

Title (en)  
Illumination device for a dial with central symmetry

Title (de)  
Anzeigebeleuchtung eines Zifferblatt mit zentraler Symmetrie

Title (fr)  
Dispositif d'éclairage à symétrie centrale d'un cadran

Publication  
**EP 1643322 B1 20100818 (FR)**

Application  
**EP 04023172 A 20040929**

Priority  
EP 04023172 A 20040929

Abstract (en)  
[origin: EP1643322A1] Lighting device with central symmetry for a dial comprises information display(s); housing for receiving an energy source; and a light source. The dial is arranged in a case that is closed at its top part by a crystal delimited by an external face and by an internal face, and on its bottom part by a back cover delimiting with the dial. The thickness of the crystal decreases regularly from the center to the periphery. Lighting device with central symmetry for a dial comprises information display(s); housing (6) for receiving an energy source (7) that powers the display control mechanism (8); and a light source (15) located in the housing. The dial is arranged in a case that is closed at its top part by a crystal (1) delimited by an external face and by an internal face and on its bottom part by a back cover delimiting with the dial. The thickness of the crystal decreases regularly from the center to the periphery. A cylindrical light guide passes through the center of the dial. One end of the guide is opposite the light source and the opposite end is opposite a reflector with axial symmetry formed in a hollow in the center of the crystal for reorienting the rays from the light source by total internal reflection in the thickness of the crystal, and allowing them to emerge towards the dial when the angle of incidence on the inner face of the crystal is greater than the maximum angle of refraction.

IPC 8 full level  
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CPC (source: EP KR US)  
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