

Exhibit 169-21

INVALIDITY OF U.S. PAT. NO. 10,869,169 BY U.S. PATENT NO. 8,645,211 (“Rothschild”)

Charted Reference:

- **U.S. Patent No. 8,645,211 (“Rothschild”)** anticipates and/or renders obvious, alone or in combination with one or more references identified below, the asserted claims of U.S. Patent No. 10,869,169 (“the ’169 patent”).

This claim chart is based on Google and YouTube’s (“Google”) current understanding of the asserted claims, the implicit assertions of claim scope that can be discerned from Wildseed’s vague and overbroad infringement contentions, and Google’s investigation to date. Google is not adopting Wildseed’s apparent constructions, nor is Google admitting to the accuracy of any particular construction. Google reserves all rights to amend this invalidity claim chart in light of any claim-construction developments or any amendments to Wildseed’s infringement contentions and as permitted by the Patent Local Rules and any orders in this case. Further, as discovery is ongoing and Google continues to seek discovery from third parties regarding the references identified in Google’s invalidity contentions as well as other potential prior art, Google reserves the right to revise its invalidity contentions as appropriate in view of any ongoing discovery.

The claim chart below identifies where each limitation of each asserted claim of the ’169 patent can be found in Rothschild. The citations provided below are exemplary, rather than exhaustive, and Google reserves the right to rely upon any other portion of the cited references. In addition to disclosures contained in the chart below, Defendants incorporate by reference the analysis and explanation provided in their Petition for Inter Partes Review contained in IPR 2023-00247.

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INVALIDITY OF U.S. PAT. NO. 10,869,169 BY U.S. PATENT NO. 8,645,211 (“Rothschild”)

Claim	Exemplary Evidence of Anticipation and/or Obviousness
1. One or more non-transitory computer-readable media (NTPCRM) including program code, wherein execution of the program code by one or more processors of a computer system is to cause the computer system to:	To the extent the preamble is limiting, Rothschild discloses, and/or renders obvious, “One or more non-transitory computer-readable media (NTPCRM) including program code, wherein execution of the program code by one or more processors of a computer system is to cause the computer system to.” <i>See, e.g.:</i> First, Rothschild describes a web server with hardware and software components (“<i>non-transitory computer-readable media (NTPCRM) including program code</i>”). Rothschild’s “Web Server” includes “hardware/software server components that serve information content over a network and the ‘back end’ hardware/software components ... that interact with the server component to perform services for Web site users.” Rothschild 6:61-67. The web server includes non-transitory computer-readable media in the form of a Web site memory device 116, which may be “long or short term data storage devices, including, but not limited to, RAM, cache memory, flash memory, magnetic disks, optical disks, removable disks, SCSI disks, IDE hard drives, tape drives, smart cards, and all other types of data storage devices (and combinations thereof, such as RAID devices) generally known to those skilled in the art.” Rothschild 7:37-8:2. Second, Rothschild explains that software is executed by a computer hardware device, such as a web server (“<i>computer system</i>”). “Within the context of computer hardware and software, an application program is a set of one or more computer programs that performs a function when executed within a computer hardware device.” Rothschild 6:38-47. One example of such an application program is “advertising application 114, operating on the Web site 110, [which] permits a sender to create, and send a personal communication containing a sender-selected advertisement to the communication application 134[.]” Rothschild 7:37-8:2. Thus, because Rothschild describes a web server having a memory device that stores applications that are executed by computer hardware, Rothschild renders obvious “<i>One or more non-transitory computer-readable media (NTPCRM) including program code, wherein execution of the program code by one or more processors of a computer system is to cause the computer system to</i>” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.

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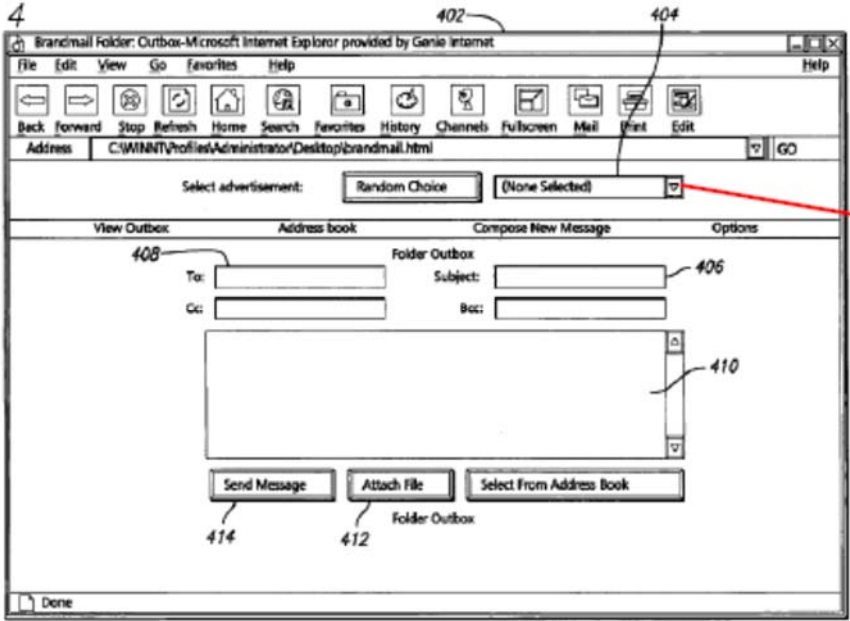
Claim	Exemplary Evidence of Anticipation and/or Obviousness
1[a] identify a trigger to generate a hot link; and	Rothschild discloses, and/or renders obvious, “identify a trigger to generate a hot link.” <i>See</i> citations for claim 10[a][2]; <i>see also, e.g.:</i> First, Rothschild describes a “trigger” for generating an interactive advertisement (“hot link”) in the form of a pull-down menu for selecting an interactive advertisement. <i>See</i> Rothschild 9:11-31. FIG. 4  The figure is an annotated screenshot of a web browser window titled 'Brandmail Folder: Outbox-Microsoft Internet Explorer provided by Genie Internet'. The browser's address bar shows 'C:\WINNT\Profiles\Administrator\Desktop\brandmail.html'. Below the address bar, there is a 'Select advertisement:' section with a 'Random Choice' button and a pull-down menu currently showing '(None Selected)'. A red arrow points from the text 'pull-down menu for presenting a palette of advertisements' to this menu. Below this section are tabs for 'View Outbox', 'Address book', 'Compose New Message', and 'Options'. The 'Compose New Message' tab is active, showing fields for 'To:', 'Subject:', 'Cc:', and 'Bcc:'. Below these fields is a large text area for the message body. At the bottom of the compose window are three buttons: 'Send Message', 'Attach File', and 'Select From Address Book'. Various parts of the interface are labeled with reference numerals: 402 for the browser window, 404 for the pull-down menu, 406 for the 'Subject:' field, 410 for the message body text area, 414 for the 'Send Message' button, and 412 for the 'Attach File' button. The 'Folder Outbox' label is also present near the bottom buttons. pull-down menu for presenting a palette of advertisements Rothschild Fig. 4 (annotated). Selection of an advertisement from the pull-down menu ultimately triggers insertion of the advertisement into an e-mail message. <i>See</i> Rothschild 9:11-31. When the server receives a compilation of data that includes the user’s advertisement selection, such “data (which includes the selected advertisement) is formatted into a

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	standard e-mail format.” Rothschild 11:28-30. Second, Rothschild’s server identifies the “trigger” when it provides the sending user’s device with the e-mail communication page 402 that contains the pull-down menu. Upon request from a user, the server “provides the sender network device with an e-mail communication page (see FIG. 4), enabling the sender to enter ... a selected advertisement that should accompany the completed e-mail.” Rothschild 11:5-10. As noted above, the user selects an advertisement from the pull-down menu. Accordingly, because selection of an advertisement through the pull-down menu ultimately triggers insertion of an interactive advertisement into an e-mail, Rothschild’s server “identif[ies] a trigger for generating a hot link” when it presents the selection mechanism (e.g., pull-down menu) through the web communication page 402. Third, Rothschild’s interactive advertisement teaches a “hot link” as claimed because interaction with the interactive advertisement causes an action to be performed. Rothschild’s interactive advertisement is displayed as a “graphic” or “icon” that can be interacted with. <i>See</i> Rothschild 8:22-25. Interaction with the advertisement causes the recipient’s device to retrieve additional data from a web site. <i>See</i> Rothschild 5:8-16. This is analogous to the “hot link” as described in the ’169 patent, which may be displayed as “a virtual button, icon, symbol, or some other user interface associated with the device receiving the hot link.” The ’169 Patent 2:15-17. The hot link “instructs the receiving device to perform some action upon activation of the hot link[.]” <i>Id.</i> 7:27-28. This action may be, for example, “to obtain and render a web page in a web browser[.]” <i>Id.</i> 18:60-61.

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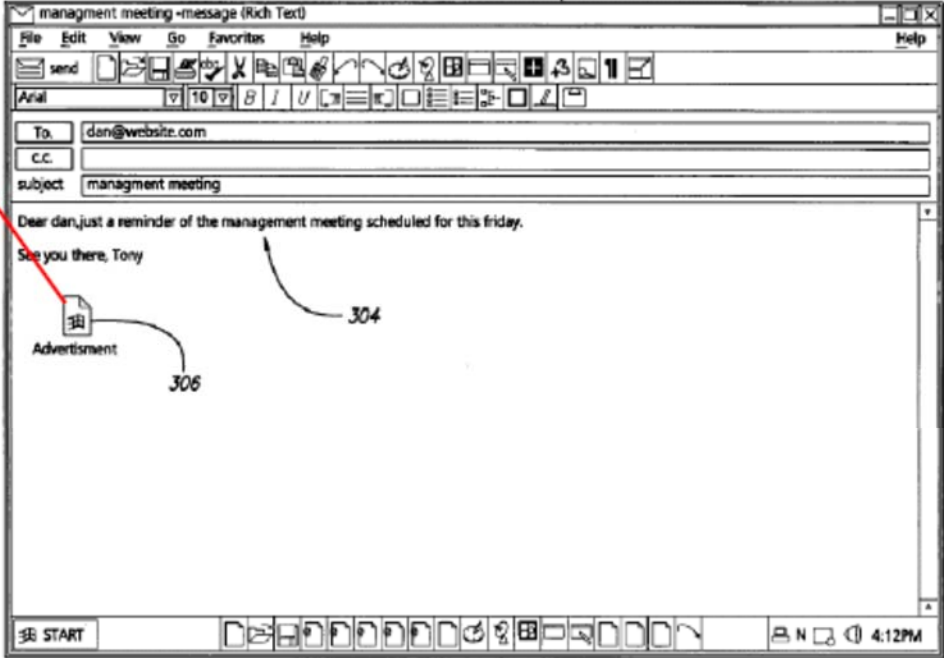
Claim	Exemplary Evidence of Anticipation and/or Obviousness
	FIG. 3 interactive advertisement (“hot link”)  Rothschild Fig. 3 (annotated). Thus, because Rothschild’s web server presents a pull-down menu with a list of interactive advertisements that, when selected by the user, cause an email (having an interactive advertisement with an embedded URL) to be created, Rothschild renders obvious “identify a trigger to generate a hot link” as claimed. Rothschild’s server also “identif[ies] a trigger to generate a hot link” when it receives the user’s selection of an advertisement from the pull-down menu. After the user selects an advertisement, Rothschild’s server “receives the compilation of data, which includes message data, sender data, and advertisement data.” Rothschild 11:14-16. Then, “the message data (which includes the selected advertisement) is formatted into a standard e-mail

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	format.” Rothschild 11:28-30. Because receipt of the user’s selection prompts the server to insert the selected advertisement (“hot link”) into the e-mail message (“hot link message”), receipt of the user’s selection identifies a trigger to generate the e-mail message and interactive advertisement therein. For this reason as well, Rothschild renders obvious “identify a trigger to generate a hot link” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
1[b] in response to detection of the trigger, determine an action to be performed upon activation of the hot link based on the trigger, wherein activation of the hot link by individual user devices of a set of user devices is to cause the individual user devices to execute program code to perform the action;	Rothschild discloses, and/or renders obvious, “in response to detection of the trigger, determine an action to be performed upon activation of the hot link based on the trigger, wherein activation of the hot link by individual user devices of a set of user devices is to cause the individual user devices to execute program code to perform the action.” <i>See</i> citations for claim 10[b][2]; <i>see also, e.g.:</i> When the server receives the user’s advertisement selection (“detection of the trigger”), Rothschild’s server determines an action to be performed by placing the selected interactive advertisement—along with its embedded URL—into the e-mail message. Rothschild 9:26-31. The URL helps define “the action to be performed” by defining the location of data on the Internet from where additional data is retrieved when the receiving user interacts with the interactive advertisement to follow the URL. As explained above, when the recipient of the email message activates the interactive advertisement, the embedded URL is used to cause the recipient’s device to retrieve additional information (e.g., graphic, text, audio, video pertaining to the advertised product) from a web site. <i>See</i> Rothschild 11:57-12:13; 8:31-64. Furthermore, because retrieval of additional information (“action to be performed upon activation of the hot link”) is defined by the sending user’s selection of the advertisement (“trigger”), retrieval of additional information is “based on the trigger” as claimed. A POSITA also would have recognized that various characteristics of the URL define “the action to be performed” by specifying the type of application that will perform the action associated with the URL. For example, industry standards (as explained in RFC 1738 indicate that “http” specifies Hypertext Transfer

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	Protocol and thus invokes a web browser. RFC 1738, 4. Thus, the nature of the URL itself defines “an action to be performed” as claimed. Thus, because Rothschild’s system receives a selected advertisement from the user, and in response generates an e-mail message with an interactive advertisement when activated by the user, causes an action to retrieve additional information to be performed, Rothschild renders obvious “in response to detection of the trigger, determine an action to be performed upon activation of the hot link based on the trigger” as claimed. As explained above at 1[a], the interactive advertisement (“hot link”) includes an embedded URL that when activated, causes the recipient’s system to retrieve additional data. See Rothschild 11:57-12:13. “When a recipient interacts with an interactive advertisement, the request data (contained in the advertisement’s embedded URL) calls to the data processing layer. The data processing layer uses the request data (which may contain message data that is linked to sender data and advertisement data) to retrieve data from the Web site memory device.” Rothschild 5:8-16. Accordingly, a POSITA would have found it obvious that the application (e.g., a web browser) of the recipient’s device that obtains additional information from a web site executes program code when doing so. Indeed, Rothschild explains that “an application program is a set of one or more computer programs that performs a function when executed within a computer hardware device.” Rothschild 6:39-41. Thus, because Rothschild describes that the receiving user can interact with an advertisement to activate the URL, which causes program code to execute to retrieve data from a web site, Rothschild renders obvious “wherein activation of the hot link by individual user devices of a set of user devices is to cause the individual user devices to execute program code to perform the action” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
1[c] generate a hot link message to	Rothschild discloses, and/or renders obvious, “generate a hot link message to include the determined action and instructions for rendering and displaying the hot link at each of the set of user devices.” <i>See</i> citations for claim

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include the determined action and instructions for rendering and displaying the hot link at each of the set of user devices; and	10[b][3]; <i>see also, e.g.:</i> First, Rothschild’s server generates a hot link message when the web server formats the message data into an e-mail that contains the selected interactive advertisement. “At step 516 the message data (which includes the selected advertisement) is formatted into a standard e-mail format. The formatted e-mail’s reply-to address is changed, at step 518, to reflect the senders e-mail address that was provided by the sender upon registration.” Rothschild 10:65-11:33. Accordingly, by formatting the message data into an e-mail message containing the interactive advertisement, the web server “generates a hot link message” as claimed. Second, the e-mail includes the selected interactive advertisement, which includes the embedded URL (which defines “the determined action” as explained at 1[b]). See Rothschild 11:63-65 (“The location of the additional communication data (or a pointer to the data) is contained in a URL embedded within the interactive advertisement”). Third, the selected interactive advertisement can be displayed as “an icon, graphic, text, or voice message that can be interacted with to provide the recipient with additional communication data[.]” Rothschild 8:3-30. Rothschild explains that graphic data can be in a variety of forms, including “JPEG, GIF, or any other generally recognizable graphical format.” Rothschild 13:41-42. Given that Rothschild describes an interactive advertisement that is displayed with a graphic and includes an embedded URL, a POSITA would have recognized that such interactive advertisement would be implemented using HTML. Indeed, using HTML to implement advertisements within e-mail messages was well-known to POSITAs. See e.g., U.S. Patent No. 6,836,792 (“Chen”) 2:37-54 (describing inserting advertisements into e-mail using HTML as “conventional”). Rothschild also mentions “Hotmail” as an example e-mail service. See Rothschild 2:26-36. POSITAs would have recognized that such browser-based e-mail applications relied on HTML. A POSITA would have understood that an HTML implementation of an embedded URL in an interactive advertisement displayed as a graphic, text, GIF, or other form described by Rothschild would include HTML tags (“instructions”) that define how the embedded URL is displayed within the interactive advertisement. An example HTML code is shown below:

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	 See RFC 1866 at 35; W3, HTML 4.01 Specification (“W3”) at 179. In this example, the URL—which is the location where the additional information is located—is displayed to the user as a graphic defined by the JPEG file graphic.jpg. In this manner, the URL is embedded in the interactive advertisement, which appears to the user as the image file “graphic.jpg.” Accordingly, a POSITA would have found it obvious for Rothschild’s interactive advertisement, which is sent in the e-mail (“hot link message”), to include HTML code that acts as “instructions for rendering and displaying a hot link.” Additionally, the data representing the icon or graphic are “instructions for rendering and displaying the hot link” because the data (e.g., JPEG file) informs the receiving device how to display the graphic or icon. Thus, because Rothschild’s web server formats an e-mail message which includes the interactive advertisement that defines how it is to be displayed, Rothschild renders obvious “generate a hot link message to include the determined action and instructions for rendering and displaying the hot link at each of the set of user devices” as claimed. Further, the above presents Rothschild as rendering obvious “instructions for rendering and displaying the hot link,” citing to Chen as evidence that it would be obvious for Rothschild’s e-mail service to be implemented using HTML, and in so doing, the HTML code would provide such instructions for rendering and displaying a hot link. To the extent that Chen does not represent the background knowledge of a POSITA, the discussion in Claims 19 and 20 below, which is incorporated herein by reference, provides reasons why a POSITA would have found it obvious to implement Rothschild’s interactive advertisements using HTML, as evidenced by Chen. Chen relates to a “method for providing add-on services responsive to an email transferred via a distributed computer network.” Chen’s background section provides examples of known mechanisms by which advertisements are inserted into e-mail messages—through HTML: “[A]n advertisement insertion module 170

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	interfaces with HTML converter facility 158 to insert an appropriate advertisement banner into the email message prior to sending the email message[.]” Chen 2:51-54. Chen further shows that various concepts, including the HTML converter facility 158, are “conventional and may include other implementational details and variations, which are well known to those in the business of providing email service[.]” Chen 2:37-39. Chen also explains that the advertisements inserted into the e-mail “may take various forms, including without limitation one or more of audio, still banner, animation, video clips, each with or without HTML links.” Chen 8:23-26. Accordingly, Chen provides evidence that before May of 2001 it was well-known to insert advertisements into emails using HTML. A POSITA would have recognized that HTML code includes instructions for rendering and displaying graphics. A POSITA would have found it obvious to implement Rothschild’s interactive advertisement using known techniques. Chen provides evidence that it was known to implement advertisements in e-mail using HTML. For the reasons explained below, a POSITA would have found it obvious and beneficial to implement Rothschild’s interactive advertisement using HTML. As an initial matter, Chen is analogous art to the ’169 patent because Chen is in the same field of endeavor—telecommunication. <i>Compare</i> ’169 Patent 3:59-61 (“[T]he present invention is directed to generating and sending a hot link to a telecommunications device”) <i>with</i> Chen, abstract (describing “method for providing add-on services responsive to an email transferred via a distributed computer network”). Rothschild generically describes inserting an interactive advertisement within an e-mail. In particular, Rothschild describes a “system and method that allows an Internet user to place an advertisement within a personal communication[.]” Rothschild 1:26-27. The advertisement may be an interactive advertisement that includes an embedded URL to retrieve data from a website. <i>See</i> Rothschild 11:57-12:13. “When a recipient interacts with an interactive advertisement, the request data (contained in the advertisement’s embedded URL) ... retrieve[s] data from the Web site[.]” Rothschild 5:8-16. Rothschild’s interactive advertisement may be displayed as “an icon, graphic, text, or voice message that can be interacted with to provide the recipient with additional communication data[.]” Rothschild 8:22-25. Rothschild leaves out the implementation details for inserting an interactive advertisement that is displayed with a graphic and includes an embedded URL, thus suggesting that such details were known.

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	Chen provides evidence that, indeed, techniques for inserting advertisements into an e-mail were known. Specifically, Chen describes an HTML converter facility 158 that is “conventional and may include other implementational details and variations, which are well known to those in the business of providing email service[.]” Chen 2:37-39. “[A]n advertisement insertion module 170 interfaces with HTML converter facility 158 to insert an appropriate advertisement banner into the email message prior to sending the email message[.]” Chen 2:51-54. A POSITA would have had a reasonable expectation of success when combining the teachings of Rothschild with Chen because both Rothschild and Chen describe similar types of advertisement. Rothschild explains that the advertisements may be displayed as “an icon, graphic, text, or voice message that can be interacted with to provide the recipient with additional communication data[.]” Rothschild 8:22-25. Similarly, Chen explains that the advertisements “may take various forms, including without limitation one or more of audio, still banner, animation, video clips, each with or without HTML links.” Chen 8:23-26. Accordingly, a POSITA would have expected Chen’s HTML-specific implementation of advertisements to be applicable to Rothschild’s advertisements as well. A POSITA would have recognized that implementing Rothschild’s interactive advertisement using HTML would have been beneficial. Chen explains that its teachings provide “improved techniques for providing new services and features to users of an existing email system in a way that requires little change to the existing email systems and at little cost.” Chen 3:64-67. Accordingly, the combination of Rothschild and Chen represents the combination of known elements (e-mail advertisements) according to known methods (HTML) to yield predictable results. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
1[d] control transmission of the hot link message to	Rothschild discloses, and/or renders obvious, “control transmission of the hot link message to the set of user devices.” See citations for claim 10[a][3]; see also, e.g.:

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the set of user devices.	Rothschild’s web server transmits the e-mail message (“hot link message”) with the interactive advertisement to the recipients (“set of user devices”): “At step 520, the formatted e-mail is sent to the designated recipient(s).” Rothschild 11:30-33. Thus, because Rothschild’s web server transmits the formatted e-mail message to the designated recipients, Rothschild renders obvious “control transmission of the hot link message to the set of user devices” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
4. The one or more NTCRM of claim 1, wherein execution of the program code is to cause the computer system to: generate the hot link message to include an indication about the hot link, wherein the indication about the hot link comprises text, multimedia, or a link pointing to a resource that includes information about the hot link.	Rothschild discloses, and/or renders obvious, “The one or more NTCRM of claim 1, wherein execution of the program code is to cause the computer system to: generate the hot link message to include an indication about the hot link, wherein the indication about the hot link comprises text, multimedia, or a link pointing to a resource that includes information about the hot link.” <i>See</i> citations for claims 14 and 22; <i>see also, e.g.:</i> Rothschild renders this claim obvious in various ways. In one example, text within Rothschild’s interactive advertisement is an “indication about the hot link.” Rothschild explains that if an advertisement includes text, “the advertising application 114 allows the advertiser the option of typing in the textual information that makes up the advertisement. Alternatively, the advertiser can upload the advertisement data (e.g., text, icon, graphic, audio).” Rothschild 13:21-43. A POSITA would have understood that “textual information that makes up the advertisement” is an “indication about the hot link” as claimed. Indeed, the claim language explicitly recites “text” as one example of what is included in the term “indication:” “wherein the indication about the hot link comprises text, multimedia, or a link pointing to a resource that includes information about the hot link.” Additionally, the URL embedded within the interactive advertisement teaches “an indication about the hot link.” The claim explicitly recites that the indication may be a “link pointing to a resource that includes information about the hot link.” As explained above at 1[a] and 1[b], the URL embedded within Rothschild’s interactive advertisement is used to retrieve additional communication data. <i>See</i> Rothschild 8:31-64.

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	Thus, because Rothschild explains that the interactive advertisement includes textual information and a URL that make up the advertisement, and the interactive advertisement is placed within an e-mail message, Rothschild renders obvious “wherein execution of the program code is to cause the computer system to: generate the hot link message to include an indication about the hot link, wherein the indication about the hot link comprises text, multimedia, or a link pointing to a resource that includes information about the hot link” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
5. The one or more NTCRM of claim 4, wherein execution of the program code is to cause the computer system to: generate the hot link message as a Short Message Service (SMS) message, an instant messaging (IM) message, or an email message.	Rothschild discloses, and/or renders obvious, “The one or more NTCRM of claim 4, wherein execution of the program code is to cause the computer system to: generate the hot link message as a Short Message Service (SMS) message, an instant messaging (IM) message, or an email message.” <i>See</i> citations for claim 15; <i>see also</i>, <i>e.g.</i>: See claim 4. Rothschild describes its technique with the example of an e-mail message, but states that it is applicable to other forms of communication including SMS messages and instant messages: “It should be appreciated that a personal communication can include, but is not limited to, an e-mail message, text message, short message service (SMS) message, chat-room message, instant messaging message, video message, voice message, and any other personalized network communications generally known to those skilled in the art.” Rothschild 8:6-11. Thus, Rothschild renders obvious “generate the hot link message as a Short Message Service (SMS) message, an instant messaging (IM) message, or an email message” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of

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	persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
7. The one or more NTCRM of claim 1, wherein the hot link comprises instructions to obtain and render a web page in a web browser, execute executable instructions of an application program, or adjust radiofrequency circuitry to obtain and display broadcasted content.	Rothschild discloses, and/or renders obvious, “The one or more NTCRM of claim 1, wherein the hot link comprises instructions to obtain and render a web page in a web browser, execute executable instructions of an application program, or adjust radiofrequency circuitry to obtain and display broadcasted content.” <i>See</i> citations for claims 13 and 21; <i>see also, e.g.:</i> As explained above, the interactive advertisement (“hot link”) includes instructions to obtain and render a web page in a web browser. Rothschild explains that the recipient device 130 includes a communication application, which “may be a Web browser.” Rothschild 7:51. A POSITA would have found it obvious for the recipient device to obtain the data from the URL through use of a web browser, as that is a common way to retrieve additional data from a web site. As Rothschild explains, “[t]he location of the additional communication data (or a pointer to the data) is contained in a URL embedded within the interactive advertisement.” Rothschild 11:57-12:13. “If the recipient interacts with the interactive advertisement, the recipient will be provided with additional communication data (e.g., graphic, text, audio, video)[.]” Rothschild 8:47-50. “The additional communication data can contain advertisement data, entertainment data, educational data, or any other type of data made available to the Web site.” Rothschild 8:60-63. Rothschild explicitly mentions that the additional data may be a “populated communication <u>page</u>.” Rothschild 10:29. Thus, because Rothschild’s interactive advertisement includes an embedded URL, which instructs a web browser to obtain and display additional information, Rothschild renders obvious “wherein the hot link comprises instructions to obtain and render a web page in a web browser, execute executable instructions of an application program, or adjust radiofrequency circuitry to obtain and display broadcasted content” as claimed. Further, the above presents Rothschild as rendering obvious “instructions for rendering and displaying the hot link,” citing to Chen as evidence that it would be obvious for Rothschild’s e-mail service to be implemented using HTML, and in so doing, the HTML code would provide such instructions for rendering and displaying a hot link. To the extent Patent Owner argues that Chen does not represent the background knowledge of a POSITA, the below (along with the obviousness arguments for claims 19 and 20) provides reasons why a

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	POSITA would have found it obvious to implement Rothschild’s interactive advertisements using HTML, as evidenced by Chen. A POSITA would have found it obvious to implement Rothschild’s interactive advertisement using known techniques. Chen provides evidence that it was known to implement advertisements in e-mail using HTML. For the reasons explained below, a POSITA would have found it obvious and beneficial to implement Rothschild’s interactive advertisement using HTML. As an initial matter, Chen is analogous art to the ’169 patent because Chen is in the same field of endeavor—telecommunication. <i>Compare</i> ’169 Patent 3:59-61 (“[T]he present invention is directed to generating and sending a hot link to a telecommunications device”) <i>with</i> Chen abstract (describing “method for providing add-on services responsive to an email transferred via a distributed computer network”). Rothschild generically describes inserting an interactive advertisement within an e-mail. In particular, Rothschild describes a “system and method that allows an Internet user to place an advertisement within a personal communication[.]” Rothschild 1:26-27. The advertisement may be an interactive advertisement that includes an embedded URL to retrieve data from a website. <i>See</i> Rothschild 11:57-12:13. “When a recipient interacts with an interactive advertisement, the request data (contained in the advertisement’s embedded URL) ... retrieve[s] data from the Web site[.]” Rothschild 5:8-16. Rothschild’s interactive advertisement may be displayed as “an icon, graphic, text, or voice message that can be interacted with to provide the recipient with additional communication data[.]” Rothschild 8:22-25. Rothschild leaves out the implementation details for inserting an interactive advertisement that is displayed with a graphic and includes an embedded URL, thus suggesting that such details were known. Chen provides evidence that, indeed, techniques for inserting advertisements into an e-mail were known. Specifically, Chen describes an HTML converter facility 158 that is “conventional and may include other implementational details and variations, which are well known to those in the business of providing email service[.]” Chen 2:37-39. “[A]n advertisement insertion module 170 interfaces with HTML converter facility 158 to insert an appropriate advertisement banner into the email message prior to sending the email message[.]” Chen 2:51-54.

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	A POSITA would have had a reasonable expectation of success when combining the teachings of Rothschild with Chen because both Rothschild and Chen describe similar types of advertisement. Rothschild explains that the advertisements may be displayed as “an icon, graphic, text, or voice message that can be interacted with to provide the recipient with additional communication data[.]” Rothschild 8:22-25. Similarly, Chen explains that the advertisements “may take various forms, including without limitation one or more of audio, still banner, animation, video clips, each with or without HTML links.” Chen 8:23-26. Accordingly, a POSITA would have expected Chen’s HTML-specific implementation of advertisements to be applicable to Rothschild’s advertisements as well. A POSITA would have recognized that implementing Rothschild’s interactive advertisement using HTML would have been beneficial. Chen explains that its teachings provide “improved techniques for providing new services and features to users of an existing email system in a way that requires little change to the existing email systems and at little cost.” Chen 3:64-67. Accordingly, the combination of Rothschild and Chen represents the combination of known elements (e-mail advertisements) according to known methods (HTML) to yield predictable results. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
9. The one or more NTCRM of claim 1, wherein, to control transmission of the hot link message to the set of user devices, execution of the program code is to cause the	Rothschild discloses, and/or renders obvious, “The one or more NTCRM of claim 1, wherein, to control transmission of the hot link message to the set of user devices, execution of the program code is to cause the computer system to: instruct a network interface of the computer system to send the hot link message to the set of user devices over a wired or wireless network. <i>See</i> citations for claim 17; <i>see also</i>, e.g.: See claim 1. First, Rothschild’s web server includes the hardware components for transmitting data over the Internet (“network interface”). In particular, Rothschild’s web server includes “hardware/software server components

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computer system to: instruct a network interface of the computer system to send the hot link message to the set of user devices over a wired or wireless network.	that serve information content over a network[.]” Rothschild 6:61-67. Second, as explained above at 1[d], Rothschild’s web server transmits the e-mail message that includes the interactive advertisement (“hot link”) over a network. “The sender network device, the recipient network device, and the Web site are coupled together on a communication network, such as, the Internet, local area network, wide area network[.]” Rothschild 7:11-14. Thus, because Rothschild’s web server includes hardware components for transmitting an email with the interactive advertisement over a network, Rothschild renders obvious “instruct a network interface of the computer system to send the hot link message to the set of user devices over a wired or wireless network” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
10. A computer system to be employed as a server, the computer system comprising:	To the extent the preamble is limiting, Rothschild discloses, and/or renders obvious, “A computer system to be employed as a server, the computer system comprising.” <i>See, e.g.:</i> Rothschild describes a web server 112 associated with a website (“computer system to be employed as a server”). Rothschild describes a Web site that is realized by a “Web server 112, an advertising application 114, and a Web site memory device 116” as shown in Fig. 2 below. Rothschild 7:37-8:2.

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	Rothschild, Fig. 2 (annotated). Thus, because Rothschild describes a web server, Rothschild renders obvious a “computer system to be employed as a server” as claimed.

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	To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
10[a][1] network interface circuitry to:	Rothschild discloses, and/or renders obvious, “network interface circuitry to.” <i>See, e.g.:</i> Rothschild’s web server “interfaces” with the sender’s device over the Internet: “Specifically the Web browser 124, operating on the sender network device 120, interfaces over the Internet 102 with the Web server 112, which is operating on the Web site 110[.]” Rothschild 8:64-9:10. As described above at claim 9, Rothschild’s web server includes “network interface circuitry” in that the web server includes “hardware/software server components that serve information content over a network[.]” Rothschild 6:61-67. Thus, because Rothschild’s web server includes hardware/software server components that serve information and interface over a network, Rothschild renders obvious “network interface circuitry” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
10[a][2] receive, from a first user device, a request to generate a hot link along with information of a set of second user devices to receive the hot link, and	Rothschild discloses, and/or renders obvious, “receive, from a first user device, a request to generate a hot link along with information of a set of second user devices to receive the hot link.” With respect to “generate a hot link,” <i>see</i> citations for claim 1[a]. With respect to the remainder of this element, <i>see also, e.g.:</i> First, as explained above at 1[a] and 1[b], a user accesses a web site to generate an e-mail message with an interactive advertisement. In this manner, the web server associated with the web site receives “a request to generate a hot link.”

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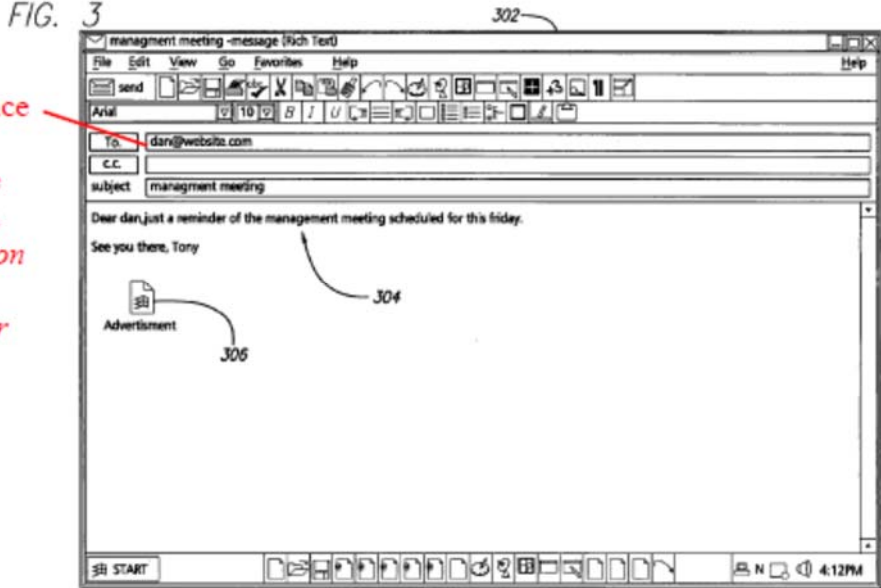
Claim	Exemplary Evidence of Anticipation and/or Obviousness
	Second, Rothschild’s web server also provides the sending user with a mechanism to designate the recipients of that e-mail message. “The e-mail communication page 402 provides a recipient space 408 where the sender can designate at least one recipient that will receive the e-mail.” Rothschild 9:11-31. <i>FIG. 3</i> <i>user interface element to provide the server with “information of a set of second user devices to receive the hot link”</i>  Rothschild Fig. 3 (annotated). Accordingly, when a user accesses the web page 402 and identifies the recipients of the message and advertisement, the web server receives “information of a set of second user devices to receive the hot link.” Moreover, by designating e-mail addresses of users who have their associated devices, the sending user is designating a set of second user devices. Moreover, a POSITA would have understood that anything received from the sending user’s device would be received by the hardware/software components for transferring data

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	over a network (“network interface circuitry”). Thus, because Rothschild’s web server receives a selection of an interactive advertisement for inclusion in an e-mail message, as well as the recipients of that e-mail message, Rothschild renders obvious “receive, from a first user device, a request to generate a hot link along with information of a set of second user devices to receive the hot link” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
10[a][3] transmit a hot link message to the set of second user devices; and	Rothschild discloses, and/or renders obvious, “transmit a hot link message to the set of second user devices.” <i>See</i> citations for claim 1[d]. Rothschild’s web server transmits the e-mail message with the interactive advertisement (“hot link message”) to the recipients (“set of second user devices”). “At step 516 the message data (which includes the selected advertisement) is formatted into a standard e-mail format ... At step 520, the formatted e-mail is sent to the designated recipient(s).” Rothschild 10:65-11:33. A POSITA would have understood that data transmitted from the server would be transmitted by the hardware/software components for transferring data over a network (“network interface circuitry”). Thus, because Rothschild’s web server transmits the e-mail with the interactive advertisement to the recipients, Rothschild renders obvious “transmit a hot link message to the set of second user devices” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.

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10[b][1] processor circuitry communicatively coupled with the network interface circuitry, the processor circuitry communicatively coupled with the network interface circuitry, the processor circuitry is to:	Rothschild discloses, and/or renders obvious, “processor circuitry communicatively coupled with the network interface circuitry, the processor circuitry communicatively coupled with the network interface circuitry, the processor circuitry is to.” <i>See, e.g.:</i> First, a POSITA would have found it obvious for Rothschild’s web server to include processor circuitry as that is how servers perform the services for which they were designed. Rothschild’s web server includes “‘back end’ hardware/software components” (“processor circuitry”) to perform services for web-site users, which a POSITA would have understood to include processor circuitry. Rothschild 6:61-67. Second, because these services are provided to web site users over a network, a POSITA would have recognized that Rothschild’s “back end” hardware/software components (“processor circuitry”) interfaces with the hardware/software components that serve information content over a network (“network interface circuitry”). Thus, Rothschild renders obvious “processor circuitry communicatively coupled with the network interface circuitry, the processor circuitry communicatively coupled with the network interface circuitry” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
10[b][2] in response to detection of a trigger, determine an action to be performed upon activation of the hot link, wherein activation of the hot link by individual	Rothschild discloses, and/or renders obvious, “in response to detection of a trigger, determine an action to be performed upon activation of the hot link, wherein activation of the hot link by individual second user devices of the set of second user devices is to cause the individual second user devices to execute program code to perform the action.” <i>See citations for claim 1[b].</i> As explained above at 1[b], when the server receives the user’s advertisement selection (“detection of a trigger”), Rothschild’s system places a selected advertisement—along with an embedded URL—into an e-mail

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second user devices of the set of second user devices is to cause the individual second user devices to execute program code to perform the action, and	message (“determines an action to be performed upon activation of the hot link”). Thus, Rothschild renders obvious “in response to detection of a trigger, determine an action to be performed upon activation of the hot link” as claimed. As described above at 1[a]-1[b], activation of the URL within the interactive advertisement (“hot link”) causes an application (e.g., a web browser) on the receiving user’s device to obtain additional data from a web site (“cause[s] the individual second user devices to execute program code to perform the action”) when the user interacts with the advertisement (“activation of the hot link by individual second user devices of the set of second user devices.”). See Rothschild 11:57-12:13. Thus, Rothschild’s interactive advertisement, when interacted with by the receiving user, causes the receiving user’s device to obtain additional information from the web site, Rothschild renders obvious, “wherein activation of the hot link by individual second user devices of the set of second user devices is to cause the individual second user devices to execute program code to perform the action” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
10[b][3] generate the hot link message to include the determined action and instructions for rendering and displaying the hot link at each of the set of user devices.	Rothschild discloses, and/or renders obvious, “generate the hot link message to include the determined action and instructions for rendering and displaying the hot link at each of the set of user devices.” <i>See citations for claim 1[c].</i> For the reasons explained above at 1[c], Rothschild renders obvious “generate the hot link message to include the determined action and instructions for rendering and displaying the hot link at each of the set of user devices” as claimed.

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	Further, the above presents Rothschild as rendering obvious “instructions for rendering and displaying the hot link,” citing to Chen as evidence that it would be obvious for Rothschild’s e-mail service to be implemented using HTML, and in so doing, the HTML code would provide such instructions for rendering and displaying a hot link. To the extent that Chen does not represent the background knowledge of a POSITA, the below (along with the obviousness arguments for claims 19 and 20) provides reasons why a POSITA would have found it obvious to implement Rothschild’s interactive advertisements using HTML, as evidenced by Chen. A POSITA would have found it obvious to implement Rothschild’s interactive advertisement using known techniques. Chen provides evidence that it was known to implement advertisements in e-mail using HTML. For the reasons explained below, a POSITA would have found it obvious and beneficial to implement Rothschild’s interactive advertisement using HTML. As an initial matter, Chen is analogous art to the ’169 patent because Chen is in the same field of endeavor—telecommunication. <i>Compare</i> ’169 Patent 3:59-61 (“[T]he present invention is directed to generating and sending a hot link to a telecommunications device”) <i>with</i> Chen abstract (describing “method for providing add-on services responsive to an email transferred via a distributed computer network”). Rothschild generically describes inserting an interactive advertisement within an e-mail. In particular, Rothschild describes a “system and method that allows an Internet user to place an advertisement within a personal communication[.]” Rothschild 1:26-27. The advertisement may be an interactive advertisement that includes an embedded URL to retrieve data from a website. <i>See</i> Rothschild 11:57-12:13. “When a recipient interacts with an interactive advertisement, the request data (contained in the advertisement's embedded URL) ... retrieve[s] data from the Web site[.]” Rothschild 5:8-16. Rothschild’s interactive advertisement may be displayed as “an icon, graphic, text, or voice message that can be interacted with to provide the recipient with additional communication data[.]” Rothschild 8:22-25. Rothschild leaves out the implementation details for inserting an interactive advertisement that is displayed with a graphic and includes an embedded URL, thus suggesting that such details were known. Chen provides evidence that, indeed, techniques for inserting advertisements into an e-mail were known. Specifically, Chen describes an HTML converter facility 158 that is “conventional and may include other implementational details and variations, which are well known to those in the business of providing email

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	service[.]” Chen 2:37-39. “[A]n advertisement insertion module 170 interfaces with HTML converter facility 158 to insert an appropriate advertisement banner into the email message prior to sending the email message[.]” Chen 2:51-54. A POSITA would have had a reasonable expectation of success when combining the teachings of Rothschild with Chen because both Rothschild and Chen describe similar types of advertisement. Rothschild explains that the advertisements may be displayed as “an icon, graphic, text, or voice message that can be interacted with to provide the recipient with additional communication data[.]” Rothschild 8:22-25. Similarly, Chen explains that the advertisements “may take various forms, including without limitation one or more of audio, still banner, animation, video clips, each with or without HTML links.” Chen 8:23-26. Accordingly, a POSITA would have expected Chen’s HTML-specific implementation of advertisements to be applicable to Rothschild’s advertisements as well. A POSITA would have recognized that implementing Rothschild’s interactive advertisement using HTML would have been beneficial. Chen explains that its teachings provide “improved techniques for providing new services and features to users of an existing email system in a way that requires little change to the existing email systems and at little cost.” Chen 3:64-67. Accordingly, the combination of Rothschild and Chen represents the combination of known elements (e-mail advertisements) according to known methods (HTML) to yield predictable results. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
13. The computer system of claim 10, wherein the hot link comprises	Rothschild discloses, and/or renders obvious, “The computer system of claim 10, wherein the hot link comprises instructions to obtain and render a web page in a web browser, execute executable instructions of an application program, or adjust radiofrequency circuitry to obtain and display broadcasted content.”

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instructions to obtain and render a web page in a web browser, execute executable instructions of an application program, or adjust radiofrequency circuitry to obtain and display broadcasted content.	See claims 7 and 10. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
14. The computer system of claim 10, wherein the processor circuitry is to: generate the hot link message to include an indication about the hot link, wherein the indication about the hot link comprises text, multimedia, or a link pointing to a resource that includes information about the hot link.	Rothschild discloses, and/or renders obvious, “The computer system of claim 10, wherein the processor circuitry is to: generate the hot link message to include an indication about the hot link, wherein the indication about the hot link comprises text, multimedia, or a link pointing to a resource that includes information about the hot link.” See claims 4 and 10. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
15. The computer system of claim 10,	Rothschild discloses, and/or renders obvious, “The computer system of claim 10, wherein the processor circuitry to: generate the hot link message as a Short Message Service (SMS) message for transmission over a

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wherein the processor circuitry is to: generate the hot link message as a Short Message Service (SMS) message for transmission over a cellular communication network, or generate the hot link message as an instant messaging (IM) message for transmission over a communications network.	cellular communication network, or generate the hot link message as an instant messaging (IM) message for transmission over a communications network.” <i>See</i> claims 5 and 10. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
17. The computer system of claim 10, wherein the network interface circuitry is to transmit the hot link message to the set of user devices over a wired or wireless network.	Rothschild discloses, and/or renders obvious, “The computer system of claim 10, wherein the network interface circuitry is to transmit the hot link message to the set of user devices over a wired or wireless network.” <i>See</i> claims 9 and 10. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
18. One or more non-transitory computer-readable	To the extent the preamble is limiting, Rothschild discloses, and/or renders obvious, “One or more non-transitory computer-readable media (NTCRM) including program code, wherein execution of the program code by one or more processors of a user device is to cause the user device to.” <i>See, e.g.:</i>

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media (NTPRM) including program code, wherein execution of the program code by one or more processors of a user device is to cause the user device to:	Rothschild describes a recipient device (“user device”). The recipient device includes “a recipient display 132, a communication application 134, and a recipient memory device 136.” Rothschild 7:39-41. The recipient device 130 includes various forms of memory 136, such as “long or short term data storage devices, including, but not limited to, RAM, cache memory, flash memory, magnetic disks, optical disks, removable disks, SCSI disks, IDE hard drives, tape drives, smart cards, and all other types of data storage devices (and combinations thereof, such as RAID devices)[.]” Rothschild 7:60-64. A POSITA would have recognized these types of memory as non-transitory computer-readable media. Moreover, like the discussion above at 1[pre], the recipient device 130 includes a communication application 134. Rothschild explains that “an application program is a set of one or more computer programs that performs a function when executed within a computer hardware device.” Rothschild 6:39-42. A POSITA would have understood that an application running on the recipient device that performs the claimed steps (described below in 18[a]-18[c]), such as a web browser or communication application 134, is “program code” as claimed.

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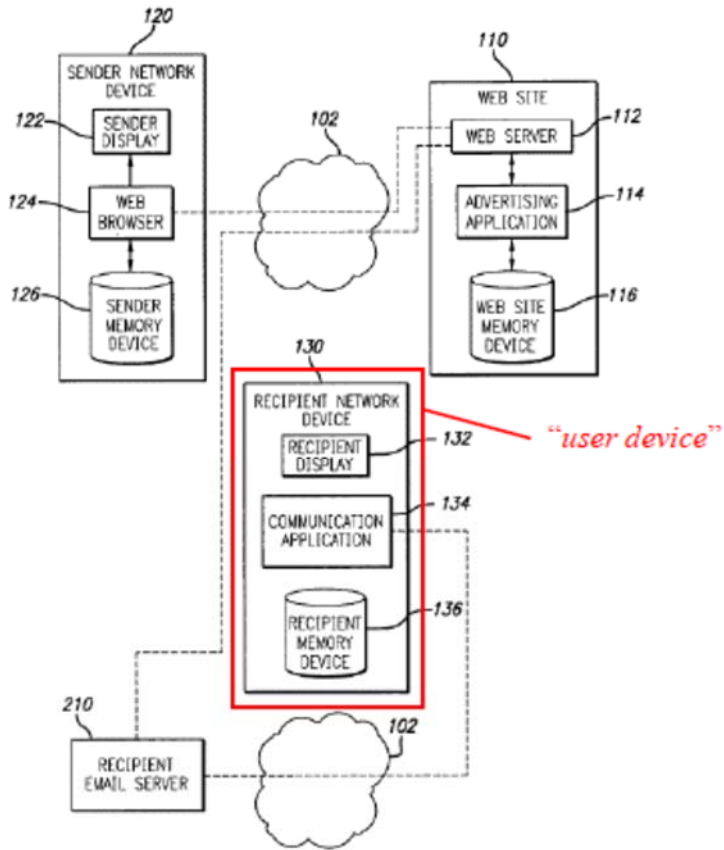
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	 FIG. 2 Rothschild Fig. 3 (annotated). Thus, because Rothschild describes a recipient device that includes various forms of memory 136 and an application 134 that is executed by hardware, Rothschild renders obvious “one or more non-transitory

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	computer-readable media (NTCRM) including program code, wherein execution of the program code by one or more processors of a user device is to cause the user device to” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
18[a] control receipt of a hot link message comprising a hot link and assignment information, the assignment information to assign the hot link to a graphical control element (GCE), and the hot link comprising instructions to perform an action and instructions for rendering and displaying the hot link;	Rothschild discloses, and/or renders obvious, “control receipt of a hot link message comprising a hot link and assignment information, the assignment information to assign the hot link to a graphical control element (GCE), and the hot link comprising instructions to perform an action and instructions for rendering and displaying the hot link.” <i>See</i> citations for claims 1[b]-[d] and 10[a][3], 10[b][2]-[3]; <i>see also</i>, <i>e.g.</i>: As to “control receipt of a hot link message comprising a hot link and assignment information, the assignment information to assign the hot link to a graphical control element (GCE),”: First, as described above at 1[d], the web server transmits the e-mail message to the designated recipients. Accordingly, the recipient devices then receive the e-mail (“hot link message”) including the interactive advertisement (“hot link”). “The e-mail communication page 402 provides a recipient space 408 where the sender can designate at least one recipient that will receive the e-mail.” Rothschild 9:18-20. By receiving the e-mail message, an application on the recipient device “control[s] receipt” of the e-mail message, and the interactive advertisement within. Second, as explained above at 1[a] and 1[c], the personal communication (“hot link message”) may include an interactive advertisement (“hot link”) that includes a graphic or icon that is rendered to the user on the user device display. The rendered graphic or icon is a “graphical control element” with which the recipient may interact. Third, the interactive advertisement (“hot link”) is comprised of “advertisement data” that associates (i.e., assigns) the interactive advertisement with the rendered graphic or icon that is displayed to the user. A POSITA would have understood that data contained within the e-mail message that associates the interactive advertisement with the graphic or icon that is to be rendered on the receiving device’s display is “assignment

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	information” because it assigns the graphic or icon to the interactive advertisement. Thus, because the recipient devices in Rothschild receive an e-mail message that includes an interactive advertisement comprises of advertisement data that associates the interactive advertisement with a graphic for display, Rothschild renders obvious “control receipt of a hot link message comprising a hot link and assignment information, the assignment information to assign the hot link to a graphical control element (GCE)” as claimed. Further, as to “and the hot link comprising instructions to perform an action and instructions for rendering and displaying the hot link;”: First, as explained above at 1[b], the interactive advertisement includes an embedded URL that, when interacted with by the recipient, causes the recipient’s device to perform the action of obtaining additional information. Second, as explained above at 1[c], the interactive advertisement includes the data (e.g., HTML code) that is used to display the interactive advertisement as a graphic or icon. Thus, for the reasons explained above at 1[b] and 1[c], Rothschild renders obvious “and the hot link comprising instructions to perform an action and instructions for rendering and displaying the hot link” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results. Further, the above presents Rothschild as rendering obvious “instructions for rendering and displaying the hot link,” citing to Chen as evidence that it would be obvious for Rothschild’s e-mail service to be implemented using HTML, and in so doing, the HTML code would provide such instructions for rendering and displaying a hot link. To the extent that Chen does not represent the background knowledge of a POSITA, the below (along with the obviousness arguments for claims 19 and 20) provides reasons why a POSITA would have found it obvious to implement Rothschild’s interactive advertisements using HTML, as evidenced by Chen.

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	A POSITA would have found it obvious to implement Rothschild’s interactive advertisement using known techniques. Chen provides evidence that it was known to implement advertisements in e-mail using HTML. For the reasons explained below, a POSITA would have found it obvious and beneficial to implement Rothschild’s interactive advertisement using HTML. As an initial matter, Chen is analogous art to the ’169 patent because Chen is in the same field of endeavor—telecommunication. <i>Compare</i> ’169 Patent 3:59-61 (“[T]he present invention is directed to generating and sending a hot link to a telecommunications device”) <i>with</i> Chen abstract (describing “method for providing add-on services responsive to an email transferred via a distributed computer network”). Rothschild generically describes inserting an interactive advertisement within an e-mail. In particular, Rothschild describes a “system and method that allows an Internet user to place an advertisement within a personal communication[.]” Rothschild 1:26-27. The advertisement may be an interactive advertisement that includes an embedded URL to retrieve data from a website. <i>See</i> Rothschild 11:57-12:13. “When a recipient interacts with an interactive advertisement, the request data (contained in the advertisement's embedded URL) ... retrieve[s] data from the Web site[.]” Rothschild 5:8-16. Rothschild’s interactive advertisement may be displayed as “an icon, graphic, text, or voice message that can be interacted with to provide the recipient with additional communication data[.]” Rothschild 8:22-25. Rothschild leaves out the implementation details for inserting an interactive advertisement that is displayed with a graphic and includes an embedded URL, thus suggesting that such details were known. Chen provides evidence that, indeed, techniques for inserting advertisements into an e-mail were known. Specifically, Chen describes an HTML converter facility 158 that is “conventional and may include other implementational details and variations, which are well known to those in the business of providing email service[.]” Chen 2:37-39. “[A]n advertisement insertion module 170 interfaces with HTML converter facility 158 to insert an appropriate advertisement banner into the email message prior to sending the email message[.]” Chen 2:51-54. A POSITA would have had a reasonable expectation of success when combining the teachings of Rothschild with Chen because both Rothschild and Chen describe similar types of advertisement. Rothschild explains that

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	the advertisements may be displayed as “an icon, graphic, text, or voice message that can be interacted with to provide the recipient with additional communication data[.]” Rothschild 8:22-25. Similarly, Chen explains that the advertisements “may take various forms, including without limitation one or more of audio, still banner, animation, video clips, each with or without HTML links.” Chen 8:23-26. Accordingly, a POSITA would have expected Chen’s HTML-specific implementation of advertisements to be applicable to Rothschild’s advertisements as well. A POSITA would have recognized that implementing Rothschild’s interactive advertisement using HTML would have been beneficial. Chen explains that its teachings provide “improved techniques for providing new services and features to users of an existing email system in a way that requires little change to the existing email systems and at little cost.” Chen 3:64-67. Accordingly, the combination of Rothschild and Chen represents the combination of known elements (e-mail advertisements) according to known methods (HTML) to yield predictable results. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
18[b] generate a graphical user interface (GUI) to include the GCE to which the hot link is assigned according to the assignment information; and	Rothschild discloses, and/or renders obvious, “generate a graphical user interface (GUI) to include the GCE to which the hot link is assigned according to the assignment information.” <i>See</i> citations for claims 1[c] and 10[b][3]; <i>see also, e.g.:</i> Rothschild explains that the recipient devices include a display 132 that is used by an application (e.g., an e-mail client or web browser) to present an interface (“graphical user interface”) for displaying the interactive advertisement: “The personal communication received by the communication application 134 may be displayed on the recipient display 132[.]” Rothschild 7:51-53. Fig. 3 of Rothschild shows what the e-mail looks like from the sender’s perspective. A POSITA would have recognized that the e-mail displayed on the recipient’s device would be presented in a similar manner.

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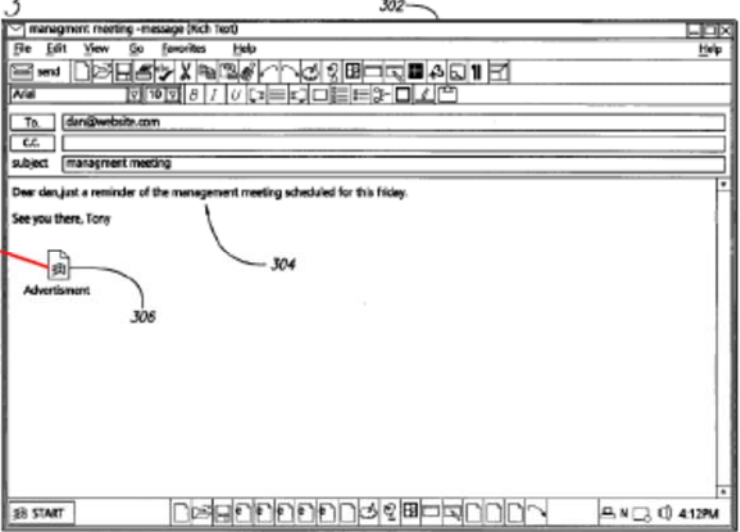
Claim	Exemplary Evidence of Anticipation and/or Obviousness
	<i>FIG. 3</i> <i>“GUI”</i> <i>“GCE to which the hot link is assigned”</i>  Rothschild Fig. 3 (annotated). Thus, because Rothschild describes a recipient device with a communication application to display the e-mail message and the e-mail message includes a graphic or icon that can be interacted with, Rothschild renders obvious “generate a graphical user interface (GUI) to include the GCE to which the hot link is assigned according to the assignment information” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
18[c] in response to activation of the GCE, execute the	Rothschild discloses, and/or renders obvious, “in response to activation of the GCE, execute the instructions of the hot link to perform the action.” <i>See</i> citations for claims 1[b] and 10[b][2]; <i>see also, e.g.:</i>

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instructions of the hot link to perform the action.	As explained above at 1[b], when the user interacts with the interactive advertisement and activates the URL, the web browser of the receiving device executes instructions to retrieve content from the location specified by the URL. Thus, Rothschild renders obvious “in response to activation of the GCE, execute the instructions of the hot link to perform the action” as claimed. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.
19. The one or more NTCRM of claim 18, wherein the GUI is a first GUI, and execution of the program code is to cause the user device to:	Rothschild discloses, and/or renders obvious, “The one or more NTCRM of claim 18, wherein the GUI is a first GUI, and execution of the program code is to cause the user device to.” <i>See</i> citations for claim 18. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results. Claim 19 is obvious under 35 U.S.C. § 103 over Rothschild and Saltanov. U.S. Patent No. 6,839,411 to Saltanov discloses e-mail forwarding—something that was well-known and commonly done in e-mail applications at the time the ’169 patent was filed. Saltanov describes a “graphical user interface [that] can be implemented in a variety of messaging systems, including electronic mail systems[.]” Saltanov, abstract. Saltanov describes that a user’s device may run “Microsoft Outlook® client messaging software sold by Microsoft Corporation.” Saltanov 5:16-17. “The client messaging software provides a graphical user interface (GUI) to display the user’s messages held in their post office mailbox and to allow the user to invoke messaging functions.” Saltanov 5:17-20. The user can “perform messaging functions such as create, attach, read, modify, reply, forward, store and delete messages of various types.” Saltanov 5:12-14. Saltanov illustrates an example of an e-mail message that is received by a user as shown below in Fig. 4B.

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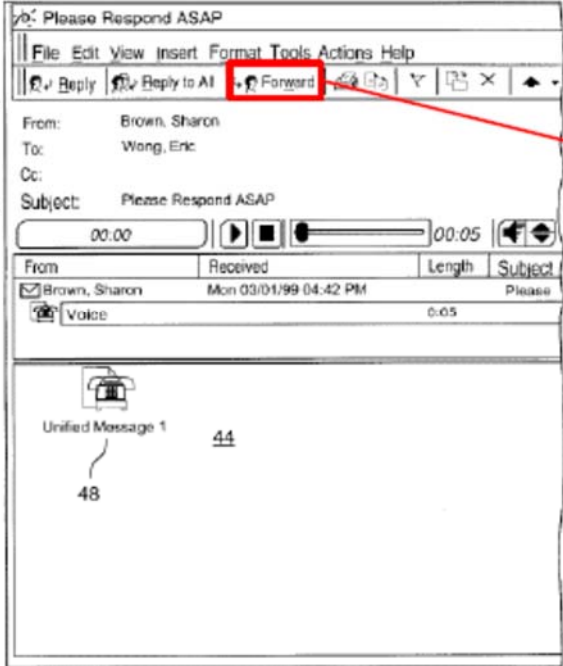
Claim	Exemplary Evidence of Anticipation and/or Obviousness
	 The screenshot shows a graphical user interface for an email client. At the top is a menu bar with 'File', 'Edit', 'View', 'Insert', 'Format', 'Tools', 'Actions', and 'Help'. Below the menu bar is a toolbar with icons for 'Reply', 'Reply to All', 'Forward', and others. The 'Forward' button is highlighted with a red rectangular box. A red arrow points from the text 'forward button' to this box. Below the toolbar, the email header information is displayed: 'From: Brown, Sharon', 'To: Wong, Eric', 'Cc:', and 'Subject: Please Respond ASAP'. Below the header is a progress bar showing '00:00' and '00:05'. Below the progress bar is a table with columns 'From', 'Received', 'Length', and 'Subject'. The table contains one row: 'Brown, Sharon', 'Mon 03/01/99 04:42 PM', 'Please', and 'Please'. Below the table is a 'Voice' button. At the bottom of the window is a large text area labeled 'Unified Message 1' with a reference numeral '44' and a bracketed reference numeral '48' pointing to the text area. Saltanov Fig. 4B. As shown in figure, there is an option to forward the e-mail. Saltanov explains that the “recipient of the message . . . replies back to the sender (or forwards the message to another) such that the reply message includes not only the original message but also additional attachments[.]” Saltanov 5:53-57. When forwarding the message, the user is presented with a new window (i.e., a new GUI), as shown below in Fig. 5B.

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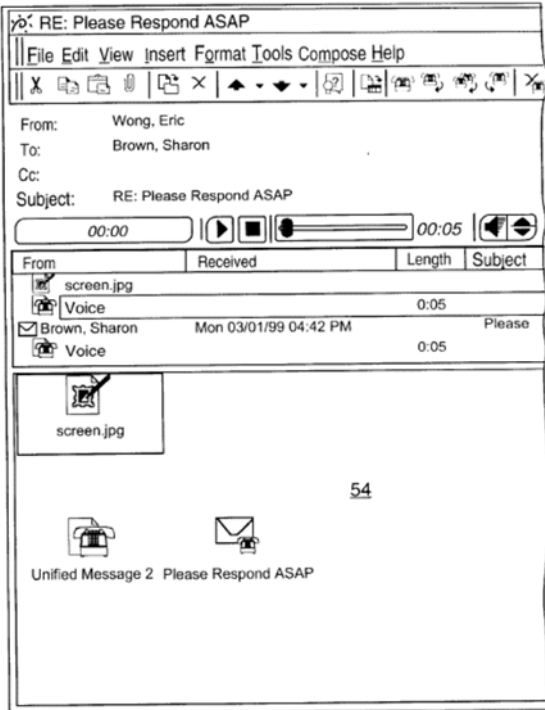
Claim	Exemplary Evidence of Anticipation and/or Obviousness
	 Saltanov Fig. 5B. As shown in the figure, the new window includes a “properties area 56” that has a “To” field and a “Cc” field. The e-mail is then sent to the user when the user clicks send. Saltanov provides an example of forwarding e-mail messages, something that both POSITAs and the general population were doing regularly before the '169 patent was filed. Accordingly, a POSITA would have found it obvious that a recipient of an e-mail message with an interactive advertisement as taught by Rothschild could forward that e-mail message to other people, as evidenced by Saltanov.

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Claim	Exemplary Evidence of Anticipation and/or Obviousness
	As an initial matter, Saltanov is analogous art to the '169 patent because Saltanov relates to the same field of endeavor—telecommunication—as the '169 patent. The '169 patent is “directed to generating and sending a hot link to a telecommunications device”). Similarly, Saltanov relates to user interfaces of e-mail applications. <i>See e.g.</i> Saltanov 5:12-14, Fig. 5B. As explained above, Rothschild’s system allows the sender of an e-mail to “depress the send message button 414 to send the e-mail (which includes the attachment(s) and the selected advertisement) to the designated recipient(s).” Rothschild 9:57-60. In particular, the e-mail message “is forwarded on to the communication application 134 operating on the recipient network device 130.” Rothschild 11:54-56. “[T]he communication application 134 may be an e-mail application (e.g., Microsoft Outlook™)[.]” Rothschild 7:48-50. Accordingly, a POSITA would have found it obvious for the communication application 134 on Rothschild’s recipient device 130 to include the known capabilities, functionalities, and features of the available communication applications, such as Microsoft Outlook. Saltanov describes a “personal computer 120 [that] runs Microsoft Outlook® client messaging software sold by Microsoft Corporation.” Saltanov 5:15-17. “The client messaging software provides a graphical user interface (GUI) to display the user’s messages held in their post office mailbox and to allow the user to invoke messaging functions.” Saltanov 5:17-20. Saltanov gives various examples of the messaging functions “such as create, attach, read, modify, reply, forward, store and delete messages of various types.” Saltanov 5:13-14. Accordingly, a POSITA would have recognized that the communication application 134 of Rothschild, which may be Microsoft Outlook, would include known functionality such as forwarding e-mail messages. A POSITA would have further understood that forwarding e-mail messages would work in a manner that was familiar to many users. In particular, a POSITA would have understood that when forwarding an e-mail, the user is provided with a new window that allows the user to enter the recipients of the forwarded e-mail and send the forwarded e-mail message when ready. <i>See e.g.</i>, Saltanov Fig. 5B, 5B’. When doing so, the originally received e-mail message that includes the interactive advertisement is then forwarded to additional users. A POSITA would have had a reasonable expectation of success when combining the teachings of Saltanov with those of Rothschild. Both Rothschild and Saltanov explicitly suggest the combination as they both list Microsoft Outlook as an example of a communication application. Moreover, Rothschild explicitly suggests that

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Claim	Exemplary Evidence of Anticipation and/or Obviousness
	forwarding e-mails, as shown by the “forward” arrow in Fig. 4. A POSITA would have found it obvious and predictable for the Microsoft Outlook in Rothschild to include the features of the Microsoft Outlook in Saltanov. More specifically, a POSITA would have found it obvious and predictable for the Microsoft Outlook in Rothschild to include the capability of forwarding e-mails. A POSITA would also have realized the benefit of forwarding the interactive advertisement so that it reaches a larger audience. Thus, the combination of Rothschild and Saltanov represents the combination of known elements (e-mail client functionality) to yield predictable results (the ability to forward e-mail). Further, for these same reasons, the combination of Rothschild, Chen, and Saltanov discloses, and/or renders obvious, “The one or more NTCRM of claim 18, wherein the GUI is a first GUI, and execution of the program code is to cause the user device to.”
19[a] generate a second GUI comprising a user selection GCE and a submission GCE, the user selection GCE to control selection of a set of other user devices to be provided with a hot link, and the submission GCE to control submission of the set of other user devices; and	Rothschild discloses, and/or renders obvious, “generate a second GUI comprising a user selection GCE and a submission GCE, the user selection GCE to control selection of a set of other user devices to be provided with a hot link, and the submission GCE to control submission of the set of other user devices.” <i>See, e.g.:</i> To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results. First, Saltanov provides an example in which when a user forwards an e-mail, a new window (included in a “<i>second GUI</i>”) is displayed. “The client messaging software provides a graphical user interface (GUI) to display the user’s messages held in their post office mailbox and to allow the user to invoke messaging functions.” Saltanov 5:17-20. The user can “perform messaging functions such as create, attach, read, modify, reply, forward, store and delete messages of various types.” Saltanov 5:12-14. Saltanov illustrates an example of an e-mail message that is received by a user as shown below in Fig. 4B, which includes a “Forward” button.

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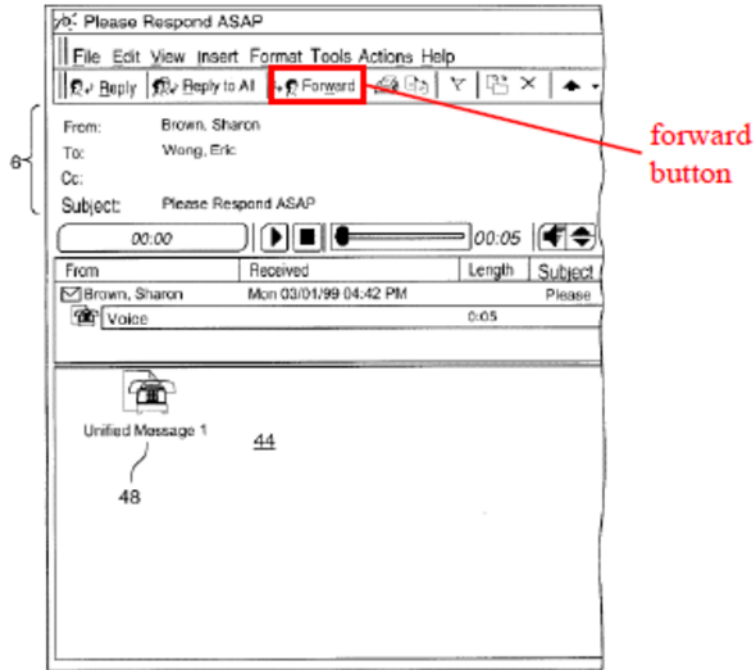
Claim	Exemplary Evidence of Anticipation and/or Obviousness
	 Saltanov Fig 4B (annotated). Saltanov explains that the “recipient of the message ... replies back to the sender (or forwards the message to another) such that the reply message includes not only the original message but also additional attachments[.]” Saltanov 5:53-57. When forwarding the message, the user is presented with a new window (part of the “<i>second GUI</i>”). Second, Saltanov shows that the new window includes fields for entering the users to whom the e-mail will be forwarded. As shown in the figure, the new window includes a “properties area 56” that has a “To” field and a “Cc” field (“<i>user selection GCE to control selection of a set of other user devices to be provided with a hot</i>

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Claim	Exemplary Evidence of Anticipation and/or Obviousness
	<i>link</i>”), as shown below in Fig. 5B. “user selection GCE” 56 “second GUT” 54 Saltanov Fig 5B (annotated). Third, a POSITA would have recognized that the user interface of e-mail applications include “Send” buttons (“<i>submission GCE to control submission of the set of other user devices</i>”) for sending the e-mail message after the recipients have been identified and the message is ready for sending. For example, Rothschild explains that

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	when a user sends an e-mail, “the sender can depress the send message button 414 to send the e-mail (which includes the attachment(s) and the selected advertisement) to the designated recipient(s).” Rothschild 9:57-60. POSITAs also recognized that e-mail clients such as Microsoft Outlook include a “Send” button when sending an e-mail (whether an original e-mail or a forwarded e-mail).  Saltanov Fig 4A (partial). Accordingly, a POSITA would have recognized that a user, who receives an e-mail message with an interactive advertisement as taught by Rothschild, would have the ability to forward that e-mail to additional recipients. When doing so, it would have been obvious for the forwarding user to select the recipients using the “To” and “Cc” fields (<i>“user selection GCE”</i>) and then to click on a “Send” button to transmit the e-mail (<i>“submission GCE”</i>). Thus, because Rothschild describes receiving an e-mail message with an interactive advertisement, and Saltanov provides an example GUI of forwarding e-mails, Rothschild and Saltanov render obvious <i>“generate a second GUI comprising a user selection GCE and a submission GCE, the user selection GCE to control selection of a set of other user devices to be provided with a hot link, and the submission GCE to control submission of the set of other user devices”</i> as claimed. Further, for these same reasons, the combination of Rothschild, Chen, and Saltanov discloses, and/or renders obvious, <i>“generate a second GUI comprising a user selection GCE and a submission GCE, the user selection GCE to control selection of a set of other user devices to be provided with a hot link, and the submission GCE to control submission of the set of other user devices.”</i> It also would have been obvious to modify Rothschild and/or combine Rothschild with other disclosed prior art

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Claim	Exemplary Evidence of Anticipation and/or Obviousness
	references for the following reasons: Graphical user interfaces—including GCEs—for selecting among options and submitting that selection were well-known in the art long before the alleged invention of the ’169 patent. <i>See, e.g.</i>, ’169 charts for Voice Express, Webex, Armstrong, Gupta, Payne, Eudora, Outlook, eRoom, BSCW, TeamSCOPE, Evite, Lotus Notes. One known application of GCEs for selecting among options and submitting that selection was for selecting a set of user devices, including for the purpose of selecting user devices to receive content (including, e.g., via a hot link). Accordingly, at the time of alleged invention of the ’169, GCEs for selecting a set of user devices to receive such content and submitting the same was well known. <i>See, e.g.</i>, ’169 charts for Voice Express, WebEx, Gupta, Payne, Eudora, Outlook, eRoom, BSCW, TeamSCOPE, Evite, Lotus Notes; U.S. Patent No. 7,080,139 to Briggs at, <i>e.g.</i>, 7:37-55 & Fig. 6; U.S. Patent No. 6,714,916 to Robertson at, <i>e.g.</i>, 7:35-52 (“GUI 580 is shown that allows a first user to select other users”) & Figs. 8, 12; U.S. Patent No. 6,519,629 to Harvey at, <i>e.g.</i>, 13:45-54 (“present a list of communication addresses to user ... user may select communication addresses from the list presented, thereby enabling the user to select other users to invite”) & Fig. 3; U.S. Patent Pub. No. 2003/0167281 to Cohen at, <i>e.g.</i>, ¶ 37 (“UI 34 to allow users to select other users and documents in the displayed tool bars”) & Figs. 10-27; U.S. Patent No. 6,839,411 to Saltanov at, <i>e.g.</i>, 5:12-20, 5:53-57, & Figs. 4B, 5B. It was also well-known that GCEs and other graphical user interfaces could be combined or sequenced one after another, such that, if a user interface had one GCE, a second could be added so that the user could view both or in sequence. <i>See, e.g.</i>, charts for VoiceExpress, WebEx, Shutterfly, Blue Mountain; Awesome Cards, Karas, Louis, Roskowski, Liwerant, Gupta, Payne, Eudora, Outlook, eRoom, BSCW, TeamSCOPE, Evite, Lotus Notes. Given the state of the art, and the teachings of Rothschild, a person of ordinary skill in the art would have readily appreciated that, in Rothschild, a second GCE could be added to an offer that comprised a user selection GCE and a submission GCE. This would have been an obvious modification using known methods with predictable results since, for instance, it would have simply required the addition of known and well-understood selection/submission user interface code, using the same techniques to insert this GCE as was used to insert the first GCE of claim 18.

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	A person of ordinary skill in the art would have been motivated to modify Rothschild in this way for any number of reasons. For instance, Rothschild relates to sharing media. It would have been an obvious improvement to add a selection and submission GCE that would allow users to forward media to their friends or other contacts, as it would have facilitated further sharing of the same media To the extent a combination is required, it would have been obvious for a person of ordinary skill in the art to combine Rothschild with the teachings of any one of Voice Express, WebEx, Eudora, Outlook, eRoom, BSCW, TeamSCOPE, Evite, Saltanov, Gupta, Payne, Briggs, Robertson, Lotus Notes, or Harvey. Each of these references discloses selecting a set of user devices and submitting the same. <i>Id.</i> A person of ordinary skill in the art would have been motivated to combine Rothschild with one of these references for any number of reasons. For instance, they involve similar solutions of sharing media—such as a photo, video, or an eCard—with another person, and share the goal of facilitating access to that content. A person of ordinary skill in the art would have looked at the teachings of any one of these other references and recognized it would be advantageous to adopt its selection/submission GCE so that content shared in Rothschild could be even more easily distributed to other users.
19[b] control transmission of another hot link message that includes an indication of the selected set of other user devices in response to selection of the submission GCE.	Rothschild discloses, and/or renders obvious, “control transmission of another hot link message that includes an indication of the selected set of other user devices in response to selection of the submission GCE.” <i>See, e.g.:</i> To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results. As explained above at 19[a], because Saltanov describes forwarding e-mails, a POSITA would have found it obvious for Rothschild’s recipient device to forward the e-mail with an interactive advertisement to additional recipients. The forwarded e-mail thus becomes “<i>another hot link message</i>” with a “To” or “Cc” field that indicates the “<i>selected set of other user devices.</i>” The forwarded message is sent when the user clicks the send

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	button (“<i>in response to selection of the submission GCE</i>”). Further, for these same reasons, the combination of Rothschild, Chen, and Saltanov discloses, and/or renders obvious, “control transmission of another hot link message that includes an indication of the selected set of other user devices in response to selection of the submission GCE.” It also would have been obvious to modify Rothschild and/or combine Rothschild with other disclosed prior art references for the following reasons: Controlling transmission of a hot link message was well-known in the art long before the alleged invention of the ’169 patent. <i>See, e.g.</i>, all ’169 charts. Indeed, Rothschild itself teaches controlling transmission of a hot link message. <i>See</i> citations for claims 1[d] & 10[a][3]. Given the state of the art, and the teachings of Rothschild, a person of ordinary skill in the art would have readily appreciated that Rothschild could be modified to repeat the step of controlling transmission of a hot link message for a second GCE, such as that recited in claim 19[a]. This would have been a simple matter of repeating the same process it already implements and therefore would have been done using known methods with predictable results. A person of ordinary skill would have been motivated to modify Rothschild in this way for the same reasons recited in claim 19[a], as this second step of controlling transmission of a hot link message would have been required for friends and other contacts to receive the forwarded content.
20. The one or more NTCRM of claim 19, wherein the second GUI comprises:	Rothschild discloses, and/or renders obvious, “The one or more NTCRM of claim 19, wherein the second GUI comprises.” <i>See</i> claim 19. As discussed in claim 19, the new window created when forwarding an e-mail is part of “<i>the second GUI</i>.” For the claim limitations below, whichever part of the user interface is presenting the positive and negative graphical control elements is also part of the claimed “<i>second GUI</i>.” To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even

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	without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results. U.S. Patent Publication No. 2002/0002502 A1(“Maes”) demonstrates that user interfaces with a mechanism for providing user feedback were widely known before May of 2001. Maes relates to a tool that “helps a person choose a product from among many possible products.” Maes [0024]. “The tool extracts information about product characteristics that appeal to or repulse the person, and uses the extracted information to present the person with additional product choices.” Maes [0024]. To extract the information on user preferences, Maes’ system provides a “user interface” in which “the user can indicate positive or negative preferences by clicking on buttons under the products[.]” Maes [0071]. “Buttons and menu items can be appropriately marked by the works [sic] ‘like’ and ‘dislike,’ a ‘thumbs-up’ or ‘thumbs-down’ symbol, or the like.” Maes [0071]. A POSITA would have found it obvious for a recipient of Rothschild’s interactive advertisement to provide feedback about the additional content delivered by interacting with the advertisement. In particular, a POSITA would have been motivated, and found it beneficial, for the content of Rothschild’s interactive advertisement to receive user feedback so that the advertisers and marketers can improve their outreach to customers. As an initial matter, Maes is analogous art to the ’169 patent because Maes relates to the same field of endeavor—telecommunication—as the ’169 patent. <i>Compare</i> ’169 Patent 3:59-61 (“[T]he present invention is directed to generating and sending a hot link to a telecommunications device”) <i>with</i> Maes [0063] (describing “communication sessions, such as by electronic mail or by mail or messenger”). As explained above, Rothschild describes “[a]n interactive advertisement is an icon, graphic, text, or voice message that can be interacted with to provide the recipient with additional communication data[.]” Rothschild 8:22-25. Rothschild explains that “[t]he additional communication data can contain advertisement data, entertainment data, educational data, or any other type of data made available to the Web site.” Rothschild 8:59-63. Rothschild explains that an advertisement “should appeal to the e-mail recipient.” Rothschild 3:24-25. Maes provides a mechanism by which users can rate content. As explained above, Maes describes a “user interface” in which “the user can indicate positive or negative preferences by clicking on buttons under the

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Claim	Exemplary Evidence of Anticipation and/or Obviousness
	products.” Maes [0071]. “Buttons and menu items can be appropriately marked by the works [sic] ‘like’ and ‘dislike,’ a ‘thumbs-up’ or ‘thumbs-down’ symbol, or the like.” Maes [0071]. Accordingly, a POSITA would have found it obvious for a recipient of Rothschild’s interactive advertisement to provide feedback on the advertised product. A POSITA would have found it obvious to include such feedback buttons within the e-mail message or within the additional content received by activating the URL of the interactive advertisement. Indeed, mechanisms for providing feedback on advertisements was well-known. <i>See e.g.</i>, WO2001008020A1, 26 (describing an “extensive feedback mechanism which applies to ... advertisements displayed” and “is preferably in the form of either ‘thumbs up’ or ‘thumbs down’”). A POSITA would have had a reasonable expectation of success. Maes explains that its feedback mechanism can be done through “communication sessions, such as by electronic mail or by mail or messenger.” Maes [0063]; A POSITA would have found the combination beneficial. Maes explains that “an embodiment of the invention can allow the user to rate each or some of the products, to provide more information about the user’s desires than which are the most/least liked.” Maes [0126]; <i>see also</i> WO2001008020A1, 26 (“In any forum or system, the information is only as good as the people participating. Without feedback, the incentive to be responsible and provide good and helpful information to others is low”). The combination of Maes and Rothschild thus yields the predictable result of providing advertisers with a mechanism to increase the appeal of their advertisements. Accordingly, the combination of Maes with Rothschild represents the use of a known technique (Maes’s ratings mechanism) to improve similar methods (Rothschild’s interactive advertisement content) in the same way (providing advertisers with feedback to improve their outreach). Further, for these same reasons, the combination of Rothschild, Chen, Saltanov, and Maes discloses, and/or renders obvious, “The one or more NTCRM of claim 19, wherein the second GUI comprises.” It also would have been obvious to modify Rothschild and/or combine Rothschild with other disclosed prior art references for the following reasons: Graphical control elements and other user interface elements for expressing a positive or negative opinion, as well as techniques for more generally collecting opinion or popularity information, were well-known in the art

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	long before the alleged invention of the '169 patent. <i>See, e.g.</i>, '169 charts for Bartholomew, eOffers, WebEx, LAUNCHcast, BSCW, eRoom, Gupta, Lee, Evite; Survey Monkey;¹ David J. Solomon, “Conducting Web-Based Surveys,” 7 Practical Assessment Research, and Evaluation 19 (2000) & Web Survey Mailer System; U.S. Patent No. 7,080,139 to Briggs at, <i>e.g.</i>, 5:5-9, 6:6-21, 10:27-37, 11:54-12:5, 17:5-25 (opinion through “selection of emoticons” and/or “ratings”) & Figs. 9-11, 16, 23; U.S. Patent No. 8,612,297 to Levy at, <i>e.g.</i>, 7:40-57 (“positive, negative or neutral” “opinions”), 9:11-18 (same) & Fig. 10 (user interface for the same); U.S. Patent No. 9,424,604 to Boulter at, <i>e.g.</i>, 5:39-43, 6:12-16, 11:46-57, 17:56-67, 18:24-46 & Figs. 1-9, 12-15, 31 (user interface to submit ratings); U.S. Patent Pub. No. 2002/0002502 to Maes at, <i>e.g.</i>, ¶¶ 24, 71, 126. Given the state of the art, and the teachings of Rothschild, a person of ordinary skill in the art would have readily appreciated that, in Rothschild, a second GCE could have been added that comprised a positive opinion GCE. This would have been an obvious modification using known methods with predictable results since it would have simply been a matter of rearranging buttons and labels. To the extent a combination is required, it would have been obvious for a person of ordinary skill in the art to combine Rothschild with the teachings of any one of at least Boulter, Levy, Briggs, Maes, Lee, LAUNCHcast, BSCW, eRoom, Evite, or WebEx. Boulter discloses a “RATE IT” slider (GCE) for collecting positive or negative opinions. <i>See, e.g.</i>, Boulter at Figs. 1-9, 12-15, 31. Levy discloses “positive” and “negative” radio buttons (GCE) for collecting positive or negative opinions. <i>See, e.g.</i>, Levy at Fig. 10. Briggs discloses “emoticon” buttons (GCE) for collecting positive or negative opinions. <i>See, e.g.</i>, Briggs at Figs. 9-11, 16, 23. WebEx has a “Polling” GCE for collecting positive or negative opinions. <i>See</i> '169 chart for WebEx. LAUNCHcast has a “My Rating” GCE and “X” GCE for collecting positive or negative opinions. <i>See</i> '169 chart for LAUNCHcast. eRoom has a “poll” GCE for collecting positive or negative opinions. <i>See</i> '169 chart for eRoom. BSCW has a “rating” GCE for collecting positive or negative opinions. <i>See</i> '169 chart for BSCW. Maes has a “user interface” in which “the user can indicate positive or negative preferences by clicking on buttons under the products.” <i>See, e.g.</i>, Maes at ¶¶ 24, 71, 126. Lee discloses contests, including popularity votes, that allow users to record positive or negative opinions. <i>See</i> '169 chart for Lee. Gupta has a “poll” GCE for collecting positive or negative opinions. <i>See</i> '169 chart for Gupta. Evite has a “poll” GCE for collecting

¹ *See, e.g.*, <https://web.archive.org/web/20010418152040/http://www.surveymonkey.com/>.

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	positive or negative opinions. <i>See</i> '169 chart for Evite. A person of ordinary skill in the art would have been motivated to combine Rothschild with any one of these References for any number of reasons. For instance, it would be advantageous to solicit feedback on the content that was shared at the hotlink, which could then be used to further refine the content or monetized for advertising or similar usages. Including an opinion GCE would make it easier for the user to provide this feedback and in real-time, which would increase response rate.
20[a] a positive opinion GCE to control submission of a positive opinion of a content item; and	Rothschild discloses, and/or renders obvious, “a positive opinion GCE to control submission of a positive opinion of a content item.” <i>See, e.g.:</i> To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results. As explained above at 18[a], a POSITA would have found it obvious for Rothschild’s recipient device to include a user interface for providing feedback, as evidenced by Maes. Maes describes a “user interface” in which “the user can indicate positive or negative preferences by clicking on buttons under the products.” Maes [0071]. “Buttons and menu items can be appropriately marked by the works [sic] ‘like’ and ‘dislike,’ a ‘thumbs-up’ or ‘thumbs-down’ symbol, or the like.” Maes [0071]. Thus, because Maes describes a “thumbs up” button for rating content, which a POSITA would have found applicable to Rothschild’s interactive advertisement, Rothschild and Maes render obvious “<i>a positive opinion GCE to control submission of a positive opinion of a content item</i>” as claimed. Further, for these same reasons, the combination of Rothschild, Chen, Saltanov, and Maes discloses, and/or renders obvious, “a positive opinion GCE to control submission of a positive opinion of a content item.”
20[b] a negative opinion GCE to	Rothschild discloses, and/or renders obvious, “a negative opinion GCE to control submission of a negative opinion of the content item.” <i>See, e.g.:</i>

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control submission of a negative opinion of the content item.	To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results. As explained above at 18[a], a POSITA would have found it obvious for Rothschild’s recipient device to include a user interface for providing feedback, as evidenced by Maes. Maes describes a “user interface” in which “the user can indicate positive or negative preferences by clicking on buttons under the products.” Maes [0071]. “Buttons and menu items can be appropriately marked by the works [sic] ‘like’ and ‘dislike,’ a ‘thumbs-up’ or ‘thumbs-down’ symbol, or the like.” Maes [0071]. Thus, because Maes describes a “thumbs down” button for rating content, which a POSITA would have found applicable to Rothschild’s interactive advertisement, Rothschild and Maes render obvious “<i>a negative opinion GCE to control submission of a negative opinion of the content item</i>” as claimed. Further, for these same reasons, the combination of Rothschild, Chen, Saltanov, and Maes discloses, and/or renders obvious, “a negative opinion GCE to control submission of a negative opinion of the content item.” <i>See</i> It also would have been obvious to modify Rothschild and/or combine Rothschild with other disclosed prior art references for the following reasons: Graphical control elements and other user interface elements for expressing a positive or negative opinion, as well as techniques for more generally collecting opinion or popularity information, were well-known in the art long before the alleged invention of the ’169 patent. <i>See, e.g.</i>, ’169 charts for Bartholomew, eOffers, WebEx, LAUNCHcast, BSCW, eRoom, Gupta, Lee, Evite; Survey Monkey;² David J. Solomon, “Conducting Web-Based Surveys,” 7 Practical Assessment Research, and Evaluation 19 (2000) & Web Survey Mailer System; U.S. Patent No. 7,080,139 to Briggs at, <i>e.g.</i>, 5:5-9, 6:6-21, 10:27-37, 11:54-12:5, 17:5-25 (opinion through

² *See, e.g.*, <https://web.archive.org/web/20010418152040/http://www.surveymonkey.com/>.

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Claim	Exemplary Evidence of Anticipation and/or Obviousness
	“selection of emoticons” and/or “ratings”) & Figs. 9-11, 16, 23; U.S. Patent No. 8,612,297 to Levy at, <i>e.g.</i>, 7:40-57 (“positive, negative or neutral” “opinions”), 9:11-18 (same) & Fig. 10 (user interface for the same); U.S. Patent No. 9,424,604 to Boulter at, <i>e.g.</i>, 5:39-43, 6:12-16, 11:46-57, 17:56-67, 18:24-46 & Figs. 1-9, 12-15, 31 (user interface to submit ratings); U.S. Patent Pub. No. 2002/0002502 to Maes at, <i>e.g.</i>, ¶¶ 24, 71, 126. Given the state of the art, and the teachings of Rothschild, a person of ordinary skill in the art would have readily appreciated that, in Rothschild, a second GCE could have been added that comprised a positive opinion GCE. This would have been an obvious modification using known methods with predictable results since it would have simply been a matter of rearranging buttons and labels. To the extent a combination is required, it would have been obvious for a person of ordinary skill in the art to combine Rothschild with the teachings of any one of at least Boulter, Levy, Briggs, Maes, Lee, LAUNCHcast, BSCW, eRoom, Evite, or WebEx. Boulter discloses a “RATE IT” slider (GCE) for collecting positive or negative opinions. <i>See, e.g.</i>, Boulter at Figs. 1-9, 12-15, 31. Levy discloses “positive” and “negative” radio buttons (GCE) for collecting positive or negative opinions. <i>See, e.g.</i>, Levy at Fig. 10. Briggs discloses “emoticon” buttons (GCE) for collecting positive or negative opinions. <i>See, e.g.</i>, Briggs at Figs. 9-11, 16, 23. WebEx has a “Polling” GCE for collecting positive or negative opinions. <i>See</i> ’169 chart for WebEx. LAUNCHcast has a “My Rating” GCE and “X” GCE for collecting positive or negative opinions. <i>See</i> ’169 chart for LAUNCHcast. eRoom has a “poll” GCE for collecting positive or negative opinions. <i>See</i> ’169 chart for eRoom. BSCW has a “rating” GCE for collecting positive or negative opinions. <i>See</i> ’169 chart for BSCW. Maes has a “user interface” in which “the user can indicate positive or negative preferences by clicking on buttons under the products.” <i>See, e.g.</i>, Maes at ¶¶ 24, 71, 126. Lee discloses contests, including popularity votes, that allow users to record positive or negative opinions. <i>See</i> ’169 chart for Lee. Gupta has a “poll” GCE for collecting positive or negative opinions. <i>See</i> ’169 chart for Gupta. Evite has a “poll” GCE for collecting positive or negative opinions. <i>See</i> ’169 chart for Evite. A person of ordinary skill in the art would have been motivated to combine Rothschild with any one of these references for any number of reasons. For instance, it would be advantageous to solicit feedback on the content that was shared at the hotlink, which could then be used to further refine the content or monetized for advertising or similar usages. Including an opinion GCE would make it easier for the user to provide this feedback and in real-time, which would increase response rate.

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Claim	Exemplary Evidence of Anticipation and/or Obviousness
21. The one or more NTCRM of claim 18, wherein execution of the instructions of the hot link is to cause the user device to: obtain and render a web page in a web browser implemented by the user device; execute executable instructions of an application program, wherein the executable instructions of the application program are stored by a memory device of the user device, or the executable instructions of the application program are to be obtained by the user device over a communication network; or adjust radio	Rothschild discloses, and/or renders obvious, “The one or more NTCRM of claim 18, wherein execution of the instructions of the hot link is to cause the user device to: obtain and render a web page in a web browser implemented by the user device; execute executable instructions of an application program, wherein the executable instructions of the application program are stored by a memory device of the user device, or the executable instructions of the application program are to be obtained by the user device over a communication network; or adjust radio frequency circuitry of the user device to obtain broadcasted content for display.” <i>See</i> citations for claims 7, 13, and 18. <i>See</i> claim 18. <i>See</i> claim 7. Because the claim is written with alternative language (i.e., “or”), the claim is met because claim 21 is met. To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.

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frequency circuitry of the user device to obtain broadcasted content for display.	
22. The one or more NTCRM of claim 18, wherein the GUI comprises an indication about the hot link, wherein the indication about the hot link comprises text, multimedia, or a link pointing to a resource that includes information about the hot link.	Rothschild discloses, and/or renders obvious, “The one or more NTCRM of claim 18, wherein the GUI comprises an indication about the hot link, wherein the indication about the hot link comprises text, multimedia, or a link pointing to a resource that includes information about the hot link.” <i>See citations for claims 4, 14, and 18.</i> <i>See claims 4 and 18.</i> To the extent this limitation is not expressly and/or inherently disclosed, such limitation is obvious, even without resorting to the disclosures of any other reference, because it was within the common knowledge of persons of ordinary skill in the art, and was used in the claims according to known methods, to achieve predictable results.