

Title (en)
Timepiece hairspring

Title (de)
Spiralfeder einer Uhr

Title (fr)
Spiral d'horlogerie

Publication
EP 2781967 A1 20140924 (FR)

Application
EP 13160028 A 20130319

Priority
EP 13160028 A 20130319

Abstract (en)
The sub-assembly (1) has a bridge (3), and a balance spring (71) whose outer end is secured to a balance spring stud (73). The balance spring and the spring stud are connected to form a single-piece assembly with the bridge. The spring stud is designed in a position-adjustable manner and locked in a pre-adjusted position by a locking unit. The spring stud is fixed to the bridge by an elastic return unit, where the balance spring comprises an outer coil (77) that is clamped by two pins. One of the pins is secured to the bridge by the return unit.

Abstract (fr)
Sous-ensemble (1) de mécanisme d'échappement d'horlogerie comportant au moins un pont (3) et au moins un ressort-spiral (71) dont l'extrémité externe est fixée à un piton (73). Au moins un dit ressort-spiral (71) et ledit piton (73) qui lui est associé forment un ensemble monobloc avec ledit pont (3).

IPC 8 full level
G04B 17/06 (2006.01); **G04B 17/32** (2006.01)

CPC (source: CN EP KR US)
G04B 1/10 (2013.01 - KR); **G04B 13/00** (2013.01 - KR); **G04B 15/14** (2013.01 - US); **G04B 17/063** (2013.01 - US);
G04B 17/066 (2013.01 - CN EP US); **G04B 17/325** (2013.01 - CN EP US); **G04B 18/06** (2013.01 - EP US); **G04B 31/02** (2013.01 - EP US)

Citation (applicant)
• EP 1119317 A1 20010801 - BIONX IMPLANTS OY [FI]
• EP 1119317 A1 20010801 - BIONX IMPLANTS OY [FI]

Citation (search report)
• [A] CH 447042 A 19680315 - TISSOT HORLOGERIE [CH]
• [A] EP 2151722 A1 20100210 - ROLEX SA [CH]
• [A] EP 2437126 A1 20120404 - ROLEX SA [CH]

Cited by
EP4187326A1; CN105717778A; EP3081996A1; US9594350B2

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

Designated extension state (EPC)
BA ME

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CN 104062883 B 20170412; CN 106842884 A 20170613; CN 106842884 B 20190802; HK 1202652 A1 20151002; JP 2014182146 A 20140929;
JP 5782150 B2 20150924; KR 101546614 B1 20150821; KR 20140114785 A 20140929; TW 201500866 A 20150101; TW I612400 B 20180121;
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HK 15102947 A 20150323; JP 2014054687 A 20140318; KR 20140031465 A 20140318; TW 103105110 A 20140217;
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