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(54) Grating for overflow edge of swimming pools

(57) A grating for straight or curved overflow edge of swimming pools composed of a series of elements (11) that tilt in relation to one another around a central point on a horizontal plane connected to one another, in which each element (11) comprises a base (10) with a plurality of slats (12) distanced (in 13), in which each element (11) is connected to a successive element (11) with male and female connecting elements (14, 14'; 15, 15'). The slats (12) are parallel to an edge (20) of the swimming pool. The slats (12) are distanced with spaces between the slats (12) that do not exceed 8 mm even when the grating is curved either in concave or convex form.

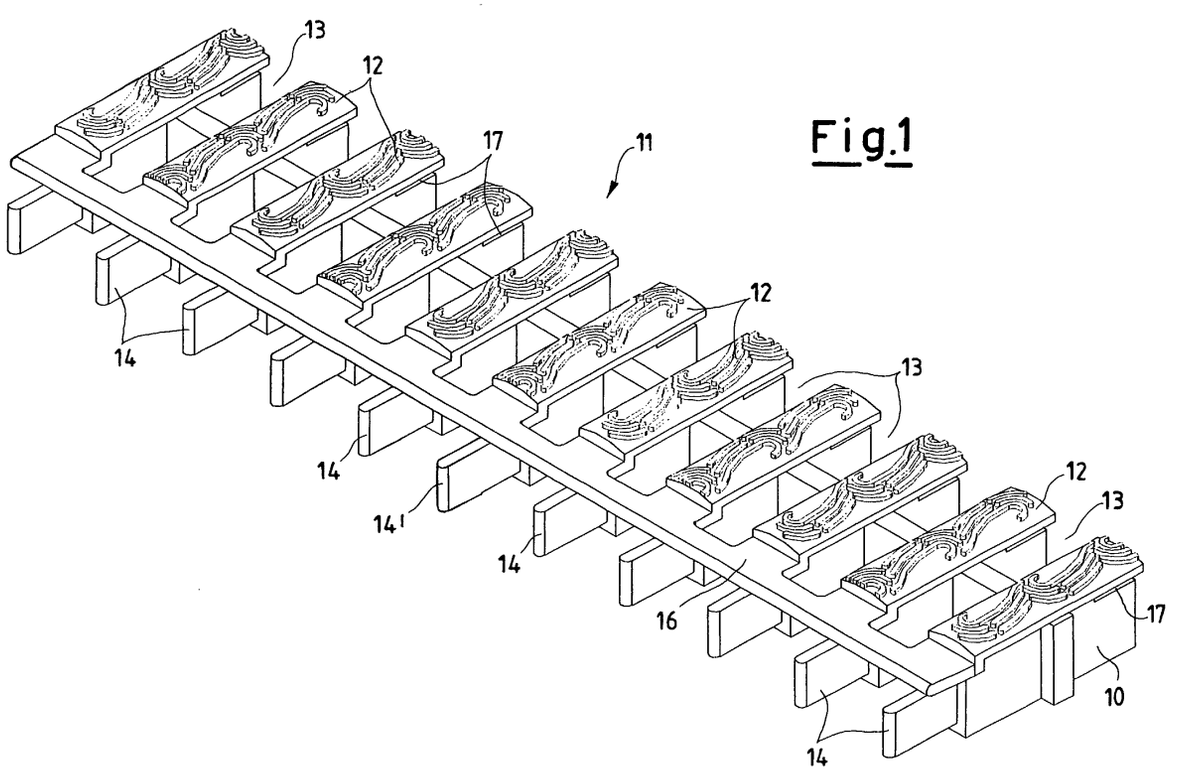

Fig.1

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Description

[0001] The present invention relates to a grating for overflow edge of swimming pools.

[0002] As is well known to experts in the field, around their perimeter swimming pools have a grating for overflow edge of swimming pools. In general these gratings may have a series of problems as summarised and set forth below.

[0003] The grating has a series of slats and if water runs over the slats, it can flow beyond the overflow edge, without dropping into this, to a zone that is usually required to remain dry, around the swimming pool.

[0004] Moreover, as the overflow edge is generally prefabricated at least in lengths that are placed around the pool, it has a fixed shape, generally straight, that cannot thus take a different form. If, for example, a curved edge is required, specific pieces of a grating must be moulded with adequate radii, with a considerable increase in costs.

[0005] Moreover, at times it is not possible to easily produce a grating with spaces between its component elements that comply to standards, that is to say spaces that do not exceed 8 mm.

[0006] The object of the present invention is to produce a grating for overflow edge of swimming pools that solves the aforesaid problems.

[0007] Another object of the present invention is to produce a grating for overflow edge of swimming pools that is simple and particularly functional.

A further object of the present invention is to produce a grating that is curvable concavely or convexly, with a variable radius, that allows easy adaptation to the form of the required overflow edge, without needing to have parts shaped differently (for example fixed radius).

[0008] Yet another object of the present invention is to produce a grating of the aforesaid kind that functions well and is easy to adapt to any type of swimming pool.

[0009] These objects according to the present invention are attained by producing a grating for overflow edge of swimming pools as set forth in claim 1.

[0010] The other claims define the additional characteristics of the present invention.

[0011] The characteristics and advantages of a grating for overflow edge of swimming pools according to the present invention shall become more apparent from the non-limiting exemplificative description below, referring to the appended schematic drawings, in which:

figure 1 is an axonometric front view of a length of a grating for overflow edge of swimming pools according to the present invention,

figure 2 is an axonometric rear view of the grating shown in figure 1,

figure 3 is another axonometric view of the underside of the grating in figure 1,

figure 4 is a view of a corner of a swimming pool equipped with grating elements of the invention.

[0012] With reference to the figures, these show a grating for overflow edge of swimming pools which, according to the present invention, can be easily and optimally placed at an edge 20 of a swimming pool, shown in walls 21.

[0013] The example shows a length of grating for overflow edge, indicated with 11, formed of an element that is positioned perpendicularly to a wall 21 of a swimming pool.

[0014] The length of grating 11 comprises a base 10, which is amply provided with openings or hollow zones, attached to which are a plurality of slats 12, arranged parallel to the wall 21 of the swimming pool and distanced by spaces 13, between one slat and the next, with a width not exceeding 8 mm.

[0015] Along the opposite longitudinal edges of this length or grating element 11 is an arrangement of connecting elements 14 and 15 of the complementary type, arranged below the slats 12. In the example shown these connecting elements are on the one side male type 14, projecting from the base 10, and along the opposite side of the female type 15 obtained in the base 10, inside which the preceding male connecting elements 14 can be inserted.

[0016] In this way a series of elements or lengths of grating 11 can be attached to one another to form a continual grating, with slats 12 parallel to the wall of the swimming pool.

[0017] In this way it is possible to create a complete grating that provides a considerable advantage over gratings used and present to date.

[0018] Moreover, the grating for overflow edge of the present invention has a further advantage in that its male connecting elements 14 can be inserted to a greater or lesser depth into the dedicated hollow female connecting elements 15. In fact, it is thus possible to connect the elements 11 successive to one another so that they are not parallel, or arranged on the same plane, so that they cover a channel with either a concave or convex curve, that may have been provided to position the overflow edge. Moreover, a male connecting element 14' which is longer than the others, positioned in the central zone and suitable to be fitted into a female element 15', permits the elements to tilt on a horizontal plate around the rotation point of said element thus composed. In fact, this male element 14' is fully inserted into the relative female element 15' and determines rotation.

[0019] To prevent spaces with a dimension exceeding 8 mm from being created between the elements 11 when connecting successive elements of the overflow edge 11 to adapt them to the curved channel, each element 11 is equipped with further connecting elements 16 and 17. These connecting elements 16 and 17 are obtained immediately under the surface produced by the plurality of slats 12. One of these elements for further connection is formed of a wing 16, for example of the male type, on one side of the element 11 and integral under the slats 12, which inserts into a corresponding seat or cavity 17

of the female type, produced on the opposite side of the overflow edge element 11 between the base 10 and the slats 12.

[0020] This wing 16 is permanently inserted into the cavity 17, even when the successive elements 11 are connected with maximum convergence to follow extremely small radii of curvature, up to, for example, 1.000 mm. Therefore, each element 11 can be arranged in relation to an adjacent element 11 aligned or inclined.

[0021] This horizontal wing 16, which is part of an element 11, is inserted into the specific seat or cavity 17 present on the opposite side of the successive element 11, eliminating empty spaces between these elements.

[0022] In this way, at no point of the grating obtained by connecting several successive elements 11 to one another is there an empty space exceeding 8 mm.

[0023] The grating element for overflow edge 11 is normally produced in plastic, but may also be in other suitable materials.

[0024] The width and length of the slats 12 is not important for the purposes of the present invention and are produced to the measurement required for the different applications possible.

[0025] By means of a grating for overflow edge of swimming pools according to the present invention, a grating with slats parallel to the side of the swimming pool is thus obtained, to prevent water from running over the grating and flowing beyond the overflow channel, where this is positioned, instead of dropping into this channel.

[0026] Advantageously, an adaptable grating is obtained that can be used on overflow edges of any form, such as with concave and convex curves.

[0027] Another advantage is to obtain a grating conforming to the standards that establish a space between the slats not exceeding 8 mm.

[0028] It is natural that an expert in the field may identify numerous alternative arrangements which nonetheless apply the same innovative concept of the present invention.

[0029] A grating for overflow edge of swimming pools thus conceived is susceptible to numerous modifications and variants, all coming within the scope of the present invention; moreover, all parts may be replaced with technically equivalent elements. In practice, the materials used, their dimensions and forms may be any according to technical requirements.

Claims

1. Grating for overflow edge of swimming pools **characterized in that** it is formed of a series of elements (11) connected to one another, in which each element (11) comprises a base (10) with a plurality of slats (12) distanced (in 13), in which each element (11) is connected to a successive element (11) with male and female connecting elements (14, 14'; 15, 15'), a pair of which (14', 15') in the central zone and longer than the others, acts as a element of rotation on a horizontal plane.

2. Grating according to claim 1, **characterized in that** said slats (12) are parallel to an edge (20) of the swimming pool.

3. Grating according to either of the claims 1 or 2, **characterized in that** said slats (12) are distanced with spaces between slats (12) not exceeding 8 mm.

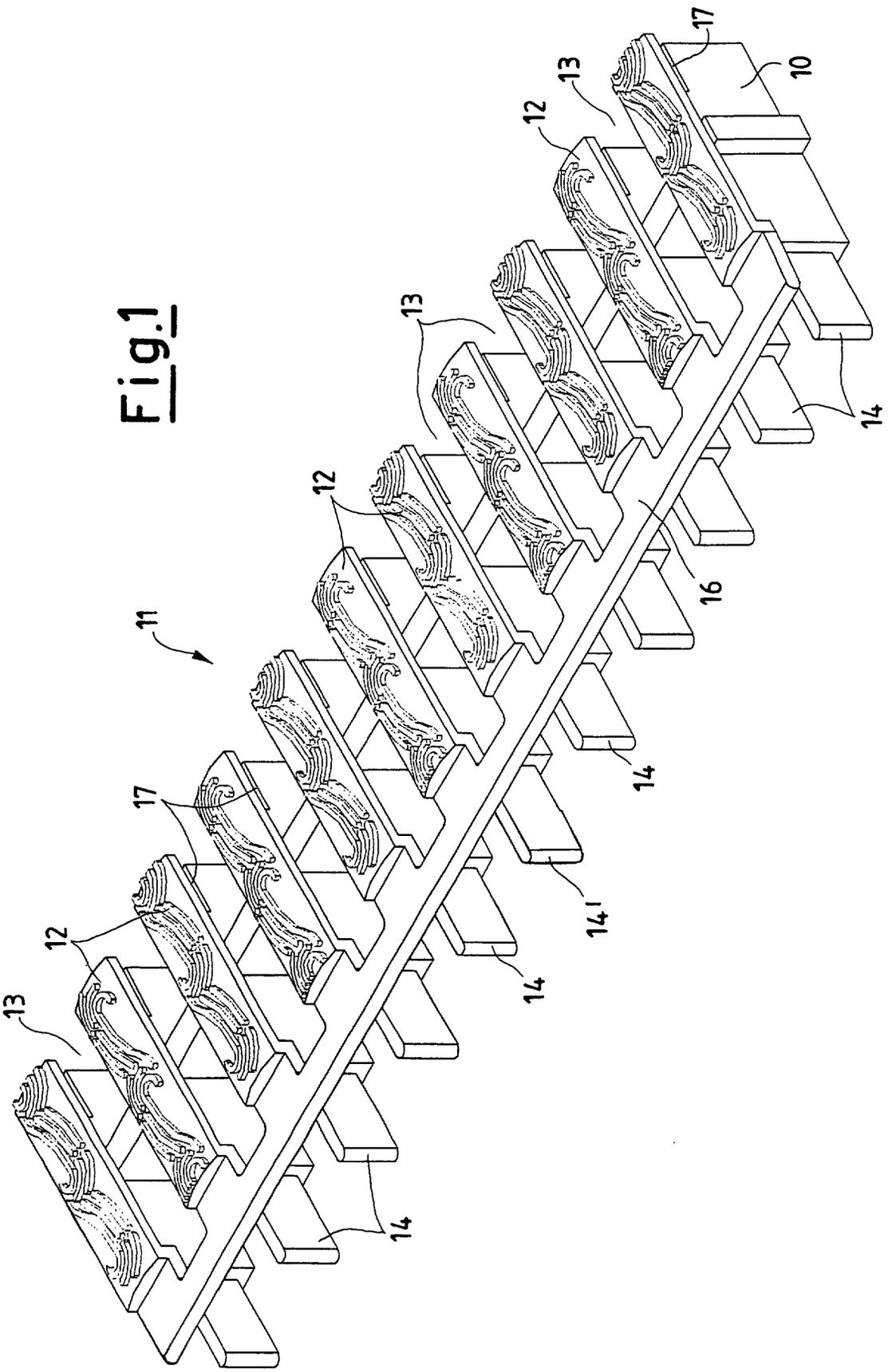
4. Grating according to any of the claims from 1 to 3, **characterized in that** said slats (12) are arranged on a base (10) that has openings and/or hollow zones.

5. Grating according to any of the claims from 1 to 4, **characterized in that** said slats (12) have further connecting elements (16, 17) of the male-female type provided along them.

6. Grating according to claim from 5, **characterized in that** said further connecting elements comprise on each element (11) on one side a wing (16) that extends from said slats (12) and on the other side an opening (17) obtained between said slats (12) and said base (10).

7. Grating according to any of the previous claims, **characterized in that** each element (11) can be arranged in relation to an adjacent element (11) aligned or inclined, thanks to the possibility of tilting around a male (14') or female (15') element longer than the other elements (14, 15).

Fig.1



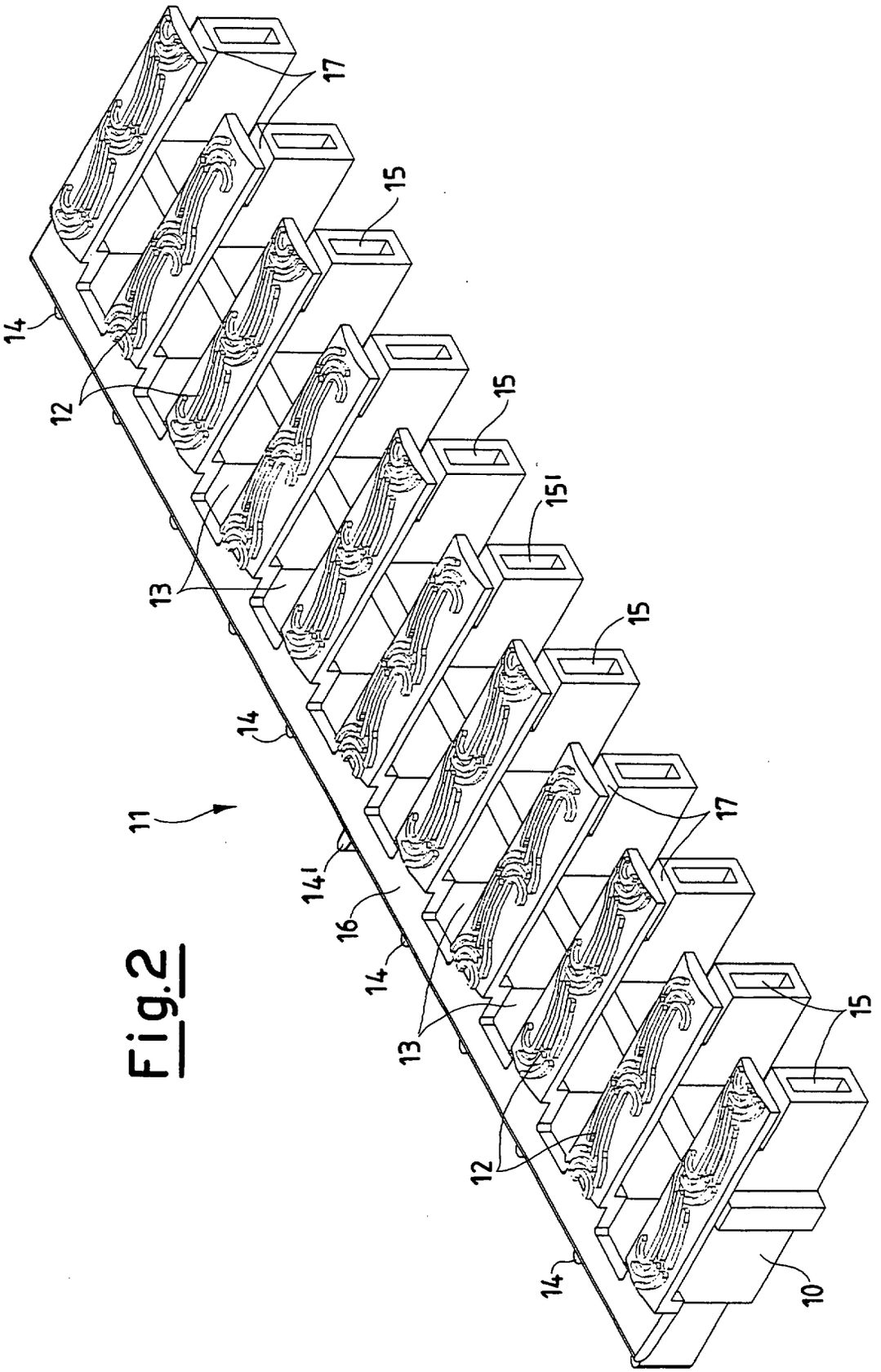


Fig.2

Fig.3

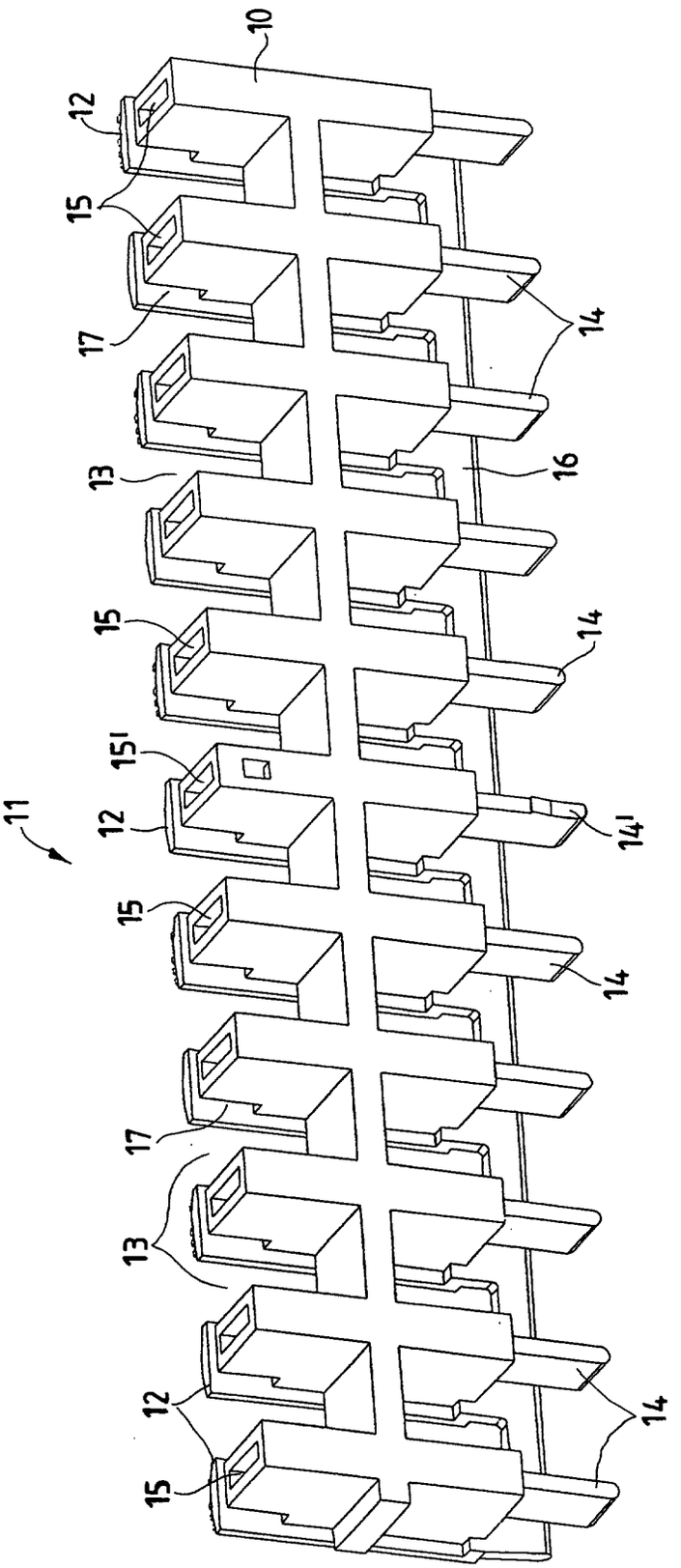


Fig.4