

Title (en)

CLOCK MOVEMENT COMPRISING A ROTARY ELEMENT PROVIDED WITH A MAGNETIC STRUCTURE HAVING A PERIODIC CONFIGURATION

Title (de)

UHRWERK MIT EINEM DREHELEMENT, DAS EINE MAGNETISIERTE STRUKTUR MIT PERIODISCHER KONFIGURIERUNG BESITZT

Title (fr)

MOUVEMENT HORLOGER COMPRENANT UN ELEMENT TOURNANT MUNI D'UNE STRUCTURE AIMANTEE AYANT UNE CONFIGURATION PERIODIQUE

Publication

**EP 3767397 B1 20220420 (FR)**

Application

**EP 19187333 A 20190719**

Priority

EP 19187333 A 20190719

Abstract (en)

[origin: CN112241120A] A timepiece movement includes a magnetic escapement formed of a magnetic escape wheel (6A) with an annular magnetized structure (12A) and a pallet fork whose shaft (18) is formed by a ferromagnetic material. The pallet shaft exerts on the escape wheel a magnetic disturbance torque due to the fact that the annular magnetized structure exhibits an angular variation of at least one defining physical parameter thereof, such that the magnetic attraction varies as a function of the angular position of the escape wheel and has a tangential component. A magnetic compensation pin (32) is incorporated in the timepiece movement, this magnetic compensation pin being arranged such that the second magnetic disturbance torque that it exerts on the escape wheel exhibits an angular phase shift relative to the first magnetic disturbance torque generated by the pallet shaft, so as to compensate largely for this first magnetic disturbance torque.

IPC 8 full level

**G04C 5/00** (2006.01); **G04C 3/10** (2006.01)

CPC (source: CN EP US)

**G04B 15/14** (2013.01 - CN US); **G04B 17/32** (2013.01 - CN); **G04C 3/101** (2013.01 - CN); **G04C 3/105** (2013.01 - EP); **G04C 5/005** (2013.01 - CN EP US)

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 3767397 A1 20210120**; **EP 3767397 B1 20220420**; CN 112241120 A 20210119; CN 112241120 B 20211224; JP 2021018237 A 20210215; JP 6982139 B2 20211217; US 11822294 B2 20231121; US 2021018876 A1 20210121

DOCDB simple family (application)

**EP 19187333 A 20190719**; CN 202010691556 A 20200717; JP 2020108538 A 20200624; US 202016891168 A 20200603