

Title (en)

Timepiece comprising a semi-conductive dial

Title (de)

Uhr mit einem halbleitenden Zifferblatt

Title (fr)

Pièce d'horlogerie comportant un cadran en matériau semi-conducteur

Publication

**EP 1760557 A1 20070307 (FR)**

Application

**EP 05108136 A 20050906**

Priority

EP 05108136 A 20050906

Abstract (en)

The timepiece has a case (12) fitted with a dial (28) and including an electronic control circuit (22) driving an analogue display device (24). The dial includes a main body (48) in the form of a plate made of silicon. The electronic control circuit includes a time base circuit formed by a reference oscillator (34) and a control unit (36) e.g. microcontroller, which is etched in the main body of the dial. The time base circuit and a micro electromechanical system are etched in the main body. The dial comprises raised indices (64) on its top face which includes a metallic coating.

IPC 8 full level

**G04G 17/00** (2006.01); **G04G 99/00** (2010.01); **G04B 19/12** (2006.01)

CPC (source: EP US)

**G04B 19/12** (2013.01 - EP US); **G04G 17/00** (2013.01 - EP US)

Citation (applicant)

- WO 2004081695 A2 20040923 - CENTRE NAT RECH SCIENT [FR], et al
- WO 0133711 A1 20010510 - EBAUCHESFABRIK ETA AG [CH], et al

Citation (search report)

- [DA] US 4599251 A 19860708 - FELLER GILBERT [CH]
- [A] DE 19857997 A1 19990819 - CREATIV PRODUCT ELEKTRO UND FE [DE], et al
- [A] CH 626496G A3 19811130
- [A] US 6067277 A 20000523 - DINGER RUDOLF [CH], et al
- [A] US 4320483 A 19820316 - VUILLEMIEZ CYRIL
- [A] EP 0884661 A2 19981216 - JUNGHANS UHREN GMBH [DE]
- [A] FR 2855651 A1 20041203 - LANIER JEAN FRANCOIS [FR]
- [A] PATENT ABSTRACTS OF JAPAN vol. 2003, no. 07 3 July 2003 (2003-07-03)

Cited by

EP3495897A1; US11119447B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1760557 A1 20070307; EP 1760557 B1 20091111; AT E448511 T1 20091115; CN 100454181 C 20090121; CN 1928743 A 20070314; DE 602005017620 D1 20091224; HK 1097056 A1 20070615; JP 2007071873 A 20070322; JP 4842737 B2 20111221; SG 131020 A1 20070426; TW 200734840 A 20070916; US 2007053241 A1 20070308; US 7663979 B2 20100216**

DOCDB simple family (application)

**EP 05108136 A 20050906; AT 05108136 T 20050906; CN 200610151403 A 20060905; DE 602005017620 T 20050906; HK 07103778 A 20070411; JP 2006234669 A 20060830; SG 2006058143 A 20060824; TW 95131809 A 20060829; US 47028806 A 20060906**