

Description

This invention relates to a gas cooking hob in accordance with the introduction to the main claim.

Cooking hobs of the said type are known to be provided with burners of different sizes located in predetermined positions. These burners comprise a body fixed to the cooking surface and connected to the corresponding gas feed pipe, and a head of particular dimensions which is removably associated with said body and can be fitted only thereto.

Hence with such a known cooking hob the user is compelled to use a specific burner for a specific task. For example, a small-diameter saucepan can be placed only on one particular burner arranged in a particular position (for example to the rear), whereas a large-diameter saucepan is preferably placed on a different burner (larger than the aforesaid) located in a predetermined fixed position to the front of the cooking hob.

An object of the present invention is to provide a cooking hob which releases the user from predetermined design constraints by enabling him to position a saucepan on one or other region of the cooking hob.

A particular object of the invention is to provide a cooking hob which enables the user to choose the best position for locating a saucepan on said hob on the basis for example of the user's height, the size of the saucepan and the type of food which it contains.

A further particular object of the invention is to provide a cooking hob which, during the preparation of a number of food items requiring the use of several containers or saucepans, enables these latter to be positioned in the most comfortable manner for the user.

These and further objects which will be more apparent to the expert of the art are attained by a cooking hob in accordance with the accompanying claims.

The present invention will be more apparent from the accompanying drawing, which is provided by way of non-limiting example and in which:

Figure 1 is an exploded view of a part of the cooking hob according to the invention;

Figure 2 is a section on the line 2-2 of Figure 1; and

Figure 3 is a schematic perspective view of a cooking hob according to the invention.

With reference to said figures, a cooking hob is indicated overall by 1 and comprises a cooking surface 2 containing a plurality (four in the example) of gas burners 3 (activated and regulated by a usual igniter 3A and knobs 3B) in correspondence with which there are provided grilles 4 of known type. Each burner 3 comprises a usual burner head 5 of cup shape provided with internal radial ducts 6 opening at 7 into an outer rim 8 of said head. This latter can be removably inserted into an end seat 9 in a burner body 10 which is internally hollow (at 11). In the cavity 11 there is provided a usual seat 12 for a nozzle 13 of known type. The burner body 10 has a substantially cylindrical side wall 14 in which there is pro-

vided a slot 15 to receive a screw 16 for fixing to said wall a known air regulator 17, the screw passing through an elongate slot 18 in this latter. By operating the screw 16 the regulator 17 can be moved relative to said wall 14 in order to suitably throttle the slot 15 and hence adjust the air quantity entering the cavity 11, to suitably regulate the flame generated by the head 5.

The lower end 20 of the burner body 10 can be inserted into a seat 21 of a member 22 for connecting the burner 3 to a gas feed pipe 23 of known type. Said member 22 is fixed to the cooking surface 2 in any known manner and comprises an upper part 25 (with reference to the figures) rising from said surface and a lower part 26 positioned within a seat 27 provided in said surface and projecting below it. This part cooperates, as a known elastic fit, with an elastically deformable engagement member 28 associated with the pipe 23 to enable this latter to be secured to the interconnection member 22.

The upper part 25 of the member 22 is of cup shape, within it there being provided said seat 21. This latter is connected to a duct 30 provided within the part 26 and opening (at 32) at its bottom end, the connection end 33 of the gas feed pipe 23 being inserted into the duct 30. Within the duct 30 in proximity to its opening 32 there is positioned an annular seal element 34, on the outside of the lower portion 26 there being provided an annular notch 35 to receive the engagement member 28.

The upper part 25 is provided with a flange 38 resting on the surface 2 and by means of a lateral lug 42 supports a usual spark generator 39 activated by the igniter 3A or a gas safety thermocouple 39B. A seal ring 40 is positioned in the seat 21.

Each burner 3 of the cooking hob 1 comprises a burner body 10 provided lowerly with a lower end 20 such as that shown in the figure and able to cooperate with the seat 21 of any interconnection member 22. Consequently, if a burner with a large-diameter head 5 is to be fitted in place of a burner with a medium or small-diameter head 5 or vice versa (ie if the position and size of the gas rings is to be changed), the burner (ie its body 10 and relative head 5) is extracted from the seat 21 in the member 22. At the same time another member 22, in whose position said burner is to be located, is released and this latter is inserted into said other member, the burner subsequently removed being inserted into the first member 22. This is shown schematically in Figure 3 by the arrows F and W, which indicate the replacement of a burner with a large-diameter head 5 by a further two burners as heretofore described.

One embodiment of the invention has been described. Other embodiments are however possible (such as an embodiment in which an elastic ring is associated with the end 22 of each burner to facilitate its retention within the seat 21 of the member 22) without however leaving the scope of the present document.

Claims

1. A gas cooking hob (1) comprising a cooking surface or region (2) in which a plurality of burners (3) each comprising a head (5) and a burner body (10) are positioned, characterised in that at least one burner (3) of said hob (1) is removably associated therewith and replaceable by a burner (3) of different gas ring size, the cooking surface (2) being provided with fixed connection means (22) connected to a gas feed pipe (23) and able to receive and support the body (10) of any burner (3) placed on it. 5
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2. A cooking hob as claimed in claim 1, characterised in that the connection means are an interconnection member (22) comprising a first portion (25) arranged to cooperate with a corresponding burner and rising from the cooking surface (2), and a second portion (26) positioned below said surface (2) and arranged to cooperate with the gas feed pipe (23), the first portion (25) comprising a seat (21) for one end (20) of the burner body (10) and communicating with a duct (30) opening at (32) in the second portion (26), into which a connection member (33) of said feed pipe (23) is inserted. 15
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3. A cooking hob as claimed in claim 1, characterised in that the burner body (10) of each burner (3) is provided with an end (20) able to cooperate with the first portion (25) of any interconnection member (22). 30
4. A cooking hob as claimed in claim 2, characterised in that each interconnection member (22) is positioned in a fixed manner within a corresponding seat (27) provided in the surface (2). 35
5. A cooking hob as claimed in claim 2, characterised in that each interconnection member (22) supports a spark generator (39) and/or a gas safety thermocouple (39B). 40
6. A cooking hob as claimed in claim 2, characterised in that each interconnection member comprises seal elements (40, 34) positioned, respectively, in the seat (21) for the end (20) of each burner body (14) and in the duct (30) to which the gas feed pipe (23) is connected. 45
7. A cooking hob as claimed in claim 2, characterised in that the second portion (26) of the interconnection member comprises means (35) for snap-coupling to an engagement member (28) associated with the gas feed pipe (23). 50

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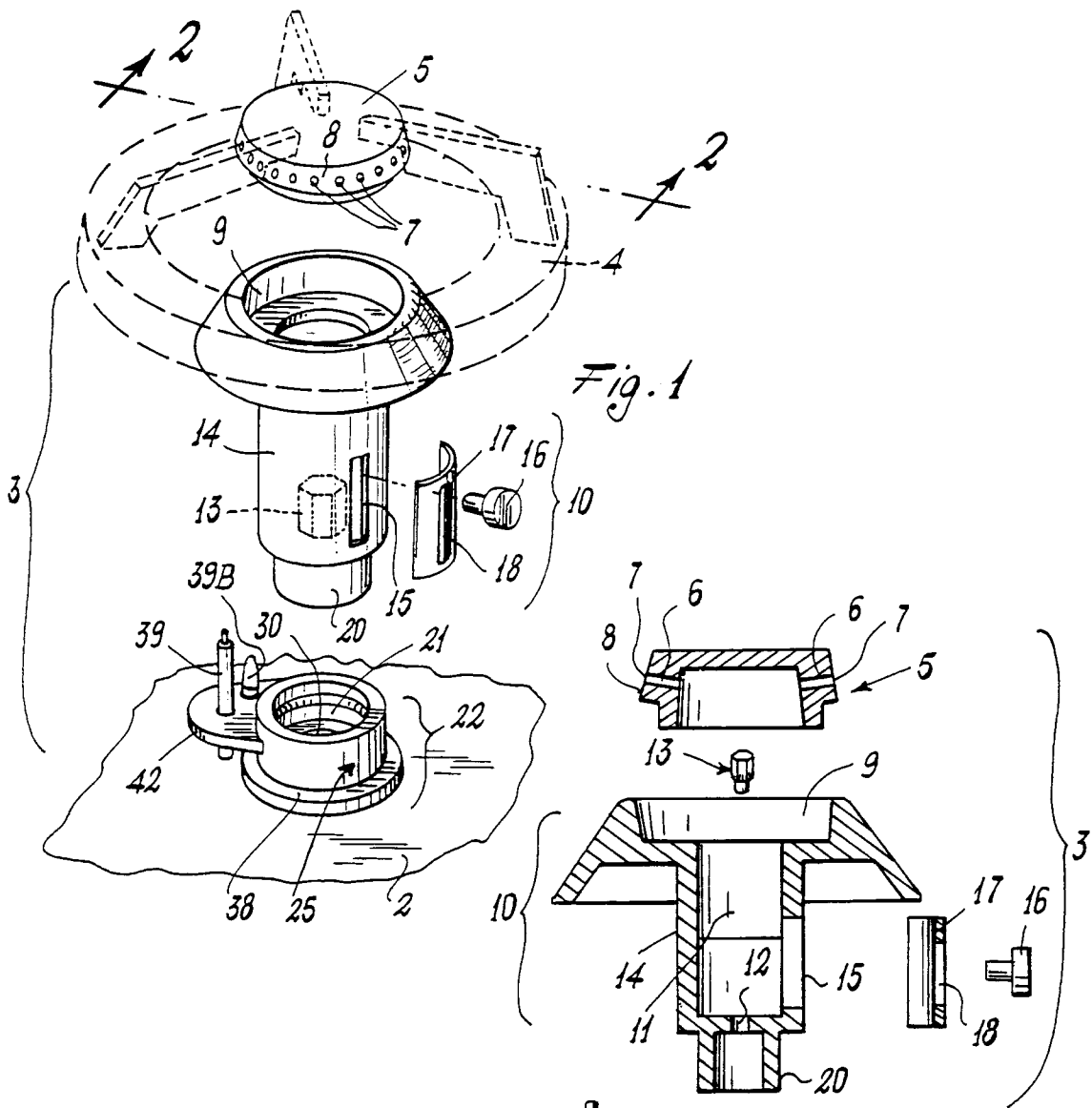


Fig. 1

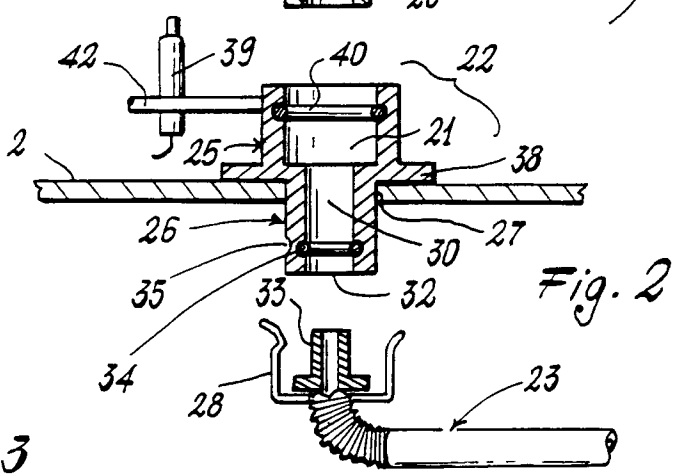


Fig. 2

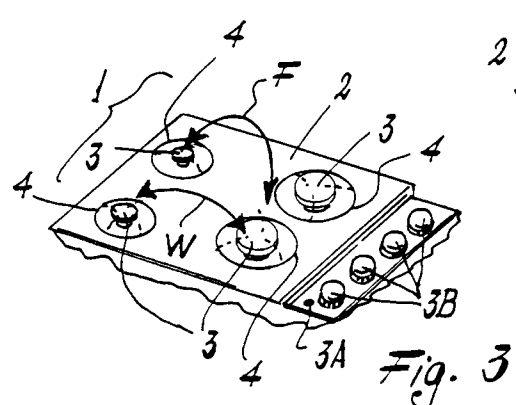


Fig. 3



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 94 11 4471

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. 6, no. 232 (M-172) (1110) 18 November 1982 & JP-A-57 131 933 (MATSUSHITA) 16 August 1982 * abstract *	1,3	F24C3/08
Y	US-A-4 705 019 (MAYTAG CO) * column 15, line 8 - line 26; claim 1; figures *	1-5	
Y	EP-A-0 019 231 (CEPEM) * the whole document *	1-5	
A	EP-A-0 216 693 (CEPEM) * abstract *	7	
A	GB-A-1 008 770 (RADIATION LIMITED) * the whole document *	1,2	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			F24C
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		20 February 1995	Vanheusden, J
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone		T : theory or principle underlying the invention	
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