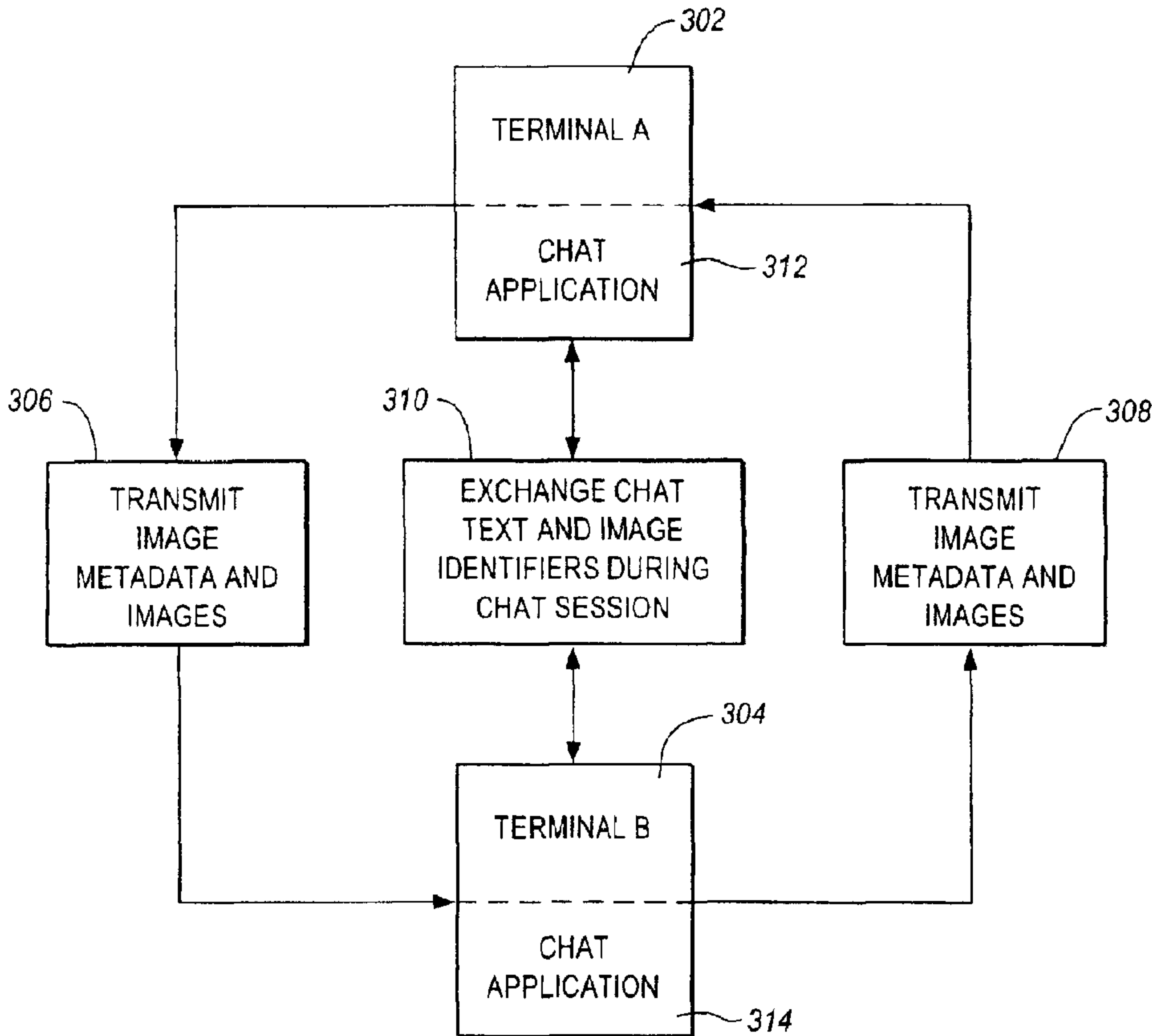




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(54) **Titre : SYSTEMES ET PROCEDES DE PARTAGE EN RESEAU DE CONVERSATIONS EN LIGNE ET DE CONTENU MULTIMEDIA**

(54) **Title: NETWORKED CHAT AND MEDIA SHARING SYSTEMS AND METHODS**



(57) **Abrégé(suite)/Abstract(continued):**

of a second terminal. At least partly in response to determining that the first user of the first terminal has changed focus from the first image to the second image, a second image identifier is automatically sent to the second terminal. Chat text is transmitted from the first terminal to the second terminal. The second terminal accesses the second image using the second image identifier, and displays the chat text in association with the second image.

ABSTRACT

Methods and systems are provided for sharing images and chat text over a network. A determination is made as to whether a first user of a first terminal has changed focus from a first image to a second image during a chat session conducted with a second user of a second terminal. At least partly in response to determining that the first user of the first terminal has changed focus from the first image to the second image, a second image identifier is automatically sent to the second terminal. Chat text is transmitted from the first terminal to the second terminal. The second terminal accesses the second image using the second image identifier, and displays the chat text in association with the second image.

NETWORKED CHAT AND MEDIA SHARING SYSTEMS AND METHODS

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Background of the Invention

Field of the Invention

[0002] The present invention is related to electronic chat networks, and in particular, to methods and systems for sharing digital media while electronically chatting over a network.

Description of the Related Art

[0003] Using the Internet and World Wide Web, or other networks, many people today communicate via “chat rooms”. Chat rooms provide a real time virtual forum for interaction among individuals that may be at disparate geographical locations throughout the world. So long as the participants are properly connected to the network and service facilitating the “chat”, the individuals can communicate conversationally in real time (the term “chat” is broadly defined herein to mean real time communications between two or more users, and thus is meant to encompass chat rooms, instant messaging, etc.). This interaction can take place via a standard Web browser interface, using a computer or other such enabled device. The information exchanged during the “chat” is typically text-based, using some chat applications, may also include static or dynamic audio data, graphic images such as “emoticons”, or some combination thereof.

[0004] However, many of these conventional chat applications are slow, cumbersome, and do not show the shared images inline with the corresponding chat text.

Summary of the Invention

[0005] In accordance with the present invention, apparatus and methods are provided for sharing media in conjunction with a chat. In one embodiment, this can further include associating a history of shared media with a chat history. The shared media can include interaction content, such as, by way of example, chat text, image information (e.g., a picture, screenshot, PowerPoint slide, etc.), including pictures, videos, and graphics, or audio data, or some combination thereof. A chat application enables the real time interactive exchange of text and media.

[0006] One embodiment of the present invention is a method of performing an electronic chat session including images over a network, the method comprising: providing, using a first terminal, a first image from a first user and an associated first image identifier via a peer-to-peer transfer to a second terminal associated with a second user, wherein the terminal associated with the second user automatically stores the first image in non-volatile memory in association with the first image identifier; during a chat session over a computer network conducted via the first terminal and the second terminal, wherein the first user and the second user are textually conversing, detecting that the first user is focusing on the first image; retransmitting the first image identifier from the first terminal to the second terminal; and at least partly in response to receiving the retransmitted first image identifier, the second terminal: comparing the retransmitted first image identifier to a second identifier associated with a second image already being displayed in a chat history on a first interface to determine if the first identifier and the second identifier are associated with different images, displaying in a first area of the chat history the first image in association with corresponding chat text from the first user at least partly in response to determining that the first identifier and the second identifier are associated with different images.

[0007] Another embodiment is a method of performing a chat session over a network, the method comprising: determining if a first user of the first terminal has changed focus from a first image to a second image during a chat session conducted with a second user of a second terminal; automatically sending a second image identifier associated with the

second image to the second terminal during the chat session; and transmitting chat text from the first terminal with a second terminal, wherein the second terminal accesses the second image using the second image identifier, and displays the chat text in association with the second image.

[0008] Still another embodiment is a method of processing images in an electronic chat session, the method comprising: receiving first chat text at a first terminal associated with a first user from a second user associated with a second terminal; displaying the chat text in a chat area via the first terminal in association with a first image; receiving at the first terminal an image identifier associated with a second image from the second user; and based at least in part on the image identifier and information related to the second image, determining whether the first image and the second image are different images, wherein if the first image and the second image are different image, the second image is retrieved and displayed in the chat history in association with second chat text.

[0009] Yet another embodiment is an electronic chat system configured to display media and chat text, the electronic chat system comprising instructions stored in computer readable memory configured to: determine if a first user of a first terminal has changed focus from a first image to a second image during a chat session conducted with a second user of a second terminal; at least partly in response to determining that the first user of the first terminal has changed focus from the first image to the second image, automatically transmit a second image identifier to the second terminal; and transmit chat text from the first terminal with a second terminal, wherein the second image identifier is intended to be used by the second terminal to access and display second image in association with the chat text.

[0010] One embodiment is a method for providing instant messaging between at least a first user and a second user over a data communication network, the method comprising: providing to the first user an instant messaging interface; providing within the interface a first area for outputting a document shared between the first user and the second user during a communication session; and providing within the interface a second area for display of a history of the communication session between the first user and the second user.

[0010a] One embodiment is a method of performing an electronic chat session including images over a network, the method comprising: sending, from a first terminal associated with a first user to a second terminal associated with a second user, a first image and an associated first image identifier; storing the first image and the first image identifier in a memory of the second terminal; displaying a second image associated with a second image identifier in a chat history on the second terminal after storing the first image and the first image identifier; detecting at the first terminal that the first user is focusing on the first image during a chat session conducted between the first terminal and the second terminal after displaying the second image on the second terminal; sending chat text for the chat session from the first terminal to the second terminal; resending the first image identifier from the first terminal to the second terminal in response to the detecting; receiving the resent first image identifier and the sent chat text from the first terminal at the second terminal; comparing the resent first image identifier to the second image identifier to determine if the first image identifier and the second image identifier are associated with different images in response to receiving the resent first image identifier at the second terminal, retrieving, at least partly in response to determining that the first image identifier and the second image identifier are associated with different images, the first image from memory at the second terminal in response to receiving the resent first image identifier; displaying in the chat history of the second terminal the first image in association with the received chat text from the first user, after retrieving the first image.

[0010b] Still another embodiment is a method of performing a chat session over a network, the method comprising: sending a first image and a first image identifier associated with the first image to a second terminal during the chat session; and determining if a first user of a first terminal has changed focus from a second image to the first image during a chat session conducted with a second user of the second terminal after sending the first image and the first image identifier; automatically resending the first image identifier to the second terminal during the chat session if the first user has focused on the first image from the second image; and transmitting chat text from the first terminal to the second terminal, and comparing at the second terminal the resent first image identifier to an identifier of the second image to determine if the first image identifier and the second image identifier are associated with different images, accessing the first image from local memory using the

resent first image identifier if the images are different, and displaying the chat text in association with the first image terminal after displaying the second image on the second terminal.

[0010c] Yet another embodiment is a method of processing images in an electronic chat session, the method comprising: receiving a second image and a second image identifier at a first terminal from a second terminal, wherein the second image is associated with the second image identifier; storing the second image at the first terminal; receiving first chat text at a first terminal associated with a first user from a second user associated with the second terminal; displaying the first chat text in a first chat area at the first terminal in association with a first image; receiving, at later time, the second image identifier associated with the second image at the first terminal from the second user after displaying the first image on the first terminal; comparing second image identifier, received at later time, to a first image identifier to determine if the first image identifier and the second image identifier are associated with different images; retrieving the second image from a memory of the first terminal in response to receiving the second image identifier if the first and second image identifiers are different; and displaying the second image at the first terminal after displaying the first image on the first terminal.

[0010d] Yet another embodiment is an electronic chat system configured to display media and chat text, the electronic chat system comprising instructions stored in computer readable non-transitory memory configured to: send a first image and a first image identifier associated with the first image to a second terminal during the chat session; and determine if a first user of a first terminal has changed focus from a second image to the first image during a chat session conducted with a second user of the second terminal after sending the first image and the first image identifier; automatically resend the first image identifier to the second terminal during the chat session if the first user has focused on the first image from the second image; and transmit chat text from the first terminal to the second terminal, wherein the second terminal compares the resent first image identifier to an identifier of the second image to determine if the first image identifier and the second image identifier are associated with different images, accesses the first image from local memory using the resent first image identifier if the images are different, and displays the chat text in association with the first image after displaying the second image on the second terminal.

[0010e] In an aspect, there is provided a method for providing instant messaging between at least a first user and a second user over a data communication network, the method comprising: providing to the first user an instant messaging interface; providing within the interface a first display area for displaying a document shared between the first user and the second user during a communication session; and providing within the interface a second display area for display of a history of the communication session between the first user and the second user including an indication of times at which comments in the chat history were made and an indication of a relative time within the history at which the document was shared.

[0010f] In an aspect, there is provided a system configured to display media and instant messaging text, the system comprising a display and a machine-readable medium including instructions that when operated upon by a machine cause the machine to: provide to a first user an instant messaging interface on the display; provide within the interface a first display area for displaying a document shared between the first user and a second user during a communication session; and provide within the interface a second display area for display of a history of the communication session between the first user and the second user including an indication of times at which comments in the chat history were made and an indication of a relative time within the history at which the document was shared.

[0010g] In an aspect, there is provided a computer readable medium storing a computer program that is executable by at least one processor of an electronic chat system, the computer program including instructions for performing operations including: providing to a first user an instant messaging interface; providing within the interface a first display area for displaying a document shared between the first user and the second user during a communication session; and providing within the interface a second display area for display of a history of the communication session between the first user and the second user including an indication of times at which comments in the chat history were made and an indication of a relative time within the history at which the document was shared.

[0010h] Further aspects of the invention will become apparent upon reading the following detailed description and drawings, which illustrate the invention and preferred embodiments of the invention.

Brief Description of the Drawings

[0011] Figure 1 illustrates a first example user interface.

concurrent media sharing history, such that, for example, a user can glance back and understand the conversation topic, and its history of textual and media share information as aligned with each other.

[0023] In one embodiment of the present invention, a "snapshot" may be taken of the state of the system when each comment is made, and if the snapshot has changed substantially since the previous line in the conversation, this change is indicated with a thumbnail representing the change. For example, if an image is of a document, scrolling through a document may not be sufficient to present a new snapshot of the scrolled document, while a document annotation or change to another document would be a sufficient change.

[0024] In accordance with one aspect of the invention, the chat apparatus and processes described herein enable users to scroll back through the chat history and to view representations (e.g., relatively smaller thumbnails) of the previously viewed versions of the media they were discussing at a given point in time during the chat history. Each change in conversation focus that is detected or inferred, for example, when one of the users is viewing a new or different image, may be indicated with a visual mechanism, e.g., a line of separation.

[0025] A user can also click on a media item in the history to gain access to the media item, thereby allowing each participating user in the chat to go back through a chat and view each item being discussed in detail.

[0026] Optionally, the invention may include a "picture in picture" view of what the remote buddy or other remote user (i.e., a chat user) is doing. For example, one embodiment provides one or more of:

[0027] 1. A shared list of pictures or images (not necessarily ordered the same way for each user). As an example, the shared list of pictures or images may be shown as a filmstrip. The pictures can also be shown in other forms, such as in a table format, one at a time or otherwise.

[0028] 2. A view of the remote user's screen, which may be expressed as a thumbnail, that changes as the remote user changes focus (or view) in a shared list of pictures. By way of example, as the remote user focuses on or selects an image, a unique

home, work, or the like), chat ID, and a brief description of the contacts provided by the contacts is displayed by the chat application.

[0072] A user can edit his or her profile via one or more profile dialog boxes. In addition, a user can provide the user's real name or nickname. All or a portion of a user's profile can be shared with chat partners during a chat session and/or at other times.

[0073] While the foregoing has described what are considered to be the preferred embodiments and other illustrative embodiments, it is understood that various modifications may be made therein and that the invention or inventions may be implemented in various forms and embodiments, and that they may be applied in numerous applications, only some of which have been described herein. For example, the push-pull method could be used with any of a variety of large files, and is not restricted to image files. For example, some other files may include text files, audio files (e.g., "wav" files), audiovisual files (e.g., "mpeg" files), and so on.

CLAIMS:

1. A method for providing instant messaging between at least a first user and a second user over a data communication network, the method comprising:
 - providing to the first user an instant messaging interface;
 - providing within the interface a first display area for displaying a document shared between the first user and the second user during a communication session; and
 - providing within the interface a second display area for display of a history of the communication session between the first user and the second user including an indication of times at which comments in the chat history were made and an indication of a relative time within the history at which the document was shared.
2. The method of Claim 1, wherein the document is one of an image, a text file, a presentation, a web page, a search result, and a blog.
3. The method of Claim 1, further comprising allowing the first user to experience in real-time the second user's actions with respect to at least one document shared between the first and the second users.
4. The method of Claim 3, further comprising disallowing the first user from experiencing the second user's actions with respect to the document based on a preference set by the second user.
5. The method of Claim 1, further comprising providing to the first user a window within the interface configured to track the second user's actions with respect to at least one shared document.
6. The method of Claim 1, wherein the instant messaging interface is configured to substantially instantly exchange text and images.

7. The method of Claim 1, further comprising providing, within the second area, a representation of the document.
8. The method of Claim 1, wherein the communication session is an instant messaging session.
9. The method of Claim 1, further comprising providing to the first user a window within the interface configured to track the second user's action with respect to the shared document.
10. The method of Claim 9, wherein the window follows a view of the second user to display which document the second user is currently viewing, and wherein the document that the second user is currently viewing is identified in the window automatically.
11. The method of Claim 10, wherein the document that the second user is currently viewing is identified in the window automatically without requiring the second user to activate a separate send image button.
12. The method of Claim 1, further comprising:
 - receiving, in real time, indications of the second user's actions with respect to the shared document; and
 - displaying the indications of the second user's actions in the instant messaging interface.
13. The method of Claim 12, wherein the indications of the second user's actions includes one or more of: going online, going offline, selecting an image, and changing focus from one document to another.
14. A system configured to display media and instant messaging text, the system comprising a display and a machine-readable medium including instructions that when operated upon by a machine cause the machine to:
 - provide to a first user an instant messaging interface on the display;

provide within the interface a first display area for displaying a document shared between the first user and a second user during a communication session; and

provide within the interface a second display area for display of a history of the communication session between the first user and the second user including an indication of times at which comments in the chat history were made and an indication of a relative time within the history at which the document was shared.

15. The system of Claim 14, wherein the document is one of an image, a text file, a presentation, a web page, a search result, and a blog.

16. The system of Claim 14, wherein the instructions further cause the machine to:
allow the first user to experience in real-time the second user's actions with respect to at least one document shared between the first and the second users.

17. The system of Claim 16, wherein the instructions further cause the machine to disallow the first user from experiencing the second user's actions with respect to the document based on a preference set by the second user.

18. The system of Claim 14, wherein the instructions further cause the machine to provide to the first user a window within the interface configured to track the second user's actions with respect to at least one shared document.

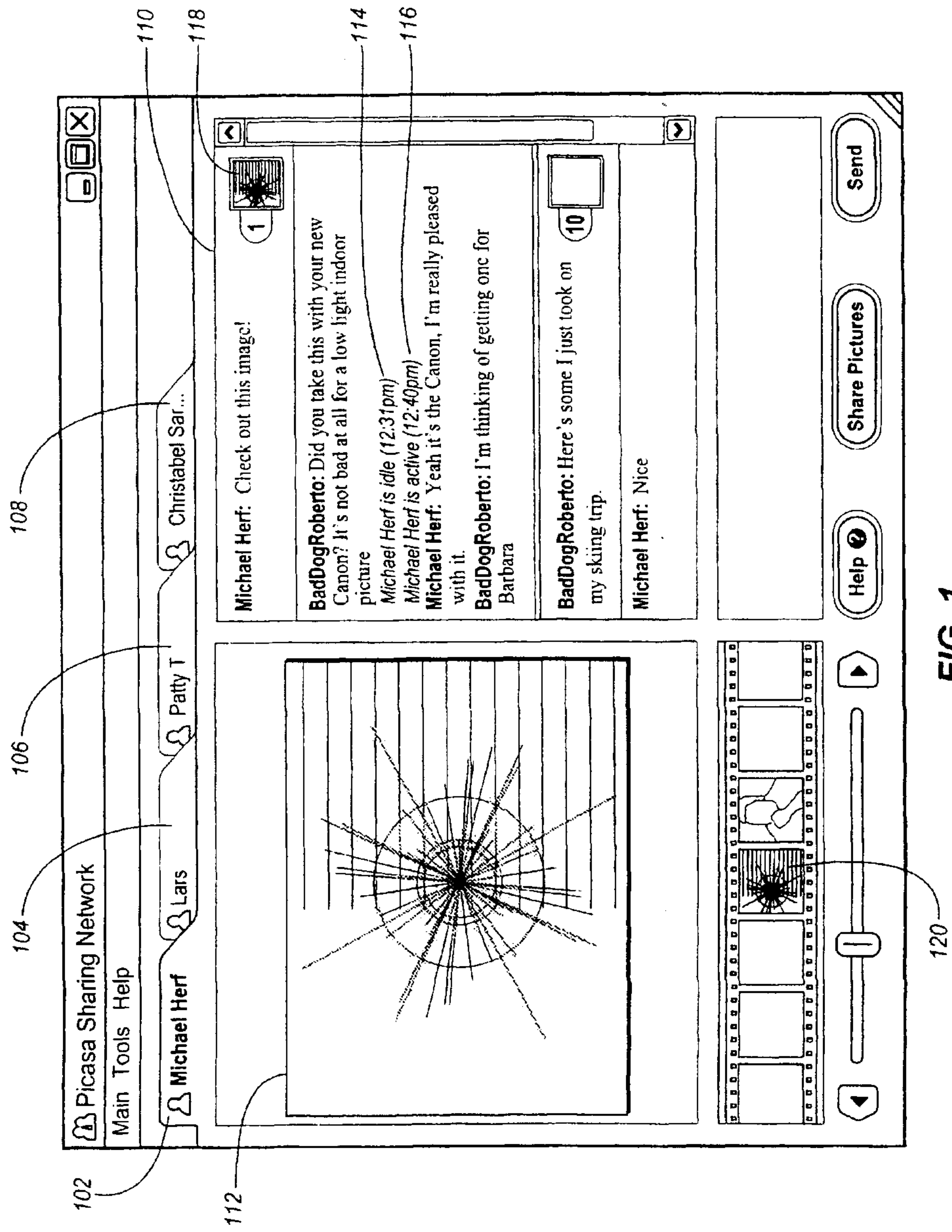
19. The system of Claim 14, wherein the instant messaging interface is configured to substantially instantly exchange text and images.

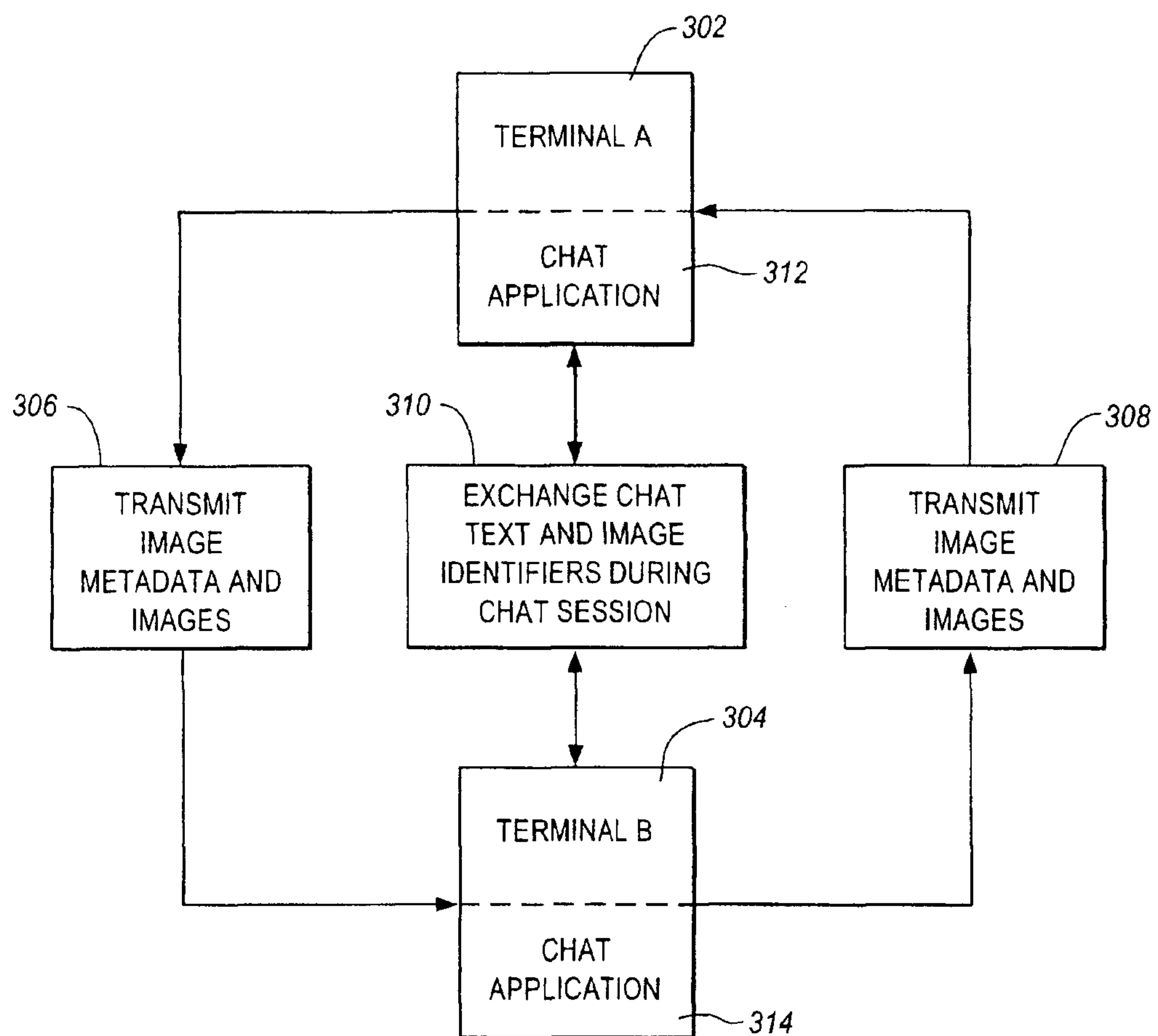
20. The system of Claim 14, wherein the instructions further cause the machine to provide, within the second area, a representation of the document.

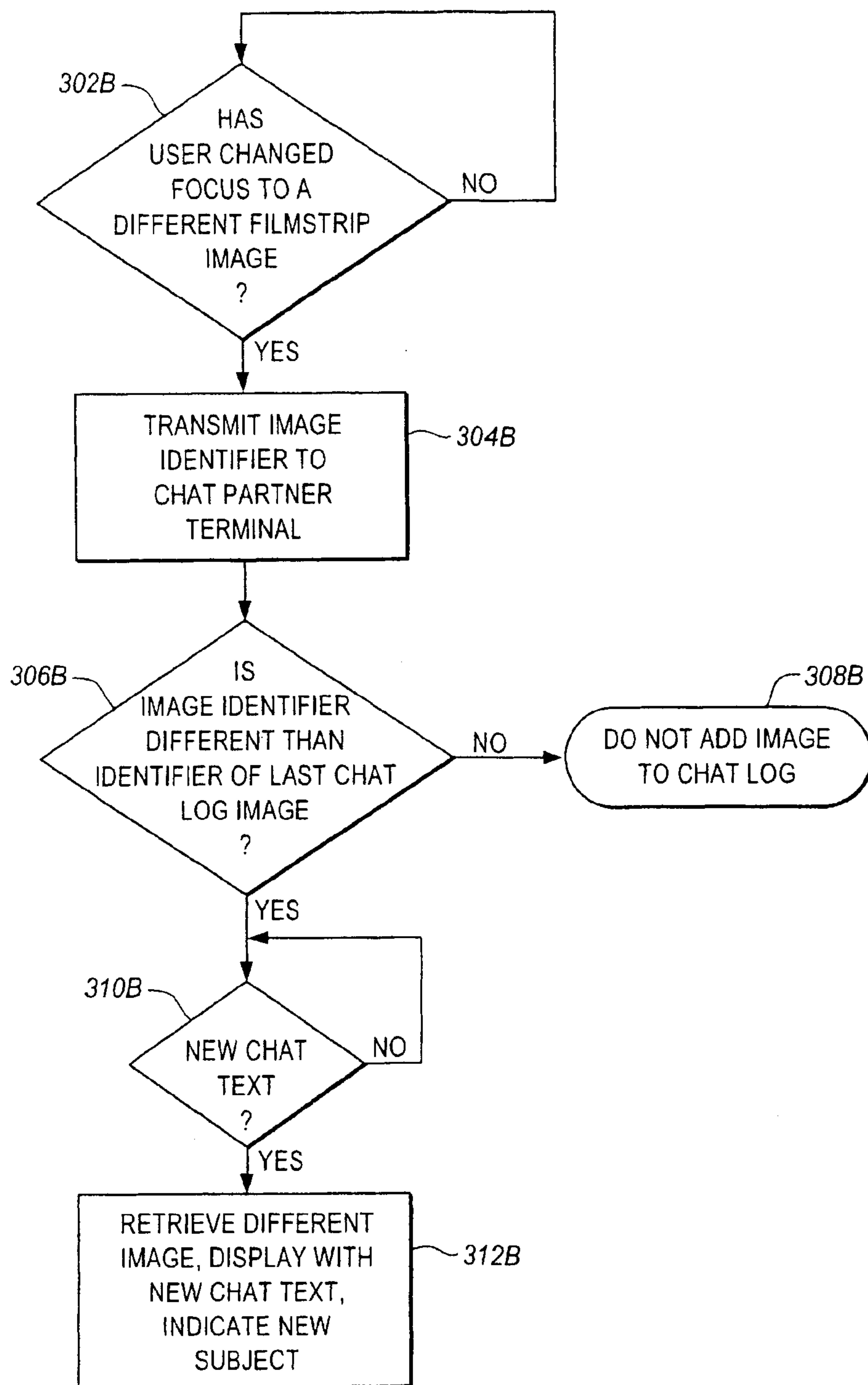
21. The system of Claim 14, wherein the communication session is an instant messaging session.

times at which comments in the chat history were made and an indication of a relative time within the history at which the document was shared.

28. A computer readable medium storing a computer program that is executable by at least one processor, the computer program comprising sets of instructions for implementing the method according to any one of claims 1 to 13.



**FIG. 3A**

**FIG. 3B**

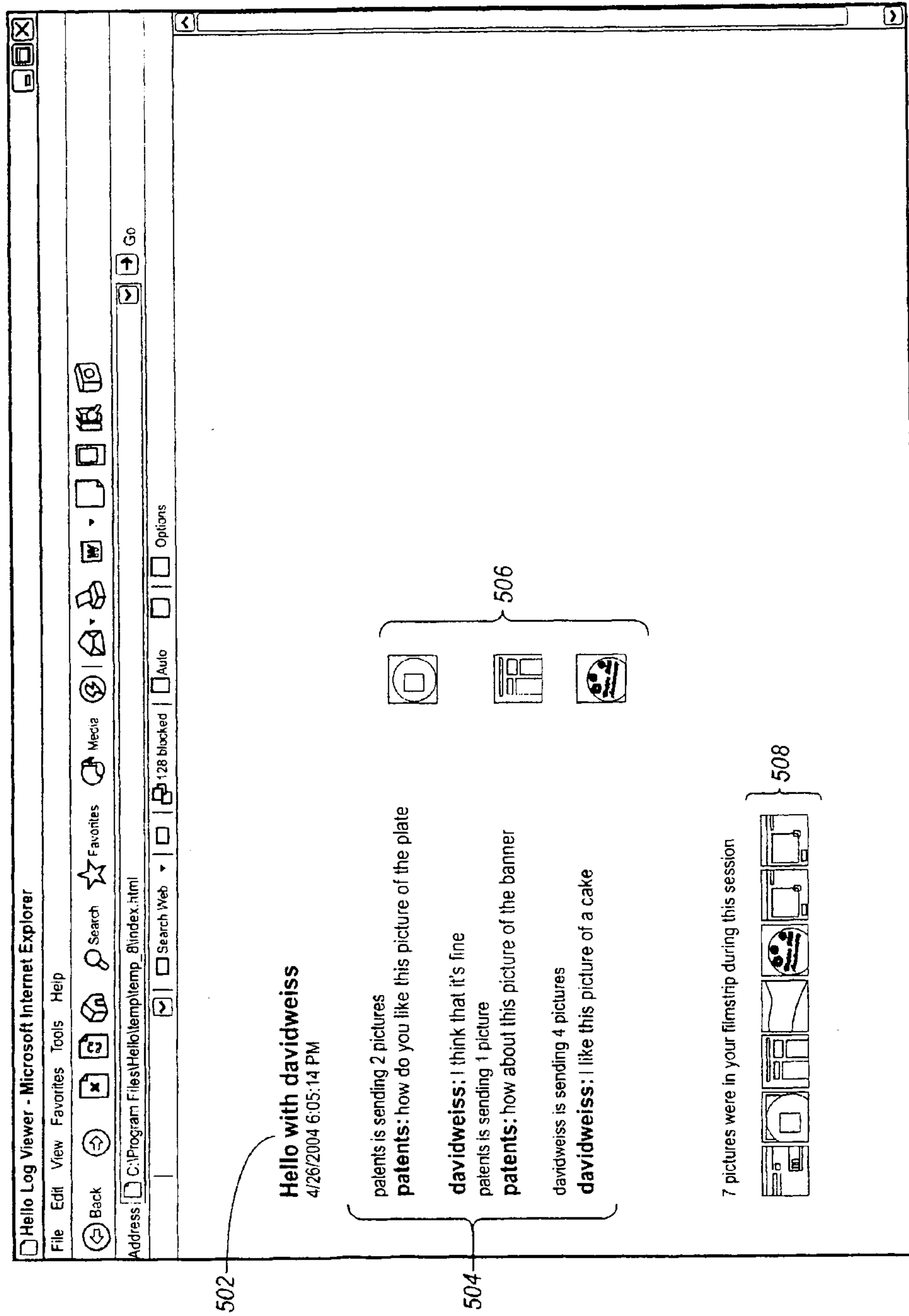


FIG. 5

