(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) Publication number: **0 027 786**
B1

(12) # EUROPEAN PATENT SPECIFICATION

(45) Date of publication of patent specification: **08.06.83**

(51) Int. Cl.³: **F 24 C 15/36**

(21) Application number: **80850158.9**

(22) Date of filing: **16.10.80**

(54) **Hob guard for stove and the use of such a hob guard on stoves.**

(30) Priority: **19.10.79 SE 7908687**

(43) Date of publication of application:
29.04.81 Bulletin 81/17

(45) Publication of the grant of the patent:
08.06.83 Bulletin 83/23

(84) Designated Contracting States:
DE FR GB IT NL

(56) References cited:
DE - A - 2 100 417
DE - A - 2 608 638
DE - C - 1 139 956
DE - U - 1 954 519
US - A - 3 513 826
US - A - 4 157 705

(73) Proprietor: **AB AKTA BARNSÄKERHET**
34 Fleminggatan
S-112 32 Stockholm (SE)

(72) Inventor: **Bell, Robert**
3 Asvägen
S-171 37 Solna (SE)

(74) Representative: **Onn, Thorsten**
AB Stockholms Patentbyra Zacco & Bruhn P.O.
Box 3129
S-103 62 Stockholm (SE)

EP 0 027 786 B1

Note: Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European patent convention).

Courier Press, Leamington Spa, England.

Hob guard for stove and the use of such a hob guard on stoves

This invention relates to a hob guard which can be attached to kitchen stoves, irregardless of the breadth and depth of the stove, in built-in or free-standing cabinetry, and the use of such a hob guard in various applications.

Earlier known hob guards are of two types:

1. Sheet metal formed to the same dimensions as the stove, bent to follow the hob's outer contour along the front and extending part way along the sides. These hob guards are because of their U-form bulky and subject to damage in transportation, difficult to adapt to point-of-purchase packaging, and must also be manufactured in several sizes to fit the various breadths of various stoves.

From US—A—3 513 826 is also known a hub guard consisting of sheet metal fitted with downwardly and upwardly extending flanges to make end sections slidable on a center section to adapt the guard to the breadth of the stove. Side sections are detachably connected to the end sections. This hob guard can be delivered in a flat package, but to make up a guard on a fully built-in stove at least five sheet metal pieces and a number of connecting means are required, whereby the assembling of the guard becomes more difficult.

2. Open wire hob guards, bent to follow the outer contour, and extending part way along the sides. These hob guards yield insufficient protection, as children can reach through them and be burned, or burned by spills which splash through the open construction.

This invention yields a hob guard which avoids the drawbacks listed above and is comprised by the features as set out in claim 1. By using a flat sheet metal form which the consumer folds the guard can be stored transported and delivered in a flat package. By using two mirror image sheets that can be affixed to one another in any desired breadth, a hob guard can be put together for any built-in stove.

Further using the same mirror-image sheets, the hob guard can be extended on one or both sides, a feature which relates to the varying placement of stoves in various countries: for example, in Sweden stoves are almost all built-in, Great Britain often free-standing, and in Finland, stoves end the counter, e.g. have one side free.

An edge of the sheet metal is perforated with square holes, which are used to affix the two or more sheets in one another. The holes also afford ventilation at the bottom edge, which is appropriate for gas stoves, where only open-wire guards have been used hitherto. The otherwise unperforated sheet in this invention prevent spills from splashing through the guard and onto the floor, where the child often plays whilst parents cook.

This invention will be described in detail below, with the help of two examples, illustrated by drawings, where fig. 1 shows a front view of one of the sheets which make up the hob guard, fig. 2 shows the use of a hob guard on a built-in stove, and fig. 3 shows the use of the hob guard on a stove that is free-standing on one side.

Figure 1 shows one of the sheet metal components of the stove guard, constructed of a heat resistant material which can be folded without damage to the surface. An appropriate material with an aesthetically attractive appearance and requisite performance is the plasticized sheet metal marketed as DOBEL®-sheet. The sheet 10 is fitted with a transverse perforated row of holes 11. Near one of the sheet edges 12 two short rows of holes 13, 14 and two pairs of slits are punched, to allow for the folding up of support edges 15, 16. Between these rows 13, 14 there is a double slit 17 for attachments 18. Between row of holes 14 and the rear edge of the sheet 19 there is a short row of holes 20, designed to interact with the front row of holes 21 in an identical sheet metal component. Parallel with the long side of the sheet between row of holes 11 and the front short edge 22 of the sheet near the bottom edge 12 a longer perforated row of holes 21 is punched. The other long side 23 of the sheet is equipped with an open folded edge 26.

The second sheet metal component 24 which forms part of the hob guard has the same appearance as the first, but is a mirror image, e.g. the folded edge is the same but all perforations are a mirror image of the first component, slightly displaced downwards.

The hob guard is used as follows. The sheet 10 is bent along hole row 11, so that the opposing sides build a right angle with respect to one another. Further the support edges 15 and 16 are bent inwards along rows 13 and 14.

Fig. 2 shows a built-in stove, with cabinetry on both sides. A hob guard is affixed to the stove. The hob guard consists of sheet component 10 in conjunction with sheet component 24. Sheet 24 is the mirror image of sheet 10. The folded edge 26 and corresponding edge on sheet 24 affix the upper edge of the sheets in one another. A plug or U-formed clamp 25 affixes the holes in row 21 with the holes in sheet 24. The clamp goes through the holes and is folded at the back, so that both sheets are firmly locked at a given breadth. The row of holes 21 allows adjustment of the guard so that any desired breadth within a given range is achieved. The sheet 24 is fitted with holes that are slightly displaced downward, corresponding to the difference of the two edges at the upper sides of plates 10 and 24, where the edge of 24 nestles over the edge of 10.

As can be seen in fig. 3 the hob guard is attached to the hob by means of an attachment device 18, which can consist of a corner

iron fastened to the guard or an excenter wire lock or a woven band equipped with a hook which can attach to the hob's clipped edge.

As can be seen in fig. 3, a stove which has one side free-standing can be equipped with an extended hob guard through the use of a third sheet component 10a, identical to 10. The short end 22 is placed alongside the end 19 on the component 10 that runs along the front side, so that 10a and 10 constitute a hob guard for the free-standing side. Sheet 10a is attached by affixing row of holes 21 to the short row of holes 20 on sheet 10, by the use of clamp 25. The various depths of different makes and models of stove can be covered by the adjustable length feature of the rows of holes.

In a similar fashion a wholly free-standing stove can be shielded on both sides by the further addition of a fourth sheet component, identical to component 24.

Claims

1. A hob guard consisting of a flat oblong sheet metal piece for use on a kitchen stove, characterized in that the flat oblong sheet metal piece (10, 24) is fitted with a transverse perforated row of holes (11) defining a line of folding, two short perforated hole rows (13, 14) near a long edge (12) and double slits at each row for the folding in of support edges (15, 16), a pair of slits (17) for the attachment of fastening devices (18) on the same side of the transverse row (11), and two rows of perforated holes (20, 21) that correspond in height with one another and parallel with the long axis of the sheet metal starting from the respective short ends of the piece, whereby the rows (20, 21) are intended, with a penetrating clamp (25), to be affixed to corresponding rows (respect. 21 and/or 20) in another sheet metal piece.

2. A hob guard according to claim 1, characterized in that the sheet metal components (10, 24) are fitted with an open folded edge (26).

3. A hob guard according to claim 1, characterized in that one row of holes (20) is shorter and placed in the vicinity of the two support edges (15, 16) and the other row of holes (21) is longer and is placed adjacent the short end of the piece opposite to the first row.

4. Use of a hob guard as claimed in claims 1—3 on a fully built-in kitchen stove, characterized in that a first flat oblong sheet metal piece (10) and a second oblong sheet metal piece (24), the mirror image of first (10), both being user folded along the transverse hole rows (11) so as to construct a hob guard along the front side of the stove.

5. Use of a hob guard as claimed in claims 1—3 on a stove free-standing on one side, characterized in that a first flat oblong sheet metal piece (10) and a second oblong piece (24), the mirror image of the first (10), both being user folded along transverse hole rows (11) so as to construct a hob guard along the front side of the stove, and an additional oblong sheet metal piece being attached at the short end (19) of either front (10 or 24, respectively) so as to construct a hob guard along the front side and the free-standing side.

6. Use of a hob guard as claimed in claims 1—3 on a fully free-standing stove, characterized in that a first flat oblong sheet metal piece (10) and a second oblong sheet metal piece (24), the mirror image of the first (10) both being user folded along the transverse hole rows (11) so as to construct a hob guard along the front side of the stove, and in addition at each short end an identical folded sheet metal piece being attached to the front pieces (10 resp. 24) so as to construct a hob guard on the remaining free sides of the stove.

7. Use of a hob guard according to any of claims 4—6, characterized in that support edges (15, 16) are folded inwards along their perforations (13, 14) in order to rest flat against the upper side of the hob and support the hob guard.

Revendications

1. Bandeau de protection pour table de cuisson constitué par un élément allongé plat en tôle métallique, caractérisé par le fait que cet élément (10, 24), comporte une rangée transversale de trous (11) définissant une ligne de pliage, deux courtes rangées de trous (13, 14) au voisinage d'un grand bord (12) et des paires de fentes à chacune de ces rangées pour le repliement de bords supports (15, 16) deux fentes (17) pour y attacher des dispositifs de fixation (18) du même côté de la rangée transversale (11), et deux rangées de trous (20, 21) qui se correspondent l'une à l'autre en hauteur et qui sont parallèles au grand axe de l'élément métallique en partant des petits côtés respectifs de l'élément, les rangées (20, 21) pouvant être fixées, à l'aide d'une bride pénétrante (25), aux rangées correspondantes (respectivement 21 et/ou 20) dans un autre élément métallique.

2. Bandeau de protection selon la revendication 1, caractérisé par le fait que les composants métalliques (10, 24) ont un bord retourné ouvert (26).

3. Bandeau de protection selon la revendication 1, caractérisé par le fait qu'une rangée de trous (20) est plus courte et est située au voisinage des deux bords supports (15, 16) et que l'autre rangée de trous (21) est plus longue et est adjacente au petit côté de l'élément opposé à la première rangée.

4. Utilisation d'un bandeau de protection de table de cuisson selon les revendications 1 à 3, sur une cuisinière totalement encastrée, caractérisée par le fait qu'un premier élément allongé plat (10) en tôle métallique et un deuxième élément allongé (24) en tôle métallique, symétrique du premeir (10) dans un miroir, sont tous

deux pliés par l'utilisateur selon les rangées de trous transversales (11) de façon à constituer un bandeau de protection sur l'avant de la cuisinière.

5. Utilisation d'un bandeau de protection de table de cuisson selon les revendications 1 à 3, sur une cuisinière dont un côté est dégagé, caractérisée par le fait qu'un premier élément allongé plat (10) en tôle (métallique et un deuxième élément allongé (24), symétrique de premier (10) dans un miroir, sont tous deux pliés par l'utilisateur selon les rangées de trous transversales (11) de façon à constituer un bandeau de protection sur l'avant de la cuisinière et qu'un autre élément allongé en tôle métallique est fixé sur le petit côté (19) de l'un ou l'autre élément frontal (10 ou 24) de façon à constituer un bandeau de protection sur le côté avant et sur le côté dégagé.

6. Utilisation d'un bandeau de protection de table de cuisson selon les revendications 1 à 3, sur une cuisinière dégagée de tous les côtés, caractérisée par le fait qu'un premier élément allongé plat (10) en tôle métallique et un deuxième élément allongé (24) en tôle métallique, symétrique du premier (10) dans un miroir, sont tous deux pliés par l'utilisateur selon les rangées de trous transversales (11) de façon à constituer un bandeau de protection sur l'avant de la cuisinière et qu'en outre un élément métallique plié identique est fixé, par chaque petit côté, aux éléments avant (respectivement 10 ou 24) de façon à constituer un bandeau de protection sur les côtés libres restants de la cuisinière.

7. Utilisation d'un bandeau de protection d'une table de cuisson selon l'une quelconque des revendications 4 à 6, caractérisée par le fait que des bords supports (15, 16) sont repliés vers l'intérieur le long de leurs perforations (13, 14) afin de reposer à plat contre le côté supérieur de la table de cuisson et supporter le bandeau de protection.

Patentansprüche

1. Herdplattenschutzvorrichtung, bestehend aus einem flachen, länglichen Blechstück für Anwendung an einem Küchenherd, dadurch gekennzeichnet, daß das flache, längliche Blechstück (10, 24) mit einer eine Biegelinie definierenden querlaufenden Lochreihe (11) versehen ist, ferner mit zwei kurzen Lochreihen (13, 14) nahe einer Längskante (12) und doppelten Schlitzen an jeder Reihe zum Einbiegen von Stützkanten (15, 16), einem Schlitzpaar (17) zur Anbringung von Befestigungsvorrichtungen (18) auf derselben Seite der Querreihe (11), und zwei Lochreihen (20, 21), die in der Höhe einander entsprechen und parallel mit der Längsachse des Bleches sind und an der Jeweiligen Kurzseite des Stückes beginnen, und die Reihen (20, 21) vorgesehen sind, mittels einer durchgreifenden Klammer (25) mit entsprechenden Reihen (21 bzw. 20) in einem anderen Blechstück verbunden zu werden.

2. Herdplattenschutzvorrichtung nach Anspruch 1, dadurch gekennzeichnet, daß die Blechstücke (10, 21) mit einer offenen umgebogenen Kante (26) versehen sind.

3. Herdplattenschutzvorrichtung nach Anspruch 1, dadurch gekennzeichnet, daß eine der Lochreihen (20) kürzer und in der Nähe der zwei Stützkanten (15, 16) angeordnet ist, und die zweite Lochreihe (21) länger und neben de Kurzseite des Stückes gegenüber der ersten Reihe angeordnet ist.

4. Anwendung einer Schutzvorrichtung gem. den Ansprüchen 1—3 an einem völlig eingebauten Küchenherd, dadurch gekennzeichnet, daß ein erstes flaches, längliches Blechstück (10) und ein zweites längliches Blechstück (24), spiegelbildlich zum ersten (10), beide längs der queraufenden Lochreihe (11) so gebogen sind, daß sie längs der Vorderseite des Herdes eine Herdplattenschutzvorrichtung bilden.

5. Anwendung einer Schutzvorrichtung gem. den Ansprüchen 1—3 an einem an einer Seite freistehenden Herd, dadurch gekennzeichnet, daß ein erstes flaches, längliches Blechstück (10) und ein zweites längliches Stück (24), spiegelbildlich zum ersten (10), beide längs querlaufenden Lochreihen (11) so gebogen sind, daß sie eine Schutzvorrichtung längs der Vorderseite des Herdes bilden, und ein weiteres längliches Blechstück an der Kurzseite (19) jeder Vorderseite (10 bzw. 24) so angebracht ist, daß eine Schutzvorrichtung längs der Vorderseite und der freistehenden Seite gebildet wird.

6. Anwendung einer Schutzvorrichtung gem. den Ansprüchen 1—3 an einem völlig freistehenden Herd, dadurch gekennzeichnet, daß ein erstes flaches, längliches Blechstück (10) und ein zweites längliches Blechstück (24), spiegelbildlich zum ersten (10), beide längs den querlaufenden Lochreihen (11) so gebogen sind, daß eine Schutzvorrichtung längs der Vorderseite des Herdes gebilder wird, und zusätzlich an jeder Kurzseite ein identisch gebogenes Blechstück an der Vorderseitenstücken (10 bzw. 24) so angebracht ist, daß eine Schutzvorrichtung an den übrigen Seiten des Herdes gebildet wird.

7. Anwendung einer Schutzvorrichtung em. einem der Ansprüche 1—6, dadurch gekennzeichnet, daß Stützkanten (15, 16) längs ihren Perforierungen (13, 14) einwärts gebogen sind, um flach gegen die Oberseite der Herdplatte anzuliegen und die Schutzvorrichtung zu stützen.

FIG.1

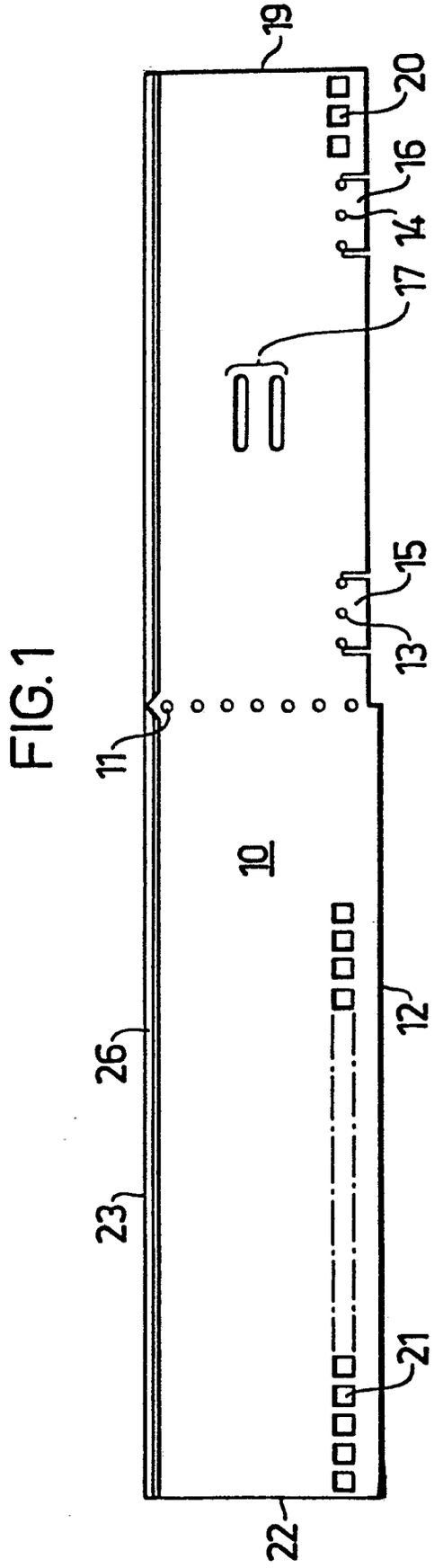


FIG.2

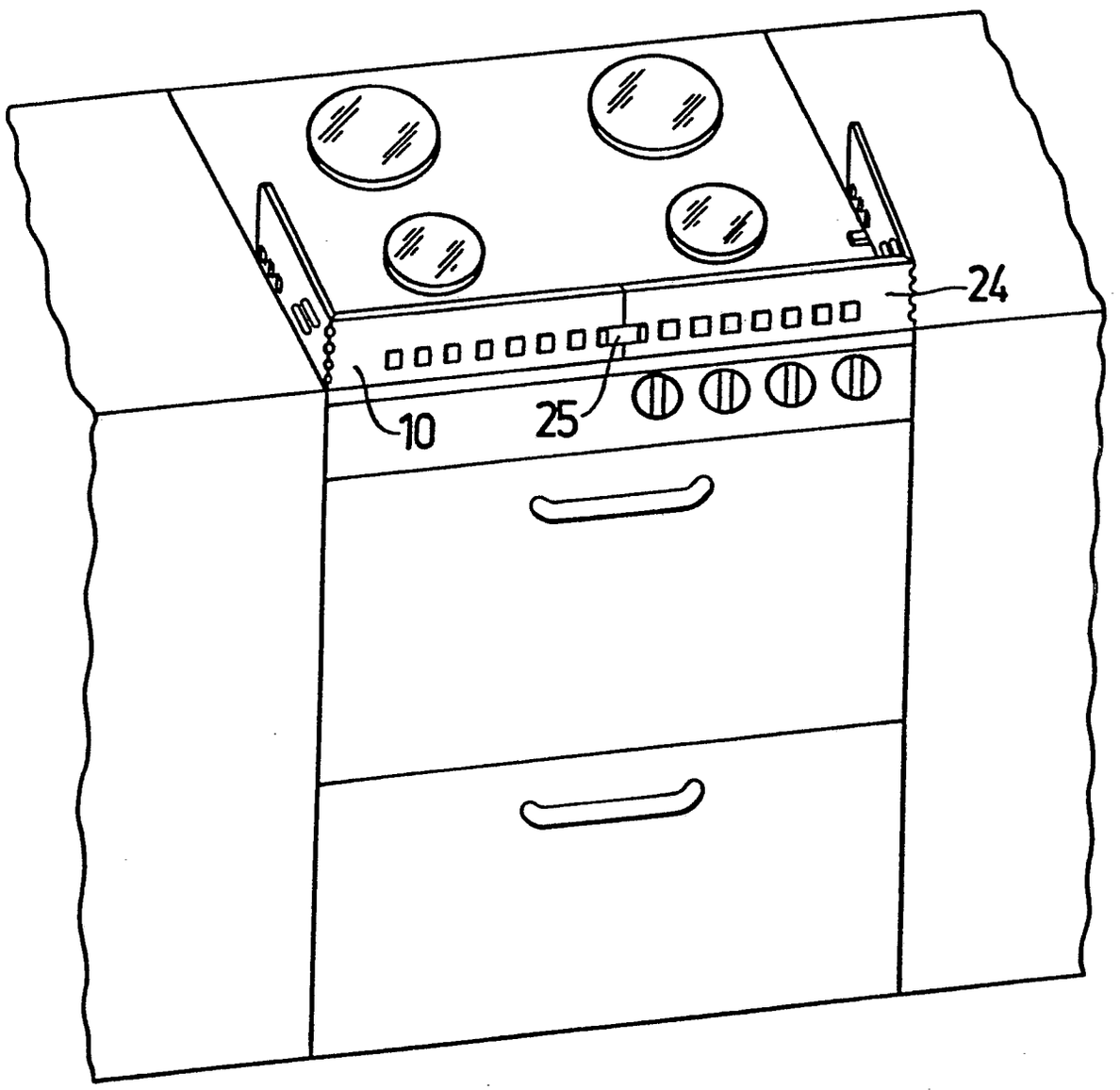


FIG. 3

