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(54) Ironing board with aspirator

(57) The present invention relates to an ironing board comprising a board (2) equipped at the top with a perforated work surface (11). An aspirating device (4) is capable of aspirating the moisture which collects inside an aspiration chamber (5) arranged below the work surface (11). The inside of the aspiration chamber (5) is provided with moisture detectors (9) which are capable of supplying a signal used for actuation of the aspirating device (4). The invention allows the degree of moisture in the aspiration chamber (5) to be kept under control in any working condition (Fig. 2).

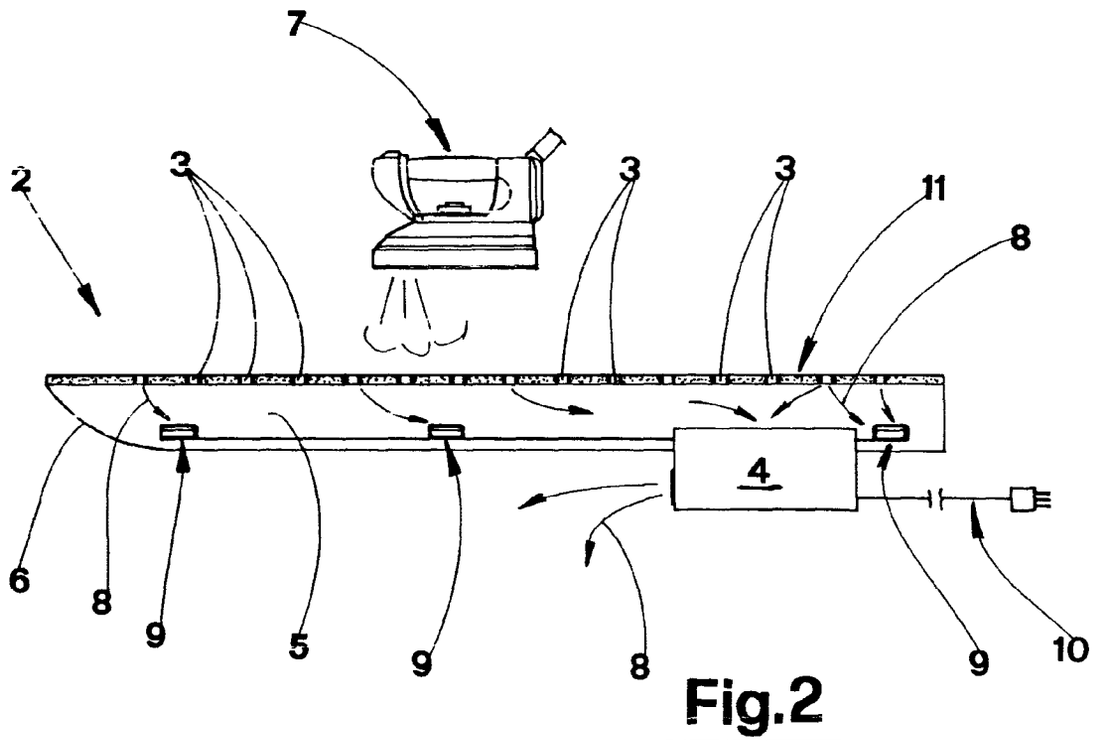

Fig.2

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Description

The present invention relates to an ironing board with aspirator.

In particular, it relates to ironing boards which are equipped with a work surface which is perforated or in any case steam-permeable and below which means for aspirating the steam emitted by the iron and for removing the moisture (steam and condensate) present below the work surface itself are provided.

Ironing boards of this type, in which the aspirator is directly operated by a pedal at the discretion of the operator, are already known. In other known ironing boards, the aspirator is connected to the steam iron and is controlled and operated depending on the amount of steam emitted by the iron itself. The steam delivery of the iron is regulated directly by the operator, in general by means of a push button. Basically, the greater the amount of steam emitted by the iron, the greater therefore will be the amount of fluid removed by the aspirator.

However, the degree of moisture present below the work surface not only depends on the amount of steam emitted by the iron, but also on various other parameters, such as, for example, the type of garments to be ironed, the humidity and temperature of the working environment, etc.

In the present-day ironing boards equipped with an aspirator, since regulation of the latter is effected solely on the basis of the steam delivery of the iron without taking into account the other significant parameters, it may indeed happen that in certain working situations aspiration is too strong and in other situations too weak. In other words, it is impossible to achieve an optimum control of the degree of moisture present below the work surface of the ironing board.

The object of the present invention is to overcome the abovementioned drawback of the prior art by providing an ironing board equipped with an aspirator which is capable of keeping under control in any case and in any operating condition the amount of moisture present below the work surface.

One advantage of the invention is to ensure that the degree of moisture present in a moisture-collecting chamber arranged below the work surface of the ironing board does not exceed a predetermined and resettable maximum limit.

Another advantage of the invention in question is that it is simple and economical in design and is also easily applicable to ironing boards which are commercially available at the present time.

These and still further objects and advantages are all achieved by the invention in question, as characterized by the claims indicated below.

Further characteristic features and advantages of the present invention will become more apparent from the following detailed description of an embodiment of the invention in question, which is illustrated by way of a non-limiting example in the accompanying figures in which:

- Figure 1 shows a schematic perspective view of an ironing board provided in accordance with the invention and
- Figure 2 shows a schematic longitudinal section along a vertical plane of the ironing board according to Figure 1.

Referring to the abovementioned figures, 1 shows in its entirety an ironing board comprising a board 2 equipped with a steam-permeable work surface 11 with a plurality of uniformly distributed through-holes 3.

An aspirating device 4 of the known type is mounted on the ironing board 1 in a suitable housing located close to the work surface 11. The aspirating device 4 communicates with an aspiration chamber 5 which is arranged below the work surface 11 and is delimited, at the top, by the work surface itself and, at the bottom and on the sides, by steam-impermeable walls 6 onto which part of the steam present in the aspiration chamber 5 can be condensed.

The aspirating device 4, which can be connected to the electricity mains by means of a power supply cable 10, can operate, following actuation, so as to lower the pressure in the aspiration chamber 5 and thus create a pressure gradient between the upper surface and the lower surface of the work surface 11. In this way the steam emitted, during use, by an iron 7 is able to pass more easily through the garment being ironed and then enter the aspiration chamber 5, passing through the holes 3. The aspirating device 4 moreover removes the steam and condensate which collects in the chamber 5. In the accompanying Figure 2, the path of the steam is schematically shown by arrows 8.

The ironing board 1 is equipped with a plurality of moisture detectors 9 of the known type which are arranged inside the aspiration chamber 5, being located close to the bottom side of work surface 11 and uniformly distributed throughout the chamber 5. The various moisture detectors 9 are connected to the aspirating device 4 such that the signals supplied by them, which correspond to the moisture value detected, may be used for actuation of the aspirating device itself. The connection between the moisture detectors 9 and the aspirating device 4 may be effected, for example, by means of a suitably programmed electronic circuit of the known type not shown in the figures. Basically, such a connection may be made so that when one or several detectors 9 indicate that the degree of moisture in the aspiration chamber 5 exceeds a certain predetermined and resettable value, the aspirating device 4 is operated so as to remove the excess moisture until a moisture level which is lower than the pre-selected maximum limit is restored in the aspiration chamber 5.

During use, the moisture in the aspirating chamber 5 is always maintained at a value below the pre-selected maximum limit, irrespective of the working conditions

and, in particular, whatever the type of garment to be ironed, its degree of moisture, the humidity and temperature in the environment in which operation takes place, the steam delivery of the iron, etc.

Claims

1. Ironing board (1) of the type, comprising:

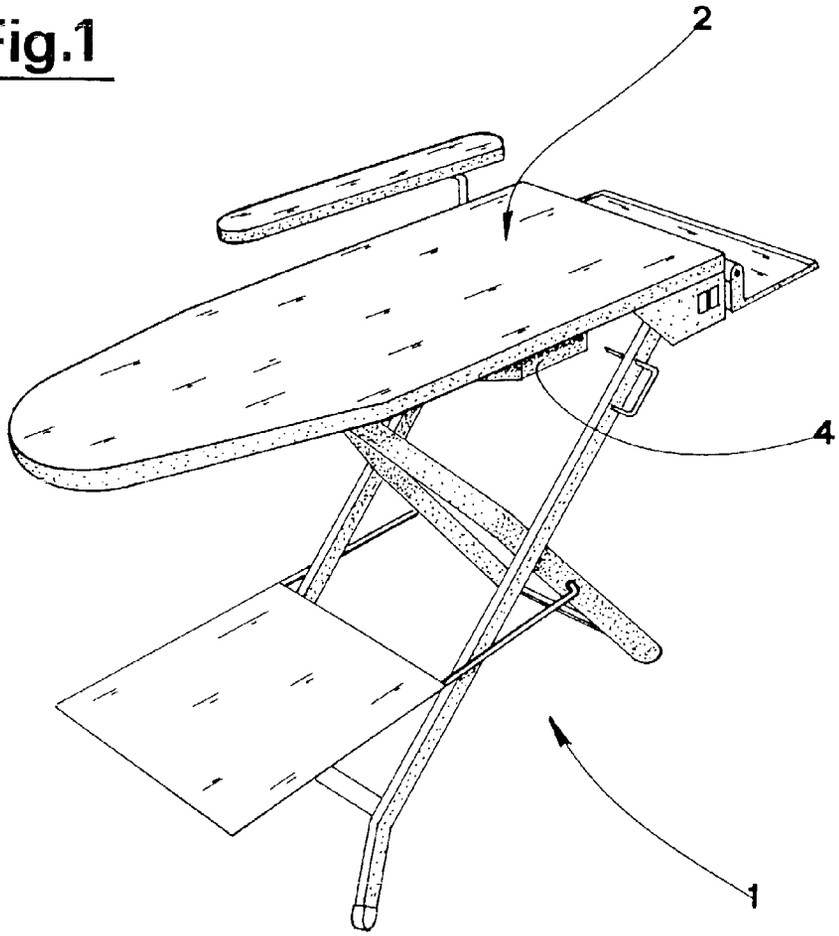
   - a board (2) equipped with a steam-permeable work surface (11);
   - an aspirating device (4) capable, following actuation, of operating below said work surface (11),

   characterized in that it comprises at least one moisture detector (9) which is located close to the bottom side of the work surface (11) and which is able to supply a signal which may be used for actuation of the said aspirating device (4).

2. Board according to Claim 1, characterized in that the said moisture detector (9) is located inside an aspiration chamber (5) which is delimited at the top by the said work surface (11).

3. Board according to Claim 2, characterized in that it comprises a plurality of said moisture detectors (9) distributed inside the aspiration chamber (5).

Fig.1



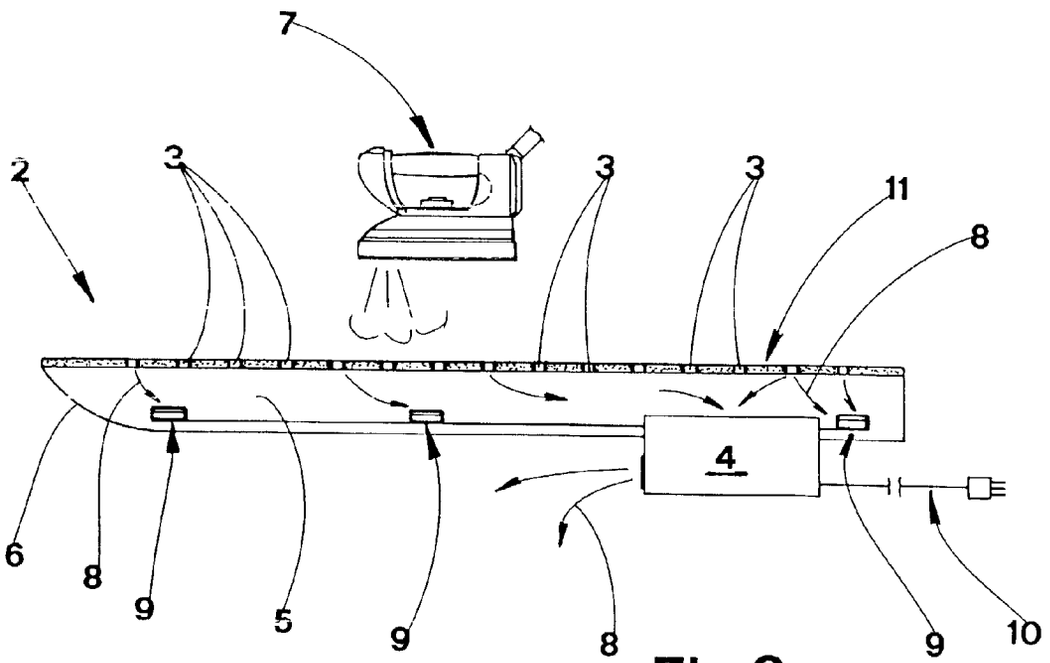


Fig.2

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EUROPEAN SEARCH REPORT

Application Number
EP 97 83 0343

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	PATENT ABSTRACTS OF JAPAN vol. 015, no. 197 (C-0833), 21 May 1991 & JP 03 051091 A (MATSUSHITA ELECTRIC IND CO LTD), 5 March 1991, * abstract *	1,2	D06F81/08
X	PATENT ABSTRACTS OF JAPAN vol. 018, no. 176 (C-1183), 25 March 1994 -& JP 05 337299 A (SANYO ELECTRIC CO LTD;OTHERS: 01), 21 December 1993, * abstract; figures *	1-3	

TECHNICAL FIELDS SEARCHED (Int.Cl.6)

D06F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	10 March 1998	Courrier, G

CATEGORY OF CITED DOCUMENTS

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