

[54] WATCH CASE
 [75] Inventor: **Gérald Genta**, Geneva, Switzerland
 [73] Assignee: **Societe Anonyme de la Manufacture d'Horlogerie Audemars, Piquet & Co.**, Le Brassus, Switzerland
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Primary Examiner—George H. Miller, Jr.
 Attorney—Robert E. Burns et al.

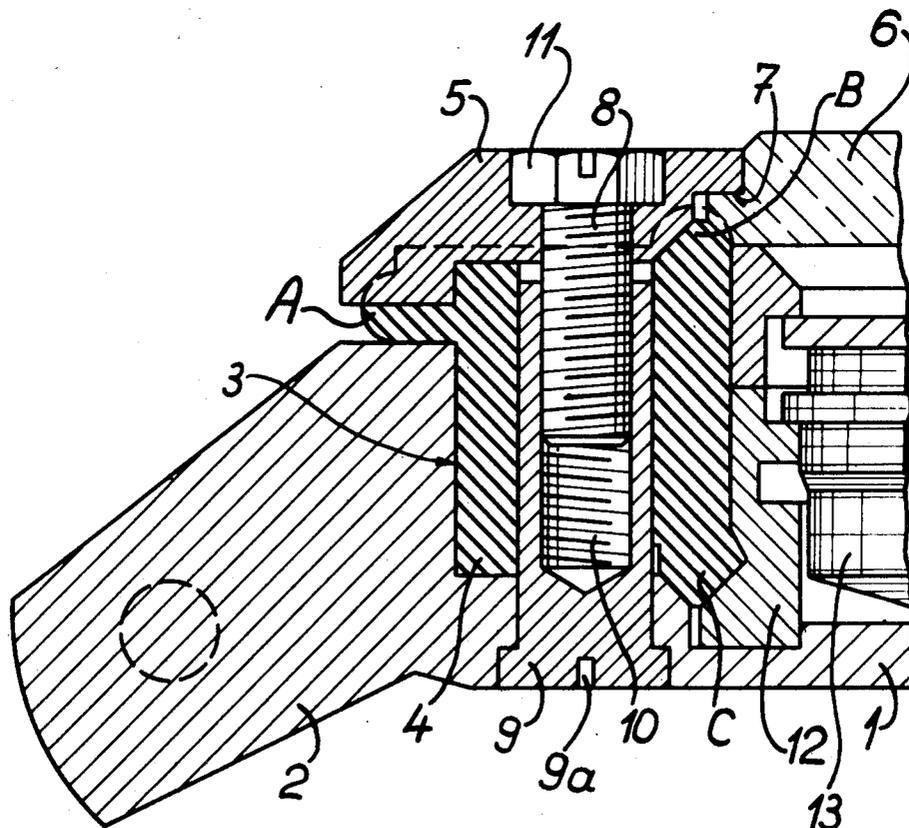
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 [58] Field of Search **58/88 C, 90 R**

[57] **ABSTRACT**

A fluid-tight watch case comprises a back casing and a bezel including a glass connected by screws, a fluid-tight packing interposed between the back casing, bezel and glass, and a frame for supporting a watch movement. Said screws each have a head countersunk in the bezel and are screwed into a rod having a tapped bore, each rod having means for effecting rotation thereof. Each screw and rod passes through and is embedded in the fluid-tight packing and ensures fluid-tightness between the glass and the bezel, between the back casing and the bezel and between the back casing and the movement frame.

[56] **References Cited**
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1 Claim, 3 Drawing Figures



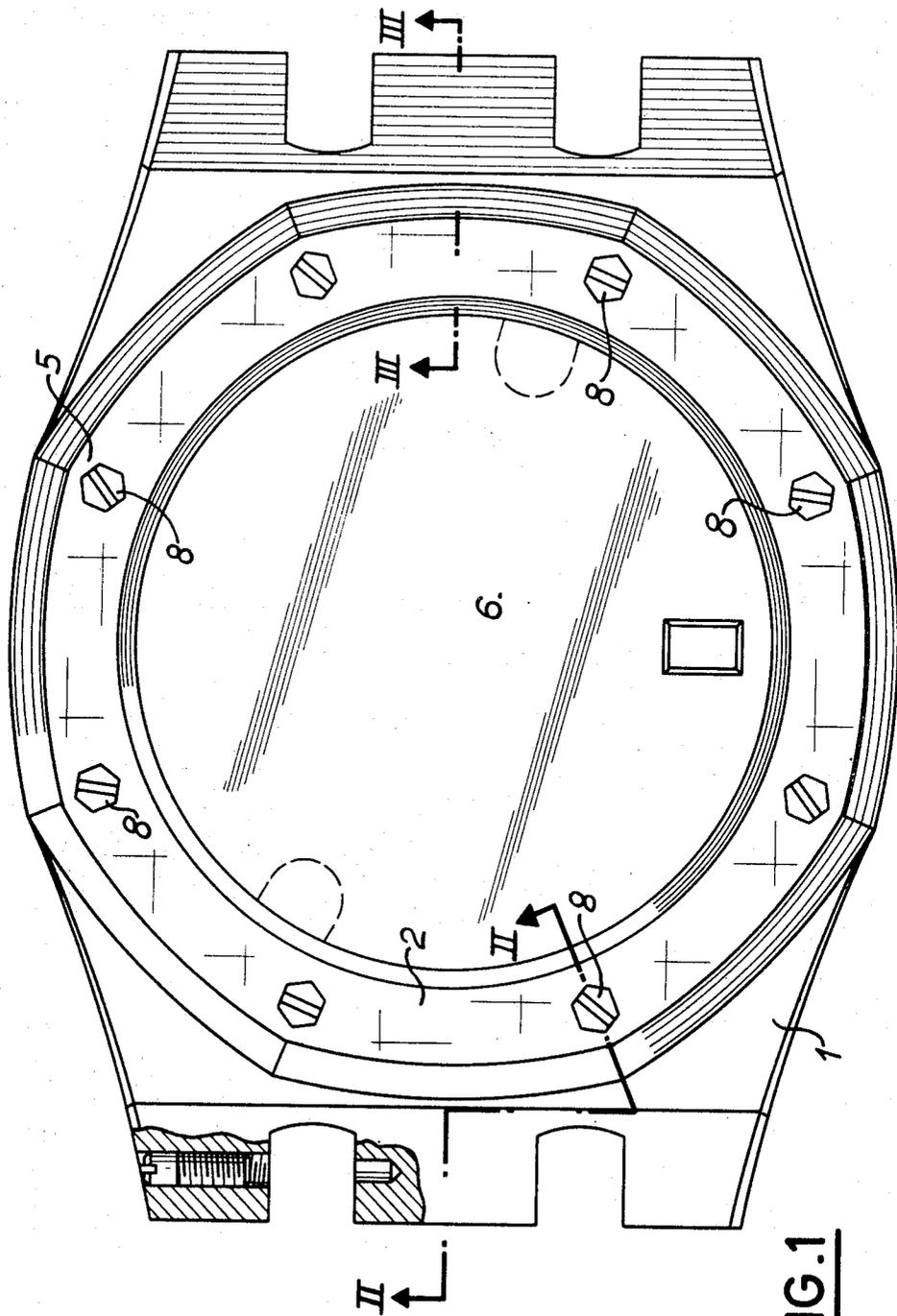


FIG. 1

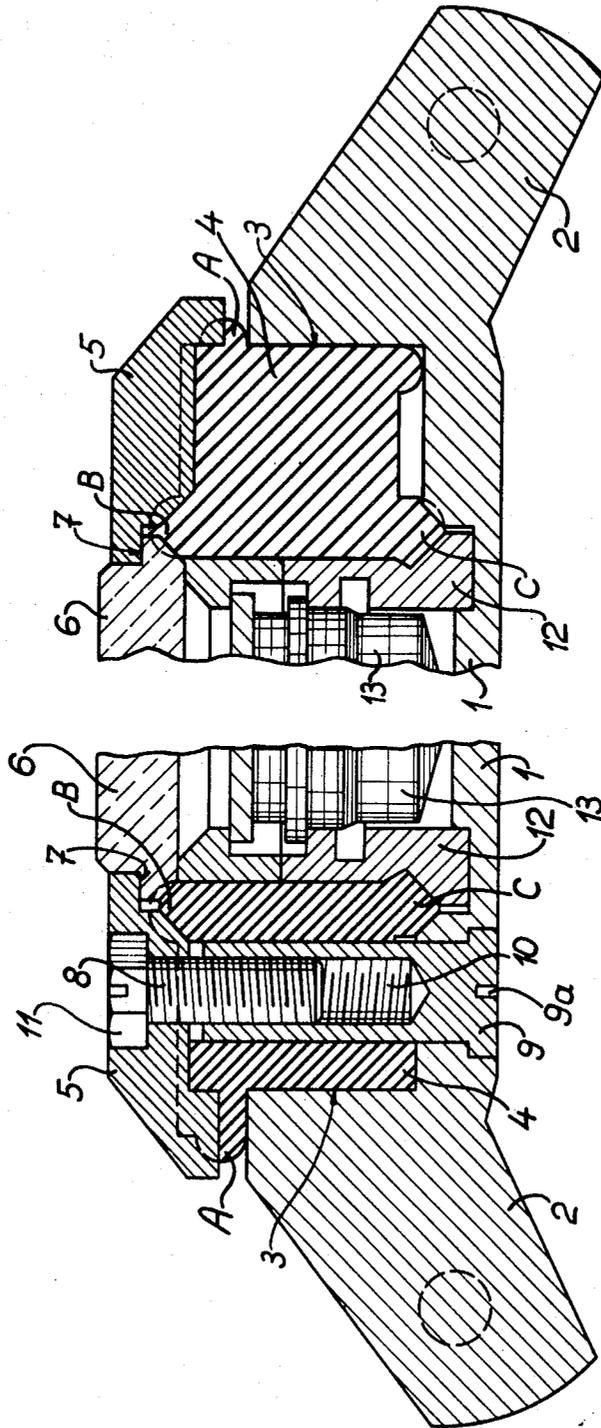


FIG. 2

FIG. 3

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WATCH CASE

This invention relates to watch cases.

It is an object of the present invention to provide a fluid-tight watch case of particularly simple and adequate construction and of aesthetic appearance.

This fluid-tight watch case has a back casing and a bezel including a glass joined together by screws, a fluid-tight packing interposed between this back casing, bezel and glass and a frame intended to support the movement of the watch.

Numerous constructions of this type are known. However, in known constructions, the back casing directly compresses a thin packing of general toric shape. The drawback of these constructions is that all parts of the watch outside at this joint, and in particular between the bezel and the back casing, may be filled with water, which, in the course of time, may oxidise these parts.

The main object of the watch case according to the invention is to ensure complete fluidtightness of all the parts of the watch case, the other objects being a new aesthetic shape and particularly easy assembly.

This fluid-tight watch case is characterised by the fact that the screws each have a head countersunk in the bezel and that each is screwed into a rod with a tapped bore, this rod comprising means for effecting its rotation and each screw and rod being embedded in the fluid-tight packing which ensures fluid-tightness between the glass and the bezel between the back casing and the bezel and between the back casing and the movement frame.

An embodiment of the present invention will now be described, by way of example, with reference to the accompanying drawings, in which:

FIG. 1 is a plan view of a watch case;

FIG. 2 is a cross-section taken along the line II—II of FIG. 1; and

FIG. 3 is a cross-section taken along line III—III of FIG. 1.

The watch-case shown in the drawing has a back casing 1 provided with lugs or loops 2 for the attachment of a strap or bracelet. This back casing 1 includes an annular bearing surface 3 for a fluid-tight packing 4.

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This packing 4 when in a non-compressed state has a generally square-shaped cross-section with a deformable projection at each corner, as indicated in broken lines in FIGS. 2 and 3.

This watch case also has a bezel 5 which mounts a glass 6, made preferably of a hard inorganic material such as hardened glass or corundum. This mounting is ensured by a ledge 7 in the glass 6 co-operating with the edge of the bezel 5.

Rods 9 with tapped bores 10 threadably receiving screws 8 connect the bezel 5 to the back casing 1 and ensure compression of the fluid-tight packing 4. The screws 8 and 9 pass through and are embedded in the packing 4. The screws 8 have a non-circular head 11, embedded in the bezel 5; they are, for example, hexagonal so as not to rotate when the rods 9 are screwed thereon. In order to permit rotation of the rods 9, they are provided with a slot 9a to receive a screwdriver. For the same purpose, any other known means may be provided in the head of the rod 9 to permit its rotation (Imbus or Philips slots for example).

The fluid-tight packing 4 ensures that the case is completely fluid-tight, since it acts between the bezel 5 and the casing back 1 at A, between the bezel 5 and the glass 6 at B and between the casing back 1 and a casing ring 12 for a watch movement 13 at C.

The watch case according to the invention can be easily constructed, is effective even at high pressures and has an aesthetic appearance.

What is claimed is:

1. A fluid-tight watch case comprising a back casing and a bezel including a glass connected by screws, a fluid-tight packing interposed between the back casing, bezel and glass, and a frame for supporting a watch movement, said screws each having a head countersunk in the bezel and being screwed into a rod having a tapped bore, each rod having means for effecting rotation thereof, and each screw and rod passing through and being embedded in the fluid-tight packing, said fluid-tight packing forming means for ensuring fluid-tightness between the glass and the bezel, between the back casing and the bezel and between the back casing and the movement frame.

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