

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
20 July 2006 (20.07.2006)

PCT

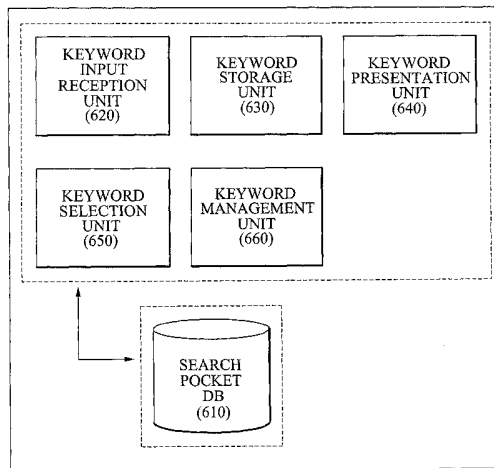
(10) International Publication Number
WO 2006/075898 A1

- (51) International Patent Classification:
G06F 17/30 (2006.01)
- (21) International Application Number:
PCT/KR2006/000156
- (22) International Filing Date: 13 January 2006 (13.01.2006)
- (25) Filing Language: Korean
- (26) Publication Language: English
- (30) Priority Data:
10-2005-0003173 13 January 2005 (13.01.2005) KR
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR MANAGING VARIOUS KINDS OF KEYWORDS BY INTERWORKING THE KEYWORDS DEPENDING ON USER AUTHENTICATION



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(57) Abstract: A keyword management method of managing a keyword inputted to a search server, including: maintaining a search pocket database for storing a first keyword associated with a user, the first keyword received from the user when the user is authenticated; receiving at least one second keyword from the user when the user is not authenticated; storing the second keyword in a user terminal associated with the user, in a temporary file; providing the second keyword to the user by referring to the temporary file when a state of the user is changed from the unauthenticated state to the authenticated state; selecting at least one certain keyword from the provided at least one second keyword, according to the user's selection; and storing and managing the selected at least one certain keyword in the search pocket database together with the first keyword.

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**METHOD AND SYSTEM FOR MANAGING VARIOUS KINDS OF
KEYWORDS BY INTERWORKING THE KEYWORDS DEPENDING ON
USER AUTHENTICATION**

5 Technical Field

The present invention relates to a keyword management method and system in which two types of keywords differ according to whether user is authenticated are managed being coupled with each other via the same server space.

10 Background Art

Currently, many people use the Internet as high speed data communication network develops. As use of the Internet increases, various Internet services such as a search engine, messenger, shopping mall, and game are provided.

In particular, since a search engine providing a search service provides various
15 kinds of information desired by a user when the user inputs a keyword, many Internet users usually use the search engine. Accordingly, to Internet users who contact various information by one keyword, efficient management of keywords surfaces as a very important matter.

In keyword management methods according to a conventional technology, a
20 keyword inputted to a search server by a user when the user does not log in the search server is stored in a user terminal of the user in a temporary file. When the user inputs a keyword to the search server by using the same terminal, the keyword stored in the temporary file is displayed to the user.

In the conventional keyword management method, when the user inputs a
25 keyword by using a different terminal instead of the previous terminal used for inputting a keyword, since the keyword previously inputted is not stored, the keyword inputted before by the user may not be provided. Namely, only when the user inputs a keyword by using the same terminal, the keyword inputted before may be provided.

As an alternative to the conventional keyword management method, a method
30 of storing and managing a keyword inputted by a user in association with the user is provided. In this method, a search server stores the keyword in association with a user identifier of the user in a predetermined storage space, which is restricted to only the

keyword inputted to a search server when the user logs in to the search server. In this case, when the user logs in, the keyword stored in response to the user may be provided to the user, and though the user inputs a keyword by using a different terminal, the keyword inputted before may be provided.

5 However, since search engine users generally search information when they do not log in a search server, there is a burden of essentially requiring log-in of the users in the method.

 Consequently, conventional cookie-based technologies which do not require authentication of users but have a defect of providing only keywords inputted by using
10 the same terminal and conventional log-in based technologies which can provide keywords inputted in a previous search regardless of whether a terminal is the same but essentially require the log-in of the users can not satisfy desire of users to efficiently and conveniently manage the keywords inputted before by the user.

 Accordingly, a new keyword management method and system capable of
15 solving the problems have been required.

Disclosure of Invention

Technical Goals

 An aspect of the present invention provides a keyword management method
20 and system in which, when a user moves from an unauthenticated to an authenticated state with respect to a predetermined search server, keywords inputted by the user when the user is not authenticated are provided to the user, and when at least one certain keyword is selected by the user from the provided keywords, the selected certain keyword is stored in a predetermined server space storing and managing the keywords
25 inputted by the user when the user is authenticated, thereby managing two types of the keywords which differ according to whether the user is authenticated by coupling the two types of the keywords via the same server space.

 An aspect of the present invention provides a keyword management method
and system which enable a search server to manage not only a keyword inputted when a
30 user is authenticated but also a keyword inputted when the user is not authenticated, thereby maximizing convenience of the user.

 An aspect of the present invention provides a keyword management method

and system, in which a keyword inputted from the user when a user is not authenticated is stored in the user terminal in temporary files together with search category information of the keywords and a keyword inputted from the user, when the user is authenticated, is stored and maintained in a predetermined search pocket database
5 together with search category information of the keyword, thereby not only managing both types of the keywords to be coupled with each other but also managing the search category information of the both types of the keywords.

An aspect of the present invention provides a keyword management method and system in which a keyword inputted by a user and search category information of
10 the keyword are stored together, thereby managing many keywords for each search category to satisfy a need of the user with respect to keyword management.

An aspect of the present invention provides a keyword management method and system in which, since keywords are managed for each search category, information on keywords frequently used by a user is provided to the user, thereby providing a
15 service distinguished from existing services to the user.

Technical Solutions

According to an aspect of the present invention, there is provided a keyword management method of managing a keyword inputted to a search server, including:
20 maintaining a search pocket database for storing a first keyword associated with a user, the first keyword received from the user when the user is authenticated; receiving at least one second keyword from the user when the user is not authenticated; storing the second keyword in a user terminal associated with the user, in a temporary file; providing the second keyword to the user by referring to the temporary file when a state
25 of the user is changed from the unauthenticated state to the authenticated state; selecting at least one certain keyword from the provided at least one second keyword, according to the user's selection; and storing and managing the selected at least one certain keyword in the search pocket database together with the first keyword.

The operation of maintaining the search pocket database includes the operation
30 of storing and maintaining search category information associated with the first keyword in the search pocket database. The operation of storing the second keyword in the user terminal associated with the user, in a temporary file includes the operation

of storing search category information associated with the second keyword in the temporary file. The operation of storing and managing the selected at least one certain keyword in the search pocket database together with the first keyword includes the operation of storing search category information associated with the selected at least one certain keyword in the search pocket database to be managed with the search category information associated with the first keyword.

According to another aspect of the present invention, there is provided a keyword management system for managing a keyword inputted to a search server, including: a search pocket database for storing a first keyword associated with a predetermined user, the first keyword received from the user when the user is authenticated to the user; a keyword input reception unit receiving at least one second keyword from the user when the user is not authenticated; a keyword storage unit for storing the second keyword in a user terminal associated with the user, in a temporary file; a keyword presentation unit, when a state of the user is changed from the unauthenticated state to the authenticated state, providing the second keyword to the user by referring to the temporary file; a keyword selection unit selecting at least one certain keyword from the provided at least one second keyword, according to the user's selection; and a keyword management unit for storing and managing the selected at least one certain keyword in the search pocket database together with the first keyword.

20

Brief Description of Drawings

FIG. 1 is a diagram illustrating a network connection of a keyword management system according to an embodiment of the present invention;

FIG. 2 is a flowchart illustrating a keyword management method according to an embodiment of the present invention;

FIG. 3 is a diagram illustrating an example of a search pocket database according to an embodiment of the present invention;

FIG. 4 is a diagram illustrating an example of second keywords provided to a user, according to an embodiment of the present invention;

FIG. 5 is a diagram illustrating an example of first keywords according to an embodiment of the present invention;

FIG. 6 is a block diagram illustrating an internal configuration of the keyword

management system according to an embodiment of the present invention; and

FIG. 7 is a diagram illustrating an example of a first view of managing the first keywords and the second keywords, according to an embodiment of the present invention.

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Best Mode for Carrying Out the Invention

Hereinafter, a keyword management method and system according to an embodiment of the present invention will be described in detail with reference to the attached drawings.

10 FIG. 1 is a diagram illustrating a network connection of a keyword management system 100 according to an embodiment of the present invention.

The keyword management system 100 for managing a keyword inputted from a user 110 stores a keyword inputted from the user 110 when the user 110 is not authenticated in a user terminal 115, provides the keyword inputted when the user is not
15 authenticated to the user 110 when the state of the user 110 is changed into an authenticated state, and stores and manages a certain keyword selected by the user 110 from the provided keyword.

The keyword management system 100 may be included in an Internet search service providing system for providing a predetermined search service, to be provided
20 in association with the search service.

The user 110 may have the user terminal 115 for accessing the keyword management system 100 and may input a random keyword to the keyword management system 100 via the user terminal 115.

The user terminal 115 indicates a device capable of accessing a wired/wireless
25 communication network, which is a terminal equipped with functional ability by including a memory and a microprocessor, such as a desktop PC, a notebook PC, a PDA, and a mobile communication terminal.

Hereinafter, a keyword management method according to an embodiment of the present invention will be described in detail with reference to FIG. 2. FIG. 2 is a
30 flowchart illustrating the keyword management method according to an embodiment of the present invention. The keyword management method according to the present embodiment will be provided by the keyword management system 100.

In 201, the keyword management system 100 maintains a search pocket database for storing a first keyword associated with a predetermined user. The first keyword is received from the user in a state in which the user is authenticated. Namely, in the search pocket database, a keyword inputted from the user when the user is authenticated may be stored corresponding to information for identifying the user, for example, a user identifier ID. Accordingly, the keyword stored in the search pocket database may be provided to the user when the relevant user is authenticated, for example, when the user logs in a predetermined search server associated with the keyword management system 100.

Also, in the search pocket database, keyword category information associated with the first keyword may be further included. The search category information may include information on categories such as searches, news, images, geographical information, books, and movies.

Hereinafter, the search pocket database will be described in detail with reference to FIG. 3. FIG. 3 is a diagram illustrating an example of the search pocket database according to an embodiment of the present invention.

Referring to FIG. 3, the search pocket database may include a user identifier 301, a keyword 302, and search category 303.

The user identifier 301 may be information for identifying the user, such as a name of the user or user ID (Identifier), etc. The keyword 302 indicates keyword information inputted from the user when the user is authenticated. The search category 303 information is associated with the keyword 302 and may include different category information in the case of the same keyword. For example, when the user inputs a keyword of "Phantom of the Opera" in a search category of "movie", "Phantom of the Opera – movie" may be stored in the search pocket database, and when the user inputs a keyword of "Phantom of the Opera" in a search category of "book", "Phantom of the Opera – book" may be stored in the search pocket database.

Also, a number of keywords stored in the search pocket database may be limited to a predetermined number, for example, ten, determined by a system administrator and may be flexibly changed by the system administrator. If the keywords stored in the search pocket database are more than the number, the keyword management system 100 may delete a predetermined keyword according to, for

example, an order of a point in time when the keyword is stored, from the keywords stored in the search pocket database and may store a new keyword.

In 202, the keyword management system 100 receives at least one second keyword from the user when the user is not authenticated. Namely, the second
5 keyword may be a keyword inputted from the user when the user does not log in to the predetermined search server associated with the keyword management system 100. The user may input a keyword by using a predetermined input unit such as a keyboard or a mouse of the user terminal 115 and may select search category information associated with the keyword when inputting the keyword. When the user does not
10 select the search category information, the search category information may be automatically selected by the keyword management system 100, for example, search. Accordingly, according to a selection of the user with respect to the search category information, the search server may provide only search information corresponding to the selected search category information, to the user.

15 In 203, the keyword management system 100 stores the second keyword in the user terminal 115 associated with the user, in a temporary file. The temporary file may be a cookie file including information for intermediating between a user and an Internet website by storing a record of a visit to the Internet website. In the temporary file, search category information associated with the first keyword may be further included.

20 For example, when the user inputs a random keyword in the search server and requests the search server to search, the keyword management system 100 may identify the search category information of the inputted keyword and may temporarily store a temporary file including the keyword and the identified search category information in the user terminal 115. Also, when the temporary file is stored, whether the keyword
25 included in the temporary file is previously stored in the user terminal 115 may be checked. When the keyword is duplicated, a stored keyword may be deleted and a new keyword may be stored, or the new keyword may not be stored and the stored keyword may be maintained.

In 204, when the state of the user is changed from an unauthenticated state to an
30 authenticated state, the keyword management system 100 presents the second keyword to the user with reference to the temporary file. For example, when the user uses a search service in a logged-out state and logs in via a predetermined log-in process, the

keyword inputted from the user when the user is not authenticated may be displayed in the user terminal 115 with reference to the temporary file stored in the user terminal 115. Namely, the keyword inputted from the user when the user is not authenticated may be provided to the user when the user is authenticated so that the user can perform a search
5 with respect to the keyword inputted from the user when the user is not authenticated. Accordingly, the user may easily perform keyword management.

Also, when the second keyword is provided to the user, the provided at least one second keyword may be provided to the user together with a predetermined button associated with each of the keywords. Accordingly, the user may select a certain
10 button desired by the user from the provided buttons thereby selecting the keyword.

Also, when the second keyword is provided to the user, when the search category information is inputted from the user, the second keyword associated with the search category information corresponding to the inputted search category information may be provided to the user. Namely, search category information identical to the
15 inputted search category information or the second keyword associated with the related search category information may be provided to the user. For example, when the search category information inputted from the user is "movie", if a keyword whose search category information is "movie" is not included in the temporary file stored in the user terminal 115 of the user, a keyword corresponding to search category
20 information associated with "movie", such as "entertainment", may be provided to the user.

In 205, at least one certain keyword is selected by the user from the provided at least one second keyword.

The user may select a keyword to be stored in the search pocket database by
25 selecting a predetermined button provided together with the second keyword. Hereinafter, the second keywords provided to the user will be described in detail with reference to FIG. 4.

FIG. 4 is a diagram illustrating an example of the second keywords provided to the user, according to an embodiment of the present invention.

30 As shown in FIG. 4, when the state of the user with respect to the predetermined search server associated with the keyword management system 100 is changed from the unauthenticated state to the authenticated state, keywords 401

inputted from the user when the user is not authenticated may be displayed in the user terminal 115 of the user to present the keywords 401 to the user. The keywords 401 inputted from the user when the user is not authenticated may be provided to the user while included in "my keyword". Namely, the keyword and the search category
5 information stored in the user terminal 115 of the user in the temporary file may be included in "my keyword".

Also, together with each keyword included in "my keyword", a shift button 402 and a delete button 403 associated with the each keyword may be provided.

The user may store a keyword desired by the user in the search pocket database
10 by clicking the shift button 403 of the keyword desired by the user from the provided keywords. Also, the keyword may be deleted by clicking the delete button 403 associated with the keyword to be deleted from the provided keywords. The deleted keyword may be deleted from the temporary file and may no longer be provided to the user.

15 When the shift button 403 is selected by the user, an OnClick event is generated and a predetermined function, for example, a Javascript function, running on a web browser to process the generated OnClick event may be performed. The Javascript function transmits the keyword and the search category information to be stored in the search pocket database to the keyword management system 100 or the predetermined
20 search server associated with the keyword management system 100, to request to be stored in the search pocket database. The keyword management system 100 receiving the storage request may check whether the keyword and the search category information can be stored.

The keyword management system 100 receiving the storage request determines
25 whether the user is authenticated and whether the keyword and the search category information are stored in the search pocket database in association with the user identifier of the user, in order to verify whether the keyword and the category information can be stored. When the keyword management system 100 outputs result information of the determination as a variable, the Javascript function may display the
30 determination result information on a predetermined display screen of the user terminal 115, with reference to the determined result information. The determination result information may include whether the user is authenticated, a number of the keywords

stored in the search pocket database, whether the keyword is duplicated, the keywords to be stored, and keyword category information.

Also, the keyword management system 100 may further present search category information 404 associated with the first keyword when the second keyword is provided to the user. Also, when certain search category information is selected by the user, only the keyword associated with the selected search category information may be provided to the user. For example, referring to FIG. 4, when the user selects "book" from the search category information, keywords whose search category information corresponds to "book", such as "alchemist", "western art history", and "da Vinci code" from the keywords may be provided to the user.

Namely, when the keyword is presented to the user by using the search category information, a number of the keywords managed by the user may be increased due to increase of a number of the keyword capable of being provided. Accordingly, the user may effectively manage many keywords.

In 206, the keyword management system 100 stores at least one certain keyword selected by the user in the search pocket database and manages the at least one certain keyword together with the first keyword. Also, the search category information associated with the selected at least one certain keyword may be stored in the search pocket database and may be managed with the search category information associated with the first keyword.

As described above, according to the present invention, the keyword inputted from the user when the user is not authenticated is stored in the user terminal in temporary files together with the search category information of the keywords and the keywords inputted from the user, when the user is authenticated, is stored and maintained in the predetermined search pocket database together with the search category information of the keyword, thereby not only managing both types of the keywords to be coupled with each other but also managing the search category information of the both types of the keywords.

The keyword stored in the search pocket database may be the keyword directly inputted from the user when the user is authenticated, or inputted from the user and selected to be stored in the search pocket database when the user is not authenticated. The keyword stored as described above may be provided to the user when the state of

the user is changed from an unauthenticated state to an authenticated state.

Hereinafter, the first keyword will be described in detail with reference to FIG. 5. FIG. 5 is a diagram illustrating an example of first keywords according to an embodiment of the present invention.

5 As shown in FIG. 5, the keywords stored in the search pocket database may be provided to the user while included in a search pocket 501 that is a predetermined storage space on a web. Namely, the keyword stored in the search pocket 501 may be provided to the user via a user authentication process. The keyword stored in the search pocket 501 may be provided to the user regardless of whether the user terminal
10 115 of the user is the same terminal used by the user in previous search.

The keyword displayed on the search pocket 501 may be provided together with a detailed information providing button 502 providing detailed information of the keyword or a delete button 504. When the user clicks the delete button 504, the relevant displayed keyword may be omitted and may be deleted from the search pocket
15 database. Also, when the user clicks the detailed information providing button 502, predetermined URL information associated with the keyword may be provided to the user. Accordingly, the user may visit a website associated with the relevant keyword by clicking the URL information. Also, the keyword displayed on the search pocket 501 may further include search category information 503. In the case of identical
20 keywords whose search category information differ, the identical keywords may be managed as a different keyword, respectively.

FIG. 7 is a diagram illustrating an example of a first view of managing the first keywords and the second keywords, according to an embodiment of the present invention.

25 As shown in FIG. 7, when an authenticated user clicks a keyword management start button 702 displayed in a keyword input window 701, keywords 703 inputted by the user when the user is not authenticated and keywords 704 inputted by the user when the user is authenticated, may be provided to the user. Accordingly, the user may start a keyword management service via keyword coupling by clicking the keyword
30 management start button 702.

In conventional technologies, "search pocket" including the keywords inputted by the user, when the user is authenticated, are provided to the authenticated user.

However, "my keyword" including the keywords inputted by the user when the user is not authenticated are not provided. The keyword providing system 100 according to an embodiment of the present invention may provide not only the keywords included in "search pocket" but also the keywords included in "my keyword" may be provided to the user when the user is authenticated. Accordingly, the user may check a list of the keywords inputted when the user is not authenticated, in an authenticated state and may search by using the keywords, thereby managing the two types keywords, which differ from each other according to whether the user is authenticated, by coupling the two types of the keywords via the same server space.

As described above, according to the present invention, when a user moves from an unauthenticated to an authenticated state with respect to a predetermined search server, keywords inputted by the user when the user is not authenticated are provided to the user, and when at least one certain keyword is selected by the user from the provided keywords, the selected certain keyword is stored in a predetermined server space storing and managing the keywords inputted by the user when the user is authenticated, thereby managing two types of the keywords, which differ according to whether the user is authenticated, by coupling the two types of the keywords via the same server space.

The keyword management method according to the present invention may be embodied as a program instruction capable of being executed via various computer units and may be recorded in a computer readable recording medium. The computer readable recording medium may include a program instruction, a data file, and a data structure, separately or cooperatively. The program instructions and the media may be those specially designed and constructed for the purposes of the present invention, or they may be of the kind well known and available to those skilled in the art of computer software arts. Examples of the computer readable recording medium include magnetic media (e.g., hard disks, floppy disks, and magnetic tapes), optical media (e.g., CD-ROMs or DVD), magneto-optical media (e.g., floptical disks), and hardware devices (e.g., ROMs, RAMs, or flash memories, etc.) that are specially configured to store and perform program instructions. The media may also be transmission media such as optical or metallic lines, wave guides, etc. including a carrier wave transmitting signals specifying the program instructions, data structures, etc. Examples of the program

instructions include both machine code, such as produced by a compiler, and files containing high-level languages codes that may be executed by the computer using an interpreter. The hardware elements above may be configured to act as one or more software modules for implementing the operations of this invention.

5 Hereinafter, a keyword management system 600 according to another embodiment of the present invention will be described. FIG. 6 is a block diagram illustrating an internal configuration of the keyword management system 600 according to an embodiment of the present invention.

As shown in FIG. 6, the keyword management system 600 may include a
10 search pocket database 610, a keyword input reception unit 620, a keyword storage unit 630, a keyword presentation unit 640, a keyword selection unit 650, and a keyword management unit 660.

The search pocket database 610 stores a first keyword associated with a predetermined user. The first keyword is received from the user when the user is
15 authenticated. Namely, the first keyword may indicate a keyword inputted by the user when the user logs in a predetermined search server associated with the keyword management system 600.

Also, the search pocket database 610 may further store search category information associated with the first keyword. The search category information is
20 associated with a relevant keyword and may include information, for example, searches, geographical information, movies, books, and shopping. Accordingly, the same keywords whose search category information differ from each other may be separately stored.

The keyword input reception unit 620 receives at least one second keyword
25 from the user when the user is not authenticated. Namely, the second keyword may be a keyword inputted by the user when the user does not log in the predetermined search server associated with the keyword management system 600. The user may input the keyword by using a predetermined input unit of a user terminal.

The keyword storage unit 630 stores the second keyword in the user terminal
30 associated with the user in a temporary file. The second keyword inputted by the user when the user is not authenticated may be stored in the user terminal in the temporary file such as a cookie file. The temporary file may further include search category

information associated with the second keyword.

Also, when the second keyword inputted by the user is stored, if the second keyword is previously stored in the temporary file, the keyword storage unit 630 may delete the previously stored keyword and store the inputted keyword or may not store the inputted keyword and maintain the previously stored keyword in the temporary file.

The second keyword requested to be deleted, by the user, from the provided second keywords may be deleted from the temporary file.

When the user moves from unauthenticated to authenticated state, the keyword presentation unit 640 provides the second keyword to the user with reference to the temporary file. Namely, if the user uses the search service by inputting a keyword when the user is not logged in and then logs in, the keyword presentation unit 640 may provide the keyword inputted by the user when the user is not logged in, to the user with reference to the temporary file. Also, when the second keyword is provided, the keyword presentation unit 640 may further provide the search category information associated with the second keyword.

The keyword selection unit 650 selects at least one certain keyword from the provided at least one second keyword according to a selection of the user. When the second keyword is provided to the user, the keyword presentation unit 640 may further provide a predetermined button associated with each of the second keywords. Accordingly, when the at least one certain button is selected, by the user, from the provided button, the keyword selection unit 650 selects a certain keyword associated with the selected at least one certain button.

The keyword management unit 660 stores and manages the selected at least one certain keyword in the search pocket database 610 together with the first keyword. When the second keyword selected by the keyword selection unit 650 is stored in the search pocket database 610, the keyword management unit 660 may determine whether the user is authenticated or whether the keyword to be stored is previously stored in the search pocket database 610. As a result of the determination, when the user is authenticated and the keyword is not duplicated, the keyword management unit 660 may store the selected keyword in the search pocket database 610. When the user is not authenticated or the keyword is duplicated, the keyword management unit 660 may not store the selected keyword.

Also, a keyword request by the user to be deleted from the keywords stored in the search pocket database 610 may be deleted from the search pocket database 610 by the keyword management unit 660.

5 Since the keyword stored in the search pocket database 610 is provided to the user when the user is authenticated, the user may search with respect to the keyword previously inputted.

While this invention has been particularly shown and described with reference to preferred embodiments thereof, various changes in form and details may be made therein without departing from the spirit and scope of the invention as defined by the
10 appended claims. The preferred embodiments should be considered in a descriptive sense only and not for purposes of limitation.

Therefore, the scope of the invention is defined not by the detailed description of the invention but by the appended claims, and all differences within the scope will be construed as being included in the present invention.

15

Industrial Applicability

According to the present invention, there is provided a keyword management method and system in which, when a user moves from unauthenticated to authenticated state with respect to a predetermined search server, keywords inputted by the user when
20 the user is not authenticated are provided to the user, and when at least one certain keyword is selected by the user from the provided keywords, the selected certain keyword is stored in a predetermined server space storing and managing the keywords inputted by the user when the user is authenticated, thereby managing two types of the keywords differently, according to whether the user is authenticated, by coupling the
25 two types of the keywords via the same server space.

According to the present invention, there is also provided a keyword management method and system which enable a search server to manage not only a keyword inputted when a user is authenticated but also a keyword inputted when the user is not authenticated, thereby maximizing convenience of the user.

30 According to the present invention, there is also provided a keyword management method and system in which a keyword inputted from the user when a user is not authenticated is stored in the user terminal in temporary files together with search

category information of the keywords and a keyword inputted from the user, when the user is authenticated, is stored and maintained in the predetermined search pocket database together with search category information of the keyword, thereby not only managing both types of the keywords to be coupled with each other but also managing
5 the search category information of the both types of the keywords.

According to the present invention, there is also provided a keyword management method and system in which a keyword inputted by a user and search category information of the keyword are stored together, thereby managing many keywords for each search category to satisfy the needs of the user with respect to
10 keyword management.

According to the present invention, there is also provided a keyword management method and system in which, since keywords are managed for each search category, information on keywords frequently used by a user is provided to the user, thereby providing a service distinguished from existing services to the user.

CLAIMS

1. A keyword management method of managing a keyword inputted to a search server, comprising:

maintaining a search pocket database for storing a first keyword associated with a user, the first keyword received from the user when the user is authenticated;

receiving at least one second keyword from the user when the user is not authenticated;

storing the second keyword in a user terminal associated with the user, in a temporary file;

providing the second keyword to the user by referring to the temporary file when a state of the user is changed from the unauthenticated state to the authenticated state;

selecting at least one certain keyword from the provided at least one second keyword, according to the user's selection; and

storing and managing the selected at least one certain keyword in the search pocket database together with the first keyword.

2. The method of claim 1, wherein:

the maintaining a search pocket database comprises the operation of storing and maintaining search category information associated with the first keyword in the search pocket database;

the storing the second keyword in a user terminal associated with the user, in a temporary file comprises the operation of storing search category information associated with the second keyword in the temporary file; and

the storing and managing the selected at least one certain keyword in the search pocket database together with the first keyword comprises the operation of storing search category information associated with the selected at least one certain keyword in the search pocket database to be managed with the search category information associated with the first keyword.

3. The method of claim 2, wherein the providing the second keyword to the user by referring to the temporary file comprises:

receiving search category information from the user;
retrieving the second keyword associated with the search category information
corresponding to the inputted search category information by referring to the temporary
file; and

5 providing the retrieved second keyword to the user.

4. The method of claim 1, wherein:

the providing the second keyword to the user comprises the operation of
providing a predetermined button associated with the second keyword to the user; and

10 the selecting at least one certain keyword from the provided at least one second
keyword, according to the user's selection comprises the operation of selecting at least
one certain button from the buttons, by the user.

5. The method of claim 4, further comprising:

15 when the certain button is selected by the user, executing a predetermined
function associated with the certain button;

transmitting the second keyword associated with the button and the search
category information associated with the second keyword, according to execution of the
function;

20 receiving a request of storing the transmitted second keyword and the search
category information associated with the second keyword; and

checking whether the second keyword can be stored.

6. The method of claim 5, wherein the checking whether the second keyword can
25 be stored comprises:

determining whether the user is authenticated;

determining whether the second keyword is stored in the search pocket
database; and

30 providing determination result information, according to the determination, to
the user.

7. The method of claim 6, wherein the determination result information includes

at least one of whether the user is authenticated, a number of the keywords stored in the search pocket database, whether the keyword is duplicated, the keyword, and the search category information associated with the keyword.

5 8. A computer readable recording medium in which a program for executing the method according to any one of claims 1 through 7 is recorded.

9. A keyword management system for managing a keyword inputted to a search server, comprising:

10 a search pocket database for storing a first keyword associated with a predetermined user, the first keyword received from the user when the user is authenticated as the user;

a keyword input reception unit receiving at least one second keyword from the user when the user is not authenticated;

15 a keyword storage unit for storing the second keyword in a user terminal associated with the user in a temporary file;

a keyword presentation unit, when a state of the user is changed from the unauthenticated state to the authenticated state, providing the second keyword to the user by referring to the temporary file;

20 a keyword selection unit selecting at least one certain keyword from the provided at least one second keyword, according to the user's selection; and

a keyword management unit for storing and managing the selected at least one certain keyword in the search pocket database together with the first keyword.

25 10. The system of claim 9, wherein:

the search pocket database stores and maintains search category information associated with the first keyword and the temporary file stores search category information associated with the second keyword; and

30 the keyword management unit stores and manages search category information associated with the selected at least one certain keyword in the search pocket database together with the search category information associated with the first keyword.

FIG. 1



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FIG. 2

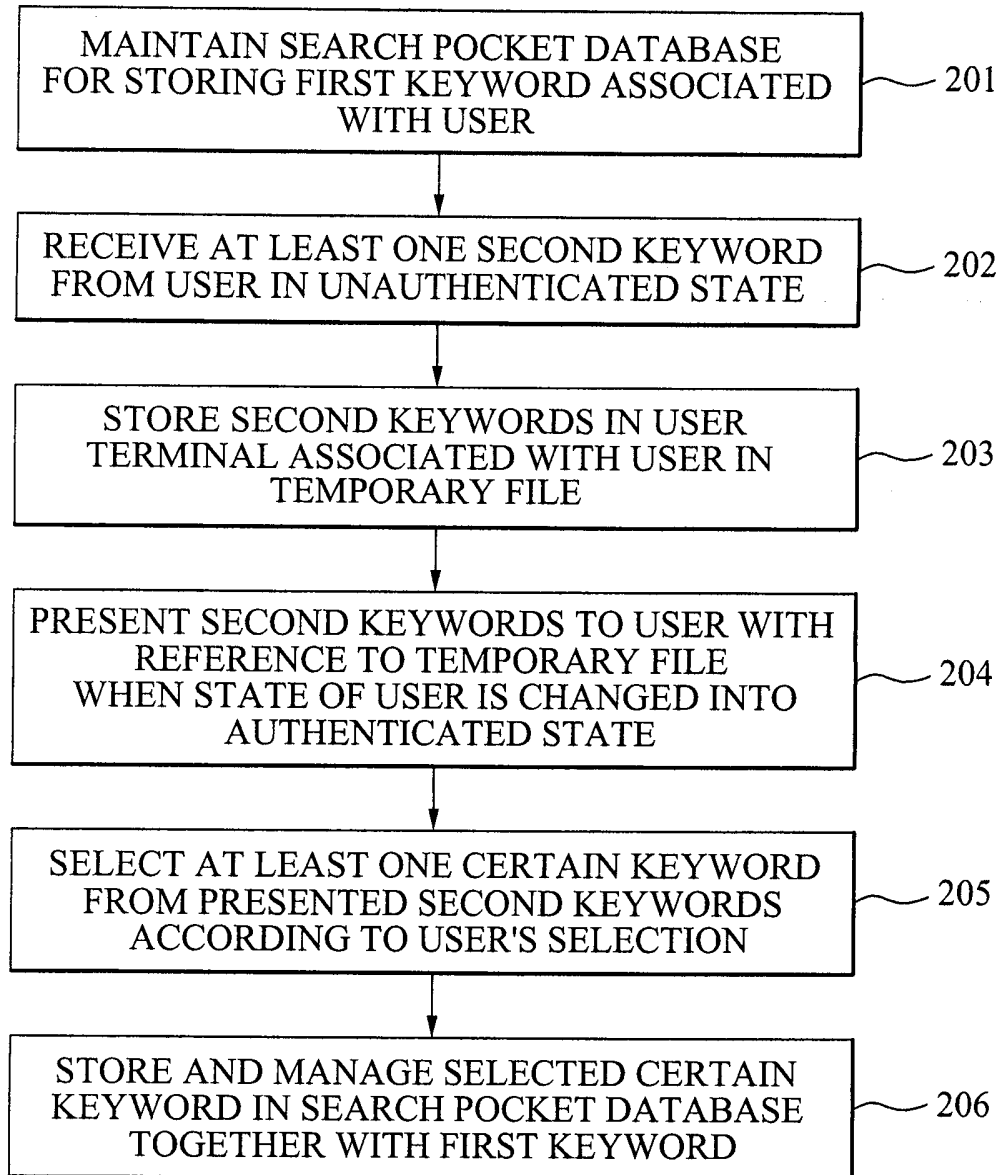


FIG. 3

USER IDENTIFIER (301)	KEYWORD (302)	SEARCH CATEGORY (303)
KARMA	DAVINCI CODE	BOOK
	KANGNAM-GU	GEOGRAPHICAL INFORMATION
	YI HYO RHEE	IMAGE
	ALCHEMIST	BOOK
SUEZO	INTERPARK	SHOPPING
	APPLY	ENGLISH DICTIONARY
	TSUNAMI	NEWS
	⋮	⋮

FIG. 4

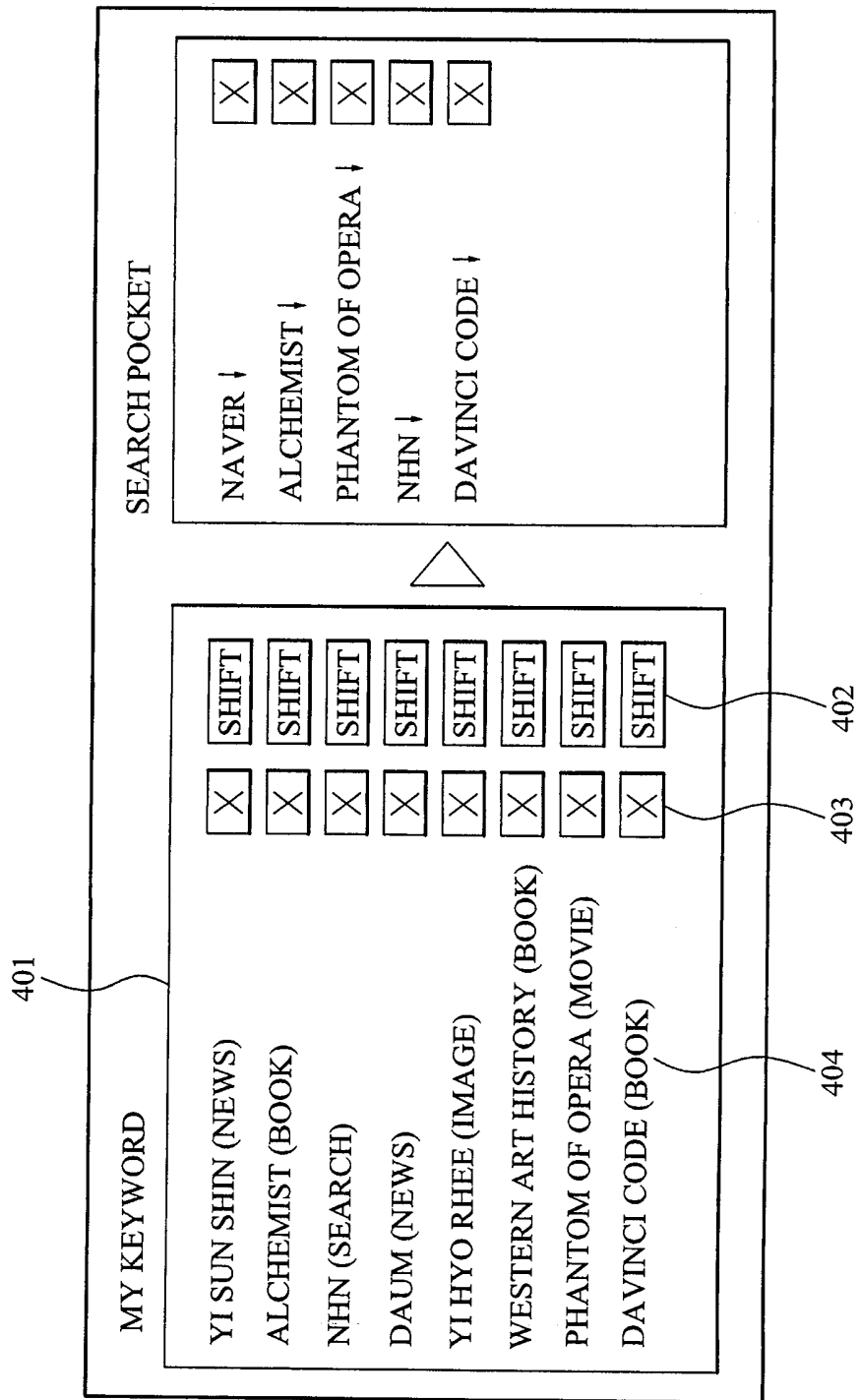


FIG. 5

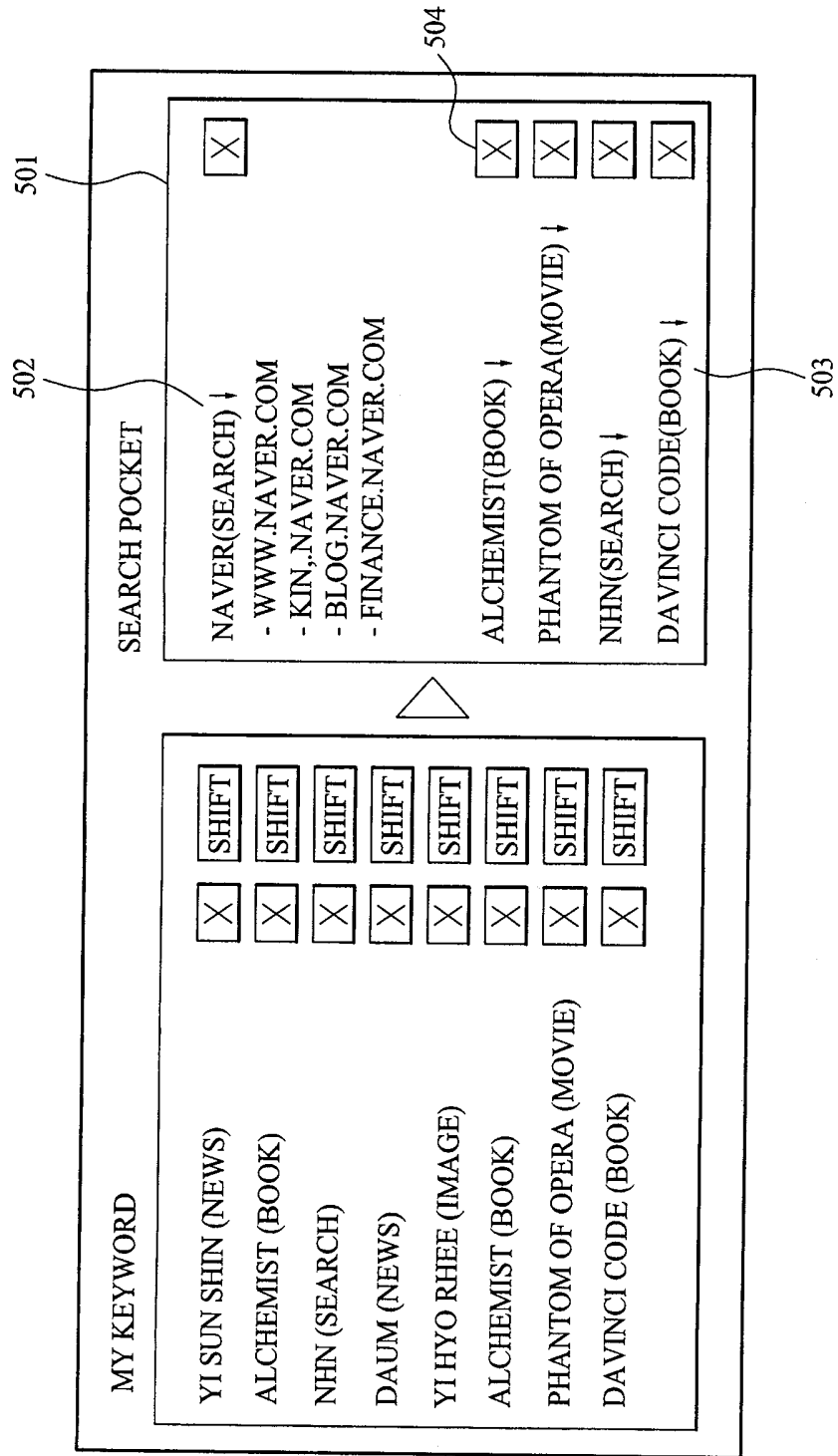


FIG. 6

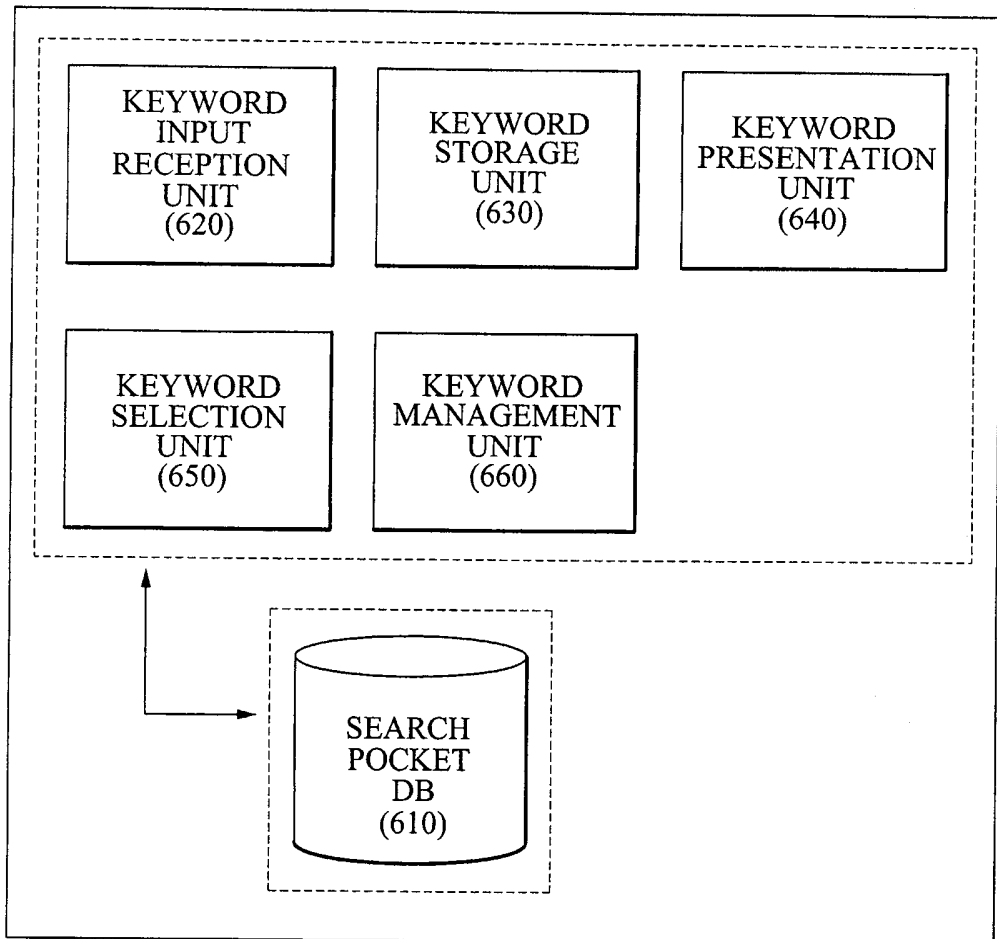
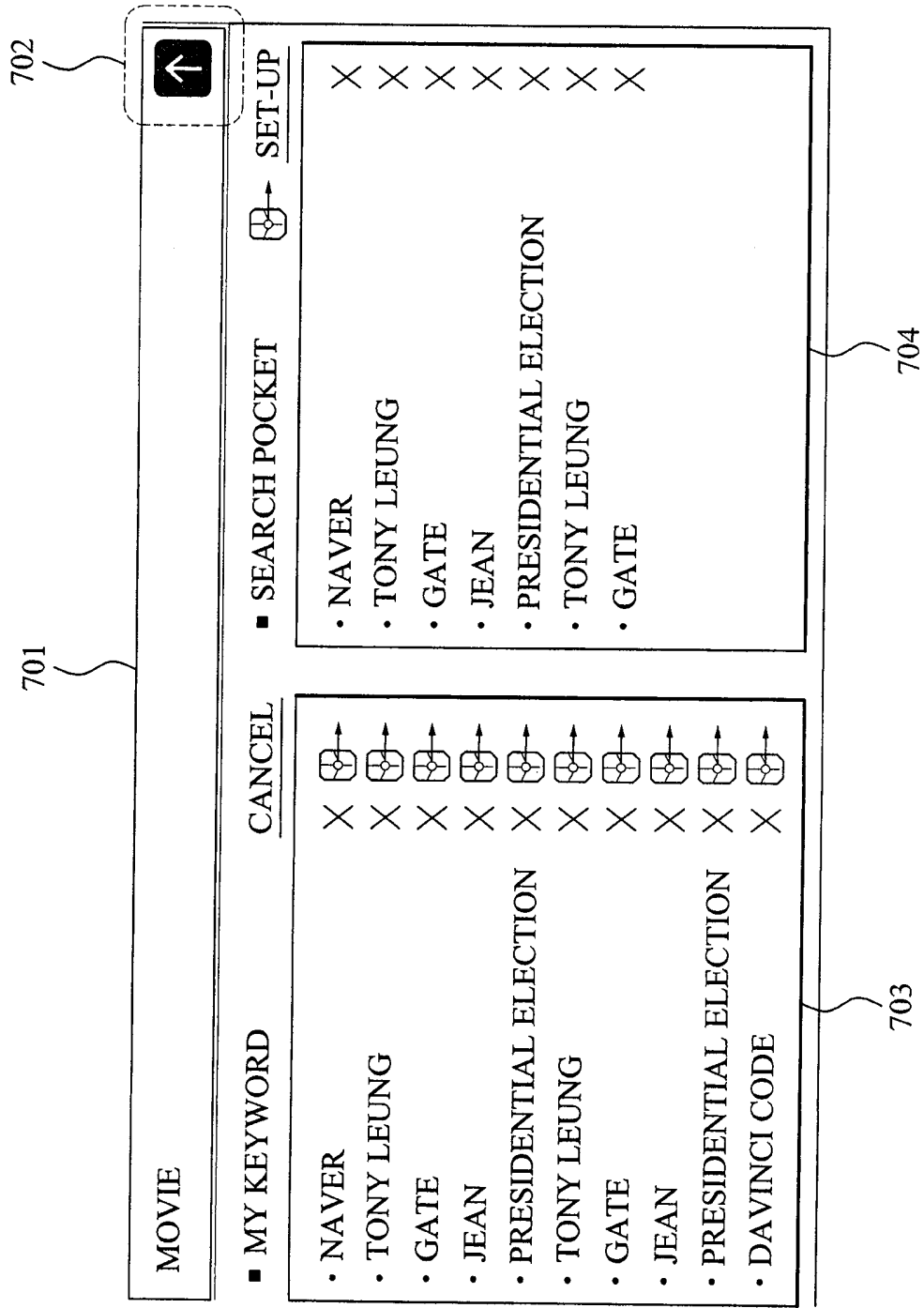



FIG. 7



INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2006/000156

A. CLASSIFICATION OF SUBJECT MATTER		
<i>G06F 17/30(2006.01)i</i>		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) IPC8 G06F 17/30		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean patents and applications for inventions since 1975		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) KIPOnet DB; user* & authentifi* & keyword* & query*		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 2002-7742 A (OZ TECHNOLOGY INC.) 29 JAN. 2002 SEE THE WHOLE DOCUMENTS	1-10
A	KR 2002-15463 A (KIM TOEN-JONG) 28 FEB. 2002 SEE THE WHOLE DOCUMENTS	1-10
A	JP 2001-14317 A (TORNADO TECHNOLOGY INC.) 10 JAN. 2001 SEE THE WHOLE DOCUMENTS	1-10
A	JP 2004-334638 A (JAPAN TELECOMMUNICATION INC.) 25 NOV. 2004 SEE THE WHOLE DOCUMENTS	1-10
A	KR 2004-6515 A (NEOWIZ INC.) 24 JAN. 2004 SEE THE WHOLE DOCUMENTS	1-10
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
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Date of the actual completion of the international search 25 APRIL 2006 (25.04.2006)		Date of mailing of the international search report 27 APRIL 2006 (27.04.2006)
Name and mailing address of the ISA/KR  Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140		Authorized officer JEONG, Jae Hoon Telephone No. 82-42-481-5787 