

REMARKS

Table of Contents of Remarks

	Page
The examiner interview	18
Accompanying declaration	19
Support for amendments to description.....	19
Support for amendments to the claims	21
Distinction of claimed subject matter over the prior art.....	30
I. Nickerson (i) fails to disclose or suggest “configuring each [of a plurality of arbitrary data items] into a distinct information object”, (ii) similarly fails to disclose or suggest “using the extracted data to cause display, simultaneously, of a representation of each of the information objects in a uniform format, wherein the format includes a card, and, within the card, an icon area for graphical and textual material, the heading, the source, a set of indicators, and a set of icons giving graphical access to functions”, and fails to disclose or suggest “storing data corresponding to each of the cards in a database, configured so that each card in the database is sharable.”	30
II. Maybury fails to disclose or suggest the requirements of claim 17.	36

The examiner interview

The courtesy of Examiner Hailu in granting a telephone interview to the undersigned attorney with applicant Dr. Paul Keel on October 28, 2015, is acknowledged with appreciation. In the interview, there was discussion of claim 1 in relation to the Nickerson reference. Examiner Hailu maintained that paragraphs 45 and 52 of Nickerson disclose the subject matter of claim 1. Mr. Sunstein disagreed, pointing out, among other things, that the language relied upon by Examiner Hailu in paragraph 45 (“the reaction information may include the title, URL, start time and date, reaction time and date, user reaction”) pertains to information entered by the user and not information caused to be displayed by the server (see earlier in the paragraph: “Tool 30, using the user’s computer system, may communicate user reaction information for page 28 to server 18 before or after user 16 leaves page 28.”) As to paragraph 52, Examiner Hailu took the position that

because a web page could “include a picture of a particular make and model of vehicle” the contents of the web page could satisfy the requirements of claim 1. Mr. Sunstein disagreed.

Accompanying declaration

Accompanying this response is a declaration by one of the inventors, Dr. Paul Keel, which is submitted in support of the response.

Support for amendments to description

The Description is amended in this Response A to explicitly add to the present application material that is incorporated by reference. By way of background, each of the applications that is a source of priority for the present application is incorporated by reference. Moreover, each predecessor nonprovisional application that is a source of priority for the present application incorporates by reference each earlier application that is a source of priority for the predecessor. In short, there is a chain of incorporations by reference going back to the first filed application in the chain.

In these remarks we show the support for each amendment made to the present application. In the listing below, we use the following terminology to identify predecessor applications:

Application Number 1: Provisional Patent Application Serial Number 60/566,723, filed April29, 2004, entitled "METHODS AND APPARATUS FOR MANAGING AND INFERRING RELATIONSHIPS FROM INFORMATION".

Application Number 2: Patent Application Serial Number 11/118,301 (now US Patent Number 7,640,511), filed April29, 2005, entitled "METHODS AND APPARATUS FOR MANAGING AND INFERRING RELATIONSHIPS FROM INFORMATION OBJECTS".

The amendments to the Description have support as indicated below.

Amendment Number 1, paragraph [00057].

For substituting “comments” with “messages”, support is found in Application No. 2, page 13, lines 13-17 showing the correspondence of these words.

Amendment Number 2, immediately after paragraph [00058].

For paragraph [00058A], support is found in Application No. 2 starting on page 31 line 31 and ending on page 33 line 2.

Amendment Number 3, paragraph [00062].

Support is found in Application No. 1, page 27, lines 47-48.

Amendment Number 4, paragraph [00067].

Support is found in Application No. 2, page 18, lines 10-13.

Amendment Number 5, immediately after paragraph [00076].

For paragraph [00076A], support is found in Application No. 2 starting on page 19, line 25 and ending on page 20, line 17.

For paragraph [00076B], support is found in Application No. 1 starting on page 91, line 54 and ending on page 92, line 10.

For paragraph [00076C], support is found in Application No. 2 starting on page 21, line 16 and ending on page 22, line 8.

For paragraph [00076D], support is found in Application No. 2 starting on page 26, line 21 and ending on page 28, line 27.

For paragraph [00076E], support is found in Application No. 1 starting on page 88, line 43 and ending on page 89, line 36.

For paragraph [00076F], support is found in Application No. 1 starting on page 93, line 43 and ending on page 94, line 12.

In the foregoing amendments, the insertions are taken verbatim from the referenced portions of the above applications (with various references in the copied text being deleted to avoid confusion), except that the parenthetical “(IO)”, meaning “Information Object” is occasionally inserted after “card” and after “node” in the referenced portions. Support for “card” as an “Information Object” appears in the application, paragraph [00022]: “As used herein the term “card,” “IO” and “information object” are used interchangeably, and a card is one example configuration or representation of an information object.” Support for “node” as an “Object” appears in application No. 1 on page 51, line 25: “This section uses the words Objects, Items, Nodes, and Cards for similar concepts.”

Claims 1-20 are pending. Claims 1, 3, 4, 17 and 20 have been amended so as to assure that the claims have an effective filing date no later than the filing date of Application No. 2. Claims 1 and 17 have also been amended in order to claim subject matter of the invention with greater precision, even though these claims previously distinguished over the prior art relied upon in the office action. Claim 8 has been canceled. Claims 21-28 have been added. Therefore, claims 1-7 and 9-28 are pending. Applicants respectfully request reconsideration of the claims in view of the above amendments and these remarks.

Support for amendments to the claims

The amendments to the Claims have support as indicated below.

Amendment to Claim 1

For substituting “multimedia data” with “graphical and textual material”, support is found in paragraph [00052] (“The icon area allows for the placement of graphical and/or textual material ...”).

For substituting “URL” with “hyperlink”, support is found in paragraph [00016] (“IOs that are data files that can include other data files (such as documents, hyperlinks, and executables) ...”).

For substituting “a multimedia window” with “an icon area for graphical and textual material”, support is found in paragraph [00052] (“The icon area allows for the placement of graphical and/or textual material ...”).

For “using the extracted data to cause display, simultaneously, of a representation of each of the information objects in a uniform format”, see numerous figures, including, for example, Figs. 1, 4A, 4B, 5B, and 6B.

For “storing data corresponding to each of the cards in a database, configured so that each card in the database is sharable”, see paragraph 76 (database), 92 (importation, which is a form of sharing), and 94 (sharing).

Amendment to Claims 3 and 4

For substituting “comment/s” with “message/s”, support is found in amended paragraph [00057] (“... each IO 320 can further include features such as an instant messaging capability allowing to users in a distributed system to share access to an IO in order to exchange comments or messages between themselves concerning information associated with the IO.”) and in Application No. 2, page 13, lines 13-17 showing the correspondence of these words.

Amendment to Claim 17

For substituting “news feeds” with “information sources”, support is found in paragraph [00065] (“The News View provides users with the technology to effectively monitor and visualize additions and modifications from information sources such as web sites, databases, security cameras, alarm systems, sensors, news feeds and so forth.”).

For adding the limitation “obtaining additions and modifications to the information sources and converting the additions and modifications into data items”, support is also found in paragraph [00065] as recited above.

For substituting “multimedia data” with “graphical and textual material”, support is found in paragraph [00052] (“The icon area allows for the placement of graphical and/or textual material ...”).

For substituting “URL” with “hyperlink”, support is found in paragraph [00016] (“IOs that are data files that can include other data files (such as documents, hyperlinks, and executables) ...”).

For substituting “a multimedia window” with “an icon area for graphical and textual material”, support is found in paragraph [00052] (“The icon area allows for the placement of graphical and/or textual material ...”).

For inserting “automatically collected” and “data items therein are arranged chronologically” support is found in paragraph [00098] (“... News View having an adaptor for receiving news feeds and the user interface chronologically organizes information chronologically in a subject-time matrix ...”).

For “using the extracted data to cause display, simultaneously, of a representation of each of the information objects in a uniform format”, see numerous figures, including, for example, Figs. 1, 4A, 4B, 5B, and 6B.

Amendment to Claim 20

For substituting “sensors” with “sensor data”, support is found in paragraph [00065] (“The News View 305 provides users 108 with the technology to effectively monitor and visualize additions and modifications from information sources such as web sites, databases, security cameras, alarm systems, sensors, news feeds and so forth...”). The substitution corrects a grammatical error. Only sensor data and not the sensor itself can be transmitted for information processing.

The new Claims have support as indicated below.

New Claim 21

Support is found in paragraphs [00017] (“Copies of IOs remain synchronized if displayed on different IVs.”), [00048] (“IOs can be copied or transferred between the same or different types of IVs, copied or transferred between the IVs of the same or different users, remain synchronized if copied to multiple IVs, ...”) and [00092] (“The user can import an IO from another user into the Workspace View which will create an IO copy that is synchronized with the original IO.”).

New Claim 22

For convenience in showing support, we reproduce this claim with reference numbers, which will be used below to indicate the source of support.

22. (New) A method according to claim 1, further comprising:

[22.1.] serving, to a client computing device of a first user, a view of a first set of information objects that constitute a collection of the first user;

[22.2.] serving, to a client computing device of a second user, a view of a first set of information objects that constitute a collection of the second user;

[22.3.] storing the information objects in a database, each of the information objects being stored in association with data pertinent thereto including

[22.3.1.] any users thereof,

[22.3.2.] spatial location thereof in the workspace view,

[22.3.3.] content and metadata thereof, such metadata including comments and votes,

[22.3.4.] times of storage, viewing and copying thereof,

[22.3.5.] relationship thereof to any other information objects; and

[22.4.] processing information object data in the database to make a recommendation to the first user, wherein the recommendation is based on at least one of the criteria in the group consisting of:

[22.4.1.] number of direct and indirect relations of information objects in the collection of the first user with another information object in the database;

[22.4.2.] addition of a first pair of information objects to a collection of another user in short interval of time, of which one of the first pair of information objects

is already in the collection of the first user;

[22.4.3.] presence of a second pair of information objects in the collection of the other user in close spatial proximity to one another, of which one of the second pair of information objects is already in the collection of the first user;

[22.2.4.] presence of a given information object in a row or column of information objects in the collection of the other user, wherein one of the information objects in the row or column is already in the collection of the first user;

[22.4.5.] popularity of an information object in the database, based on a popularity measure selected from the group consisting of number of users, number of views, number of copies made, number of comments made, number of votes, and combinations thereof;

[22.4.6] presence of an information object from a second user with whom the first user previously exchanged information objects, comments or votes;
and combinations thereof.

Reference [22.1.]: Support is found in paragraph [00067] (“... users 108 use their individual Workspace Views 300 to organize and analyze information.”).

Reference [22.2.]: Support is found in paragraph [00067] (“The exchange server 153 produces the exchange view 315 to display cards (IOs) 320 that are concurrently displayed in one or more workspace views 300 of at least one other user 108.”) and in paragraph [00076C] (“...the transformation algorithm 155 can identify, in order of relevance, a set of resultant cards not already placed in that user’s workspace 300. These can be shown to the user in the database view 310.”), whereas the words “Database View” and “Exchange View” are used interchangeably as indicated in paragraph [00076] (“The Discovery View presents individual users with a custom selection of potentially relevant IOs, and in one embodiment consolidates the Exchange View (315) and Database View (310).”).

Reference [22.3.]: Support is found in paragraph [00058A] (“... the relation manager 150 creates a new card record 160 in the database to correspond to the new card in the workspace view 300.”; “The relation manager 150 stores card attributes and an identity of the information source in the new card record 160 in the card database.”) and

paragraph [00076D] (“Card content can include content displayed on the card, parameters associated with the card, or information content hyperlinked to the card or metadata about the card (e.g., creation time, time of last access, time of last copy, user access history, etc.) ...”).

Reference [22.3.1.]: Support is found in paragraph [00058A] (“The relation manager 150 stores an identity of the first user in the new card record 160.”) and paragraph [00076D] (“Card content can include content displayed on the card, parameters associated with the card, or information content hyperlinked to the card or metadata about the card (e.g., creation time, time of last access, time of last copy, user access history, etc.) that might not be readily visible from viewing the cards in a view.”).

Reference [22.3.2.]: Support is found in paragraph [00058A] (“The relation manager 150 stores a card position in the new card record 160.”).

Reference [22.3.3.]: Support is found in paragraph [00076B] (“The Recognition Functions keep track of all interactions that take place among users. An interaction is registered if a user copies a card, views the content associated with a card, or adds a comment, vote or notification to a card.”) and paragraph [00076D] (“Card content can include content displayed on the card, parameters associated with the card, or information content hyperlinked to the card or metadata about the card (e.g., creation time, time of last access, time of last copy, user access history, etc.) that might not be readily visible from viewing the cards in a view.”).

Reference [22.3.4.]: Support is found in paragraph [00058A] (“The relation manager 150 stores a card creation time in the new card record.”) and paragraph [00076D] (“Card content can include content displayed on the card, parameters associated with the card, or information content hyperlinked to the card or metadata about the card (e.g., creation time, time of last access, time of last copy, user access history, etc.) that might not be readily visible from viewing the cards in a view.”).

Reference [22.3.5.]: Support is found in paragraph [00076A] (“The database items including the relations 170 and the card records 160 are combined into one coherent network of cards using the relation processing algorithms 155.”) and in paragraph [00076B] (“The Recognition Functions record and combine all explicit relations among cards established by the users as well as all implicit relations established

by the Algorithms.”) and paragraph [00076D] (“The relation manager 150 applies at least one interpretation algorithm 155 between card (IO) records 160 in the card database 125 to create relations 170 between card records 160 in the card database 125.”).

Reference [22.4.]: Support is found in paragraph [00076C] (“The relation manager 150 analyzes card (IO) records 160 and card relations 170 within the card (IO) database 125. The results of this analysis can produce an indication of other card records 160 in the card database 125 that correspond to other cards 320 that are not currently displayed in the workspace view 300 of the user 108, but that might be of interest to that user operating that workspace view 300.”).

Reference [22.4.1.]: Support is found in paragraph [00076A] (“...if card A is related to card B and card B is related to card C, then the database server 154 can decide to relate card A and C because the indirect relation suggests a partial correlation.”), paragraph [00076E] (“Every search returns the node referenced by the Start Point as well as a selection of directly and indirectly connected nodes.”), paragraph [00076E] (“Other criteria of organizing the search results include the distance of nodes from the Start Point, the number of relations associated with individual nodes, ...), paragraph [00076F] (“The Weight Algorithm sorts cards by the number of relations associated with individual cards.”), and paragraph [00076F] (“The Relevance Algorithm ... considers relations that connect with cards the user is using. For example, a card on a user's Exchange View may be related to four cards only one of which the user is using on his Workspace View. Thus, the number of associated relations for this card is assumed one rather than four.”).

Reference [22.4.2.]: Support is found in paragraph [00076D] (“... the relation manager 150 can detect and analyze chronological context of the at least two card records (e.g., sequence of creation or modification of card information).”).

Reference [22.4.3.]: Support is found in paragraph [00076D] (“The relation manager 150 identifies implicit relations between cards in the first set of cards displayed on the graphical user interface based on proximity of cards on the graphical user interface.”).

Reference [22.4.4.]: Support is found in paragraph [00076D] (“The relation manager 150 identifies implicit relations between cards in the first set of cards displayed on the graphical user interface based on horizontal alignment of cards 320 on the

graphical user interface 132.” And paragraph [00076D] (“The relation manager 150 identifying implicit relations between cards in the first set of cards displayed on the graphical user interface based on vertical alignment of cards on the graphical user interface.”).

Reference [22.4.5.]: Support is found in paragraph [00076D] (“... the relation manager 150 can detect and analyze collaborative context by at least two users 108 of at least two cards 320 respectively associated with the card records 160. An example of collaborative context is when two or more users share two (or more) cards such as by providing comments to those cards, or using instant messaging to discuss information associated with the cards, or via other common access (e.g., copying to workspace) to the cards by those two or more users.”), paragraph [00076E] (“Other criteria of organizing the search results include ... the card properties such as card sizes, modification dates, authors, contents, notifications, comments, votes, accesses, font types, font styles, font sizes, pictures, and locations.”) and paragraph [00076F] (“The Unity Algorithm sorts cards (IOs) by the number of current and past users of individual cards. A card user is defined as somebody who created, copied, took ownership, reviewed the content, commented, or voted for a particular card. The Unity Algorithm assumes that the activity associated with a card is a meaningful way to determine the importance and popularity of the card.”).

Reference [22.4.6.]: Support is found in paragraph [00076F] (“The Group Algorithm fosters the information exchange among users that have had frequent interactions in the past. The Group Algorithm considers an interaction when a user copies a card from another user, takes ownership over another user's card, or adds a comment or a vote to another user's card. The Group Algorithms orders cards based on the number of interactions that a particular user had with the individual card authors.”).

New Claim 23

Support is found in paragraph [00076C]. (“...the transformation algorithm 155 can identify, in order of relevance, a set of resultant cards not already placed in that user's workspace 300.”).

New Claim 24

Support is found in paragraph [00076C]. (“In one configuration, cards 320 displayed on views not only hint relevant information but also inform about people (the authors of the cards) with relevant knowledge on a particular topic.”).

New Claim 25

Support is found in paragraph [00053] (“An access log function provides users with a detailed record about the IO history. The Log Function provides users with a detailed record indicating the dates, times and names of all users that previously viewed, copied or modified the card (IO).”) and [00054] (“The date / time bar 324 displays the date and time of the most recent IO modification. The relation manager can use the date / time bar indication to reconstruct the chronology of contributions from different users and sources.”).

New Claim 26

Support is found in paragraph [00024] (“News feeds include but are not limited to news, alerts, announcements, motion detection events triggering security cameras, emails, instant messages (IMs), short message services (SMSs), sensors, real time search results, and custom content.”).

New Claim 27

Support is found in paragraph [00062] (“IOs 320 in the News View 305 can be organized by time and information sources (e.g., by topic or content area) as well as by geographic locations associated with the information represented by each IO 320, and can be filtered for user specific keywords.”).

New Claim 28

Support is found in paragraph [00068] (“The News View can also be used as a RSS feed generator. For example, a user could create an empty News View that all users can view and add IOs to.”).

Distinction of claimed subject matter over the prior art

- I. Nickerson (i) fails to disclose or suggest “configuring each [of a plurality of arbitrary data items] into a distinct information object”, (ii) similarly fails to disclose or suggest “using the extracted data to cause display, simultaneously, of a representation of each of the information objects in a uniform format, wherein the format includes a card, and, within the card, an icon area for graphical and textual material, the heading, the source, a set of indicators, and a set of icons giving graphical access to functions”, and fails to disclose or suggest “storing data corresponding to each of the cards in a database, configured so that each card in the database is sharable.”

Claim 1 requires three processes, none of which is disclosed or suggested by the Nickerson reference asserted by the Office Action to anticipate claim 1.

As a preliminary matter, claim 1 is directed to “[a] computer-implemented method of interacting *with a plurality of arbitrary data items*” (emphasis added). The claim requires a “plurality” of data items, and the data items are “arbitrary”. The two processes required by claim 1 operate on these arbitrary data items (i) to configure each data item into a distinct information object and (ii) to cause display, simultaneously, of a representation of each of the information objects in a uniform format.

As discussed in the application, and as pointed out in the accompanying declaration of Dr. Paul Keel, an inventor herein, the “information objects”, in accordance with various embodiments of the present invention, are designed to handle a wide range of data items. These data items include documents, hyperlinks, and executables (see Application, paragraph 16), as well as feeds, including news, alerts, announcements, motion detection events triggering security cameras, emails, instant messages (IMs), short message services (SMSs), sensors, real time search results, and custom content (see Application, paragraph 24). Moreover, information objects in such embodiments can “display” different types of files, such as pictures, text, movies, and flash applications, etc. (Application, paragraph 39). Declaration of Dr. Paul Keel, paragraph 3.

In contrast, Nickerson concerns only web pages, as indicated by its title: COLLECTING A USER RESPONSE TO AN EXPLICIT QUESTION SPECIFICALLY CONCERNING *A PARTICULAR WEB PAGE OF A WEBSITE* (emphasis added). As pointed out by Dr. Keel, web pages are displayed in a web browser. A web page is written in hypertext markup language (HTML), and provides data (which may include a set of style sheets) instructing the browser generally how to render the content defined of the web page. In all cases, the appearance of a web page reflects the work of a human (in specifying the content and the layout). There is no requirement that any given web page should have the same appearance as any other web page. Declaration of Dr. Paul Keel, paragraph 4.

The body of claim 1 specifies three processes that are performed on the plurality of arbitrary data items recited in the preamble of the claim.

The first process required by claim 1, applicable to this plurality of arbitrary data items, is “configuring each of the data items into a distinct information object by extracting, from each data item, extracted data including a heading, a source, graphical and textual material, and a hyperlink”. As pointed out by Dr. Keel, the application, in paragraph 91, addresses protocols by which information objects are created from data items. Although the starting point is an arbitrary data item, as discussed above, the two processes required by claim 1 transform the arbitrary data item into what is represented in a display as an information object. Declaration of Dr. Paul Keel, paragraph 5.

Although, for this limitation, the Office Action relies on paragraphs 37 and 86 of Nickerson (Office Action, page 3), these paragraphs in Nickerson are unconcerned with “configuring each of the data items into a distinct information object by extracting, from each data item, extracted data including a heading, a source, graphical and textual material, and a hyperlink”.

Nickerson has nothing to do with configuring arbitrary data items into information objects, as required by the first process of claim 1. Nickerson discloses embedding a polling tool 30 in web pages (see paragraph 27), so that viewers of a web page can respond to questions and vote on content in the web page without leaving the web page (see abstract). In this context, in paragraph 37 (on which the Office Action

relies), Nickerson discloses a procedure for embedding the polling tool in web pages that are served to the user. That is the subject of paragraph 37:

...collection module 42 of server 18 may perform a “crawl” to identify the pages 28 that are associated with website 26 (and possibly other websites 26) *and incorporate tool 30*.

(Tool 30, in turn, is a “user reaction measurement tool” that collects the user’s reaction to a web page. See, for example, paragraphs 28-29.) Per paragraph 37, on which the Office Action relies, these collected web pages are stored, and a map is prepared of the topography of the website so that the owner of the website can analyze the website to possibly improve it based on user reactions:

Reporting module 46 [which provides the user reactions, see Fig. 1] uses the map to generate reports concerning the pages 28 of website 26, which might be linked to one another according to the topography of website 26 as described as described more fully below with reference to FIG. 9. Owner 12 may subsequently modify one or more pages 28 of website 26 according to the subjective ratings or other user reactions received from users 16 (and possibly their demographic profiles), as reflected in the reports, to improve the pages 28 or better tailor the pages 28 for particular categories of users 16.

Accordingly, paragraph 37, on which the Office Action relies for disclosing the first process of claim 1, fails to disclose or suggest the limitation of “configuring each of the data items into a distinct information object by extracting, from each data item, extracted data including a heading, a source, graphical and textual material, and a hyperlink”.

Similarly, the other paragraph on which the Office Action relies for this limitation, paragraph 86, is similarly irrelevant to this limitation. Paragraph 86, in its entirety, reads as follows:

FIG. 12 illustrates an example method of reporting to owner 12 user reactions to one or more particular web pages 28 of a website 26. The method begins at step 400, where collection module 42 may perform a

crawl or otherwise identify the pages 28 of website 26 incorporating tool 30. At step 402, collection module 42 may parse pages 28 to identify their titles, URLs, and any other appropriate information. At step 404, the collection module 42 may generate a map or other report concerning the topography of website 26 and, at step 406, store the map in the database 44. At step 408, owner 12 communicates a report request to server 18 and, at step 410, the reporting module 46 prompts owner 12 to specify one or more criteria for use in generating the requested report 100. Owner 12 provides the requested report criteria at step 412.

Two things can be learned from this passage. First, it is concerned with “method of reporting to owner 12 user reactions to one or more particular web pages 28 of a website 26.” Second, the reporting of user reactions happens to involve parsing web pages with respect to which the users provided reactions. Neither one of these ideas in paragraph 86 has anything to do with the claim limitation of “configuring each of the data items into a distinct information object by extracting, from each data item, extracted data including a heading, a source, graphical and textual material, and a hyperlink”.

Accordingly, paragraph 86 also fails to suggest or disclose the claim limitation of “configuring each of the data items into a distinct information object by extracting, from each data item, extracted data including a heading, a source, graphical and textual material, and a hyperlink”.

The second process of claim 1 further requires using the extracted data to cause display, *simultaneously*, of a representation of each “information object” “*in a uniform format*”. The claim is precise in requiring first causing display, *simultaneously*, of a representation of each “information object.” The claim is similarly precise that the representation of each information object displayed is “*in a uniform format*”. Moreover, the claim requires that “the format includes a card, and, within the card, an icon area for placement of graphical and textual material, the heading, the source, a set of indicators, and a set of icons giving graphical access to functions”. The accompanying declaration of Dr. Paul Keel explains that embodiments of the represented information objects are illustrated in many figures of the application. A representative card is illustrated Fig. 2, showing specific areas of the type that are called out by claim 1. Fig. 1 shows a computer

screen, wherein a plurality of cards are displayed. Similarly, Figs. 4A, 4B, 5B, and 6B show displays with a plurality of cards. Declaration of Dr. Paul Keel, paragraph 6.

The Office Action argues that this limitation of claim 1 is anticipated by Nickerson, citing paragraphs 45, 51, and 84, and in the interview, the Examiner cited paragraphs 45 and 52. This argument is baseless. There are, in fact, dramatic differences between the processes disclosed in Nickerson and this limitation of claim 1. We begin with the requirement in claim 1 that it is required to cause display representations of a plurality of information objects simultaneously. Nothing in Nickerson discloses or suggests any such thing. Moreover, it is required that the information objects represented must have a uniform format, including includes a card, and, within the card, an icon area for placement of graphical and textual material, the heading, the source, a set of indicators, and a set of icons giving graphical access to functions. Nothing in these passages discloses any such thing.

Nickerson concerns collecting user reaction to displayed web pages, and with respect to web pages, as pointed out by Dr. Keel, there is no requirement that any given web page should have the same appearance as any other web page. Moreover, nothing in Nickerson requires or suggests that the web page must have the uniform format required by the claim, namely, “includes a card, and, within the card, an icon area for placement of graphical and textual material, the heading, the source, a set of indicators, and a set of icons giving graphical access to functions”.

The third process of claim 1 requires “storing data corresponding to each of the cards in a database, configured so that each card in the database is sharable.” As explained by Dr. Keel, the application discloses that the cards are stored in a database (application, paragraph 76), and the application discloses that cards can be imported from a view of another user (application, paragraph 92), and that cards can be shared (application, paragraph 94). Nothing in Nickerson has any correspondence to this claim limitation.

The body of independent claim 17 includes limitations similar to the first two limitations of claim 1, including “configuring each of the data items into a distinct information object by extracting, from each data item, extracted data including a heading, multimedia data graphical and textual material, and a URL”. Claim 17 also requires

“using the extracted data to cause display, simultaneously, of a representation of each of the information objects in a uniform format, wherein the format includes a card, and, within the card, an icon area for placement of graphical and textual material, and a heading.

II. Maybury fails to disclose or suggest the requirements of claim 17.

Although the office action argues that claim 17 is anticipated by Maybury, that reference fails to meet a variety of provisions of claim 17. Quintessentially, among other things, claim 17, as currently amended, requires:

...
obtaining additions and modifications to the information sources
and converting the additions and modifications into data items;

...
using the extracted data to cause display, simultaneously, of a
representation of each of the information objects in a uniform format,
wherein the format includes a card, and, within the card, an icon area for
graphical and textual material, and a heading;

...
wherein the information objects are organized for display in a
plurality of rows, wherein each row is automatically collected and
corresponds to a distinct set of at least one of the information sources and
the data items therein are arranged chronologically.

In contrast to these claim requirements, Maybury operates in a different fashion altogether—by segmenting a stream of video or audio or close captions into separate segments, tagging the segments, and storing the separate segments, which are analyzed and searched. See, for example, col. 5, line 56, to col. 6, line 9. Accordingly, since Maybury simply segments streams of data, nothing in Maybury discloses or suggests the claim requirement of “obtaining additions and modifications to the information sources and converting the additions and modifications into data items”. Furthermore, since Maybury simply segments streams of data, nothing in Maybury discloses or suggests representing each data item as a card by “using the extracted data to cause display of a representation of each of the information objects in a uniform format, wherein the format includes a card, and, within the card, an icon area for graphical and textual material, and a heading”. Finally, since Maybury simply segments streams of data, nothing in Maybury discloses or suggests organizing the information objects for display in rows, “wherein each row is automatically collected and corresponds to a distinct set of at least one of the information sources and the data items therein are arranged chronologically.”

For these reasons nothing in Maybury discloses or suggests the requirements of claim 17, and therefore claim 17, and the claims dependent on claim 17, are allowable over Maybury.

For all of the foregoing reasons, the applicants submit that all pending claims are in condition for allowance. The applicants respectfully request early allowance of the application.

Date: October 30, 2015

Respectfully submitted,

/Bruce D. Sunstein, Reg. No. 27,234/

Bruce D. Sunstein
Registration No. 27,234
Attorney for Applicants

Sunstein Kann Murphy & Timbers LLP
125 Summer Street
Boston, Massachusetts 02110-1618
Tel: (617) 443-9292
Fax: (617) 443-0004