

The present invention relates to a wrist-watch having a watch-case and a decoration device according to the preamble of claim 1.

Watch-cases are known, of which the backrest can be decorated by exchangeable rings having different colours which are releaseably mounted in a support in mentioned backrest and which are arrested on this backrest by a simple snapping.

These decoration devices allow indeed a changing of a part of the colour of the backrest, are, however, bound to the shape of the ring which must fit itself into the support foreseen on the backrest. Additionally, the ring must have very tight tolerances in order to lend itself for a simple mounting in the support.

It also has been proposed to modify the appearance and shape of watch-cases by means of exchangeable rings which can be mounted from below in a releasable state onto the watch-case.

It also has been proposed to hold the ring arrested by means of an arm band which extends parallel to the bottom of the watch and in corresponding guides. Such a ring holding device is, however, only possible with this specific type of the mounting of the arm band, whereby the arm band must be of one single piece and extend practically along under the watch-case, such that its arm band mount projects strongly over the arm band and thus impairs the wrist of the carrier of the watch.

Regarding this reference is made to the statements in GB-A-2 200 032.

In the CH-A-371 055 a technical novelty for the mounting of a clock mechanism is described, with the object to improve the suspension and impact resistance of the clock mechanism.

A wrist-watch with a watch-case and a decoration device according to the preamble of claim 1 is known by the document CH-A-332 892.

A wrist-watch is described in the CH-A-654 167 at which a decoration ring is mounted to a watch-case from below. Mountings for the arm band are placed at the watch-case. The decoration ring is held by the bottom of the watch-case and is not manually exchangeable.

It is an object of the present invention to provide a wrist-watch with a watch-case and a decoration device in which the decoration device is independent from the arm band and at which there is no risk that the decoration ring can be lost when it is carried along.

This wrist-watch shall not only allow an exchanging of the colour of the watch but also provide in a same way the possibility to change its appearance and shape in a simple, efficient and economical manner.

This object is reached at a wrist-watch of the above mentioned kind by the characterizing features of claim 1.

An advantage of this wrist-watch consists in that the exchangeable ring 3 can have a plurality of different shapes. Only the inner diameter of the ring 3 must respect the dimension of the watch-case 1 such to accommodate its contour and to make an inserting of same possible.

When proceeding for instance from a round watch case 1 it is possible to bring its appearance arbitrarily and according to the option of the user into a square, rectangular, oval, etc. shape.

A further advantage consists in that the ring 3 is mounted onto the outside of the watch-case 1.

The tolerances for the manufacturing are, thereby, much less severe, and this allows among others the use of various materials which would not be possible with for instance a threaded mounting of the ring 3. It is specifically possible to use all fragil materials, such as ceramics, glass, granite, precious stones, semi-precious stones, noble metals, such as gold, etc.

Apart, therefrom, the ring 3 is not only held by the devices 5a, 5b or 7, 8, 9, 14 for the locking, but in the same way also during the carrying by the arm of the bearer himself because it is mounted from the bottom part of the watch. In this manner there exists no risk of loosing the ring 3 during the wearing thereof, independently from how the arm band is mounted to the casing, also called watch-case.

Possible embodiments of the present invention are illustrated in the figures.

Figure 1 illustrates a prospective view of a first embodiment of a ring 3, specifically of a decorative ring, during the mounting operation onto the watch-case 1.

Figure 2 is a schematic partial section of Figure 1 along the arm axis from 12 o'clock to 6 o'clock, whereby the arm band 6 is fixed onto the mounts 2a, 2b of the watch-case 1.

Figures 3 to 5 illustrate schematically three possible embodiments of the ring 3 in finished watches.

Figure 6 illustrates as example a partial section of a watch of which the ring 3 is held by the bolting device.

At the example illustrated in Figure 1 the watch-case 1 comprises a circular clock mechanism without crown, and is equipped with two mounts 2a, 2b for the arm band 6. A decorative ring 3 is foreseen in order to be mounted in a releasable manner from below into the watch-case 1 in direction of the arrows.

The inner diameter of the ring 3 corresponds, thereby, about to the outer diameter of the watch-case 1. The ring 3 is equipped with two recesses 4a, 4b located diametrically opposite each other and which fit into the mounts 2a, 2b of the watch case 1. The thickness d_1 of the ring 3 corresponds more or less precisely to the thickness d_2 of the watch-case 1, such that the watch-case 1 is inserted practically completely and flush into the ring 3.

In the schematic partial section illustrated in figure 2 it is possible to use the devices for arresting the ring 3 on the watch-case 1, illustrated in this example by two pivotable locking bars 5a, 5b mounted at the bottom to the watch-case 1, which are located diametrically opposite of each other.

These locking bars 5a, 5b can have a rectangular, elongate, half circular or full circular shape. Their arresting and pivotal point on the watch-case 1 is excentric, such that they do not exceed the diameter of the watch-case 1 in the mounted position of the ring 3, but exceed in

the arrested position of the ring 3 on the watch-case 1 mentioned diameter in order to prevent a displacing of the ring 3.

With the object not to disturb the bearer, the locking bars 5a, 5b can be placed in recesses in the bottom side of the watch-case 1.

The decorative ring 3 can have a plurality of shapes which allows a arbitrary changing of the appearance of the watch.

In figure 3 a ring 10 having the shape of leaves of a blossom is depicted.

In figure 4 the ring was provided with roman numerals for the indication of the hours.

In figure 5 the watch-case 1 is mounted on a metal arm band, the ring 13 has a shape which completes the geometry of the arm band 12.

There is no limit regarding the shaping of the ring 3. The only condition is that its inner diameter corresponds to the outer diameter of the watch-case 1.

Therefore, it is also possible to foresee rings 3 having any outer shape, for instance square, rectangular, oval, in accordance with the magnitude of imagination of the creator.

Specifically in case of childrens watches application the ring 3 can have the shape of persons, living patterns or arbitrary animals, etc.

The material from which this ring 3 is produced can be arbitrary, and is preferably selected from metals, specifically noble metals, stones, specifically precious stones,

granite, glass, ceramics, plastics, wood, leather, a weaving placed onto a metal surface, enamel, etc.

Proceeding from a round watch it is in this way possible to vary the appearance to infinity in order to meet a present taste of fashion or the garments or other attires of the bearer.

PATENT CLAIMS

1. Wrist-watch with a watch-case (1) and a decoration device, including an exchangeable decoration ring (3) which is mounted to said watch-case (1) in a manually detachable manner, whereby the inner diameter of said decoration ring (3) corresponds to the outer diameter of said watch-case (1), and whereby said watch-case (1) is at least partly encased in said decoration ring (3), and with devices for the mounting of the decoration ring (3) on the watch-case (1), whereby these devices for mounting include at least one displaceable, mutually coordinated element, mounted either in the watch-case (1) or in the decoration ring (3) and which hold(s) the respective other part(s), and whereby said watch-case (1) includes two mounts (2a, 2b) for the arm band (6),

characterized in that said exchangeable decoration ring (3) is mounted from below to said watch-case (1), further in that the thickness (d_1) of the decoration ring (3) corresponds to the thickness (d_2) of the watch-case (1), such that the watch-case (1) is inserted completely in the decoration ring (3), and in that the decoration ring (3) is equipped with two recesses (4a, 4b) located diametrically opposite of each other in order to allow the inserting of the mounts (2a, 2b) for the arm band (6).

2. Wrist-watch according to claim 1, characterized in that the mounting devices consist of pivotable latches located under the watch-case (1).

3. Wrist-watch according to claim 1, characterized in that said mutually coordinated element includes a moveable peg (7) which is connected to a spring (8) and is located



in a bore (9) and is located in the watch-case (1), and a recess (14) for the receipt of the peg (7) is located in the decoration ring (3).

4. Wrist-watch according to claim 3, characterized in that the peg (7) has the shape of a ball.

