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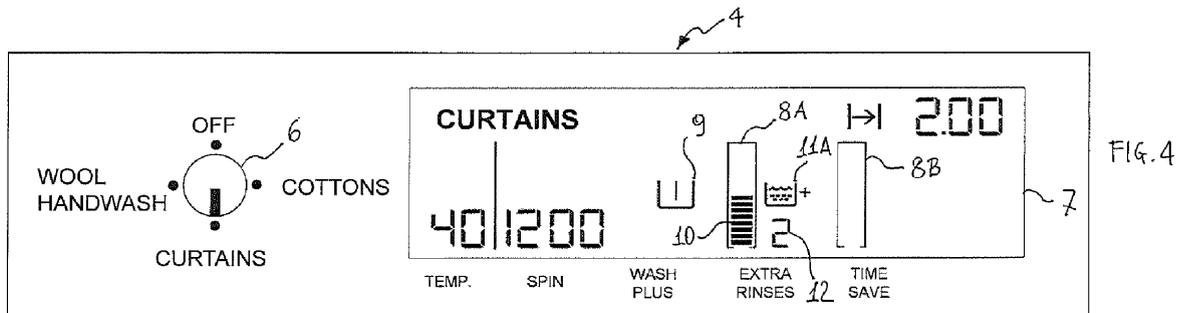
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(54) **Laundry treating machine with improved user interface**

(57) The invention relates to laundry treating machine (1) having an improved user interface and to a method of interfacing user input to such machine.

A laundry treating machine (1) according to the invention comprises a user interface (4) and operational

displaying device (7) adapted to visualize operational features of said machine. Such machine is characterized in that said displaying device (7) comprises at least one appearance-changing graphical icon (8, 8A, 8B) whose appearance is changeable by setting one or more operational parameters of a laundry treating process.



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## Description

**[0001]** The present invention relates to laundry treating machine (e.g. a washing machine, a drier, a washer/drier) having an improved user interface and to a method of interfacing user input to such machine.

**[0002]** Laundry treating machines generally comprise a user-operable laundry treating process selector and a display for visualizing to a user operational features regarding the selected process. Some laundry treating machines known in the art let a user adjust one or more process parameters, such as number of washing rinses, overall process working time, and so on, according to specific needs. However, in such machines of known type, a user needs to try to adjust a process parameter to find out whether said parameter is effectively adjustable in relation to the selected laundry treating process. If a process parameter cannot be adjusted, a corresponding error message, usually in the form of flashing light and/or an audible signal, is output by the machine. A user is therefore left in doubt on what options she/he effectively has to modify in order to adapt the selected laundry treatment process according to her/his personal preferences.

**[0003]** In addition, in machines of known type, even in case a process parameter has been recognized as adjustable by a user for a specific laundry treating program, the maximum or minimum extent of adjustability for such parameter remains unknown to the user. For this reason, said user may be undesirably caused to act repetitively on input means such as push-buttons, scrolling bars and the like, because the maximum or minimum setting has been inadvertently exceeded. Preliminary setting operations of a prior art laundry treating machine result to be cumbersome and may require rather complex manipulation of a control interface that includes a large number of selectors for each laundry treating program. This may disadvantageously be annoying to new users and time consuming even to experienced users.

**[0004]** The aim of the present invention is therefore to solve the noted drawbacks and thus providing a laundry treating machine having a user interface that may readily present the user with all the adjustable laundry treatment parameters available for a chosen treatment program.

**[0005]** An object of the present invention is to provide a laundry treating machine having a user interface that provides information to a user about the extent of adjustability for each adjustable parameter of a laundry treatment process.

**[0006]** A further object of the invention is to provide a laundry treating machine that is easier to be set compared to prior art machines.

**[0007]** Still another object of the invention is to provide a laundry treating machine wherein a user interface has a reduced number of input means and a compact design.

**[0008]** A further object of the invention is to provide a method of interfacing user input to said laundry treating machine that makes optional settings of such machine intuitive and easy to be carried out even for a first time

user.

**[0009]** Still another object of the invention is to provide a method of interfacing user input to a laundry treating machine that allows a reduction in number of selectors to be operated by a user.

**[0010]** Advantages, objects, and features of the invention will be set forth in part in the description and drawings which follow and in part will become apparent to those having ordinary skill in the art upon examination of the following or may be learned from practice of the invention. The objects and advantages of the invention may be reached and attained as particularly pointed out in the appended claims.

**[0011]** According to the invention a laundry treating machine is provided, comprising a user interface and operational displaying device adapted to visualize operational features of said machine; the displaying device comprises at least one appearance-changing graphical icon whose appearance is changeable by setting one or more operational parameters of a laundry treating process.

**[0012]** Preferably the laundry treating machine further comprises a laundry treating process selector and one or more input devices for setting one or more operational parameters of a laundry treating process; the machine comprises a control unit that, depending on signals received from the laundry treating process selector, presents one or more of the appearance-changing graphical icons on displaying device and enables the one or more input devices to emit signals recognizable by the control unit as icon appearance modifying signals for changing appearance of the one or more displayed graphical icons.

**[0013]** Advantageously, the laundry treating machine further comprises a laundry treating process selector, wherein said at least one appearance-changing graphical icon is preferably divided into portions that are selectively highlightable in a number that depends on the laundry treating process set through the selector.

**[0014]** Preferably the displaying device comprises at least one iconic indicator which is activable by changing appearance of the at least one appearance-changing graphical icon.

**[0015]** Advantageously the displaying device comprises at least one iconic indicator and a blank that are activable instead of the at least one appearance-changing graphical icon.

**[0016]** The invention advantageously regards also a method of interfacing user input to a laundry treating machine; the method comprises the following steps:

a) in response to a selection of a laundry treating process, displaying on an operational displaying device:

a1) at least one appearance-changing graphical icon, whether one or more treatment process parameters are available for user adjustment;

a2) at least one iconic indicator, whether one or more treatment process parameters corresponding to one or more treatments to be performed on laundry are unavailable for user adjustment;

a3) at least one blank, whether one or more treatment process parameters are unavailable for the selected laundry treating process;

b) whether step a1) is performed, than providing a control unit for receiving icon appearance modifying signals from an input device, for changing appearance of one or more displayed appearance-changing graphical icons.

**[0017]** Preferably step b) further comprises highlighting one or more portions composing the at least one appearance-changing graphical icon, the number of portions highlighted by an action performed by a user on the input device depending on the selected laundry treating process.

**[0018]** Advantageously step a1) and/or step b) further comprise displaying at least one iconic indicator on operational displaying device.

**[0019]** Preferably the at least one iconic indicator displayed in step a1) and/or in step b) is accompanied by a numeric indicator.

**[0020]** Opportunely, the at least one iconic indicator displayed in step a1) and/or b) is additional to the iconic indicator displayed in step a2).

**[0021]** Advantageously step a2) and a3) further comprise disabling one or more input devices from emitting signals recognizable by the control unit as signals suitable to modify the status of iconic indicators and/or blank.

**[0022]** The accompanying drawings, which are included to provide a further understanding of the invention and are incorporated in and constitute a part of this specification, illustrate a possible embodiment of the invention and together with the description serve to explain the principles of the invention. Like reference numbers represents like features throughout the accompanying drawings, wherein:

Figure 1 schematically shows a laundry treating machine according to the invention;

Figure 2 shows a user interface and an operational displaying device with no laundry treating parameter available for user adjustment;

Figure 3 shows a user interface and an operational displaying device presenting a plurality of laundry treating parameters available for user adjustment depicted as appearance-changing graphical icons;

Figure 4 shows a user interface and an operational displaying device presenting both laundry treating parameters available for user adjustment each depicted through an appearance-changing graphical icon, both a non-adjustable laundry treating parameter depicted through an iconic indicator;

Figure 5 shows the user interface and an operational displaying device of Figure 4 wherein graphical icons have changed appearance and iconic indicators have been correspondingly highlighted;

Figures 6A-6C show a detail of an operational displaying device wherein combined visual indications provided by iconic indicators and an appearance-changing graphical icon are displayed;

**[0023]** With reference to Figure 1, a laundry treating machine according to the invention comprises a cabinet 1 enclosing a laundry treating chamber 2 that can be accessed by opening a door 3, and further operational devices (not shown) such as, for example, an electric motor, a condenser, a water pump and the like, suitable for carrying out a treatment on laundry articles received in the treating chamber 2. A user interface 4 is provided preferably, but not necessarily, on a front surface 5 of cabinet 1 to let a user set laundry treating machine to perform a treatment process on laundry. A treatment program selector 6 is preferably provided on the user interface 4 for selecting a desired laundry treatment program to be carried out on laundry.

**[0024]** Said user interface 4 advantageously comprises operational displaying device 7 preferably in the form of a LED display, a liquid crystal display (LCD), a plasma display or any other image generating device. Such displaying device 7 is adapted to visualize operational features of the laundry treating machine, such as, for example, a washing and/or drying temperature, program cycle duration time, number of revolutions per minute of the treating chamber 2, and so on. All these operational features are advantageously represented by the display through icons, text characters, indicators and the like.

Advantageously, laundry treating parameters that are available to a user adjustment are presented on the displaying device 7 through appearance-changing icons, i.e. icons whose modifiable appearance may give an indication of the current state of a treatment parameter. A non limitative example of such appearance-changing icons is a portioned bar whose portions may be highlighted in response to signals emitted by a corresponding input device, like for example a push-button, so as to give a clear impression to a user whether a treatment parameter associated to this icon is increasing or decreasing.

**[0025]** In Figure 2 it is shown a user interface 4 and an operational displaying device 7 as it appears to a viewer after a laundry treating machine, like for example a washing machine, has been switched on, for example, by moving a treatment program selector 6 from OFF position to a laundry treatment position, such as, for example, a WOOL-HANDWASH program position. Upon selection of a treatment program, the displaying device 7 is powered (if not already powered) and presents a viewer with textual and symbolic information about operational features of the selected laundry treating program. As an exemplificative view, the displaying device 7 shown in Figure 2 depicts a treatment temperature of 40 °C, a spin

speed of 1200 rev/min and a treatment time of 1 hour, all these treatment parameters being preferably associated as default settings for a WOOL-HANDWASH program. In this case, no appearance-changing icons are shown on the displaying device 7 thereby indicating that no treatment parameters are available to a user for adjustment. Therefore, no input device is enabled to emit signals suitable for changing appearance of corresponding appearance changing icons, and blanks 13 are displayed on the displaying device 7. In addition, since no further indication is provided on the displaying device 7 other than those set as default, a user is further informed that no other operational activities (i.e. pre-wash operations, extra rinses, process time subtractions) will be performed on laundry treated with a WOOL-HANDWASH program.

**[0026]** The visual appearance of the displaying device 7 is advantageously controlled by a control unit, not illustrated, arranged in the laundry treating machine, that is programmed to associate a display view to each laundry treating process, to receive and/or to emit signals from/to input devices activated by a user. Preferably, control unit is programmed for enabling input devices to emit signals that are suitable for changing appearance of corresponding appearance-changing icons when the latter are displayed on the displaying device 7 to indicate that one or more treatment parameters are available to a user for adjustment. Said input devices may be embodied in different ways, for example, they may be in the form of push-buttons, rotatably knobs and/or parts of displaying device 7 activable by the control unit. Advantageously, when a user selects a laundry treating program to be performed by the machine, a signal from a laundry treating process selector 6 is received by the control unit and this signal is associated to a display default configuration that is shown on the displaying device 7. Each default configuration is advantageously specifically designed for each laundry treating program.

**[0027]** Figure 3 shows a condition in which three laundry treatment parameters may be adjusted by a user. In particular, as the program selector 6 is moved to a further exemplary treatment program, like "COTTONS", the displaying device 7 depicts a treatment temperature of 60 °C, a spin speed of 1600 rev/min and a treatment time of 2 hours. In addition, instead of blanks 13 as in the previous case, three appearance-changing graphical icons 8 are shown on the displaying device 7, each of them being in the form of an empty bar. Naturally, other icons may be used provided that they are suitable to represent a variable degree of intensity of an adjustable laundry treating parameter.

**[0028]** Input devices are advantageously enabled by the control unit to emit signals, recognizable by said control unit as icon appearance modifying signals, upon user manipulation, in order to allow modifications of laundry treating parameters settings that are available for user adjustment while representing the effect and/or the extent of such modifications on displaying device 7. Control

unit is programmed to change appearance of graphical icons 8 only whether a corresponding icon appearance modifying signal has been recognized as such. Further signals, not linked to any graphical icon 8, may be emitted by the same input device and disregarded by the control unit and/or used by said control unit for inputting further commands to the treating machine. With reference to Figure 3, a user may choose to modify the intensity of pre-washing process, the number of extra rinses and how much time shall be subtracted, i.e. saved, from the ordinary treatment time duration of 2 hours.

**[0029]** It must be noted that, according to the invention, not only appearance-changing graphical icons 8 are indicative of optional settings adjustable by a user, but they also intelligibly indicate the extent of the available parameter adjustment. An empty bar as one of those shown in Figure 3 indicates that a maximum extent of adjustability is allowed for the associated treatment parameter. In this way a user can readily understand how many times she/he has to manipulate input devices for adjusting the treatment parameter by changing appearance of graphical icons 8, i.e. by filling at least partly the corresponding bar before reaching the maximum allowed for the pre-selected treatment program.

**[0030]** Turning now to Figures 4 and 5, a further exemplary laundry treating program, like "CURTAINS", has been selected. Associated to this treating program there is a representation on the displaying device 7 representation showing a default treatment temperature of 40 °C, a spin speed of 1200 rev/min and a treatment time of 2 hours. In addition, as it can be seen in Figure 4, a couple of appearance-changing graphical icons 8A, 8B are shown on the displaying device 7 indicating that two laundry treatment parameters (in this case the number of extra rinses and the amount of time to be subtract from the 2 hour default time) are available for user adjustment. Graphical icon 8A corresponding to number of extra-rinses is shown partially filled by portions 10, while graphical icon 8B is shown as an empty bar. An iconic indicator 11A, preferably accompanied by a numeric indicator 12, ("2" in Figure 4) is advantageously depicted near graphical icon 8A for indicating that a number of two extra rinses are provided as default. According to the indication provided by graphical icon 8A, which is depicted as a partially highlighted bar, a user may either add further rinses, thereby highlighting other portions 10 to icon 8A, or, as a further preferred option, also reducing/deleting default setting turning portions 10 off from icon 8A. In the latter case, iconic indicator 11A will turn off after a number of "zero" extra rinses has been chosen, and graphical icon 8A will appear as an empty bar. The numeric indicator 12, accompanying the iconic indicator 11A, will change up or down according to the user selection, as it can be better seen in Figure 5. However, since graphical icons 8A, 8B are shown on display 7 even in case that a number of "zero" extra rinses has been chosen, corresponding input devices for adjusting laundry treating parameters available for user adjustment remain active.

**[0031]** In an advantageous embodiment, more than one iconic indicator 11A may be highlighted for each appearance-changing graphical icon 8A, 8B, for example when an increasing number of portions 10 have been turned on. A representation on the displaying device 7 of multiple iconic indicators 11A in connection with the same graphical icon 8A, 8B, can inform a user both about the intensity of a treatment to be carried out on laundry both about the cumulative effect of her/his choice on laundry to be treated.

**[0032]** Figures 6A and 6B show a detail of operational displaying device 7 wherein, with particular reference to Figure 6A, in response to a selection of a laundry treating program through selector 6, for example "COTTONS" program, an appearance-changing graphical icon 8A is activated to allow modification of laundry treating parameters that are available for user adjustment, as disclosed in Figure 3. Graphical icon 8A of Figure 6A relates to intensity of prewashing treatments optionally selectable by a user. Acting once on input devices associated to graphical icon 8A for choosing a light prewashing treatment, such as a stain removal treatment, to be carried out on laundry, a first iconic indicator 11C is highlighted in association with highlighting one of four steps of portions 10 available for user adjustment that are represented in the appearance-changing graphical icon 8A. Figure 6B shows the configuration of the displaying device 7 when input devices has been acted on twice for choosing a pre-wash treatment more intense than a stain removal treatment shown in Figure 6A. The increased treatment intensity is represented by graphical icon 8A wherein a greater number of portions 10 has been highlighted compared to those highlighted on graphical icon 8A in Figure 6A. In addition, a second different iconic indicator 11D is highlighted to show that another pre-washing treatment, i.e. a treatment with different characteristics compared to previous stain removal treatment, has been selected to be carried out as part of the main "COTTONS" program. Consequently, the first iconic indicator 11C appears in a turned off state.

**[0033]** In Figure 6C it is shown as the displaying device 7 looks like when an even more intensive prewashing treatment has been set, for example, by acting on input devices for the third time. In this case both the first and the second iconic indicators 11C, 11D are highlighted indicating that a longer treatment will be carried out on laundry compared to each prewashing treatment illustrated respectively in Figures 6A and 6B. Further portions 10 of graphical icon 8A are highlighted thereby changing its appearance. For example, the number of highlighted portions 10 on graphical icon 8A shown in Figure 6C is equal to the sum of portions 10 highlighted, respectively, in Figures 6A and 6B. Therefore, while a user repetitively acts on input devices, the consequent changing appearance of graphical icon 8A and the activation of one or more iconic indicators 11C, 11D allow the user to promptly and intelligibly compare one treatment with another, thereby providing useful information for choosing the

most appropriate option available to treat laundry.

**[0034]** In Figure 4, an iconic indicator 9 is shown on the displaying device 7 without any accompanying appearance-changing graphical icon. Such iconic indicator 9 represents a default laundry treating parameter associated to a treating operation (for example a pre-wash operation in Figure 4) that has to be carried out on laundry but that is not available for user adjustment. Therefore input devices, even if they are actuated, cannot provide signals recognizable by the machine control unit as signals capable of changing appearance of iconic indicator 9.

**[0035]** Figure 5 shows the user interface and the operational displaying device of Figure 4 wherein graphical icons 8A, 8B have changed appearance after user adjustment and a further iconic indicator 11B has been correspondingly highlighted. Specifically, appearance-changing graphical icons 8A, 8B of Figure 4 have been changed in appearance after a user has acted on corresponding input device for adding, respectively, one extra rinses and one step of time saving out of a total of three steps. When at least an amount of time saving has been selected, an iconic indicator 11B appears on the displaying device 7. Similarly, graphical icon 8A of Figure 4 has been changed in appearance by highlighting further portions 10 and increasing the value represented by the numeric indicator 12 indicating the amount of extra rinses actually set.

**[0036]** It has to be noted that each appearance-changing graphical icon 8A, 8B, may comprise portions 10 that are selectively highlighted preferably in a number that depends on the laundry treatment program selected by a user. In this way, the same graphical icon 8A, 8B may indicate a different number of total steps selectable for the same laundry treatment parameter in case of different laundry treatment program selected by a user. As an example, graphical icon 8A may comprise a total of sixteen portions 10 that may be highlighted four at a time for each activation of corresponding input devices for "COTTONS" as chosen laundry treating program, or eight at a time in case of "CURTAINS" as chosen program. In this way, the extent of a laundry treatment parameter available for user adjustment can be clearly and intelligibly represented on the displaying device 7.

**[0037]** It will now be described a method of interfacing user input to a laundry treating machine according to the present invention.

**[0038]** When a user turns the laundry treating machine on, for example, by selecting a laundry treating process through selector 6, operational displaying device 7 on a user interface 4 is lighted on to show default settings for treatment parameters pertaining to the selected laundry treatment program. Icons 8A, 8B and/or indicators 9, 11A-11D are shown on the displaying device 7 in order to visually inform a user both about whether one or more laundry treatment parameters are available for adjustment, both about the extent of adjustability of these parameters. In particular, whether for the selected laundry

treatment process one or more treatment process parameters are available for user adjustment, at least one appearance-changing graphical icon 8A, 8B is displayed on the displaying device 7. Instead, whether for the same selected laundry treatment process one or more treatment process parameters corresponding to one or more treatments to be performed on laundry are unavailable for user adjustment, then at least an iconic indicator (9) is displayed on the displaying device 7. In case one or more treatment process parameters are unavailable for user adjustment and they do not correspond to any treatments to be carried out on laundry in connection with said selected laundry treatment process, then a blank 13 is displayed on the displaying device 7. According to the present method of interfacing user input to a laundry treating machine, signals provided by an input device manipulated by a user, such as push and/or touch buttons, scrolling bars and the like, are recognized by a control unit as icon appearance modifying signals provided to change appearance of one or more graphical icons 8, 8A, 8B that are displayed on the displaying device 7 after the selection of a laundry treating process. Whether displaying device 7 shows one or more blanks 13 or iconic indicators 9, 11A, 11B, 11C, 11D indicating that corresponding treatments to be performed on laundry are unavailable for user adjustment, then the control unit disables input device to emit signals recognizable as signals suitable to modify the status of blank 13 and/or iconic indicators 9, 11A-11D (while input device may preferably still remain active for emitting further signals dedicated to other functions of the laundry treating machine). In a preferred embodiment, this means that the input device may still emit a signal, but this signal is not recognized by the control unit as a signal that can modify the status of blank 13 and/or iconic indicators 9, 11A-11D. In a further embodiment this may instead mean that the input device is not able to emit a signal; for example, if the input device is an electric switch, it can be temporarily disabled or disconnected from the control unit. In other words, in both this embodiments, no signal may be provided by input device for changing a blank 13 and/or iconic indicators 9, 11A-11D from an active status to a deactivated status, i.e. for changing a blank 13 into an iconic indicator 9, 11A-11D and/or into an appearance changing graphical icon 8, 8A, 8B, and iconic indicators 9, 11A-11D into blanks 13 and/or into appearance changing graphical icons 8, 8A, 8B. In this way a user is prevented from modifying the default settings of a laundry treating process, but she/he can only modify appearance of displayed graphical icons 8, 8A, 8B, thereby adjusting corresponding treatment process parameters. Each iconic indicator 9, 11A-11D and blank 13, displayed as a default indication, remains actually unchanged.

**[0039]** Advantageously, this appearance change is carried out by highlighting a number of portions 10 that composes each graphical icon 8A, 8B. The amount of portions 10 highlighted for each activation of input devices depends on the particular laundry treating process. In

this way the extent of adjustability of a treatment process parameter may be different for each selectable laundry treatment process but it may be represented using the same appearance-changing graphical icon 8A, 8B, thereby saving space on the user interface, simplifying its design and making easier its manipulation and use.

**[0040]** Advantageously, when an appearance-changing graphical icon 8A, 8B is displayed on the displaying device 7 and/or is changed in appearance by a user acting on an input device, one or more further iconic indicators 9, 11A-11D may be displayed on the displaying device 7. The iconic indicator 9, 11A-11D displayed in association with an appearance changing graphical icon 8A, 8B may be added to one or more further iconic indicators that are displayed as a default representation after having selected a laundry treating program through selector 6 and that correspond to one or more treatments to be performed on laundry but unavailable for user adjustment. More preferably, a numeric indicator 12 accompanies a displayed iconic indicators 9, 11A-11D to count the number of times that a particular treatment has to be carried out on laundry. In this way a user may be intelligibly informed not only of what laundry treatments may optionally be adjusted but also about the extent, i.e. the intensity of such treatments. Conclusively it can be stated that a laundry treating machine according to the invention has an improved user interface that is easy to be used and intuitive to be manipulated. The inventive user interface advantageously provides intelligible and prompt information regarding options available to a user for personalizing a laundry treating process, and/or making said process more adapted to condition of laundry to be treated. In addition, the proposed machine provides a user also with information about the extent of adjustability of each laundry treating parameter available for modification. In this way optional settings may be performed faster and by avoiding a too much repetitive use of input devices.

**[0041]** Furthermore, thanks to the method of interfacing user input to a laundry treating machine according to this invention, a user interface may be simplified in design and number of input devices, thereby making its use easier.

**[0042]** The present invention may be applicable to a wide range of laundry treating machine such as, for example, washing machines, laundry dryers, washing-drying machines, laundry refreshing machine and the like.

## 50 Claims

1. A laundry treating machine (1) comprising a user interface (4) and operational displaying device (7) adapted to visualize operational features of said machine, **characterized in that** said displaying device (7) comprises at least one appearance-changing graphical icon (8, 8A, 8B) whose appearance is changeable by setting one or more operational pa-

rameters of a laundry treating process.

2. A laundry treating machine (1) according to claim 1, further comprising a laundry treating process selector (6) and one or more input devices for setting one or more operational parameters of a laundry treating process, **characterized by** comprising a control unit that, depending on signals received from the laundry treating process selector (6), presents one or more of said appearance-changing graphical icons (8, 8A, 8B) on displaying device (7) and enables said one or more input devices to emit signals recognizable by said control unit as icon appearance modifying signals for changing appearance of the one or more displayed graphical icons (8, 8A, 8B).

3. A laundry treating machine (1) according to claim 1 or 2, further comprising a laundry treating process selector (6) wherein said at least one appearance-changing graphical icon (8, 8A, 8B) is divided into portions (10) that are selectively highlightable in a number that depends on the laundry treating process set through said selector (6).

4. A laundry treating machine (1) according to any preceding claim, wherein said displaying device (7) comprises at least one iconic indicator (9, 11A, 11B, 11C, 11D) which is activable by changing appearance of said at least one appearance-changing graphical icon (8, 8A, 8B).

5. A laundry treating machine (1) according to any preceding claim, wherein said displaying device (7) comprises at least one iconic indicator (9) and a blank (13) that are activable instead of said at least one appearance-changing graphical icon (8, 8A, 8B).

6. Method of interfacing user input to a laundry treating machine (1) according to any claim 1 to 5, **characterized by** comprising the following steps:

a) in response to a selection of a laundry treating process, displaying on operational displaying device (7):

a1) at least one appearance-changing graphical icon (8, 8A, 8B) whether one or more treatment process parameters are available for user adjustment;

a2) at least one iconic indicator (9, 11A, 11B, 11C, 11D) whether one or more treatment process parameters corresponding to one or more treatments to be performed on laundry are unavailable for user adjustment;

a3) at least one blank (13) whether one or more treatment process parameters are unavailable for the selected laundry treating

process;

b) whether step a1) is performed, than providing a control unit for receiving icon appearance modifying signals from an input device, for changing appearance of one or more displayed appearance-changing graphical icons (8, 8A, 8B).

7. Method of interfacing user input according to claim 6, wherein step b) further comprises highlighting one or more portions (10) composing said at least one appearance-changing graphical icon (8, 8A, 8B), the number of portions highlighted by an action performed by a user on said input device depending on the selected laundry treating process.

8. Method of interfacing user input according to claim 6 or 7, wherein step a1) and/or step b) further comprise displaying at least one iconic indicator (9, 11A, 11B, 11C, 11D) on operational displaying device (7).

9. Method of interfacing user input according to claim 8, wherein said at least one iconic indicator (9, 11A, 11B, 11C, 11D) displayed in step a1) and/or in step b) is accompanied by a numeric indicator (12).

10. Method of interfacing user input according to claim 8 or 9, wherein the at least one iconic indicator (9, 11A, 11B, 11C, 11D) displayed in step a1) and/or b) is additional to the iconic indicator displayed in step a2).

11. Method of interfacing user input according to any claim 6 to 10 wherein step a2) and a3), further comprise disabling one or more input devices from emitting signals recognizable by said control unit as signals suitable to modify the status of iconic indicators (9, 11A, 11B, 11C, 11D) and/or blank 13.

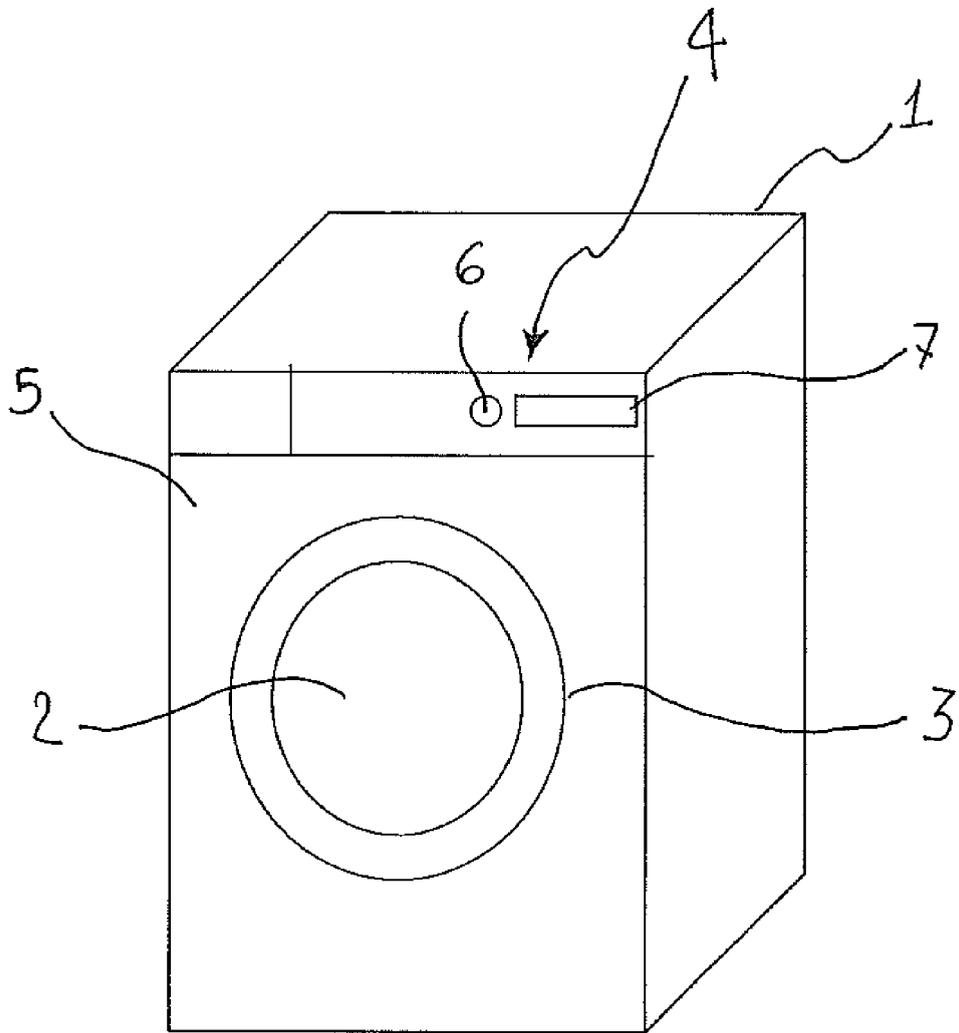
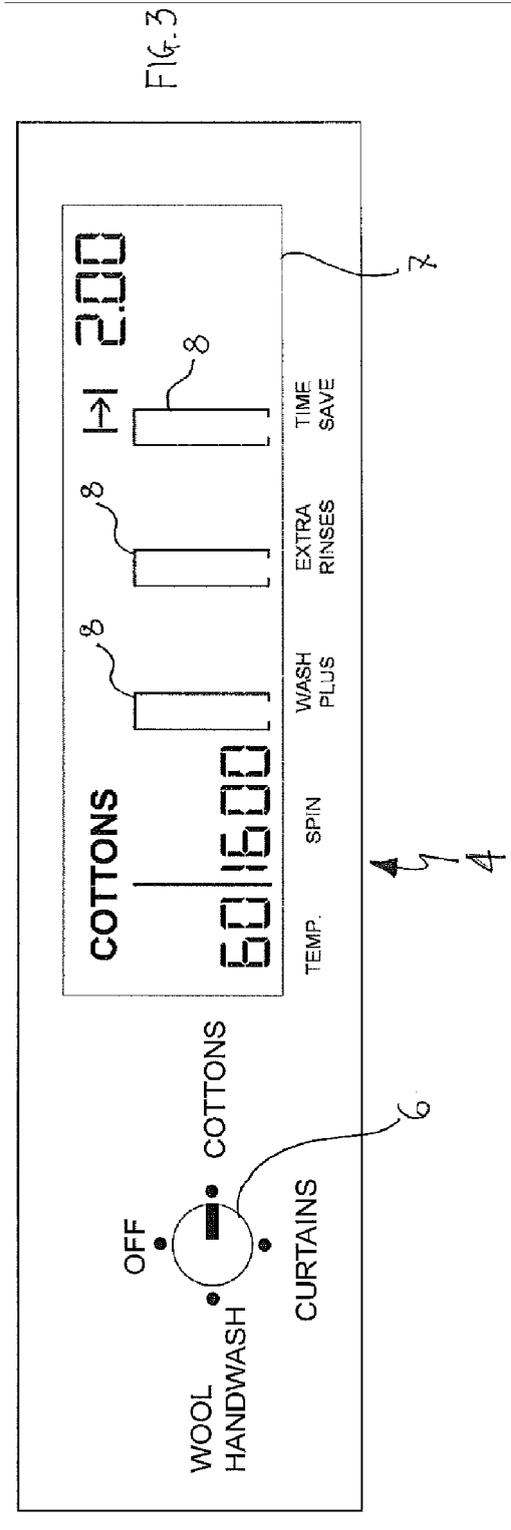
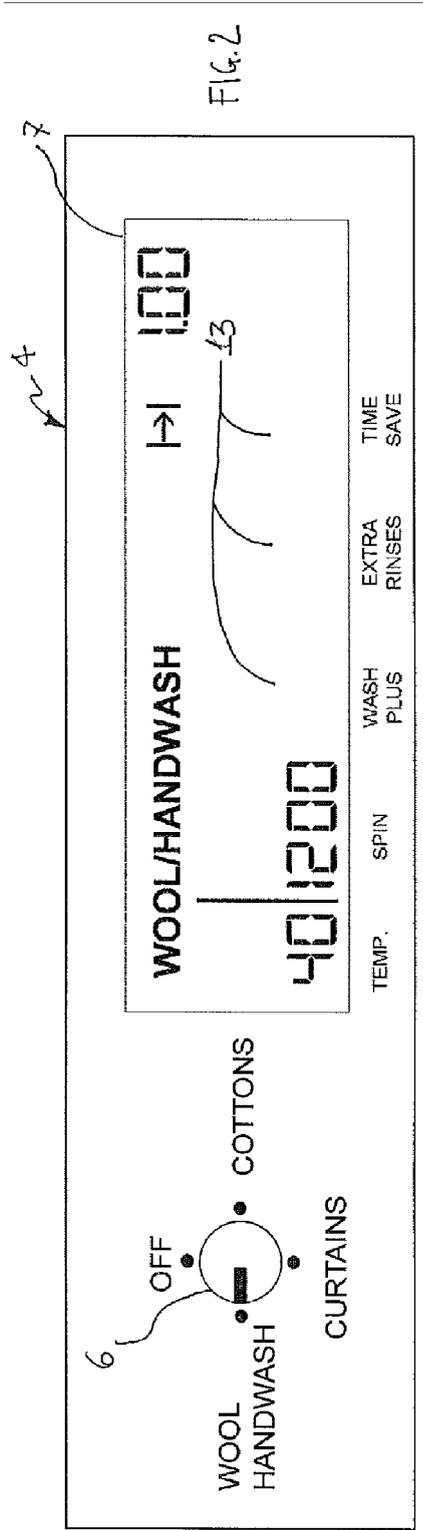


FIG. 1



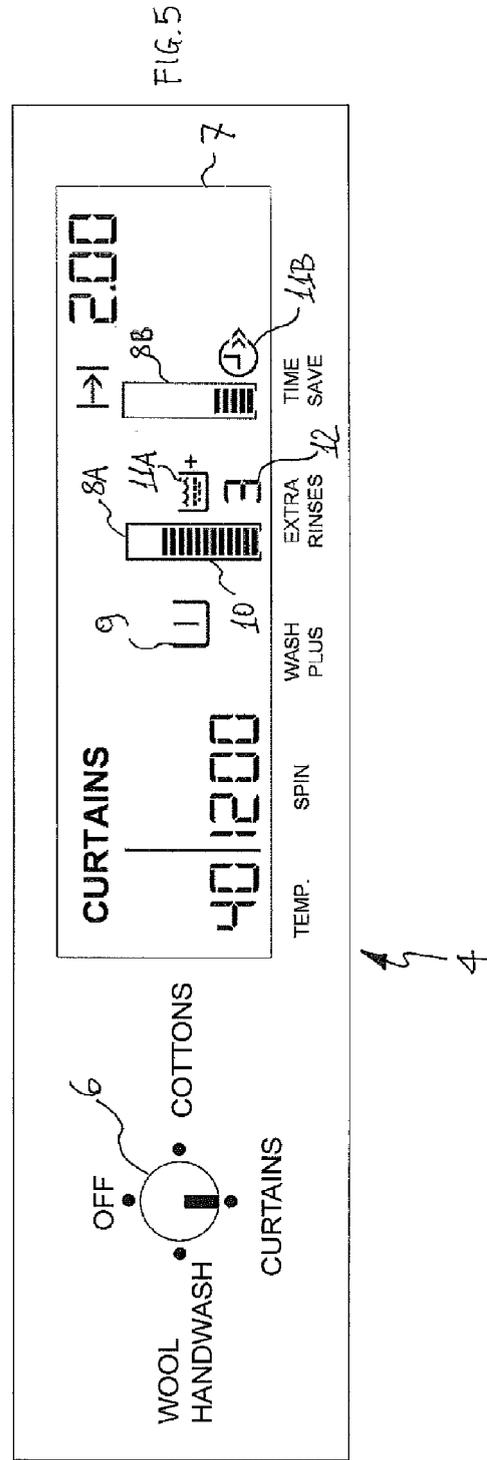
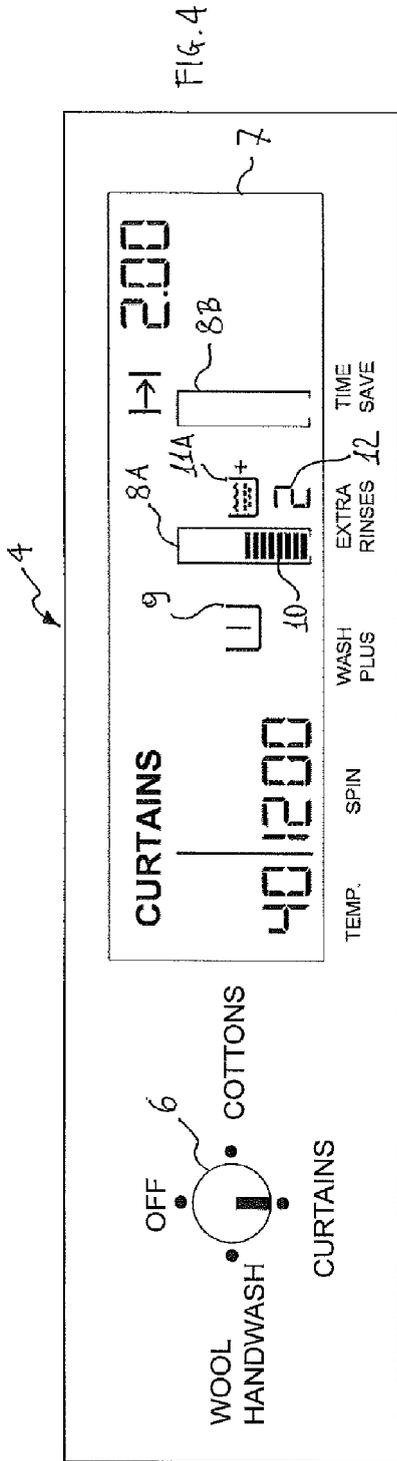


FIG. 6A

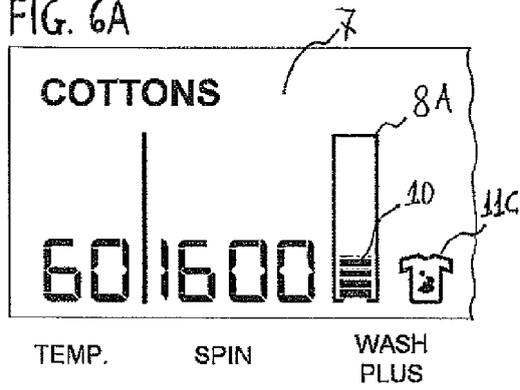


FIG. 6B

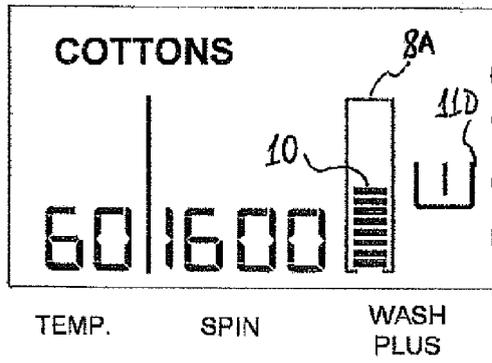
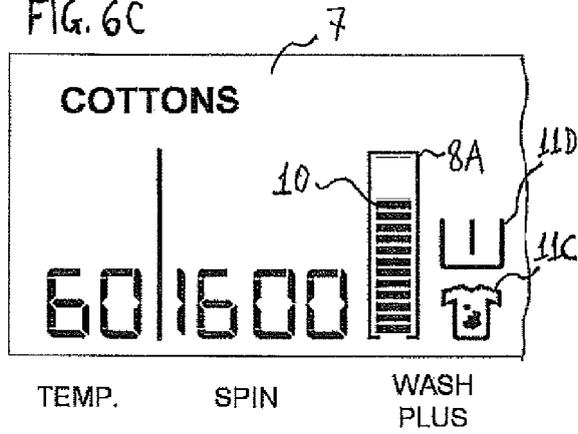


FIG. 6C





EUROPEAN SEARCH REPORT

Application Number  
EP 10 19 2168

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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1	Place of search Munich	Date of completion of the search 17 June 2011	Examiner Kising, Axel
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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