

Method for operating an active ironing board

The present invention relates to a method for operating an ironing board having air-displacing means comprising at least one air-displacing device such as a fan for generating airflow.

Such an ironing board is known, for example from US 6 655 055, and is also referred to as active ironing board. In general, an active ironing board is suitable to be applied in a steam ironing process that is aimed at treating items such as garments with steam for the purpose of removing wrinkles from these items. In many cases, the items are also heated during the steam ironing processes, for example by means of a hot soleplate of a steam iron that is applied during the steam ironing process.

An important function of the active ironing board is supporting items to be ironed. For that purpose, the active ironing board comprises a supporting panel, which is preferably perforated, such as to be capable of letting through air and steam. In many cases, the supporting panel is made of flat metal, and a cover of flannel or the like is placed over this panel to offer more comfortable ironing. Furthermore, the active ironing board comprises a ventilating unit for sucking in and blowing out air and steam through the cover.

When the active ironing board is applied in a steam ironing process, steam passes through the cover and the supporting panel, and eventually gets inside the ironing board. When the steam touches colder surfaces of elements arranged inside the ironing board, the steam will condense on these surfaces. In order to avoid problems such as corrosion of metal elements and fungus growth, it is important that measures are taken to keep the active ironing board dry. According to US 6 655 055, the ventilating unit of the active ironing board should preferably function continuously during a steam ironing session, and, if needed, for a certain period of time after the ironing session is over, in order to ensure that the ironing board is completely dry.

A disadvantage of the active ironing board known from US 6 655 055 is that the operation of the ventilation unit is exclusively controlled by a user of the ironing board. In case the user decides not to operate the ventilating unit continuously during a steam ironing session, the moisture problems will occur anyway. In other words, it is dependent on the actions taken by the user whether the active ironing board will remain completely dry, or

not. This is a disadvantageous situation, given the fact that the ventilating unit produces noise, and there is a considerable chance that the user will choose not to operate the ventilating unit continuously during a steam ironing process. Furthermore, a user may be aware of the fact that the operation of the ventilating unit involves power consumption, and may be inclined to switch off the ventilating unit now and then during a steam ironing session, in order to save energy and money.

In case the user of the active ironing board chooses to operate the ventilating unit continuously during the steam ironing session, the ironing board remains dry, but another problem occurs, namely the problem of the user getting annoyed and irritated by the noise produced by the ventilating unit.

It is an objective of the present invention to provide another method for operating an active ironing board, which is suitable to be used for keeping the ironing board dry under all circumstances, without requiring action of a user of the ironing board, and without annoying the user. This objective is achieved by means of a method for operating an ironing board having air displacing means comprising at least one air displacing device such as a fan for generating an airflow, i.e. an active ironing board, wherein the air displacing means are continuously kept in an activated state during the operation of the ironing board, wherein, in case there is a need for an airflow capable of acting on an item to be ironed when such item is placed on the ironing board, the ironing board is put to a normal operating condition in which the air displacing means are operated for the purpose of generating an airflow at a normal flow rate, and wherein, in case there is no such need, the ironing board is put to a ventilating condition in which the air displacing means are operated for the purpose of generating an airflow at a flow rate which is reduced with respect to the normal flow rate.

According to the present invention, the air displacing means of the ironing board, which comprise at least one air-displacing device such as a fan, for example, are continuously kept in an activated state during the operation of the ironing board. However, the air displacing means are not continuously operated such as to generate an airflow at a normal flow rate, in which the air displacing means are capable of sucking in air for drying an item to be ironed and for keeping it in place on the ironing board, or blowing air for inflating an item to be ironed and for avoiding incorrect creases, depending on the direction in which the at least one air displacing device of the air displacing means is operated. In stead, when it is not necessary to have the air displacing means generating an airflow at the normal flow rate, the ironing board is put to a ventilating condition, in which the air

displacing means are operated such as to generate an airflow at a flow rate which is reduced with respect to the normal flow rate.

Thus, when the method according to the present invention is applied, the air displacing means are continuously operated during a steam ironing process. As a result, steam and/or condensed steam are continuously removed from the ironing board. In situations in which a steam ironing process does not require the operation of the air displacing means, the air displacing means are not switched off, but are operated for the purpose of generating airflow at a reduced flow rate. In this way, it is possible to realize a continuous removal of steam and/or condensed steam from the ironing board, while a user of the ironing board is not unnecessarily confronted with the noise associated with the normal operating condition of the ironing board. The noise level associated with the ventilating condition of the ironing board may even be such that the user will hardly notice the operation of the air displacing means in this condition of the ironing board. Another advantage of the application of the method according to the present invention is that the ironing board is operated in an energy-saving fashion, as operating the air displacing means for the purpose of generating an airflow at a reduced flow rate requires less power than operating the air displacing means for the purpose of generating an airflow at a normal flow rate.

In a preferred way of carrying out the method according to the present invention, the reduced flow rate is close to the lowest possible flow rate for effective removal of steam and/or condensed steam from the ironing board, so that the level of the noise produced by the air displacing means when the ironing board is in the ventilating condition may be relatively low. In an even more preferred way of carrying out the method according to the present invention, the reduced flow rate is practically the lowest possible flow rate for effective removal of steam and/or condensed steam from the ironing board, so that the level of the noise produced by the air displacing means when the ironing board is in the ventilating condition is practically the lowest possible level. Given the fact that the at least one air displacing device of the air displacing means is arranged inside the ironing board, the noise associated with the ventilating condition of the ironing board may even be virtually non-perceptible.

In another preferred way of carrying out the method according to the present invention, in which the method is suitable to be used for the purpose of operating air displacing means comprising one air displacing device, the ironing board is driven at a normal operating speed for the purpose of generating an airflow at the normal flow rate when the ironing board is put to the normal operating condition, and the air displacing device is

driven at a ventilating speed for the purpose of generating an airflow at the reduced flow rate when the ironing board is put to the ventilating condition, the ventilating speed being lower than the normal operating speed. Preferably, the speed at which the air displacing device is driven is controlled on the basis of at least one characteristic of a voltage supplied to the air displacing device, for example on the basis of pulse-width modulation of such voltage. This way of controlling the speed at which the air-displacing device is driven is accurate, and the implementation of this way of controlling the speed at which the air displacing device is relatively simple.

In another preferred way of carrying out the method according to the present invention, in which the method is suitable to be used for the purpose of operating air displacing means comprising two air displacing devices, both air displacing devices are operated when the ironing board is put to the normal operating condition, and only one of the air displacing devices is operated when the ironing board is put to the ventilating condition. Preferably, this one of the air displacing devices is continuously driven at a substantially constant speed. According to this way of carrying out the method according to the present invention, an appropriate condition of the ironing board is obtained in a relatively simple manner, namely by using a main air displacing device, which is continuously driven at a substantially constant speed, and an auxiliary air displacing device, which is activated in the normal operating condition, and which is switched off in the ventilating condition.

In yet another preferred way of carrying out the method according to the present invention, in the ventilating condition of the ironing board, the air displacing device is driven in a rotational direction associated with a sucking action of the device, i.e. a rotational direction in which the air displacing device is capable of generating an airflow which is directed from a top side of the ironing board, which is adapted to supporting items to be ironed, to a bottom side of the ironing board. In this way, it is achieved that the steam is directed away from the user of the ironing board.

In yet another preferred way of carrying out the method according to the present invention, the ironing board is heated, as the higher the temperature, the lower the risk that the steam condenses. For the purpose of heating the ironing board, the ironing board may be equipped with at least one heating element.

In yet another preferred way of carrying out the method according to the present invention, the airflow which is generated by the air displacing means is heated. In general, a drying process is more effective when hot air is used instead of cold air. Therefore, heating the airflow helps to improve and/or to speed up drying of the ironing board.

The present invention also relates to an ironing board having air-displacing means comprising at least one air-displacing device such as a fan for generating airflow, and a controlling unit adapted to carrying out the operating method according to the present invention. According to a feasible possibility, the controlling means are adapted to putting the ironing board in the ventilating condition as a default. The ironing board is only put to a normal operating condition when the controlling means receive a signal representing a need for doing so. Such a signal may be provided by the user, but may also be provided by a sensor, for example, which is arranged such as to detect the presence of an item to be ironed on the ironing board. In order to enable the user to provide a signal to the controlling means, these means may comprise push buttons, a handle which is arranged such as to be put in one of a predefined number of positions, or any other arrangement for providing input to the controlling means. Preferably, such arrangement is incorporated in a steam iron which is used in combination with the ironing board. In this way, it is achieved that the arrangement is always within convenient reach of the user.

In a preferred embodiment, the ironing board comprises one air displacing device, wherein the controlling means are adapted to driving the air displacing device at a normal operating speed when there is a need for an airflow capable of acting on an item to be ironed when such item is placed on the ironing board, and to driving the air displacing device at a ventilating speed when there is no such need, the ventilating speed being lower than the normal operating speed. Furthermore, preferably, the controlling means are adapted to controlling the speed at which the air displacing device is driven on the basis of at least one characteristic of a voltage supplied to the air displacing device during operation of the ironing board, for example on the basis of pulse-width modulation of such voltage.

In another preferred embodiment, the ironing board comprises two air displacing devices, wherein the controlling means are adapted to operating both air displacing devices when there is a need for an airflow capable of acting on an item to be ironed when such item is placed on the ironing board, and to operating only one of the air displacing devices when there is no such need. Furthermore, preferably, the controlling means are adapted to continuously driving one of the air displacing devices at a substantially constant speed.

Advantageously, the at least one air displacing device of the air displacing means of the ironing board is drivable in two rotational directions. In that case, the user may

choose to use the air-displacing device to perform a sucking action, in case it is desired to have the steam removed or to keep an item to be ironed in place on the ironing board, or to perform a blowing action, in case it is desired to inflate an item to be ironed.

For the purpose of achieving a more effective drying process of the ironing board, the ironing board may be equipped with at least one element for heating the ironing board and/or at least one heater for heating the airflow which is generated by the air displacing means during operation of the ironing board.

In a preferred embodiment of the ironing board, at least a topside of the ironing board, which is adapted to supporting items to be ironed, comprises at least one element manufactured from a plastic material that is resistant to the relatively high temperatures prevailing during operation of the ironing board. An advantage of the use of a plastic material in the ironing board with respect to the use of a metal material is related to the fact that a plastic material has better resistance against the influence of steam and condensed steam than a metal material. Furthermore, condensation of steam is less likely to occur on a plastic surface than on a metal surface, under the same circumstances.

The present invention will now be explained in greater detail with reference to the figures, in which similar parts are indicated by the same reference signs, and in which:

Figure 1 diagrammatically shows an ironing board according to a first preferred embodiment of the present invention; and

Figure 2 diagrammatically shows an ironing board according to a second preferred embodiment of the present invention.

Figure 1 diagrammatically shows an ironing board 1 according to first preferred embodiment of the present invention. Two main functions of the ironing board 1 are supporting items to be ironed in a steam ironing process and removing steam from an area where the steam ironing process is performed on the items, i.e. an area located at a topside of the ironing board 1.

Underneath the ironing board 1, any suitable type of support may be arranged, so that the ironing board 1 may be positioned at a level at which it is convenient for a user of the ironing board 1 to apply the ironing board 1 in a process of putting items on the ironing

board 1, subjecting the items to a steam ironing process with the help of a steam iron or the like, and removing the items from the ironing board 1.

For the purpose of supporting items to be ironed, the ironing board 1 comprises a supporting panel 10. Preferably, the supporting panel 10 is manufactured from a plastic material that is resistant to the relatively high temperatures prevailing during the steam ironing process. However, the supporting panel 10 may also be manufactured from another suitable material, for example from a metal material. An advantage of an application of a plastic material is that this material is very durable, and is practically insensitive to the influence of steam and/or condensed steam. Moreover, steam is less likely to condense on a plastic surface than on a metal surface, for example, under the same circumstances. In any case, it is important that the supporting panel 10 is permeable to steam. According to a feasible possibility, the supporting panel 10 is provided with a plurality of holes 11 for letting through the steam.

Normally, the supporting panel 10 is covered by a cover manufactured from flannel or the like, in order to enhance the level of comfort during the steam ironing process. For sake of clarity, such a cover is not shown in figure 1.

At a position underneath the supporting panel 10, a fan 20 is arranged. The ironing board 1 comprises a more or less closed space 12 underneath the supporting panel 10, which is accessible through the holes 11 arranged in the supporting panel 10, and the fan 20 is arranged in this space 12, i.e. inside the ironing board 1.

In the shown example, the fan 20 is drivable in two directions. When the fan 20 is driven in one direction, it generates an airflow which is directed toward the supporting panel 10, wherein air is blown out, through the supporting panel 10. Contrariwise, when the fan 20 is driven in an opposite direction, it generates an airflow which is directed away from the supporting panel 10, wherein air is sucked in, through the supporting panel 10. In the following, a mode in which the fan 20 is driven such as to blow air out of the ironing board 1, through the supporting panel 10, is referred to as blowing mode, and a mode in which the fan 20 is driven in an opposite rotational direction is referred to as suction mode. In figure 1, a flow of air and steam through the ironing board 1 associated with an operation of the fan 20 in the suction mode is diagrammatically indicated by means of dashed arrows. In the blowing mode, steam and air are blown out of the ironing board 1, via the holes 11 in the supporting panel 10, whereas, in the suction mode, steam and air are sucked in, also via the holes 11, and are released from the ironing board 1 through outlet holes 13 arranged in another panel positioned underneath the fan 20.

When the user of the ironing board 1 has placed an item on the ironing board 1 and desires to inflate this item, the fan 20 may very well be applied for doing so, provided that the fan 20 is operated in the blowing mode. When there is no need for inflating the item, but it is desired to dry the item and/or to remove steam from the area where the item is located, the fan 20 may also very well be applied. However, in that case, it is appropriate to operate the fan 20 in the suction mode. For the purpose of enabling the user to control the operation of the fan 20 in a convenient manner, the ironing board 1 comprises a controlling unit 40. In the shown example, the controlling unit 40 comprises two push buttons 41, 42 for receiving input from the user, such that when the user depresses one of the push buttons 41, 42, which will hereinafter be referred to as blowing mode button 41, the controlling unit 40 puts the fan 20 to the blowing mode, and when the user depresses another of the push buttons 41, 42, which will hereinafter be referred to as suction mode button 42, the controlling unit 40 puts the fan 20 to the suction mode. Each of the push buttons 41, 42 may be arranged such that the user is enabled to put the push button 41, 42 from a default position, in which the push button 41, 42 is not depressed, to a depressed position by depressing the push button 41, 42, and that the user is enabled to put the push button 41, 42 to the default position again by depressing the push button 41, 42 once again. It will be understood that other suitable means than the described push buttons may be applied for the purpose of providing the controlling unit 40 with input from the user. Furthermore, it will be understood that such means do not necessarily need to be positioned directly on the controlling unit 40 itself, and that it is also possible that such means are positioned on a steam iron that is used in combination with the ironing board 1, for example.

As due to the presence of the fan 20, the ironing board 1 is capable of actively supplying an airflow, the ironing board 1 is also referred to as active ironing board 1. Besides a fan 20, the ironing board 1 as shown in figure 1 comprises a heating element 30 which is positioned right underneath the supporting panel 10, and which serves for heating the ironing board 1 and items to be ironed which may be present on the ironing board 1. In this way, the heating element 30 plays a role in increasing the effectiveness of the steam ironing processes which are performed with the help of the ironing board 1, and in keeping the supporting panel 10 and the cover of the ironing board 1 dry. Advantageously, the ironing board 1 is equipped with a temperature controlling device for controlling the temperature of the heating element 30, so that the temperature of the heating element 30 may be adapted such as to meet specific requirements related to specific applications of the ironing board 1. For example, when the ironing board 1 is applied in a process of ironing items containing natural fibres, it

is desirable to have a higher temperature than when the ironing board 1 is applied in a process of ironing items containing synthetic fibres.

5 In order to avoid problems such as corrosion of elements of the ironing board 1 under the influence of moisture and fungus growth inside the ironing board 1, it is important that the ironing board 1 is kept dry. In this respect, the fan 20 plays a key role, as the fan 20 is used for generating an airflow by means of which steam and/or condensed steam are removed from the ironing board 1, both in the blowing mode and the suction mode. An
10 advantageous feature of the ironing board 1 is that the controlling unit 40 is adapted to continuously driving the fan 20 when the ironing board 1 is operated. As has been explained in the foregoing, the fan 20 may be put in one of the blowing mode and the suction mode, depending on input provided by the user. Additionally, the controlling unit 40 is adapted to keeping the fan 20 in yet another mode as a default, i.e. in a situation in which the user does
15 not want to put the fan 20 to one of the blowing mode and the suction mode, and does not depress one of the push buttons 41, 42.

According to an important aspect of the present invention, a speed at which the fan 20 is driven in the default mode is lower than a speed at which the fan 20 is driven in the blowing mode or the suction mode. It is noted that a lower speed should be understood as
20 being a speed closer to zero, irrespective of the direction of the speed. Furthermore, it is noted that the level of the speed at which the fan 20 is driven in the blowing mode and the level of the speed at which the fan 20 is driven in the suction mode do not necessarily need to be equal. Nevertheless, both speeds may be considered as normal operational speeds of the fan 20, which are higher than the speed at which the fan 20 is driven in the default mode. In
25 the following, the speed at which the fan 20 is driven in the default mode is referred to as ventilating speed, the speed at which the fan 20 is driven in the blowing mode is referred to as positive normal operating speed, and the speed at which the fan 20 is driven in the suction mode is referred to as negative normal operating speed.

On the basis of optimization studies performed on an ironing board 1 having a
30 heating element 30 which is operable in a power range of 300 W to 500 W, it has been found that suitable flow rates of a generated airflow in the default mode are in a range of 0.5 m³/minute to 0.8 m³/minute. Furthermore, it has been found that suitable flow rates of a generated airflow in the suction mode are in a range of 1.25 m³/minute to 1.5 m³/minute.

Preferably, the rotational direction in which the fan 20 is driven in the default mode is the same as the rotational direction in which the fan 20 is driven in the suction mode. In that way, it is achieved that steam is directed away from the user of the ironing board 1.

In view of the above, three operational modes of the ironing board 1 may be discerned. In the first place, when both push buttons 41, 42 of the controlling unit 40 are in a default position, i.e. when none of the push buttons 41, 42 has been depressed by the user, the fan 20 is driven in the default mode, in which the fan 20 performs a sucking action through the supporting panel 10 of the ironing board 1, at the ventilating speed. In the second place, when the blowing mode button 41 is in a depressed position, the fan 20 is driven in the blowing mode, in which the fan 20 performs a blowing action through the supporting panel 10 of the ironing board 1, at the positive normal operating speed. In the third place, when the suction mode button 42 is in a depressed position, the fan 20 is driven in the suction mode, in which the fan 20 performs a sucking action through the supporting panel 10 of the ironing board 1, at the negative normal operating speed.

Preferably, the push buttons 41, 42 are interrelated such that it is not possible for the user to depress both buttons 41, 42 at the same time. However, this is not essential. For example, it is also possible that the controlling unit 40 is programmed such as to put the fan 20 to the default mode in case both push buttons 41, 42 are depressed.

The controlling unit 40 may be of any suitable type. For example, the controlling unit 40 may comprise a type of processor which is arranged such as to be operated on the basis of software, for example. In a feasible embodiment, the controlling unit 40 is adapted to controlling the speed at which the fan 20 is driven on the basis of pulse-width modulation of a voltage supplied to the fan 20.

During operation of the ironing board 1, it is ensured that the fan 20 is continuously driven. Consequently, it is ensured that circulation of steam inside the ironing board 1 and removal of steam and/or condensed steam from the ironing board 1 continuously take place. Even in case the user does not want the fan 20 to act on an item to be ironed, either in the blowing mode or in the suction mode, the fan 20 is still driven, namely in the default mode. As a result, condensation of steam inside the ironing board 1 does hardly occur or does not occur at all, so that the ironing board 1 is kept dry, and problems such as corrosion of elements of the ironing board 1 and fungus growth inside the ironing board 1 are avoided. Preferably, the ventilating speed is close to the lowest possible speed for effective

removal of steam and/or condensed steam from the ironing board 1 or is practically equal to this speed, so that the noise produced by the fan 20 in the default mode is as low as possible.

The drying effect of the method according to the present invention on the ironing board 1 may be enhanced by various other measures. For example, it is advantageous to have a relatively high number of holes 11 in the supporting panel 10, so that a contact area of steam and the supporting panel 10 may be relatively small, and a number of places where condensation might take place is relatively low. Furthermore, a relatively high number of holes 11 leads to a relatively high permeability of the supporting panel 10 to steam.

Figure 2 diagrammatically shows an ironing board 2 according to second preferred embodiment of the present invention. This ironing board 2 resembles the ironing board 1 as shown in figure 1 to a considerable extent. However, a main difference between the ironing boards 1, 2 relates to the fact that the ironing board 1 as shown in figure 1 comprises only one fan 20, and that the ironing board 2 as shown in figure 2 comprises two fans 21, 22. Furthermore, the ironing board 2 as shown in figure 2 does not comprise a heating element 30 which is positioned right underneath the supporting panel 10. The ironing board 2 comprises another element which is capable of providing heat during its operation, namely a heater 50 for heating an airflow which is generated when at least one of the fans 21, 22 is operated. In the ironing board 2 as shown, the heater 50 is positioned right above the fans 21, 22. By applying the heater 50 during the operation of the ironing board 2, the drying effect of the airflow is enhanced. In an advanced embodiment, the ironing board 2 comprises a temperature-controlling device for controlling the temperature of the heater 50.

When the ironing board 2 is operated, one of the fans 21, 22, which will hereinafter be referred to as main fan 21, is continuously driven at a substantially constant speed. Furthermore, another of the fans 21, 22, which will hereinafter be referred to as auxiliary fan 22, is only driven when the controlling unit 6 of the ironing board 2 has received information indicating a user's need of doing so, which is the case when the user has placed an item to be ironed on the ironing board 2 and wants to keep this item in place on the ironing board 2 and/or to dry this item, or wants to have a blowing action performed in order to inflate this item.

The speed at which the main fan 21 is driven is preferably chosen such as to be just high enough for obtaining an airflow which is capable of removing steam and/or condensed steam from the ironing board 2. When both fans 21, 22 are driven, the obtained

airflow is also capable of performing a sucking action or a blowing action on an item placed on the ironing board 2, depending on the direction in which the fans 21, 22 are rotated. In the shown example, the auxiliary fan 22 is larger than the main fan 21, and the auxiliary fan 22 is capable of displacing a larger volume of air than the main fan 21. In this way, it is achieved that both the main fan 21 and the combination of the main fan 21 and the auxiliary fan 22 are capable of effectively performing their specific functions in a proper manner, wherein an application of unnecessarily large fans is avoided.

In view of the above, three operational modes of the ironing board 2 may be discerned, wherein the operational mode is set by the controlling unit 40 on the basis of input provided by the user, through the push buttons 41, 42 of the controlling unit 40. In the first place, the ironing board 2 may be put to a default mode, in which only the main fan 21 is driven. In the second place, the ironing board 2 may be put to a mode in which both fans 21, 22 are driven such as to perform a blowing action. In the third place, the ironing board 2 may be put to a mode in which both fans 21, 22 are driven such as to perform a sucking action.

During operation of the ironing board 2, it is ensured that the main fan 21 is continuously driven. Consequently, it is ensured that circulation of steam inside the ironing board 2 and removal of steam from the ironing board 2 continuously take place. Even in case the user does not want a blowing action or a sucking action to be performed by the ironing board 2, the main fan 21 is still driven, at a relatively low speed. As a result, condensation of steam inside the ironing board 2 is prevented, so that the ironing board 2 is kept dry, while the user does hardly experience any hinder in the form of noise produced by the main fan 21.

It will be clear to a person skilled in the art that the scope of the present invention is not limited to the examples discussed in the foregoing, but that several amendments and modifications thereof are possible without deviating from the scope of the present invention as defined in the attached claims.

The ironing board 1 as shown in figure 1 comprises a heating element 30 positioned right underneath the supporting panel 10, whereas the ironing board 2 as shown in figure 2 comprises a heater 50 positioned right above the fans 21, 22. Within the scope of the present invention, it is possible to have an ironing board comprising both the heating element 30 for heating the ironing board and items to be ironed, and the heater 50 for heating the airflow which is generated by the main fan 21 during operation of the ironing board.

In the foregoing, an ironing board 1 is disclosed, which comprises a fan 20 for generating an airflow and a controlling unit 40 for controlling a mode in which the fan 20 is driven during operation of the ironing board 1. When there is a need for obtaining an airflow through an item to be ironed, the controlling unit 40 puts the fan 20 to a mode in which the fan 20 is driven at a normal operating speed. However, when there is no such need, the controlling unit 40 puts the fan 20 to a mode in which the fan 20 is driven at a speed which is lower than a normal operating speed. In this way, it is achieved that the fan 20 is continuously driven during operation of the ironing board 1, also in case an ironing process performed with the help of the ironing board 1 does not require an operation of the fan 20. As an advantageous result, condensation of steam inside the ironing board 1, which is released during a steam ironing process in which the ironing board 1 is applied, is prevented.

CLAIMS:

1. Method for operating an ironing board (1, 2) having air displacing means comprising at least one air displacing device such as a fan (20, 21, 22) for generating an airflow, wherein the air displacing means (20, 21, 22) are continuously kept in an activated state during the operation of the ironing board (1, 2), wherein, in case there is a need for an
5 airflow capable of acting on an item to be ironed when such item is placed on the ironing board (1, 2), the ironing board (1, 2) is put to a normal operating condition in which the air displacing means (20, 21, 22) are operated for the purpose of generating an airflow at a normal flow rate, and wherein, in case there is no such need, the ironing board (1, 2) is put to a ventilating condition in which the air displacing means (20, 21, 22) are operated for the
10 purpose of generating an airflow at a flow rate which is reduced with respect to the normal flow rate.
2. Method according to claim 1, wherein the reduced flow rate is close to the
15 lowest possible flow rate for effective removal of steam and/or condensed steam from the ironing board (1, 2).
3. Method according to claim 1, wherein the reduced flow rate is practically the
20 lowest possible flow rate for effective removal of steam and/or condensed steam from the ironing board (1, 2).
4. Method according to any of claims 1-3, wherein the air displacing means
comprise one air displacing device (20), wherein, when the ironing board (1) is put to the
normal operating condition, the air displacing device (20) is driven at a normal operating
speed for the purpose of generating an airflow at the normal flow rate, and wherein, when the
25 ironing board (1) is put to the ventilating condition, the air displacing device (20) is driven at a ventilating speed for the purpose of generating an airflow at the reduced flow rate, the ventilating speed being lower than the normal operating speed.

5. Method according to claim 4, wherein the speed at which the air-displacing device (20) is driven is controlled on the basis of at least one characteristic of a voltage supplied to the air-displacing device (20).

5 6. Method according to claim 4 or 5, wherein the speed at which the air displacing device (20) is driven is controlled on the basis of pulse-width modulation of a voltage supplied to the air displacing device (20).

7. Method according to any of claims 1-3, wherein the air displacing means
10 comprise two air displacing devices (21, 22), wherein, when the ironing board (2) is put to the normal operating condition, both air displacing devices (21, 22) are operated, and wherein, when the ironing board (2) is put to the ventilating condition, only one of the air displacing devices (21, 22) is operated.

15 8. Method according to claim 7, wherein one of the air displacing devices (21, 22) is continuously driven at a substantially constant speed.

9. Method according to any of claims 1-8, wherein, in the ventilating condition of the ironing board (1, 2), the air displacing device (20, 21) is driven in a rotational direction
20 associated with a sucking action of the device (20, 21), i.e. a rotational direction in which the air displacing device (20, 21) is capable of generating an airflow which is directed from a top side of the ironing board (1, 2), which is adapted to supporting items to be ironed, to a bottom side of the ironing board (1, 2).

25 10. Method according to any of claims 1-9, wherein the ironing board (1, 2) is heated.

11. Method according to any of claims 1-10, wherein the airflow which is generated by the air displacing means (20, 21, 22) is heated.

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12. Ironing board (1, 2) having air displacing means comprising at least one air displacing device such as a fan (20, 21, 22) for generating an airflow, and a controlling unit (40) adapted to carrying out the method according to any of claims 1-11.

13. Ironing board (1) according to claim 12, comprising one air displacing device (20), wherein the controlling means (40) are adapted to driving the air displacing device (20) at a normal operating speed when there is a need for an airflow capable of acting on an item to be ironed when such item is placed on the ironing board (1), and to driving the air
5 displacing device (20) at a ventilating speed when there is no such need, the ventilating speed being lower than the normal operating speed.

14. Ironing board (1) according to claim 13, wherein the controlling means (40) are adapted to controlling the speed at which the air displacing device (20) is driven on the
10 basis of at least one characteristic of a voltage supplied to the air displacing device (20) during operation of the ironing board.

15. Ironing board (2) according to claim 12, comprising two air displacing devices (21, 22), wherein the controlling means (40) are adapted to operating both air displacing
15 devices (21, 22) when there is a need for an airflow capable of acting on an item to be ironed when such item is placed on the ironing board (2), and to operating only one of the air displacing devices (21, 22) when there is no such need.

16. Ironing board (2) according to claim 15, wherein the controlling means (40)
20 are adapted to continuously driving one of the air displacing devices (21, 22) at a substantially constant speed.

17. Ironing board (1, 2) according to any of claims 12-16, wherein the air displacing device (20, 21, 22) is drivable in two rotational directions.

18. Ironing board (1) according to any of claims 12-17, comprising at least one heating element (30) for heating the ironing board (1).

19. Ironing board (2) according to any of claims 12-18, comprising at least one
30 heater (50) for heating the airflow which is generated by the air displacing means (21, 22) during operation of the ironing board (2).

20. Ironing board (1, 2) according to any of claims 12-19, wherein at least a top side of the ironing board (1, 2), which is adapted to supporting items to be ironed, comprises

at least one element (10) manufactured from a plastic material that is resistant to the relatively high temperatures prevailing during operation of the ironing board (1, 2).