

Title (en)
INTELLIGENT DEVICE FOR WINDING WATCHES

Title (de)
INTELLIGENTE VORRICHTUNG ZUM AUZIEHEN VON ARMBANDUHREN

Title (fr)
DISPOSITIF INTELLIGENT DE REMONTAGE DE MONTRES

Publication
EP 3339984 B1 20191016 (FR)

Application
EP 16206047 A 20161222

Priority
EP 16206047 A 20161222

Abstract (en)
[origin: US2018181075A1] Watch winding device, with a motor driving a winding operation, means for acoustic measurement of the oscillator of a watch in the winding position, control means analysing the signals transmitted by the measuring means and comparing them to desired values that can be parameterized to regulate the operation of the motor by starting this motor when the operating amplitude of the oscillator is less than a minimum value, and by stopping this motor when the working amplitude is higher than a maximum value, these acoustic measuring means are fixed in a base behind an sensing opening of the acoustic sensor means, the device includes an acoustic duct which places a receiving port, located inside a chamber for housing a watch, in communication with a transmitting port movable by the motor facing this sensing opening.

IPC 8 full level
G04D 7/00 (2006.01); **G04B 3/00** (2006.01); **G04C 1/10** (2006.01); **G04D 7/08** (2006.01); **G04D 7/12** (2006.01)

CPC (source: CH CN EP US)
G04B 3/006 (2013.01 - CH EP US); **G04B 5/00** (2013.01 - CN); **G04B 5/007** (2013.01 - CN); **G04C 1/06** (2013.01 - CH);
G04C 1/10 (2013.01 - EP US); **G04C 1/12** (2013.01 - CH); **G04D 7/003** (2013.01 - CH EP US); **G04D 7/009** (2013.01 - CH EP US);
G04D 7/087 (2013.01 - EP US); **G04D 7/1264** (2013.01 - EP US); **G04D 7/1292** (2013.01 - EP US); **A47F 7/022** (2013.01 - CH);
G04D 1/06 (2013.01 - EP US); **G04D 7/1214** (2013.01 - EP US)

Cited by
EP3985454A1; EP4002018A1; EP3982209A1; CN114063421A; CN114355747A; EP3572887A1; EP3719589A1; EP3985445A1; EP3835889A1;
US11650546B2; US11687037B2; US11860582B2; EP4095623A1; US11927922B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3339984 A1 20180627; **EP 3339984 B1 20191016**; CH 713271 A2 20180629; CN 108227451 A 20180629; CN 108227451 B 20191011;
HK 1257049 A1 20191011; JP 2018105858 A 20180705; JP 6481017 B2 20190313; US 10539928 B2 20200121; US 2018181075 A1 20180628

DOCDB simple family (application)
EP 16206047 A 20161222; CH 17042016 A 20161222; CN 201711392433 A 20171221; HK 18116184 A 20181218; JP 2017238315 A 20171213;
US 201715848314 A 20171220