CLAIMS

1. A method of controlling for a printing system in which a mobile terminal and a plurality of image forming apparatuses are connectable to a management system and a charging system via a network, the method comprising:

a step of, in the management system, authenticating that a user of the mobile terminal is a registered user of the printing system;

a step of, in the charging system, confirming that clearance processing of the user of the mobile terminal is possible;

a step of, in the mobile terminal, displaying, on a screen, a setting region for inputting a print setting for print data which is a printing target, and a search region for inputting a search condition for searching one or more image forming apparatuses for executing printing;

a search step of, in the management system, searching for one or more image forming apparatuses from out of the plurality of image forming apparatuses in accordance with the search condition input in the search region;

a display step of, in the mobile terminal, displaying display content that associates information of the one or more image forming apparatuses with charge information for when the print data is printed

on the one or more image forming apparatuses respectively on a screen which is a screen that includes a selection region by which it is possible to select a printing target from out of the one or more image forming apparatuses searched for in the search step, wherein the charge information is calculated based on at least a cost fee according to the respective image forming apparatuses which are necessary if the print data is printed on the one or more image forming apparatuses respectively, and the cost fee is calculated based on at least a cost of a depreciation of the respective image forming apparatuses which are necessary if the print data is printed by the input print setting on the one or more image forming apparatuses respectively;

a step of, in the mobile terminal, transmitting to the management system a print instruction that includes information of an image forming apparatus selected as the printing target in the selection region;

a step of, in the management system, issuing a print job including information by which it is at least possible to identify the print instruction which is for the image forming apparatus selected as the printing target if the clearance processing of the user is possible;

an outputting step of, in the image forming apparatus selected as the printing target, outputting

printed material by printing the print data based on the issued print job; and

a requesting step of, in the management system, making a request for clearance processing based on the charge information to the charging system after the outputting of the printed material.

2. The method for controlling according to claim 1, wherein

the mobile terminal and the plurality of image forming apparatuses each comprise a short range communication means capable of short range communication;

in the outputting step, in accordance with the mobile terminal becoming able to perform short range communication with the selected image forming apparatus via the respective short range communication means, the print data is printed by transmitting an execution instruction for the print job to the image forming apparatus from the mobile terminal; and

in the requesting step, after reception of a completion notification for the outputting in the outputting step from the image forming apparatus selected as the printing target, and after reception of a confirmation notification for the printed material from the mobile terminal, the clearance processing is requested.

3. The method for controlling according to claim 2, wherein in the outputting step the mobile terminal transmits the print data and the execution instruction to the image forming apparatus using respective the short range communication means.

4. The method for controlling according to claim 3, wherein

the mobile terminal and the plurality of image forming apparatuses each comprise a communication means for performing public wireless communication; and

in the outputting step, in order to set a communication parameter for the public wireless communication, the mobile terminal transmits the print data to the image forming apparatus via the communication means by the mobile terminal and the image forming apparatus using the respective short range communication means.

5. The method for controlling according to claim 1 or 2, further comprising:

a step of, in the mobile terminal, transferring print data of the printing target to the management system; and

a step of, in the management system, performing image processing on the transferred print data and

transferring a result of the image processing to the image forming apparatus.

6. The method for controlling according to claim 1, wherein in the mobile terminal, a region for selecting print data which is a printing target, the setting region, and the search region are displayed on the same screen.

7. The method for controlling according to claim 1, wherein the charge information is calculated based on the cost fee and a print service fee according to the respective image forming apparatus.

8. The method for controlling according to claim 7, wherein the cost fee is calculated based on the cost of the depreciation, a coloring material cost and a sheet cost of the respective image forming apparatus which are necessary if the input print data is printed by the print setting on the one or more image forming apparatuses respectively.

9. The method for controlling according to claim 8, wherein the cost of the coloring material is calculated based on an image size and a standard unit price of a coloring material used by the respective image forming apparatus when the print data is printed by the print

setting.

10. The method for controlling according to claim 8 or 9, wherein out of the charge information, at least the cost of the coloring material is calculated from a number of dots of the print data which is calculated based on the print data which is stored in the mobile terminal.

11. The method for controlling according to any one of claims 1 to 10, wherein the charge information is calculated in the management system and transmitted to the mobile terminal.

12. The method for controlling according to any one of claims 1 to 11, wherein the print data is selected from files stored in the mobile terminal.

13. The method for controlling according to any one of claims 1 to 11, wherein the print data is selected from files stored in the management system.

14. The method for controlling according to any one of claims 1 to 13, wherein, in the mobile terminal, display content that associates information of the one or more image forming apparatuses on an image of a map with charge information for when the print data is

printed on the one or more image forming apparatuses respectively is respectively superimposed when displaying the screen that includes the selection region by which it is possible to select the printing target from out of the one or more image forming apparatuses searched for in the search step.

15. The method for controlling according to any one of claims 1 to 14, wherein, in the mobile terminal, a distance from a current location of the mobile terminal to a location of the one or more image forming apparatuses is displayed on an image of a map when displaying the screen that includes the selection region by which it is possible to select the printing target from out of the one or more image forming apparatuses searched for in the search step.

16. The method for controlling according to any one of claims 1 to 15, wherein information used for calculating the charge information is registered when an image forming apparatus is registered to the management system.

17. The method for controlling according to any one of claims 1 to 16, wherein, in the charging system, when the clearance processing is requested in the requesting step, the clearance processing is performed based on

the charge information for the user of the mobile terminal.

18. The method for controlling according to any one of claims 1 to 17, comprising:

a step of, in the mobile terminal, displaying a buying and selling contract corresponding to printing in a relationship between a buyer and a seller of the printed material wherein the relationship is between the user of the mobile terminal and a service provider of the image forming apparatus, and

a step of, on the image forming apparatus, displaying a usage contract for the printing system which is between the service provider of the image forming apparatus and an administrator of the printing system.

19. The method for controlling according to any one of claims 1 to 18, wherein the image forming apparatus is installed at at least one of a retail shop, a restaurant, and an event site.

20. A printing system in which a mobile terminal and a plurality of image forming apparatuses are connectable to a management system and a charging system via a network, wherein

the management system comprises:

authentication means for authenticating that a user of the mobile terminal is a registered user of the printing system;

search means for searching for one or more image forming apparatuses from out of the plurality of image forming apparatuses in accordance with a search condition input by the mobile terminal;

issuance means for issuing a print job including information by which a print instruction to an image forming apparatus which is selected as a printing target can be identified; and

requesting means for making a request for clearance processing based on charge information to the charging system after outputting of a printed material by the selected image forming apparatus, and

the charging system comprises:

confirmation means for confirming the clearance processing for a user of the mobile terminal is possible; and

execution means for executing the clearance processing in accordance with the request from the management system, and

the mobile terminal comprises:

instruction means for displaying, on a screen, a setting region for inputting a print setting for print data which is a printing target, and a search region for inputting a search condition for image forming

apparatus candidates for executing printing; and

display means for displaying display content that associates information of the one or more image forming apparatuses searched for by said search means of the management system with charge information for when the print data is printed by the print setting on the one or more image forming apparatuses respectively on a screen which is a screen that includes a selection region by which it is possible to select a printing target from out of the one or more image forming apparatuses, wherein the charge information is calculated based on at least a cost fee according to the respective image forming apparatuses which are necessary if the print data is printed on the one or more image forming apparatuses respectively, and the cost fee is calculated based on at least a cost of a depreciation of the respective image forming apparatuses which are necessary if the print data is printed by the input print setting on the one or more image forming apparatuses respectively; and

transmission means for transmitting to the management system a print instruction that includes information of an image forming apparatus selected as the printing target in the selection region; and

the image forming apparatus, comprises

outputting means for outputting printed material by printing by the print setting the print data based

on the issued print job when the image forming apparatus is selected as the target of the printing.

21. The printing system according to claim 20, wherein

the mobile terminal and the plurality of image forming apparatuses each comprise a short range communication means capable of short range communication, and

the mobile terminal comprises:

transmission means for transmitting an execution instruction for the print job in accordance with a short range communication with the image forming apparatus via the respective short range communication means becoming possible; and

confirmation notification means for notifying the management system of a confirmation of the printed material output by said outputting means of the image forming apparatus, and

the image forming apparatus comprises:

completion notification means for notifying the management system of the completion notification for the outputting of the printed material by said outputting means, wherein

said outputting means prints the print data by the execution instruction for the print job being transmitted from said transmission means of the mobile terminal, and

said requesting means of the management system requests the clearance processing after reception of the completion notification from said completion notification means of the image forming apparatus and after reception of the confirmation notification from said confirmation notification means of the mobile terminal.