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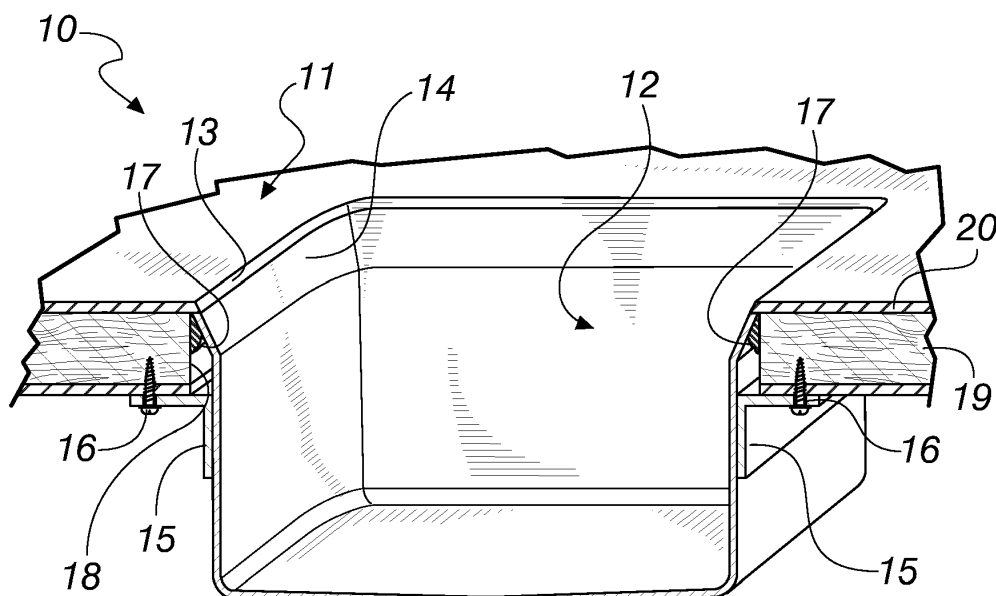
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(54) **SINK AND BASIN FOR SUCH SINK**

(57) A sink (10, 110) and a basin (12, 112) for such sink, said sink (10, 110) comprising a worktop (11, 111) which is provided with at least one opening, for the accommodation of a basin (12, 112), and an upper border (13, 113), which is perimetric to the opening and defines with the rest of the worktop (11, 111) a substantially flat

surface, the basin (12, 112) being mounted with the rim (14, 114) underneath the border (13, 113); the rim (14, 114) of the basin (12, 112) is flared or rounded, providing a widening of the basin (12, 112) in an upper direction, and the border (13, 113) is flared upward, blending with the rim (14, 114).



**Fig. 1**

## Description

**[0001]** The present invention relates to a sink and a basin for such sink.

**[0002]** The sink is applied, in general, in kitchens; however, it can also be applied in other areas, for example bathrooms.

**[0003]** Nowadays, many types of kitchen worktops and the like are widespread, including composites that are made with a chipboard counter covered with a layer of laminate adapted to simulate the appearance of a monolithic counter.

**[0004]** Special openings are provided in the worktops which are designed to accommodate sinks and cooktops.

**[0005]** Typically the sink is fitted by inserting the basin into the adapted opening of the worktop, with the perimeter rim folded outward and resting on the surface, around the perimeter of the opening.

**[0006]** Alternatively, the sink is fitted with a perimeter rim that rests on a border milled around the perimeter of the opening, so as to obtain a fitting known in the sector as "flush with the surface".

**[0007]** Kitchen counters are also known with laminate worktops which have an opening for the sink which is lined with the same covering applied to the worktop. The sink is mounted under the opening, and is therefore concealed at first sight.

**[0008]** Such conventional mounting techniques exhibit some drawbacks.

**[0009]** Often it can happen in fact that during common food preparation operations, the pots or other equipment in use may knock accidentally against the corner edge of the laminate, perimeteric to the basin of the sink, or on the corner edge of the sink, depending on the type of structure, damaging them.

**[0010]** The aim of the present invention is to provide a sink that is capable of improving the known art in one or more of the above mentioned aspects.

**[0011]** Within this aim, an object of the invention is to provide a sink that is less subject to accidental impacts at the rim around the perimeter of the opening for the sink.

**[0012]** Another object of the invention is to provide a sink with a new and pleasing visual impact.

**[0013]** Furthermore, another object of the present invention is to overcome the drawbacks of the known art in a different manner to any existing solutions.

**[0014]** A still further object of the invention is to provide a sink that is highly reliable, easy to implement and low cost.

**[0015]** This aim and these and other objects which will become better apparent hereinafter are achieved by a sink according to claim 1, optionally provided with one or more of the characteristics of the dependent claims.

**[0016]** Further characteristics and advantages of the invention will become better apparent from the description of two preferred, but not exclusive, embodiments of the sink according to the invention, illustrated by way of non-limiting example in the accompanying drawings

wherein:

- Figure 1 is a cutaway perspective view of the sink according to the invention in a first embodiment thereof;
- Figure 2 shows a part of the sink according to the invention in a second embodiment thereof;
- Figure 3 shows a part of the sink according to the invention in the second embodiment thereof.

**[0017]** With reference to Figure 1, the sink according to the invention, generally designated by the reference numeral 10 in its first embodiment, is intended preferably for kitchens and comprises a worktop 11 that has at least one opening, for the accommodation of a basin 12, and an upper border 13 which is perimeteric to such opening and defines with the rest of the worktop 11a substantially flat surface.

**[0018]** The basin 12 is mounted with the rim 14 underneath the border 13.

**[0019]** The rim 14 is flared or rounded, providing a widening of the basin 12 in an upper direction, and the border 13 is flared upward, blending with the rim 14.

**[0020]** In the example shown, the rim 14 is flared, but alternatively it can be rounded, according to a curvature that can vary according to requirements.

**[0021]** The sink 10 comprises at least one upside-down L-shaped bracket 15 which is fixed with one side to the outer wall of the basin 12 and with the other side underneath the worktop 11.

**[0022]** Preferably, for a sink 10 with a square or rectangular basin, there are four brackets 15, each one extending along one side of the basin 12.

**[0023]** The bracket 15 is fixed to the worktop 11 by way of a fixing screw 16 and to the basin 12 by way of an adhesive.

**[0024]** The worktop 11 and the basin 12 are sealed below the border 13 and at the connection of the latter with the rim of the basin 12.

**[0025]** In particular, the worktop 11 and the basin 12 are sealed by way of a deposit of polyurethane adhesive 17 applied between the side wall 18 of the worktop 11 which is directed toward the opening and the outer wall of the basin 12 at the rim 14.

**[0026]** The polyurethane adhesive is conveniently applied along the entire perimeter of the basin rim.

**[0027]** As illustrated, the worktop 11 consists of a layered composite provided with a supporting core 19 and an upper covering layer 20 which protrudes with respect to the core 19 toward the inside of the opening so as to define the border 13.

**[0028]** In particular, the worktop 11 is preferably made of HPL (acronym for High Pressure Laminate) and/or stratified HPL, or of MDF (acronym for Medium-Density Fiberboard), or of chipboard enclosed between two layers of HPL.

**[0029]** In the case shown in Figure 1, the worktop 11 also has a lower layer 21, which with the upper layer 20

encloses the core 19 sandwich-fashion. In other variants of worktop 11, the lower layer 21 may not be present.

[0030] A second embodiment of the sink according to the invention is illustrated in Figures 2 and 3 and is generally designated with the reference numeral 110.

[0031] With reference to Figure 2, the sink 110 according to the invention comprises, as in the previous embodiment, a worktop 111 with at least one opening, for the accommodation of a basin 112, and an upper border 113 which is perimetric to such opening and defines with the rest of the worktop 111 a substantially flat surface.

[0032] The basin 112 is mounted with the rim 114 underneath the border 113.

[0033] The rim 114 is flared or rounded, providing a widening of the basin 112 in an upward direction, and the border 113 is flared upward, blending with the rim 114.

[0034] Again in this example the rim 114 is flared, but alternatively it can be rounded, with a curvature that can vary according to requirements, as in the variation shown in Figure 3.

[0035] The structure 110 comprises, as in the first embodiment, four upside-down L-shaped brackets 115, each one fixed with one side to the outer wall of the basin 112 and with the other side underneath the worktop 111.

[0036] The bracket 115 is fixed to the worktop 111 by way of a fixing screw 116 and to the basin 112 by way of an adhesive.

[0037] The worktop 111 and the basin 112 are sealed below the border 113 and at the connection of the latter with the rim of the basin 112.

[0038] In particular, the worktop 111 and the basin 112 are sealed by way of a deposit of polyurethane adhesive 117 applied between the side wall 118 of the worktop 111 which is directed toward the opening and the outer wall of the basin 112 at the rim 114.

[0039] The worktop 111 consists of a layered composite provided with a supporting core 119 and an upper covering layer 120 which protrudes with respect to the core 119 toward the inside of the opening so as to define the border 113. In other variants, there can also be a lower layer.

[0040] The remaining part of the worktop 111 is preferably made of HPL and/or stratified HPL, or of MDF, or of chipboard enclosed between two layers of HPL.

[0041] This embodiment differs from the previous one in that the core 119 of the worktop 111 comprises a block 122 made of HPL, at which the deposit 117 of polyurethane adhesive is made.

[0042] In a variation of the second embodiment, shown in Figure 3, the block 122 has, in cross-section, a tab 123 that protrudes toward the opening of the worktop 111 and extends below the border 113 and has the same flaring as the latter so as to provide with this and with the rim 114 a uniformly inclined surface.

[0043] The worktop 111 and the basin 112 are sealed by way of a deposit of polyurethane adhesive 117 applied between the block 122 and the outer wall of the basin 112, at the inclined rim 114.

[0044] In general, in the second embodiment, the presence of the block 122 improves the sealing.

[0045] The invention also relates to a sink basin 12, 112 for a sink 10, 110 described above, with the peculiarity of having a rim 14, 114 that is flared or rounded so as to provide a widening of the basin 12, 112 in an upward direction.

[0046] It should be noted that the widening of the basin at the rim gives the product a pleasing visual impact overall.

[0047] It should also be noted that at a functional level the flaring acts as a guiding portion for the insertion of kitchen objects and utensils, thus facilitating the various operations that are usually performed in the area of the sink and therefore limiting the possibility that pots, utensils or other equipment in use could knock accidentally against the corner edge of the laminate, perimetric to the basin, or on the corner edge of the basin, damaging them.

[0048] In practice it has been found that the invention fully achieves the intended aim and objects by providing a sink that is less subject, with respect to conventional sinks, to accidental impacts that could damage them, and which has a new and pleasing visual impact.

[0049] The invention, thus conceived, is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims. Moreover, all the details may be substituted by other, technically equivalent elements.

[0050] In practice the materials employed, provided they are compatible with the specific use, and the contingent dimensions and shapes, may be any according to requirements and to the state of the art.

[0051] The disclosures in Italian Patent Application No. 102017000034260 from which this application claims priority are incorporated herein by reference.

[0052] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

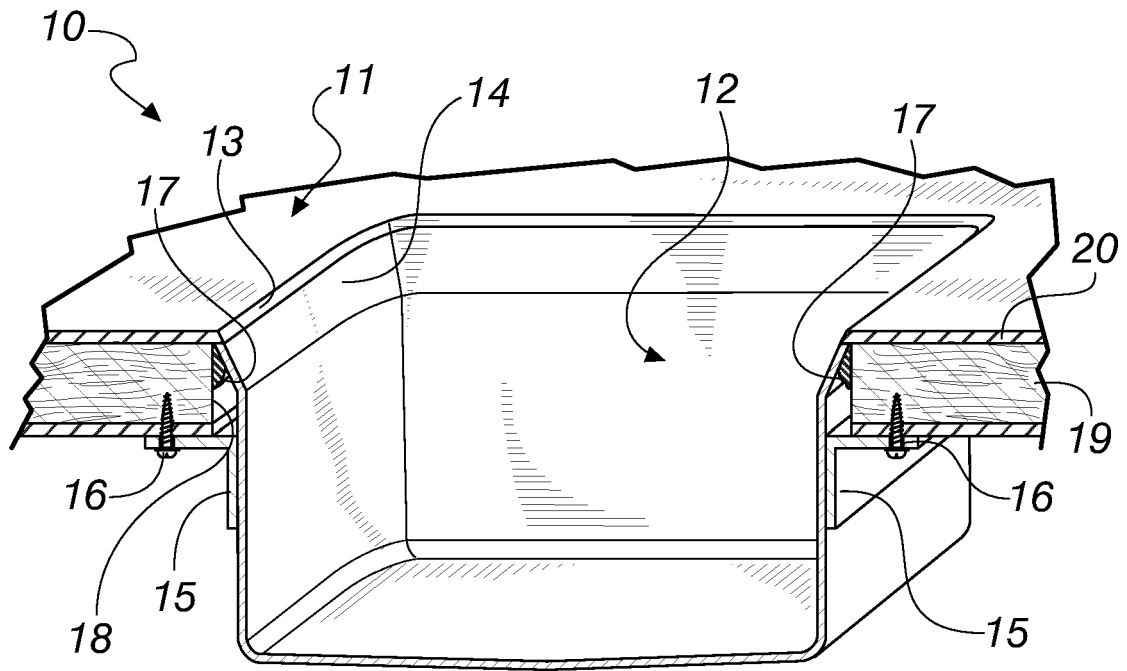
## Claims

1. A sink (10, 110) which comprises a worktop (11, 111) provided with at least one opening, for the accommodation of a basin (12, 112), and an upper border (13, 113), which is perimetric to said opening and defines with the rest of said worktop (11, 111) a substantially flat surface, said basin (12, 112) being mounted with the rim (14, 114) underneath said border (13, 113),  
said sink (10, 110) being **characterized in that** said rim (14, 114) is flared or rounded, providing a widening of said basin (12, 112) in an upper direction, and said border (13, 113) is flared upward, blending

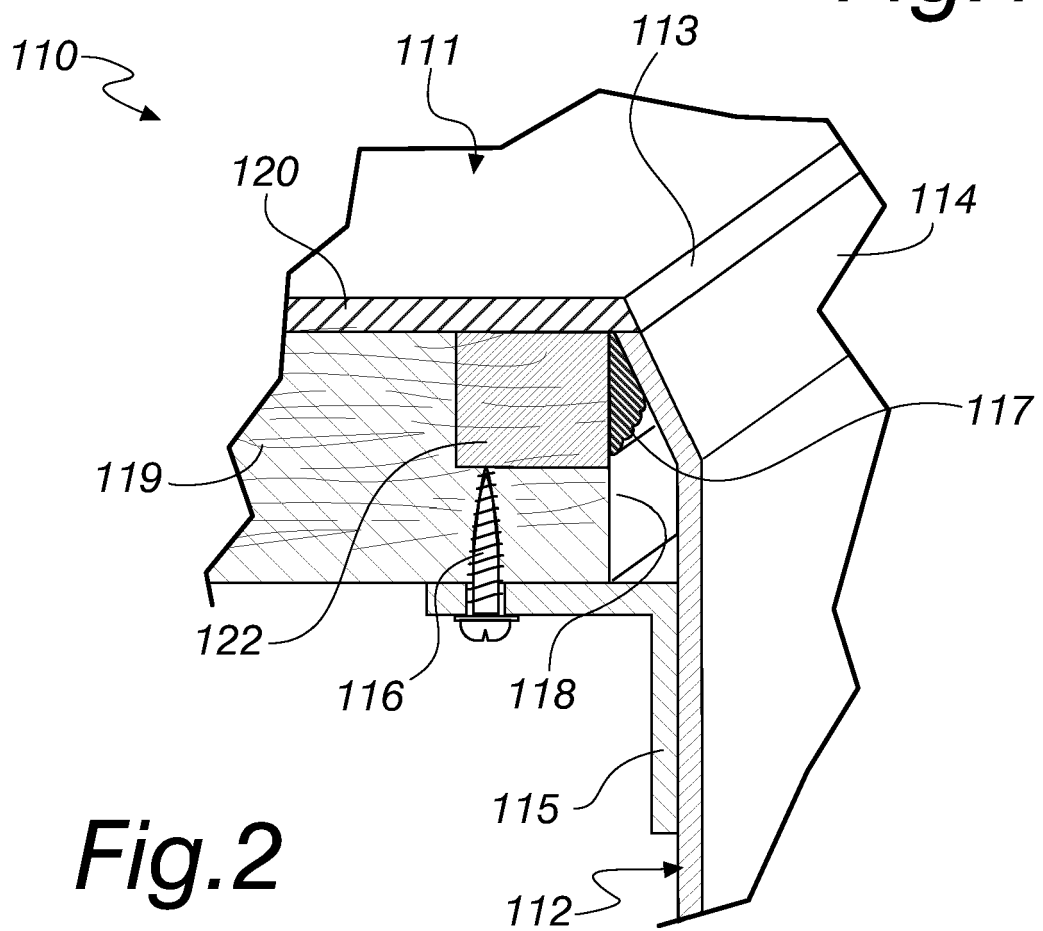
with said rim (14, 114).

2. The sink according to claim 1, **characterized in that** it comprises at least one upside-down L-shaped bracket (15, 115) which is fixed with one side to the outer wall of said basin (12, 112) and with the other side underneath said worktop (11, 111). 5
3. The sink according to one or more of the preceding claims, **characterized in that** said bracket (15, 115) is fixed to said worktop (11, 111) by way of at least one fixing screw (16, 116). 10
4. The sink according to one or more of the preceding claims, **characterized in that** said bracket (15, 115) is fixed to said basin (12, 112) by way of an adhesive. 15
5. The sink according to one or more of the preceding claims, **characterized in that** said worktop (11, 111) and said basin (12, 112) are sealed below said border (13, 113) and at the connection of the latter with the rim of said basin (12, 112). 20
6. The sink according to one or more of the preceding claims, **characterized in that** said worktop (11, 111) and said basin (12, 112) are sealed by way of a deposit of polyurethane adhesive (17, 117) applied between the side wall (18, 118) of said worktop (11, 111) which is directed toward said opening and the outer wall of said basin (12, 112), at said rim (14, 114). 25 30
7. The sink according to one or more of the preceding claims, **characterized in that** said worktop (11, 111) consists of a layered composite provided with a supporting core (19, 119) and an upper covering layer (20, 120) which protrudes with respect to said core (19, 119) toward the inside of said opening so as to define said border (13, 113). 35 40
8. The sink according to one or more of the preceding claims, **characterized in that** said core (119) of said worktop (111) comprises a block (122) made of HPL, at which said deposit (117) of polyurethane adhesive is made. 45
9. The sink according to one or more of the preceding claims, **characterized in that** said block (122) has, in cross-section, a tab (123) that protrudes toward said opening of said worktop (111) and extends below said border (113), and has the same flaring as the latter so as to provide with this and with said rim (114) a uniformly inclined surface, said worktop (111) and said basin (112) being sealed by way of a deposit of polyurethane adhesive (117) applied between said block (122) and the outer wall of said basin (112), at said inclined rim (114). 50 55

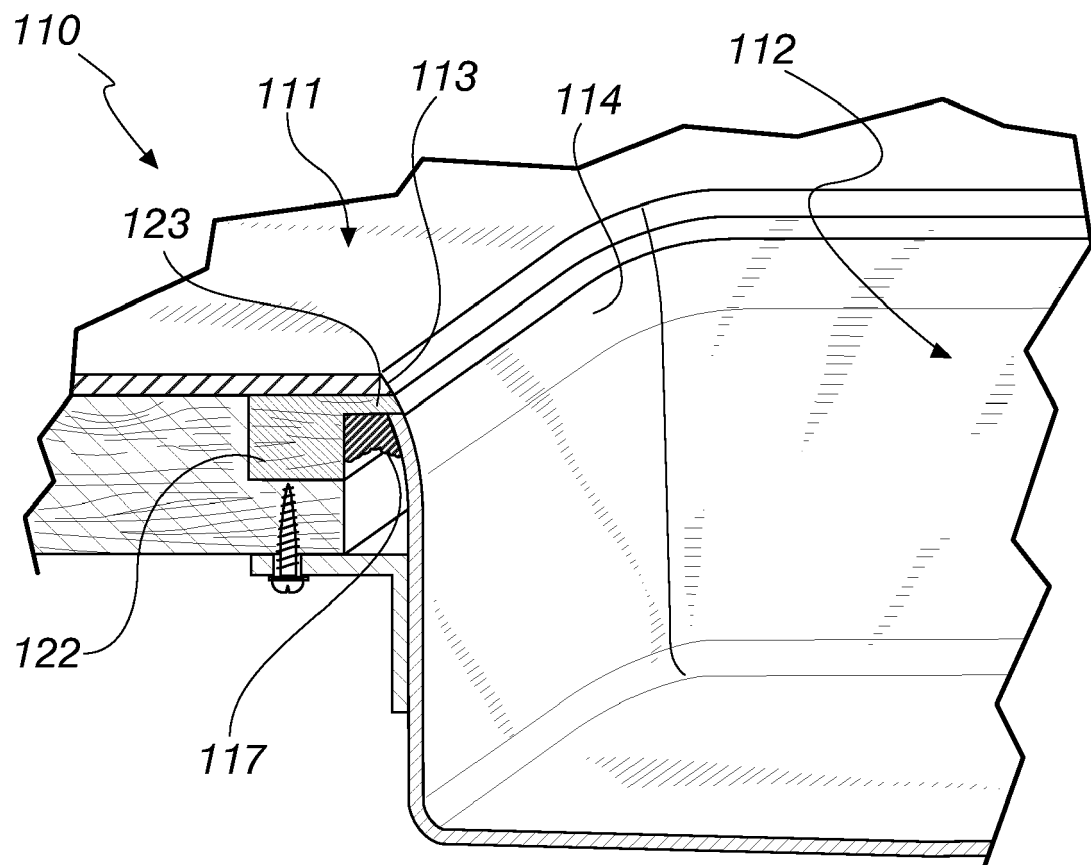
10. A basin (12, 112) for a sink (10, 110) according to one or more of the preceding claims, **characterized in that** it has a rim (14, 114) that is flared or rounded so as to provide a widening of said basin (12, 112) in an upward direction.



**Fig. 1**



**Fig. 2**



*Fig.3*



## EUROPEAN SEARCH REPORT

Application Number  
EP 18 16 3355

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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	WO 2009/073873 A1 (CUSIMANO CHAD MICHAEL [US]) 11 June 2009 (2009-06-11) * page 10, line 13 - line 17 * * page 11, line 17 - line 22; figure 15 * -----	1-8,10	INV. E03C1/33
X	JP S61 92618 A (IBIDEN CO LTD) 10 May 1986 (1986-05-10) * figure 8 * -----	1-8,10	
X	WO 80/02170 A1 (AICA KOGYO CO LTD [JP]; IKEDA E [JP]; YAMADA R [JP]; TAKASHIMA S [JP];) 16 October 1980 (1980-10-16) * abstract; figures 1-4 * -----	1,5,7-9	
A	EP 0 307 552 A1 (WREDE DUROPAL WERK [DE]) 22 March 1989 (1989-03-22) * abstract * -----	1,7,8	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			E03C A47K A47B
Place of search		Date of completion of the search	Examiner
The Hague		16 July 2018	Van Bost, Sonia
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	
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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 18 16 3355

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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 2009073873	A1	11-06-2009	CA	2707848 A1		11-06-2009
			CN	101889120 A		17-11-2010
			EP	2231937 A1		29-09-2010
			US	2009144893 A1		11-06-2009
			US	2014109309 A1		24-04-2014
			WO	2009073873 A1		11-06-2009
-----						
JP S6192618	A	10-05-1986	JP	H0257403 B2		04-12-1990
			JP	S6192618 A		10-05-1986
-----						
WO 8002170	A1	16-10-1980	EP	0026236 A1		08-04-1981
			GB	2060369 A		07-05-1981
			HK	94384 A		07-12-1984
			MY	8500513 A		31-12-1985
			SG	20784 G		04-01-1985
			US	4374695 A		22-02-1983
			WO	8002170 A1		16-10-1980
-----						
EP 0307552	A1	22-03-1989	DE	3729378 A1		16-03-1989
			EP	0307552 A1		22-03-1989
-----						



**REFERENCES CITED IN THE DESCRIPTION**

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**Patent documents cited in the description**

- IT 102017000034260 [0051]