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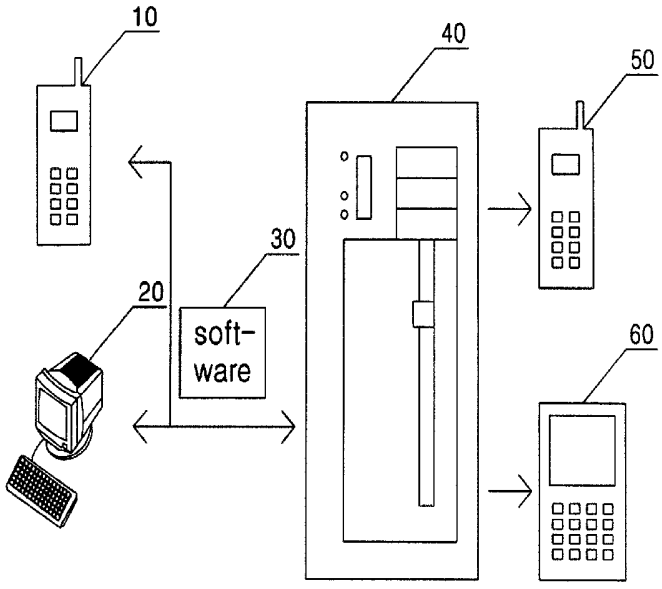
(54) **Title:** METHOD OF PROVIDING VARIOUS SERVICE WITH A PARTICULAR PERSON'S VOICE AND IMAGE, MANAGED BY A ALTERING AND COMPOSING TECHNOLOGY



(57) **Abstract:** The present invention relates to a method of providing various services with a particular person's voice and image, managed by an alternating and composing technology, which is capable of providing a certain service. The above method of the present invention is implemented in such a manner that a service data is inputted into a service user's cellular phone or PDA through a server of a service provider and is transferred to the server of the service provider, and the service data received by the server is analyzed, and the service data is modulated and synthesized to a voice signal of a certain entertainer or sports star based on a user's request and is image-processed.

WO 2004/049743 A1

Method of providing various service with a particular person's voice and image, managed by a altering and composing technology

Technical Field

The present invention relates to a method for providing various services with a particular person's voice and image, managed by an alternating and composing technology, and in particular to a method for providing a voice service, a character service, a motion image, etc. by converting voice into a certain famous entertainer's voice that a customer wants or into a motion image (motion picture) using a voice, image modulation and synthesizing technology in a service method of providing a morning call, schedule management, message transfer, gift function, etc. using a cellular phone.

BACKGROUND ART

As a mass media is advanced, a famous person such as a singer, an athletic player, etc. has a big attraction from people, and famous stars are used as products in various fields.

In particular, as a cellular phone is generally used, the cellular phone is used as a tool for making calls as well as a tool having the functions of a morning call, a schedule manager, and a message transfer, so that various functions are added to the services provided using a cellular phone with respect to famous stars.

For example, the functions such as a morning call have been provided to a charged telephone or the Internet using voices of famous stars. However, since the above services are performed based on the famous star's voices or images previously stored in a server of a service provider, it is impossible for a user to select a certain star's voice or image that a user wants to use. In addition, it is impossible to directly implement a content that a user wants.

DISCLOSURE OF INVENTION

Accordingly, it is an object of the present invention to overcome the above conventional problems.

It is another object of the present invention to provide a method for providing various functions such as a morning call, a schedule management, a message transfer, and a gift transfer using a famous entertainer in such a manner that a voice, image or character that a service user wants to use is inputted and transferred, and a voice signal of a famous star modulated and mixed by a voice modulation and mixing software is received, and an image signal that a service user directly fabricates or a service provide mixes based on a user's demand wherein a voice and image previously stored in a certain server are used together.

To achieve the above objects, there are provided a cellular phone or computer capable of inputting a user information and transferring to a server, and a server capable of processing a modulation and mixing operation with

respect to a vice, image or character of an information transferred and providing a service to the cellular phone or PDA of a service user on a designated date.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will become better understood with reference to the accompanying drawings which are given only by way of illustration and thus are not limitative of the present invention, wherein;

Figure 1 is a view illustrating the construction of a service construction system capable of providing a morning call function, a schedule management and a message transfer function according to the present invention;

Figure 2 is a flow chart of a method for providing a morning call function, a schedule management and a message transfer using a voice and image of a certain person based on a cellular phone and PDA using a voice and image modulation and mixing technique according to the present invention; and

Figure 3 is a view illustrating an embodiment that a motion picture or a character is implemented on a cellular phone or a PDA according to the present invention.

BEST MODE FOR CARRYING OUT THE INVENTION

The preferred embodiments of the present invention will be described with reference to the accompanying drawings.

Figure 1 is a view illustrating the construction of a service construction system capable of providing a morning call function, a schedule management

and a message transfer function according to the present invention.

As shown in Figure 1, a service construction system of a morning call, a schedule management and a message transfer includes a cellular phone 10 or a computer capable of downloading a software 30 for inputting a service content from a server of a service provider and transferring an information that a service user inputs to a server of a service provider, and a server 40 in which a service that a user wants is implemented using a technique of a voice and image modulation mixing based on a service content transferred and the service is transferred to a cellular phone 50 or a PDA 60 at a certain time.

The cellular phone 10 and the computer 20 download a software 30 capable of inputting a service content from a server of a service provider based on a wireless or wired method, so that a character, a voice signal, an image signal, a modulation and mixing of a desired voice and image, and a telephone number and address of a service user are inputted.

The software 30 is capable of achieving an interaction with an image or motion picture fabrication program stored in a cellular phone or computer of a service demander and is capable of directly fabricating a desired image or voice. In the software 30, a desired character, voice or image may be inputted in a question form, so that a character, image and voice signal provided on the service are made.

In the case of the voice signal, in the case that voices and images of a

famous entertainer such as a singer, movie star, etc. and a sports star are modulated and mixed, a certain person whose voice is modulated may be designated and inputted together with the contents of a voice signal.

In addition, in the case of the image signal, it is possible to input an image or a motion picture of a famous star fabricated by him, and an implementation method of an image or motion picture previously inputted into a server may be designated and inputted.

The server 40 receives various information inputted through a software from the cellular phone 10 or the computer of the service demander and processes a voice signal and image signal based on the service content. The server 40 stores voices of famous stars and various images and background screens of the stars, so that the voice signal and image signal corresponding to the information inputted are selected, and the service is provided.

In the case that the input signals have a certain content to be modulated and mixed, the voices are modulated and mixed into the voices of a certain person (for example, a famous entertainer such as a singer, a movie star or a sports star) through a voice conversion software installed in the server 40.

The voice modulation and mixing technique by a voice modulation mixing unit divides a feature with respect to a voice signal of a certain person to be changed into a spectrum envelopment information and a pitch information. The spectrum envelopment information of a certain person is modeled to a HMM

(Hidden Markov Model). The pitch information of a certain person is stored in the server 40. When it is needed to change to the voice of a certain person, a mapping relationship is processed based on the spectrum envelopment information stored in the server 40. In a histogram conversion method, the pitch histogram of the voice signal inputted is changed to have a pitch probability distribution of a certain person.

In the case of the image implementation technique, the service demander can user an image or motion picture fabricated using motion picture or image fabrication software stored in a cellular phone or a computer. For example, the service demander can edit an image using an image fabrication software and can fabricate a new image or a picture of a star. In addition, a motion picture having a game state of a certain sports star may be edited and transferred to the server using an input software.

In addition, the service demander may select a previously fabricated image, voice, etc. without fabricating an image or motion picture. For example, an image, motion picture, avatar, etc. of the stars are stored in the server 40, and the images and motion pictures of the stars that the service demander wants are selected and edited. When the desired information is inputted using the input software 30, the selected image or motion picture is edited based on a user's demand using the voice and image information stored in the server 40 and is provided.

The cellular phone 50 or the PDA 60 performs a character, voice, image signal (including motion picture) inputted from the server 40. The method that the character, voice, and image signal are implemented based on the character, may be selected by the service user. Figure 3 illustrates an embodiment with respect to the implementation method.

Figure 2 is a flow chart of a method for providing a morning call function, a schedule management and a message transfer using a voice and image of a certain person based on a cellular phone and PDA using a voice and image modulation and mixing technique according to the present invention.

First, the service user downloads (S100) a program that the content of a desired service is inputted to a cellular phone or a computer through a server of the service provider. The content of a desired service is inputted (S200) using the program and is transferred (S300) to the server.

Next, the service provider analyzes the service content that the server received and modulates or mixes the character, voice and image signal based on the contents that the service demander wants for thereby fabricating an image (S400). The character, voice and images processed by the cellular phone or computer are retransferred (S500). At this time, a satisfaction of the service demander is checked with respect to the processed character, voice and image. As a result of the check, if not satisfied, the routine is processed from the step S200, and the above routine is repeated until a desired voice and image signal

are obtained.

When a user transfers a signal concerning the satisfaction with respect to the voice and image signals, the server transfers (S600) the voice and image signals to the user's cellular phone or PDA on the date that the user designated.

The voice and image signals transferred to the cellular phone in the designated date are executed (S700), so that the services such as a morning call, schedule management and message transfer are provided.

Figure 3 is a view illustrating an embodiment that a motion picture or a character is implemented on a cellular phone or a PDA according to the present invention.

As shown in Figure 3, in a method for displaying the motion picture and character on the cellular phone or the PDA, three output windows are displayed. A motion picture is displayed on a largest window 100. A character is displayed on a lower window 200. A time or an incoming information of the cellular phone are displayed on a right window 300.

The implementation method is not limited to the above method. The output windows may be deleted or added based on a change of setting in the cellular phone or PDA of the service user. In addition, the positions of the windows may be changed. The outputs of the character, image and voice signals may be changed.

INDUSTRIAL APPLICABILITY

In the present invention, there is provided a method for providing various functions such as a morning call, a schedule management, a message transfer, and a gift transfer using a famous entertainer in such a manner that a voice, image or character that a service user wants to use is inputted and transferred, and a voice signal of a famous star modulated and mixed by a voice modulation and mixing software is received, and an image signal that a service user directly fabricates or a service provide mixes based on a user's demand wherein a voice and image previously stored in a certain server are used together.

The present invention is not limited to the above embodiment. As the present invention may be embodied in several forms without departing from the spirit or essential characteristics thereof, it should also be understood that the above-described examples are not limited by any of the details of the foregoing description, unless otherwise specified, but rather should be construed broadly within its spirit and scope as defined in the appended claims, and therefore all changes and modifications that fall within the meets and bounds of the claims, or equivalences of such meets and bounds are therefore intended to be embraced by the appended claims.

WHAT IS CLAIMED IS:

1. A method for providing various services with a voice and image of a certain person using a voice and image modulation and mixing technique, comprising the steps of:

(a) a step in which a program capable of inputting a content of a service using a cellular phone or a computer of a service demander through a server of a service provider;

(b) a step in which a desired service content is inputted using the program stored in the cellular phone or computer;

(c) a step in which the content of the service inputted by the software stored in the cellular phone or computer is transferred to the server;

(d) a step in which the service content that the server received is analyzed, and a voice signal is modulated and mixed based on the content that the user wants, and an image and character including a motion picture are fabricated and mixed;

(e) a step in which the voice, image and character processed by the server are transferred to the cellular phone or computer that transferred the service content for thereby checking whether the contents are satisfied;

(f) a step in which in the case that the reverse-transferred vice, image and character are not satisfied by the service demander, the server processes the routine from the step (b), and in the case that the same are satisfied, the

character, voice and image corresponding to the service contents are transferred to the cellular phone or the PDA of the service user that the service demander designated, on the designated date based on the service contents inputted in the server; and

(g) a step in which the character, voice, and image signal transferred to the cellular phone of PDA of the service user by the server are outputted through the cellular phone or the PDA.

2. The method of claim 1, wherein in said step (b), a certain selection such as ID of a service demander, a kind of service, a voice content, a character content and a modulation and mixing object, a selection of an image stored in a cellular phone or computer of a service demander or an image or motion picture fabricated using a motion picture fabrication software or a selection of an image or a motion picture stored in the server and a cellular phone number of a service user, a PDA receiving address, and a service date are inputted in the software received from the cellular phone or computer of the service demander through the server.

3. The method of claim 1, wherein in the step (d), the voice signal is modulated and mixed to a voice of a certain person using a voice changing software in the server based on the service content transferred in the step (c);

and in the case that the image or motion picture that the service demander fabricated are inputted, and in the case that the image signal is directly used or the service demander selects an image or a motion picture stored in the server or inputs an edit method, an image or motion picture t hat the service demander wants is implemented in the server.

4. The method of claim 1, wherein in said step (f), the service is provided to the cellular phone or PDA based on a transfer period provided in the service content transferred and inputted in the server.

5. The method of claim 1, wherein in said (g), a method for outputting a voice signal or a method for implementing a character or voice in the LCD is determined based on the setting of a service user wherein the character, voice and image are executed through a LCD or speaker of the cellular phone or PDA.

FIG. 1

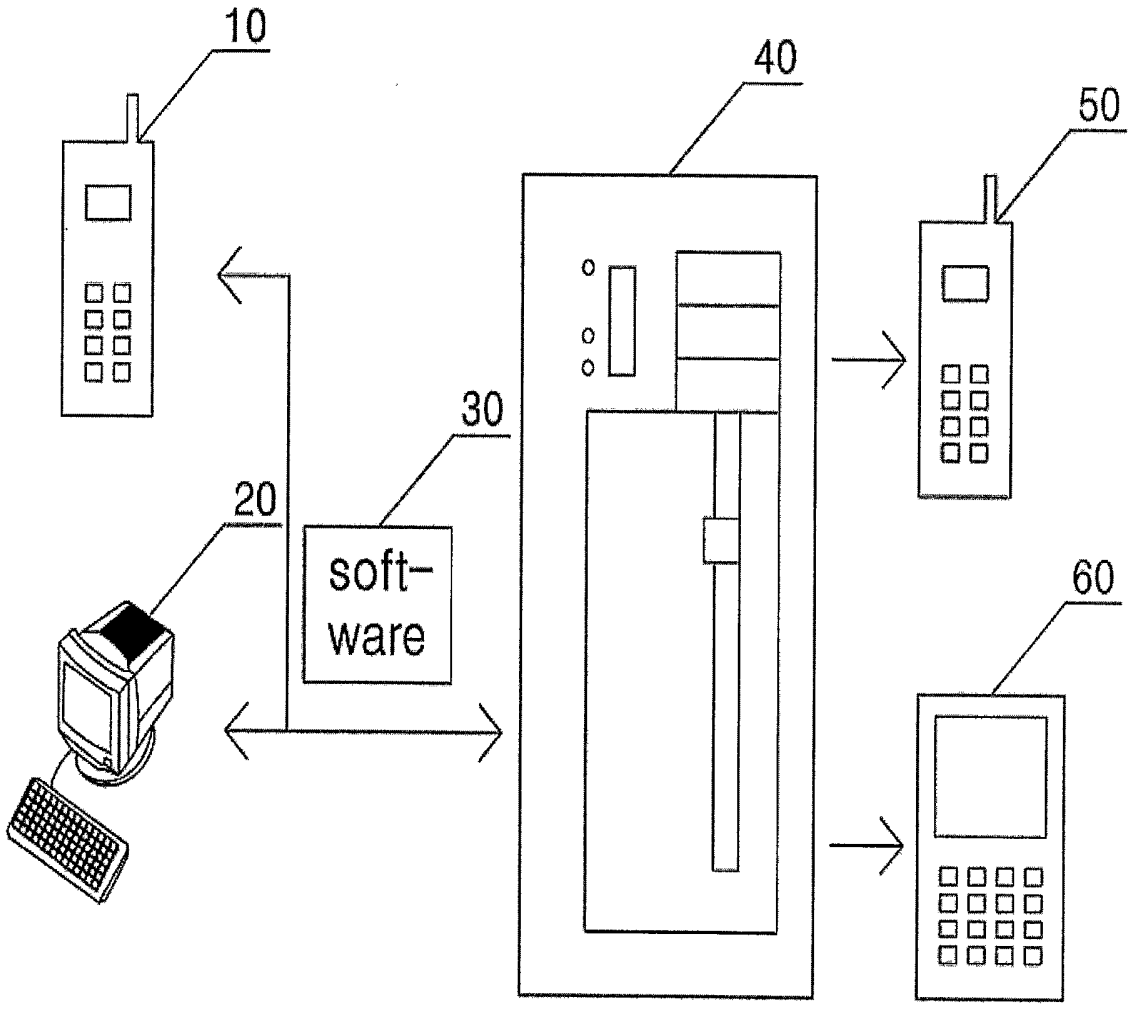


FIG. 2

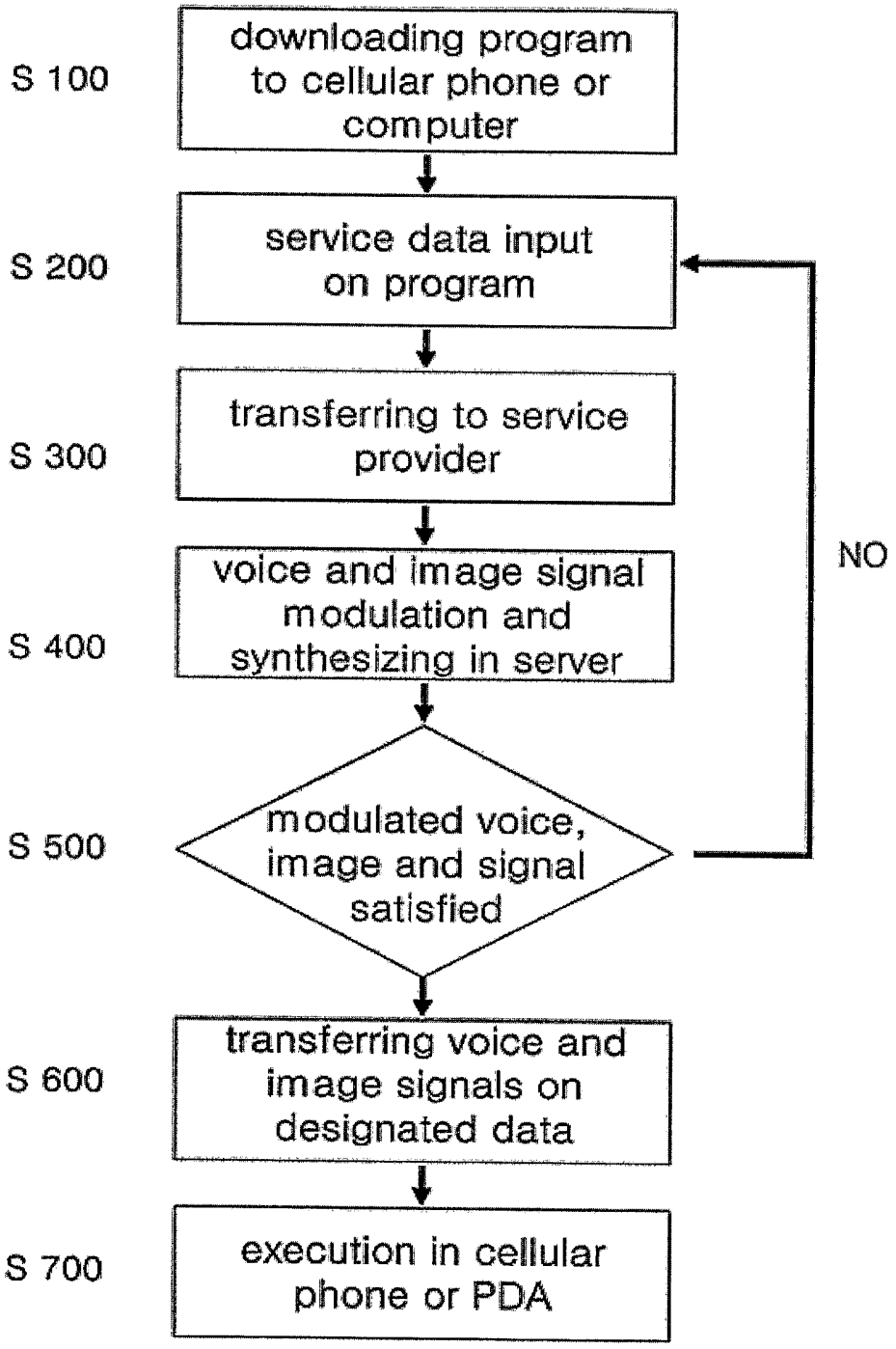
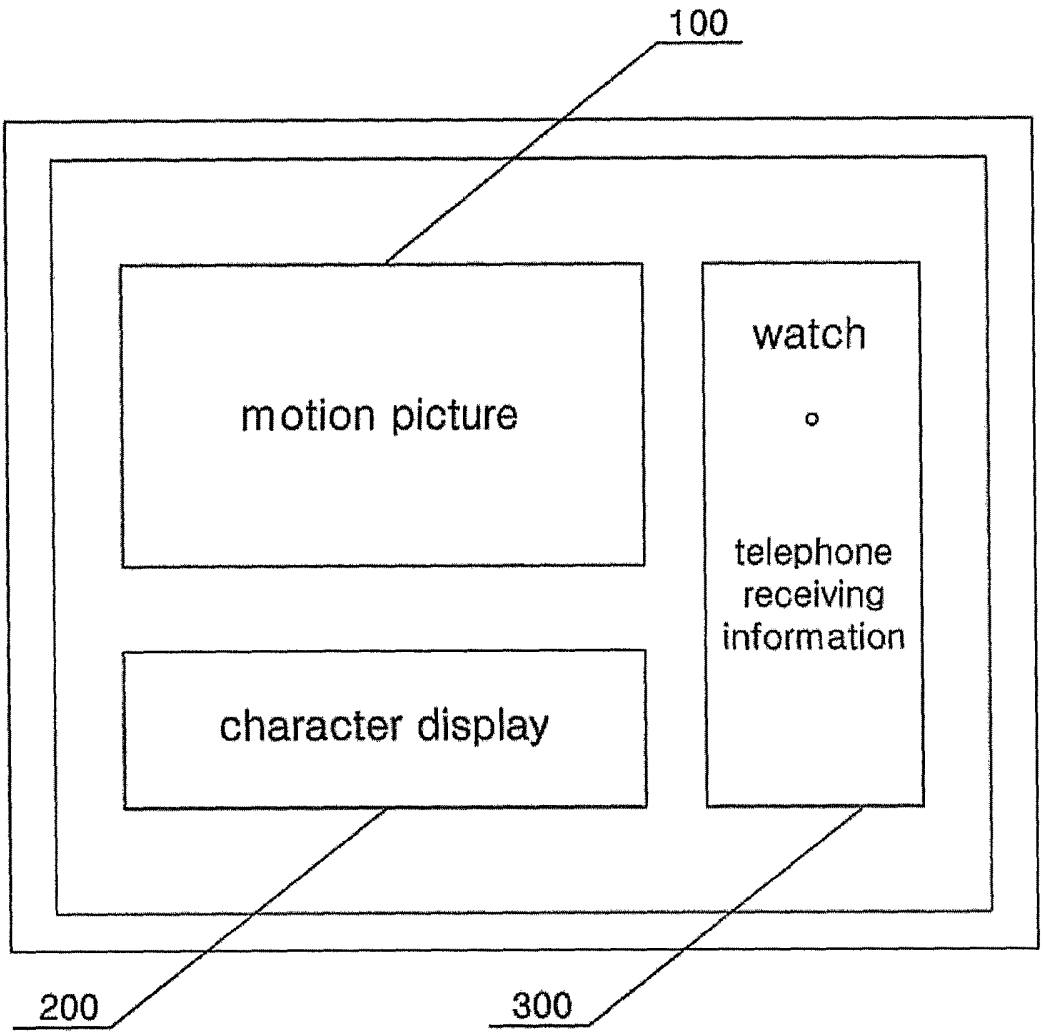

S 100
downloading program to cellular phone or computer
S 200
service data input on program
S 300
transferring to service provider
S 400
voice and image signal modulation and synthesizing in server
S 500
modulated voice, image and signal satisfied
NO
S 600
transferring voice and image signals on designated data
S 700
execution in cellular phone or PDA

FIG. 3


100
motion picture
watch
telephone receiving information
character display
200
300

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2003/002438

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 H04Q 7/24

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)
IPC7 H04Q, H04M, H04B, G06F17, G10L,

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 internationl search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KR2001-69740 A (FANDANGGO KOREA LTD.) 25 JULY 2001 see the abstract & figure1, 4	1-5
X	KR2000-36756 A (VOICE WEAR CO. LTD.) 5 JULY 2000 see the abstract & figure1	1-5
X	KR2001-91843 A (WOORI TECHNOLOGY INC.) 23 OCTOBER 2001 see the abstract & figure1	1-5
Y	KR2000-10003 A (SAMSUNG ELECTRONICS CO. LTD.) 15 FEBRUARY 2000 see the abstract & figure3	1-5
Y	KR2001-25659 A (PUJENSOPUT CO.) 6 APRIL 2001 see the abstract & figure2	1-5
Y	JP2000-13476 A (MATSUSHITA ELECTRIC IND. CO. LTD.) 14 JANUARY 2000 see the abstract & figure1, 3	1-5

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:
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