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(54) Title: SERVICE PROVIDING METHOD OF A CHARACTER GROWING GAME BY USING MOBILE PHONES

(57) Abstract: Disclosed is a method which enables mobile phone users to enjoy a character growing game provided to their mobile phones accessible to a web game server system. In response to reception of an entry signal of the character growing game from a first mobile phone, the web game server system transmits via the wireless Internet a character seed to the first mobile phone and to a second mobile phone designated by the first mobile phone, respectively. Whenever the first and second mobile phones are connected via a call, the character growing game is activated between the first and second mobile phones. In the game, a growing energy is calculated based on call intervals and/or call duration of the two phones. According to the value of the calculated growing energy, the growing step of a character is determined. Then, a growing figure of the character corresponding to the determined growing step is displayed on each display panel of the first and second mobile phones. Thus, the users of the first and second mobile phones can grow the character by their common efforts via their calls.

SERVICE PROVIDING METHOD OF A CHARACTER GROWING GAME BY USING MOBILE PHONES

Technical Field

The present invention relates to a method of providing a game service using mobile phones, and more particularly to a service providing method of a character growing game which enables users to grow a character, through their common interest in and efforts at each other's calls, by producing growth energy which raises the character in proportion to calling frequency and calling time between the users of pre-designated mobile phones.

Background Art

Generally, the most typical game among character growing games is the "Damagochi" growing game. This game is operated only in a game apparatus which is designed exclusively therefor, and is a method of growing the character called "Damagochi" through the sole user's interest and affection.

There has been introduced an improved character growing game that a character chosen on one's own is grown by using a computer connected to the Internet. The user may also be bored with this game as it raises the character through such sole interest and affection. Moreover, it may be a hassle in that the user should access to an Internet game site to enjoy the game.

The characteristics of the above games lie in the fact that the user receives amusement by raising the character via his or her own interest and affection only. However, this fact may operate as a drawback. That is, such games cannot meet a demand for raising a shared character in common and

receiving amusement together on the parts of lovers, close friends, or family members.

Disclosure of Invention

Therefore, it is an object of the present invention to provide a service providing method of a character growing game by using mobile phones in order to enable lovers, close friends, or family members to grow a common character together and to multiply a delightfulness of calls and feel more intimacy through the character of which the growth speed is controlled in proportion to calling frequency and calling time via the mobile phones.

In order to accomplish the said object, there is provided a service providing method for enabling mobile phone users to play a character growing game program provided to first and second mobile phones connected to a web game server system via the wireless Internet, characterized in that, in response to receiving an application signal of a character growing game from the first mobile phone, the web game server system transmits a character seed to the first mobile phone and/or to the second mobile phone designated by the first mobile phone via the wireless Internet and, by functions of the character growing game program installed in the first mobile phone and/or the second mobile phone, a growth energy is calculated according to calling frequency and/or calling time whenever a call is made between the first mobile phone and the second mobile phone, a growth stage of a character is calculated on the basis of the calculated growth energy, and a growing feature of the character corresponding to the calculated growth stage is displayed on each display panel of the first mobile phone and/or the second mobile phone, so that each user of

the first and second mobile phones grows the character by common efforts via a call connection.

It is preferable that, by a function of the character growing game program, the web game server system receives a mobile phone number from the first and/or second mobile phone(s) whenever the character completes growth, and the web game server system accumulates the number of the character grown by the user of the received phone number. Further, by a function of the character growing game program, the web game server system selects a part of all mobile phone users who completely grew at least one character to provide a prize. It is preferable that the character is consecutively displayed with modification in location and size for providing vividness on panels of the first and/or second mobile phone(s).

Brief Description of Drawings

The detailed description of a preferred embodiment according to the present invention will be made with reference to the attached drawings in which the reference numbers exactly correspond to those in the detailed description.

FIG. 1 is the configuration of a system in which a character growing game service according to the present invention is realized.

FIG. 2 is a block diagram showing the internal configuration of a mobile phone which enables a user to enjoy the character growing game service.

FIG. 3 is a flow chart showing the procedure of a service application processing module of a character growing game according to the present invention.

FIG. 4 is a flow chart showing the procedure of a character growth

processing module of the character growing game according to the present invention.

FIG. 5 is a flow chart showing the procedure of a post-processing module for a growth-completed character of the character growing game according to the present invention.

FIG. 6 illustrates sequential displays of a mobile phone panel for accessing to the menu of the character growing game.

FIG. 7 illustrates sequential displays of the mobile phone panel concerned with a guide to the character growing game and the game start.

FIG. 8 illustrates sequential displays of the mobile phone panel corresponding to each growth stage of the rose character.

FIG. 9 illustrates sequential displays of the mobile phone panel concerned with storing the growth-completed rose character.

FIG. 10 illustrates sequential displays of the mobile phone panel concerned with a prize service.

Best Mode for Carrying Out the Invention

The above object and other characteristics and advantages of the present invention will become more apparent with reference to the following detailed description and the attached drawings in which the characteristics of the various embodiments according to the present invention are exemplified.

Hereinafter, a preferred embodiment of the present invention will be explained in detail with reference to the attached drawings.

FIG. 1 is the configuration of a system in which a character growing game service according to the present invention is realized. A game service site

provider prepares a web game server 40, connected to the Internet 30, which provides various services required for a character growing game in response to an external service request, which stores programs and contents for various kinds of character growing games in a game database 42, and which prepares a membership database 44 for administrating membership information. The web game server 40 is connected to a wireless Internet service system 20 via the Internet 30. When a mobile phone user wants to play and enjoy the character growing game provided by the site provider, the user prepares an environment for carrying out the character growing game by providing information requested by the site provider via the wireless Internet service system 20 and by installing requisite game programs and a character seed in his or her own mobile phone through downloading. The character seed hereinafter refers to the character concerned with the initial growth stage.

The examples of the mobile phone intended by the present invention can be a normal cellular phone, a personal communication service (PCS) phone, and a phone such as IMT2000 to be serviced in the future. As shown in FIG. 2, these mobile phones generally comprise a radio frequency (RF) signal transmitter/receiver 54 connected to an antenna 70, a data storage 66 for storing a game program required for the character growing game and each character per a growth stage, a microphone 62, a speaker 64 and a voice signal processor 60 which input/output a voice signal during a call and process the signal required therefor, a display 58 like an LCD module for displaying a character image, a variety of text information and so on, a key input 56 having phone number keys and various kinds of function keys required for calls and generating input signals of the keys, and an interface 68 for communicating data by being connected to

an external device via a cable. In particular, it is preferable to have a caller ID detector 52 having a function of identifying the caller's phone number in order to play and enjoy the character growing game according to the present invention. The mobile phones also have a controller 50, which is connected to all the components mentioned above, for controlling an overall operation of the components.

For playing and enjoying the character growing game, the game program should be installed in the mobile phone. As one method of installing the game program, the user can wireless-download the game program by connecting his or her mobile phone to the web game server 40 via the wireless Internet service system 20 and the Internet 30. As another method, the user can download the game program from the web game server 40 to his or her computer (not shown) via the Internet 30, and then from the computer to his or her mobile phone by connecting the interface 68 to the computer via a communication cable.

The mobile phone in which the game program is installed displays a game menu on the display 58 by the user's key manipulation as shown in FIG. 6. FIG. 6 is made on the assumption that a 'character growing (growth) game' is provided as a submenu of an entertainment network menu. The character growing game menu is prepared to include one or more kinds of character growing games such as 'love-rose growing', 'pet growing', 'cyber-baby growing' or the like, each of which is made to have a particular character and a growing scenario. In the 'pet raising' game in which a dinosaur's egg or baby grows, it is preferable to design the game in such a way that the user's curiosity can be long maintained by not revealing the species of the character until the egg or the baby is fully grown up. The 'cyber-baby growing' game is designed for a couple to

continuously proceed with processes of having, delivering and raising their baby. The 'love-rose growing' game is a game that a rose seed is provided for players or parties involved in the game to grow the rose seed until it is in full bloom by their common efforts. Hereinafter, this game will be explained as an example.

FIG. 3 is a flow chart showing the procedure of a service application processing module of a character growing game according to the present invention. When the mobile phone user selects a game, i.e., the 'love-rose growing' game, among a plurality of character growing games displayed on the display 58 by manipulating the key input 56, the controller 50 recognizes such selection and controls to display a main menu shown in FIG. 7(a) on the display 58 of the mobile phone (Step S10).

At the user's request, an introduction to the game and how to play are briefly displayed as in FIG. 7(b). When the 'game start' menu is selected, a message as in FIG. 7(c) is outputted on the display 58, so that a menu from which a receiver of the character (rose) seed is selected is provided. The receiver can be the user himself or herself, the other person, or the other person and the user (Step S12).

When the receiver is selected, the controller 50 requests the user to input the receiver's phone number as shown in FIG. 7(d). As shown in FIG. 7(e), when the applicant has a message for the receiver, it can be transmitted by an input, together with the phone number (Step S14).

Further, the controller 50 proceeds with requesting and inputting the game applicant's phone number and personal information (FIG. 7(f) and (g)). The applicant's personal information basically includes the national identification number or its equivalent by which the applicant can be identified. The national

identification number must be received for a billing purpose and for a future use as marketing resources. Although an ID or a password can be requested as personal information, the request can be omitted due to the property of mobile phone service in which it is a hassle to input such data (Step S16).

After information on the applicant and the receiver is inputted, the controller 50 controls the RF signal transmitter/receiver 54 to transmit said information to be delivered to the web game server 40 (Step S17).

The web game server 40 stores said information in the membership database 44. And then, the web game server 40 transmits the character (rose) seed, together with the massage, to the mobile phone of the receiver, and transmits a message notifying the completed transmission of the character seed to the mobile phone of the applicant. Therefore, the respective messages are displayed on the display 58 of each mobile phone as shown in FIG. 7 (h) and (i) (Steps S18, S20). When an error occurs during the transmission, a proper error message is displayed on the display 58 (FIG. 7 (k)). When the receiver or the applicant presses an 'O.K.' key of the key input 56, the character seed is displayed on the display 58 as shown in FIG. 7(j), accordingly an environment in which the character seed shoots out the sprout to grow is secured in the respective mobile phones. At this time, the web game server 40 ascertains as to whether the game program is installed in the mobile phone or not. If not, the game program will be transmitted concurrently with the transmission of the character seed.

Detailed explanations are described hereinafter with reference to FIG. 4 in which a flow chart shows the procedure of a character growth processing module of the character growing game according to the present invention.

As mentioned above, the character seed can be transmitted in three ways according to the applicant's intention. Fig. 4 will commonly apply if the mobile phone, whether it is the applicant's or the receiver's, is the one which has received the character seed.

After the applicant and/or the receiver transmit(s) and/or receive(s) the character seed, the character gradually grows, without special administration, by receiving a growth energy according to calls between the applicant and the receiver. For this, the controller 50 executes the game program which resides in the data storage 66. As the character grows, its growing features are displayed on the display 58 of each mobile phone of the applicant and the receiver.

First of all, while whether a call is in is regularly checked, upon detection of a call arrival, it is judged whether the call is from the party involved in the character growing game. For this, the caller ID detector 52 detects the caller's phone number and transmits it to the controller 50, and the controller 50 makes the judgment as above by comparing the present caller's phone number with the phone number, stored in the data storage 66, of the party involved in the character growing game (The latter phone number is, hereinafter, referred to as 'the designated phone number')(Steps S22, S24).

If the phone number of the received call corresponds to the designated phone number, the controller 50 will count calling time (Step 26). Based on the counted calling time, the controller 50 calculates a growth energy of the character (Step 28). The growth energy can be calculated by a method in which one unit of the growth energy, which enables the character to level up its growth stage by one, is allowed to calling parties whenever an accumulated

calling time between the parties reaches a predetermined time, for example, 5 minutes.

However, a variety of modifications can be made to the method of calculating the growth energy. That is, in addition to calling time, calling frequency can be further taken as a calculating base of the growth energy, and the growth energy can be calculated by applying proper weight values to the total calling frequency and the total calling time. Calling intervals can be further taken as the calculating base in a manner that a minus weight value is applied to the calling time and/or the calling frequency so as to reduce the growth energy when no call has been made for more than 24 hours, for example.

After calculating the growth energy, the controller 50 generates the calculated growth energy, for example, the sunlight, water, rest and so on for plants such as roses, and grows the character by providing the generated energy to the present character. The feature of the grown character to which the growth energy is added is displayed on the display 58 (Steps S30, S32). Here, the growth stage of the character can be variable according to how the scenario is prepared. FIG. 8 illustrates an example, in which the growth stage of a rose as a character is depicted, comprising 14 stages starting from a stage at which a seed is transmitted (Stage 1) to a stage at which the seed grows (Stage 2), a stage at which sprouts shoot out (Stage 3), a stage at which leaves come out (Stage 4), a stage at which the leaves and branches grow (Stage 5), a stage at which the leaves, branches and thorns grow (Stage 6), a stage at which the flower bud is ready (Stage 7), a stage at which the flower bud shoots out (Stage 8), a stage at which the flower bud begins to open (Stage 9), and stages from which the flower bud begins to open through which the rose is in full bloom

(Stages 10 to 14). There is provided a scenario for the growth stages in which stage 14 can be reached, for example, by calling on the average twice or three times a day for a week. Some changes for the character image in size or position can be made to display the character vividly as if it were seen as a motion picture.

After the character is grown based on the above growth scenario, the present growth status is stored in the data storage 66. When the next call is connected, the character is grown by repeating the procedure of the character growth by means of calculating the growth energy in the same manner as above.

FIG. 5 is a flow chart showing the procedure of a post-processing module for a growth-completed character of the character growing game according to the present invention. Whenever the above character growth processing is made by completing the call, the controller 50 checks whether the growth stage of the character has reached the final stage (for example, the fourteenth stage at which the rose is in full bloom).

Whenever the character growth is completed, the controller 50 displays a rose storage box of the main menu as shown in FIG. 9, and then the user is requested to input his or her mobile phone number (Steps S38, S40).

When the user inputs the phone number, the controller 50 transmits it via the RF signal transmitter/receiver 54, and increases the number of the growth-completed character to one in the data storage 66 (Steps S42, S44). And also, the web game server 40 receives the mobile phone number and increases the number of the character grown by the user of the phone number by one (Step 46). The transmitted roses are automatically stored in the rose storage box of the web game server 40 (Step 48).

In order to raise interest in the game, a variety of services can be provided. Prizes can be provided by drawing a lottery for some users who succeeded in completing the character growth, for example, the rose in full bloom. When the number of the roses accumulated in the rose storage box exceeds, for example, 100, a discount coupon for a flower delivery service can be provided, or a bunch of roses can be delivered. As represented in FIG. 10, guides on these prize services are displayed on the mobile phone panel in order to let the user know.

Industrial Applicability

As explained above, the present invention is a character growing game, based on the wireless Internet, in which a character can be grown by transmitting the character image to a user and/or a designated party by the user via their mobile phones and by common efforts via calling time and/or calling frequency between the two parties. As their shared character is administered in virtual space via their mobile phones which can be used most, the two parties have doubled enjoyment during the call conversation and can resolve the feeling of distance that they cannot meet frequently in their busy lives. Furthermore, the present invention can contribute to creating a better society by increasing the bond of intimacy among people.

While the present invention has been particularly shown and described with reference to a particular embodiment thereof, it will be understood by those skilled in the art that various changes and modifications can be made within the scope of the invention as hereinafter claimed. Therefore, all the changes and modifications of which the meaning or scope is equal to the scope of the claims

of the present invention belong to the scope of the claims thereof.

CLAIMS

1. A service providing method for enabling mobile phone users to play a character growing game program provided to first and second mobile phones connected to a web game server system via the wireless Internet, characterized in that, in response to receiving an application signal of a character growing game from the first mobile phone, said web game server system transmits a character seed to said first mobile phone and/or to the second mobile phone designated by said first mobile phone via said wireless Internet and, by functions of said character growing game program installed in said first mobile phone and/or said second mobile phone, a growth energy is calculated according to calling frequency and/or calling time whenever a call is made between said first mobile phone and said second mobile phone, a growth stage of a character is calculated on the basis of the calculated growth energy, and a growing feature of the character corresponding to the calculated growth stage is displayed on each display panel of said first mobile phone and/or said second mobile phone, so that each user of the first and second mobile phones grows the character by common efforts via a call connection.

2. The method as claimed in claim 1, wherein by a function of said character growing game program, said web game server system receives a mobile phone number from said first and/or second mobile phone(s) whenever the character completes growth, and said web game server system accumulates the number of the character grown by the user of said received phone number.

3. The method as claimed in claim 1, wherein by a function of said character growing game program, said web game server system selects a part of all mobile phone users who completely grew at least one character to provide a prize.

5

4. The method as claimed in claim 1, wherein said character is consecutively displayed with modification in location and size for providing vividness on panels of said first and/or second mobile phone(s).

FIG. 1

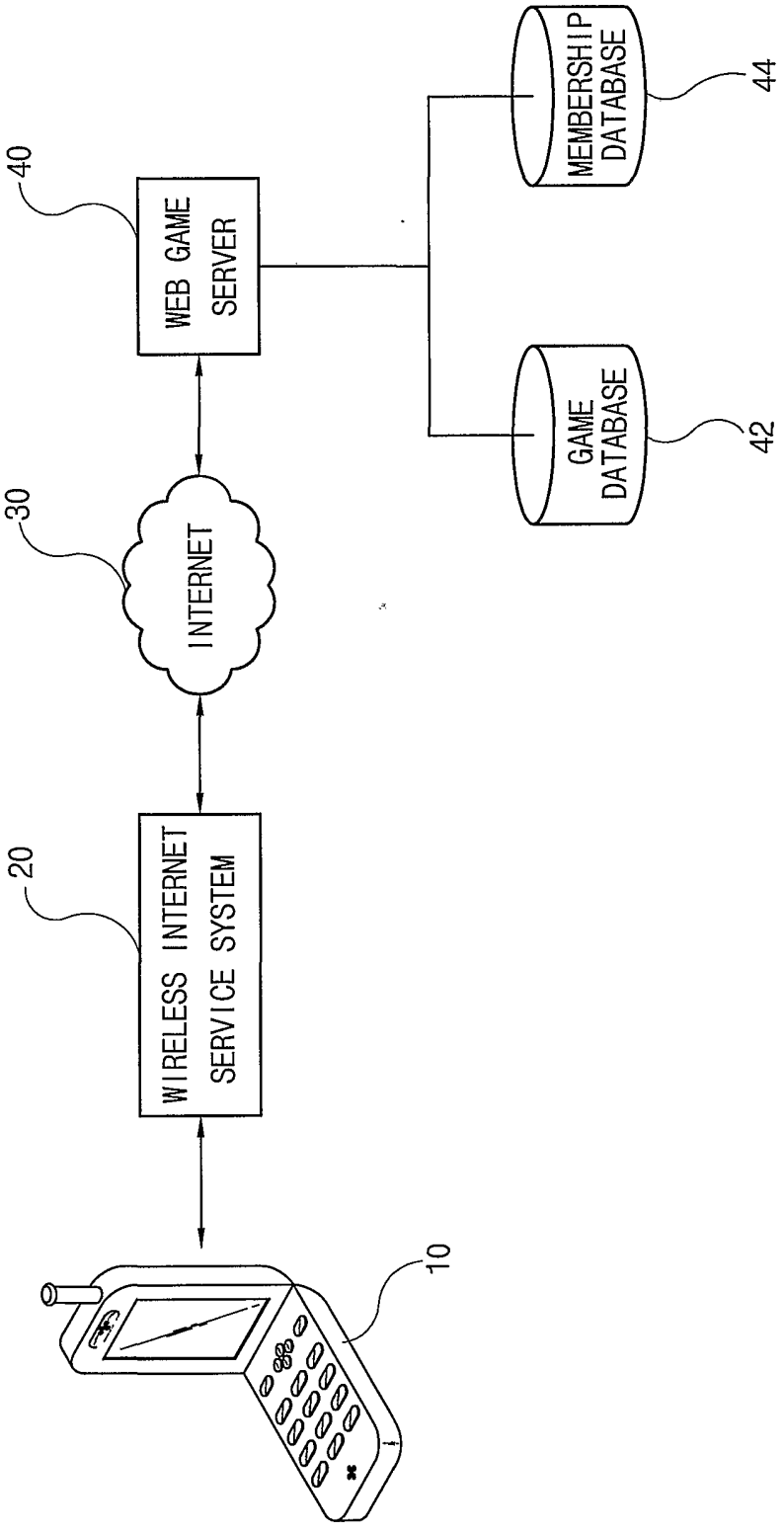

MEMBERSHIP DATABASE
44
40
WEB GAME SERVER
GAME DATABASE
42
30
INTERNET
20
WIRELESS INTERNET SERVICE SYSTEM
10

FIG. 2

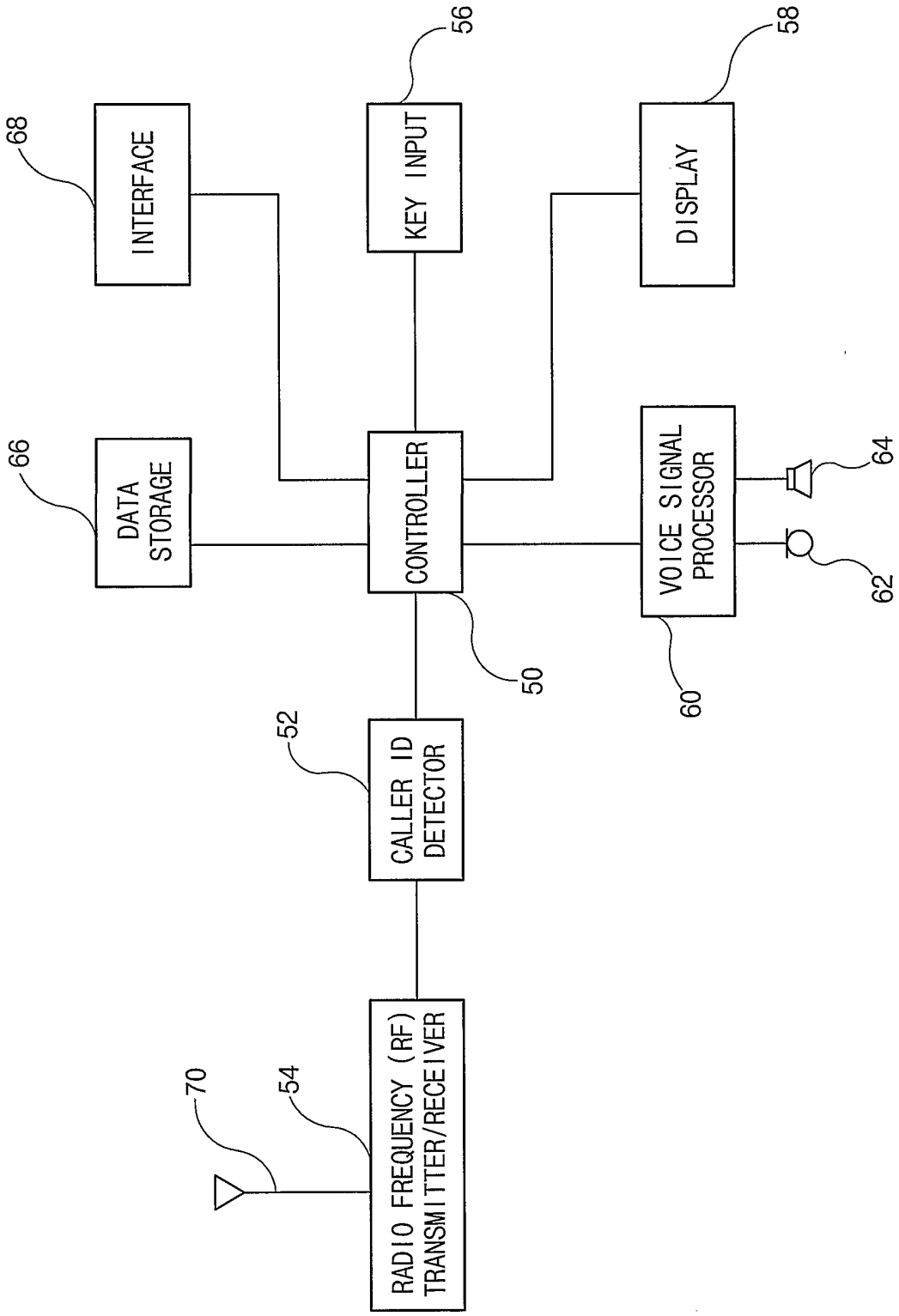

INTERFACE
68
KEY INPUT
56
DISPLAY
58
DATA STORAGE
66
CONTROLLER
50
VOICE SIGNAL PROCESSOR
60
64
62
CALLER ID DETECTOR
52
RADIO FREQUENCY (RF) TRANSMITTER/RECEIVER
54
70

FIG. 3

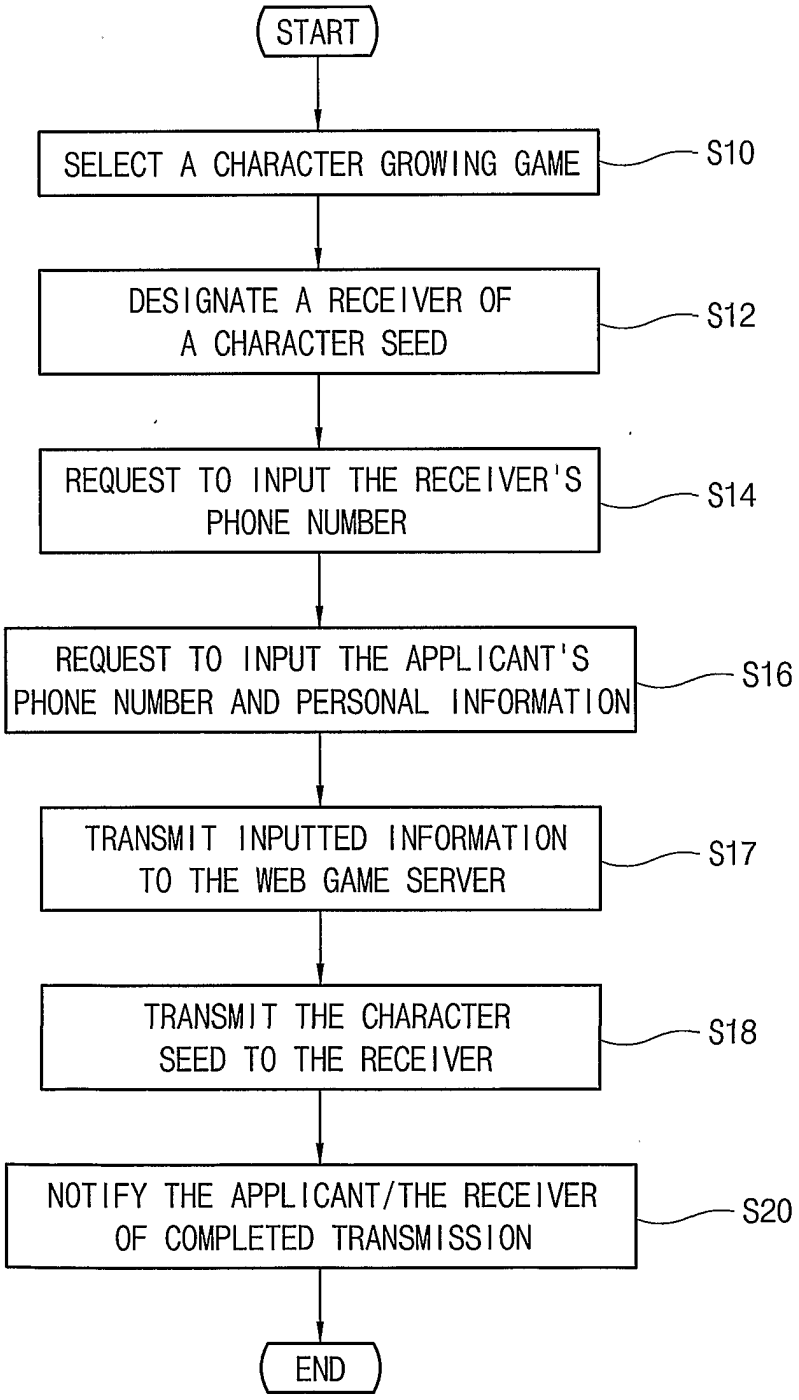

START
SELECT A CHARACTER GROWING GAME
S10
DESIGNATE A RECEIVER OF A CHARACTER SEED
S12
REQUEST TO INPUT THE RECEIVER'S PHONE NUMBER
S14
REQUEST TO INPUT THE APPLICANT'S PHONE NUMBER AND PERSONAL INFORMATION
S16
TRANSMIT INPUTTED INFORMATION TO THE WEB GAME SERVER
S17
TRANSMIT THE CHARACTER SEED TO THE RECEIVER
S18
NOTIFY THE APPLICANT/THE RECEIVER OF COMPLETED TRANSMISSION
S20
END

FIG. 4

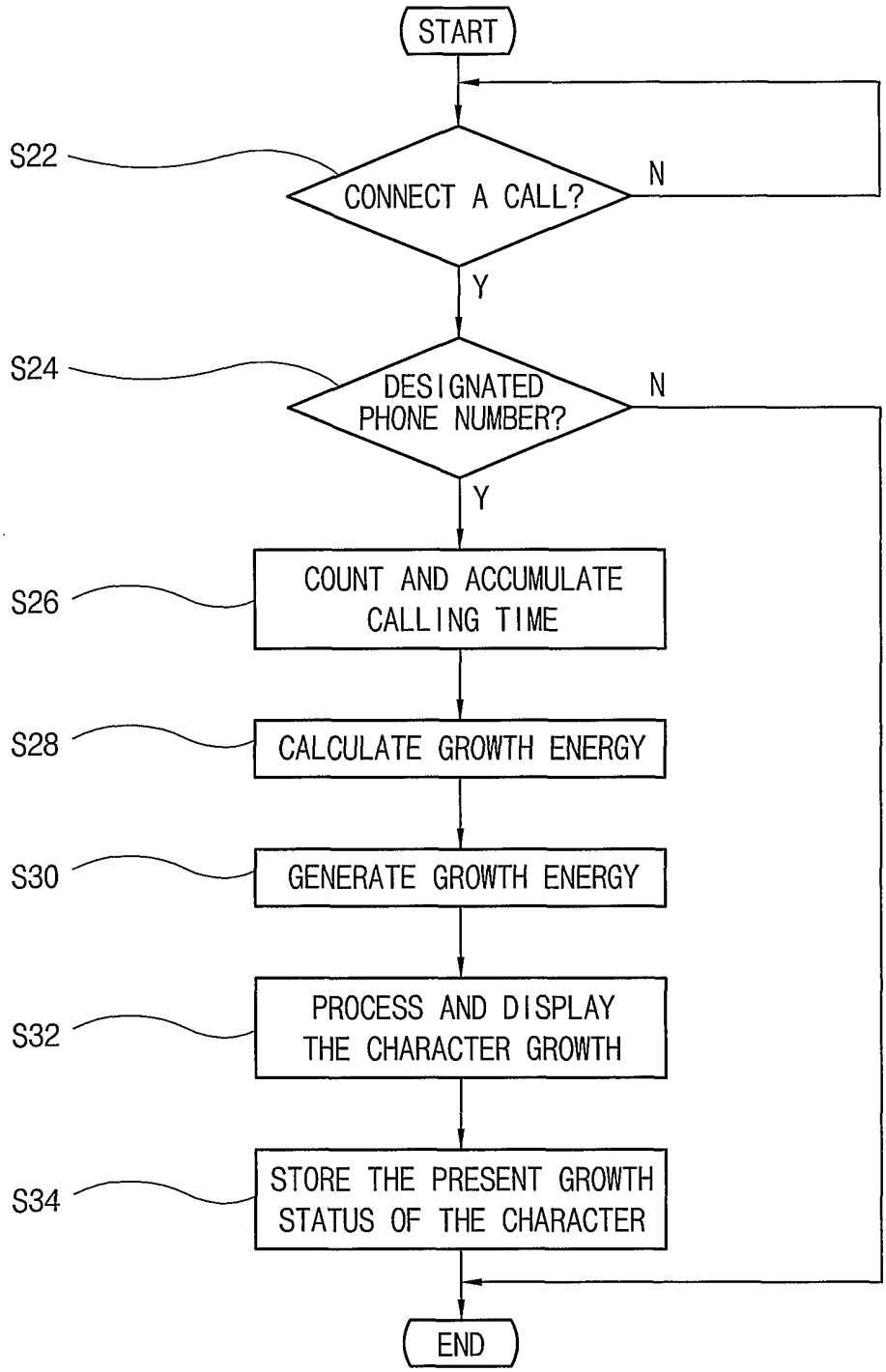

START
S22
CONNECT A CALL?
N
Y
S24
DESIGNATED PHONE NUMBER?
N
Y
S26
COUNT AND ACCUMULATE CALLING TIME
S28
CALCULATE GROWTH ENERGY
S30
GENERATE GROWTH ENERGY
S32
PROCESS AND DISPLAY THE CHARACTER GROWTH
S34
STORE THE PRESENT GROWTH STATUS OF THE CHARACTER
END

FIG. 5

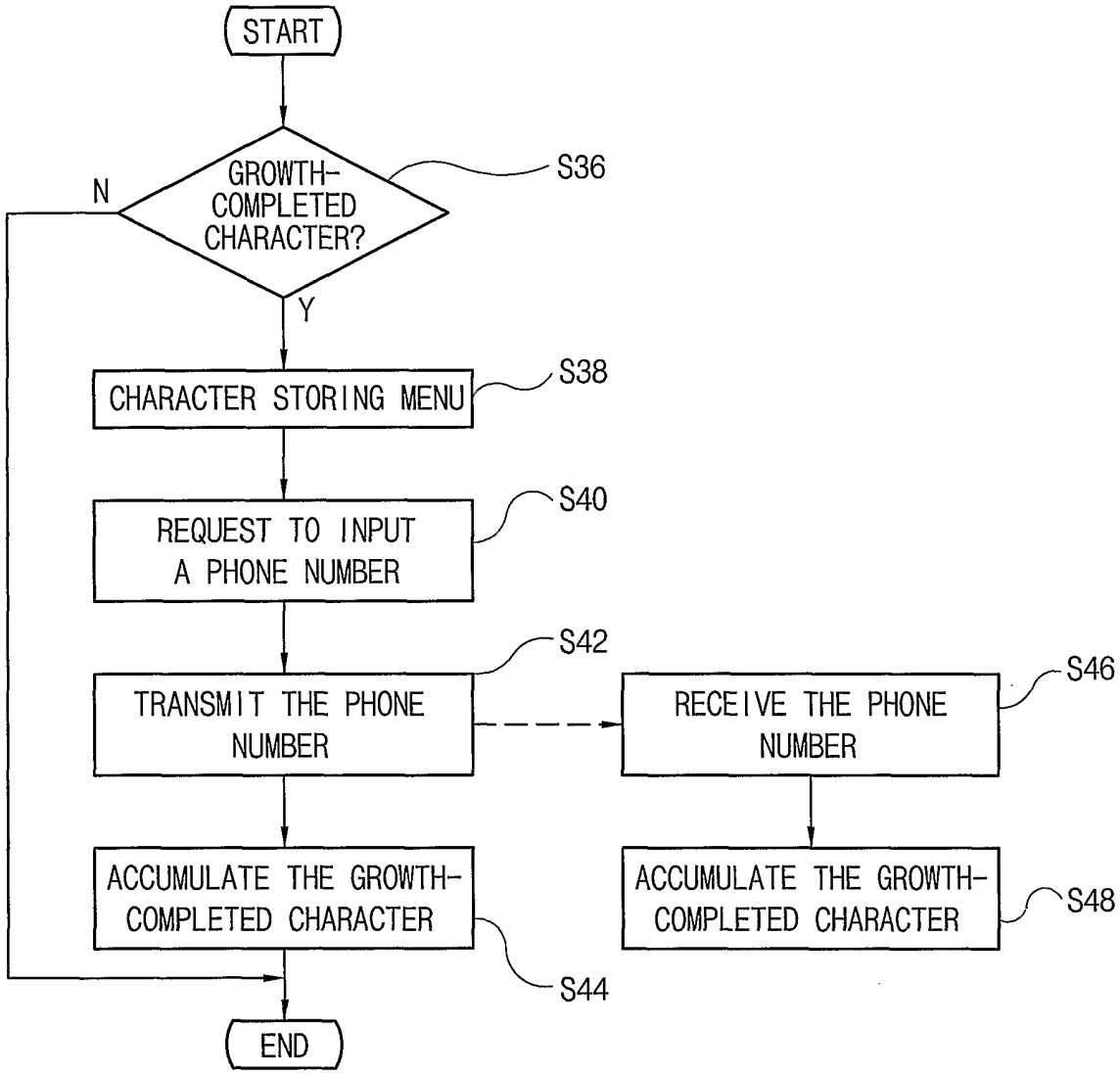

START
GROWTH-COMPLETED CHARACTER?
S36
N
Y
CHARACTER STORING MENU
S38
REQUEST TO INPUT A PHONE NUMBER
S40
TRANSMIT THE PHONE NUMBER
S42
RECEIVE THE PHONE NUMBER
S46
ACCUMULATE THE GROWTH-COMPLETED CHARACTER
ACCUMULATE THE GROWTH-COMPLETED CHARACTER
S48
S44
END

FIG. 6

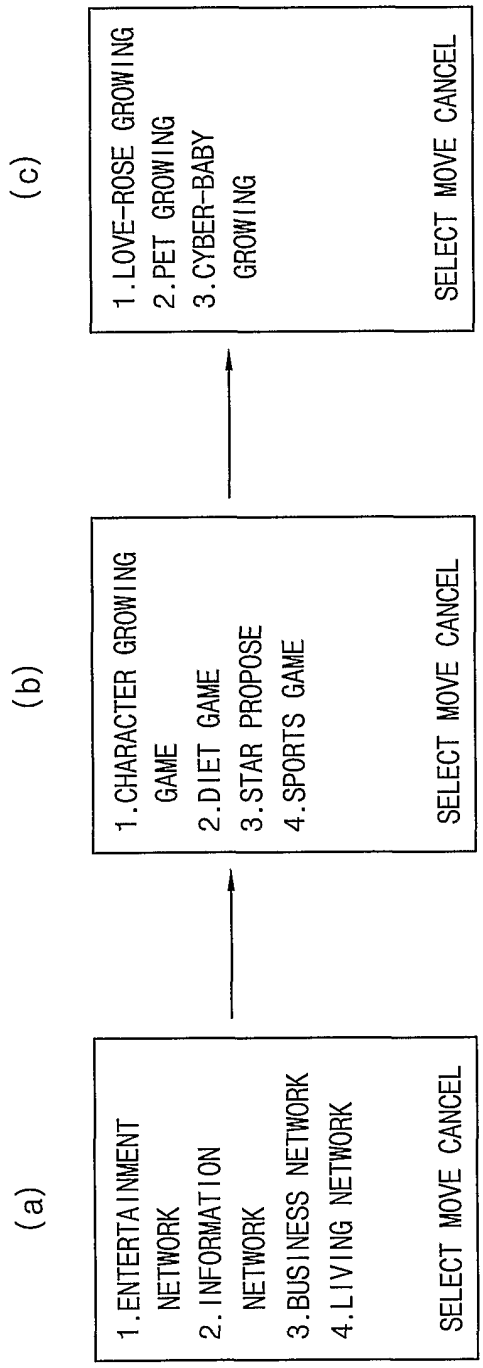

(a)
1. ENTERTAINMENT NETWORK
2. INFORMATION NETWORK
3. BUSINESS NETWORK
4. LIVING NETWORK
SELECT MOVE CANCEL
(b)
1. CHARACTER GROWING GAME
2. DIET GAME
3. STAR PROPOSE
4. SPORTS GAME
SELECT MOVE CANCEL
(c)
1. LOVE-ROSE GROWING
2. PET GROWING
3. CYBER-BABY GROWING
SELECT MOVE CANCEL

FIG. 7

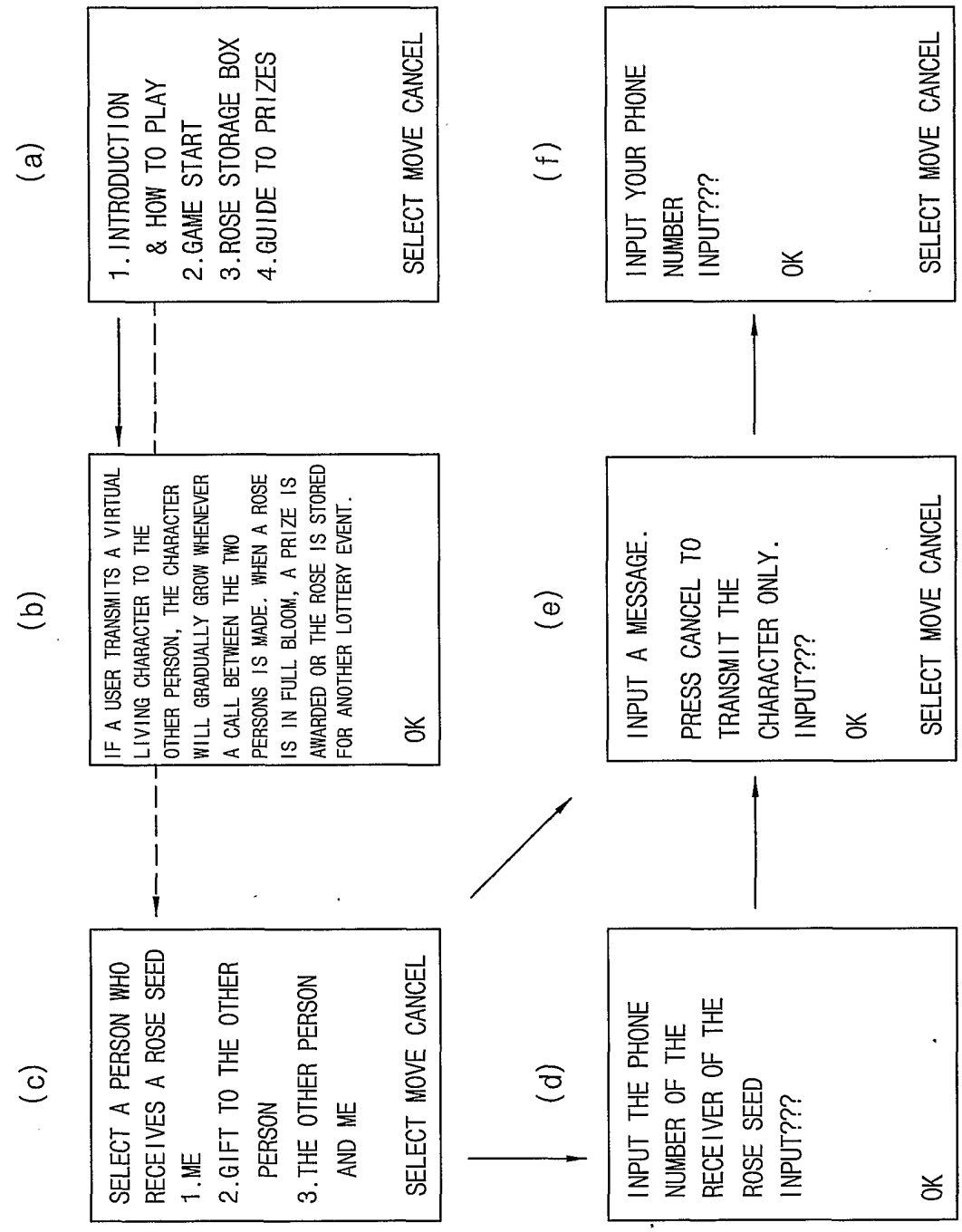

(a)
1. INTRODUCTION
& HOW TO PLAY
2. GAME START
3. ROSE STORAGE BOX
4. GUIDE TO PRIZES
SELECT MOVE CANCEL
(b)
IF A USER TRANSMITS A VIRTUAL LIVING CHARACTER TO THE OTHER PERSON, THE CHARACTER WILL GRADUALLY GROW WHENEVER A CALL BETWEEN THE TWO PERSONS IS MADE. WHEN A ROSE IS IN FULL BLOOM, A PRIZE IS AWARDED OR THE ROSE IS STORED FOR ANOTHER LOTTERY EVENT.
OK
(c)
SELECT A PERSON WHO RECEIVES A ROSE SEED
1. ME
2. GIFT TO THE OTHER PERSON
3. THE OTHER PERSON AND ME
SELECT MOVE CANCEL
(d)
INPUT THE PHONE NUMBER OF THE RECEIVER OF THE ROSE SEED
INPUT???
OK
(e)
INPUT A MESSAGE.
PRESS CANCEL TO TRANSMIT THE CHARACTER ONLY.
INPUT???
OK
SELECT MOVE CANCEL
(f)
INPUT YOUR PHONE NUMBER
INPUT???
OK
SELECT MOVE CANCEL

FIG. 7

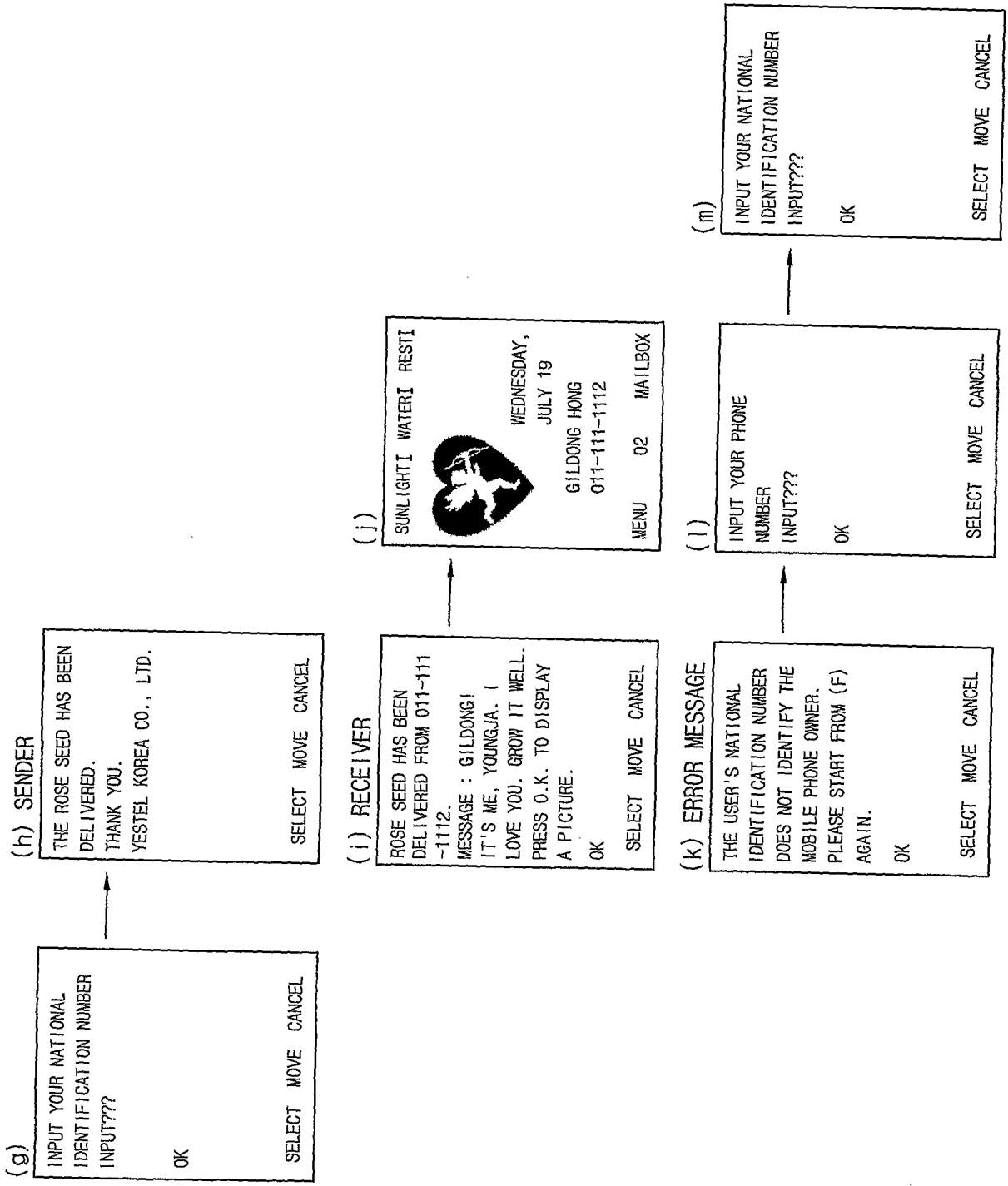
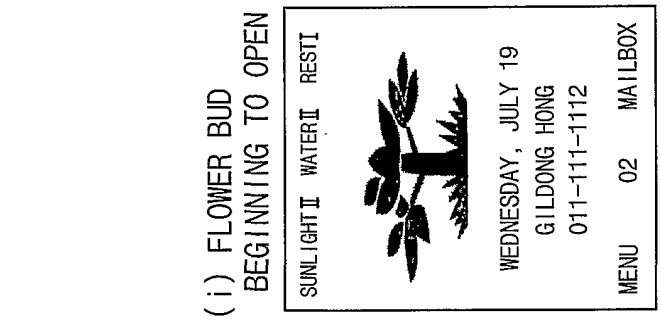

(g)
INPUT YOUR NATIONAL IDENTIFICATION NUMBER INPUT???
OK
SELECT MOVE CANCEL
(h) SENDER
THE ROSE SEED HAS BEEN DELIVERED.
THANK YOU.
YESTEL KOREA CO., LTD.
SELECT MOVE CANCEL
(i) RECEIVER
ROSE SEED HAS BEEN DELIVERED FROM 011-111-1112.
MESSAGE : GILDONG! IT'S ME, YOUNGJA. I LOVE YOU. GROW IT WELL.
PRESS O.K. TO DISPLAY A PICTURE.
OK
SELECT MOVE CANCEL
(j)
SUNLIGHTI WATERI RESTI
WEDNESDAY, JULY 19
GILDONG HONG
011-111-1112
MENU 02 MAILBOX
(k) ERROR MESSAGE
THE USER'S NATIONAL IDENTIFICATION NUMBER DOES NOT IDENTIFY THE MOBILE PHONE OWNER.
PLEASE START FROM (F) AGAIN.
OK
SELECT MOVE CANCEL
(l)
INPUT YOUR PHONE NUMBER INPUT???
OK
SELECT MOVE CANCEL
(m)
INPUT YOUR NATIONAL IDENTIFICATION NUMBER INPUT???
OK
SELECT MOVE CANCEL

FIG. 8

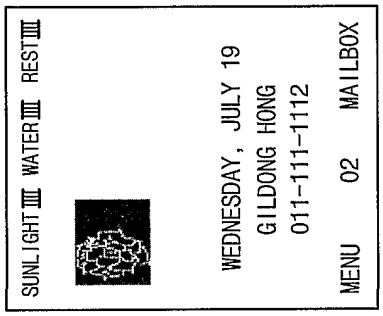
(a) SEED RECEIVED
SUNLIGHT 0 WATER 0 REST 0
WEDNESDAY, JULY 19
GILDONG HONG
011-111-1112
MENU 02 MAILBOX
(b) SEED GROWING
SUNLIGHT I WATER 0 REST 0
WEDNESDAY, JULY 19
GILDONG HONG
011-111-1112
MENU 02 MAILBOX
(c) SPROUT SHOT OUT
SUNLIGHT II WATER 0 REST 0
WEDNESDAY, JULY 19
GILDONG HONG
011-111-1112
MENU 02 MAILBOX
(d) LEAVES SHOT OUT
SUNLIGHT II WATER I REST 0
WEDNESDAY, JULY 19
GILDONG HONG
011-111-1112
MENU 02 MAILBOX
(e) LEAVES AND BRANCHES GROWING
SUNLIGHT II WATER I REST I
WEDNESDAY, JULY 19
GILDONG HONG
011-111-1112
MENU 02 MAILBOX
(f) LEAVES, BRANCHES AND THORNS GROWING
SUNLIGHT II WATER II REST I
WEDNESDAY, JULY 19
GILDONG HONG
011-111-1112
MENU 02 MAILBOX
(g) FLOWER BUD READY
SUNLIGHT II WATER II REST I
WEDNESDAY, JULY 19
GILDONG HONG
011-111-1112
MENU 02 MAILBOX
(h) FLOWER BUD SHOT OUT
SUNLIGHT II WATER II REST I
WEDNESDAY, JULY 19
GILDONG HONG
011-111-1112
MENU 02 MAILBOX

FIG. 8

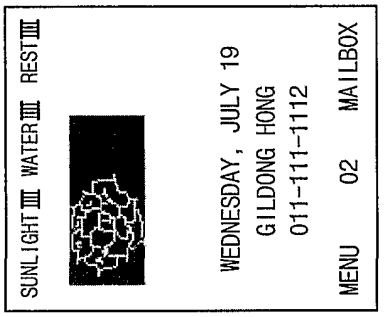
(i) FLOWER BUD BEGINNING TO OPEN



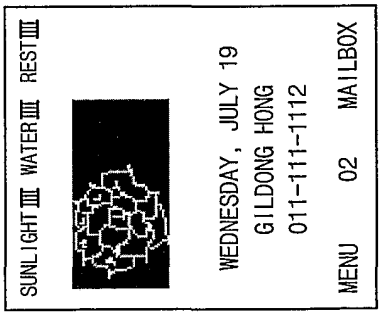
(j) BLOOMING - 1



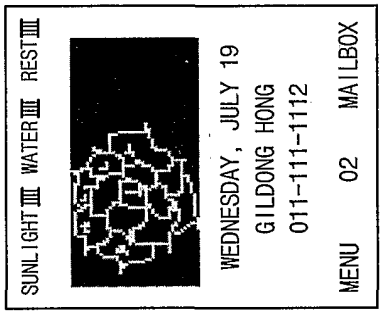
(k) BLOOMING - 2



(l) BLOOMING - 3



(m) BLOOMING - 4



(n) FULL BLOOM

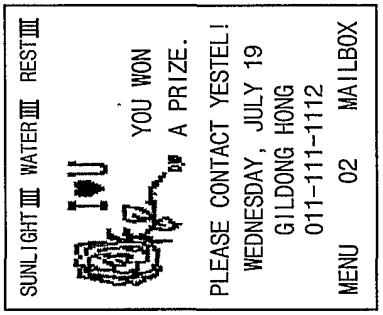


FIG. 9

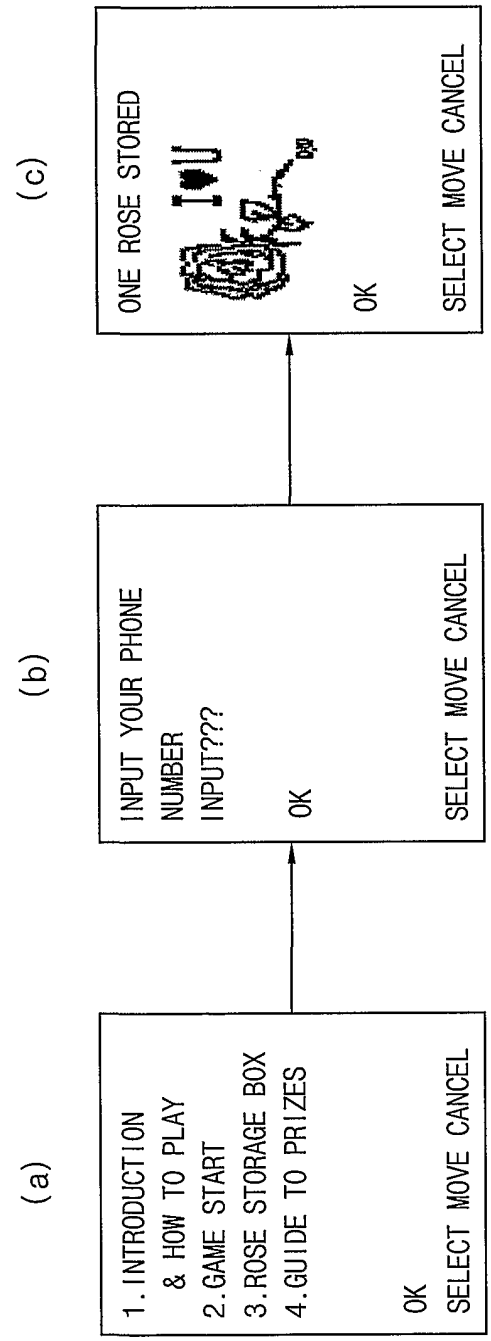
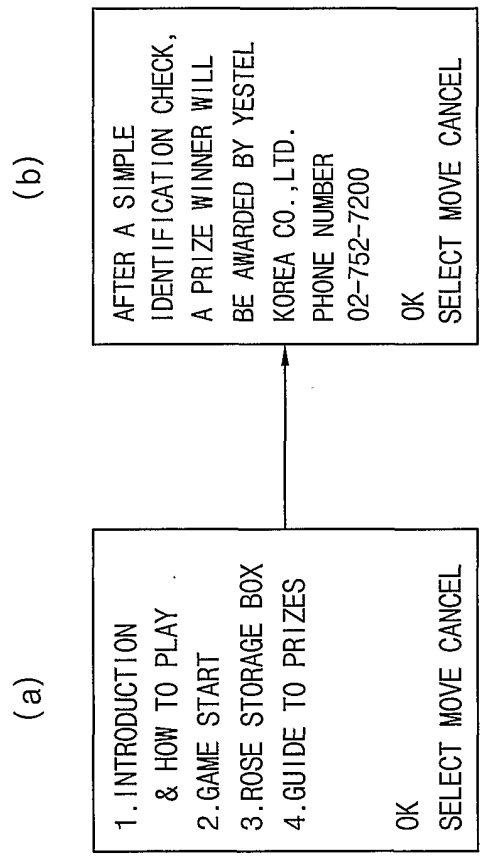

(a)
1. INTRODUCTION
& HOW TO PLAY
2. GAME START
3. ROSE STORAGE BOX
4. GUIDE TO PRIZES
OK
SELECT MOVE CANCEL
(b)
INPUT YOUR PHONE
NUMBER
INPUT???
OK
SELECT MOVE CANCEL
(c)
ONE ROSE STORED
OK
SELECT MOVE CANCEL

FIG. 10


(a)
1. INTRODUCTION
& HOW TO PLAY
2. GAME START
3. ROSE STORAGE BOX
4. GUIDE TO PRIZES
OK
SELECT MOVE CANCEL
(b)
AFTER A SIMPLE
IDENTIFICATION CHECK,
A PRIZE WINNER WILL
BE AWARDED BY YESTEL
KOREA CO.,LTD.
PHONE NUMBER
02-752-7200
OK
SELECT MOVE CANCEL

INTERNATIONAL SEARCH REPORT

ternational application No.
PCT/KR01/01040

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 G06F 17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimun documentation searched (classification system followed by classification symbols)

G06F 17/60

Documentation searched other than minimun documentation to the extent that such documents are included in the fileds searched

KOREAN PATENTS AND APPLICATIONS FOR INVENTIONS SINCE 1975
KOREAN UTILITY MODELS AND APPLICATIONS FOR UTILITY MODELS SINCE 1975

Electronic data base consulted during the internationl search (name of data base and, where practicable, search trerms used)

HTTP://WWW.USPTO.GOV/
WPI, PAJ, IEEE/IEE ELECTRONIC LIBRARY(1998) 'GAME AND (STOCK OR FINANCE) AND (STUDY OR TEACH)'

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US-6165068 (Tomy Company, Ltd.) December 26, 2000 *ABSTRACT*	1 ~ 4
Y	US-5971855 (Tiger Electronics, Ltd.) October 26, 1999 *THE WHOLE DOCUMENT*	1 ~ 4
A	US-5890964 (Square Co., Ltd.) April 6, 1999 *ABSTRACT*	1 ~ 4
P, A	US-6254477 (Sony Computer Entertainment, Inc.) July 3, 2001 *ABSTRACT*	1 ~ 4

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
30 JULY 2001 (30.07.2001)	31 JULY 2001 (31.07.2001)

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Form PCT/ISA/210 (second sheet) (July 1998)