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(54) Profile and fixation member cooperating therewith

(57) A profile (1) with a generally prismatic form, comprising a central part and two side parts which extend at least more or less in transverse direction relative thereto and the free end zones of which are directed toward each other while leaving clear a gap, has the feature that the central part has on its outside two ribs lying substantially in one common plane and oriented in opposing directions, which ribs serve for co-action with at least one resilient fixation member (10) having two protrusions displaceable over the free ends of the ribs in hookable manner and/or while deforming elastically and subsequently co-acting therewith in clamping and/or hooking manner, which fixation member (10) can be fastened to a supporting construction by means of fastening means (14).

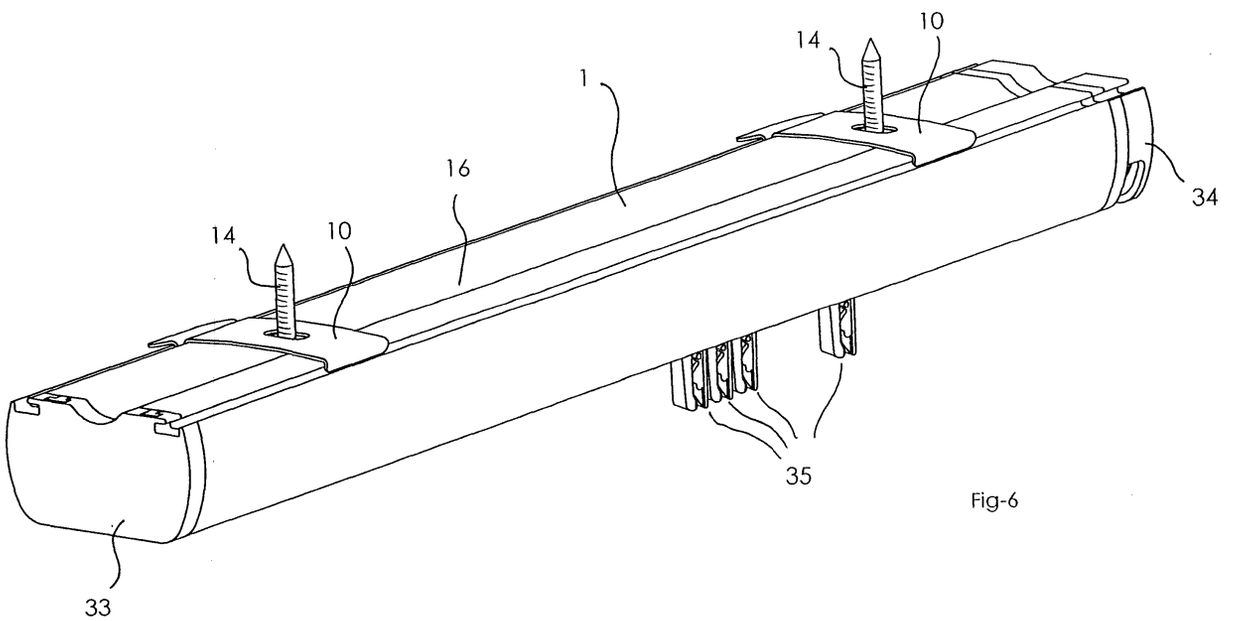


Fig-6

EP 1 536 095 A2

Description

[0001] The invention relates to a profile with a generally prismatic form, comprising a central part and two side parts which extend at least more or less in transverse direction relative thereto and the free end zones of which are directed toward each other while leaving clear a gap.

[0002] Such a profile is known in many embodiments and serves for instance to accommodate provisions for lowering and raising for instance a roller blind, pleated blinds or the like, or for displacing along the profile slides to which vertical slats, curtains or the like are or can be attached.

[0003] It is an object of the invention to embody a profile such that it can be fixed to and removed from a supporting construction in exceptionally simple manner, while the strength with which the profile is fixed to this supporting construction is more than sufficient for, among others, the purpose of use described briefly above.

[0004] The invention provides in this respect a profile of the type stated in the preamble which has the feature that the central part has on its outside two ribs lying substantially in one common plane and oriented in opposing directions, which ribs serve for co-action with at least one resilient fixation member having two protrusions displaceable over the free ends of the ribs in hookable manner and/or while deforming elastically and subsequently co-acting therewith in clamping and/or hooking manner, which fixation member can be fastened to a supporting construction by means of fastening means.

[0005] A preferred embodiment has the special feature that the free end zone of each rib is situated above a recess present in the profile. The recesses can serve to receive at least a part of the protrusions.

[0006] A preferred embodiment has a recess situated on the upper side of the profile for receiving parts of fastening means, for instance the head of a screw or bolt extending through the or each fixation member.

[0007] According to an important aspect of the invention, the profile has the feature that the profile has on at least one side a standing edge which extends at least roughly in transverse direction relative to the ribs and which after fastening of the profile to a supporting construction conceals the or each fixation member and any fastening means which may be present.

[0008] The profile can be manufactured in diverse ways. The profile preferably has the feature that the profile is manufactured by extrusion.

[0009] This latter embodiment can be particularly embodied such that the profile is manufactured from aluminium or a plastic.

[0010] The invention further provides a combination of a profile according to the above stated specifications and a resilient fixation member having two protrusions displaceable over the free ends of the ribs in hookable manner and/or while deforming elastically and subsequently co-acting therewith in clamping and/or hooking manner.

[0011] Finally, the invention provides a fixation member adapted for co-action with a profile according to the above stated specifications, comprising two protrusions displaceable over the free ends of the ribs in hookable manner and/or while deforming elastically and subsequently co-acting therewith in clamping and/or hooking manner.

[0012] The invention will now be elucidated with reference to the annexed drawings, in which:

Fig. 1 shows a perspective view of a profile according to the invention in a first exemplary embodiment;
Fig. 2 shows a view corresponding with Fig. 1 of the profile with a fixation member co-acting therewith;
Fig. 3 is a side view of the combination of Fig. 2;
Fig. 4 shows the cross-section IV-IV of Fig. 2 on enlarged scale;
Fig. 5 shows a cross-section corresponding with Fig. 4 of a second exemplary embodiment;
Fig. 6 shows a perspective view corresponding with Fig. 2 of an assembled profile from which vertical slats can be suspended; and
Fig. 7 is a perspective view from the underside of the profile in the assembled state as according to Fig. 6.

[0013] Figures 1, 2, 3 and 4 show a profile 1 with a generally prismatic form, i.e. the profile has the same cross-section at any longitudinal position. Profile 1 comprises a central part 2 and two side parts 3, 4 which extend at least more or less in transverse direction relative thereto and the free end zones 5, 6 of which are directed toward each other while leaving clear a gap 7. The central part 2 has on its outside, in the figures the upper side, two ribs 8, 9 which lie substantially in one common plane and are oriented outward in opposing directions, and which serve for co-action with at least one resilient, for instance spring-steel, fixation member 10 having two protrusions 11, 12 displaceable over the free ends of ribs 8, 9 in hookable manner and/or while deforming elastically and subsequently co-acting therewith in clamping and/or hooking manner. Each fixation member can be fastened to a supporting construction and has for this purpose a through-hole 13 through which can extend a fastening screw 14 which can be coupled in screwing manner to the supporting construction, which screw 14 has a head 15 which is wider than the dimensions of through-hole 13 so that, in the manner shown in Fig. 2, 3 and 4, fixation member 10 can be firmly connected to a supporting construction.

[0014] After the screw 14, 15 placed through hole 13 has been screwed fixedly to the supporting construction, profile 1 can be attached thereto in snap-on and clamping manner by first placing the outer end of ribs 9 into the cavity defined by protrusion 12 and, while tilting and pressing, then displacing the outer end of ribs 18 in

snapping manner over the undercut protrusion 11 until the hooking and clamping coupling as drawn in Fig. 4 has been effected.

[0015] Profile 1 can be removed from the clamping co-action with fixation member 10 by moving the profile with a sufficient force in the opposite direction. The described tilting movement can particularly take place in reverse direction, whereby one of the undercuts defined by protrusions 11, 12 functions temporarily as pivot point, and the ribs located opposite can be released with force from the relevant undercut.

[0016] Standing edges 31, 32 conceal fixation member 10, 12 and screw 14. It is noted that lip 19, which serves for easy placing and removal of the profile, protrudes and cannot therefore be concealed by edge 32. However, a profile is generally fixed in a position such that there is only one visible side. It would then in principle be possible to suffice with standing edge 31. For the sake of a symmetrical construction however, the structure is recommended which is shown clearly in Fig. 2, in which the profile takes a strictly symmetrical form and therefore has two standing edges 31, 32.

[0017] The fixation member can for instance be manufactured from a steel having sufficient strength and elastic quality. It consists of a modelled strip of this material. It will be apparent that use will generally be made of a minimum of two fixation members to fix the profile to a supporting construction.

[0018] As will be particularly apparent from Fig. 4, central part 2 has a recess 16 for receiving the head 15 of screw 14, 15.

[0019] Profile 1 further has two undercuts 17, 18 into which can be pushed components of the curtain or sunblind structure of the system. Profile 1 further possesses a number of inward directed protruding portions which serve similar purposes, but which are not relevant in the context of the invention.

[0020] Fig. 4 shows particularly clearly the form of fixation member 10. This member has on one side a protruding part 19 which can be useful in placing and removal of the profile. The protruding part can be moved upward as according to arrow 20, thereby decreasing and even completely releasing the clamping force of protrusion 11 relative to ribs 8 such that profile 1 can be readily displaced and removed.

[0021] Fig. 5 shows an alternative. The profile 1' shown herein has a form which partly corresponds to that of profile 1 of Fig. 4. The components in question are designated in Fig. 4 and Fig. 5 with the same reference numerals. These components, which have a corresponding function but have another form or position, are designated in Fig. 5 with the same reference numeral, which is however provided with an accent.

[0022] The difference between profiles 1' and 1 is that ribs 8' and 9' are directed toward and not away from each other, and that fixation member 10' comprises protrusions 11' and 12', the form of which is adapted to the placing and direction of ribs 8', 9'.

[0023] Fig. 6 shows profile 1 in the assembled situation, in which it is supported by two fixation strips 10, which are for instance fastened to the ceiling or the upper horizontal beam of a window frame by means of respective screws 14. The supporting construction in question is not shown in the drawings for the sake of clarity.

[0024] In the assembled situation the open ends of profile 1 are closed by means of respective covers 33, 34.

[0025] Protruding on the underside of profile 1 are suspension hooks 35 to which vertical slats can be clampingly connected so as to be suspended from rail 1. These suspension hooks/clips are movable along the profile by means of slides. The sliding displacement takes place along the free end zones 5, 6. The slides and hooks 35 extend through the gap 7.

Claims

1. Profile with a generally prismatic form, comprising a central part and two side parts which extend at least more or less in transverse direction relative thereto and the free end zones of which are directed toward each other while leaving clear a gap,
   characterized in that
   the central part has on its outside two ribs lying substantially in one common plane and oriented in opposing directions, which ribs serve for co-action with at least one resilient fixation member having two protrusions displaceable over the free ends of the ribs in hookable manner and/or while deforming elastically and subsequently co-acting therewith in clamping and/or hooking manner, which fixation member can be fastened to a supporting construction by means of fastening means.

2. Profile as claimed in claim 1,
   characterized in that
   the free end zone of each rib is situated above a recess present in the profile.

3. Profile as claimed in any of the foregoing claims,
   characterized by
   a recess situated on the upper side of the profile for receiving parts of fastening means, for instance the head of a screw or bolt extending through the or each fixation member.

4. Profile as claimed in any of the foregoing claims,
   characterized in that
   the profile has on at least one side a standing edge which extends at least roughly in transverse direction relative to the ribs and which after fastening of the profile to a supporting construction conceals the or each fixation member and any fastening means which may be present.

5. Profile as claimed in any of the foregoing claims,
characterized in that
the profile is manufactured by extrusion.

6. Profile as claimed in any of the foregoing claims,
characterized in that
the profile is manufactured from aluminium or a plastic.

7. Combination of a profile as claimed in any of the foregoing claims and a resilient fixation member having two protrusions displaceable over the free ends of the ribs in hookable manner and/or while deforming elastically and subsequently co-acting therewith in clamping and/or hooking manner.

8. Clip adapted for co-action with a profile as claimed in any of the claims 1-6, comprising two protrusions displaceable over the free ends of the ribs in hookable manner and/or while deforming elastically and subsequently co-acting therewith in clamping and/or hooking manner.

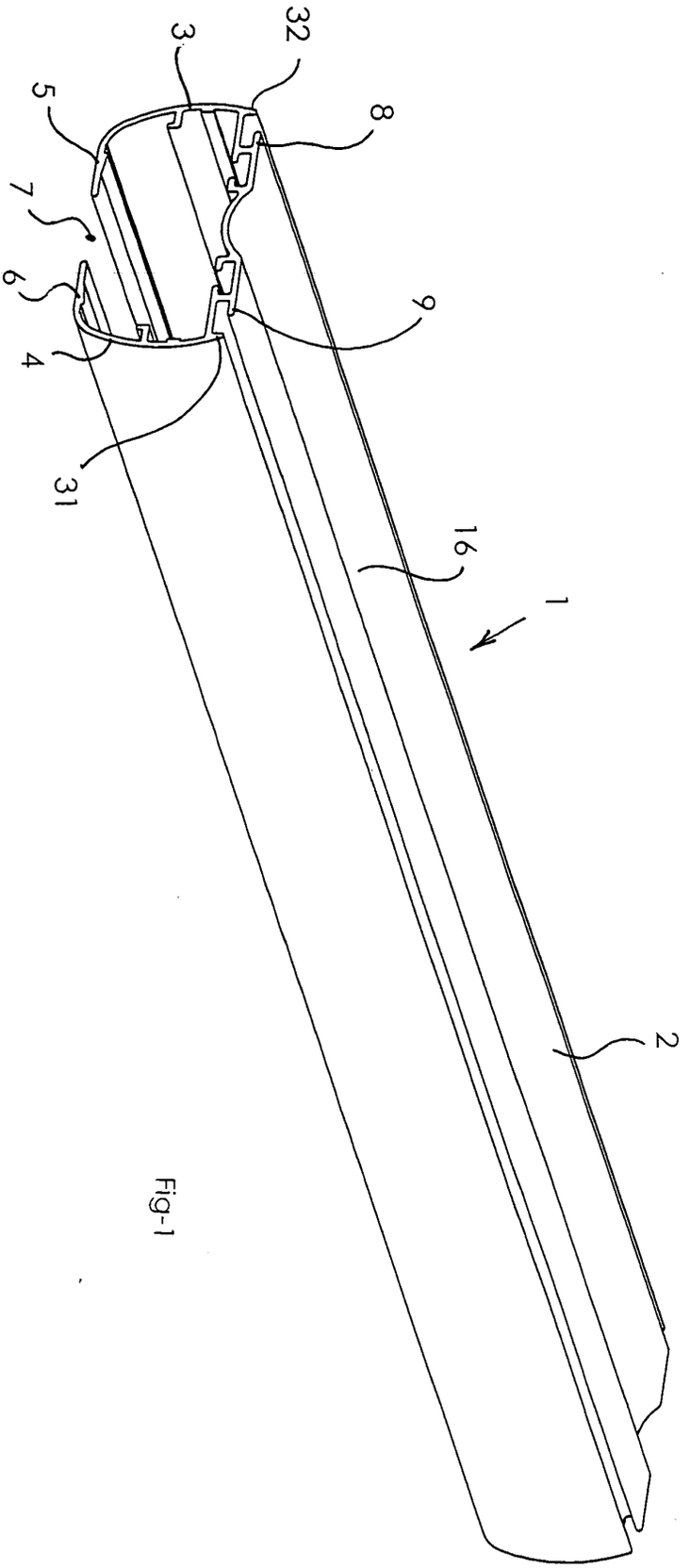


Fig-1

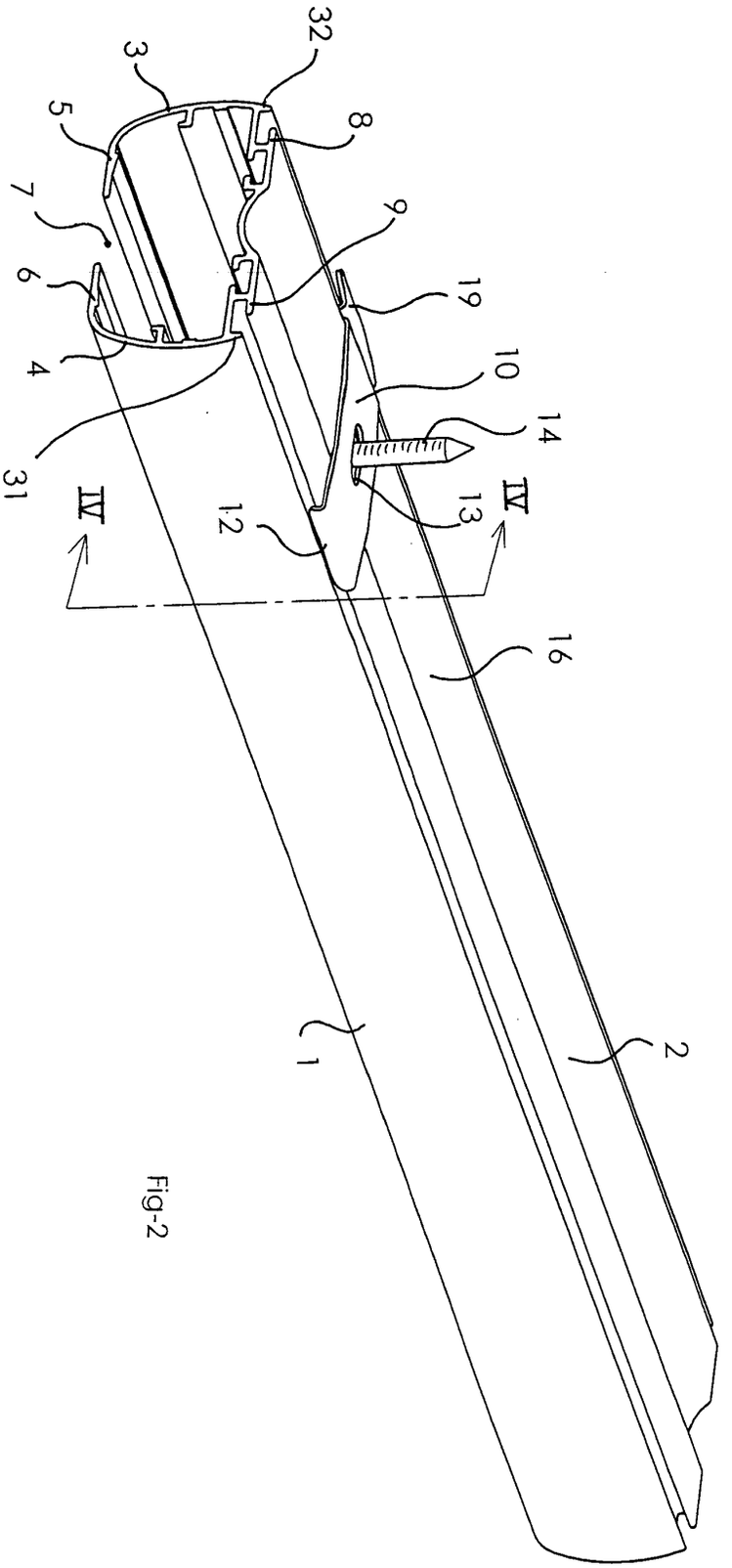


Fig-2

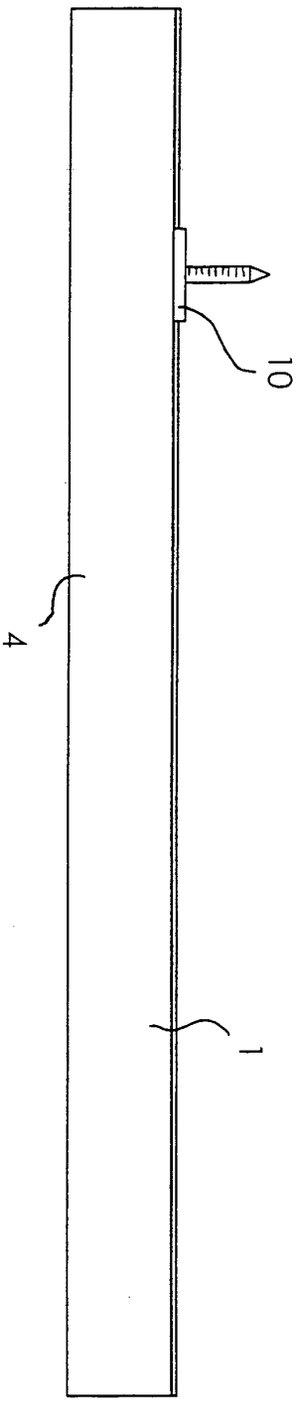
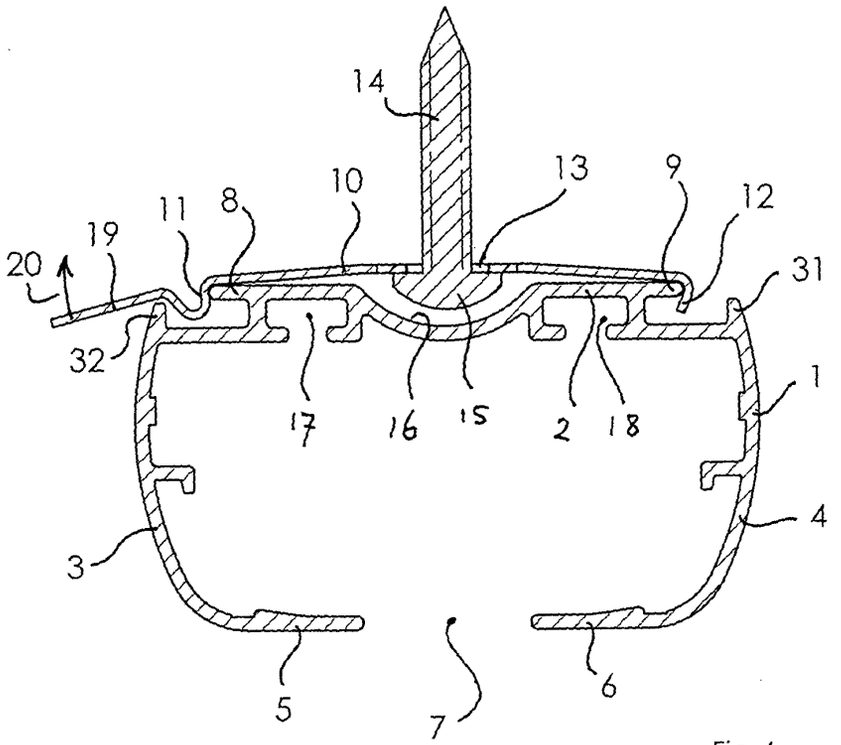


Fig-3


14
10
13
9
12
11
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31
32
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16
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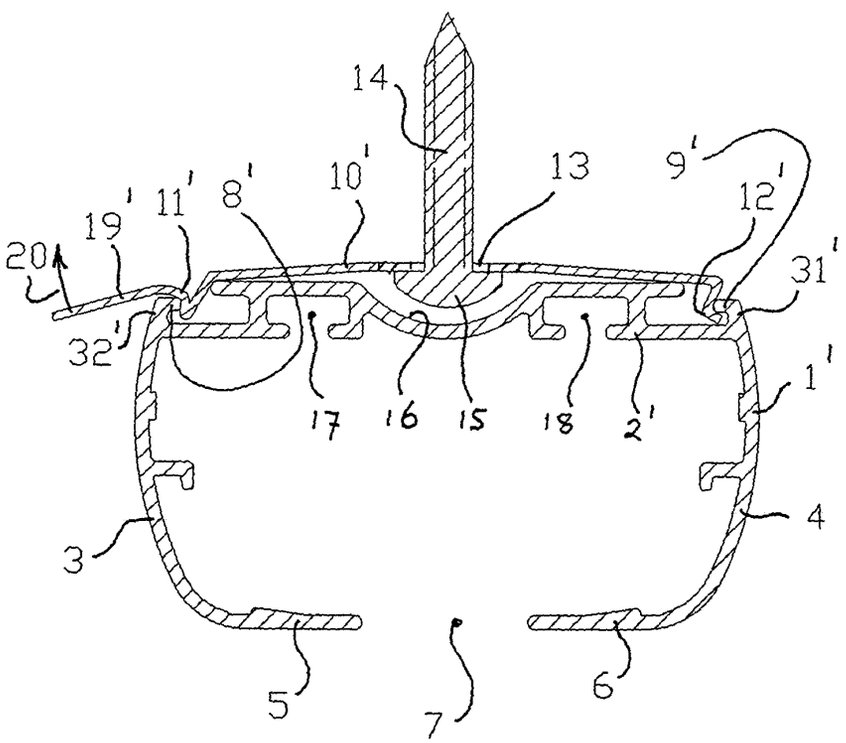
2
18
4
3
5
6
7

Fig-4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10'
13
9'
12'
11'
8'
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31'
32'
1'
17
16
15
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Fig-5

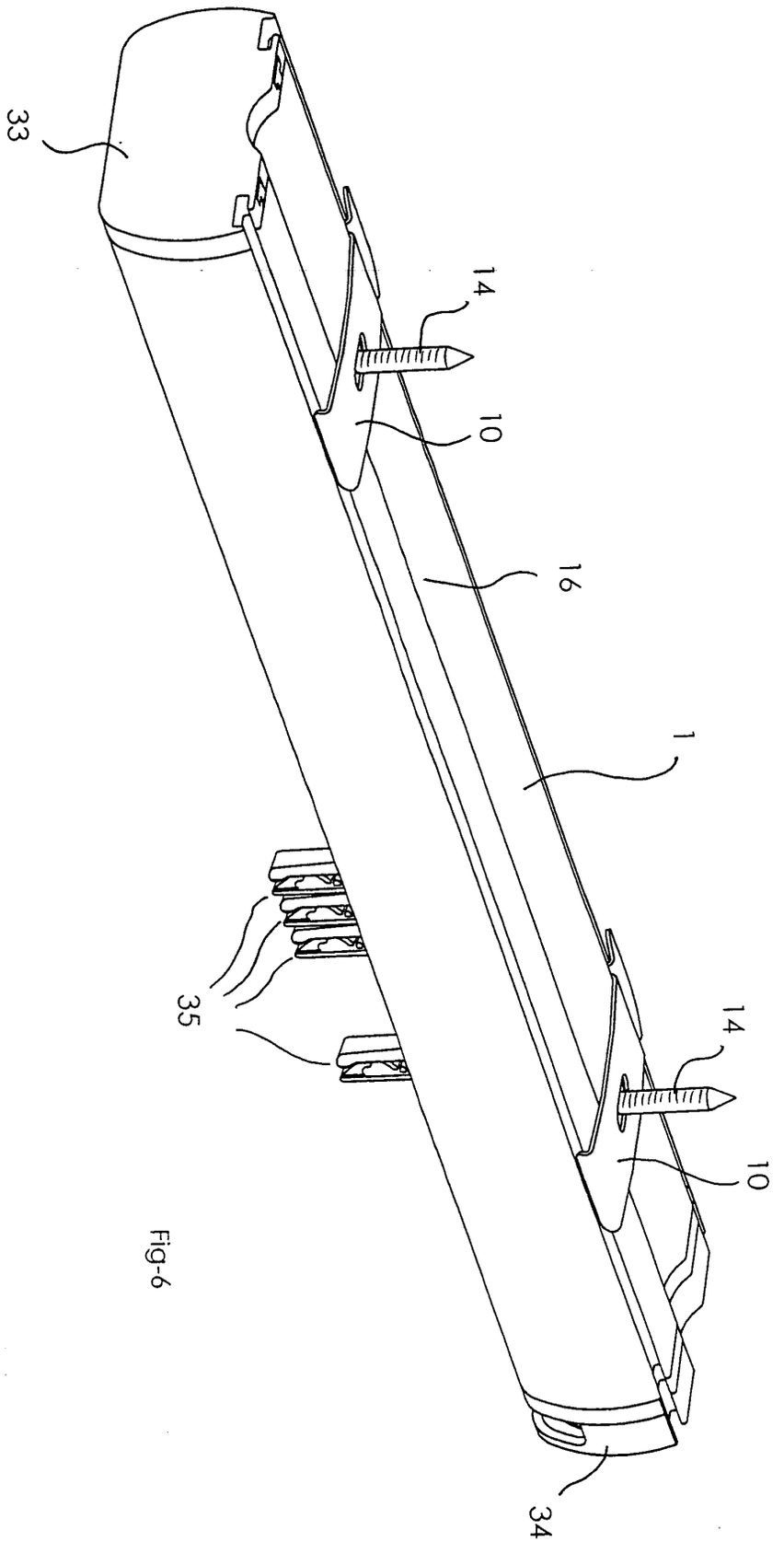

Fig-6

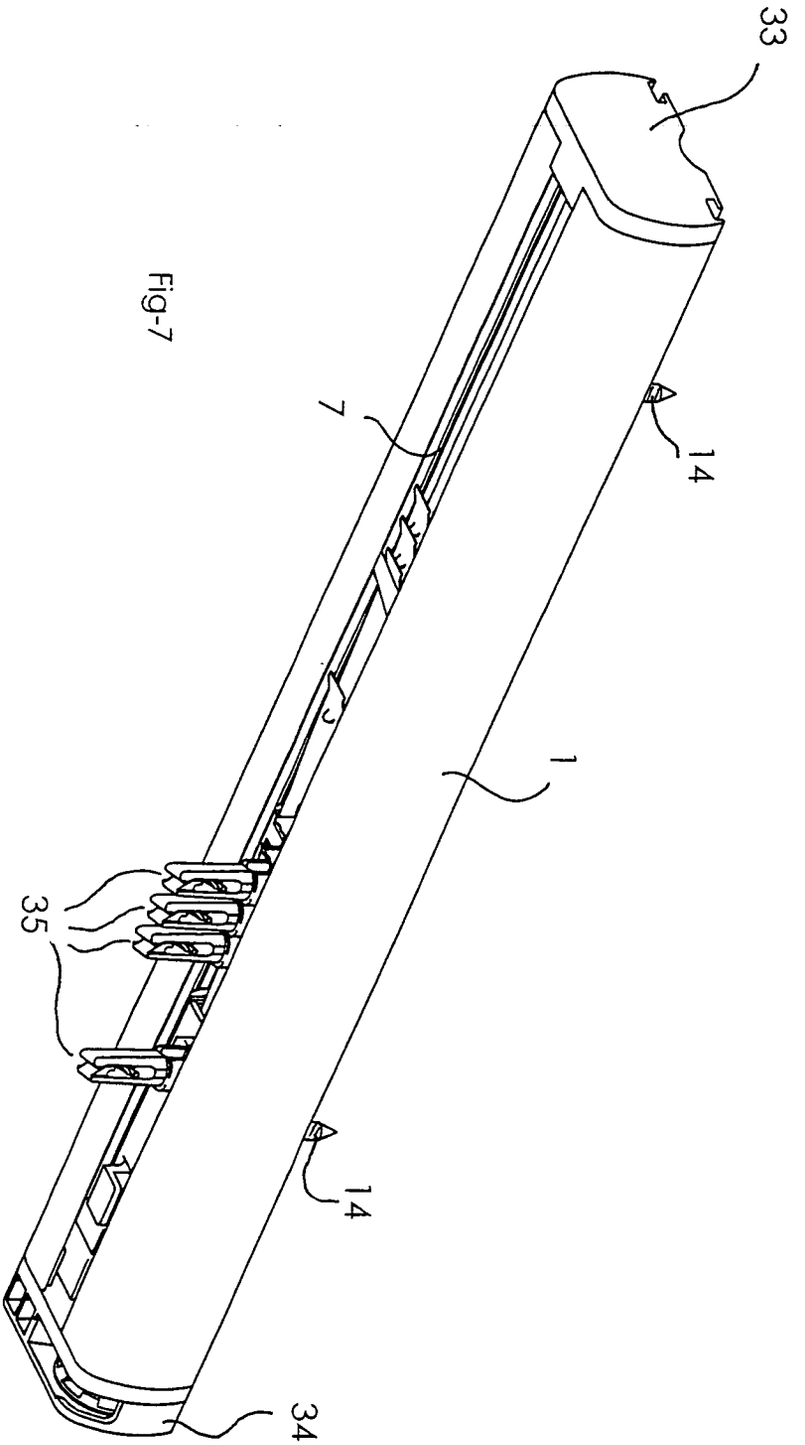

Fig-7