

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets

(11) Publication number:

0 136 441**A2**

(12)

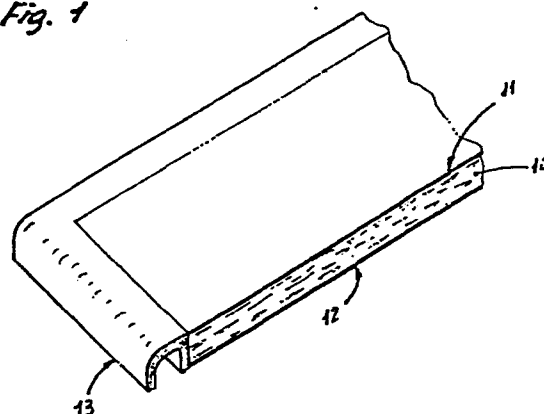
EUROPEAN PATENT APPLICATION(21) Application number: **84108684.6**(51) Int. Cl.⁴: **A 47 B 96/18**
A 47 B 77/08(22) Date of filing: **23.07.84**(30) Priority: **01.09.83 IT 3404083 U**(43) Date of publication of application:
10.04.85 Bulletin 85/15(84) Designated Contracting States:
AT BE CH DE FR GB IT LI LU NL SE(71) Applicant: **ZANUSSI COMPONENTI PLASTICA S.p.A.**
Via Giardini Cattaneo 3
I-33170 Pordenone(IT)(72) Inventor: **Geremia, Maurizio**
Via Cimarosa 4
I-31046 Oderzo (Treviso)(IT)(72) Inventor: **Munini, Dino**
Via Mason 53
I-33080 San Quirino (Pordenone)(IT)(74) Representative: **Patentanwälte Grünecker, Dr.**
Kinkeldey, Dr. Stockmair, Dr. Schumann, Jakob, Dr.
Bezold, Meister, Hilgers, Dr. Meyer-Plath
Maximilianstrasse 58
D-8000 München 22(DE)(54) **Working table top for electric household appliances.**

(57) A working table top for mounting on an electric household appliance is provided, comprising a fiberboard panel lined with plastic laminate sheets, preferably of a melamine resin or the like, and a peripheral cornice formed of a thermoplastic material, preferably ABS.

In the case of a working table top made of fiberboard material, difficulties have been encountered with regard to protecting the fiberboard material against the intrusion of moisture. Known solutions to this problem have been found to be ineffective and/or expensive and/or to involve the formation of a raised rim portion along the periphery of the working table top.

In accordance with the present invention, the borders of the cornice are coplanar with the surfaces of the laminate sheets secured respectively to the upper and lower surfaces of the fiberboard panel.

Means may be provided for adjustably mounting the working table top on the upper portion of an electric household appliance.

Fig. 1

1 Description

The present invention relates to a working table top adapted to be mounted on an electric household appliance in general,
5 and in particular on such appliances of the combination kitchen furniture type.

As generally known, a working table top of this type is required to have specific characteristics, as it does not
10 only serve as the top finish element of the electric appliance and as such has to esthetically conform to the remaining kitchen furniture, but also as a functional element for carrying out various operations thereon. This requires thus a particular resistance to mechanical attack
15 such as scratching, cutting, impacts and the like, as well as to physio-chemical attack such as spillage of hot and cold liquids, deposits of fatty substances, cleaning with detergents and so on.

20 To be kept in mind on the other hand is the continuously rising cost of base materials and labour, imposing the need to search for simple solutions and the employ of less expensive base materials.

25 These considerations have led to the increasing employ of fibreboard panels for the construction of kitchen furniture including working table tops for electric appliances to be combined with and included in such furniture.

30 Fiberboard panels suffer from the serious drawback, however, that they tend to absorb moisture to a considerable extent, resulting in their becoming bloated, deformed, and finally, disintegrated.

35 In addition to the necessity of protecting the surfaces of these panels with the aid of various types of linings, such as water-repellent varnishes, melamine resin layers and the like, it is therefore required to ensure perfect sealing

1 of the peripheral borders of the panels against the intrusion of liquids and vapours.

There are various solutions known for countering these
5 problems. French Patent 2,037,655 teaches the sealing of the panel borders by means of adhesive synthetic materials, particularly polyurethane foams, to be applied and cured in a mold. The panels obtained by this method are solely
10 suitable for the construction of furniture, as their surfaces lack adequate protection or treatment capable of providing them with the characteristics required for employ as a working table top for electric appliances.

French Patent 2,420,942 teaches the construction of furniture of fiberboard panels by completely coating such panels
15 and interconnecting them in an injection molding process using a synthetic resin. This method does not lead to favourable results, as it is extremely difficult to obtain a uniform surface coating which is sufficiently thin and
20 at the same time free of any defects. As this injection molding process is applied to relatively large surfaces, it is practically impossible to ensure uniform distribution of the injected material, particularly in the case of fiberboard panels of varying density.

25 German Patent 3,131,532 a working table top having a replaceable cover panel to be inserted into a cornice formed of a plastics material and interiorly provided with a support rail for the cover panel. This solution presents
30 certain difficulties in mounting the cover panel due to dimensional tolerances of the panel and the cornice, and is in addition unable to ensure a perfectly coplanar arrangement of the components at the mounting location and/or proper sealing against the intrusion of moisture.

35 German Utility Model 8,214,636 finally describes a working table top formed of a fiberboard panel the peripheral borders of which are sealed by a cornice formed of a synthetic

1 material applied thereto by an injection molding process.
The working table tops of this type are reliably sealed
against the intrusion of moisture, They are formed, however,
with a raised peripheral rim tending to retain liquid and
5 solid substances on the surface and rendering thorough
cleaning thereof difficult. On the other hand, it is
required to provide suitable reinforcements on the lower
side of the panel for guarding against possible deformation
of the working table top due to the particular configurat-
10 ion of the cornice and shrinkage of the plastics material.

It is therefore an object of the present invention to pro-
vide a one-piece working table top having a completely flat
top surface with the requisite resistance properties, and
15 provided with peripheral border structures ensuring perfect
sealing against the intrusion of moisture; this solution
should be simple and economical so as to allow the manu-
facture of such table tops with cornices of various types
adapted to conform to various styles of kitchen furniture.

20 According to the invention, a working table top of the type
defined above comprises a fiberboard panel lined with
layers of a plastic laminate, preferably a melamine resin
or the like, and a peripheral cornice formed of a thermo-
25 plastic material, preferably ABS; this working table top
is characterized in that the borders of the cornice are
coplanar with the surfaces of the plastic laminate layers
attached to the upper and lower surface, respectively, of
the panel.

30 The described working table top may in addition be provided
with adjustable mounting means permitting the table top to
be positioned in accordance to esthetic and functional
requirements, and may further be formed with a raised
35 rear wall portion integral with said peripheral cornice.

These and other characteristics will become evident from
the following description, given by way of a non-limiting

1 example with reference to the accompanying drawings,
wherein:

5 figs. 1 to 3 shows partially sectioned perspective views
of various embodiments of a working table top according to the invention,

10 figs. 4 and 5 show diagrammatic cross-sectional views of
a working table top according to the invention mounted
on an electric appliance in different positions, and

figs. 6 to 9 show sectional views and top plan views,
respectively, of means for mounting the working table
top on an electric household appliance.

15

With reference to figs. 1 to 3, a working table top
according to the invention comprises a fiberboard panel 10
having its upper and lower surfaces lined with a pair of
plastic laminate sheets 11 and 12, respectively, prefer-
20 ably of a melamine resin material, the periphery of panel
10 being sealed by means of a peripheral cornice 13 formed
of a thermoplastic material, preferably ABS (acrylonitrile-
butadiene-styrene). Sheets 11 and 12 are adhesively secured
to panel 10 prior to the latter being cut to measure and
25 subsequently placed into a mold for injection-molding of
the ABS peripheral cornice 13.

Obtained in this manner is a one-piece working table top
having a perfectly flat top surface and offering the
30 required resistance against mechanical and physio-chemical
attack.

The table top is in addition perfectly sealed against the
intrusion of moisture, as not a single portion of panel 10
35 remains uncovered and the injection molding process results
in an intimate bond between cornice 13, panel 10 and sheets
11 and 12.

- 1 For obtaining optimum adhesion of the material of cornice
13 to the fiberboard material of panel 10, the latter may
be formed with a recessed shoulder 14 as shown in figs. 2
and 3, and the peripheral surfaces of the panel may be
5 impregnated with an adhesive prior to the panel being
placed in the mold.

The profile of cornice 13 may obviously vary in accordance
with esthetic aspects and with the provisions for mounting
10 the table top on an electric appliance.

As an alternative to the profiles shown in figs. 1 to 3,
cornice 13 may be integrally formed with a raised rear
wall portion 15 as shown in figs. 4 and 5 for preventing
15 objects from dropping behind the electric household app-
pliance 16, or in certain cases for adapting the appearance
of the appliance to that of the combination kitchen
furniture.

- 20 The working table top is of course intended to be mounted
on the top portion of an electric appliance, preferably in
an adjustable manner.

To this effect, a simple and practical solution shown in
25 figs. 6 to 9 provides for the employ of a screw 17 to be
engaged with a lug 18. Screw 17 may extend through a pro-
jection of cornice 13, while lug 18 may be formed on or
secured to the upper edge of the electric appliance.

- 30 In summary, the working table top according to the invention
is of simple and economical construction and meets any
requirements imposed thereon in practical use, while in
particular offering excellent versatility with regard to
the adaptation of electric household appliances to various
35 types of combination kitchen furniture.

A GRÜNECKER, DPL-ING
DR H KINKELDEY, DPL-ING
DR W STOCKMAIR, DPL-ING, ABT. KALTECH
DR K SCHUMANN, DPL-ING
P. H. JAKOB, DPL-ING
DR G BEZOLD, DPL-ING
W MEISTER, DPL-ING
H HILGERS, DPL-ING
DR H. MEYER-PLATH, DPL-ING

8000 MÜNCHEN 22
MAXIMILIANSTRASSE 58

EP 1834

10

15

20 Working Table Top for Electric Household
Appliances

P a t e n t C l a i m s

25

1. A working table top adapted to be mounted on an electric household appliance, particularly for use with combination kitchen furniture, comprising a fiberboard panel lined with plastic laminate sheets, preferably of a melamine resin or the like, and a peripheral cornice
30 formed of a thermoplastic material, preferably ABS, characterized in that the borders of said cornice (13) are coplanar with the surfaces of said sheets (11 and 12) secured respectively to the upper and lower surfaces of said panel (10).
35

2. A working table top according to claim 1, characterized in that said panel (10) is formed with a recessed

1 shoulder (14) for receiving therein a projecting portion
of said cornice (13).

3. A working table top according to claim 2, character-
5 ized in that said cornice (13) is integrally formed with
a raised rear wall portion (15).

4. A working table top according to any of the preceding
claims, characterized in that releasable and adjustable
10 fastener means (17, 18) are provided for positioning the
working table top on an electric household appliance.

15

20

25

30

35

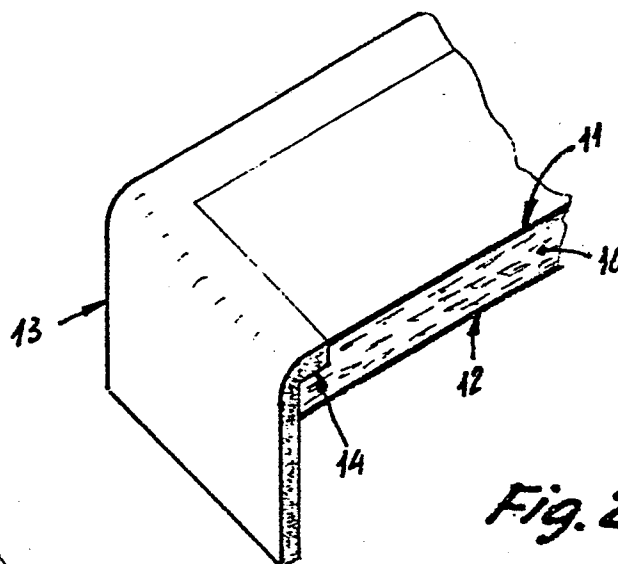
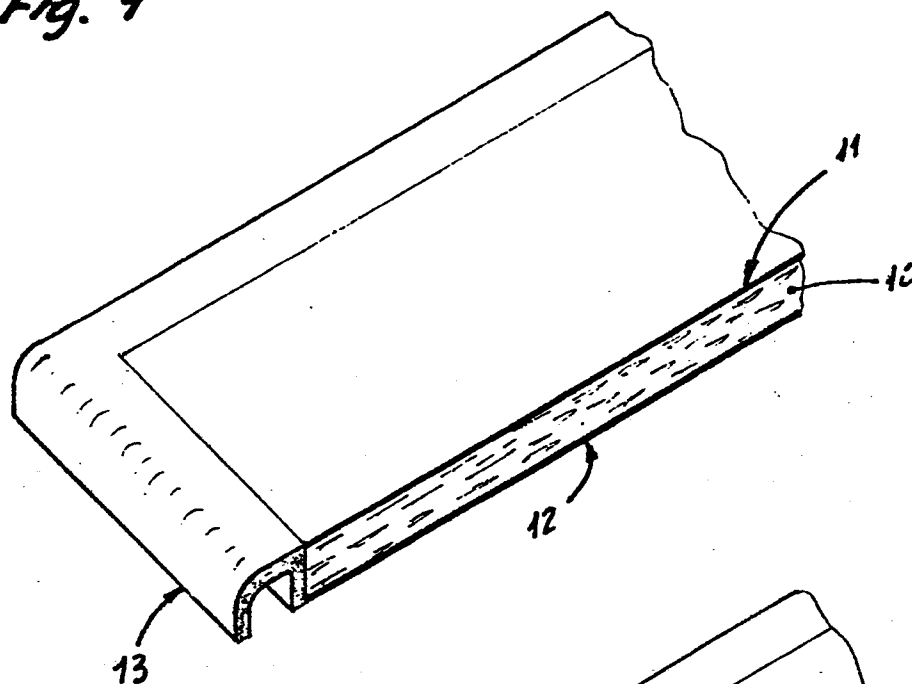
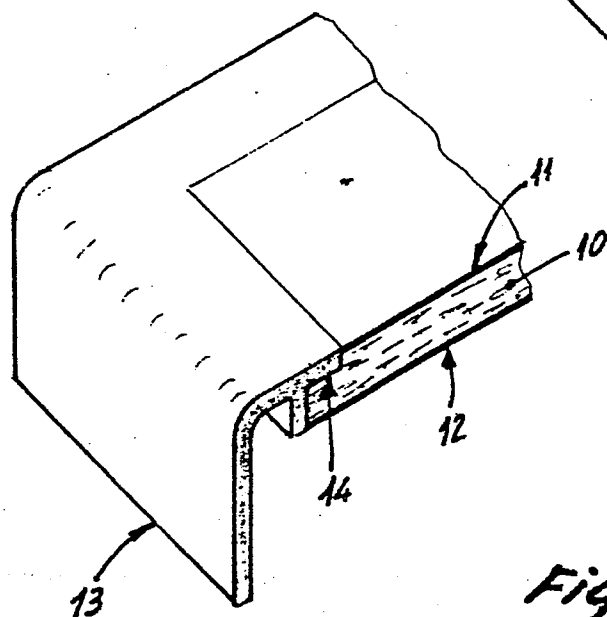
Fig. 1*Fig. 2**Fig. 3*

Fig. 4

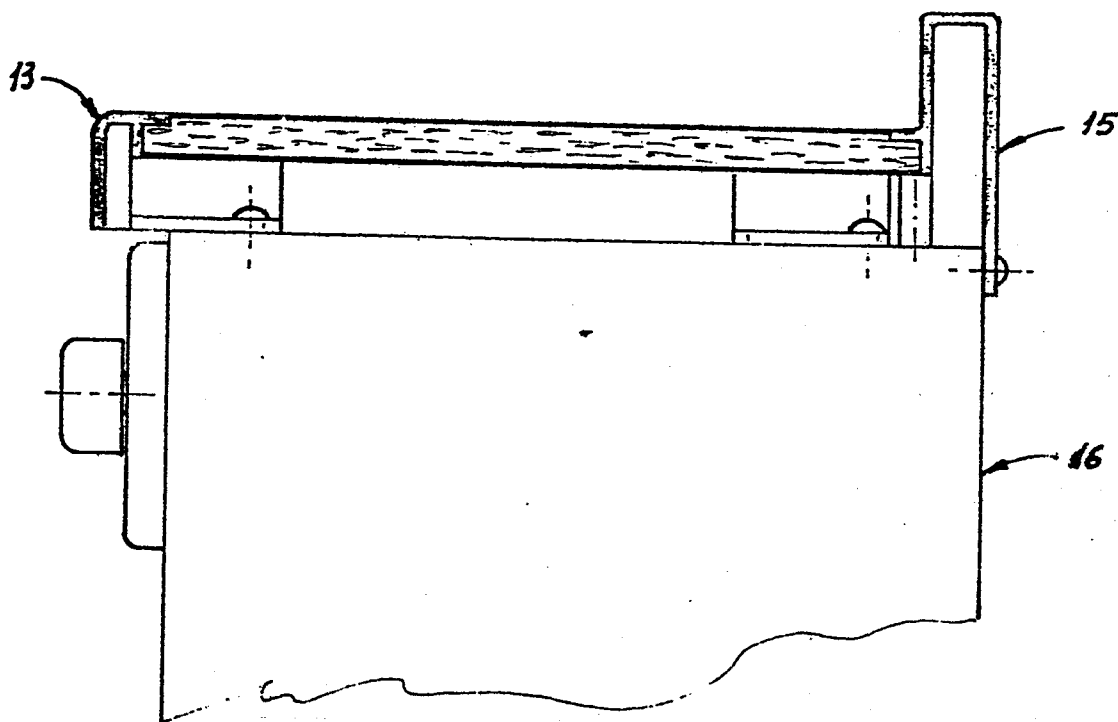
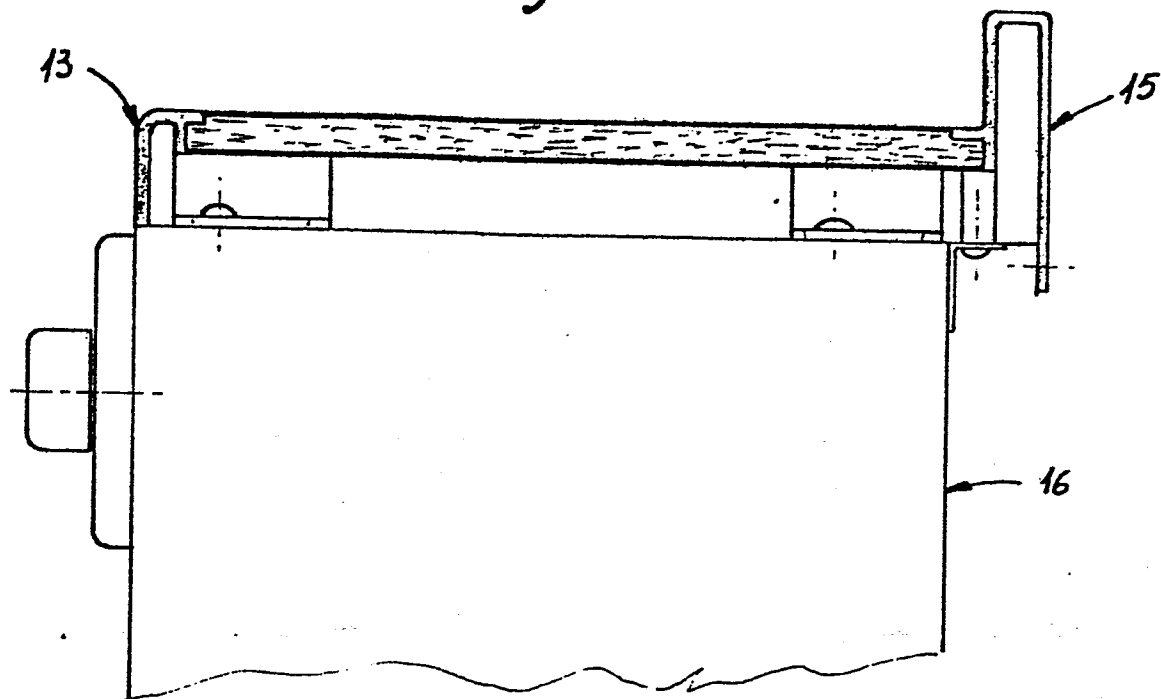


Fig. 5

Fig. 6

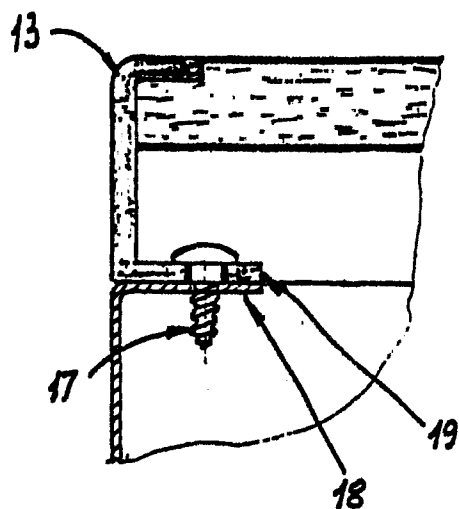


Fig. 8

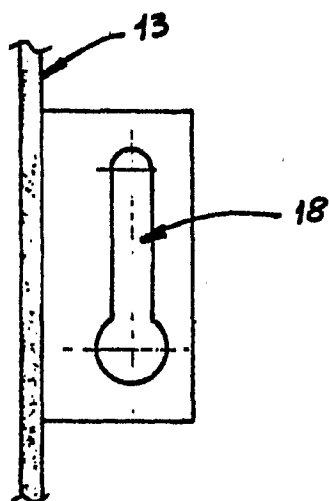
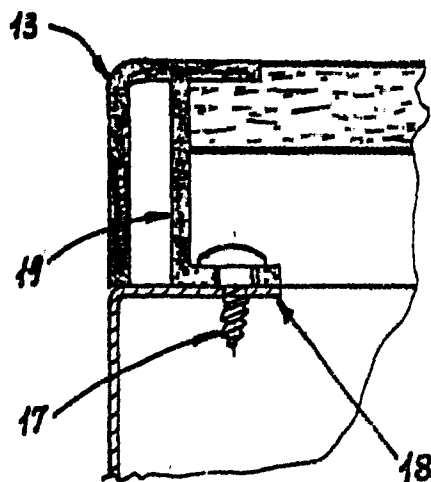


Fig. 7

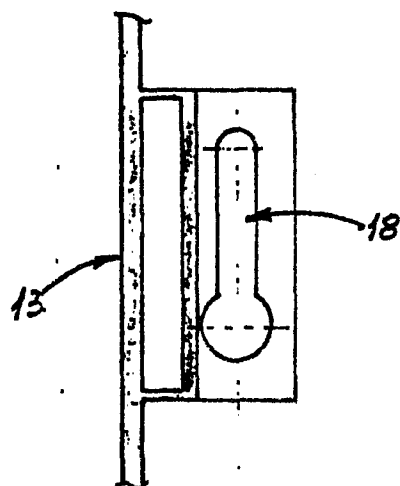


Fig. 9