	06-May-2014
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Filer:	Brian Charles McCormack/Rebecca Smith
Attorney Docket Number:	VEV-003

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

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

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Certificate of Correction	1811	1	100	100
Processing Fee Correcting Inventorship	1816	1	130	130
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**230**

Electronic Acknowledgement Receipt

EFS ID:	24806885
Application Number:	14271134
International Application Number:	
Confirmation Number:	1557
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Customer Number:	23562
Filer:	Brian Charles McCormack
Filer Authorized By:	
Attorney Docket Number:	VEV-003
Receipt Date:	03-FEB-2016
Filing Date:	06-MAY-2014
Time Stamp:	16:56:29
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$230
RAM confirmation Number	3633
Deposit Account	130480
Authorized User	MC CORMACK, BRIAN 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		RequestoAddInventor.pdf	1637598 2a9563e0cd725f8ec4fef5798707a9ab77093861	yes	7
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Post Allowance Communication - Incoming		1	6	
	Oath or Declaration filed		7	7	
Warnings:					
Information:					
2		ExecutedPOA.pdf	1690492 044cba4e596ca874c71e4969a70fc9d85ff5ae4a	yes	5
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Power of Attorney		1	1	
	Assignee showing of ownership per 37 CFR 3.73		2	5	
Warnings:					
Information:					
3	Request for Certificate of Correction	RequestforIssuanceofCOC.pdf	42818 4a3964d89e4f03926cecc3516651f36798a93194	no	2
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	31653 073626f62b8094c3b1191d414b4141fc7e5b073b	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	3402561		

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

Applicant(s):	Timothy S. Murphy et al.	§	**Group Art No.:**	2447
		§		
Patent No.:	9,055,023	§	**Examiner:**	Jude Jean Gilles
		§		
Issued:	June 9, 2015	§	**Atty. Docket No.:**	VEV-003
		§		
For:	System and method for controlling electronic communications	§	**Confirmation No.:**	1557

REQUEST TO ADD INVENTOR AFTER GRANT OF PATENT UNDER 37 CFR §1.324(a) and §1.324(b)

Patentees and Assignee hereby respectfully request the addition of co-inventor, Ling Lam to U.S. Patent No. 9,055,023, entitled "SYSTEM AND METHOD FOR CONTROLLING ELECTRONIC COMMUNICATIONS" that issued on June 9, 2015. The addition of Ling Lam as an inventor is necessitated by an inadvertent omission in the filing of the original application and this addition of inventorship occurred without deceptive intention by any Patentee or the Assignee. Patentees and Assignee have agreed to the addition of this inventor and have concurrently filed the following:

1. Statement of Added Inventor by Ling LAM;
2. Statement of Co-Inventor by Timothy S. MURPHY;
3. Statement of Co-Inventor by Brian C. LONGO;
4. Statement by Assignee Veeva Systems Inc. with attached Statement of Ownership under 37 CFR 3.73(c).
5. Declaration of Ling LAM;
6. Statement of Ownership under 37 CFR 3.37(c) with attached assignment from inventor LAM to Assignee Veeva Systems Inc.;

7. Fee set forth in 37 CFR 1.20(b) in the amount of $130 for correcting inventorship in a patent; and

8. Certificate of Correction.

Patentees and Assignee respectfully request the addition of inventor Ling LAM and issuance of the Certificate of Correction.

The Commissioner is hereby authorized to withdrawn any additional fees as may be required from deposit account 13-0480 referencing attorney docket number VEV-003.

Respectfully submitted,

Date: February 3, 2016

/Brian C. McCormack, Reg. No. 36601/

Brian C. McCormack
Registration No. 36,601
BAKER & McKENZIE LLP
2300 Trammell Crow Center
2001 Ross Avenue
Dallas, TX 75201
Phone: 214-978-3007
Fax: 214-978-3099

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Timothy S. Murphy et al.	§	**Group Art No.:**	2447
		§		
Patent No.:	9,055,023	§	**Examiner:**	Jude Jean Gilles
		§		
Issued:	June 9, 2015	§	**Atty. Docket No.:**	VEV-003
		§		
For:	System and method for controlling electronic communications	§	**Confirmation No.:**	1557

STATEMENT OF ADDED INVENTOR

I, Ling Lam, hereby state that I am an inventor the invention(s) disclosed in the U.S. Patent No. 9,055,023, entitled "SYSTEM AND METHOD FOR CONTROLLING ELECTRONIC COMMUNICATIONS" that issued on June 9, 2015. The addition of myself as an inventor is necessitated by an inadvertent omission in the filing of the original application and this addition of inventorship occurred without deceptive intention on my part or on the part of my co-inventors. I do not have any disagreement with any other co-inventor or the assignee, Veeva Systems Inc. with regard to this requested change. I hereby agree to this addition of myself as inventor to the above-identified patent.

My declaration is concurrently filed herewith.

2/1/2016
Date

By: Ling Lam
4280 Hacienda Drive
Pleasanton, California 94588

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Timothy S. Murphy et al.	§	Group Art No.:	2447
Patent No.:	9,055,023	§	Examiner:	Jude Jean Gilles
Issued:	June 9, 2015	§	Atty. Docket No.:	VEV-003
For:	System and method for controlling electronic communications	§	Confirmation No.:	1557

STATEMENT OF CO-INVENTOR TO ADDED INVENTOR AFTER GRANT OF PATENT

I, Timothy S. Murphy, hereby state that I am an inventor the invention(s) disclosed in the U.S. Patent No. 9,055,023, entitled "SYSTEM AND METHOD FOR CONTROLLING ELECTRONIC COMMUNICATIONS" that issued on June 9, 2015. The addition of Ling Lam as an inventor is necessitated by an inadvertent omission in the filing of the original application and this addition of inventorship occurred without deceptive intention on my part or on the part of my co-inventors. I do not have any disagreement with any other co-inventor or the assignee, Veeva Systems Inc. with regard to this requested change. I hereby agree to this addition of inventor Ling Lam to the above-identified patent.

6/2/2016
Date

By: Timothy S. Murphy
4280 Hacienda Drive
Pleasanton, California 94588

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Timothy S. Murphy et al.	§	**Group Art No.:**	2447
Patent No.:	9,055,023	§	**Examiner:**	Jude Jean Gilles
Issued:	June 9, 2015	§	**Atty. Docket No.:**	VEV-003
For:	System and method for controlling electronic communications	§	**Confirmation No.:**	1557

STATEMENT OF CO-INVENTOR TO ADDED INVENTOR AFTER GRANT OF PATENT

I, Brian C. Longo, hereby state that I am an inventor the invention(s) disclosed in the U.S. Patent No. 9,055,023, entitled "SYSTEM AND METHOD FOR CONTROLLING ELECTRONIC COMMUNICATIONS" that issued on June 9, 2015. The addition of Ling Lam as an inventor is necessitated by an inadvertent omission in the filing of the original application and this addition of inventorship occurred without deceptive intention on my part or on the part of my co-inventors. I do not have any disagreement with any other co-inventor or the assignee, Veeva Systems Inc. with regard to this requested change. I hereby agree to this addition of inventor Ling Lam to the above-identified patent.

2/1/2016
Date

By: Brian C. Longo
4280 Hacienda Drive
Pleasanton, California 94588

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):	Timothy S. Murphy et al.	§	**Group Art No.:**	2447
Patent No.:	9,055,023	§	**Examiner:**	Jude Jean Gilles
Issued:	June 9, 2015	§	**Atty. Docket No.:**	VEV-003
For:	System and method for controlling electronic communications	§	**Confirmation No.:**	1557

STATEMENT OF ASSIGNEE TO ADDED INVENTOR AFTER GRANT OF PATENT

Veeva Systems Inc., hereby states that it is the owner (assignee) of the invention(s) disclosed in the U.S. Patent No. 9,055,023, entitled "SYSTEM AND METHOD FOR CONTROLLING ELECTRONIC COMMUNICATIONS" that issued on June 9, 2015. The addition of Ling Lam as an inventor is necessitated by an inadvertent omission in the filing of the original application and this addition of inventorship occurred without deceptive intention on the part of the assignee or on the part of any co-inventors. Assignee does not have any disagreement with any inventor with regard to this requested change. Assignee hereby agrees to this addition of inventor Ling Lam to the above-identified patent. A Statement of Ownership under 37 CFR 3.73(c) is attached to this statement.

VEEVA SYSTEMS INC.

By: _____
Jonathan Faddis

Title: VP & General Counsel

Date: February 02, 2016

PTO/AIA/01 (06-12)
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.

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

Title of Invention	System and method for controlling electronic communications

As the below named inventor, I hereby declare that:

This declaration is directed to:

- ☐ The attached application, or
- ■ United States application or PCT international application number 14/271,134 filed on May 6, 2014

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

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

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

WARNING:

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

LEGAL NAME OF INVENTOR

Inventor: Ling Lam Date (Optional): _____

Signature: _____

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

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

PTO/AIA/80 (07-12)
Approved for use through 11/30/2014. OMB 0651-0035
U.S. Patent and Trademark Office: U.S DEPARTMENT OF COMMERCE
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POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

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

I hereby appoint:

☒ Practitioners associated with Customer Number: 23562

OR

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

Name	Registration Number	Name	Registration Number

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

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

☒ The address associated with Customer Number: 23562

OR

☐

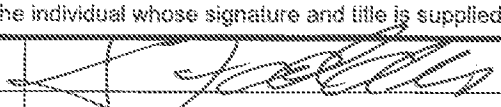
Firm or Individual Name			
Address			
City		State	Zip
Country			
Telephone		Email	

Assignee Name and Address: VEEVA SYSTEMS INC.
4280 Hacienda Drive
Pleasanton, CA 94588

A copy of this form, together with a statement under 37 CFR 3.73(c) (Form PTO/AIA/96 or equivalent) is required to be Filed in each application in which this form is used. The statement under 37 CFR 3.73(c) may be completed by one of The practitioners appointed in this form, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

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

Signature		Date	February 02, 2016
Name	Jonathan Faddis	Telephone	925-452-6500
Title	VP & General Counsel		

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)
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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: Veeva Systems Inc.

Application No./Patent No.: 9,055,023 Filed/Issue Date: June 9, 2015

Titled: System and method for controlling electronic communications

Veeva Systems Inc., a Delaware 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: Timothy S. Murphy and Brian C. Longo To: Veeva Systems Inc.

   The document was recorded in the United States Patent and Trademark Office at

   Reel 032892, Frame 0048, or for which a copy thereof is attached.

2. From: Ling Lam To: Veeva Systems Inc.

   The document was recorded in the United States Patent and Trademark Office at

   Reel _____, Frame _____, 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: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

4. 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.

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.

/Brian C. McCormack, Reg. No. 36601/	February 3, 2016
Signature	Date
Brian C. McCormack	36601
Printed or Typed Name	Title or Registration Number

ASSIGNMENT

WHEREAS, I, the undersigned inventor of residence as listed, have invented certain new and useful improvements as below entitled, for which an application for United States Letters Patent is made, said applications having been designated as set forth below and filed on or about the date set forth below; and

WHEREAS, **Veeva Systems Inc.** (hereinafter referred to as "Assignee"), a Delaware company

with an address of: 4637 Chabot Drive, Suite 210
Pleasanton, CA 94588
U.S.A.

desires to acquire the entire right, title and interest in and to the inventions, and in and to the said application and any Letters Patent(s) that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we assign to Assignee, all right, title and interest in and to said inventions and in and to said applications and all patents which may be granted therefor, and all divisions, reissues, continuations, continuations-in-part and extensions thereof; and we authorize and request the Commissioner of Patents and Trademarks to issue all patents for said inventions, or patents resulting therefrom, insofar as our interest is concerned, to Assignee.

We also assign to Assignee, all right, title and interest in and to the invention disclosed in said applications throughout the world, including the right to file applications and obtain patents, utility models, industrial models and designs for said invention in its own name throughout the world, including all rights to publish cautionary notices reserving ownership of said invention and all rights to register said invention in appropriate registries; and we further agree to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith necessary to perfect such right, title and interest in Assignee.

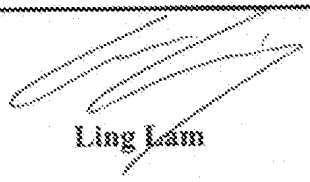
We will communicate to Assignee any facts known to us respecting any improvements; and, at the expense of Assignee, we will testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, make lawful oaths and declarations, and generally do everything possible to vest title in Assignee and to aid Assignee to obtain and enforce proper protection for said invention in all countries.

This Assignment shall be binding on the parties' successors, assigns and legal representatives.

Invention Name:	**System and method for controlling electronic communications**
Application No.:	**14/271,134**
Filing Date:	**May 6, 2014**

We hereby grant JOHN G. FLAIM, Registration No. 37,323, BRIAN C. McCORMACK, Registration No. 36,601, WILLIAM D. McSPADDEN, Registration No. 44,234, GUY F. BIRKENMEIER, Registration No. 52622, and MATT DUSHEK, Registration No. 61921, and all practitioners with the firm of Baker & McKenzie LLP (Customer Number 23562) with an office at 2001 Ross Avenue, Suite 2300, Dallas, TX 75201, the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

The undersigned further declares that all statements made herein of his/her own knowledge are true and that all statements made on information and belief are believed to be true; and further that these 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 and false statements may jeopardize the validity of the application or any patent issued thereon.

Signature of Inventor:	
Inventor(s) Name:	**Ling Lam**
Residence:	**Fremont, CA** **United States of America**
Citizenship:	**Hong Kong**
Date:	11/25/2014

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
14/271,134	05/06/2014	Timothy S. Murphy	VEV-003

CONFIRMATION NO. 1557

POA ACCEPTANCE LETTER

23562
BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201

OC000000080465704

Date Mailed: 02/10/2016

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 02/03/2016.

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**.

/lqchau/

UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/271,134	05/06/2014	Timothy S. Murphy	VEV-003	1557

23562 7590 03/14/2016

BAKER & MCKENZIE LLP
PATENT DEPARTMENT
2001 ROSS AVENUE
SUITE 2300
DALLAS, TX 75201

EXAMINER	
JEAN GILLES, JUDE	

ART UNIT	PAPER NUMBER
2447	

NOTIFICATION DATE	DELIVERY MODE
03/14/2016	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@bakermckenzie.com

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

Patent No. 9055023
Issued Date: 09 June, 2015
Appl. No: 14/271,134
Filed.: 06 May 2014

PART (A) RESPONSE FOR CERTIFICATES OF CORRECTION

This is a decision on the Certificate of Correction request filed .

The request for issuance of Certificate of Correction for the above-identified correction(s) under the provisions of 37 CFR 1.322 and/or 1.323 is hereby:

(Check one)
☐ Approved ☐ Approved in Part ☐ Denied

Comments:

PART (B) PETITION UNDER 37 CFR 1.324 OR 37 CFR 1.48

This is a decision on the petition filed 3 February 2016 to correct inventorship under 37 CFR 1.324.

This is a decision on the request under 37 CFR 1.48, petition filed . In view of the fact that the patent has already issued, the request under 37 CFR 1.48 has been treated as a petition to correct inventorship under 37 CFR 1.324.

The petition is hereby: ☒ Granted ☐ Dismissed

The patented filed is being forwarded to Certificate of Corrections Branch for issuance of a certificate naming only the actual inventor or inventors.

/Joon Hwang/
Technology Center 2400
Phone: 703-305-3900

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO.	: 9,055,023 B2
APPLICATION NO.	: 14/271134
DATED	: June 9, 2015
INVENTOR(S)	: Murphy et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title Page, Item (72) Inventor is corrected to read:

-- Timothy S. Murphy, Berkeley (CA);
Brian C. Longo, Danville (CA);
Ling Lam, Fremont (CA) --.

Signed and Sealed this
Fifth Day of April, 2016

Michelle K. Lee

Michelle K. Lee
Director of the United States Patent and Trademark Office

PTO/SB/47 (03-09)
Approved for use through 07/31/2018. OMB 0651-0016
U.S. Patent and Trademark Office; U. S. DEPARTMENT OF COMMERCE
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"FEE ADDRESS" INDICATION FORM

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

- OR -

Fax to:
571-273-6500

INSTRUCTIONS: The issue fee must have been paid for application(s) listed on this form. In addition, only an address represented by a Customer Number can be established as the fee address for maintenance fee purposes (hereafter, fee address). A fee address should be established when correspondence related to maintenance fees should be mailed to a different address than the correspondence address for the application. **When to check the first box below**: If you have a Customer Number to represent the fee address. **When to check the second box below**: If you have no Customer Number representing the desired fee address, in which case a completed Request for Customer Number (PTO/SB/125) must be attached to this form. For more information on Customer Numbers, see the Manual of Patent Examining Procedure (MPEP) § 403.

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PATENT NUMBER (if known)	APPLICATION NUMBER
9,055,023	14/271,134

Completed by (check one):

☐ Applicant/Inventor

☐ Attorney or Agent of record _

☐ Assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

☒ Assignee recorded at Reel 032892 Frame 0048

/Lin Deng/ Deputy General Counsel, IP
Signature

Lin Deng
Typed or printed name

(925) 475-4827
Requester's telephone number

July 09, 2018
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more that one signature is required, see below*.

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PTO/SB/47 (03-09)
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"FEE ADDRESS" INDICATION FORM

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- OR -

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☒ Assignee recorded at Reel 037690 Frame 0151

/Lin Deng/ Deputy General Counsel, IP
Signature

Lin Deng
Typed or printed name

(925) 475-4827
Requester's telephone number

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Electronic Acknowledgement Receipt

EFS ID:	33124720
Application Number:	14271134
International Application Number:	
Confirmation Number:	1557
Title of Invention:	System and method for controlling electronic communications
First Named Inventor/Applicant Name:	Timothy S. Murphy
Customer Number:	23562
Filer:	Lin Deng
Filer Authorized By:	
Attorney Docket Number:	VEV-003
Receipt Date:	10-JUL-2018
Filing Date:	06-MAY-2014
Time Stamp:	15:07:10
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	Maintenance Fee Address Change	9055023MFEChangeofAddress.pdf	240662 7aa85cf3571bdfc08c243c6c0e53008516b83c46	no	2

Warnings:

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

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

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New International Application Filed with the USPTO as a Receiving Office

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