

(19) World Intellectual Property Organization  
International Bureau



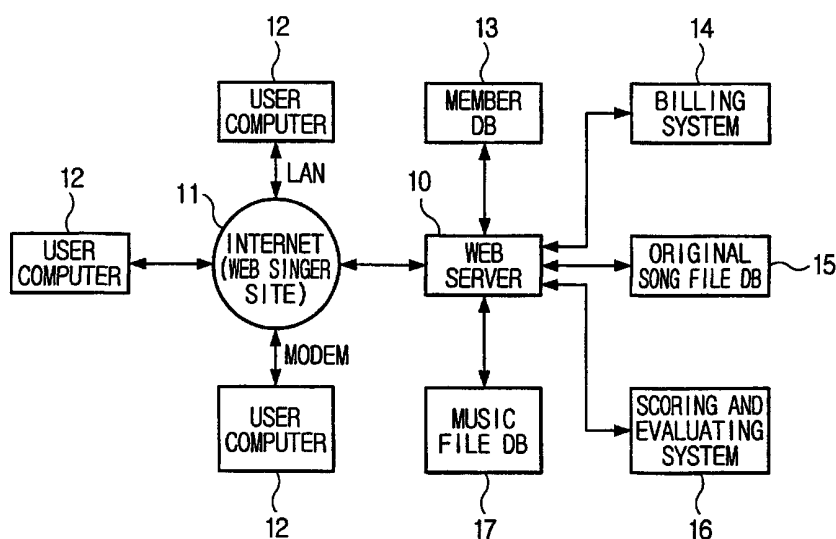
(43) International Publication Date  
27 September 2001 (27.09.2001)

PCT

(10) International Publication Number  
WO 01/71639 A1

- (51) International Patent Classification<sup>7</sup>: G06F 19/00
- (21) International Application Number: PCT/KR01/00435
- (22) International Filing Date: 19 March 2001 (19.03.2001)
- (25) Filing Language: Korean
- (26) Publication Language: English
- (30) Priority Data:  
2000/14431 22 March 2000 (22.03.2000) KR
- (71) Applicant and  
(72) Inventor: JUNG, Young-Keun [KR/KR]; #201, Daeyang villa, 235-1, Nonhyun-Dong, Kangnam-Gu, Seoul 135-012 (KR).
- (74) Agent: KIM, Ik-Sung; Hansun International Patent & Law Office, #202, Newseoul Building, 828-8, Yeoksam-Dong, Kangnam-Gu, Seoul 135-080 (KR).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- 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.

(54) Title: WEB SINGER SELECTION SYSTEM AND WEB SINGER SELECTION METHOD BASED ON INTERNET



(57) Abstract: A singing ability evaluation and singer selection method for selecting a singer, user the Internet, wherein evaluation of one's singing ability is given to ordinary persons over the Web, and an opportunity of making a debut as a cyber singer is given to a competent person having an excellent singing ability. The system comprises a Web server programmed to perform the step of downloading a Java application program to a user computer of an authenticated member to generate a menu picture for song selection and function setting on a screen of the user computer, the step of allowing the member to select an entry song on the downloaded application program, sing the selected song, generate an entry song data file through an automatic recording operation and upload the generated entry song data file, the step of scoring and evaluating the uploaded entry song data file, and the step of comparing the evaluation result with a predetermined reference score and determining from the compared result whether the member passes or fails in the singing.

WO 01/71639 A1

WEB SINGER SELECTION SYSTEM AND WEB SINGER SELECTION  
METHOD BASED ON INTERNET

Technical Field

The present invention relates in general to a singer selection system over the  
5 Web wherein an ordinary person is able to receive an evaluation with respect to  
his/her singing ability and to determine his/her likelihood of becoming a  
professional singer, and he/she may be further allowed to make his/her debut as a  
professional singer, and more particularly, to a singing ability evaluation and singer  
selection system using the Internet, wherein an opportunity of making one's debut as  
10 a cyber singer is given to a competent person having an excellent singing ability, and  
further profits may be made through producing and selling a music record in  
accordance with a contract with a production company.

Background Art

Many persons generally like to listen to or sing songs well known to them.  
15 Many of them purchase an apparatus for singing songs to enjoy singing songs, or  
otherwise visit a commercial singing room equipped with the singing apparatus to  
enjoy singing songs.

Recently, computers have rapidly come into wide use. It cannot be denied  
that this rapid popularization of computers has led to a singing system realized by  
20 means of the computers.

The singing system by means of a computer with the aid of compact discs  
(CDs) or other singing software programs has contributed to saving the costs to be  
paid for using commercial singing rooms and solving the problem of time  
restriction. However, because the singing is performed in a limited off-line space,  
25 there is a lack of vividness or realism, thereby being liable to cause the users to  
gradually lose their interests in singing songs.

To solve the shortcomings of the conventional art in which the singing is

realized within a closed off-line space without an audience, there has been an attempt to realize the on-line singing room using the Internet. The singing in the on-line singing room may cause the user to feel the vividness or realism and the sense of tension because it is capable of producing the effect of singing songs in the presence of a large audience, depending upon how the singing room is developed.

This attempt has received a positive response from a lot of users who like to sing songs.

However, on-line singing practice using the Internet merely allows the user to sing songs in real time, and there is no significant difference to singing songs in the conventional off-line singing room.

In any event, not a few persons still like to sing songs. Some of them also try to study skills of singing songs in an effort to sing better, and they expect to improve their singing ability. Further, those who sing songs better than other persons may hope to become professional singers.

To ordinary persons, to debut as singers is unfamiliar and unusual, and it is generally accepted that someone who wishes to become a professional singer has to invest time and money in debuting as a singer. Thus, it is usual that ordinary persons cannot even conceive of the idea of being a professional singer.

Taking the above into consideration, if criticism and advice with respect to the likelihood of becoming a singer were provided to ordinary persons at a reasonable cost, and further any guidance to help the user become a professional singer were provided to the user, those services may be expected to receive a favorable criticism from ordinary persons.

#### Disclosure of the Invention

Therefore, the present invention has been made in view of the above-described shortcomings and expectations, and it is an object of the present invention to provide a singing ability evaluation and singer selection system and a method for selecting a singer, using the Internet, wherein evaluation of one's singing ability is given to ordinary persons over the Web, and an opportunity of making a debut as

a cyber singer is given to a competent person having an excellent singing ability, and further profits can be made through producing and selling a music record in accordance with a contract with a production company.

Another object of the present invention is to provide a singing ability  
5 evaluation and a singer selection system using the Internet, wherein a user who participated in a singer selection program but failed to earn a passing grade is provided with exact and appropriate advice with respect to his/her lack of ability and improvement of their singing ability, thereby facilitating and taking steps toward improvement of the participant's singing ability.

10 Still another object of the present invention is to provide a singing ability evaluation and singer selection system using the Internet wherein a would-be singer is given an opportunity to determine at low cost the possibility of making a debut, and the likelihood of succeeding as a professional singer, thereby relieving a great economic burden of the would-be singers.

15 In accordance with one aspect of the present invention, the above and other objects can be accomplished by the provision of a singing ability evaluation and singer selection method using the Internet, comprising the steps of a) inviting a user having access to an associated Internet site to gain membership for participation in a singing ability evaluation and singer selection program and performing a member  
20 authentication operation; b) downloading a Java application program to a user computer of an authenticated member to generate a menu picture for song selection and function setting on a screen of the user computer; c) allowing the member to select an entry song on the downloaded Java application program, sing the selected song, generate an entry song data file through an automatic recording operation and  
25 upload the generated entry song data file; d) scoring and evaluating the uploaded entry song data file; and e) comparing the evaluation result with a predetermined reference score, determining from the compared result whether the member passes or fails in the singing, deciding a winning Web singer by selecting the most competent singer through prearranged events if the member passes, providing the  
30 member with advice for improving his/her singing ability according to the scoring result if he or she fails, and terminating the singing.

In accordance with another aspect of the present invention, there is provided a singing ability evaluation and singer selection system using the Internet, comprising a Web server programmed to perform the steps of a) inviting a user having access to an associated Internet site to gain membership for participation in a singer selection program and performing a member authentication operation, b) downloading an application program to a user computer of an authenticated member to generate a menu picture for song selection and function setting on a screen of the user computer, c) allowing the member to select an entry song on the downloaded application program, sing the selected song, generate an entry song data file through an automatic recording operation and upload the generated entry song data file, d) scoring and evaluating the uploaded entry song data file, and e) comparing the evaluation result with a predetermined reference score, determining from the compared result whether the member passes or fails in the singing, deciding a winning Web singer by selecting the most competent singer through prearranged events if the member passes, providing the member with advice for improving his/her singing ability according to the scoring result if he or she fails, and terminating the singing; a member database connected to the Web server for storing therein examination application information and personal information of the member; a music file database connected to the Web server for transmitting accompaniment information about a plurality of songs to the user computer through the Web server; a scoring and evaluating system connected to the Web server for reading the entry song data file uploaded by the member and scoring and evaluating it; and an original song file database for storing therein original song file data required in scoring the entry song.

According to the present invention, a singing ability evaluation and singer selection system and a method for selecting a singer using the Internet is provided, wherein evaluation of the singing ability is given to ordinary persons over the Web, and an opportunity of making a debut as a cyber singer is given to a competent person having an excellent singing ability, and further profits can be made through producing and selling a music record in accordance with a contract with a production company. Therefore, the present invention is effective in opening

up opportunities for an ordinary person who wishes to make a debut as a singer.

According to the present invention, a user who participated in a singer selection program but failed to earn a passing grade is provided with exact and appropriate advice with respect to his/her lack of ability and improvement of their singing ability, thereby facilitating and taking steps toward improvement of the participant's singing ability. Therefore, the participant can improve his/her singing ability.

Further, according to the present invention, a would-be singer is given an opportunity to determine at low cost the possibility of making a debut as a singer and the likelihood of succeeding as a professional singer. Therefore, it is effective to relieve a great economic burden of the would-be singers.

#### Brief Description of the Drawings

The above and other objects, features and other advantages of the present invention will be more clearly understood from the following detailed description taken in conjunction with the accompanying drawings, in which:

Fig. 1 is a block diagram showing a configuration of a Web singer singing ability evaluation and singer selection system according to the present invention;

Fig. 2 is a flow chart illustrating the whole process of selecting a Web singer according to the present invention;

Fig. 3 is a flow chart showing a process in which a user (participant) desiring to participate in a Web singer selection program applies for participation in the Web singer selection program via the Internet according to a first embodiment of the present invention;

Fig. 4 is a flow chart showing a process in which the singing ability of the participant of the Web singer selection program is scored and evaluated according to the first embodiment of the present invention;

Fig. 5 is a flow chart showing a process in which the participant of the Web singer selection program applies for participation in the Web singer selection program in real time and his/her singing ability is evaluated in real time,

according to a second embodiment of the present invention;

Fig. 6 is a flow chart showing a process in which the participant of the Web singer selection program applies for participation in the Web singer selection program under a moving picture mode and his/her singing ability is evaluated, according to a third embodiment of the present invention; and

Fig. 7 is a flow chart showing a process in which the singing ability of the participant of the Web singer selection program is examined and evaluated by a professional examiner according to a fourth embodiment of the present invention.

#### Best Mode for Carrying Out the Invention

Herein below, the present invention will be described in detail with reference to the accompanying drawings.

Referring to Fig. 1 which is a block diagram showing a configuration of the system according to the present invention, a Web server 10 constructs a Web singer site over the Internet and provides users with Internet services so as to allow a plurality of prospective singers or those who wish to receive evaluation with respect to their singing ability to participate in a Web singer selection program operated by the Web site through user computers 12.

The user computers 12 are respectively equipped with a modem, a local area network (LAN), an asymmetric digital subscriber line (ADSL), a cable TV network, etc. with which users can access the Web server 10 managing the Web site. The Web server 10 is comprised of a member database 13 storing therein personal information of a member who gains membership from the Web singer site, information about application for the Web singer selection program, information related to payment, etc. and updating them from time to time, a music file database 17 storing therein music data and accompaniment data thereof in the form of files, transmitting accompaniment information according to information about a song selected by a user desiring to participate in the Web singer selection program (participant) through the Web server to the user computer, and also transmitting a music file to an internet user through the Web server, when the Internet user

submits a request for downloading of the music file, and a scoring and evaluating system 16 reading out an entry song data selected by the participant and scoring and evaluating it according to a Web singer selection and singing ability evaluation program of the server.

5           The Web server 10 may further include a billing system 14 in order to construct an environment in which any expense related to application fee for receiving evaluation of one's singing ability, downloading fee of a music file, etc. are automatically paid through cyber points stored in the member database 13, cash or an automatic transfer program of the expense to be paid.

10           The Web server 10 may also be configured with an original song file database 15 storing therein data files of original songs which will be used as reference values for scoring a participant's singing ability in order to evaluate his/her singing ability.

15           The Web server 10 may include an advertisement database targeted for the members of the Web singer site. In consideration of posting advertisements, the operator of the Web site can receive payment from associated advertisers, and the received payment can be used for operating expenses of the Web site and awarding points to the members in consideration of viewing the advertisements.

20           An operating process of the present system will be described with reference to Fig. 2 which is a flow chart illustrating the whole process of selecting a Web singer according to the present invention.

25           A user gaining access to the Internet (sometimes, Internet user) first visits a Web singer site according to the present invention through his/her user computer, and the Web server 10 performs a process of ascertaining whether or not the user is a registered member. In response to a request by the Web server to enter a membership number, the user enters his/her ID and password, and then the Web server 10 refers to member codes registered in the member database 13 so as to determine whether to approve the user's access to the Web site.

30           Where the user gaining access to the Web site has no membership ID, he/she is invited to gain membership from the Web site. In this course, the user applies for gaining membership by entering his/her personal information,



and a process of authenticating the membership is performed and then a Java program is downloaded so as to allow the user to participate in an Internet singing ability evaluation program. However, if the user visiting the Web site refuses to gain membership, he/she is guided into an open singing room mode, thereby  
5 allowing him/her to select a song, sing the selected song and receive a score and evaluation about the song sung by the user, thereby being able to use the Internet singing room free of charge. The unregistered user is allowed to repeatedly use the open singing room, and the scoring and evaluation are simply progressed using a general tool therefor.

10 For evaluation about the song sung in the open singing room mode, a basically different system from a chargeable singing ability evaluation system to be described later is employed, and these systems are also constructed so as to be clearly differentiated from each other.

Especially, under the open singing room mode, the user is allowed to move  
15 to different menus or another link site within the concerned Web site when the user has finished singing the song. Thus, the user accessing the concerned Web site can move to the other menu or site as he/she desires.

The other menu or link site may include a compact disk (CD) shop for an electronic commerce related to music records, etc., a game room, a chat room, etc.  
20 Through this movement to the link site or selection of a menu, for example, after purchasing a CD in the CD shop, the user is allowed to pay for any article or service to be paid by means of his/her cyber point account (which is limited to only registered members) or other settlement means such as a credit card, etc. The billing system 11 and the member database 13 are executed in cooperation with the  
25 Web server 10. As described above, the user is allowed to obtain cyber points by clicking an advertisement popped up or posted in the concerned site, and acquire reward points through the electronic commerce in associated or affiliated sites; these cyber points are accumulated by person in the member database 13.

A subroutine showing a process in which a user participates in the Web  
30 singer selection program by means of Java program or Plug-in program downloaded to the user computer after the user gaining access to the Web site is

authenticated as a registered member by the server, according to a first embodiment of the present invention, is illustrated in Fig. 3.

An Internet user gaining access to the Web site uses numeral key button menus or a variety of function key button menus over Java Applet or Plug-in  
5 program activated on the user computer, thereby to select a song he/she wishes to sing.

When a song is selected, the Web server requests the Internet user who participates in the singing ability evaluation and singer selection program to determine whether a music file appropriate for the selected song is to be downloaded  
10 on-line. This step is designed for allowing a user who wishes to use a CD-ROM, which have been previously distributed, storing therein songs available for selection by the user, to directly use the songs stored in the CD without a separate downloading process, and therefore, this step (of selecting whether to use the CD-ROM) is an optional step rather than an essential step restricting the embodying of  
15 the present invention.

If a participant selects downloading of accompaniment data of an entry song from the CD-ROM in his/her possession, a data file of the selected song is downloaded to a memory from the CD-ROM over Java or Plug-in program. At the same time, a process of performing payment of an evaluation fee under the name of  
20 an entry fee is executed by initiating the billing system. However, there is no license fee to be paid for the selected song.

When an on-line downloading of the entry song is requested, the accompaniment data of the song concerned is downloaded in real time on-line and it is loaded in the memory on Java Applet or Plug-in program. In this case, a license  
25 fee for the selected song in addition to the evaluation fee under the name of the entry fee may be charged.

On the other hand, when data of the entry song is completely downloaded to the user computer of the user who participates in the singing ability evaluation and singer selection program according to the present invention, the prelude for singing  
30 the song starts, and a microphone and a recording program are activated according to the user's option. The recording operation is performed on-line in real

time. When the singing test is completed through the above-described processes, the data recorded with the song sung by the participant is compiled in a file form, transmitted to the Web server according to the present invention, and then stored in a directory of the concerned member ID of the member database 13.

5 In the method of transmitting an entry song, the entry song may be automatically transmitted to the server if the user selects a transmission menu after finishing singing the song or it is recognized by Plug-in or Java program that the singing is completed.

If necessary, after the participant conducts the selection of the entry song  
10 following the above-described processes, he/she may be allowed to sing and record the song off-line without limitation of time and transmit the recorded data to the server thereafter.

After the subroutine program for selecting a Web singer has terminated, the Web server extracts the song data by the original singer stored in the original song  
15 database 15 and activates the scoring and evaluating system 16, thereby performing a subroutine for scoring and evaluating the entry song.

The scoring and evaluating subroutine for the entry song is progressed as illustrated in the flow chart of Fig. 4. As illustrated therein, the Web server loads a data file of a song to be applied for, that is, an entry song, from the member database  
20 13 and also the original song data file from the original song file database 15, and then directly compares the two data files on the basis of analyzed values of their electric characteristics.

According to such an analysis, physical amounts of tone, timing, pronunciation, etc. of the song sung by the participant are compared with those of  
25 the song sung by the original singer to determine how closely the entry song approaches the original song. Information for the comparison can be obtained in a fast and correct manner through a quantitative analysis (electronic scoring) of the electric characteristics.

The scoring result about the entry song obtained through the above-  
30 described processes is indicated as a percentage to determine the obtained score. The passing grade in the contest is determined depending upon whether the

obtained score reaches a predetermined reference score (for example, over 90 points).

According to the present invention, the singing ability of a participant of the Web singer selection program is determined based on whether he/she obtains a score  
5 equal to or higher than the reference score. If the participant's singing ability is determined to be less than the reference score, the evaluated score is provided to the participant, along with advice for improving his/her singing ability.

For this purpose, a variety of cases with respect to the electronic scoring result are modeled in advance, and a separate database exclusively for such advice is  
10 constructed with the modeled cases. If information about a score analysis is produced, it may be provided to the participant along with advice menu information of a modeled case appropriate for the score-related situation. The Web server allows the participant to challenge the singer selection program without restriction to the number of attempts if the participant who has failed in the contest wants to do so.

Where the user who participated in the singing ability evaluation and singer  
15 selection program is determined to pass the program, he or she is given an opportunity to participate in events for selecting the most competent singer held monthly, quarterly and annually and compete with the other participants. The first-place winner through these events is finally selected as the most competent singer  
20 and is awarded a qualification for a professional Web singer. This event program may be progressed through the same process on-line as described above, or through actual live examination by the experts off-line.

The participant obtaining the qualification for the Web singer can be employed as a professional cyber singer over the Web and also can be employed as a  
25 real singer off-line, through an agreement with a production company, training and education, and he or she is also allowed to produce and sell CD records, thereby creating profits from a total entertainment.

Fig. 5 is a flow chart showing a process in which the participant of the Web singer selection program applies for participation in the Web singer selection  
30 program and his/her singing ability is evaluated, in real time on-line, according to a second embodiment of the present invention.

As described above, after an entry song is selected by means of Java Applet or Plug-in program, processes of singing the song and of scoring the singing ability are performed at the same time with the selection of a start button menu. This method of scoring does not allow the participant to make an error, but those who are  
5 competent in singing will be given a realistic sense of tension and a sense of reality, thereby increasing the participants' interest in the singing program.

In view of technical points, if a participant clicks a start button menu on Java Applet or Plug-in program in order to initiate singing a song in accordance with the accompaniment started after finishing selection of the song, the Web server  
10 activates the original song file database so as to allow the original song corresponding to the selected song to start synchronously with the entry song. The original song and the entry song are compared in real time in respect of tone, timing and pronunciation based on the electric analysis, thereby performing the scoring process.

15 Accordingly, at the time when the singing is completed, the singing ability of the participant is completely scored and evaluated, and therefore, the participant can directly know the evaluation result about his/her singing ability and whether he or she passes or fails in the singer selection program, without delay.

Fig. 6 is a flow chart showing a process in which the participant of the Web  
20 singer selection program applies for participation in the Web singer selection program under a moving picture mode and his/her singing ability is evaluated, according to a third embodiment of the present invention. Herein, an entry song is selected by means of Java Applet driven in the user computer or a Plug-in downloaded to the user computer in advance. If a video examination mode is  
25 selected, the Web server allows a data file for accompaniment of the song selected by the user to be downloaded to the user computer and at the same time performs charging and payment of an examination fee for the video examination in addition to the license fee for the selected song.

Where a CD-ROM distributed beforehand is used, only an examination fee  
30 for the video examination, not including the license fee for the selected song, is charged and the payment thereof is performed. Thereafter, a start button

menu of the singing ability evaluation and singer selection program is clicked by the user, and then a microphone and a video camera prepared in advance by the user are activated to operate, and the voice and external appearance of the participant are stored in the memory supported by Java Applet, etc.

5           When the photographing by the video camera and the singing test are completed, a video file including the singing data of the selected song is transmitted to the Web server and then stored in the participant's member ID directory of the member database.

10           The stored video file is transmitted to the participant along with a report of passing or failing, that is, as to whether he or she has a likelihood of succeeding as a video singer through a professional examination, and advice for improving the singing ability.

15           Fig. 7 is a flow chart showing a process in which the singing ability of the participant of the Web singer selection program is examined and evaluated by a professional examiner according to an application for participation in the Web singer selection program, according to a fourth embodiment of the present invention. Referring to this figure, where a member desires, an entry song in the singing ability evaluation and singer selection program is precisely examined off-line by professional examiners.

20           After an entry song is selected on the user computer by means of Java Applet or a Plug-in program, the Web server presents a variety of examination modes to the user so as to allow him/her to select a desired one of the examination modes. If the participant selects a digital on-line examination mode, he or she knows whether he or she passes or fails in the singing ability evaluation and singer selection program following the same processes as described with reference to Fig. 3. However, if the participant selects an off-line mode at the above examination mode selection step in order to receive a precise evaluation by professional examiners off-line, accompaniment data of the selected song is downloaded and thereafter the singing test is finished. Then, an entry song file stored in the member database is directly reproduced by the examiners to listen to it, and the examiners perform a precise analysis for evaluation about the singing ability.

25  
30

The result about the singing ability evaluation and the passing or failing in the program examined off-line is drafted in text, and the resulting text is transmitted to the participant via an electronic mail, etc.

5 Although the preferred embodiments of the present invention have been disclosed for illustrative purposes, those skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing from the scope and spirit of the invention as disclosed in the accompanying claims.

## Claims:

1. A singing ability evaluation and singer selection system using the Internet, comprising:

a Web server programmed to perform the steps of a) inviting a user having  
5 access to an associated Internet site to gain membership for participation in a singer  
selection program and performing a member authentication operation, b)  
downloading an application program to a user computer of an authenticated member  
to generate a menu picture for song selection and function setting on a screen of the  
user computer, c) allowing the member to select an entry song on the downloaded  
10 application program, sing the selected song, generate an entry song data file through  
an automatic recording operation and upload the generated entry song data file, d)  
scoring and evaluating the uploaded entry song data file, and e) comparing the  
evaluation result with a predetermined reference score, determining from the  
compared result whether said member passes or fails in the singing, deciding a  
15 winning Web singer by selecting the most competent singer through prearranged  
events if said member passes, providing said member with advice for improving  
his/her singing ability according to the scoring result if he or she fails, and  
terminating the singing;

a member database connected to said Web server for storing therein  
20 examination application information and personal information of said member;

a music file database connected to said Web server for transmitting  
accompaniment information about a plurality of songs to said user computer through  
said Web server;

a scoring and evaluating system connected to said Web server for reading  
25 said entry song data file uploaded by said member and scoring and evaluating it; and

an original song file database for storing therein original song file data  
required in scoring said entry song.

2. The system as set forth in Claim 1, further comprising a billing system  
connected to said Web server for receiving payment of an entry fee from



said member who participates in said singer selection program.

3. The system as set forth in Claim 1, wherein said application program downloaded from said Web server to said user computer includes Java Applet.

4. The system as set forth in Claim 1, wherein said application program  
5 downloaded from said Web server to said user computer includes Plug-in.

5. A singing ability evaluation and singer selection method using the Internet, comprising the steps of:

a) inviting a user having access to an associated Internet site to gain membership for participation in a singing ability evaluation and singer selection  
10 program and performing a member authentication operation;

b) downloading a Java application program to a user computer of an authenticated member to generate a menu picture for song selection and function setting on a screen of the user computer;

c) allowing the member to select an entry song on the downloaded Java  
15 application program, sing the selected song, generate an entry song data file through an automatic recording operation and upload the generated entry song data file;

d) scoring and evaluating the uploaded entry song data file; and

e) comparing the evaluation result with a predetermined reference score, determining from the compared result whether said member passes or fails in the  
20 singing, deciding a winning Web singer by selecting the most competent singer through prearranged events if said member passes, providing said member with advice for improving his/her singing ability according to the scoring result if he or she fails, and terminating the singing.

6. The method as set forth in Claim 5, further comprising the step of storing  
25 said entry song data file in a memory on said Java application program downloaded to said user computer and then automatically transmitting it to a Web server in response to selection of a transmission menu by said member or recognition of

singing completion by said Java application program.

7. The method as set forth in Claim 5, further comprising the step of allowing said member participating in said singing ability evaluation and singer selection program to generate his/her entry song audio data file and video data file  
5 on said Java application program and transmit them to a Web server for a video examination.

8. The method as set forth in Claim 5, further comprising the step of allowing said member participating in said singing ability evaluation and singer selection program to request a substantial examination by professional examiners  
10 off-line with respect to his/her entry song.

9. The method as set forth in any one of Claims 5 through 8, further comprising the step of charging said member participating in said singing ability evaluation and singer selection program differently depending upon different modes of examination.

FIG. 1

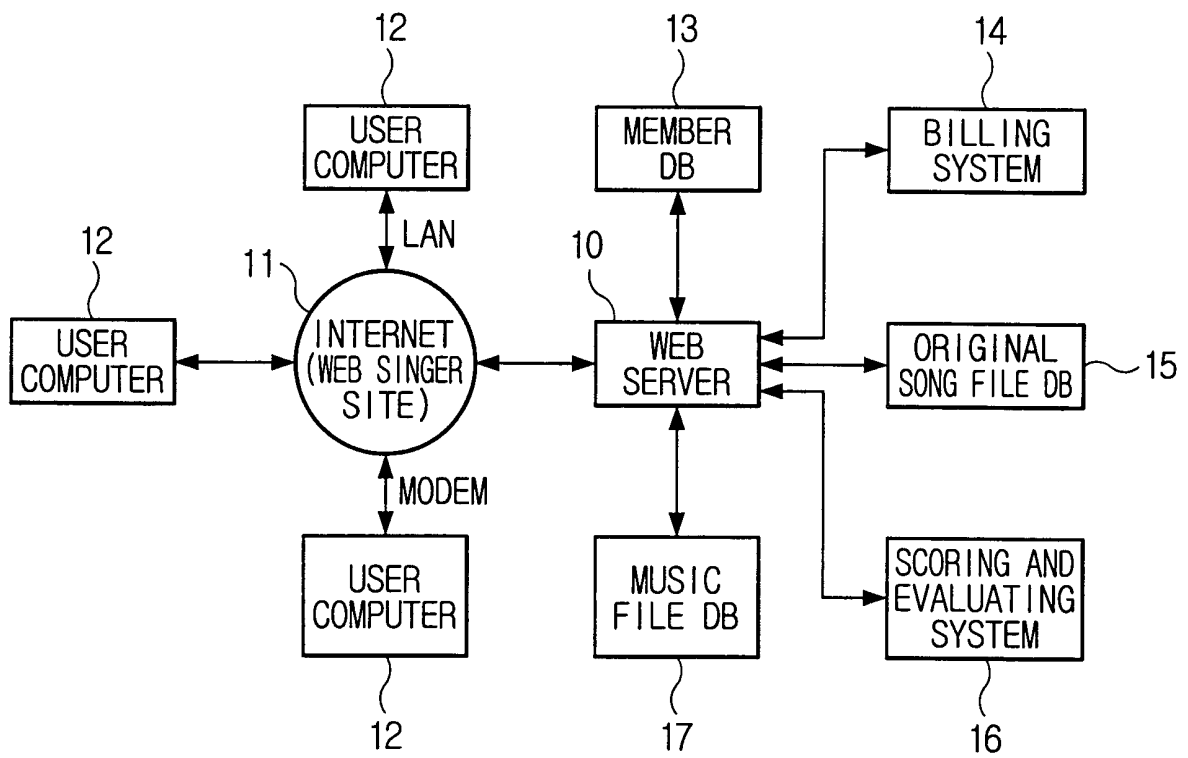


FIG. 2

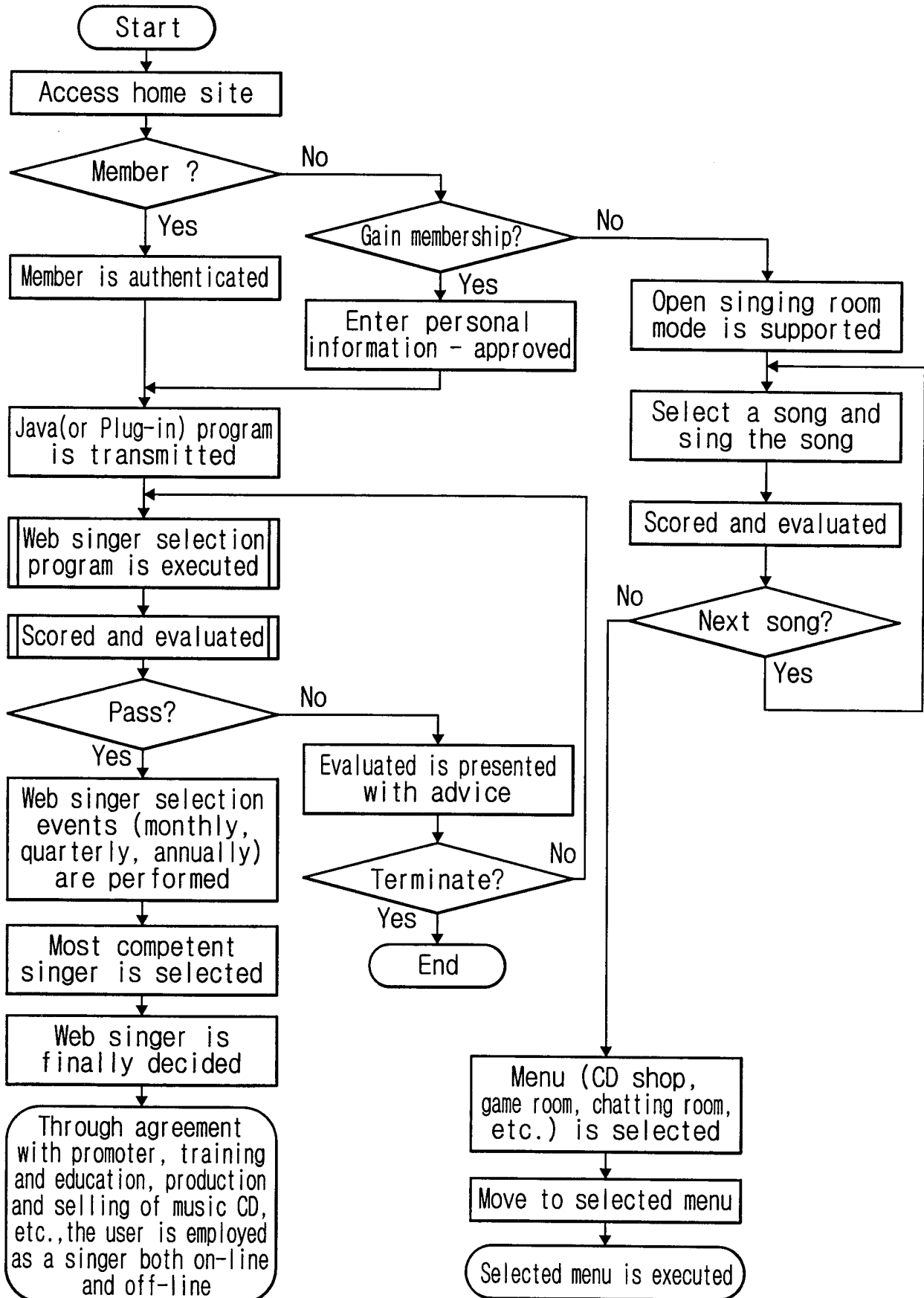


FIG. 3

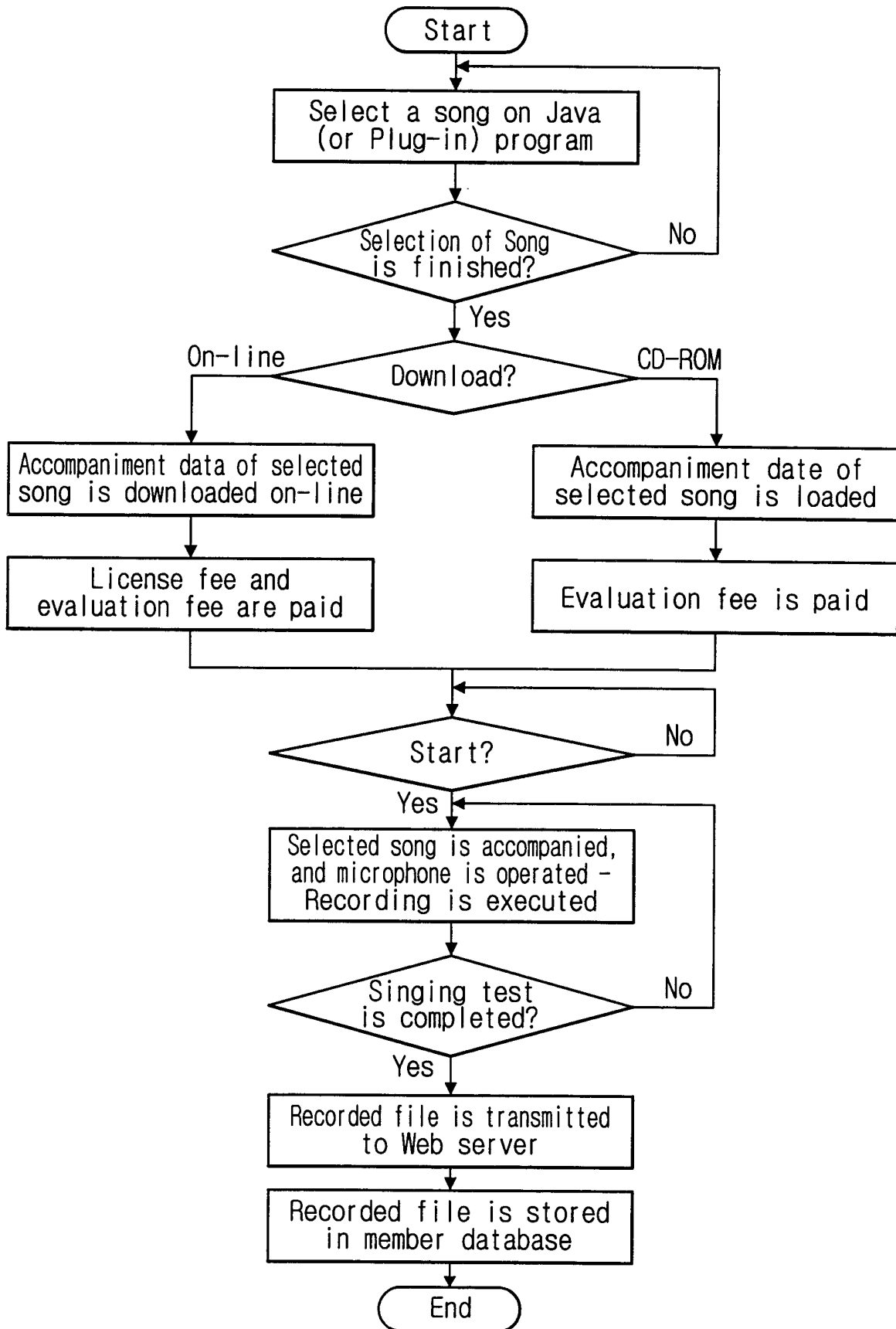


FIG. 4

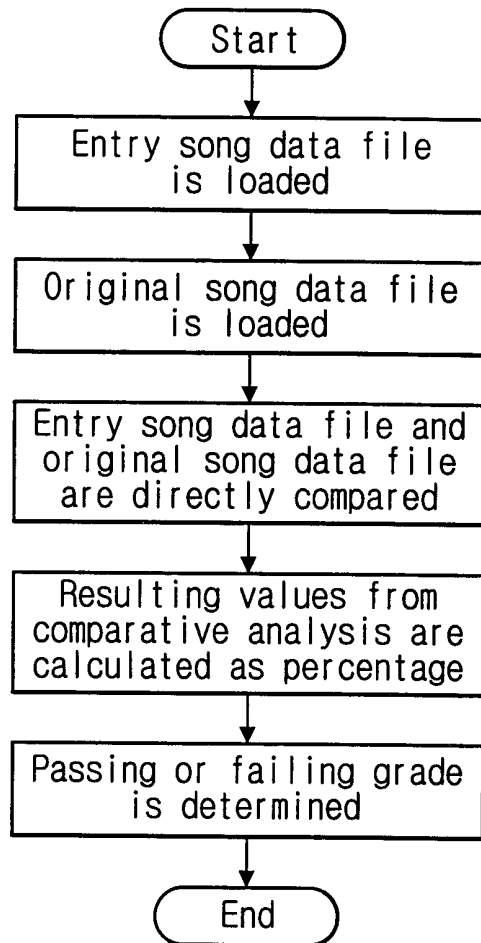


FIG. 5

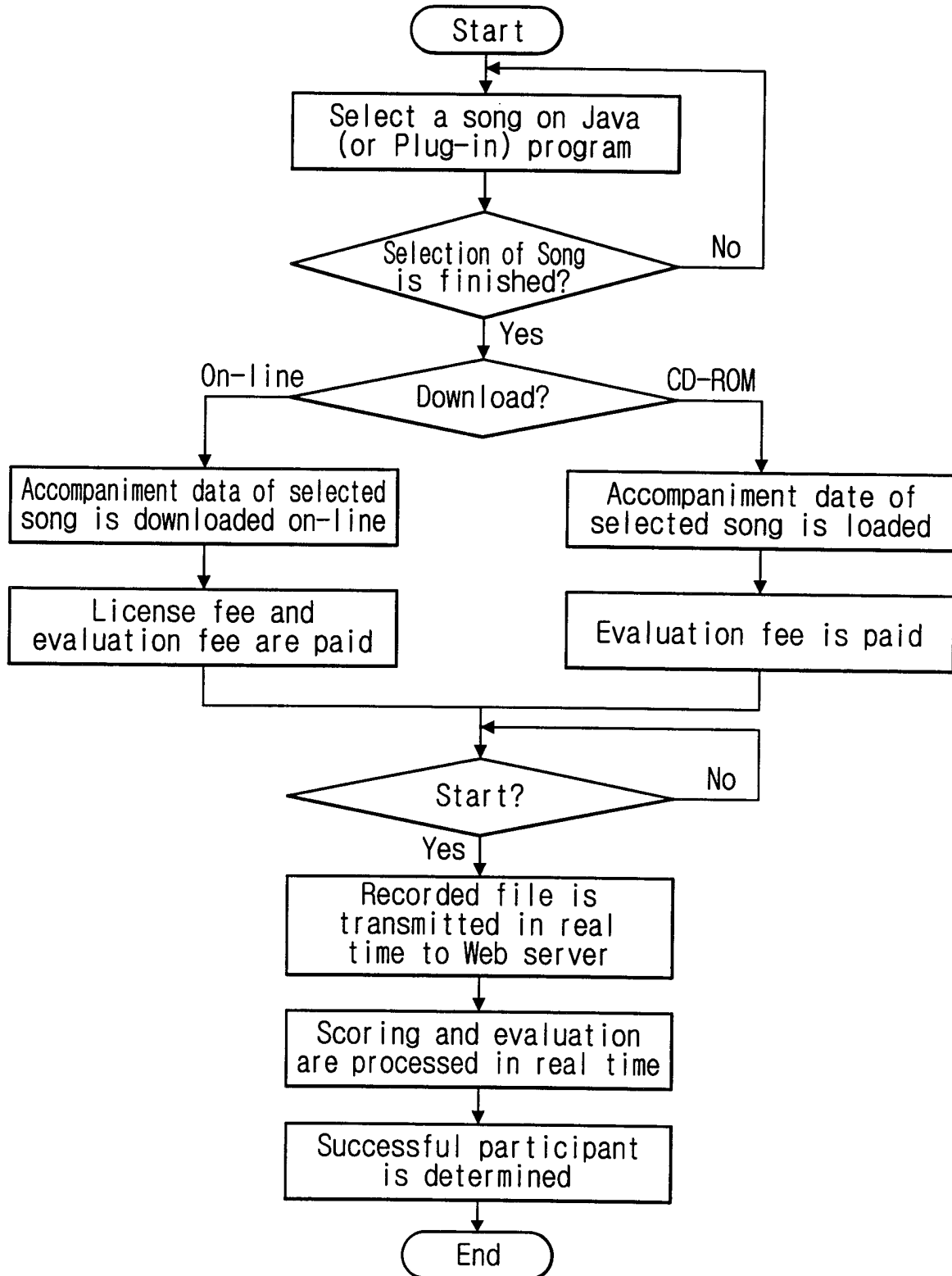


FIG. 6

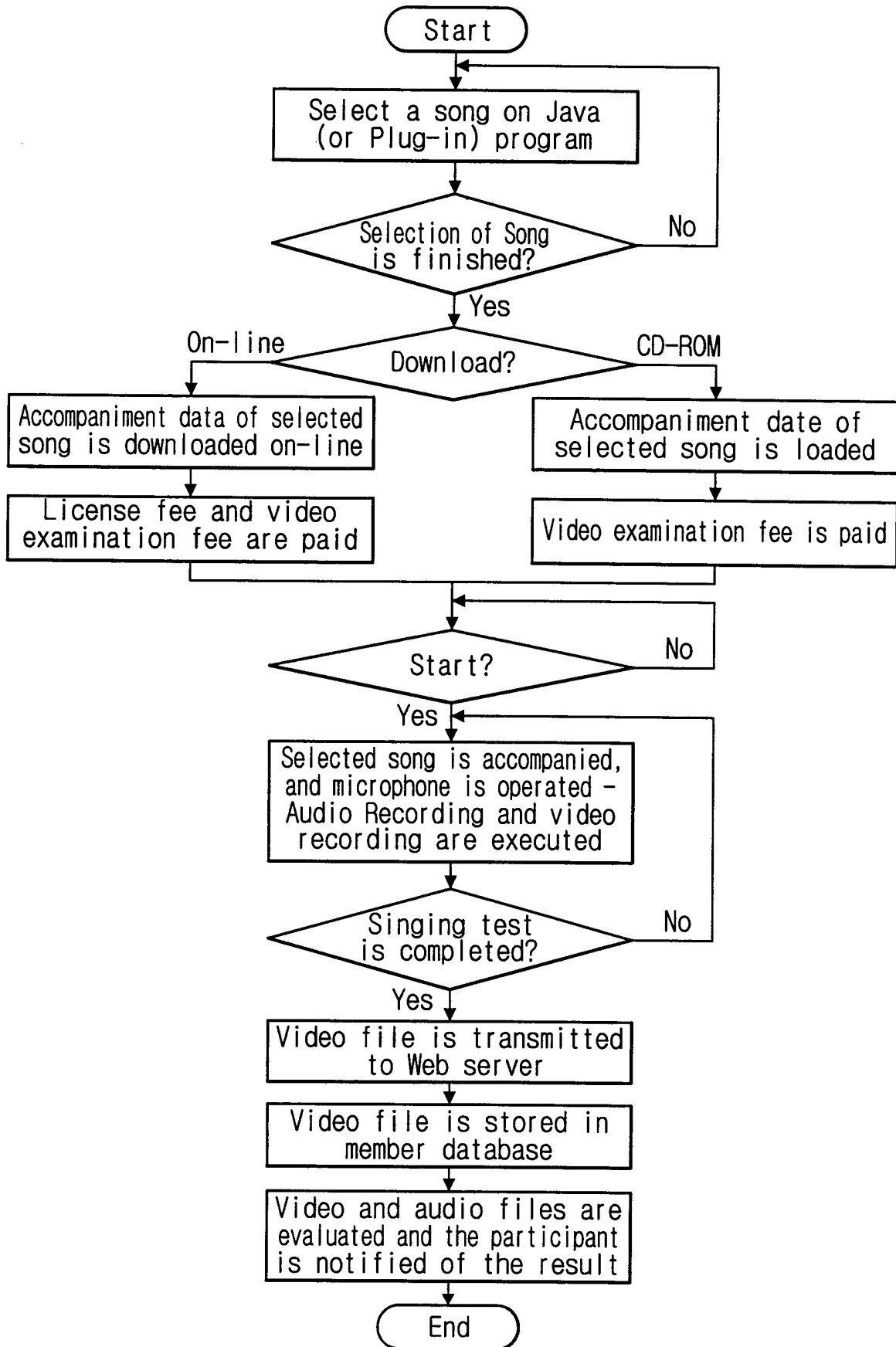
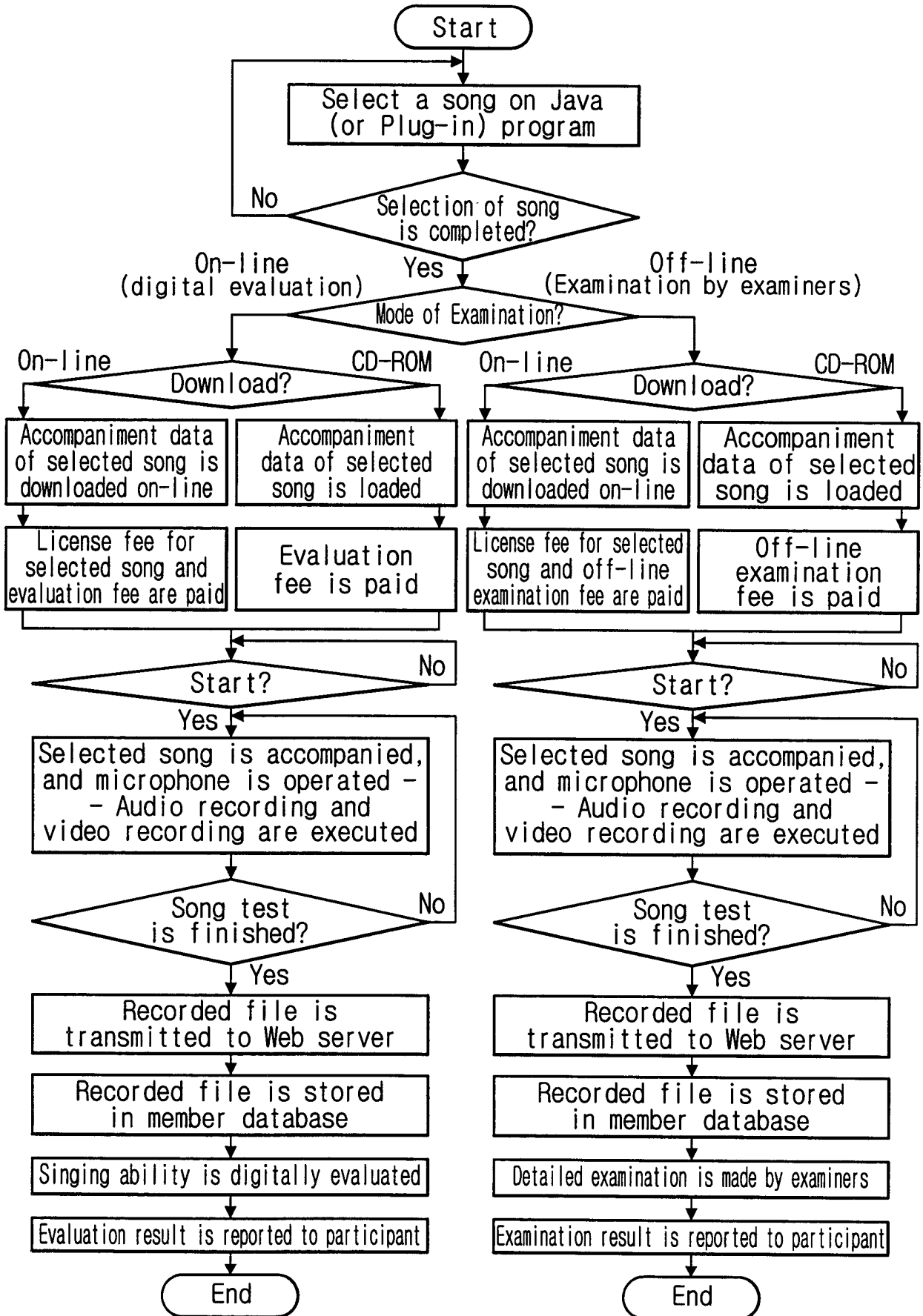




FIG. 7



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR01/00435

**A. CLASSIFICATION OF SUBJECT MATTER****IPC7 G06F 19/00**

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)

IPC6 G06F 17/00, 15/00, 15/16

Documentation searched other than minimum documentation to the extent that such documents are included in the files searched

Electronic data base consulted during the international 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.
Y	JP 11-194787 A (YAMAHA Corporation) 21. JULY. 1999 FIG.1, 2, 3, 4, 5, 6, ABSTRACT, CLAIMS 1, 2	1-9
Y	JP 09-171504 A (SONY Corporation) 30. JUN. 1997 FIG.1, 2, 3, 4, 5, 6, 9-13, 17-22, 27-38, ABSTRACT, CLAIMS 1, 2, 3, 4	1-9
A	JP 09-016187 A (EXING; BRAZA Industrial) 17. JANUARY. 1997 FIG.1, 2, 3, 4, 5, 6, ABSTRACT, CLAIMS 1, 2, 3, 4, 5, 6	1-9
A	JP 08-234770 A (EXING; BRAZA Industrial) 13. SEPTEMBER. 1996 FIG.1, 2, 3, 4, 5, 6, 7, 8, ABSTRACT, CLAIMS 1, 2, 3, 4, 5, 6	1-9
A	US 6041311 A (Microsoft Corp.,) 21. MARCH. 2000 FIG.1, 2, 3, 4, ABSTRACT, CLAIMS 1, 2, 3, 4, 5, 6, 9-13, 18-24, 29-33	1-9

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

## \* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

01 JUNE 2001 (01.06.2001)

Date of mailing of the international search report

07 JUNE 2001 (07.06.2001)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office  
Government Complex-Daejeon, Dunsan-dong, Seo-gu, Daejeon  
Metropolitan City 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

LEE, Un Cheol

Telephone No. 82-42-481-5784

