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(74) Agents: **BAHNG, Hae Cheol** et al.; KBK & Associates,
15th Floor, YoSam Building, 648-23 Yeoksam-dong,
Kangnam-ku, Seoul, 135-748 (KR).

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(71) Applicant (*for all designated States except US*): **LG ELECTRONICS INC.** [KR/KR]; 20, Yeouido-dong, Yeongdeungpo-gu, Seoul, 150-721 (KR).

(72) Inventors; and

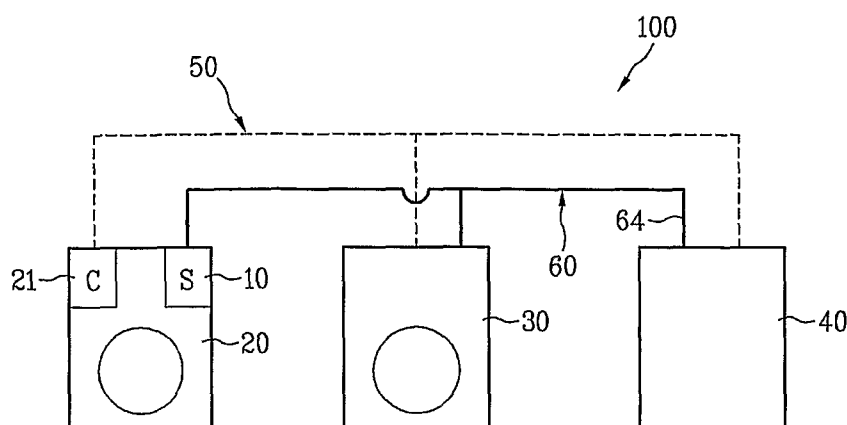
(75) Inventors/Applicants (*for US only*): **KIM, Young Soo** [KR/KR]; LG Electronics Inc. IP Group 391-2, Gaeumjeong-dong, Changwon-si, Gyeongsangnam-do, 641-711 (KR). **JEONG, Seong Hae** [KR/KR]; LG Electronics Inc. IP Group 391-2, Gaeumjeong-dong, Changwon-si, Gyeongsangnam-do, 641-711 (KR).

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(54) Title: TOTAL LAUNDRY TREATING SYSTEM



(57) Abstract: The present invention relates to a total laundry treating system composed of laundry treating devices as a set. A total laundry treating system includes a plurality of laundry treating apparatuses in which at least one controller is provided to treat laundry; a steam generator provided a predetermined one of the laundry treating apparatuses, wherein the steam generator generates steam based on a control of the controller and the steam generator supplies the steam to the laundry treating apparatuses; a steam supply line through which the steam generated by the steam generator is supplied to the other laundry treating apparatuses having no steam generators.

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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.

Description

TOTAL LAUNDRY TREATING SYSTEM

Technical Field

- [1] The present invention relates to a total laundry treating system. More specifically, the present invention relates to a total laundry treating system composed of laundry treating devices as a set.

Background Art

- [2] Laundry treating apparatuses are all kinds of appliances that are used in houses, Laundromats or dry cleaners' to treat clothes, cloth items, bedding and the like (hereinafter, laundry) such as washing, drying, removing wrinkles.
- [3] For example, laundry treating apparatuses include washers, dryers, laundry devices having washing and drying functions, refreshers, irons for removing or producing wrinkles of laundry and steamers for removing unnecessary wrinkles.
- [4] More specifically, the refreshers are appliances that performs drying, supplying aroma to laundry, prevents static electricity of laundry or removing wrinkles of laundry. These kinds of refreshers are consumed a lot in North America.
- [5] The steamers are appliances that supplies steam to laundry to remove wrinkles of laundry. The steamer may not allow a hot plate to contact with the laundry, different from the iron. As a result, the steamers are consumed a lot in here in Korea via home shopping channels.
- [6] Recently, washers having steam generators, especially, drum type washers have come into wide use. The products have become popular in recent years which supplies steam to laundry during washing or before/after washing, to maximize washing efficiency by using functions of sterilization, laundry soaking time reduction and detergent activation.

Disclosure of Invention

Technical Problem

- [7] As mentioned above, it is common that these kinds of laundry treating apparatuses are separately placed in places where laundry is treated.
- [8] That is, such laundry treating apparatuses happen to be scattered in space. Even though such laundry treating apparatuses are placed in one space, the laundry treating apparatuses have no interrelation with each other and a user has to spend quite a time in treating laundry.
- [9] It may not be preferred as a matter of space utility or laundry treating time

efficiency and production cost that the steam used in laundry treating is generated in each of the laundry treating apparatuses.

- [10] In addition, if each of the laundry treating apparatuses has a water supply source for generating the steam, a user can feel inconvenient.

Technical Solution

- [11] To solve the problems, an object of the present invention is to provide a total laundry treating system composed of laundry treating devices as a set.

- [12] To achieve these objects and other advantages and in accordance with the purpose of the invention, as embodied and broadly described herein, a total laundry treating system includes a plurality of laundry treating apparatuses in which at least one controller is provided to treat laundry; a steam generator provided a predetermined one of the laundry treating apparatuses, wherein the steam generator generates steam based on a control of the controller and the steam generator supplies the steam to the laundry treating apparatuses; a steam supply line through which the steam generated by the steam generator is supplied to the other laundry treating apparatuses having no steam generators.

- [13] Here, the plurality of the laundry treating apparatuses may include a washer for washing laundry, a washer having a drying function for washing and drying laundry and a dryer for drying laundry. also, the plurality of the laundry treating apparatuses may include a refresher or iron.

- [14] On the other hand, the plurality of the laundry treating apparatuses may be various kinds of laundry treating apparatuses having separate laundry treating modules. That is, in one total laundry treating system, there are provided a plurality of washers, a dryer and a refresher, or a plurality of dryers, a washer and a refresher.

- [15] Commonly, such laundry treating apparatuses in houses may be configured to be different kinds of laundry treating apparatuses performing separate laundry treating modules. Here, the laundry treating module is modules for washing, drying and refreshing.

- [16] The controller may be provided in a predetermined one of the plurality of the laundry treating apparatuses. In this case, the controller controls an operation of each laundry treating apparatus and an operation of the steam generation. The controller may be connected to each of the laundry treating apparatuses via only a control wire.

- [17] The controller may be provided in each of the laundry treating apparatuses. In this case, each controller separately controls the corresponding laundry treating apparatus.

- [18] Here, the total laundry treating system may further include a data transmitting part

that transmits data between the controller provided in the predetermined laundry treating apparatus including the steam generator and the controllers provided in the other laundry treating apparatuses.

[19] The data transmitting part may be a wire cable connected between the controllers or a wireless communication device provided at each of the controllers to send and receive the data among the controllers wirelessly.

[20] The plurality of laundry treating apparatuses may further include a steam iron.

[21] By the way, the total laundry treating system may include a predetermined one laundry treating apparatus having the steam generator and the other laundry treating apparatuses receiving steam from the steam generator.

[22] Here, the capacity of the steam generator may be adjustable according to a case that steam is requested by all of the laundry treating apparatuses and a case that steam is requested by one of the laundry treating apparatuses. This is because user inconvenience and energy saving caused by insufficient steam supply or time delay of steam supply may be accomplished.

[23] On the other hand, the total laundry treating system may further include a hot air generator that generates hot air based on a control of the controller; a data transmitting part for transmitting data between a controller of the hot air generator and the controller of the laundry treating apparatuses; and an hot air supply line through which the hot air generated by the hot air generator is supplied to the other laundry treating apparatuses having no hot air generator.

[24] The total laundry treating system may further include a hot air collect line through which hot air exhausted from the other laundry treating apparatuses is collected. The hot air generator may include a condenser that the hot air collected through the hot air collect line is condensed.

[25] That is, it is possible to embody an air condensation type drying function in that hot air is not exhausted outside but circulated and to embody an air exhaustion type drying function in that hot air is exhausted by each of the laundry treating apparatuses separately.

[26] In the total laundry treating system including the hot air generator, the steam generator and the hot air generator are controlled by one controller, which is efficient as a matter of production cost. In addition, there is an effect of a simple structure, because an auxiliary data transmitting part for sharing the hot air generator does not have to be provided other than the data transmitting part for sharing the steam generator.

- [27] At least one of the laundry treating apparatuses has a different laundry treating module.

Advantageous Effects

- [28] The present invention has following advantageous effects.

- [29] Each of the laundry treating apparatuses is inter-relative and thus a convenient total laundry treating system may be provided. That is, the total laundry treating system according to the present invention is efficient and convenient in a view of space or a laundry treating time.

- [30] Furthermore, according to the present invention there are provided the plurality of the laundry treating apparatuses that uses steam, respectively, and the steam the total laundry treating system having the steam generator for supplying steam to each of the laundry treating apparatuses. As a result, the present invention has an advantageous effect that a series of laundry treating processes may be performed conveniently.

- [31] A still further, the steam generator able to adjust the amount of steam supply is provided in the total laundry treating system according to the present invention. As a result, efficient steam supply is possible and energy saving is possible.

- [32] A still further, according to the present invention, steam is supplied to the plurality of the laundry treating apparatuses through the single steam generator. As a result, a user may easily secure a water source for steam generation.

- [33] A still further, the hot air generator for supply air, especially, hot air as well as the steam generator is provided in each of the laundry treating apparatuses. As a result, the laundry treating process may be performed convenient.

- [34] Lastly, the total laundry treating system may be embodied by using conventional washers having the steam generators or dryers having the hot air generators.

Brief Description of the Drawings

- [35] The accompanying drawings, which are included to provide further understanding of the disclosure and are incorporated in and constitute a part of this application, illustrate embodiments of the disclosure and together with the description serve to explain the principle of the disclosure.

- [36] In the drawings:

- [37] FIG. 1 is a block view illustrating a first embodiment of the present invention;

- [38] FIG. 2 is a block view illustrating a second embodiment of the present invention;

- [39] FIG. 3 is a block view illustrating a third embodiment of the present invention;

- [40] FIG. 4 is a block view illustrating a fourth embodiment of the present invention;

and

[41] FIG. 5 is a diagram schematically illustrating a steam generator provided in the present invention.

Best Mode for Carrying Out the Invention

[42] Reference will now be made in detail to the specific embodiments of the present invention, examples of which are illustrated in the accompanying drawings. Wherever possible, the same reference numbers will be used throughout the drawings to refer to the same or like parts.

[43] In reference to FIGS. 1 to 5, preferred embodiments of the present invention will be explained.

[44] FIG. 1 is a block view illustrating a first embodiment of the present invention. Next, the first embodiment will be explained.

[45] A total laundry treating system 100 according to the first embodiment may include a steam generator 10 and a plurality of laundry treating apparatuses 20, 30 and 40. Here, the laundry treating apparatuses may be appliances that have the same laundry treating module, or may be appliances that have different laundry treating modules, respectively.

[46] The steam generator 10 may be provided in a predetermined one of the laundry treating apparatuses. FIG. 1 presents that the steam generator 10 is provided in a washer 20.

[47] Such washers having steam generators have been used a lot and demands of such washers have been increasing in market because of high washing efficiency.

[48] FIG. 1 illustrates a washer 20, a dryer 30 and a refresher 40 as laundry treating apparatuses. Of course, these laundry treating apparatuses may be different kinds of laundry treating apparatuses and may include more laundry treating apparatuses.

[49] Meanwhile, the present specification may not explain functions and structures of individual laundry treating apparatuses in detail, because the functions and the structures are well-known knowledge to those skilled in the art and the present invention is not limited to the detailed functions or structures. Accordingly, the technical subject matter of the present invention may pertain to any kinds of laundry treating apparatuses applied to the present invention.

[50] Next, as shown in FIG. 1, a total laundry treating system including the washer 20, the dryer 30 and the refresher 40 as the plurality of the laundry treating apparatuses will be explained.

[51] Steam may be supplied to the washer 20, the dryer 30 and the refresher 40 to

improve washing efficiency, remove wrinkles, prevent static electricity, perform sterilization or remove bad smell of laundry.

[52] Here, the steam supplied to the washer 20, the dryer 30 and the refresher 40 is generated by a steam generator that is provided in a predetermined one of the laundry treating apparatuses.

[53] FIG. 1 illustrates that a controller 21 and the steam generator 10 are provided in the washer 20.

[54] As shown in FIG. 1, the controller 21 provided in the washer 10 controls operations of dryer 30 and the refresher 40 as well as the washer 20. That is, only driving parts operated by the control of the controller 21 are provided in the dryer 30 and the refresher 40. As a result, only a control wire 50 is connected among the controller 21, the dryer 30 and the refresher 40 to allow a control signal transmitted, such that the total laundry treating system is embodied.

[55] The controller 21 operates the steam generator 10 if necessary to generate steam and it controls the steam to be supplied to the washer 20, the dryer 30 and the refresher 40.

[56] In case the washer 20 having the steam generator 10 is applied to the total laundry treating system, a steam supply line 60 should be additionally provided and the steam is supplied from the steam generator 10 outside the washer 20 through the steam supply line 60.

[57] If the controller 21 performs all the control of the total laundry treating system, the dryer 30 or the refresher 40 do not have to include controllers. As a result, a user uses the total laundry treating system via the controller 21 provided in the washer 20.

[58] Next, in reference to FIG. 2, a second embodiment of the present invention will be explained.

[59] The embodiment shown in FIG. 2 substantially has the same structure of the above embodiment, except that an additional controller is provided in each of the laundry treating apparatuses without the steam generator 10. Specifically, if the steam generator 10 is provided in the washer 10, a dryer controller 31 is provided in the dryer 31 and a refresher controller 41 is provided in the refresher 40.

[60] Here, each controller 21, 31 and 41 controls an operation of each laundry treating apparatus.

[61] A washer controller 21 is provided in the washer 20 and a dryer controller 31 is provided in the dryer 30 and a refresher 41 is provided in the refresher 40 separately. As a result, the laundry treating apparatuses perform separate laundry treating modules

by using separate controllers 21, 31 and 41.

[62] For example, if the dryer 30 needs steam, the controller 31 of the dryer 30 requests steam supply to the controller 21 of the washer 20 via a data transmitting part 50. The controller 21 of the washer 20 controls an operation of the steam generator 10, corresponding to the request, to supply the requested steam to the dryer 30. At this time, the steam is supplied through the steam supply line 60.

[63] In this embodiment, the steam is supplied to each of the laundry treating apparatuses by the steam generator 10 provided in a predetermined one of the laundry treating apparatuses, for example, the washer 20.

[64] Such control logic may be applied to the case that the steam generator 10 is provided in the dryer 20 or the refresher 40.

[65] By the way, the data transmitting part 50 may be a cable. While, the data transmitting part 50 may include a wireless communication device (not shown) provided in the controller 21 of the washer 20 and wireless communication devices (not shown) provided in the other controllers 31 and 41 of the other laundry treating apparatuses. At this time, data may be sent and received wirelessly.

[66] The wire/wireless data transmitting is well-known knowledge to those skilled in the art and easy for them to expect. Therefore, the detailed explanation thereof will be omitted.

[67] The present invention includes the steam supply line 6 through which the steam generated by the steam generator 10 is supplied to the laundry treating apparatuses. The steam supply line 6 may be formed between the steam generator 10 and each of the laundry treating apparatuses.

[68] As shown in FIG. 2, the steam supply line 60 may include a header 61 and branched steam pipes 62 and 63. The header 61 is connected to an outlet (not shown) of the steam generator 10 for branching a steam flow. The branched steam pipes 62 and 63 are branched from the header 6 such that each branched steam pipe is branched to each of the laundry treating apparatuses. The branched steam pipes 62 and 63 are connected to an inlet (not shown) of each laundry treating apparatus and steam is supplied to the laundry treating apparatuses through the branched steam pipes 62 and 63.

[69] Although not shown in FIG. 2, a valve may be provided at the header 61, the branched steam pipes 62 and 63, the outlet of the steam generator 10 or the inlets of the laundry treating apparatuses to be selectively opened and closed. Controlling the valve enables the steam to be supplied to the laundry treating apparatus that needs the

steam.

[70] Next, in reference to FIG. 3, a third embodiment will be explained. FIG. 3 is a block view illustrating the third embodiment.

[71] A total laundry treating system according to this embodiment further includes a hot air generator 80. Specifically, according to this embodiment the laundry treating apparatuses share the hot air generator 80 as well as the steam generator 10, while according to above embodiments the laundry treating apparatuses share only the steam generator 10.

[72] Dryers or washers having a drying function typically include means for forcibly supply hot air to the laundry to dry the laundry and one of the examples is a hot air generator. The hot air generator 80 includes a fan (not shown) that forcibly circulates air and a heater (not shown) that heats the air. As a result, the hot air is supplied into a dryer to dry the laundry. Here, the damp air inside the dryer may be exhausted outside right away, or may be re-circulated after passing a condenser to remove its moisture. The former is called an exhaustion type drying and the latter is called a condensation type drying.

[73] A heating source of the heater may be a gas burner or an electric heater, which is not limited thereto.

[74] The subject matter of the present invention may not pertain to such specific dryer and thus the detailed description thereof will be omitted.

[75] As shown in FIG. 3, this embodiment has the same configuration of the above embodiment shown in FIG. 2, except that the hot air generator 80 is provided in a pre-determined one of the laundry treating apparatuses.

[76] FIG. 3 shows that the hot air generator 80 is provided in a dryer 30 and the dryer 30 may be a washer having a drying function that can perform a drying and washing function. As a result, according to this embodiment, the plurality of the laundry treating apparatuses may share the hot air generator 80 as well as the steam generator 10.

[77] As mentioned above, generally the dryer 30 includes the hot generator 80. As a result, the total laundry treating system according to this embodiment can be embodied without any additional hot generator and thus the detailed description thereof will be omitted.

[78] Here, hot air may not mean only literally hot air, which may include normal temperature air.

[79] Such normal and high temperature air is forcibly supplied to the dryer to dry or

refresh the laundry.

[80] In this case, it is preferable that a hot air supply line 70 is provided to supply hot air to each of the laundry treating apparatuses 20 and 40 from the hot air generator 80. That is, the hot air supply line 70 is a separate component from the steam supply line 60.

[81] Next, in reference to FIG. 4, a fourth embodiment will be explained.

[82] As shown in FIG. 4, this embodiment has the same configuration as that of the third embodiment, except that the steam generator 10 and the hot air generator 80 are provided in a predetermined one of the laundry treating apparatuses and that they are shared by the other laundry treating apparatuses.

[83] Specifically, the steam generator 10 and the hot air generator 80 may be provided in the dryer 30 or the washer 20. For example, if the steam generator 10 and the hot air generator 80 are provided in the washer 20, the washer 20 is a washer having a steam washing and drying function.

[84] Each of the laundry treating apparatuses 20, 30 and 40 performs a separate laundry treating module via each of the controllers 21, 31 and 41 and the controller 21 controls operations of the steam generator 10 and the hot air generator 80 when each of the laundry treating apparatuses 20, 30 and 40 needs hot air or steam. Hence, steam or hot air is supplied to the laundry treating apparatus that needs the steam or hot air.

[85] Pipes or control logic for such supply of the steam or hot air has been explained in above embodiments and thus the explanation thereof will be omitted.

[86] According to this embodiment, there is an effect that a total laundry treating system can be embodied via a conventional dryer or conventional dryer having a washing function that includes the steam generator 10 and the hot air generator 80.

[87] It is easy to make a control program, because the steam generator 10 and the hot air generator 80 are controlled via one controller 21.

[88] The steam supply line 60 and the hot air supply line 70 have been explained in the above first embodiment and the specific descriptions thereof will be omitted. Of course, the control method of opening/closing those lines 60 and 70 has been explained in the above first embodiment, and the description thereof will be also omitted.

[89] In the above embodiments, a hot air circulation method by the hot air generator provided in a predetermined laundry treating apparatus may be an air exhaustion type or air condensation type.

[90] Specifically, in case of the air exhaustion type, the air supplied to each of the laundry treating apparatuses through the hot supply line 70 is not circulated into the

hot air generator 80 but exhausted outside. That is, the air is exhausted to an outside or an inside through an air outlet of each laundry treating apparatus, which is identical to an air passage of the air exhaustion type.

[91] In case of the air condensation type, the air supplied to each of the laundry treating apparatuses through the hot air supply line 70 is re-circulated to the hot air generator 80. For that, an auxiliary hot air collect line (not shown) may be provided.

[92] That is, when the air is supplied to each of the laundry treating apparatuses through the hot air supply line 70, the air gets to contain moisture in the laundry treating apparatuses and the damp air is collected through the hot air collect line (not shown). Here, the moisture of the air may be removed before the collected air is re-supplied to each of the laundry treating apparatuses.

[93] As a result, in case of the condensation type, a condenser (not shown) may be further provided to condense the moisture of the air. The moisture of the air is condensed in the condenser and the air having its moisture removed is supplied to each of the laundry treating apparatuses through the hot air supply line 70.

[94] The structure of such condensation type is applicable to a case in that an air outlet is difficult to form at laundry devices in houses or dry cleaners'. That is, it is easy to install the air exhaustion type in a room near an external wall of a building and it is easy to install the air condensation type in a room near a center area of a building, because complicated air outlet pipes are difficult to install in the room near the center area of the building.

[95] Next, in reference to FIG. 5, a steam generator applicable to the present invention will be explained. FIG. 5 is a diagram schematically illustrating the steam generator.

[96] The total laundry treating system according to the present invention may include one steam generator 500. The steam generator 500 may be provided in a predetermined one of plural laundry treating apparatuses.

[97] However, the amount of steam supply supplied to the steam generator may be variable, because each of the laundry treating apparatuses requires steam simultaneously or one of them requires steam.

[98] As a result, the amount of steam generation or steam supply may be variable based on demands of steam. That is preferable for energy saving or for time reduction of steam supply.

[99] FIG. 5 illustrates an embodiment of the steam generator that is such a capacity variable type.

[100] As shown in FIG. 5, the steam generator 500 is configured to be a plurality of

chambers 520, 521 and 522 the chambers may have separate volumes and the heaters 530, 531 and 532 are mounted in the chambers 520, 521 and 522, respectively. Of course, these heaters 530, 531 and 532 may have separate capacities.

[101] FIG. 5 illustrates a chamber 520 having a relatively large volume and a heater 530 having a relatively large volume, and chambers 521 and 522 having relatively small volumes and heaters 531 and 532 having relatively small capacities.

[102] For example, if the amount of requested steam is most, all the heaters are operated to generate steam. If the amount of requested is least, one of the heaters having the small capacity is operated to generate steam. As a result, the amount of steam generation and supply may be adjustable based on the amount of requested steam.

[103] The operation of the heaters 530, 531 and 532 is controlled by a controller of the laundry treating apparatus having the steam generator 500 therein. The controller receives data for the amount of requested steam from the controllers of the laundry treating apparatuses.

[104] On the other hand, a steam outlet (not shown) is formed at each of the chambers 520, 521 and 522. Steam discharged through the steam outlets is supplied to each of the laundry treating apparatuses through the steam supply line 560.

[105] Such method of steam amount adjustment may be embodied in a different way. For example, the amount of water supplied to the steam generator may be controlled by the controller based on the amount of requested steam. Hence, the heating amount of the heater may be controlled or the number of the operated heaters may be controlled.

[106] Specifically, if the steam amount is most in the steam generator having one chamber and the plurality of the heaters are provided therein, the largest amount of water may be supplied to the steam generator and all of the heaters may be operated. If the steam amount is least, the least amount of water may be supplied to the steam generator and only a predetermined heater may be operated.

[107] If only one heater is provided, the heating amount of the heater is controlled based on the amount of requested steam to adjust the steam amount to adjust the steam amount.

[108] Water should be supplied to the steam generator according to the present invention. A source of such water supply may be a common water pipe or a user may directly supply water to the steam generator.

[109] A water pipe as a water source is not provided in every house and is commonly, for example, only in a kitchen or bathroom. In addition even such places as a kitchen or bathroom have limited water taps and washers that use a lot of water are connected to

the water taps.

[110] As a result, lack of water source can be prevented because only one steam generator may be used according to the present invention.

[111] In the meantime, if there is no such water source, a user may directly supply water to the steam generator by using a water basket. In this case, even when water is supplied to only one steam generator provided in the predetermined one of the laundry treating apparatuses, the water may be supplied to the other laundry treating apparatuses and thus there is an effect of minimized fatigue to the user.

[112] If the steam generator is provided in the washer, the steam generator may use a water tap for supplying water to the washer and thus an auxiliary water source may not be provided.

[113] Next, in reference to FIG. 2, an operation of the total laundry treating system according to the present invention will be explained. An operation according to other embodiment can be easily understood through the following explanation and thus the description thereof will be omitted.

[114] Firstly, each of the laundry treating apparatuses may be operated separately. That is, the washer performs washing, the dryer performs drying and the refresher performs refreshing. When steam is requested during an operation of each laundry treating apparatus, each of the controllers transmits a signal for steam request to the controller of the predetermined laundry treating apparatus having the steam generator.

[115] Hence, the controller of the predetermined laundry treating apparatus controls the steam generator to be operated and to generate steam based on the steam request. Here, the controller may control the water amount for steam generation, the heating capacity of the heater or the number of the operated heaters. That is, the steam generation and steam supply amount may be adjustable based on the amount of requested steam.

[116] The steam is supplied to each of the laundry treating apparatus.

[117] Therefore, according to the present invention, the steam generator does not have to be provided in each of the laundry treating apparatuses and the present invention is advantageous as a matter of cost. In addition, it is limited that the efficient steam generator is mounted in each of the laundry treating apparatus. Such problematic limitation may be solved by the present invention in which the steam generator is provided in the predetermined laundry treating apparatuses.

[118] It will be apparent to those skilled in the art that various modifications and variations can be made in the present invention without departing from the spirit or

scope of the invention. Thus, it is intended that the present invention cover the modifications and variations of this invention provided they come within the scope of the appended claims and their equivalents.

Industrial Applicability

- [119] The present invention has an industrial applicability.
- [120] Each of the laundry treating apparatuses is inter-relative and thus a convenient total laundry treating system may be provided. That is, the total laundry treating system according to the present invention is efficient and convenient in a view of space or a laundry treating time.
- [121] Furthermore, according to the present invention there are provided the plurality of the laundry treating apparatuses that uses steam, respectively, and the steam the total laundry treating system having the steam generator for supplying steam to each of the laundry treating apparatuses. As a result, the present invention has an industrial applicability that a series of laundry treating processes may be performed conveniently.
- [122] A still further, the steam generator able to adjust the amount of steam supply is provided in the total laundry treating system according to the present invention. As a result, efficient steam supply is possible and energy saving is possible.
- [123] A still further, according to the present invention, steam is supplied to the plurality of the laundry treating apparatuses through the single steam generator. As a result, a user may easily secure a water source for steam generation.
- [124] A still further, the hot air generator for supply air, especially, hot air as well as the steam generator is provided in each of the laundry treating apparatuses. As a result, the laundry treating process may be performed convenient.
- [125] Lastly, the total laundry treating system may be embodied by using conventional washers having the steam generators or dryers having the hot air generators.

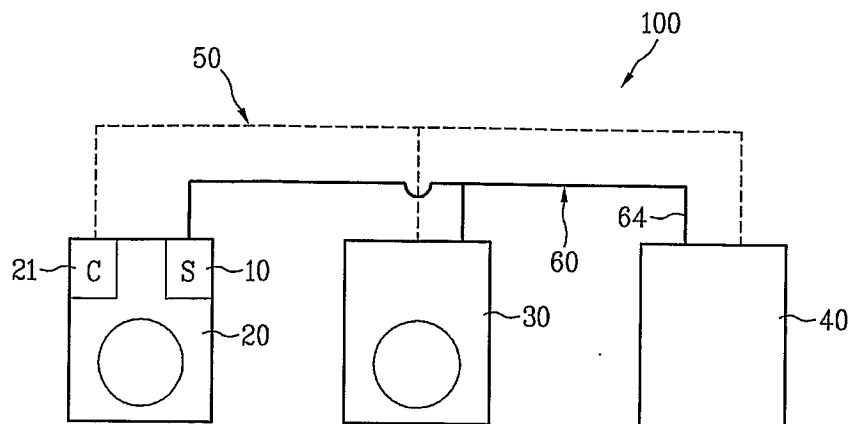
Claims

- [1] A total laundry treating system comprising:
a plurality of laundry treating apparatuses in which at least one controller is provided to treat laundry;
a steam generator provided a predetermined one of the laundry treating apparatuses, wherein the steam generator generates steam based on a control of the controller and the steam generator supplies the steam to the laundry treating apparatuses;
a steam supply line through which the steam generated by the steam generator is supplied to the other laundry treating apparatuses having no steam generators.
- [2] The total laundry treating system as claimed in claim 1, wherein the plurality of the laundry treating apparatuses comprise a washer for washing laundry and a washer having a drying function for washing and drying laundry.
- [3] The total laundry treating system as claimed in claim 1, wherein the plurality of laundry treating apparatuses comprise a dryer for drying laundry.
- [4] The total laundry treating system as claimed in claim 3, wherein the plurality of laundry treating apparatuses further comprise a refresher for refreshing laundry.
- [5] The total laundry treating system as claimed in claim 4, wherein the controller is provided in each of the laundry treating apparatuses.
- [6] The total laundry treating system as claimed in claim 5, wherein the data transmitting part is a wire cable connected between the controllers or a wireless communication device provided at each of the controllers to send and receive the data among the controllers wirelessly.
- [7] The total laundry treating system as claimed in claim 6, wherein the data transmitting part is a wire cable connected between the controllers or a wireless communication device provided at each of the controllers to send and receive the data among the controllers wirelessly.
- [8] The total laundry treating system as claimed in claim 1, wherein the plurality of laundry treating apparatuses further comprise a steam iron.
- [9] The total laundry treating system as claimed in claim 1, wherein the predetermined laundry treating apparatus including the steam generator is a washer.
- [10] The total laundry treating system as claimed in claim 1, wherein the predetermined laundry treating apparatus having the steam generator is a dryer for drying laundry or a washer having a drying function for washing and drying

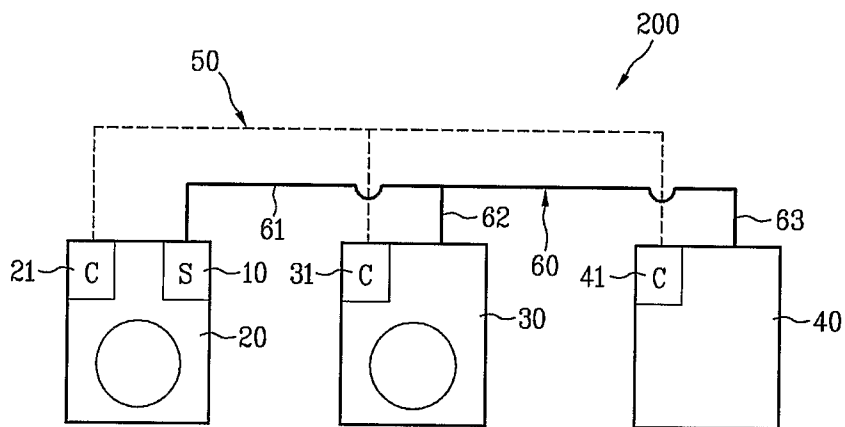
laundry.

- [11] The total laundry treating system as claimed in claim 10 wherein the dryer or the washer having a drying function comprises a hot air generator that generates hot air based on a control of the controller.
- [12] The total laundry treating system as claimed in claim 11, further comprising a hot air supply line through which the hot air generated by the hot air generator is supplied to the other laundry treating apparatuses having no hot air generator.
- [13] The total laundry treating system as claimed in claim 12, further comprising; a hot air collect line through which hot air exhausted from the other laundry treating apparatuses is collected.
a condenser that the hot air collected through the hot air collect line is condensed.
- [14] The total laundry treating system as claimed in claim 1, wherein the steam generator is a capacity adjustable type steam generator that adjusts a steam amount supplied to the laundry treating apparatuses.
- [15] The total laundry treating system as claimed in claim 1, wherein at least one of the laundry treating apparatuses has a different laundry treating module.

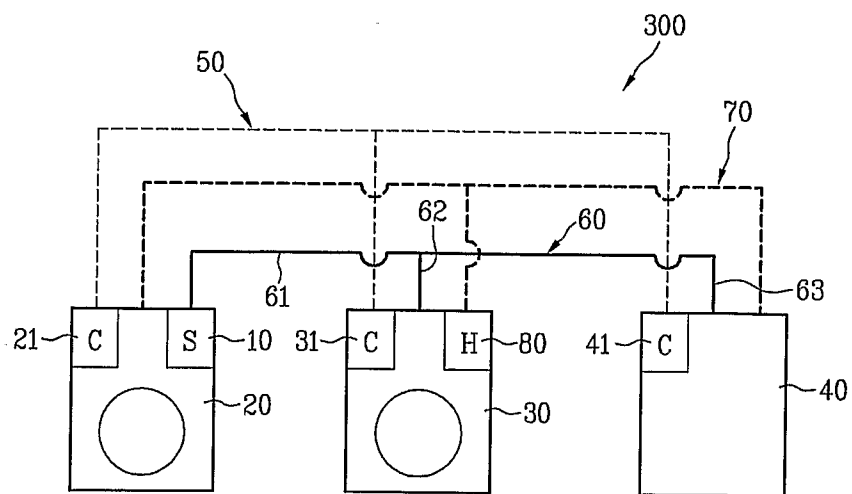
[Fig. 1]



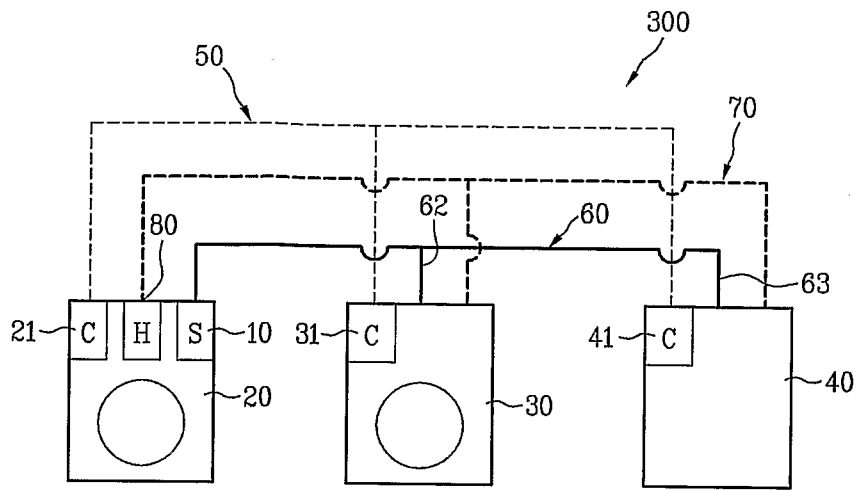
[Fig. 2]



[Fig. 3]



[Fig. 4]



[Fig. 5]

