
Abstract: The present disclosure is directed towards having media assets that come from different social publication services be communicated to a user based on different conditions. Specifically, a determination is made from metadata associated with a media asset whether the media asset is of a particular type (315), is published from a specified party (320), and whether the media asset comes from an approved social publication service (310). If the determination is affirmative (325), the media asset is communicated to a user, otherwise the communication is prevented (325).
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- with international search report (Art. 21(3))
COMMUNICATION OF MEDIA ASSETS FROM SOCIAL PUBLICATION SERVICES

CROSS REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application Serial No. 61/584,144 filed January 6, 2012 which is incorporated by reference herein in its entirety.

Field of the Invention

The present disclosure generally to social publication services, and more specifically to a determining whether a media asset that is published on a social publication service is communicated to a user.

Background of the Invention

When a person uses a social networking service and receives different communications from their friends to whom they are connected on such service, it is possible that the person receives the media assets such as photos, messages, videos, and audio recordings from their friends. It is possible however that the person receives too many media assets from their friends, or alternatively a user may not want to receive certain media assets from their friends through the social networking service. A more problematic situation arises when a person is connected to their friends through multiple social network services, photo sharing services, messaging services, and the like where a person can receive multiple copies of a media asset from their friends from each of these services known as social publication services.
Summary of the Invention

A method and apparatus are directed towards determining whether a media asset that is sent to a user through a social publishing service should be communicated to a user. Such a determination is made relative to user preferences concerning whether a media asset is from a specified party, of a particular type, and from a particular social publishing service. If the media asset does not meet such criteria about, the communication of the media asset is prevented.

Description of the Drawings

These, and other aspects, features and advantages of the present disclosure will be described or become apparent from the following detailed description of the preferred embodiments, which is to be read in connection with the accompanying drawings.

In the drawings, wherein like reference numerals denote similar elements throughout the views:

FIG. 1 is a block diagram of an exemplary system communicating media assets in accordance with an embodiment of the present disclosure;

FIG. 2 is a block diagram of an exemplary consumption device in accordance with an embodiment of the present disclosure;

FIG. 3 displays a flow diagram of a method for determining whether a media asset is to be communicated to a user; and

FIG. 4 displays a user interface for generating user preference information in accordance with an embodiment of the present disclosure.
Description of the Preferred Embodiments

For purposes of this specification, the term social publishing service is an internet based service where a user posts different types of media assets such as videos, audio, pictures, electronic messages, links to websites, a message text, and the like to the publishing service. These media assets are then provided to a user who is accessing the social publishing. Some social publishing services support the publishing of multiple types of media assets as well. External users can access these published media assets through a program such as a web browser, a client application written specifically for a social publishing service which access such a social publishing service directly. Examples of existing social publishing services include FACEBOOK, TWITTER, FLICKR, PINTREST, INSTAGRAM, TUMBLR, YOUTUBE, and the like.

Social publishing services can also receive media assets from other social publishing services. For example, a user can publish their photos from a first social publishing service to a second publishing service. The same user can also publish other types of media assets from other publishing services to the second publishing service. In addition, some publishing services are capable of having media assets reposted from other users. For example, a first user can publish a media asset received from a second user through a social publishing service where such an operation is called a reposting operation.

Media assets from a social publishing service can also be forwarded to a user where such media assets can be collected in a storage repository such as a digital locker implemented as a server.

The term specified party relates to a person or service that a user permissively agrees to receive media assets from. In one example, a user accepts
an invitation from a specified party on a social networking service such as FACEBOOK where the social networking service will make available through a posting operation, forwarding operation, communicating operation, providing operation, and the like, media assets from the specified party to the user. Conversely, a user sends an invitation to the specified party on a social networking service, where the media assets published by the specified party will be forwarded to the user when the specified party accepts the invitation. In a second example, a user indicates through a social publishing service such as TWITTER that the user wants to follow the posts from a specified party. Other connections between a user and a specified party can be created in accordance with the disclosed principles.

Users can be known as being linked or connected when a first user and a second user are "FRIENDS" of each other through a social networking service, where the first and second users are listed on the same list of a third user, a first and second user are grouped together in the same category either implicitly or explicitly with each other’s permission, a first and second user are grouped together in the same category either implicitly or explicitly by a third party, and the like.

FIG. 1 is an exemplary embodiment of a system 100 in accordance with the present disclosure. Consumption device 105 represents a device such as a computer, set top box, tablet, television, phone, personal access device, gateway, and the like that is used to communicate an electronic communication to other devices such as consumption device 110 or consumption device 115.

The publishing of media assets between users operating consumption devices 105, 110, and 115 can take place through various social publishing services such as social network service 120. Examples of social networking services include, but are not limited to, FACEBOOK, GOOGLE+, MYSPACE, LINKEDIN, PINTREST, INSTAGRAM, TUMBLR and the like. The communication of media assets via social publishing services between users can also take place via a website 130 and/or a
communication network 140 such as, and not limited to, a telephone connection, satellite, connection, cellular network, WI-FI Digital Subscriber Line (DSL), Internet communication, and the like. Media service provider 150 include, but are not limited to, NETFLIX, M-GO, AMAZON CLOUD SERVICE, ITUNES, PANDORA, FLICKR and the like can also be used to communicate media assets between users who use devices such as consumption devices 105, 110, and 115.

Filtering server 160 can filter the delivery of media assets between consumption devices 105, 110, and 120. That is, media assets are communicated from a social publishing service are first communicated to filter server 160 in order to determine if such media assets should be made available to different consumption devices. Filter server 160 can be set up to determine if the media asset is of a particular type, comes from a specified social publishing service, is published by a specified party using such a social publishing service, and to whom the media asset is being communicated to. Such information can come from the social publishing services themselves, a profile server 170 that contains profile information of different users, from users themselves, and the like. Filter server 160 based on the determinations listed above can communicate media assets to a user, prevent the communication of media assets to a user, forward media assets to a user, block the forwarding of media assets to a user, filter media assets, provide media assets, change access privileges to media assets, and the like.

In an optional embodiment, the operation of filtering server 160 can be performed within a social publishing service such a social networking service 120, website 130, communication network 140, media service provider 150, and the like. In another optional embodiment, the operation of filtering server 160 can also be performed within a consumption device 105, 110, 115, and the like.

Profile server 170 contains user profile data that indicates a user's preferences including the type of media assets the user wants to receive, the social
publishing services used, the specified parties a user is connected with through such social publishing services, media asset filtering data, and the like. Such data can come from sources such as a consumption device 105, 110, 115, social networking service 120, website 130, communication network 140, media service provider 150, filtering service 160, a user, other social publishing service, and the like. Storage server 180 contains media assets that are communicated from sources such as a consumption device 105, 110, 115, social networking service 120, website 130, communication network 140, media service provider 150, filtering service 160, a user, other social publishing service, and the like. Storage server 180 can operate a storage locker for media assets.

Turning now to FIG. 2, a block diagram of an embodiment of a consumption device 200 is shown. The device 200 shown can be incorporated into other systems including an audio device or a display device. In either case, several components necessary for complete operation of the system are not shown in the interest of conciseness, as they are well known to those skilled in the art.

In the device 200 shown in FIG. 2, the content is received by an input signal receiver 202. The input signal receiver 202 can be one of several known receiver circuits used for receiving, demodulation, and decoding signals provided over one of the several possible networks including over the air, cable, satellite, Ethernet, fiber and phone line networks. The desired input signal can be selected and retrieved by the input signal receiver 202 based on user input provided through a control interface or touch panel interface 222. Touch panel interface 222 can include an interface for a touch screen device. Touch panel interface 222 can also be adapted to interface to a cellular phone, a tablet, a mouse, a high end remote or the like.

The decoded output signal is provided to an input stream processor 204. The input stream processor 204 performs the final signal selection and processing, and includes separation of video content from audio content for the content stream. The
audio content is provided to an audio processor 206 for conversion from the received format, such as compressed digital signal, to an analog waveform signal. The analog waveform signal is provided to an audio interface 208 and further to the display device or audio amplifier. Alternatively, the audio interface 208 can provide a digital signal to an audio output device or display device using a High-Definition Multimedia Interface (HDMI) cable or alternate audio interface such as via a Sony/Philips Digital Interconnect Format (SPDIF). The audio interface can also include amplifiers for driving one more sets of speakers. The audio processor 206 also performs any necessary conversion for the storage of the audio signals.

The video output from the input stream processor 204 is provided to a video processor 210. The video signal can be one of several formats. The video processor 210 provides, as necessary, a conversion of the video content, based on the input signal format. The video processor 210 also performs any necessary conversion for the storage of the video signals.

A storage device 212 stores audio and video content received at the input. The storage device 212 allows later retrieval and playback of the content under the control of a controller 214 and also based on commands, e.g., navigation instructions such as fast-forward (FF) and rewind (Rew), received from a user interface 216 and/or touch panel interface 222. The storage device 212 can be a hard disk drive, one or more large capacity integrated electronic memories, such as static RAM (SRAM), or dynamic RAM (DRAM), or can be an interchangeable optical disk storage system such as a compact disk (CD) drive or digital video disk (DVD) drive.

The converted video signal, from the video processor 210, either originating from the input or from the storage device 212, is provided to the display interface 218. The display interface 218 further provides the display signal to a display device of the type described above. The display interface 218 can be an analog signal interface such as red-green-blue (RGB) or can be a digital interface such as HDMI.
It is to be appreciated that the display interface 218 will generate the various screens for presenting the search results in a two dimensional form as will be described in more detail below.

The controller 214 is interconnected via a bus to several of the components of the device 200, including the input stream processor 202, audio processor 206, video processor 210, storage device 212, and a user interface 216. The controller 214 manages the conversion process for converting the input stream signal into a signal for storage on the storage device or for display. The controller 214 also manages the retrieval and playback of stored content. Furthermore, as will be described below, the controller 214 can interface with a search engine for the searching of content and the creation and adjusting of the display of graphical objects representing such content which can be stored or to be delivered via storage server 180, described above.

The controller 214 is further coupled to control memory 220 (e.g., volatile or non-volatile memory, including RAM, SRAM, DRAM, ROM, programmable ROM (PROM), flash memory, electronically programmable ROM (EPROM), electronically erasable programmable ROM (EEPROM), etc.) for storing information and instruction code for controller 214. Control memory 220 can store instructions for controller 214. Control memory 220 can also store a database of elements, such as graphic elements containing content, various graphic elements used for generating a displayed user interface for display interface 218, and the like. Alternatively, the memory can store the graphic elements in identified or grouped memory locations and use an access or location table to identify the memory locations for the various portions of information related to the graphic elements. In addition, various graphic elements can be generated in response to computer instructions interpreted by controller 214 for output to display interface 218. Additional details related to the storage of the graphic elements will be described below. Further, the
implementation of the control memory 220 can include several possible embodiments, such as a single memory device or, alternatively, more than one memory circuit communicatively connected or coupled together to form a shared or common memory. Still further, the memory can be included with other circuitry, such as portions of bus communications circuitry, in a larger circuit.

Optionally, controller 214 can be adapted to extract metadata from audio and video media by using audio processor 206 and video processor 210, respectively. That is, metadata that is contained in the video signal in the vertical blanking interval, auxiliary data fields associated with video, or in other areas in the video signal can be harvested by using the video processor 210 with controller 214 as to generate metadata that can be used for functions such as generating an electronic program guide, providing descriptive information about received video, supporting an auxiliary information service, and the like. Similarly, the audio processor 206 working with controller 214 can be adapted to recognize audio watermarks that can be in an audio signal. Such audio watermarks can then be used to perform some action such as the recognition of the audio signal identifying the source of an audio signal, or performing some other service. Furthermore, metadata to support the actions listed above can come from a network or other source.

Referring back to FIG. 1, profile server 170 can be implemented to keep track of a user’s preferences including the type of media assets the user wants to receive, the social publishing services used, the specified parties a user is connected with through such social publishing services, where an example of such information for a user is shown in TABLE 1 in accordance with the presented principles.

<table>
<thead>
<tr>
<th>SPECIFIED PARTY</th>
<th>SOCIAL PUBLISHING SERVICE</th>
<th>PICTURES</th>
<th>MESSAGES</th>
<th>AUDIO</th>
<th>VIDEO</th>
</tr>
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9
<table>
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<tr>
<th>Friend</th>
<th>Social Publishing Service</th>
<th>Yes</th>
<th>No</th>
<th>Yes</th>
<th>No</th>
</tr>
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<tr>
<td>Friend A</td>
<td>FACEBOOK</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Friend A</td>
<td>TWITTER</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Friend A</td>
<td>INSTAGRAM</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Friend B</td>
<td>FACEBOOK</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Friend B</td>
<td>TWITTER</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Friend B</td>
<td>INSTAGRAM</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Friend B</td>
<td>FLICKR</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>

**TABLE 1**

The column for specified party represents the different people/entities that a user has a permissive relationship with. Social publishing service indicates a particular social publishing service that a user receives communications from in the form of media assets which are published from specified parties. The next four columns represent different types of media assets including pictures, messages, audio, and videos. The Yes or No indicate whether a user is supposed to receive a media asset type from a specified party which is communicated through a social publication service. Information that defines the specified party, media asset, media asset type, source of a published asset, social publishing service, and the like can come from commands that come from a social publishing service, metadata embedded within a media asset, metadata associated with a media asset, a separate stream of metadata, an XML commands, and the like. The described operations of permitting and preventing communications of media assets, as listed for TABLE 1 can be performed by consumption devices 105, 110, 115, social
FIG. 3 is a flow chart of a method 300 for communicating a media asset received from a social publishing service is shown. The described steps can be implemented using a device 200, consumption devices 105, 110, 115, social networking service 120, website 130, communications network 140, media service provider 150, filtering server 160, profile server 170, storage server 180, and the like.

In step 305, a media asset is received from a social publishing service. The receipt of the media asset can be performed at the point of a social publishing service where a specified party posts or uploads a media asset to the social publishing service. The receipt of a media service can also having the media asset being transmitted from a social publishing service to an intervening device such as filtering server 160, or to directly to consumption devices 105, 110, 115, and the like. Note, the receipt of a media asset is not the same thing as the presentation of a media asset.

The following determination steps 310, 315, and 320 can use data from a user profile server 160 or from another source in accordance with the described principles.

In step 310, a determination is made to determine the source of a media asset. Such a determination can be made from metadata that is included with the media asset, metadata that comes from the source that provide the media asset, a server that provides metadata, from filtering server 160, from profile server 170, or any other method that is capable of being used to communicate metadata in accordance with the described principles. Step 315 has a type of media being determined for a received media asset where such an operation can be performed
by analyzing the media asset itself, referencing metadata associated with the media asset, and the like.

In step 320, a determination is made whether the received media asset was published by a specified party. As stated before, a specified party would ideally a party that a user has permissively connected to through a social networking service, other type of service which has users link to each other by accepting invitations to be connected together, and the like. The determination in step 320 can be made from noting the source via commands, metadata associated with the media asset, and the like in accordance with the described principles.

In step 325, the method continues where a determination is made whether a received media asset is of an appropriate type, from an appropriate social publishing service, and published from a appropriate specified party where such a determination is made based on the results of previous steps 305, 315, and 320. If a media asset is of an appropriate type, from an appropriate social publishing service, and from a specified party, the media asset is then communicated to a user in step 325; otherwise the communication of the media asset to a user is prevented in step 325.

The communication of a media asset in step 325 can be one of a presentation of the media asset, a playback of the media asset, a forwarding of the media asset, and the like. The preventing of a communication of the media asset in step 325 can be filtering out the media asset, preventing the display of the media asset, preventing the playback of the media asset, blocking of a transmission of the media asset, and the like.

Step 330 is the receipt of a second media asset where steps 310, 315, 320, and 325 are repeated to determine whether or not the second media asset is to be communicated. Several different scenarios exist for step 330 where the second
media asset is of a same or different type from the first media asset, the second media asset is published by a same or different specified party, the second media asset comes from a same or different social publication service, and the like. Depending on the scenario for the second media asset and the respective user profile information, it is possible that a first media asset will be communicated while the communication of a second media asset will be prevented in accordance with the described principles. It is also possible that the first and second media asset can be communicated based on the results of steps 310, 315, 320, and 325, in accordance with the described principles.

FIG. 4 is a view of an illustrative user interface 400 that is used for creating user profile data in accordance with the presented principles. In displayed element 400, a user can input data identifying the specified parties to whom the user wants to receive media assets. In displayed element 410, a user can enter in data indicating the types of media assets the user wants to receive. In displayed element 415, the user enters in what social publication services the user wants to receive media assets from. Such information, when entered in, can be used to generate similar data as shown in TABLE 1 and can be used for populating profile server 170, in accordance with the described principles.

It should be understood that the elements shown in the figures can be implemented in various forms of hardware, software or combinations thereof. Preferably, these elements are implemented in a combination of hardware and software on one or more appropriately programmed general-purpose devices, which may include a processor, memory and input/output interfaces.

The present description illustrates the principles of the present disclosure. It will thus be appreciated that those skilled in the art will be able to devise various arrangements that, although not explicitly described or shown herein, embody the principles of the disclosure and are included within its scope.
All examples and conditional language recited herein are intended for informational purposes to aid the reader in understanding the principles of the disclosure and the concepts contributed by the inventor to furthering the art, and are to be construed as being without limitation to such specifically recited examples and conditions.

Moreover, all statements herein reciting principles, aspects, and embodiments of the disclosure, as well as specific examples thereof, are intended to encompass both structural and functional equivalents thereof. Additionally, it is intended that such equivalents include both currently known equivalents as well as equivalents developed in the future, i.e., any elements developed that perform the same function, regardless of structure.

Thus, for example, it will be appreciated by those skilled in the art that the block diagrams presented herein represent conceptual views of illustrative circuitry embodying the principles of the disclosure. Similarly, it will be appreciated that any flow charts, flow diagrams, state transition diagrams, pseudocode, and the like represent various processes that can be substantially represented in computer readable media and so executed by a computer or processor, whether or not such computer or processor is explicitly shown. The computer readable media and code written on can be implemented in a transitory state (signal) and a non-transitory state (e.g., on a tangible medium such as CD-ROM, DVD, Blu-Ray, Hard Drive, flash card, or other type of tangible storage medium).

The functions of the various elements shown in the figures may be provided through the use of dedicated hardware as well as hardware capable of executing software in association with appropriate software. When provided by a processor, the functions may be provided by a single dedicated processor, by a single shared processor, or by a plurality of individual processors, some of which may be shared. Moreover, explicit use of the term "processor" or "controller" should not be construed
to refer exclusively to hardware capable of executing software, and may implicitly
include, without limitation, digital signal processor ("DSP") hardware, read only
memory ("ROM") for storing software, random access memory ("RAM"), and
nonvolatile storage.

Other hardware, conventional and/or custom, may also be included. Similarly,
any switches shown in the figures are conceptual only. Their function may be
carried out through the operation of program logic, through dedicated logic, through
the interaction of program control and dedicated logic, or even manually, the
particular technique being selectable by the implementer as more specifically
understood from the context.

Although embodiments which incorporate the teachings of the present
disclosure have been shown and described in detail herein, those skilled in the art
can readily devise many other varied embodiments that still incorporate these
teachings. It is noted that modifications and variations can be made by persons
skilled in the art in light of the above teachings.
Claims

1. A method for specifying preferences in a social networking environment comprising the steps of:

receiving a media asset from a social publication service over a network connection (305); and

communicating said media asset to a user, in accordance with a user profile, when a type of said media asset is published by a specified party on said social publication service (325).

2. The method of claim 1 comprising the additional steps of:

receiving a second media asset from said social publication service over said network connection; and

preventing a communication of said second media asset to said user, in accordance with said user profile, when a type of said second media is published by said specified party on said social publication service and said type of said media and second media are different.

3. The method of claim 1 comprising the additional steps of:

receiving a second media asset from a second social publication service over said network connection; and

preventing a communication of said second media asset to said user, in accordance with said user profile, when said type of said second media is published by said specified party on said second social publication service and said type of said media and second media are the same.

4. The method of claim 1 comprising the additional steps of:
receiving a second media asset from a second social publication service over said
network connection; and

communicating said second media asset to said user, in accordance with said user
profile, when a type of said second media is published by said specified party on
said second social publication service and said type of said media and second media
are different.

5. The method of claim 1 comprising the additional steps of:

receiving a second media asset from said social publication service over said
network connection;

preventing a communication of said second media asset to said user, in accordance
with said user profile, when a type of said second media is published by a second
specified party on said social publication service and said type of said media and
second media are the same; and

communicating said second media asset to said user, in accordance with said user
profile, when said second specified party published said second media asset on a
second social publication service.

6. The method of claim 1 wherein said social publication service is at least one of:
an instant message service, a social networking service, a photo sharing service, a
video sharing service, an audio sharing service, and an application service.

7. The method of claim 1, wherein said type of media is at least one of: audio, video,
photo, link to a website, and message.

8. The method of claim 1 wherein said specified party and user are members of said
social publication service and said specified party and user have permissively linked
to each other.
9. An apparatus (200) for specifying preferences in a social networking environment comprising:

an input interface (204) that receives a media asset from a social publication service over a network connection;

a processor (214) that communicates said media asset to a user, in accordance with a user profile, when a type of said media asset is published by a specified party on said social publication service; and

a storage device (212) that stores said user profile information.

10. The apparatus of claim 9, additionally comprising:

receiving via said input interface a second media asset from said social publication service over said network connection; and

said processor prevents a communication of said second media asset to said user, in accordance with said user profile, when a type of said second media is published by said specified party on said social publication service and said type of said media and second media are different.

11. The apparatus of claim 9, additionally comprising:

receiving via said input interface a second media asset from a second social publication service over said network connection; and

said processor prevents a communication of said second media asset to said user, in accordance with said user profile, when said type of said second media is published by said specified party on said second social publication service and said type of said media and second media are the same.

12. The apparatus of claim 9, additionally comprising:
receiving via said input interface a second media asset from a second social publication service over said network connection; and

said processor communicates said second media asset to said user, in accordance with said user profile, when a type of said second media is published by said specified party on said second social publication service and said type of said media and second media are different.

13. The apparatus of claim 9, additionally comprising:

receiving via said input interface a second media asset from said social publication service over said network connection;

said processor prevents a communication of said second media asset to said user, in accordance with said user profile, when a type of said second media is published by a second specified party on said social publication service and said type of said media and second media are the same; and

said processor communicates said second media asset to said user, in accordance with said user profile, when said second specified party published said second media asset on a second social publication service.

14. The apparatus of claim 9, wherein said social publication service is at least one of: an instant message service, a social networking service, a photo sharing service, a video sharing service, an audio sharing service, and an application service.

15. The apparatus of claim 9, wherein said type of media is at least one of: audio, video, photo, link to a website, and message.

16. The apparatus of claim 9, wherein said specified party and user are members of said social publication service and said specified party and user have permissively linked to each other.
17. A user interface (400) comprising:

a first displayed element for identifying a specified party (405);

a second displayed element for identifying a type of media asset (410); and

a third displayed element (415) for identifying a social publication service to receive
said type of media asset from said specified person, wherein said information from
said first, second, and third areas are used to generate a user profile that can be
used for at least one of: a communication operation, a preventing of a
communication, a forwarding operation, a blocking operation, and a filtering
operation.
FIG. 1
FIG. 3

RECEIVING A MEDIA ASSET FROM A SOCIAL PUBLICATION SERVICE

305

DETERMINING SOURCE OF MEDIA ASSET

310

DETERMINING MEDIA ASSET TYPE

315

DETERMINING WHETHER MEDIA ASSET WAS PUBLISHED BY A SPECIFIED PARTY

320

COMMUNICATING WHETHER SAID MEDIA ASSET SHOULD BE COMMUNICATED TO A USER OR IF SAID COMMUNICATION SHOULD BE PREVENTED

325

RECEIVING A SECOND MEDIA ASSET FROM A SOCIAL PUBLICATION SERVICE

330
FIG. 4
INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 13/20259

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - G06F 3/00 (2013.01)
USPC - 705/319

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)
IPC(8): G06F 3/00; G06F 15/16; G06F 17/00; G06Q 9/00; G06F 3/048 (2013.01)
USPC: 705/319; 709/204; 715/733; 715/745

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consultation during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<th>Category*</th>
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<th>Relevant to claim No.</th>
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<td>US 2008/0040673 A1 (ZUCKERBERG, M et al.) 14 February 2008; Figure 1: Paragraphs [0014]-[0018] and [0032]-[0034].</td>
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<td>A</td>
<td>US 201 01/238754 A1 (DASILVA, T et al.) 29 September 201 1; the whole document.</td>
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<td>US 201 01/0137894 A1 (NARAYANAN, R et al.) 9 June 201 1; the whole document.</td>
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<td>US 201 01/0004831 A1 (STEINBERG, A et al.) 6 January 201 1; the whole document.</td>
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Date of the actual completion of the international search
6 March 2013 (06.03.2013)

Date of mailing of the international search report
18 MAR 2013

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