

WATCH WITH INTERCHANGEABLE ELEMENTS

The present invention relates to a watch with interchangeable elements.

5 Such watches have been known for a long time, they are generally comprised of three elements: a case comprising a watch mechanism, the hands and the dial, a bezel which can be called an assembly cover, and a bracelet. Such a watch is for example described in FR 2 722 309.

10 These watches are of interest by being able to be transformed by the user by changing certain of the elements which comprise them such that they have a new appearance, for example to match clothing. The color or the material of the bracelet as desired can be changed, and/or the appearance of
15 the dial and the hands and/or the decoration of the bezel. This type of watch has found acceptance in the field of deluxe jewelry in which they are presented with a richly decorated bezel (with gold, precious stones, ...), the changing of the elements that can be carried out permitting having several
20 watches of different appearance without having to change the most expensive part of the watch, which is the bezel.

 The present invention seeks to provide a watch with interchangeable elements as described in the patent mentioned above, whose possible aesthetic appearance and modifications
25 are improved.

To this end, the invention relates to a watch with interchangeable elements comprising a case, enclosing the mechanism, the hands and the dial, a bracelet and a bezel so shaped as to permit the emplacement and snapping in of the case, such that said case, bezel and bracelet are held together by the emplacement of the case in the bezel, characterized in that it comprises at least one intermediate member in the form of a hook adapted to be mounted removably on the one hand on one end of said bracelet by threading one of its ends into an opening of said bracelet and on the other hand on the bezel by threading in lugs which it carries in recesses of said bezel, said intermediate member being secured to the bezel during emplacement of the case.

The watch according to the invention is further noteworthy in that:

- the intermediate member is of overall U shape and carries the lugs adjacent the end of one of the legs of the U,
- the intermediate member is a single piece,
- the intermediate member is of two pieces,
- the legs of the U of the intermediate member of two portions are constituted by two movable portions rotatable relative to each other about an axis,
- the first portion is hollowed out on its two longitudinal sides so as to be less wide at its end connected

to the rotation axle, whilst the second portion carries extensions adapted to be positioned in the hollows of the first portion when the intermediate member is closed,

- the intermediate member of two parts, comprises closure
5 means,

- the closure means of the intermediate part of two portions are constituted on the one hand by elements slidably mounted in cylindrical recesses in the end of the first portion and pressed back toward the exterior, on each side of
10 said end, by resilient means, and, on the other hand, by grooves formed in extensions of the second portion,

- the ends of the watch bracelet have a notch closed by a pin.

The invention will be better understood from the
15 description which follows, given by way of non-limiting example, with reference to the accompanying drawings, in which:

- Figure 1 is a perspective view of a watch case,
- Figure 2 is a top plan view of a bezel,
- 20 - Figure 3 is a side view of the bezel of Figure 2,
- Figure 4 is a perspective view of the bezel provided with the intermediate member, one in a single piece and the other in two portions,

- Figure 5 is a perspective view of an intermediate single piece,

- Figure 6 is a perspective view of an intermediate piece in two portions in the open position,

5 - Figure 7 is a schematic view from above of one end of the bracelet,

- Figure 8 is a side view of a watch according to the invention provided with two intermediate single pieces and a bracelet with two blades,

10 - Figure 9 is a side view of a watch according to the invention provided with a one-piece intermediate member and an intermediate member in two portions and a bracelet with a single blade.

Figure 1 shows an embodiment of the watch case 1 adapted
15 to be used in a watch according to the invention. As already know from the earlier document FR 2 722 309, this case 1 comprises a recess 11 for the watch movement, a crystal 10 protecting a dial and hands not shown in the drawing, a setting stem 12 and means 13 adapted to hold the case 1 in the
20 bezel 2 by snapping in. In the embodiment shown in the drawing, the snap-in means 13 are constituted by cylindrical pins 13 disposed in openings of the case 1 and permanently urged outwardly of said case by resilient means not shown in the drawing.

The bezel 2 comprises two lateral walls 20 and two transverse walls 21 between which are disposed the case 1. The internal surfaces of said walls 20, 21 are shaped so as to constitute a recess 201 for the case whose walls have concave
5 shapes adapted to the shapes of said case 1. Grooves 22 provided in the longitudinal walls 20 are adapted to permit the mounting by snapping in of the case 1 in the bezel 2 by receiving the snap-in means 13 of said case 1.

The bezel 2 also has hollowed out portions 24 provided in
10 the transverse walls 21 and recesses 23.

In known watches with interchangeable elements, said hollows 24 serve to position the bracelet 4 and the recesses 23 serve to emplace the hooking means carried by the bracelet. These recesses 23 are shaped such that after having positioned
15 the hooking means of the bracelet in these recesses, the latter are pressed outwardly of the recess 201 adapted for the reception of the case 1 during emplacement of said case 1 and blocked in said recesses 23 to secure the bracelet 4 to the bezel 2 by preventing the removal of said hooking means from
20 the bracelet.

In earlier constructions, the hooking means of the bracelet were comprised by rods or pins introduced into a bend formed at the end of the bracelet.

So as to improve the appearance of the known watch with interchangeable elements, the invention provides adding to it intermediate pieces or attachments 3, 30 which can, like the bezel, be richly decorated. These intermediate pieces are of hook shape and are adapted to be mounted removably both on one end of the bracelet and on the bezel to which they are secured by emplacement of the case. Hooking means adapted to be positioned in the recesses 23 of the bezel and constituted by lugs 31 are disposed on opposite sides of said intermediate members 3, 30.

Two types of intermediate members are provided, a single piece intermediate member 3 and an intermediate member 30 in two portions.

As is seen in Figure 5, the single piece intermediate member 3 is of overall U shape and carries lugs 31 adjacent the end of one of the legs of the U.

The intermediate member 30 in two portions shown in Figure 6 has the same shape as the single piece intermediate member 3 when it is closed position, but the legs of the U are constituted by two portions 32, 33 movable in rotation relative to each other about an axle 34.

So as to permit the emplacement of the closure means of the intermediate member 30 of two portions 32, 33, the first portion 32 is hollowed out along its two longitudinal sides so

as to be less wide at its end 36 connected to the rotation
axle 34 whilst the second portion 33 carries extensions 35
adapted to position it in the hollows of the first portion 32
when the intermediate member 30 is closed. The closure means
5 of the intermediate member 30 of two portions are constituted
on the one hand by elements such as pins or cylinders not
shown in the drawing, slidably mounted in cylindrical recesses
37 of the end 36 of the first portion 32 and pressed
outwardly, on each side of said end 36, by resilient means not
10 shown in the drawing, and, on the other hand, by grooves 38
formed in the extensions 35 of the second portion 33.

One end of the watch bracelet 4 is schematically shown in
Figure 7. This end has a notch 41 closed by a pin 40. The
pin 40 can be constituted by the material forming the bracelet
15 when the latter is fairly solid, or by a metallic rod
introduced into a bend not shown in the drawing, formed at the
end of said bracelet 4. The opening 42 formed between the
notch 41 and the pin 40 is of a size such that it can receive
the portion of the intermediate members 3, 30 constituting the
20 bottom of the U of these latter.

The bracelet 4 could be comprised of two blades 43 each
carrying one hollowed end and a closure means such as a buckle
44 with a tongue and holes 45 ensuring hooking of said two

blades 43, or be a single blade 4 whose two ends are hollowed to have openings 42.

The user has at least one case 1, a bezel 2, two intermediate members 3 and/or 30 and a bracelet 4.

5 If the bracelet 4 is constituted by two blades 43, there can be used if desired single-piece intermediate members 3 or intermediate members 30 of two portions, whereas if the bracelet has a single blade, it can use at least one intermediate member in two portions 30.

10 If the user uses single-piece intermediate members as shown in Figure 8, he first of all mounts an intermediate member on each blade 43 of the bracelet 4 by threading one of its ends, preferably the end of the branch that does not have the lugs 31 of said member, into the opening 42 and by sliding
15 the blade 43 of the bracelet 4 until the pin 40 is disposed in the bottom of the U of the intermediate member 3.

He then slides the intermediate members 3 into the hollows 24 of the bezel 2 and threads the lugs 31 of said intermediate members into the recesses 23 of said bezel 2.

20 Finally, he completes mounting the watch by introducing the case 1 into the recess 201 of the bezel 2 from the lower surface of the latter until the snap-in means 13 are in the grooves 22.

This having been done, the lugs 31 of the intermediate members are blocked in the recesses 23 and cannot leave so long as the case 1 is not withdrawn. This arrangement permits securing the bracelet 4 to the bezel 2 securely because when
5 the watch is carried by the user, the case is closed between the bezel and the wrist of the user, which avoids any risk of loss of said case and hence untimely disassembly of the watch.

When the user uses an intermediate member 30 in two portions as shown in Figure 9, whether with a bracelet with a
10 single blade or two blades, he can carry out mounting in the same manner as above by closing said intermediate member thanks to the closure means 37, 38, then opening the intermediate member by pulling on the portion 33 so as to bring it to the position of Figure 4 or of Figure 9 so as to
15 withdraw or position the bracelet during threading of the watch. The intermediate member 30 in two portions thus serves as a closure means for the bracelet.

It is also possible to position the intermediate member or members 30 in two portions in the bezel and to block them
20 in position by snapping in the case without having emplaced the bracelet, the latter being then hooked by opening said intermediate member or members 30.

For disassembling the watch for changing one or the other of the interchangeable elements, it suffices, after having

removed the watch from the wrist, to push on the crystal 10 of the case 1 from the external surface of the upper wall of the bezel 2 to withdraw said case 1 from the bezel 2 and to permit withdrawal of the lugs 31 from the grooves 33 and withdrawal
5 of the intermediate members from the openings 42 of the bracelet.

As seen in the drawing, the side walls 20 of the bezel 2 are prolonged beyond the transverse walls 21 so as to improve the appearance of the watch.

10 As will be understood, the watch with interchangeable elements according to the present invention, of which each component is removably mounted and easily disassembleable from the neighboring components, permits the user to have a greater variety of embodiments than known watches.

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CLAIMS



1. - Watch with interchangeable elements comprising a case (1), enclosing the mechanism, the hands and the dial, a
5 bracelet (4) and a bezel (2) shaped to permit the emplacement
by snapping in of the case (1), such that said case (1), bezel
(2) and bracelet (4) are held together by emplacement of the
case (1) in the bezel (2), characterized in that it comprises
at least one intermediate member (3, 30) in the form of a hook
10 adapted to be mounted removably on the one hand on one end of
said bracelet (4) by threading one of its ends into an opening
(42) of said bracelet and on the other hand on the bezel (2)
by threading lugs (31) which it carries into recesses (23) of
said bezel, said intermediate member (30, 31) being secured to
15 the bezel (2) during emplacement of the case (1).

2. - Watch according to claim 1, characterized in that
the intermediate member (3, 30) is of overall U shape and
carries the lugs (31) adjacent the end of one of the legs of
20 the U.

3. - Watch according to claim 1 or claim 2, characterized
in that the intermediate member (3) is of one piece.



4. - Watch according to claim 1 or claim 2, characterized in that the intermediate member (30) is of two portions.

5. - Watch according to claim 4, characterized in that
5 the legs of the U of the intermediate member (30) in two portions are constituted by two portions (32, 33) movable in rotation relative to each other about an axle (34).

6. - Watch according to claim 5, characterized in that
10 the first portion (32) is hollowed out on its two longitudinal sides so as to be less wide at its end (36) connected to the rotation axle (34) whilst the second portion (33) carries extensions (35) adapted to position it in the hollows of the first portion (32) when the intermediate member (30) is
15 closed.

7. - Watch according to any one of claims 4 to 6, characterized in that the intermediate member (30) in two portions comprises closure means.

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8. - Watch according to claim 7, characterized in that the closure means of the intermediate member (30) of two portions are constituted on the one hand by elements slidably mounted in cylindrical recesses (37) in the end (36) of the

first portion (32) and pressed outwardly, on each side of said end (36), by resilient means, and, on the other hand by grooves (38) formed in the extensions (35) of the second portion (33).

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9. - Watch according to any one of the preceding claims, characterized in that the ends of the watch bracelet (4) have a notch (41) closed by a pin (40).

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