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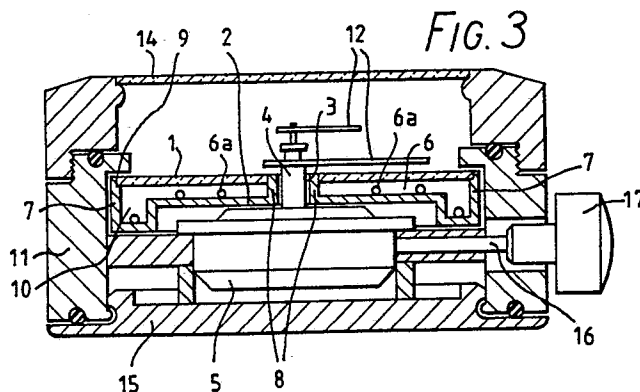
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A timepiece dial assembly and timepiece.

A timepiece dial assembly is provided suitable for a timepiece such as a wrist watch. The assembly includes a pair of spaced apart, superimposed glasses (1, 2) which are apertured intermediate their edges to provide a passage (3) through the superimposed glasses (1, 2) for a hand carrying motion shaft (4) of a timepiece movement (5) to project therethrough. The first or top glass (1) is transparent and the glasses (1, 2) are sealed together around their outer peripheries and sealed together around their inner peripheries defining the passage (3), to define between the glasses (1, 2) a sealed chamber (6) containing a fluid providing a decorative effect visible through the first or top glass (1). At least one of the glasses (1 or 2) carries numbers or marks (13) providing time indications.



A TIMEPIECE DIAL ASSEMBLY AND TIMEPIECE

This invention relates to a timepiece dial assembly suitable particularly, but not exclusively, for a watch and to a timepiece incorporating such a dial assembly.

According to the present invention there is provided a timepiece dial assembly including a pair of spaced apart, superimposed glasses which are apertured intermediate their edges to provide a passage through the superimposed glasses for a hand carrying motion shaft of a timepiece movement to project therethrough, and of which glasses the first or top glass is made of transparent material, said glasses being sealed together around their outer peripheries, and being sealed together around their inner peripheries defining said apertures and said passage to define between the glasses a sealed chamber containing a fluid providing a decorative effect visible through the first or top glass, and at least one of said glasses carrying numbers or marks providing time indications.

Advantageously the fluid is a liquid.

Conveniently the fluid contains movable objects and/or particles to provide or enhance the decorative effect.

Preferably the second or bottom glass is provided with an annular well adjacent to its outer periphery to provide a reservoir in said chamber for said fluid.

Advantageously the second or bottom glass has an outer upstanding peripheral wall for sealing with the first or top glass outer periphery and an upstanding inner peripheral wall for sealing with the first or top glass inner periphery.

Conveniently the upstanding outer and/or inner peripheral walls are recessed at their end edges to provide a seat or seats for the first or top glass.

For a better understanding of the present invention, and to show how the same may be carried in to effect, reference will now be made, by way of example, to the accompanying drawings, in which:

Figure 1 is a plan view from above of a timepiece dial assembly of the invention incorporated in a wrist watch,

Figure 2 is a side view of the wrist watch of Figure 1 taken in the direction B in Figure 1, and

Figure 3 is a transverse cross-section to an enlarged scale taken on the line A-A of Figure 1.

A timepiece dial assembly of the invention is shown in the accompanying drawings as embodied in a timepiece in the form of a wrist watch. However it is to be understood that such a timepiece dial assembly could be embodied in any other form of timepiece desired, such as a clock or pocket watch.

The timepiece dial assembly of the invention

includes a pair of spaced apart, superimposed, glasses made up of a first or top glass 1 made of transparent material and a second or bottom glass 2 which may or may not be made of transparent material. The glasses 1 and 2 are apertured intermediate their edges to provide a passage 3, as shown in Figure 3, through the superimposed glasses for a hand carrying motion shaft 4 of a timepiece movement 5 to project therethrough.

The glasses 1 and 2 are sealed together around their outer peripheries and sealed together around their inner peripheries defining the apertures and passage 3, to define between the glasses a sealed chamber 6 containing a fluid providing a decorative effect visible through the first or top glass. For sealing purposes the second or bottom glass 2 has an outer upstanding peripheral wall 7 for sealing with the outer periphery of the glass 1 and an upstanding peripheral wall 8 for sealing with the inner periphery of the glass 1. To aid the sealing effect the outer and or inner peripheral wall 7 and 8 are recessed at their end edges to provide a seat or seat or seats such as 9 for the glass 1.

The glass 2 is provided with an annular well 10 adjacent to its outer periphery and outer peripheral wall 7 to provide a reservoir in the chamber 6 for the fluid. This fluid preferably is a liquid which may or may not be decorative in its own right such as for example by being coloured or being made up of liquids which are partially miscible in one another and which thereby provide contrasting colour effects. Additionally and/or alternatively the liquid may contain a plurality of movable objects and/or particles 6a whose movement throughout the liquid provides or enhances the decorative effect which is visible to an onlooker through the transparent first or top glass 1.

In use such a timepiece dial assembly may be housed in a conventional watch case 11 such as shown in Figure 3. To provide time indications for the hands 12 the top glass 1 and/or the bottom glass 2 of the timepiece dial assembly may carry numbers or marks 13 providing such time indications. Preferably these numbers or marks 13 are provided on the top or outer surface of the glass 1 immediately underneath the hands 12 where they are visible through a transparent outer glass 14 of the timepiece.

As aforesaid the timepiece dial assembly of the invention is shown in operative association with a wrist watch and movement 5. This wrist watch may be assembled and formed in any convenient manner to afford access to the dial assembly. In the illustrated example the watch case 11 has a removable base plate 15 through which the movement 5

may be removed after removal of its winding or adjustment stem 16 and crown or button 17 allowing removal or replacement of the dial assembly through the base of the watch case 11. Such a watch case may also be provided with a wrist strap 18 of any convenient form. 5

In operation movement of the timepiece provided with the timepiece dial assembly of the invention causes the fluid and/or objects and/or particles 6a in the chamber 6 to move therein and provide a changing visual decorative effect for the user of the timepiece. 10

Claims 15

1. A timepiece dial assembly having a pair of superimposed, spaced apart glasses (1,2) which are apertured intermediate their edges to provide a passage (3) through the superimposed glasses for a hand carrying motion shaft (4) of a timepiece movement (5) to project therethrough, and of which glasses the first or top glass (1) is made of transparent material, said glasses being sealed together around their outer peripheries and being sealed together around their inner peripheries defining said apertures and said passage (3), to define between the glasses a sealed chamber (6) containing a fluid providing a decorative effect visible through the first or top glass (1), and at least one of said glasses (1) carrying numbers or marks (13) providing time indications. 20 25 30

2. An assembly according to Claim 1, in which the fluid is a liquid.

3. An assembly according to Claim 1 or Claim 2, in which the fluid contains movable objects and/or particles (6a) to provide or enhance the decorative effect. 35

4. An assembly according to any one of Claims 1 to 3, in which the bottom glass (2) is provided with an annular well (10) adjacent its outer periphery to provide a reservoir in said chamber (6) for said fluid. 40

5. An assembly according to any one of Claims 1 to 4, wherein the second or bottom glass (2) has an outer upstanding peripheral wall (7) for sealing with the first or top glass outer periphery and an upstanding inner peripheral wall (8) for sealing with the first or top glass inner periphery. 45

6. An assembly according to Claim 5, in which the upstanding outer and/or inner peripheral walls (7,8) are recessed at their end edges to provide a seat or seats (9) for the first or top glass (1). 50

7. A timepiece having a timepiece dial assembly according to any one of Claims 1 to 6. 55

