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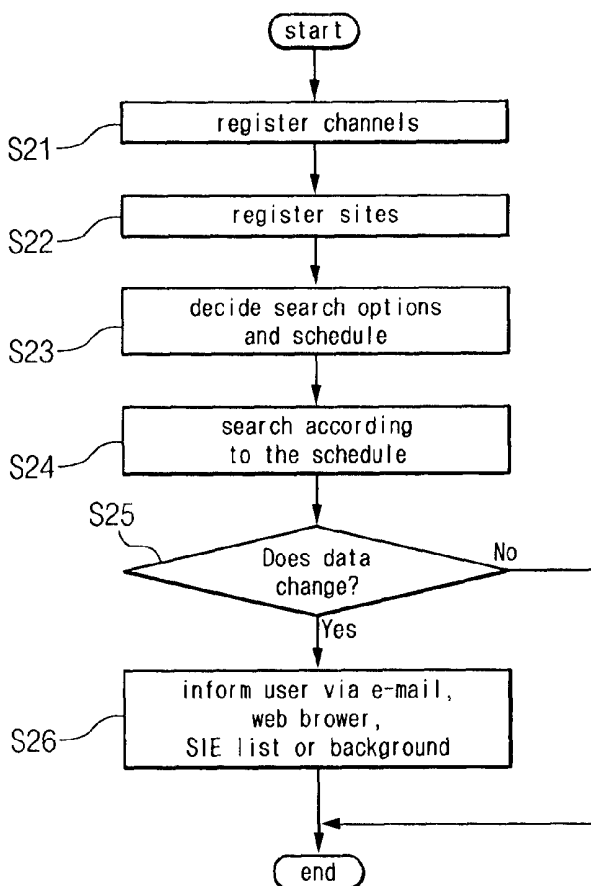
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(54) Title: INTERNET SCHEDULE SYSTEM AND METHOD FOR CONTROLLING THE SYSTEM



(57) Abstract: The present invention relates to an Internet schedule system, and a method for controlling it. More specifically, the present invention relates to a system and method for controlling it in which a user can be provided with updated information of predetermined Internet sites that are designated by the user. The user inputs the Internet sites to monitor, and the Internet schedule system checks periodically whether the information in the sites has been updated or not. If updated, the system informs the user of the updated information. Therefore, the user can easily get the updated information of the Internet sites that are monitored.



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INTERNET SCHEDULE SYSTEM AND METHOD FOR CONTROLLING THE SYSTEM

BACKGROUND OF THE INVENTION

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(a) Field of the Invention

The present invention relates to an Internet schedule system and a method for controlling it. More specifically, the present invention relates to a system and method for controlling it in which a user can be provided with
10 updated information of predetermined Internet sites designated by the user.

(b) Description of the Related Art

Users worldwide now use the Internet for accessing a variety of information, and the number of users tends to increase from day to day. For obtaining information through the Internet, the users should connect to the
15 web sites one by one and check the information therein. In other words, a general method for finding information through the Internet is that the user connects to the Internet site that includes the required information, finds the required document, and reads, prints out or downloads it. However, if the users want to monitor data that is updated periodically, they should actuate a
20 refresh button and check the documents, staying in front of a display screen.

To overcome the above trouble, a "push" technique have been suggested. In this technique, a program in a client's system is synchronized with a server that can support the technique, and information is pushed into the user's system by the synchronized program. The relationship between
25 the server and the client is similar to that between a broadcasting station having several specialized channels and a receiver such as TV or radio.

Hence, there is a shortcoming in that the user should connect to each of the service providers and apply for the services.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide an Internet schedule system and method for controlling it in which, if a user registers predetermined Internet sites to check, the updated information of those
5 sites are checked by a search robot and provided to the user through various methods.

To achieve the above object, the present invention provides a preferred Internet schedule system comprising:

a storage system including a program for connecting to the Internet,
10 and a robot program searching predetermined sites on the Internet and collecting data;

a controller for registering predetermined Internet sites according to a user, loading and executing the connecting program and the robot program, deciding whether the information of the searched site has been
15 updated or not, and informing the user of the updated data in the case that the data have changed; and

a display device indicating that the data of the site has been updated, according to a control signal from the controller.

A method for controlling the above Internet schedule system
20 comprises the steps of:

registering predetermined information about Internet sites to be searched by the user;

periodically searching the Internet sites to check whether the data have changed or not; and

25 informing the user of the updated data in the case that the data have changed.

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are incorporated in and constitute a part of the specification, illustrate an embodiment of the
30 invention, and, together with the description, serve to explain the principles of the invention.

FIG. 1 is a block diagram of an Internet schedule system to which the present invention is applied.

FIG. 2 shows a flow chart of control of the Internet schedule system following the method of the present invention.

5 FIG. 3 shows an example of the user's setting screen in the preferred embodiment of the Internet schedule system.

FIG. 4 shows a screen informing the user of the search results in the preferred embodiment of the Internet schedule system.

FIG. 5 shows a screen where updated information is presented in
10 detail if the user selects "viewing" on the screen in FIG. 4.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

In the following detailed description, only the preferred embodiment of the invention has been shown and described, simply by way of illustration of the best mode contemplated by the inventor(s) of carrying out the
15 invention. As will be realized, the invention is capable of modification in various obvious respects, all without departing from the invention. Accordingly, the drawings and description are to be regarded as illustrative in nature, and not restrictive.

Preferred embodiments of the present invention will now be
20 described in detail, with reference to the accompanying drawings.

FIG. 1 is a block diagram of an Internet schedule system to which the present invention is applied.

As shown in FIG. 1, a preferred Internet schedule system comprises:
a hard disk drive 19 for storing a web browser and a plurality of
25 programs;

a CPU 12 for loading the above programs into the memory 9 and executing them, registering predetermined Internet sites according to a user, loading and executing the connecting program and the robot program, deciding whether the information of the searched site is updated or not, and
30 informing the user of the updated data in the case that the data have changed;

a sound card 25 for processing audio signals;
a speaker 7 for outputting sound;
a microphone 6 for translating sound into audio signals;
a modem 14 for modulating/demodulating sent/received data from
5 the above CPU 12;

a display controller 13 for controlling a display 11 according to the control signals from the CPU 12; and

a display device 11 indicating that the data of the site have been updated according to the control signal from the controller.

10 The above hard disk drive 19 includes:

a program 1 for connecting to the Internet;

a search robot program 2 searching predetermined Internet sites registered by the user, collecting data, classifying them and storing the classified data;

15 an information database 3 having all the information about the above Internet sites; and

a search program 4 comparing the data collected by the search robot to those stored in the information database and deciding whether the data have been updated or not.

20 Next, the operation of the Internet schedule system in the preferred embodiment will be described in detail, with references to the FIGs. 1-5.

FIG. 2 shows a flow chart of controlling the Internet schedule system following the method of the present invention.

First, the process of the Internet schedule system starts when a user
25 turns on the computer system, then the CPU 12 performs the power on self-test (POST) and a booting process. Next, when the user selects the search program 4, the CPU 12 loads the program from the hard disk drive 19 into the memory 9 and executes it. Then, the display device 11 presents the user's setting screen as shown in FIG. 3, where channels and sites are input.

30 As shown in FIG. 3, a channel is a group of web sites classified by characteristics. For example, a channel named "law" includes the schedule

of searching the homepages of a legal newspaper office, the Supreme Court, a law office, et cetera.

The basic setting, search schedule and search method of each site are separately managed even though the sites are in the same channel, as
5 shown in FIG. 3.

In the screen shown in FIG. 3, the user can set the system to automatically provide updated data when all or part of the information or a keyword of it changes. The year, month, day, hour, minute and second can be set for a reserved search with a predetermined search method.

10 The user can also select an option such that the low-order html documents included in the URL are searched. In addition, the method for informing the user of the updated data can be chosen.

The above-mentioned options can be variously modified within the scope of the present invention.

15 After the user registers the channels: S21 and the sites: S22, selects the options and inputs the schedules: S23, the CPU 12 stores these data into the hard disk drive 19.

Next, at the time of searching according to the user's setting by control of the search program 4, the CPU 12 loads the search robot program
20 2 and the Internet connecting program 1 into the memory 9, and executes those. The search robot program 2 connects to the Internet with the Internet connecting program 1, requests the external-designated servers 41 and 51, which are registered by the user in each channel, to send data in a predetermined format, and stores the received data in the information
25 database after classifying: S24.

The CPU 12 connects to the Internet 30 through a commercial web server 110 and thereby connects to the service provider's web server 41 or 51. The route to connect to the Internet can be variously selected, for example through the web server in the user's system.

30 By the control of the search program 4, the CPU 12 compares the collected data by the search robot program 2 to those stored in the

information database and decides whether the data have been updated or not: S25.

As a result of the decision, if updated, the CPU 12 makes the display 11 show the updated data by controlling the display controller 13, as shown
5 in FIG. 5.

Then, if the user selects "viewing" of information on the screen of FIG. 5, the selected information is displayed in detail as shown in FIG. 5.

Other methods for informing the user, such as via electronic mail, a web browser, an icon, a background, a tray and a list, can be selected by the
10 user in the screen of FIG. 3.

While this invention has been described in connection with what is presently considered to be the most practical and preferred embodiment, it is to be understood that the invention is not limited to the disclosed embodiments, but, on the contrary, is intended to cover various modifications
15 and equivalent arrangements included within the spirit and scope of the appended claims.

The above search program 4, search robot program 2 and Internet connecting program 1 can either be integrated in a unified program or separated as needed.

20 The present invention can also be applied to the area of wireless Internet using a cellular phone or a portable terminal.

In summary, the present invention provides a system and method for easily and rapidly controlling the checking of a huge amount of updated data all over the Internet, and therefore time can be saved and the ability to
25 collect information through the Internet can be strengthened.

WHAT IS CLAIMED IS:

1. An Internet schedule system comprising:
 - a storage system including a program for connecting to the Internet, and a robot program searching predetermined sites on the Internet and
 - 5 collecting data;
 - a controller for registering predetermined Internet sites according to a user, loading and executing the connecting program and the robot program, deciding whether the information of the searched site is updated or not, and informing the user of the updated data in the case that the data
 - 10 has changed; and
 - a display device indicating that the data of the site is updated according to a control signal from the controller.
2. The system of claim 1 wherein the storage system comprises:
 - a program for connecting to the Internet;
 - 15 a search robot program searching predetermined sites registered by the user, collecting data, classifying them and storing the classified data;
 - an information database having information about the predetermined Internet sites; and
 - a search program comparing the data collected by the search robot
 - 20 to those stored in the information database and deciding whether the data are updated or not.
3. The system of claim 2 wherein the controller compares the data collected by the search robot to those stored in the information database, and informs the user of the updated data via electronic mail in the case
- 25 that the data are changed.
4. The system of claim 2 wherein the controller compares the data collected by the search robot to those stored in the information database, stores the updated data in a list, and informs the user in the case that the user demands it, through the Internet.
- 30 5. A method for controlling an Internet schedule system comprising the steps of:

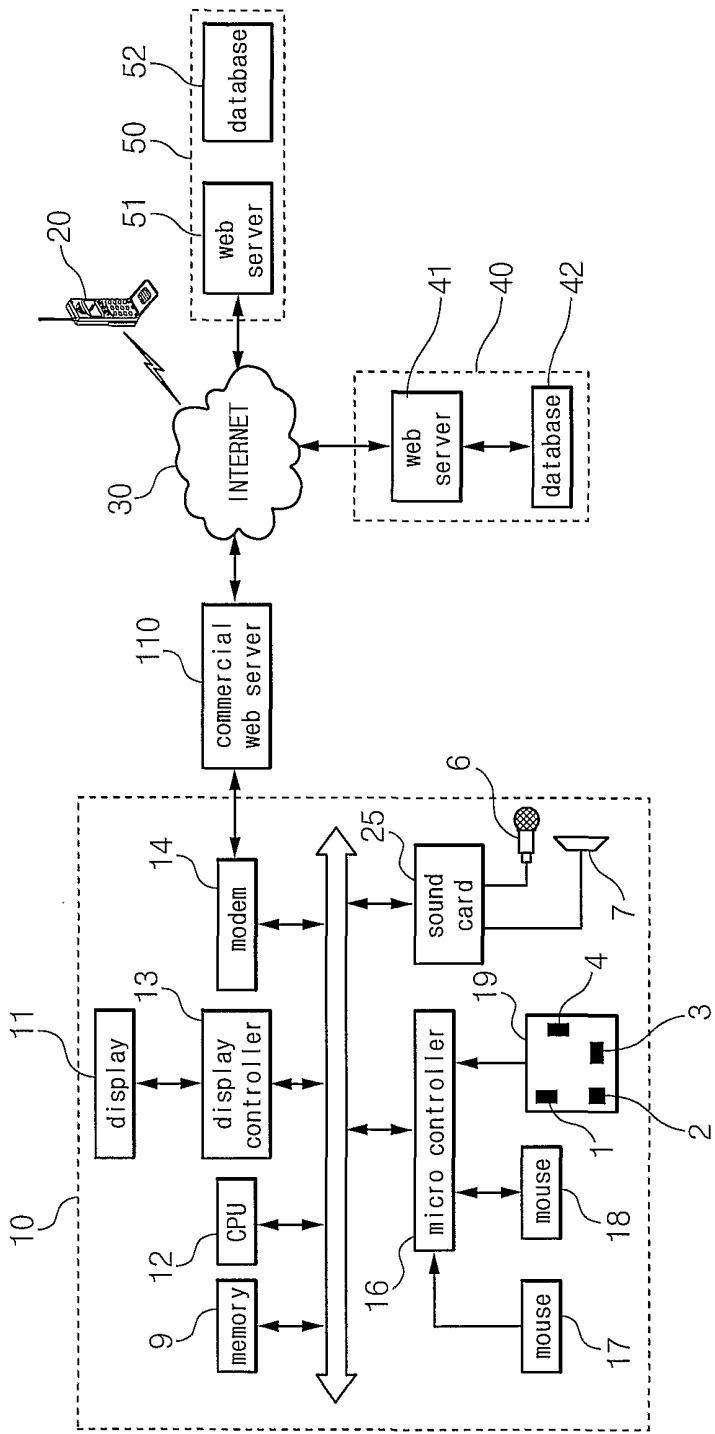
registering predetermined information about Internet sites to be searched by the user;

periodically searching the Internet sites to check whether the data are changed or not; and

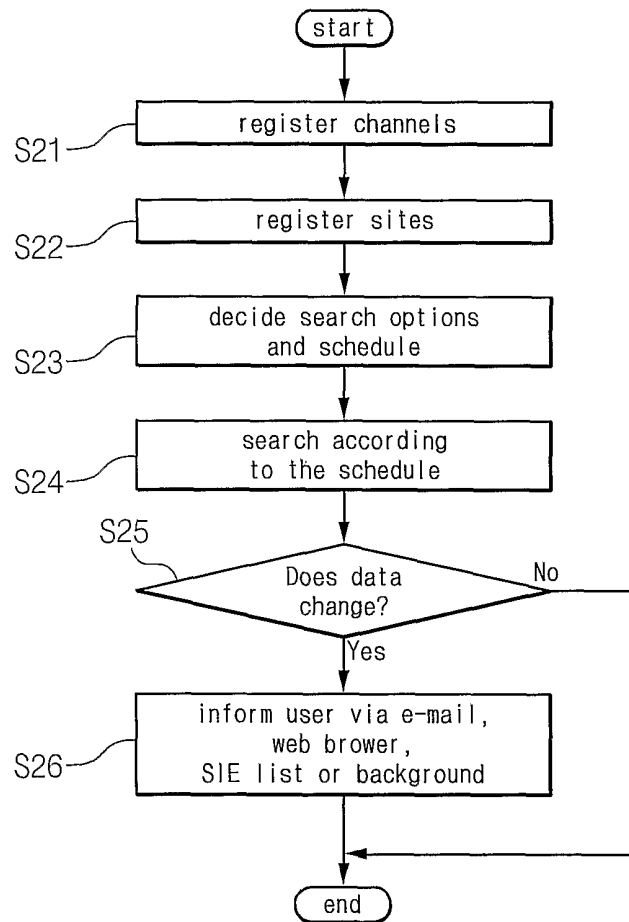
5 informing the user of the updated data in the case that the data are changed.

6. The method of claim 5, wherein in the step of registering, a basic setting of the sites to search, search schedule and the method of search are input by the user.

Fig. 1

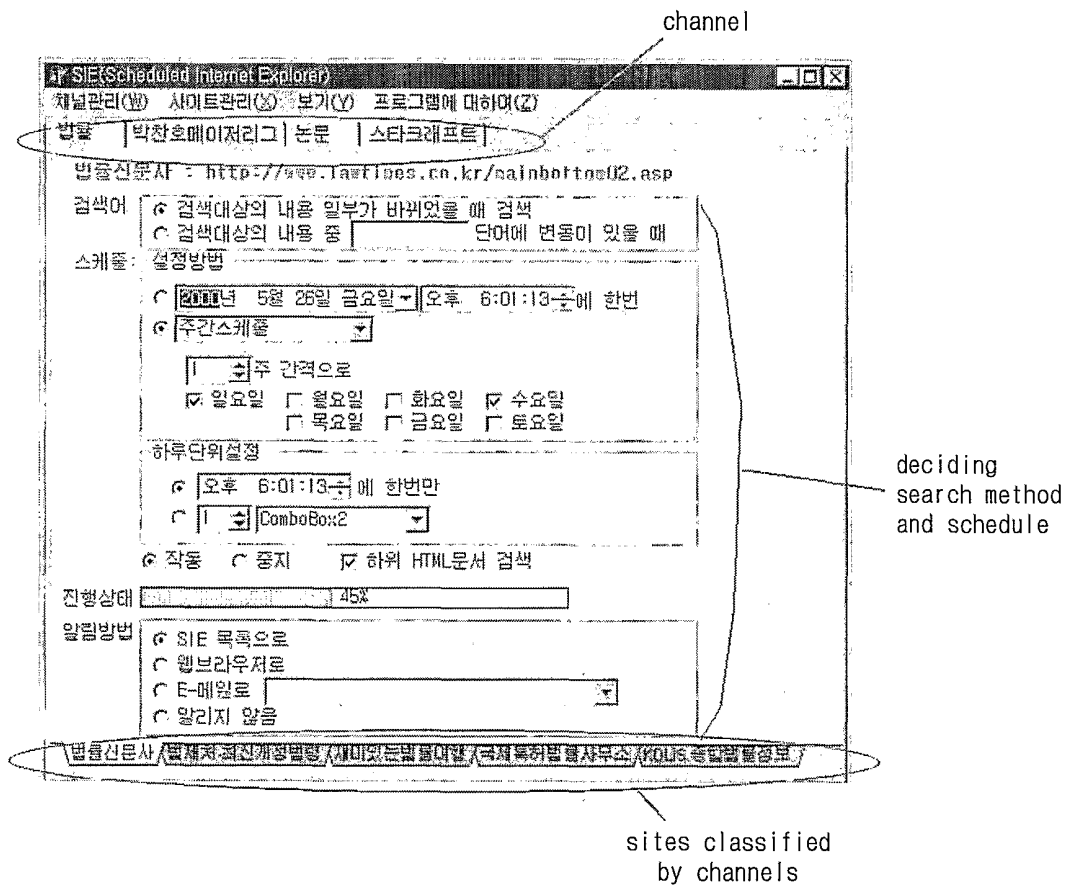


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Fig. 2

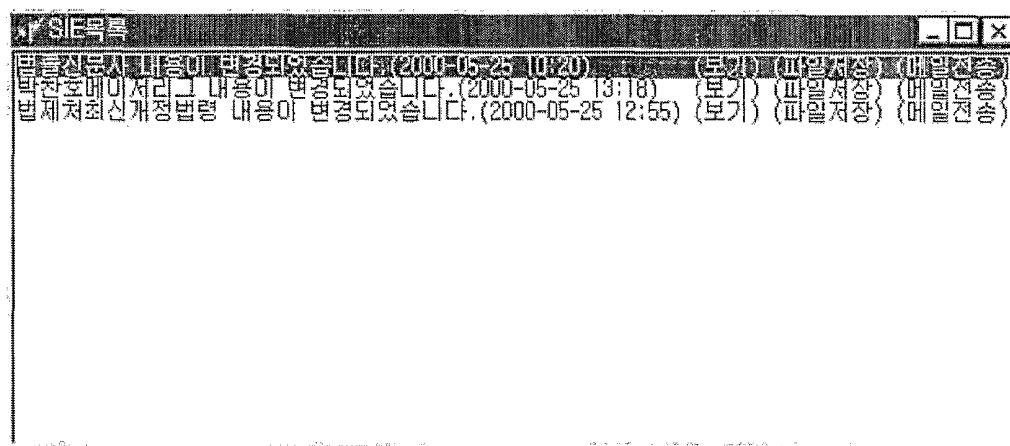
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Fig. 3



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Fig. 4



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Fig. 5

