

Title (en)
Anti-tripping device for escapement mechanism

Title (de)
Antischwingungsvorrichtung für Uhrenhemmungsmechanismus

Title (fr)
Dispositif anti-galop pour mécanisme d'échappement

Publication
EP 2450757 B1 20141015 (FR)

Application
EP 10190000 A 20101104

Priority
EP 10190000 A 20101104

Abstract (en)
[origin: EP2450757A1] The device has a limiting pin (5) arranged to be fixed to a plate (3), and a movable bistable assembly (8) including a rotor (9) arranged to be fixed to a balance (2). A movable bistable lever (11) pivots relative to the rotor about a pivot axis (D2) over a limited angular sector between indexing positions occupied by indexing unit in the assembly to memorize the position of balance. A part of trajectory of the lever interferes with the pin when the balance is pivoted, and the assembly has an amplitude limiting unit to limit the amplitude of angular pivoting of the balance in event of a shock. The rotor and/or bistable lever are made of micro-machinable material or silicon, quartz or silicon or quartz compound, an alloy derived from microelectromechanical system (MEMS) technology, an alloy obtained by Deep reactive-ion etching (DRIE), lithography, electroplating, and molding methods, or partially amorphous material. An independent claim is also included for an escape mechanism, comprising an anti-trip device.

IPC 8 full level
G04B 15/06 (2006.01); **G04B 17/26** (2006.01); **G04B 43/00** (2006.01)

CPC (source: EP US)
G04B 15/06 (2013.01 - EP US); **G04B 17/26** (2013.01 - EP US); **G04B 43/002** (2013.01 - EP US)

Cited by
CN106483817A; EP2730980A1; CN103809421A; KR20150036635A; RU2629546C2; EP2781969A1; CN104062879A; US9317015B2; US9244434B2

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EP 10190000 A 20101104; CN 201110345372 A 20111104; HK 12111953 A 20121122; JP 2011242021 A 20111104; RU 2011144808 A 20111103; TW 100137739 A 20111018; US 201113287558 A 20111102