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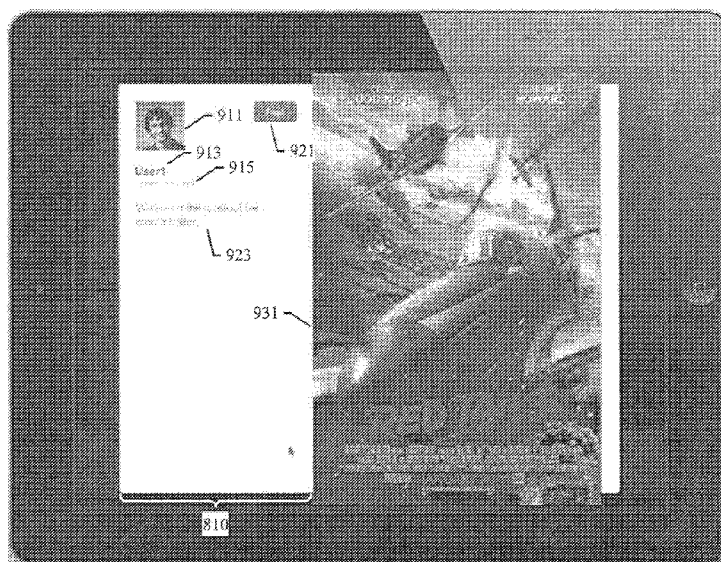


FIG. 9

(57) **Abstract:** In one embodiment, a method includes presenting a comment icon in connection with a third-party application, the comment icon being associated with a first party and enabling a user to compose comment concerning the third-party application; and while the user is interacting with the third-party application, in response to the user activating the comment icon, creating a comment post concerning the third-party application; enabling the user to input comment inside the comment post; and enabling the user to submit the comment post to the first party for publication.



## CONTENT COMPOSER FOR THIRD-PARTY APPLICATIONS

### TECHNICAL FIELD

[1] This disclosure generally relates to a user interface.

### BACKGROUND

[2] A user interface (UI), in the industrial design field of human-machine interaction, is the space where interactions between humans and machines occur. The goal of the interactions between a human, often referred to as a “user”, and a machine at the user interface is the user’s control of the machine and its operations (e.g., through user input) and machine feedback (e.g., through program output). A graphical user interface (GUI) is a type of user interface that allows users to interact with software applications executing on electronic or computing devices through multimedia objects (e.g., images, videos, audios, etc.) rather than purely text commands.

### SUMMARY OF PARTICULAR EMBODIMENTS

[3] In particular embodiments, a user interface for presenting content to users may have a hierarchical structure. The user interface may have any number of content sections, and each content section may have any number of content items. The content items may be of any type or format. A user may consume or interact with some of the content items. In particular embodiments, each content item may correspond to a user-interface element.

[4] In particular embodiments, while interacting with a third-party application through a first party (e.g., a social-networking system), a user may post comment about the third-party application through the first-party system (e.g., at the social-networking website). A first-party comment icon may be associated with the third-party application.

[5] The user may select and activate the first-party comment icon included with the third-party application at any time (e.g., while interacting with the third-party application). This causes the third-party application to stop or pause its execution and a composer screen to appear (e.g., next to the third-party application). The user may compose the comment using the composer screen. The user may preview how the comment would look like once it is posted by the first party. When done, the user may submit the comment to the first party to be published or posted (e.g., at the social-networking website).

**BRIEF DESCRIPTION OF THE DRAWINGS**

[6] FIG. 1 illustrates an example network environment associated with a social-networking system.

[7] FIGS. 2A and 2B illustrate two example mobile electronic devices.

[8] FIG. 3 illustrates an example social graph.

[9] FIG. 4 illustrates an example object hierarchy.

[10] FIG. 5 illustrates an example third-party application.

[11] FIG. 6 illustrates an example first-party comment icon included with a third-party application.

[12] FIGS. 7A-7E illustrate an animation sequence.

[13] FIGS. 8A-8B illustrate an animation sequence.

[14] FIG. 9 illustrates an example comment composer.

[15] FIG. 10 illustrates an example comment composer.

[16] FIG. 11 illustrates an example comment post.

[17] FIG. 12 illustrates an example computer system.

**DESCRIPTION OF EXAMPLE EMBODIMENTS**

[18] A user interface (UI) may be incorporated into any type of software applications, including, for example, desktop applications, mobile applications, or web-based applications, to enable users to interact with and control the applications. A graphical user interface (GUI) is a type of user interface that enables users to interact with software applications through multi-media objects, including, for example, icons, buttons, menus, images, video, or audios.

[19] In particular embodiments, a software application may be associated with a social-networking system. FIG. 1 illustrates an example network environment 100 associated with a social-networking system. Network environment 100 includes a user 101, a client system 130, a social-networking system 160, and a third-party system 170 connected to each other by a network 110. Although FIG. 1 illustrates a particular arrangement of user 101, client system 130, social-networking system 160, third-party system 170, and network 110, this disclosure contemplates any suitable arrangement of user 101, client system 130, social-networking system 160, third-party system 170, and network 110. As an example and not by

way of limitation, two or more of client system 130, social-networking system 160, and third-party system 170 may be connected to each other directly, bypassing network 110. As another example, two or more of client system 130, social-networking system 160, and third-party system 170 may be physically or logically co-located with each other in whole or in part. Moreover, although FIG. 1 illustrates a particular number of users 101, client systems 130, social-networking systems 160, third-party systems 170, and networks 110, this disclosure contemplates any suitable number of users 101, client systems 130, social-networking systems 160, third-party systems 170, and networks 110. As an example and not by way of limitation, network environment 100 may include multiple users 101, client system 130, social-networking systems 160, third-party systems 170, and networks 110.

[20] In particular embodiments, user 101 may be an individual (human user), an entity (e.g., an enterprise, business, or third-party application), or a group (e.g., of individuals or entities) that interacts or communicates with or over social-networking system 160. In particular embodiments, social-networking system 160 may be a network-addressable computing system hosting an online social network. Social-networking system 160 may generate, store, receive, and transmit social-networking data, such as, for example, user-profile data, concept-profile data, social-graph information, or other suitable data related to the online social network. Social-networking system 160 may be accessed by the other components of network environment 100 either directly or via network 110. In particular embodiments, social-networking system 160 may include an authorization server that allows users 101 to opt in or opt out of having their actions logged by social-networking system 160 or shared with other systems (e.g., third-party systems 170), such as, for example, by setting appropriate privacy settings. In particular embodiments, third-party system 170 may be a network-addressable computing system that can host various third-party software applications (e.g., web-based applications). Third-party system 170 may generate, store, receive, and transmit various types of data, such as, for example, texts, images, videos, or audios. Third-party system 170 may be accessed by the other components of network environment 100 either directly or via network 110. In particular embodiments, one or more users 101 may use one or more client systems 130 to access, send data to, and receive data from social-networking system 160 or third-party system 170. Client system 130 may access social-networking system 160 or third-party system 170 directly, via network 110, or via a third-party system. As an example and not by way of limitation, client system 130 may

access third-party system 170 via social-networking system 160. Client system 130 may be any suitable computing device, such as, for example, a personal computer, a laptop computer, a cellular telephone, a smartphone, or a tablet computer.

[21] This disclosure contemplates any suitable network 110. As an example and not by way of limitation, one or more portions of network 110 may include an ad hoc network, an intranet, an extranet, a virtual private network (VPN), a local area network (LAN), a wireless LAN (WLAN), a wide area network (WAN), a wireless WAN (WWAN), a metropolitan area network (MAN), a portion of the Internet, a portion of the Public Switched Telephone Network (PSTN), a cellular telephone network, or a combination of two or more of these. Network 110 may include one or more networks 110.

[22] Links 150 may connect client system 130, social-networking system 160, and third-party system 170 to communication network 110 or to each other. This disclosure contemplates any suitable links 150. In particular embodiments, one or more links 150 include one or more wireline (such as for example Digital Subscriber Line (DSL) or Data Over Cable Service Interface Specification (DOCSIS)), wireless (such as for example Wi-Fi or Worldwide Interoperability for Microwave Access (WiMAX)), or optical (such as for example Synchronous Optical Network (SONET) or Synchronous Digital Hierarchy (SDH)) links. In particular embodiments, one or more links 150 each include an ad hoc network, an intranet, an extranet, a VPN, a LAN, a WLAN, a WAN, a WWAN, a MAN, a portion of the Internet, a portion of the PSTN, a cellular technology-based network, a satellite communications technology-based network, another link 150, or a combination of two or more such links 150. Links 150 need not necessarily be the same throughout network environment 100. One or more first links 150 may differ in one or more respects from one or more second links 150.

[23] In particular embodiments, data (e.g., data representing various types of information or content) may be sent between servers associated with social-networking system 160 and individual client systems 130 via network 110. When two electronic devices (e.g., a server and a client) are connected to a network (e.g., a computer or communications network, such as network 110), data may be transmitted between the two devices over the network using one or more suitable network protocols. A network may include any number of sub-networks. By transmitting data between the two devices, the two devices may communicate with each other.

[24] In network communications, there are two ways to send a communication (i.e., data) from one device to another device: push and pull. With push technology, the request for the communication transaction is initiated by the sending device. That is, the sending device “pushes” the communication, so to speak, to the receiving device. In this case, the sending device may be considered the active party and the receiving device may be considered the passive party in the transaction. In contrast, with pull technology, the request for the communication transaction is initiated by the receiving device. That is, the receiving device “pulls” the communication, so to speak, from the sending device. In this case, the sending device may be considered the passive party and the receiving device may be considered the active party in the transaction. In particular embodiments, a server associated with social-networking system 160 may push data to a client system 130. A communication pushed from a server to a client may be referred to as a “push notification”. Similarly, a client system 130 may push data to a server associated with social-networking system 160.

[25] In particular embodiments, a client system 130 may be a mobile electronic or computing device. A mobile electronic device – such as a Smartphone, tablet computer, or laptop computer – may include functionality for determining its location, direction, or orientation, such as a GPS receiver, compass, or gyroscope. Such a mobile device may also include functionality for wireless communication, such as BLUETOOTH communication, near-field communication (NFC), or infrared (IR) communication or communication with a wireless local area networks (WLANs) or cellular-telephone network. Such a mobile device may also include one or more cameras, scanners, touchscreens, microphones, or speakers. Mobile electronic devices may also execute software applications, such as games, web browsers, or social-networking applications. With social-networking applications, users may connect, communicate, and share information with other users in their social networks.

[26] In particular embodiments, a mobile electronic device (e.g., Smartphone or tablet computer) may include a touchscreen capable of receiving touch input. FIG. 2A illustrates an example mobile electronic device 210 (e.g., a Smartphone) having a touchscreen 215. Touchscreen 215 may incorporate one or more touch sensors and a touch-sensor controller for detecting the presence and location of a touch (e.g., from a user’s finger) or the proximity of an object (e.g., a stylus). In particular embodiments, a specific touch detected via touchscreen 215 may result in a touch input event.

[27] Different mobile electronic devices may have different designs. As a result,

the size, shape, or aspect ratio of the touchscreens of different mobile devices may differ. FIG. 2B illustrates another example mobile electronic device 220 (e.g., a tablet computer) having a touchscreen 225. Similarly, touchscreen 225 may incorporate one or more touch sensors and a touch-sensor controller for detecting the presence and location of a touch (e.g., from a user's finger) or the proximity of an object (e.g., a stylus). A specific touch detected via touchscreen 225 may result in a touch input event. However, since mobile electronic devices 210 and 220 are two different types of devices, their respective touchscreen 215 and 225 have different sizes and aspect ratios.

[28] There may be various types of touches or gestures, such as single tap, double tap, short press, long press, slide, swipe, flip, pinch open, or pinch close, corresponding to various types of touch input events. Different touch input events may result in different responses and this disclosure contemplates any applicable gesture.

[29] Social-networking system 160 may store various types of data including, for example, user data, application data, or social data. In particular embodiments, such data may be stored in a graph having any number of nodes and edges, where each edge connects two nodes. The graph is often referred to as a "social graph" or "open graph" as it contains, among others, social information.

[30] FIG. 3 illustrates example social graph 300. In particular embodiments, social-networking system 160 may store one or more social graphs 300 in one or more data stores. In particular embodiments, social graph 300 may include multiple nodes—which may include multiple user nodes 302 or multiple concept nodes 304—and multiple edges 306 connecting the nodes. Example social graph 300 illustrated in FIG. 3 is shown, for didactic purposes, in a two-dimensional visual map representation. In particular embodiments, a social-networking system 160, client system 130, or third-party system 170 may access social graph 300 and related social-graph information for suitable applications. The nodes and edges of social graph 300 may be stored as data objects, for example, in a data store (such as a social-graph database). Such a data store may include one or more searchable or queryable indexes of nodes or edges of social graph 300.

[31] In particular embodiments, a user node 302 may correspond to a user of social-networking system 160. As an example and not by way of limitation, a user may be an individual (human user), an entity (e.g., an enterprise, business, or third-party application), or a group (e.g., of individuals or entities) that interacts or communicates with or over social-

networking system 160. In particular embodiments, when a user registers for an account with social-networking system 160, social-networking system 160 may create a user node 302 corresponding to the user, and store the user node 302 in one or more data stores. Users and user nodes 302 described herein may, where appropriate, refer to registered users and user nodes 302 associated with registered users. In addition or as an alternative, users and user nodes 302 described herein may, where appropriate, refer to users that have not registered with social-networking system 160. In particular embodiments, a user node 302 may be associated with information provided by a user or information gathered by various systems, including social-networking system 160. As an example and not by way of limitation, a user may provide his or her name, profile picture, contact information, birth date, sex, marital status, family status, employment, education background, preferences, interests, or other demographic information. In particular embodiments, a user node 302 may be associated with one or more data objects corresponding to information associated with a user. In particular embodiments, a user node 302 may correspond to one or more webpages.

[32] In particular embodiments, a concept node 304 may correspond to a concept. As an example and not by way of limitation, a concept may correspond to a place (such as, for example, a movie theater, restaurant, landmark, or city); a website (such as, for example, a website associated with social-network system 160 or a third-party website associated with a web-application server); an entity (such as, for example, a person, business, group, sports team, or celebrity); a resource (such as, for example, an audio file, video file, digital photo, text file, structured document, or application) which may be located within social-networking system 160 or on an external server, such as a web-application server; real or intellectual property (such as, for example, a sculpture, painting, movie, game, song, idea, photograph, or written work); a game; an activity; an idea or theory; another suitable concept; or two or more such concepts. A concept node 304 may be associated with information of a concept provided by a user or information gathered by various systems, including social-networking system 160. As an example and not by way of limitation, information of a concept may include a name or a title; one or more images (e.g., an image of the cover page of a book); a location (e.g., an address or a geographical location); a website (which may be associated with a URL); contact information (e.g., a phone number or an email address); other suitable concept information; or any suitable combination of such information. In particular embodiments, a concept node 304 may be associated with one or more data objects corresponding to



information associated with concept node 304. In particular embodiments, a concept node 304 may correspond to one or more webpages.

[33] In particular embodiments, a node in social graph 300 may represent or be represented by a webpage (which may be referred to as a “profile page”). Profile pages may be hosted by or accessible to social-networking system 160. Profile pages may also be hosted on third-party websites associated with a third-party server 170. As an example and not by way of limitation, a profile page corresponding to a particular external webpage may be the particular external webpage and the profile page may correspond to a particular concept node 304. Profile pages may be viewable by all or a selected subset of other users. As an example and not by way of limitation, a user node 302 may have a corresponding user-profile page in which the corresponding user may add content, make declarations, or otherwise express himself or herself. As another example and not by way of limitation, a concept node 304 may have a corresponding concept-profile page in which one or more users may add content, make declarations, or express themselves, particularly in relation to the concept corresponding to concept node 304.

[34] In particular embodiments, a concept node 304 may represent a third-party webpage or resource hosted by a third-party system 170. The third-party webpage or resource may include, among other elements, content, a selectable or other icon, or other inter-actable object (which may be implemented, for example, in JavaScript, AJAX, or PHP codes) representing an action or activity. As an example and not by way of limitation, a third-party webpage may include a selectable icon such as “like,” “check in,” “eat,” “recommend,” or another suitable action or activity. A user viewing the third-party webpage may perform an action by selecting one of the icons (e.g., “eat”), causing a client system 130 to transmit to social-networking system 160 a message indicating the user’s action. In response to the message, social-networking system 160 may create an edge (e.g., an “eat” edge) between a user node 302 corresponding to the user and a concept node 304 corresponding to the third-party webpage or resource and store edge 306 in one or more data stores.

[35] In particular embodiments, a pair of nodes in social graph 300 may be connected to each other by one or more edges 306. An edge 306 connecting a pair of nodes may represent a relationship between the pair of nodes. In particular embodiments, an edge 306 may include or represent one or more data objects or attributes corresponding to the relationship between a pair of nodes. As an example and not by way of limitation, a first user

may indicate that a second user is a “friend” of the first user. In response to this indication, social-networking system 160 may transmit a “friend request” to the second user. If the second user confirms the “friend request,” social-networking system 160 may create an edge 306 connecting the first user’s user node 302 to the second user’s user node 302 in social graph 300 and store edge 306 as social-graph information in one or more of data stores (e.g., data stores associated with social-networking system 160). In the example of FIG. 3, social graph 300 includes an edge 306 indicating a friend relation between user nodes 302 of user “A” and user “B” and an edge indicating a friend relation between user nodes 302 of user “C” and user “B.” Although this disclosure describes or illustrates particular edges 306 with particular attributes connecting particular user nodes 302, this disclosure contemplates any suitable edges 306 with any suitable attributes connecting user nodes 302. As an example and not by way of limitation, an edge 306 may represent a friendship, family relationship, business or employment relationship, fan relationship, follower relationship, visitor relationship, subscriber relationship, superior/subordinate relationship, reciprocal relationship, non-reciprocal relationship, another suitable type of relationship, or two or more such relationships. Moreover, although this disclosure generally describes nodes as being connected, this disclosure also describes users or concepts as being connected. Herein, references to users or concepts being connected may, where appropriate, refer to the nodes corresponding to those users or concepts being connected in social graph 300 by one or more edges 306.

[36] In particular embodiments, an edge 306 between a user node 302 and a concept node 304 may represent a particular action or activity performed by a user associated with user node 302 toward a concept associated with a concept node 304. As an example and not by way of limitation, as illustrated in FIG. 3, a user may “like,” “attended,” “played,” “listened,” “cooked,” “worked at,” or “watched” a concept, each of which may correspond to a edge type or subtype. A concept-profile page corresponding to a concept node 304 may include, for example, a selectable “check in” icon (such as, for example, a clickable “check in” icon) or a selectable “add to favorites” icon. Similarly, after a user clicks these icons, social-networking system 160 may create a “favorite” edge or a “check in” edge in response to a user’s action corresponding to a respective action. As another example and not by way of limitation, a user (user “C”) may listen to a particular song (“Ramble On”) using a particular application (SPOTIFY, which is an online music application). In this case, social-networking

system 160 may create a “listened” edge 306 and a “used” edge (as illustrated in FIG. 3) between user nodes 302 corresponding to the user and concept nodes 304 corresponding to the song and application to indicate that the user listened to the song and used the application. Moreover, social-networking system 160 may create a “played” edge 306 (as illustrated in FIG. 3) between concept nodes 304 corresponding to the song and the application to indicate that the particular song was played by the particular application. In this case, “played” edge 306 corresponds to an action performed by an external application (SPOTIFY) on an external audio file (the song “Imagine”). Although this disclosure describes particular edges 306 with particular attributes connecting user nodes 302 and concept nodes 304, this disclosure contemplates any suitable edges 306 with any suitable attributes connecting user nodes 302 and concept nodes 304. Moreover, although this disclosure describes edges between a user node 302 and a concept node 304 representing a single relationship, this disclosure contemplates edges between a user node 302 and a concept node 304 representing one or more relationships. As an example and not by way of limitation, an edge 306 may represent both that a user likes and has used at a particular concept. Alternatively, another edge 306 may represent each type of relationship (or multiples of a single relationship) between a user node 302 and a concept node 304 (as illustrated in FIG. 3 between user node 302 for user “E” and concept node 304 for “SPOTIFY”).

[37] In particular embodiments, social-networking system 160 may create an edge 306 between a user node 302 and a concept node 304 in social graph 300. As an example and not by way of limitation, a user viewing a concept-profile page (such as, for example, by using a web browser or a special-purpose application hosted by the user’s client system 130) may indicate that he or she likes the concept represented by the concept node 304 by clicking or selecting a “Like” icon, which may cause the user’s client system 130 to transmit to social-networking system 160 a message indicating the user’s liking of the concept associated with the concept-profile page. In response to the message, social-networking system 160 may create an edge 306 between user node 302 associated with the user and concept node 304, as illustrated by “like” edge 306 between the user and concept node 304. In particular embodiments, social-networking system 160 may store an edge 306 in one or more data stores. In particular embodiments, an edge 306 may be automatically formed by social-networking system 160 in response to a particular user action. As an example and not by way of limitation, if a first user uploads a picture, watches a movie, or listens to a song, an edge

306 may be formed between user node 302 corresponding to the first user and concept nodes 304 corresponding to those concepts. Although this disclosure describes forming particular edges 306 in particular manners, this disclosure contemplates forming any suitable edges 306 in any suitable manner.

[38] In particular embodiments, a set of objects may be organized into a hierarchy based on, for example, how the individual objects are related to each other. An object hierarchy may have any number of levels, and at each level, there may be any number of objects. Parent-child or sibling relationships may exist between specific objects in the hierarchy. Within an object hierarchy, a parent object is one level above the level of its child objects. Two sibling objects are at the same level and share the same parent object. In addition, any portion of the hierarchy may also be considered a hierarchy in itself.

[39] FIG. 4 illustrates a portion of an example object hierarchy 400 that includes a number of objects 410. FIG. 4 is in fact a visual representation of an object hierarchy. Each node represents a specific object in the hierarchy, and each edge connecting two nodes represents a parent-child relationship between the two corresponding objects.

[40] In particular embodiments, an object in a hierarchy may or may not have a parent. If an object does not have a parent, it may be referred to as a “root” object (e.g., object 410A). Typically, the root object is positioned at the first or topmost level of the hierarchy. In particular embodiments, an object in a hierarchy may or may not have any children. If an object does not have any children, it may be referred to as a “leaf” or “terminal” object (e.g., object 410B). If an object does have children (e.g., object 410C), it may have any number of children. In addition, objects sharing the same parent may be referred to as each other’s “siblings”. For example, in FIG. 4, object 410C is the parent of objects 410D and 410B. Objects 410D and 410B are the children of object 410C and are siblings to each other. Thus, a hierarchy of objects (e.g., object hierarchy 400) not only includes the individual objects (e.g., objects 410) themselves but also indicates the relationships among the specific objects. Moreover, the position of a specific object within the hierarchy may indicate its relationships with other objects in the hierarchy.

[41] Objects 410 may be of various types, and this disclosure contemplates any applicable object types. For example and without limitation, the term “object” may refer to any type of content, including but not limited to images, videos, captions, text blocks or boxes, user-interface elements, clickable links, newsfeed stories, references to other objects,

advertisements, calendar events, units for displaying open graph analysis that may be graphically rendered, applications, websites, web pages, books, chapters. In particular embodiments, given a hierarchy of objects, which may be a portion of another, larger hierarchy of objects, the hierarchical relationships (e.g., parent-child or sibling relationships, positions of the objects within the hierarchy) between specific objects may direct some aspects of how these objects behave in the context of a user interface or how the objects are presented to a user.

[42] As an example, in the context of the desktop of a computing device, the desktop may be a parent object, and sometimes the root object of a hierarchy, whose child objects are the individual software applications available on the desktop. A software application, while itself being one of the child objects of the desktop, is also the parent object of the individual components of that software application. Different software applications may include different components. For example, for a software application that manages digital books (e.g., a book reader application), its components may include the digital books available, the individual chapters of each book, the pages of each chapter, and the texts, images, videos, audios, or other content or media elements on each page. Each of these also corresponds to an object (e.g., user-interface component) in the hierarchy. More specifically, within the hierarchy, the digital book application may be the parent object of the digital books. A digital book may be the parent object of the individual chapters of that book. A chapter, while itself being one of the child objects of the book, is also the parent object of the pages in that chapter. A page is the parent object of the texts, images, videos, audios, or other content or media elements on that page. A text block, image, video, audio, or other content or media element is one of the child objects of the page to which it belongs. Similarly, for a software application that manages news feeds, its components may include the individual news channels and the news stories within each channel. Each of these may correspond to an object. Within the hierarchy, the news-feed application, while itself being one of the child objects of the desktop, is also the parent object of the news channels. A news channel in turn is the parent object of the news stories included in that channel.

[43] As another example, in the context of the Internet or the World Wide Web, the Internet may be a parent object whose child objects are the individual websites. A website, while itself being one of the child objects of the Internet, is also the parent object of the individual web pages of that website. A web page, while itself being one of the child objects

of the website to which it belongs, is the parent object of the texts, images, videos, audios, or links (e.g., Uniform Resource Locators (URLs)) included in the web page. Each text block, image, video, audio, or link may also correspond to a specific object in the hierarchy.

[44] As a third example, a website, such as a social-networking website implemented by social-networking system 160, may also be arranged in a hierarchical structure for navigating the content of the social-networking website. In this context, the social-networking website may be a parent object whose child objects are the components (e.g., photo albums, user profile pages, etc.) of the website. For example, a photo album, while itself being a child object of the social-networking website, may in turn be a parent object, and the individual photos within the album may be the child objects of the photo album. A user's profile page may be structured in such a hierarchical fashion as well. The profile page itself may be considered a parent object, and the individual objects on the profile page may be the child objects of the profile page. In particular embodiments, a profile page may be considered and rendered (e.g., for presentation to a user) as a linear timeline of objects, such as, for example and without limitation, photos, photo albums, check-ins, comments from other users, attended events, tags, applications the user has added to the profile page, stories, songs the user has listened to, playlists. These various types of objects may all be children of the profile page, or may be further arranged into multiple levels. With some implementations, a user's profile page may include any number of sections, such as the user's education and employment information, the user's public "wall", or the user's social connections. Then the various types of objects above may be divided into specific sections.

[45] In particular embodiments, an object 410 may be a component of a user interface. In this case, object hierarchy 400 may correspond to the user interface, and each object 410 may correspond to a specific component of the user-interface. A user interface may have various types of components, and this disclosure contemplates any applicable user-interface component types. For example, a user-interface component (i.e., an object 410) may be a window, a section, a tab, an image, a video, an audio, a text block, a menu, an icon, a button, a checkbox, a website, a web page, a frame, a clickable link, a message, a post, or an input field. In particular embodiments, an object 410 may be consumed by a user if the user is able to, for example and without limitation, interact with, view, read, listen to, manipulate, or handle the object 410. For example, some user-consumable objects 410 may be texts, images, videos, audios, feeds, executables (e.g., application programs or games), websites, web pages,

digital books, photo albums, posts, or messages.

[46] In particular embodiments, when the user interface corresponding to object hierarchy 400 is displayed (e.g., on a client system 130), the structure of the corresponding object hierarchy 400 may reflect the structure of the user interface. The relationships among the individual components in the user interface, as reflected in object hierarchy 400, may influence how these components are organized and presented to users. The user interface may have any number of layers, respectively corresponding to the individual levels of object hierarchy 400. Objects 410 (e.g., user-interface components) at a specific level of object hierarchy 400 are displayed in the corresponding layer of the user interface. With some implementations, the lowest or bottommost layer of the user interface corresponds to the first or topmost level of object hierarchy 400. Thus, root object 410A is displayed in the lowest layer of the user interface. Furthermore, in the user interface, each object 410 (e.g., user-interface component) is displayed in a layer immediately above the layer where its parent, if one exists, is displayed and immediately below the layer where its children, if any, are displayed. Sibling objects 410 are displayed at the same layer. Thus, the position of a component in the user interface indicates its relationships (e.g., parent-child or sibling) with other components in the user interface.

[47] In particular embodiments, a user-interface component (e.g., an image, a video, a folder, etc.) may be displayed in various display modes. As an example, the user-interface component may be displayed in a “full-screen” mode, where the user-interface component occupies the entire or nearly the entire display area (e.g., the screen of an electronic device). As another example, the user-interface component may be displayed in an “on-page” mode, where the user-interface component is included in another user-interface component and displayed as a part of that other user-interface component (e.g., an image is displayed as a part of a web page). As a third example, the user-interface component may be displayed in an “index” mode, where the user-interface component is a part of a series of user-interface components (e.g., an image is displayed together with other images from the same album, or a chapter of a book is displayed in the table of content of the book together with other chapters from the same book).

[48] In particular embodiments, a hierarchical user interface may be used to present content to a user. Such a user interface may be referred to as a “content feed” or “news feed” user interface. The content may be of any type and format, such as, for example and without

limitation, text, icon, image, video, audio, web page, post, or message. This disclosure contemplates any applicable content type and format. In particular embodiments, the individual content items (e.g., text, image, video, audio, web page, post, message, news piece, etc.) may be organized into various categories, referred to as content sections. For example, related content items may be categorized into the same content section. The user interface may include any number of content sections, and each content section may include any number of content items. Hierarchically, a content section may be the parent of the content items belonging to that section. For example, various photos taken during a holiday trip may be organized into the same album, and various photo albums may be organized into the photo section of the user interface.

[49] In particular embodiments, a user may consume or interact with a specific content item. For example, a user consumes a content item when the user scrolls, opens up, views, listens to, selects, reviews, or comments on the content item. A user interacts with a content item when the user selects, clicks on, taps, reviews, or comments on the content item. This disclosure contemplates any applicable means for a user to consume or interact with a content item.

[50] In particular embodiments, a first-party system, such as a social-networking system (e.g., social-networking system 160), may enable its users to interact with third-party applications through the first-party system. There may be some business agreement between the first party and a third party such that a third-party application is made available through the first-party system to its users. For example, the third-party application may be included at the website of the first party (e.g., a social-networking website associated with social-networking system 160) or in a user interface provided by the first party (e.g., a user interface of the first party's mobile application). Users of the first-party system may then access and interact with the third-party application from the first party's website or user interface, instead of having to go to the third party directly.

[51] FIG. 5 illustrates an example third-party application, in this case a movie trailer, included in the user interface of a mobile application provided by a social-networking system (i.e., the first-party system). Here, the first-party mobile application is executed on a tablet computer. A user may watch the movie trailer (i.e., interact with the third-party application) from the first-party mobile application, instead of having to go to the third-party system (e.g., the source of the third-party application).



[52] Suppose that the user has chosen to watch the movie trailer. In FIG. 6, the movie trailer is now playing on the user's tablet computer (e.g., through the first-party mobile application). In addition, several control icons are provided so that the user can control the video playback process. For example, icon 620 enables the user to fast reverse the video; icon 630 enables the user to play the video; icon 640 enables the user to fast forward the video; and icon 650 enables the user to play the video in full-screen mode.

[53] In addition, there is a comment icon 610, which is associated with the first-party system. First-party comment icon 610 is presented in connection with the third-party application (e.g., the movie trailer) and enables the user to compose and post a user comment concerning the third-party application. For example, a social-networking system enables its users to post comments concerning various subject matters at its website. A user may post comments on the user's wall or on the walls of the user's friends (e.g., with permissions from the friends) or in other suitable spaces at the social-networking website. Thus, the user may post a comment concerning the third-party application at the first-party website.

[54] Suppose that the user wishes to compose and post a comment about the movie trailer. The user may select and activate first-party comment icon 610 (e.g., by tapping on first-party comment icon 610). This causes the third-party application to pause or stop its execution. For example, the movie trailer is paused from playback.

[55] With some implementations, after the execution of the third-party application is paused or stopped, the third-party application is then represented as an application icon. An animation sequence is displayed to show that the third-party application is transitioned from its execution state to its iconic representation. FIGS. 7A-7E illustrate an example animation sequence. In FIG. 7A, after the user has activated first-party comment icon 610, the video playback pauses and the movie trailer screen begins to fold in half. In FIG. 7B, the movie trailer screen folds further (e.g., similar to an image folding in half). In FIG. 7C, the movie trailer screen folds still further and at this point, an image (e.g., a movie poster) representing the movie begins to appear (e.g., on the back of the folding movie trailer screen). In FIG. 7D, the movie poster now shows more while the movie trailer screen is almost folded in half. In FIG. 7E, the movie trailer screen completely folds away, now replaced by the movie poster.

[56] In particular embodiments, a comment composer is then presented to the user, through which the user can compose and post a comment about the movie trailer (i.e., the third-party application). Another animation sequence may be displayed to show the comment

composer appearing on the screen of the user's device (e.g., the tablet computer). FIGS. 8A-8B illustrate an example animation sequence. In FIG. 8A, comment composer 810 appears from the bottom of the screen and gradually moves upward. In FIG. 8B, comment composer 810 is now displayed in its entirety, occupying the whole screen of the user's tablet computer.

[57] In particular embodiments, comment composer 810 simulates what the user comment would look like once it is posted by the first-party system (e.g., at the first-party website), as illustrated in FIG. 9. This enables the user to preview the comment. With some implementations, there may be some default content automatically included in comment composer 810. For example, comment composer 810 may automatically include a profile image 911 of the user, the name 913 of the user, and the current day and time 915. Profile image 911 and name 913 of the user may be retrieved from the user's profile with the first-party system.

[58] Comment composer 810 may include a text area 923, where the user can type comments. Initially, text area 923 may display some instruction text (e.g., "Write something about this movie trailer."), which is replaced by the user's actual comment once the user inputs the comment. There may be a "Post" button 921, which enables the user to submit the comment to the first-party system for publication or posting once the user has finished composing the comment. An application icon 931 (e.g., in this case, the movie poster) representing the third-party application is displayed next to comment composer 810, which indicates to the user which third-party application the user is commenting on.

[59] With some implementations, there may be a predefined layout used for comment composer 810. For example, the layout may provide that the user's profile image 911 should appear at the top-left corner of the comment and have a specific size; the user's name 913 should appear below profile image 911 and have a specific font and color; the current date and time 915 should appear below user name 913 and have a specific font and color; and text area 923 for the user comment should appear below date and time 915.

[60] The user may type text comment concerning the third-party application into text area 923 using a keyboard or keypad provided with the user's device. In some cases, a user device may not include a physical keyboard or keypad. In such cases, an on-screen keyboard 1010 may appear when the user is typing the comment, as illustrated in FIG. 10, which enables the user to input comment into text area 923.

[61] In FIG. 11, suppose that the user has finished inputting comment concerning

the third-party application (e.g., the movie trailer) into text area 923. Comment composer 810 now resembles what the user comment would look like once it is published or posted. The user can preview the comment and make modifications to the comment if desired. When finished composing the comment, the user may select and activate "Post" button 921 to submit the comment to the first-party system (e.g., social-networking system 160). The first-party system then posts the user comment in connection with the third-party application (e.g., at the first-party website).

[62] The functionalities of a third-party comment composer may be implemented as computer software and executed on a computing system. FIG. 12 illustrates an example computer system 1200. In particular embodiments, one or more computer systems 1200 perform one or more steps of one or more methods described or illustrated herein. In particular embodiments, one or more computer systems 1200 provide functionality described or illustrated herein. In particular embodiments, software running on one or more computer systems 1200 performs one or more steps of one or more methods described or illustrated herein or provides functionality described or illustrated herein. Particular embodiments include one or more portions of one or more computer systems 1200. Herein, reference to a computer system may encompass a computing device, and vice versa, where appropriate. Moreover, reference to a computer system may encompass one or more computer systems, where appropriate.

[63] This disclosure contemplates any suitable number of computer systems 1200. This disclosure contemplates computer system 1200 taking any suitable physical form. As example and not by way of limitation, computer system 1200 may be an embedded computer system, a system-on-chip (SOC), a single-board computer system (SBC) (such as, for example, a computer-on-module (COM) or system-on-module (SOM)), a desktop computer system, a laptop or notebook computer system, an interactive kiosk, a mainframe, a mesh of computer systems, a mobile telephone, a personal digital assistant (PDA), a server, a tablet computer system, or a combination of two or more of these. Where appropriate, computer system 1200 may include one or more computer systems 1200; be unitary or distributed; span multiple locations; span multiple machines; span multiple data centers; or reside in a cloud, which may include one or more cloud components in one or more networks. Where appropriate, one or more computer systems 1200 may perform without substantial spatial or temporal limitation one or more steps of one or more methods described or illustrated herein.

As an example and not by way of limitation, one or more computer systems 1200 may perform in real time or in batch mode one or more steps of one or more methods described or illustrated herein. One or more computer systems 1200 may perform at different times or at different locations one or more steps of one or more methods described or illustrated herein, where appropriate.

[64] In particular embodiments, computer system 1200 includes a processor 1202, memory 1204, storage 1206, an input/output (I/O) interface 1208, a communication interface 1210, and a bus 1212. Although this disclosure describes and illustrates a particular computer system having a particular number of particular components in a particular arrangement, this disclosure contemplates any suitable computer system having any suitable number of any suitable components in any suitable arrangement.

[65] In particular embodiments, processor 1202 includes hardware for executing instructions, such as those making up a computer program. As an example and not by way of limitation, to execute instructions, processor 1202 may retrieve (or fetch) the instructions from an internal register, an internal cache, memory 1204, or storage 1206; decode and execute them; and then write one or more results to an internal register, an internal cache, memory 1204, or storage 1206. In particular embodiments, processor 1202 may include one or more internal caches for data, instructions, or addresses. This disclosure contemplates processor 1202 including any suitable number of any suitable internal caches, where appropriate. As an example and not by way of limitation, processor 1202 may include one or more instruction caches, one or more data caches, and one or more translation lookaside buffers (TLBs). Instructions in the instruction caches may be copies of instructions in memory 1204 or storage 1206, and the instruction caches may speed up retrieval of those instructions by processor 1202. Data in the data caches may be copies of data in memory 1204 or storage 1206 for instructions executing at processor 1202 to operate on; the results of previous instructions executed at processor 1202 for access by subsequent instructions executing at processor 1202 or for writing to memory 1204 or storage 1206; or other suitable data. The data caches may speed up read or write operations by processor 1202. The TLBs may speed up virtual-address translation for processor 1202. In particular embodiments, processor 1202 may include one or more internal registers for data, instructions, or addresses. This disclosure contemplates processor 1202 including any suitable number of any suitable internal registers, where appropriate. Where appropriate, processor 1202 may include one or

more arithmetic logic units (ALUs); be a multi-core processor; or include one or more processors 1202. Although this disclosure describes and illustrates a particular processor, this disclosure contemplates any suitable processor.

[66] In particular embodiments, memory 1204 includes main memory for storing instructions for processor 1202 to execute or data for processor 1202 to operate on. As an example and not by way of limitation, computer system 1200 may load instructions from storage 1206 or another source (such as, for example, another computer system 1200) to memory 1204. Processor 1202 may then load the instructions from memory 1204 to an internal register or internal cache. To execute the instructions, processor 1202 may retrieve the instructions from the internal register or internal cache and decode them. During or after execution of the instructions, processor 1202 may write one or more results (which may be intermediate or final results) to the internal register or internal cache. Processor 1202 may then write one or more of those results to memory 1204. In particular embodiments, processor 1202 executes only instructions in one or more internal registers or internal caches or in memory 1204 (as opposed to storage 1206 or elsewhere) and operates only on data in one or more internal registers or internal caches or in memory 1204 (as opposed to storage 1206 or elsewhere). One or more memory buses (which may each include an address bus and a data bus) may couple processor 1202 to memory 1204. Bus 1212 may include one or more memory buses, as described below. In particular embodiments, one or more memory management units (MMUs) reside between processor 1202 and memory 1204 and facilitate accesses to memory 1204 requested by processor 1202. In particular embodiments, memory 1204 includes random access memory (RAM). This RAM may be volatile memory, where appropriate. Where appropriate, this RAM may be dynamic RAM (DRAM) or static RAM (SRAM). Moreover, where appropriate, this RAM may be single-ported or multi-ported RAM. This disclosure contemplates any suitable RAM. Memory 1204 may include one or more memories 1204, where appropriate. Although this disclosure describes and illustrates particular memory, this disclosure contemplates any suitable memory.

[67] In particular embodiments, storage 1206 includes mass storage for data or instructions. As an example and not by way of limitation, storage 1206 may include a hard disk drive (HDD), a floppy disk drive, flash memory, an optical disc, a magneto-optical disc, magnetic tape, or a Universal Serial Bus (USB) drive or a combination of two or more of these. Storage 1206 may include removable or non-removable (or fixed) media, where

appropriate. Storage 1206 may be internal or external to computer system 1200, where appropriate. In particular embodiments, storage 1206 is non-volatile, solid-state memory. In particular embodiments, storage 1206 includes read-only memory (ROM). Where appropriate, this ROM may be mask-programmed ROM, programmable ROM (PROM), erasable PROM (EPROM), electrically erasable PROM (EEPROM), electrically alterable ROM (EAROM), or flash memory or a combination of two or more of these. This disclosure contemplates mass storage 1206 taking any suitable physical form. Storage 1206 may include one or more storage control units facilitating communication between processor 1202 and storage 1206, where appropriate. Where appropriate, storage 1206 may include one or more storages 1206. Although this disclosure describes and illustrates particular storage, this disclosure contemplates any suitable storage.

[68] In particular embodiments, I/O interface 1208 includes hardware, software, or both, providing one or more interfaces for communication between computer system 1200 and one or more I/O devices. Computer system 1200 may include one or more of these I/O devices, where appropriate. One or more of these I/O devices may enable communication between a person and computer system 1200. As an example and not by way of limitation, an I/O device may include a keyboard, keypad, microphone, monitor, mouse, printer, scanner, speaker, still camera, stylus, tablet, touch screen, trackball, video camera, another suitable I/O device or a combination of two or more of these. An I/O device may include one or more sensors. This disclosure contemplates any suitable I/O devices and any suitable I/O interfaces 1208 for them. Where appropriate, I/O interface 1208 may include one or more device or software drivers enabling processor 1202 to drive one or more of these I/O devices. I/O interface 1208 may include one or more I/O interfaces 1208, where appropriate. Although this disclosure describes and illustrates a particular I/O interface, this disclosure contemplates any suitable I/O interface.

[69] In particular embodiments, communication interface 1210 includes hardware, software, or both providing one or more interfaces for communication (such as, for example, packet-based communication) between computer system 1200 and one or more other computer systems 1200 or one or more networks. As an example and not by way of limitation, communication interface 1210 may include a network interface controller (NIC) or network adapter for communicating with an Ethernet or other wire-based network or a wireless NIC (WNIC) or wireless adapter for communicating with a wireless network, such

as a WI-FI network. This disclosure contemplates any suitable network and any suitable communication interface 1210 for it. As an example and not by way of limitation, computer system 1200 may communicate with an ad hoc network, a personal area network (PAN), a local area network (LAN), a wide area network (WAN), a metropolitan area network (MAN), or one or more portions of the Internet or a combination of two or more of these. One or more portions of one or more of these networks may be wired or wireless. As an example, computer system 1200 may communicate with a wireless PAN (WPAN) (such as, for example, a BLUETOOTH WPAN), a WI-FI network, a WI-MAX network, a cellular telephone network (such as, for example, a Global System for Mobile Communications (GSM) network), or other suitable wireless network or a combination of two or more of these. Computer system 1200 may include any suitable communication interface 1210 for any of these networks, where appropriate. Communication interface 1210 may include one or more communication interfaces 1210, where appropriate. Although this disclosure describes and illustrates a particular communication interface, this disclosure contemplates any suitable communication interface.

[70] In particular embodiments, bus 1212 includes hardware, software, or both coupling components of computer system 1200 to each other. As an example and not by way of limitation, bus 1212 may include an Accelerated Graphics Port (AGP) or other graphics bus, an Enhanced Industry Standard Architecture (EISA) bus, a front-side bus (FSB), a HYPERTRANSPORT (HT) interconnect, an Industry Standard Architecture (ISA) bus, an INFINIBAND interconnect, a low-pin-count (LPC) bus, a memory bus, a Micro Channel Architecture (MCA) bus, a Peripheral Component Interconnect (PCI) bus, a PCI-Express (PCIe) bus, a serial advanced technology attachment (SATA) bus, a Video Electronics Standards Association local (VLB) bus, or another suitable bus or a combination of two or more of these. Bus 1212 may include one or more buses 1212, where appropriate. Although this disclosure describes and illustrates a particular bus, this disclosure contemplates any suitable bus or interconnect.

[71] Herein, a computer-readable non-transitory storage medium or media may include one or more semiconductor-based or other integrated circuits (ICs) (such, as for example, field-programmable gate arrays (FPGAs) or application-specific ICs (ASICs)), hard disk drives (HDDs), hybrid hard drives (HHDs), optical discs, optical disc drives (ODDs), magneto-optical discs, magneto-optical drives, floppy diskettes, floppy disk drives (FDDs),

magnetic tapes, solid-state drives (SSDs), RAM-drives, SECURE DIGITAL cards or drives, any other suitable computer-readable non-transitory storage media, or any suitable combination of two or more of these, where appropriate. A computer-readable non-transitory storage medium may be volatile, non-volatile, or a combination of volatile and non-volatile, where appropriate.

[72] Herein, “or” is inclusive and not exclusive, unless expressly indicated otherwise or indicated otherwise by context. Therefore, herein, “A or B” means “A, B, or both,” unless expressly indicated otherwise or indicated otherwise by context. Moreover, “and” is both joint and several, unless expressly indicated otherwise or indicated otherwise by context. Therefore, herein, “A and B” means “A and B, jointly or severally,” unless expressly indicated otherwise or indicated otherwise by context.

[73] The scope of this disclosure encompasses all changes, substitutions, variations, alterations, and modifications to the example embodiments described or illustrated herein that a person having ordinary skill in the art would comprehend. The scope of this disclosure is not limited to the example embodiments described or illustrated herein. Moreover, although this disclosure describes and illustrates respective embodiments herein as including particular components, elements, functions, operations, or steps, any of these embodiments may include any combination or permutation of any of the components, elements, functions, operations, or steps described or illustrated anywhere herein that a person having ordinary skill in the art would comprehend. Furthermore, reference in the appended claims to an apparatus or system or a component of an apparatus or system being adapted to, arranged to, capable of, configured to, enabled to, operable to, or operative to perform a particular function encompasses that apparatus, system, component, whether or not it or that particular function is activated, turned on, or unlocked, as long as that apparatus, system, or component is so adapted, arranged, capable, configured, enabled, operable, or operative.



WHAT IS CLAIMED IS:

1. A computer-implemented method comprising:  
presenting a comment icon in connection with a third-party application, the comment icon being associated with a first party and enabling a user to compose comment concerning the third-party application; and  
while the user is interacting with the third-party application, in response to the user activating the comment icon,  
creating a comment post concerning the third-party application;  
enabling the user to input comment inside the comment post; and  
enabling the user to submit the comment post to the first party for publication.
2. The method of Claim 1, wherein:  
the first party is a social-networking system;  
the user is a member of the social-networking system;  
the user interacts with the third-party application through the social-networking system.
3. The method of Claim 1, further comprising  
while the user is interacting with the third-party application, in response to the user activating the comment icon,  
pausing execution of the third-party application; and  
presenting the third-party application as an application icon next to the comment post while the user is inputting comment inside the comment post.
4. The method of Claim 1, further comprising  
enabling the user to preview the comment post as it would appear when published by the first party.
5. The method of Claim 1, further comprising  
publishing, by the first party, the comment post as a user comment concerning the third-party application.

6. One or more computer-readable non-transitory storage media embodying software that is operable when executed to:

present a comment icon in connection with a third-party application, the comment icon being associated with a first party and enabling a user to compose comment concerning the third-party application; and

while the user is interacting with the third-party application, in response to the user activating the comment icon,

create a comment post concerning the third-party application;

enable the user to input comment inside the comment post; and

enable the user to submit the comment post to the first party for publication.

7. The media of Claim 6, wherein:

the first party is a social-networking system;

the user is a member of the social-networking system;

the user interacts with the third-party application through the social-networking system.

8. The media of Claim 6, wherein the software is further operable when executed to while the user is interacting with the third-party application, in response to the user activating the comment icon,

pause execution of the third-party application; and

present the third-party application as an application icon next to the comment post while the user is inputting comment inside the comment post.

9. The media of Claim 6, wherein the software is further operable when executed to enable the user to preview the comment post as it would appear when published by the first party.

10. The media of Claim 6, wherein the software is further operable when executed to publish, by the first party, the comment post as a user comment concerning the third-party application.

11. A system comprising:  
one or more processors; and  
a memory coupled to the processors comprising instructions executable by the processors, the processors operable when executing the instructions to:  
present a comment icon in connection with a third-party application, the comment icon being associated with a first party and enabling a user to compose comment concerning the third-party application; and  
while the user is interacting with the third-party application, in response to the user activating the comment icon,  
create a comment post concerning the third-party application;  
enable the user to input comment inside the comment post; and  
enable the user to submit the comment post to the first party for publication.

12. The system of Claim 11, wherein:  
the first party is a social-networking system;  
the user is a member of the social-networking system;  
the user interacts with the third-party application through the social-networking system.

13. The system of Claim 11, wherein the processors are further operable when executing the instructions to  
while the user is interacting with the third-party application, in response to the user activating the comment icon,  
pause execution of the third-party application; and  
present the third-party application as an application icon next to the comment post while the user is inputting comment inside the comment post.

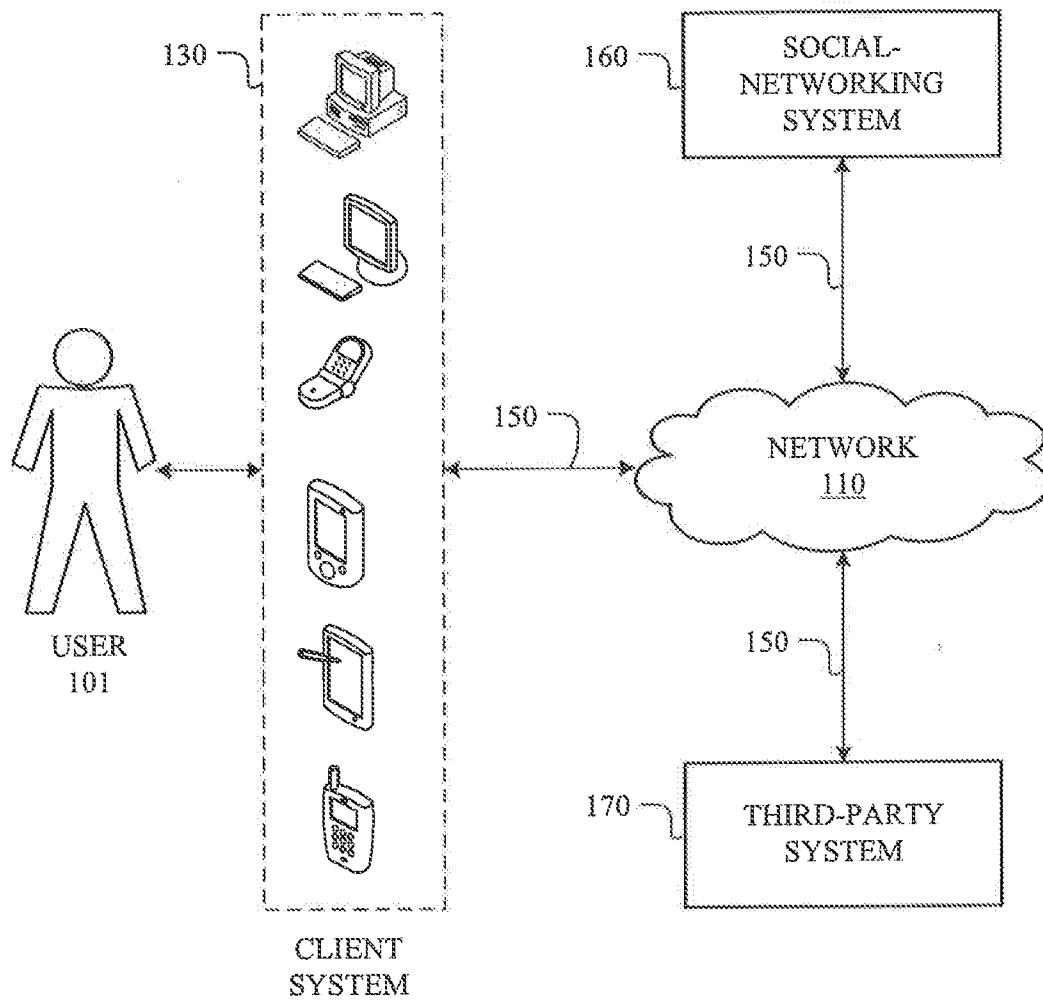
14. The system of Claim 11, wherein the processors are further operable when executing the instructions to  
enable the user to preview the comment post as it would appear when published by the first party.

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15. The system of Claim 11, wherein the processors are further operable when executing the instructions to

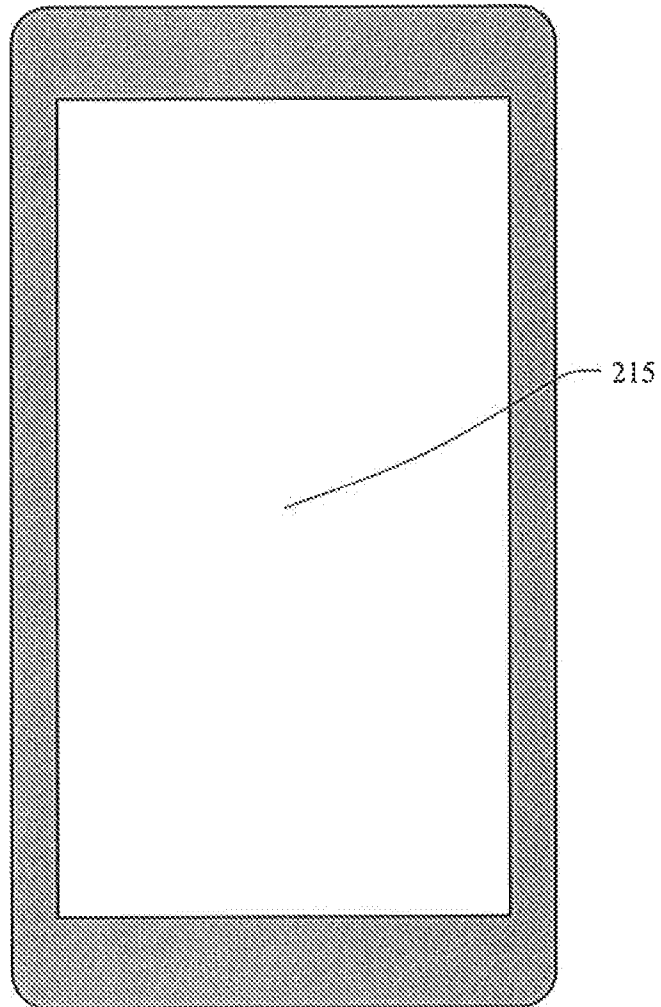
publish, by the first party, the comment post as a user comment concerning the third-party application.

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100**FIG. 1**

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**FIG. 2A**

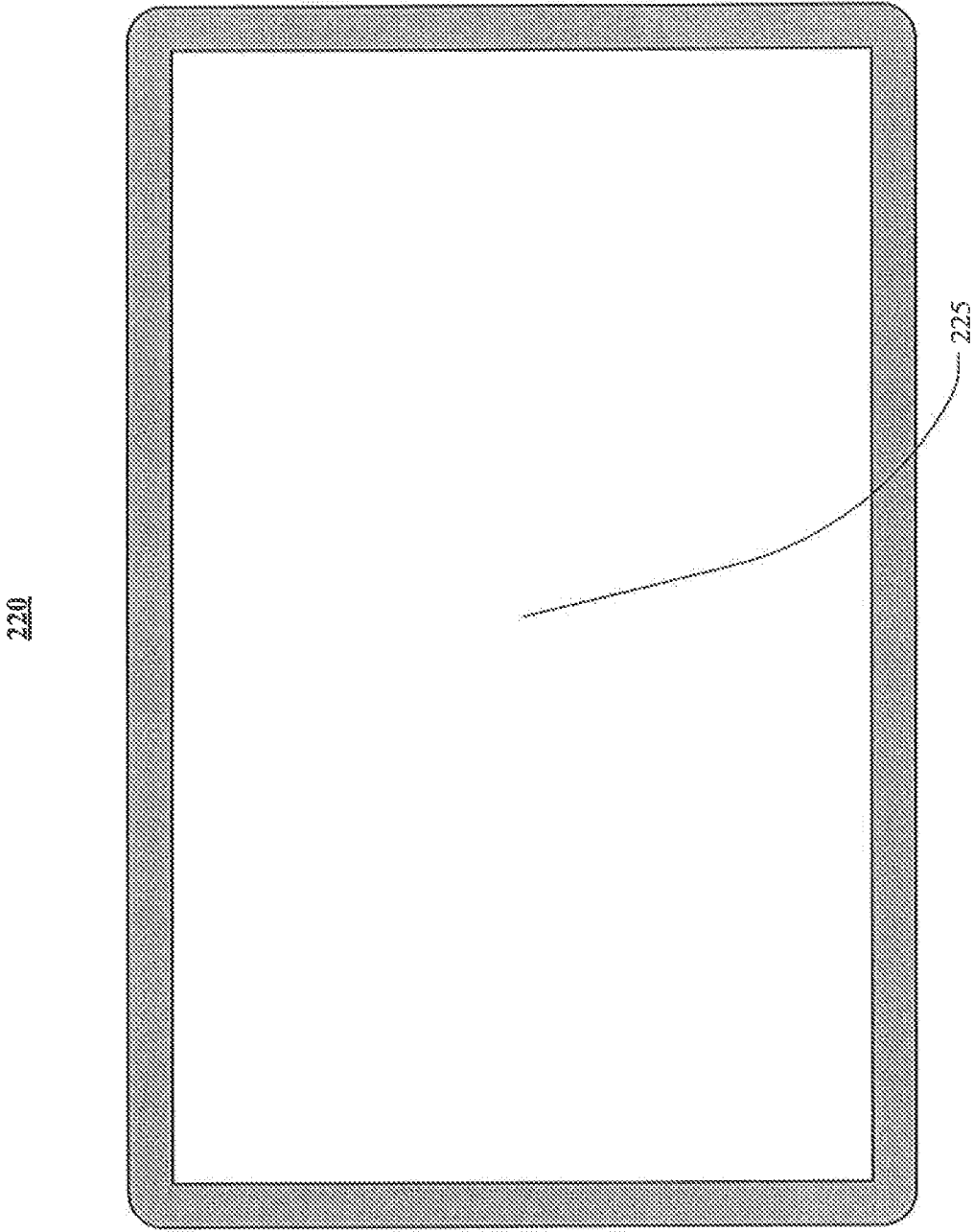


FIG. 2B

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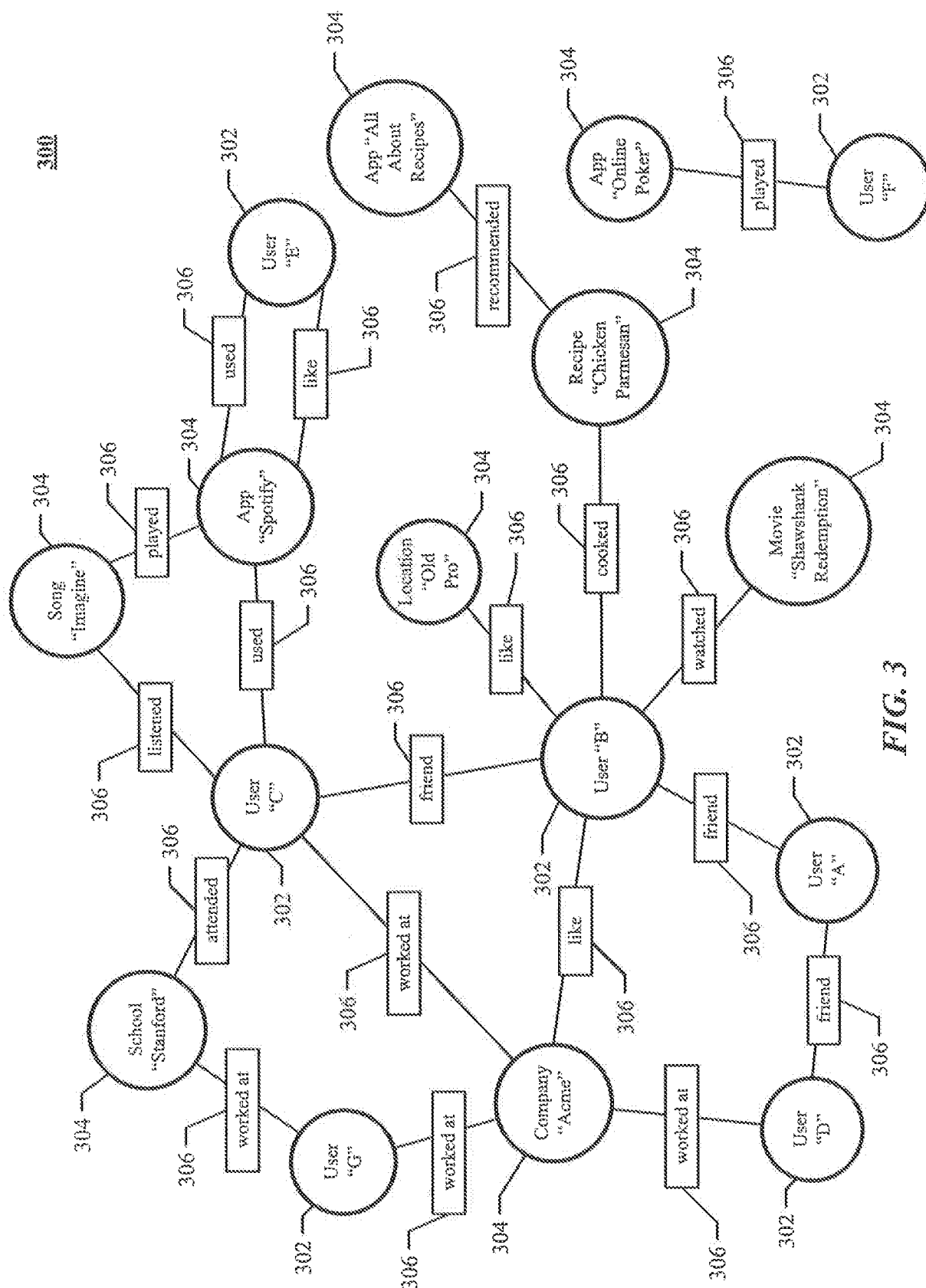


FIG. 3



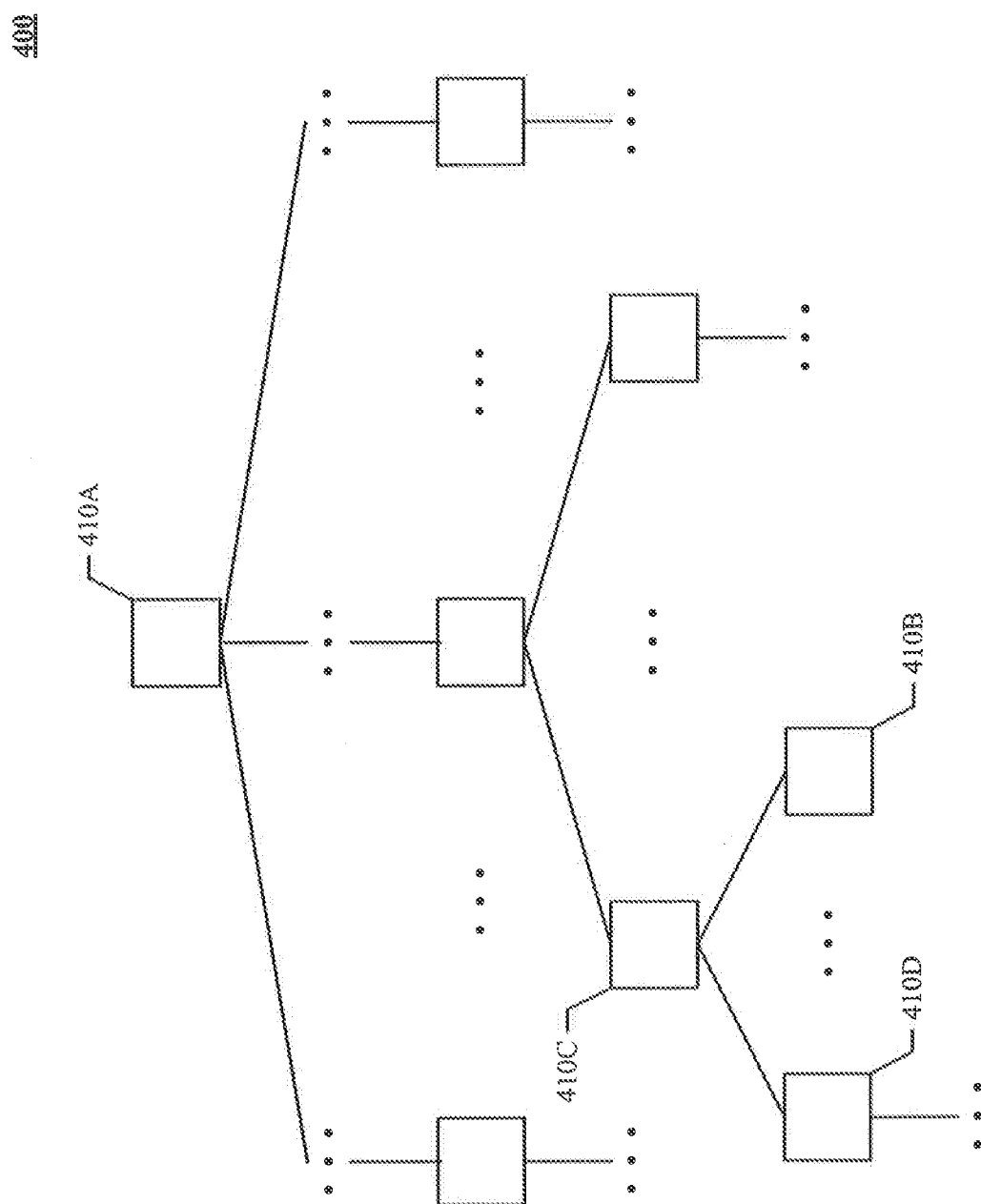


FIG. 4

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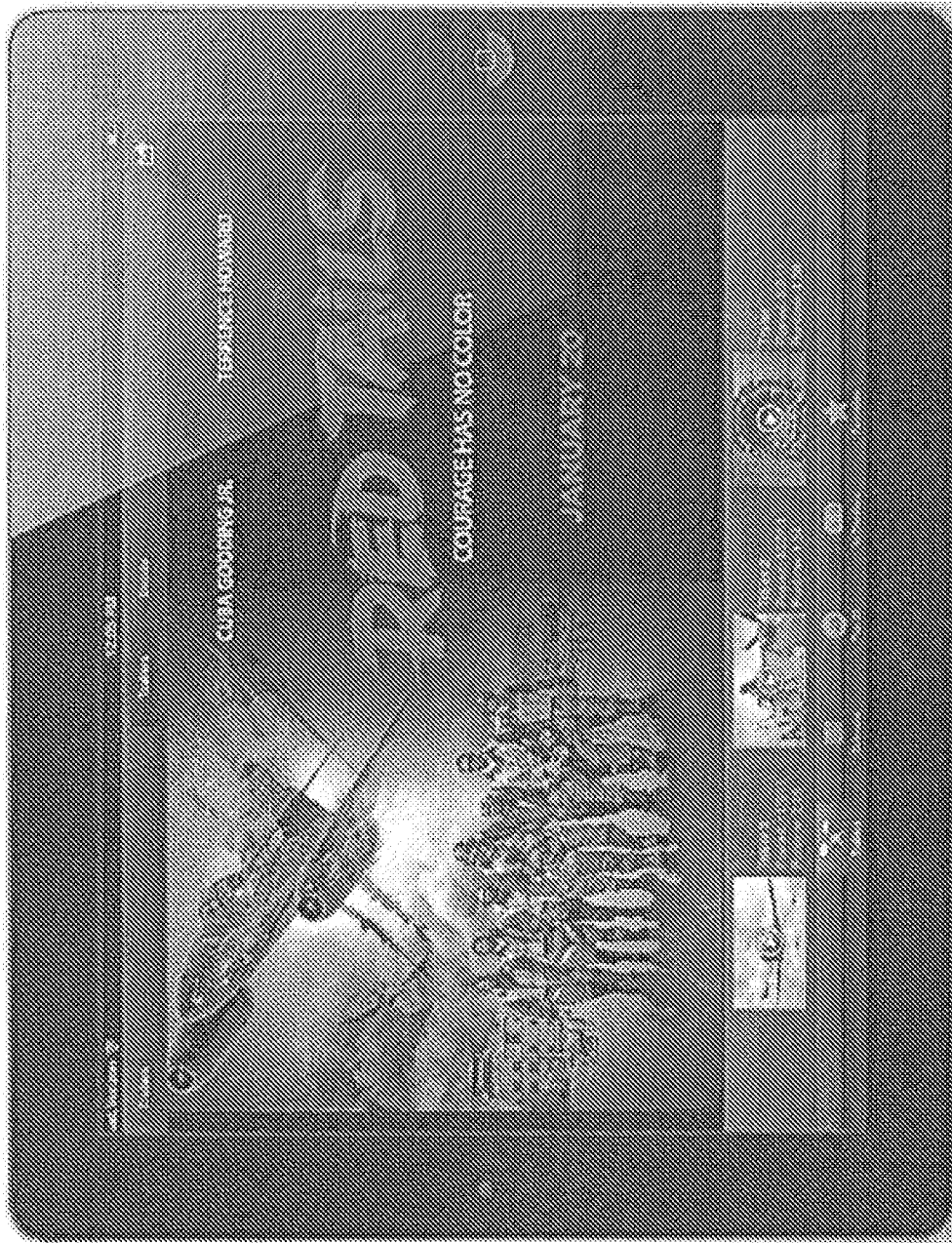


FIG. 5

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FIG. 6

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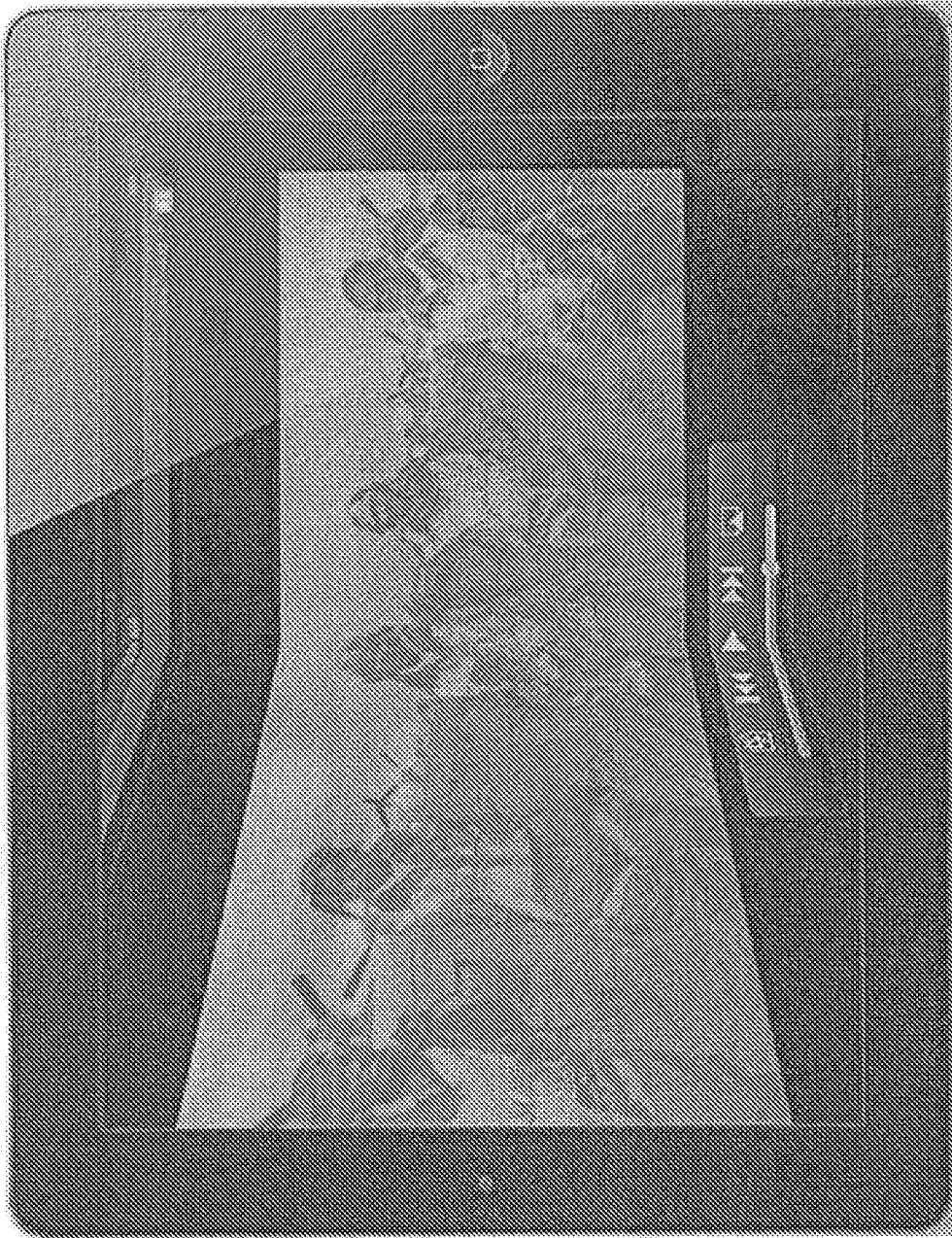


FIG. 7A

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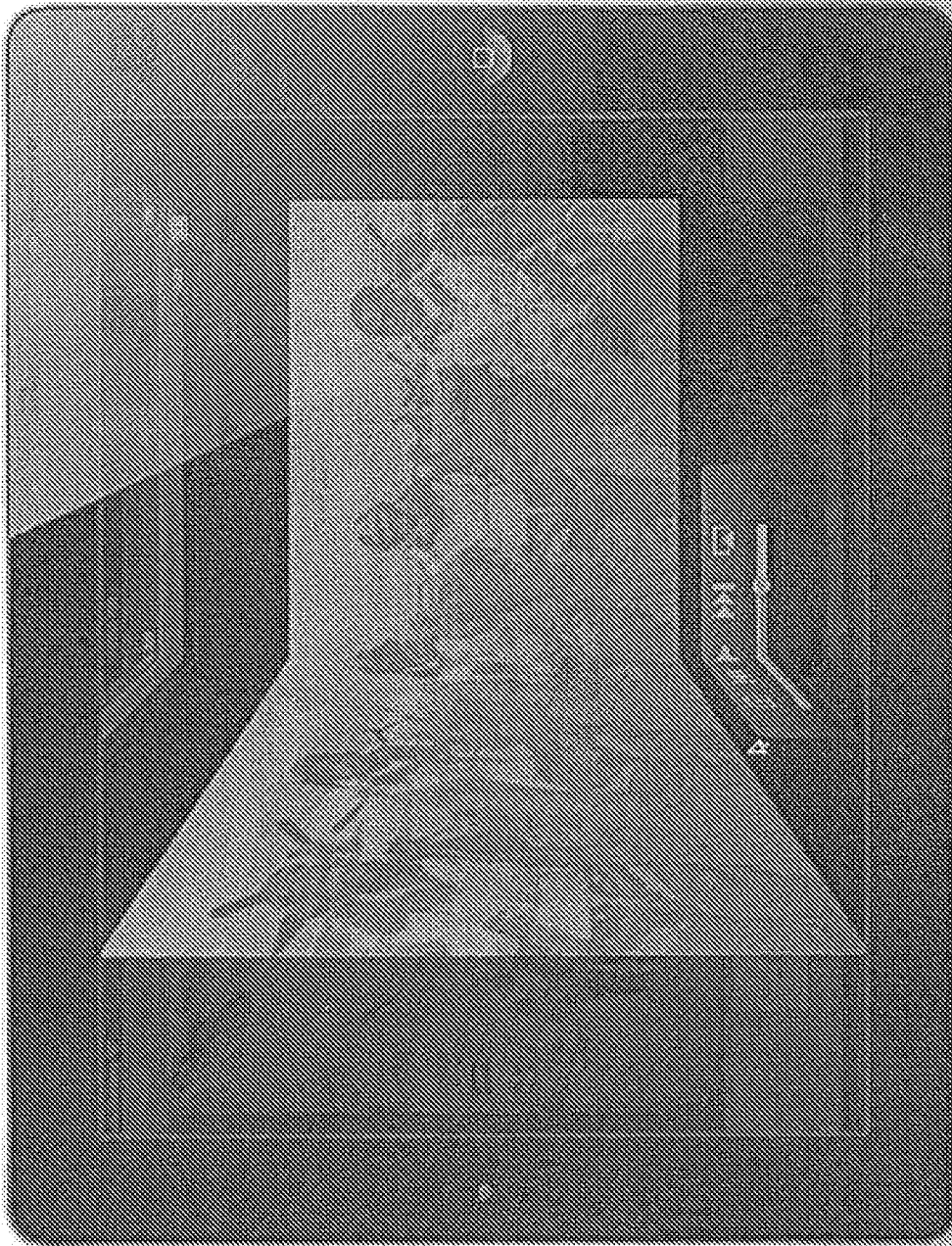


FIG. 7B



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FIG. 7C

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**FIG. 7D**

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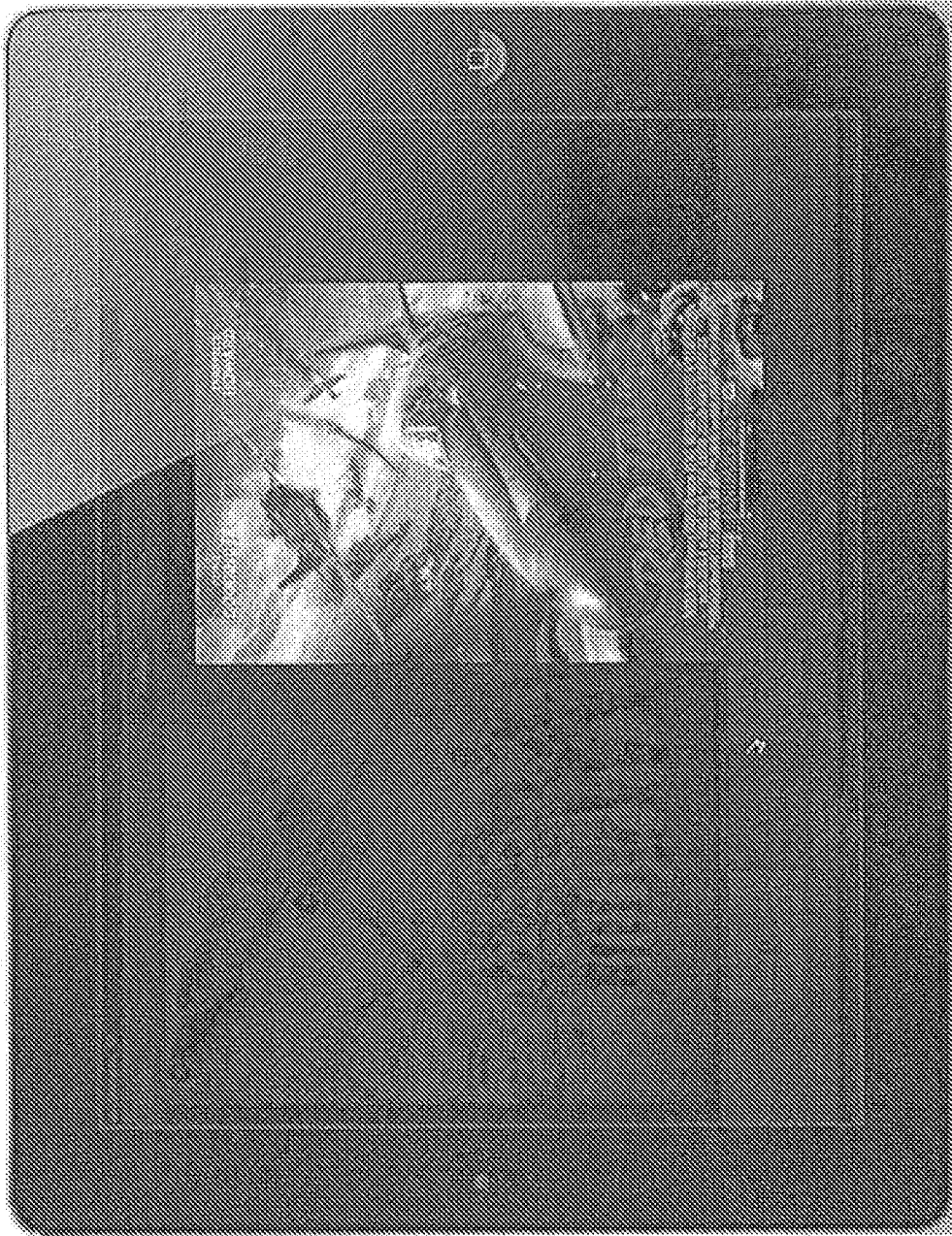


FIG. 7E



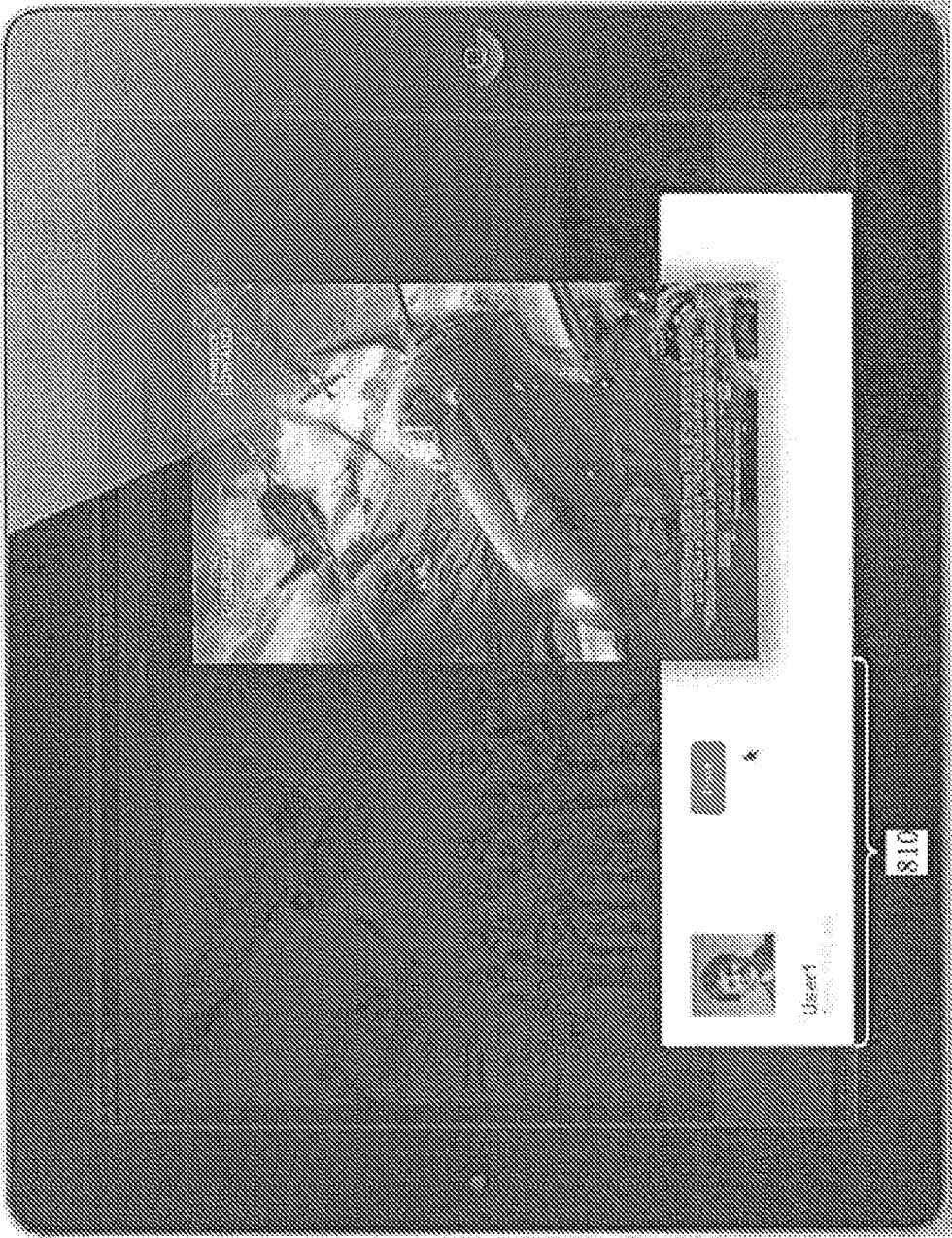


FIG. 8A

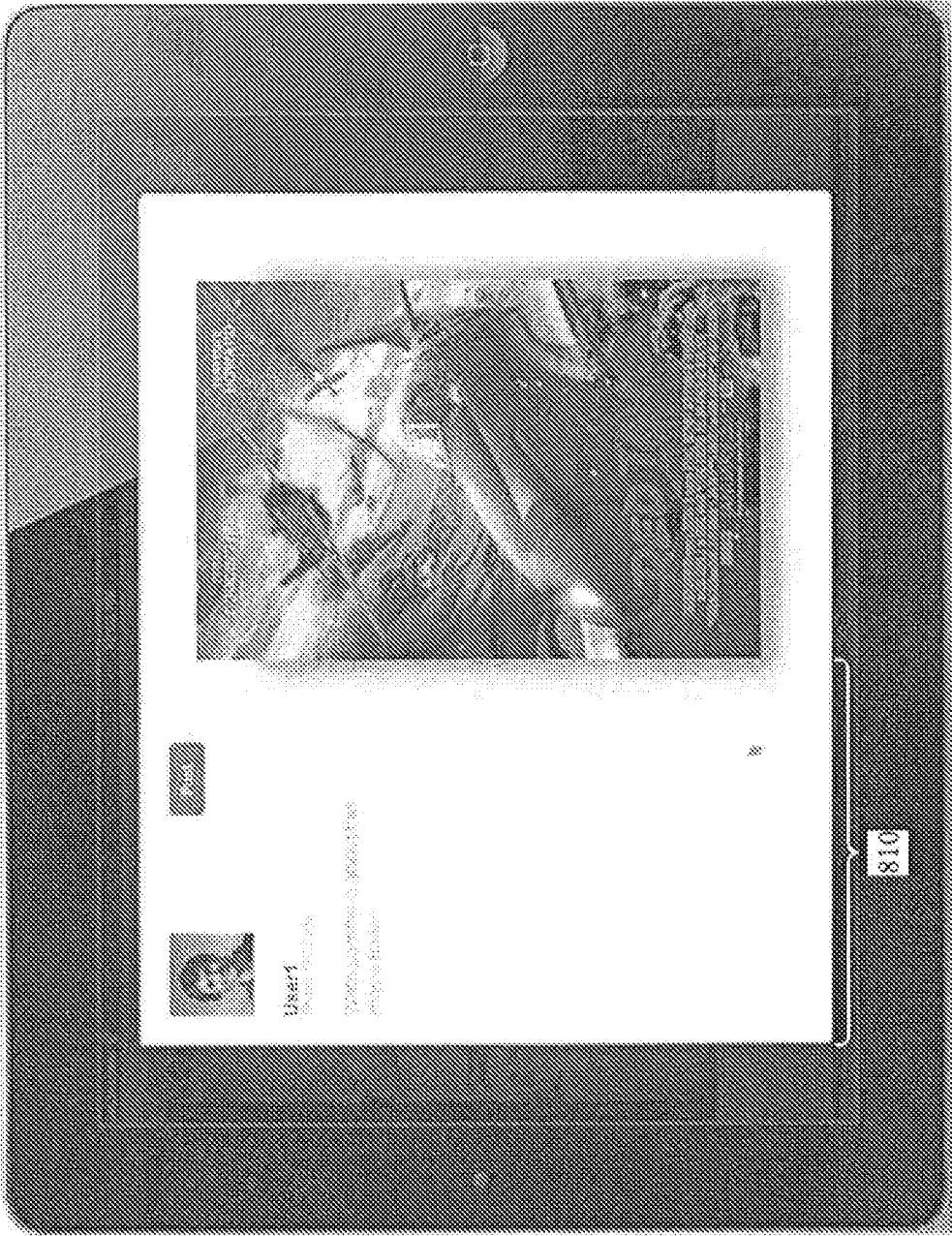


FIG. 8B

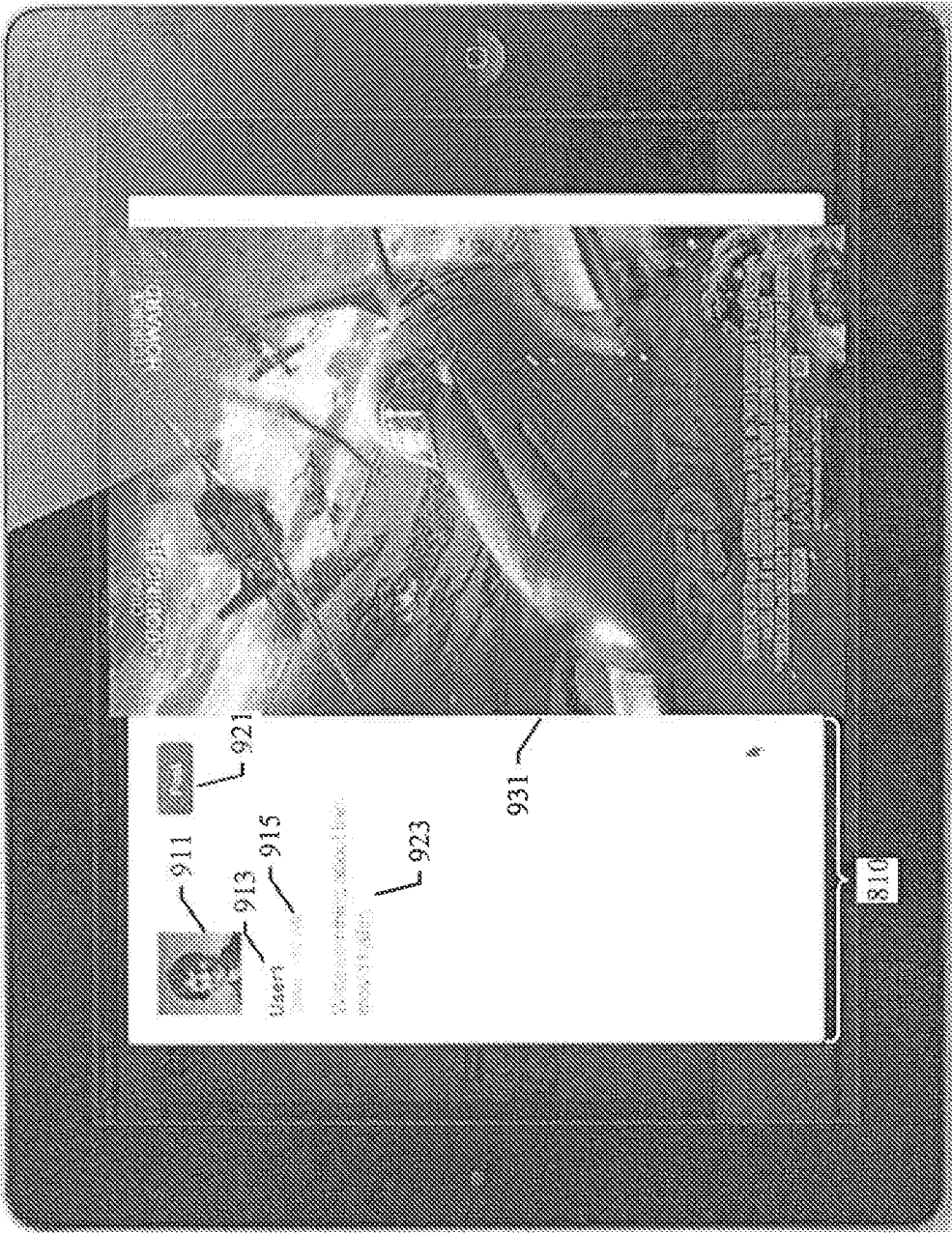


FIG. 9

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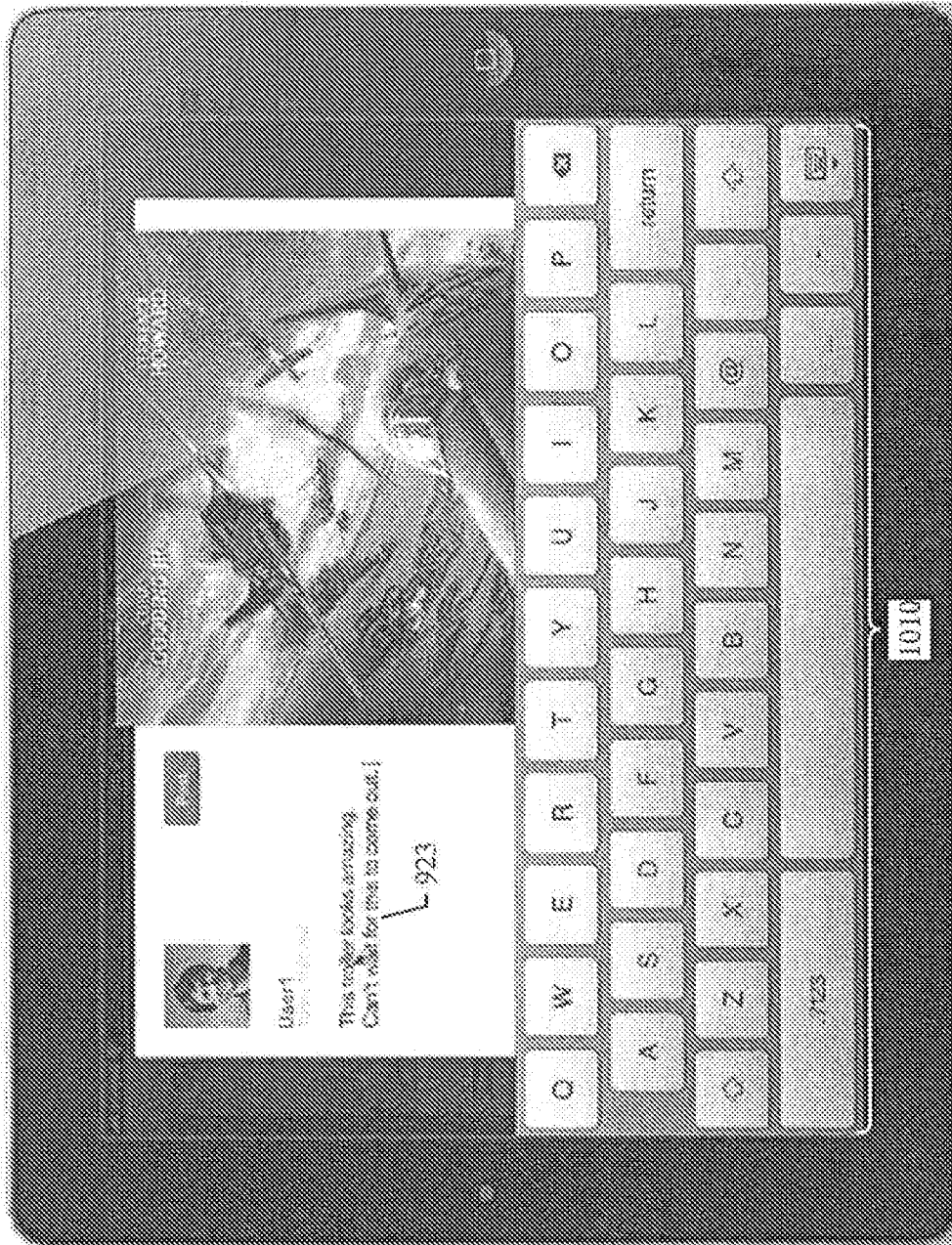


FIG. 10

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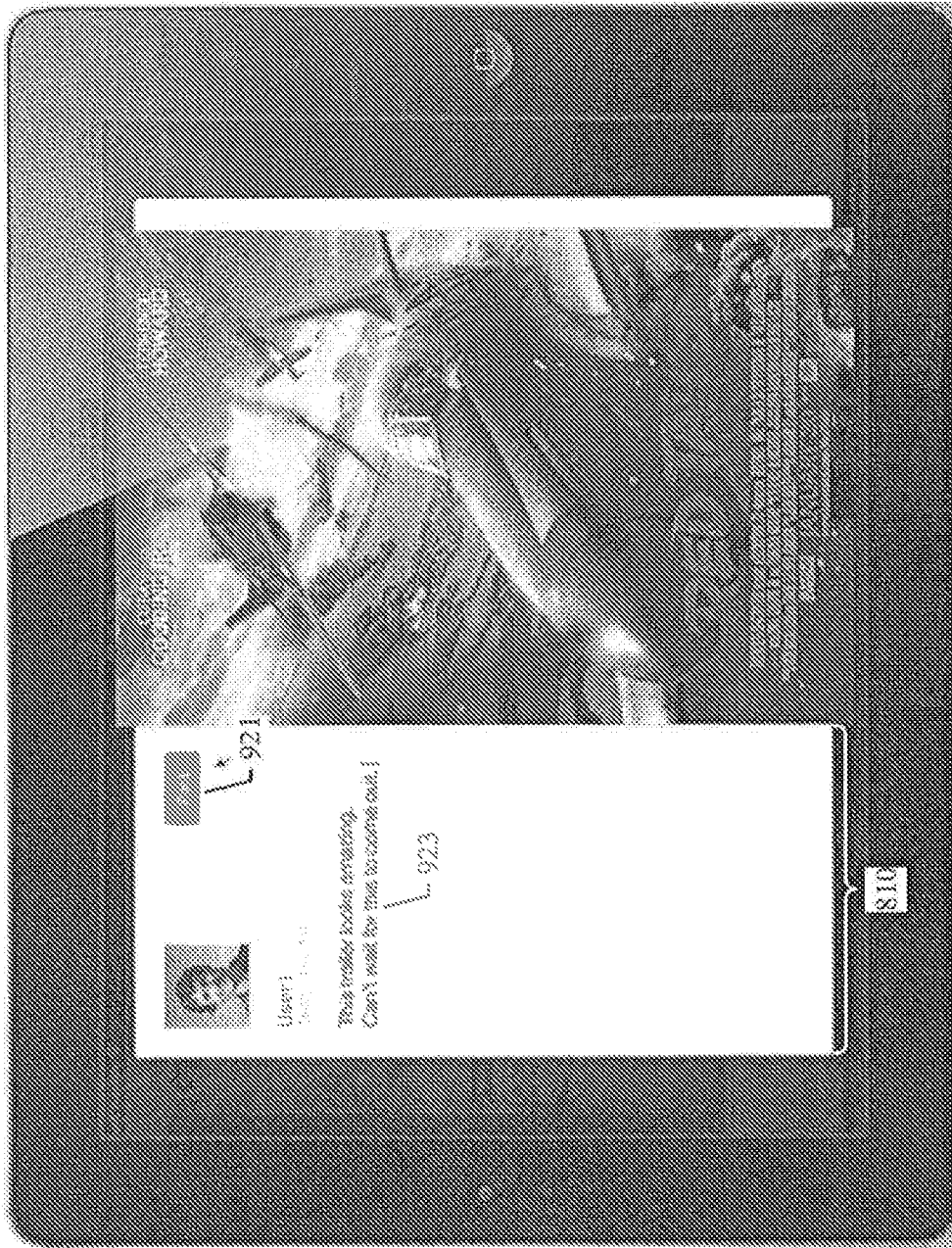
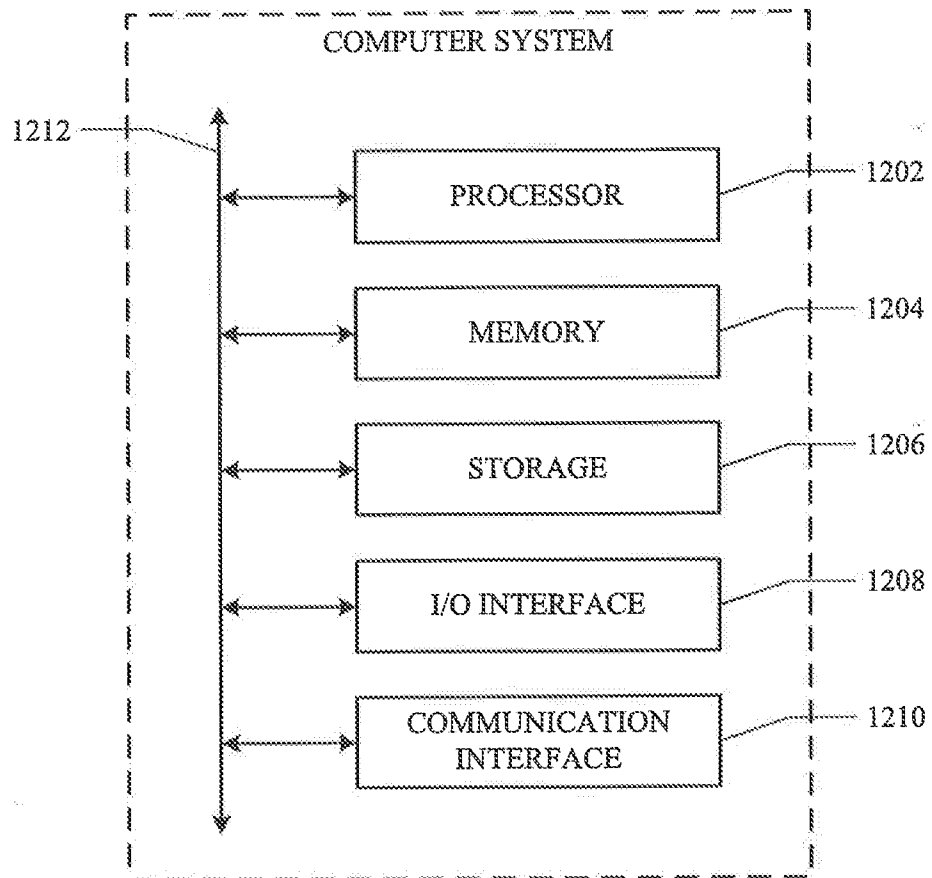


FIG. 11



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1200**FIG. 12**

## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2013/067925****A. CLASSIFICATION OF SUBJECT MATTER****G06F 3/048(2006.01)i, G06F 9/44(2006.01)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)

G06F 3/048; G06Q 99/00; G06F 15/16; H04N 7/173; G06Q 30/00; G06F 3/01; G06F 9/44

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) &amp; Keywords: comment, post, share, third party, first party, social network, image, video, audio, media

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2011-0010641 A1 (ADAM G. WOLFF et al.) 13 January 2011 See paragraphs [0002]–[0003], [0009]–[0018], [0022], [0027], [0032], [0036]–[0038], [0041]–[0042]; and figures 3A, 3E–3F.	1–2, 5–7, 10–12, 15
A		3–4, 8–9, 13–14
Y	WO 2012-125426 A1 (FACEBOOK, INC.) 20 September 2012 See paragraphs [0001], [0005]–[0006], [0056]–[0059]; and figures 1, 4–5.	1–2, 5–7, 10–12, 15
A	US 2010-0049534 A1 (THOMAS SCOTT WHITNAH et al.) 25 February 2010 See paragraphs [0001]–[0002], [0007], [0036]–[0037], [0044], [0048], [0050]; and figure 8.	1–15
A	US 2009-0144392 A1 (JAMES WANG et al.) 04 June 2009 See paragraphs [0002], [0005], [0053]–[0055], [0059]; and figures 2, 5.	1–15
A	US 2012-0072957 A1 (SAI SUMAN CHERUKUWADA et al.) 22 March 2012 See paragraphs [0001], [0024], [0063], [0080]–[0085]; and figures 4A–4C.	1–15



Further documents are listed in the continuation of Box C.



See patent family annex.

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"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

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"&amp;" document member of the same patent family

Date of the actual completion of the international search

18 February 2014 (18.02.2014)

Date of mailing of the international search report

**19 February 2014 (19.02.2014)**

Name and mailing address of the ISA/KR

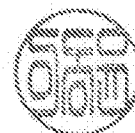
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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2013/067925**

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2011-0010641 A1	13/01/2011	WO 2010-135746 A1	25/11/2010
WO 2012-125426 A1	20/09/2012	AU 2012-229354 A1	26/09/2013
		CA 2829103 A1	20/09/2012
		US 2012-0239466 A1	20/09/2012
		US 2012-0239467 A1	20/09/2012
		US 2012-0239485 A1	20/09/2012
		US 2012-0239486 A1	20/09/2012
		US 2012-0239494 A1	20/09/2012
		US 2012-0239495 A1	20/09/2012
		US 2012-0239505 A1	20/09/2012
		US 2012-0259790 A1	11/10/2012
		US 2013-0179268 A1	11/07/2013
US 2010-0049534 A1	25/02/2010	US 2010-0049852 A1	25/02/2010
		US 8307086 B2	06/11/2012
		WO 2010-021835 A1	25/02/2010
		WO 2010-021862 A1	25/02/2010
US 2009-0144392 A1	04/06/2009	WO 2009-055825 A1	30/04/2009
US 2012-0072957 A1	22/03/2012	CN 103380627 A	30/10/2013
		EP 2619992 A2	31/07/2013
		WO 2012-039959 A2	29/03/2012
		WO 2012-039959 A3	14/06/2012