${\bf (19)}\ World\ Intellectual\ Property\ Organization$

International Bureau





(43) International Publication Date 5 October 2006 (05.10.2006)

(10) International Publication Number $WO\ 2006/104345\ A1$

- (51) International Patent Classification: *H04Q 7/24* (2006.01)
- (21) International Application Number:

PCT/KR2006/001143

- (22) International Filing Date: 29 March 2006 (29.03.2006)
- (25) Filing Language:

Korean

(26) Publication Language:

English

(30) Priority Data:

10-2005-0025960 29 March 2005 (29.03.2005) KR

- (71) Applicant (for all designated States except US): SK TELECOM CO., LTD. [KR/KR]; 11, Euljiro 2-ga, Jung-gu, Seoul 100-999 (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LEE, Changsu [KR/KR]; 3F, 129-14, Bukahyeon 1-dong, Seodaemun-gu, Seoul 120-819 (KR). PARK, Shinyoung [KR/KR]; #301, 51-2, Singyo-dong, Jongno-gu, Seoul 110-032 (KR). WON, Seongho [KR/KR]; 7-1203, Namsan Town Apt., Sindang 3-dong, Jung-gu, Seoul 100-754 (KR). HAN, Kyunghee [KR/KR]; A-102, Cheonghak Apt., 62-3, Nonhyeon 2-dong, Gangnam-gu, Seoul 135-816 (KR). KIM, Kyungjin [KR/KR]; 5-1205, Gyeongnam Town, Beomeo 4-dong, Suseong-gu, Daegu 706-771 (KR).

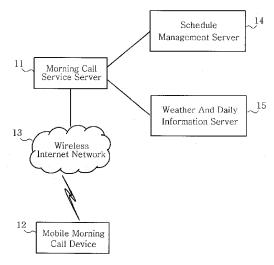
- (74) Agents: LEE, Chulhee et al.; 14F, Hyundai Marine & Fire, Insurance Bldg., 646, Yeoksam-dong, Gangnam-gu, Seoul 135-080 (KR).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, 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: MORNING CALL SERVICE BY MOBILE ROBOT



(57) Abstract: Disclosed is a system and a method for providing a morning call service wherein, when a user wakes up, a mobile morning call device capable of recognizing and tracking him automatically provides his schedule and various types of daily information based on the schedule. The method provides a morning call service by using a morning call device adapted to access a morning call service server for collecting and providing a schedule of a user and daily information. The method includes the steps of storing the schedule and the daily information received from the morning call service server when a morning call time approaches; locating the user; playing pre-selected morning call music when the morning call time arrives; outputting a request for confirming whether or not the user is fully awake when the user stops the morning call music; receiving a reply in response to the request and confirming whether or not the reply meets a requirement; playing the morning call music again when the reply does not meet the requirement; and outputting voice expression of the stored schedule and daily information after confirming that the user is fully awake when the reply meets the requirement.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 2006/104345

PCT/KR2006/001143

MORNING CALL SERVICE BY MOBILE ROBOT

Technical Field

5

10

15

20

25

The present invention relates to a system and a method for providing a morning call service by using a mobile robot. More particularly, the present invention relates to a system and a method for providing a morning call service wherein, when a user wakes up, a mobile morning call device capable of recognizing and tracking him automatically provides his schedule and various types of daily information based on the schedule.

Background Art

In general, a morning call device is used to wake a person by making a sound at a set time. This type of morning call function is now incorporated in various appliances, such as watches, mobile telephones, and wired telephones.

A morning call device is usually the thing which a person first sees when beginning a day and, for this reason, is suitable for providing a user with schedule and various information regarding daily life after awakening him or her.

Korean Patent Application Publication No. 2002-61697



WO 2006/104345 PCT/KR2006/001143

discloses a method for providing a morning call service by using a mobile communication terminal, wherein a user is provided with pre-selected morning call music, notice about arrival of E-mails, and news about various types of information together with a morning call service, regardless of his location (e.g. even on a business trip). The method will now be described briefly.

A mobile communication terminal, usually carried by a user, accesses a morning call service provision server via a wireless communication network. The morning call service provision server accesses a server for handling e-mails, a server for managing news information, a server for managing weather information, and the like.

The user accesses the morning call service provision server and registers personal information, including desired morning call time, type of morning call music, e-mail account for receiving e-mails, and identification number of the mobile communication terminal.

When the registered morning call time arrives, the

morning call service provision server acquires the
identification number of the mobile communication terminal
based on that time. The morning call service provision
server transmits an audio file corresponding to the
registered morning call music, to the mobile communication
terminal, which then plays the file.

When the user operates the mobile communication



5

10

15

WO 2006/104345

5

10

15

PCT/KR2006/001143

terminal to stop the audio file, the morning call service provision server acquires information about received E-mails from the registered E-mail server and transmits the information to the mobile communication terminal.

In addition, after playing of the audio file is stopped, the morning call service provision server provides the mobile communication terminal with news information regarding fields registered by the user, as well as weather information corresponding to the user's current location.

However, such a conventional system for providing a morning call service by using a mobile communication terminal cannot confirm whether or not the user is fully awake, though it may play music at a pre-selected time. In addition, the conventional system is not suitable for use in the morning, because, after waking up, the user generally moves around his or her house to get ready for the day.

Disclosure of the Invention

20 Therefore, the present invention has been made in view of the above-mentioned problems, and it is an object of the present invention to provide a system and a method for providing a morning call service wherein, when a user wakes up, a mobile morning call device capable of recognizing and tracking him automatically confirms whether or not he is fully awake and, after he is fully awake, provides his



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

