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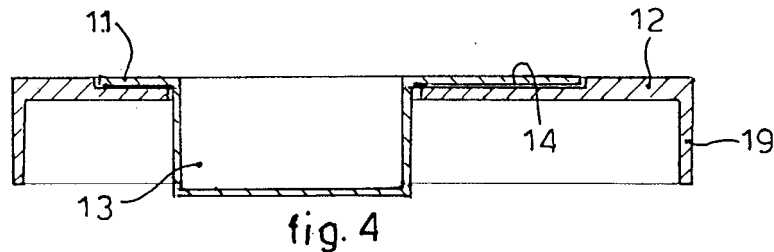
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(54) **Method to make a work top and top thus made**

(57) Top (10), even large size, made by coupling at least two slabs, one slab (11) made of steel with an irregular shape and one slab (12) made of another known

material. The coupling is flush and occurs through depression with the at least partial overlapping of the slab (11) in correspondence with the supporting perimeter (14) of the slab (12).



EP 2 147 612 A1

Description

FIELD OF THE INVENTION

[0001] The present invention concerns the method to make a work top and a top thus made, of large size, made by the flush coupling through depression of at least two slabs, one of which is made of steel.

[0002] In particular, the present invention is applied in rooms such as kitchens, bathrooms or other areas.

BACKGROUND OF THE INVENTION

[0003] A plurality of work tops are known, such as those for cooking, of various sizes, which provide the coupling of two or more slabs.

[0004] The slabs are coupled, also flush, with a plurality of coupling systems, both fixed and removable, both with adhesives, coupling means, for example screws or hooks, and with said coupling systems in combination with each other.

[0005] At least one of the slabs has at least a hole suitable to accommodate one or more second slabs having sink sections and/or cooker sections having different depths.

[0006] When the slab, of large size and with an irregular shape with sink and/or cooker section, is made of steel and is coupled with a slab, with a hole, made of a common material such as wood, plastic polymers, laminated plastics etc., the different structural capacity of the materials coupled and their different torsion makes flush coupling impossible, or is only possible with particularly difficult, costly and imprecise assembly systems, and even where it is possible the structure loses the solidity it needs for use.

[0007] To overcome this problem the state of the art has some solutions - such as using some very resistant glues, affixing cross-pieces inside the hole in proximity with the sink and/or cooker section, using moldable rubber and tension brackets - which, however, are not satisfactory inasmuch as they are not suitable for the stresses typical, for example, of a cooking top or work top and in any case are not suitable to keep the slabs coupled flush because of the presence of a large hole with respect to the surface of the top.

[0008] A further disadvantage of known solutions is that if the two or more slabs are coupled flush before they are installed and must therefore be subsequently packed and dispatched, there is a greater risk of breakage because the play between the materials of which the two or more slabs are made have different resistances which are not absorbed by the coupling systems used.

SUMMARY OF THE INVENTION

[0009] The present invention is set forth and characterized in the independent claim, while the dependent claims describe other characteristics of the invention or

variants to the main inventive idea.

[0010] Purpose of the present invention is to make a top, for example a cooking top, or work top, even of a large size, consisting of two or more slabs, a first slab made of steel and a second slab made of another known material, which are coupled flush through depression, which have a sure grip irrespective of the shape, regular or irregular, of the first steel slab.

[0011] The coupling of the present invention allows to obviate the different torsions and resistances of the materials used and coupled, thus allowing a more widespread use of the tops described and made in this way.

[0012] A further purpose of the present invention is to make a top which can be subjected to different stresses without these causing breakages and/or lack of uniformity in the coupling, above all guaranteeing that said coupling remains flush.

[0013] A further purpose of the present invention is to make a top which can be assembled easily even in the place where it will be used inasmuch as the particular conformation of the second slab and the system which guarantees coupling with the first slab, as well as reducing and eliminating the risks of breakage and of imperfect flush coupling, is easy and does not use coupling means that cause breakages or bending of one or both the materials with which the slabs are made.

[0014] The possibility of assembling the slabs in the place where they will be used also makes it easier to transport them, simplifies the packing and reduces the risks of breakages.

[0015] A further purpose is to perfect a coupling method which allows to make a top of a large size with flush coupling of one or more slabs through depression which provides:

- i) the preparation in the second slab of a supporting perimeter, or depression zone - substantially equal to the irregular shape of the first slab - provided all around the hole or holes, able to accommodate the corresponding sections present in the first slab;
- ii) said supporting perimeter having a height lower than that of the second slab, but equal to that of the first slab;
- iii) the first slab is coupled to the second slab, overlapping said first slab over said second slab in correspondence with the supporting perimeter and the coupling is guaranteed by the depression which forms there;
- iv) the coupling can also be guaranteed by the presence on at least a part of the supporting perimeter of a packing - of a known type -, even a dry packing, which can cooperate, or not, with bubbles of glue - of a known type - distributed for the purpose;
- v) in the supporting perimeter, an external channel can be provided, or for part of the perimeter, able to promote the depression necessary for the coupling between the first and second slab. Said external channel can cooperate, or not, with the packing

and/or the glue.

[0016] The Applicant has devised, tested and embodied the present invention to overcome the shortcomings of the state of the art and to obtain these and other purposes and advantages.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] These and other characteristics of the present invention will become apparent from the following description of a preferential form of embodiment, given as a non-restrictive example with reference to the attached drawings wherein:

- fig. 1 shows a view from above of the cooking or working top according to the present invention;
- fig. 2 shows another view from above of said top with two sections according to the present invention;
- fig. 3 shows a section of the second slab of said top according to the present invention;
- fig. 4 shows a section of said top according to the present invention with first and second slabs coupled with each other;
- fig. 5 shows a second section of said top according to the present invention with first and second slabs coupled with each other.

DETAILED DESCRIPTION OF A PREFERENTIAL FORM OF EMBODIMENT

[0018] With reference to fig. 1 and fig. 2, a view can be seen from above of a top 10, for example a cooking top or a work top according to the present invention, even of a large size, where the second slab 12, made of a known material, accommodates the first slab 11 made of steel, of an irregular shape. In fig. 1 said top 10 does not have the sections in said first slab 11, while fig. 2 illustrates a top 10 which provides in said slab 11 two sections 13a, 13b.

[0019] Said sections 13 define washing compartments, sinks, a seating for the gas/electricity rings, a separation chamber etc., which have a different depth than that of the slab 11, and also, they can have a different depth from each other.

[0020] The coupling between slab 11 and slab 12 is made through depression and is flush, in the sense that when coupling has been completed there is no substantial discontinuity in heights on the surface, on the operative side, between slab 11 and slab 12, and that said coupling allows to obtain a substantial continuity of line between slab 11 and slab 12 on the surface, on the operative side.

[0021] Slab 11 rests on the supporting perimeter 14, also called depression zone. Said supporting perimeter 14 which has a lower height than the height of the slab 12, but substantially equal to that of the slab 11, is made by removal of material, or other known technique, from

said slab 12.

[0022] Figs. 3 and 4 show a section of the top 10 in which slab 12 is represented and the edge or thickness 19, in which the supporting perimeter 14 where the steel slab 11 is to be coupled, and also a hole 15 able to accommodate the sections 13 provided in said slab 11. Said hole 15 is provided to accommodate the different depth, or the different depths, of the sections 13 with respect to that of the slab 11 thus promoting the exact flush coupling through depression of said slab 11 onto said slab 12.

[0023] The same flush coupling through depression is guaranteed whether all the sections 13 present in the slab 11 are accommodated in one single hole 15 of suitable size, or in several holes 13 which are also of suitable size.

[0024] Finally, fig. 5 shows a section of the coupling, flush and through depression, of the slabs 11, 12, where the use of a packing 17 is provided and/or a bubble of polymeric glue 16 and a perimeter channel 18 able to promote the depression at the act of coupling between the two slabs 11, 12.

[0025] The packing 17, the polymeric glue 16 and the channel 18 can be applied on the whole of the supporting perimeter 14 or only on one part, just as they can be applied in a cumulative way with respect to each other, or in an independent way.

[0026] It is clear that modifications and/or additions of parts may be made to the present invention as described heretofore, without departing from the field and scope of the present invention.

[0027] It is also clear that, although the present invention has been described with reference to some specific examples, a person of skill in the art shall certainly be able to achieve many other equivalent forms, having the characteristics as set forth in the claims and hence all coming within the field of protection defined thereby.

Claims

1. Top (10), even large size, made by coupling at least two slabs, one slab (11) made of steel with an irregular shape and one slab (12) made of another known material, **characterized in that** said coupling is flush and occurs through depression with the at least partial overlapping of the slab (11) in correspondence with the supporting perimeter (14) of the slab (12).
2. Top (10) as in claim 1, **characterized in that** said slab (12) has one or more holes (15) able to accommodate corresponding sections (13) present in said slab (11).
3. Top (10) as in claim 1 or 2, **characterized in that** said supporting perimeter (14) is provided substantially all around the hole or holes (15).
4. Top (10) as in claim 1, **characterized in that** said

supporting perimeter (14) has a height less than the height of the slab (12) but substantially equal to that of the slab (11).

5. Top (10) as in claim 1, **characterized in that** said supporting perimeter (14) has a channel (18) at least partly in its surface. 5
6. Top (10) as in claim 1, **characterized in that** said supporting perimeter (14) has a packing (17) at least partly in its surface. 10
7. Top (10) as in claim 1, **characterized in that** said supporting perimeter (14) has a glue (16) at least partly in its surface. 15
8. Coupling method that allows to make a top (10), even large size, **characterized in that:**
 - i) said coupling is flush and due to depression of the slab (11) in correspondence with the supporting perimeter (14) of the slab (12), said supporting perimeter (14) - substantially equal to the irregular shape of the first slab (11) - provided all around the hole or holes (15) present in said slab (12) able to accommodate the corresponding sections (13) present in said slab (11); 20 25
 - ii) said supporting perimeter (14) having a height less than the slab (12), but equal to that of the slab (11); 30
 - iii) the slab (11) is coupled with the slab (12) by superimposing it in correspondence with the supporting perimeter (14) and coupling is guaranteed by the depression that is formed there; 35
 - iv) coupling can also be guaranteed by the presence on at least part of the surface of the supporting perimeter (14) of a packing (17) - of a known type - which may or may not cooperate with glue (16) - of a known type - distributed for this purpose; 40
 - v) in the supporting perimeter (14), a perimeter channel (18) may be provided, or for part of said perimeter, able to promote the depression necessary for the coupling of the slabs (11, 12), said perimeter channel (18) may or may not cooperate with the packing (17) and/or the glue (16). 45

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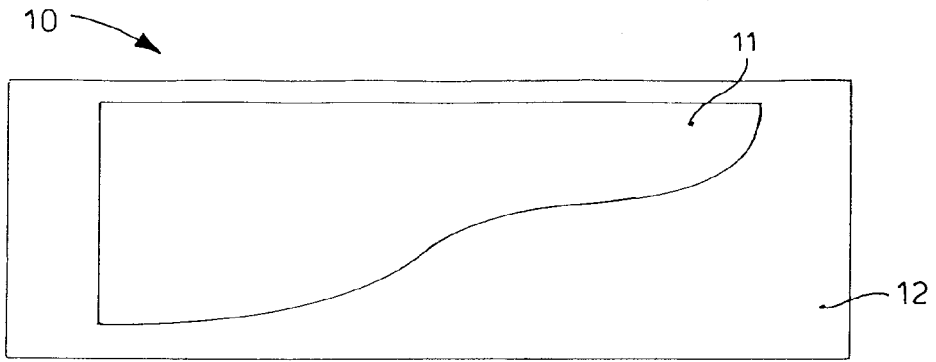


fig. 1

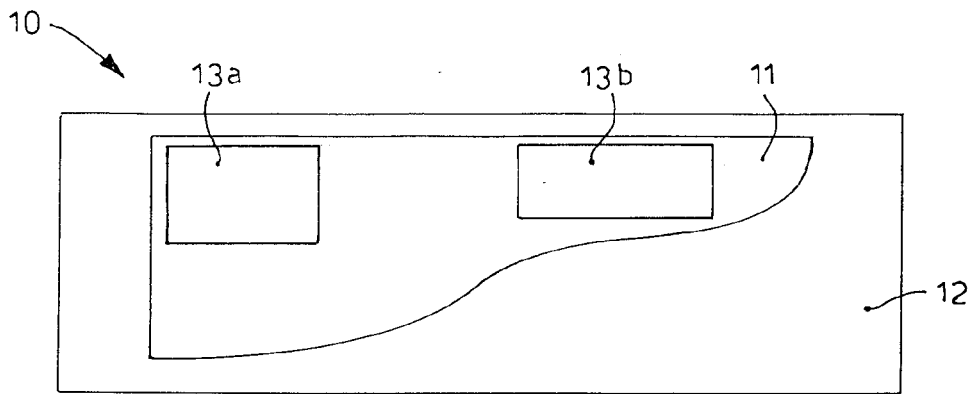


fig. 2

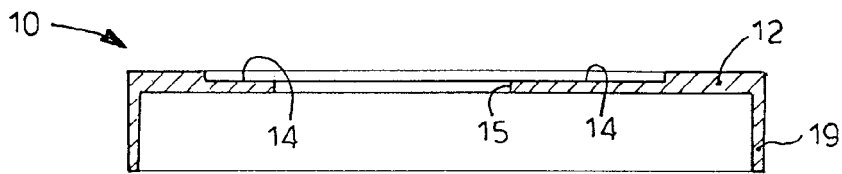


fig. 3

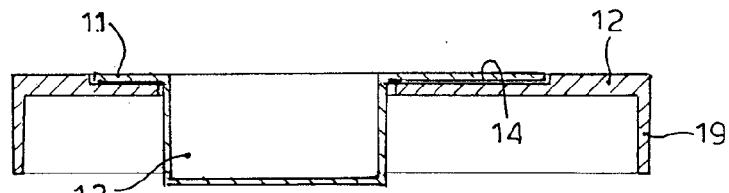


fig. 4

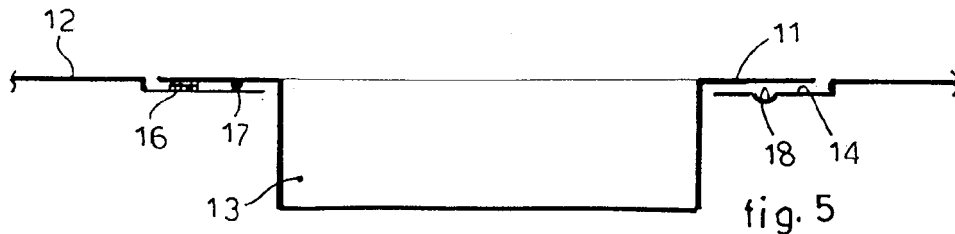


fig. 5



EUROPEAN SEARCH REPORT

Application Number
EP 09 16 5627

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 5 253 932 A (NESOVIC DANILO N [US]) 19 October 1993 (1993-10-19) * column 3, line 57 - column 6, line 60 * * figures 1,3,6 * -----	1-4,6-8	INV. A47B77/02
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A	DE 202 01 297 U1 (POELLET WILFRIED [DE]) 4 July 2002 (2002-07-04) * abstract; figures * -----	1-8	
A	US 3 456 409 A (PIGET MAURICE) 22 July 1969 (1969-07-22) * figures * -----	1-8	
			TECHNICAL FIELDS SEARCHED (IPC)
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 16 November 2009	Examiner MacCormick, Duncan
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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EPO FORM 1508 03.82 (P04CO1)

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 09 16 5627

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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16-11-2009

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