

Title (en)
Mechanism for adjusting a timepiece hairspring

Title (de)
Spiralfederregulierungsmechanismus einer Uhr

Title (fr)
Mécanisme de réglage de spiral d'horlogerie

Publication
EP 2781970 A1 20140924 (FR)

Application
EP 13160029 A 20130319

Priority
EP 13160029 A 20130319

Abstract (en)
The mechanism has pins (74, 74A, 74B) for clamping or touching an outer coil (77) of a timepiece balance spring (71) during operation of the balance spring, where the pins are in a single piece with a bar. The pins are secured to the bar by an elastic return unit (76) that is in a single piece with one of the pins and the bar, and tend to move one pin closer to the other pin. The balance spring is in a single piece with a balance spring stud and the bar. The integrated elastic return unit is pre-stressed in a silicon oxide state, where the mechanism is made of silicon.

Abstract (fr)
Mécanisme (1) de réglage de longueur active d'un ressort-spiral (71) d'horlogerie dont l'extrémité externe est fixée à un piton (73) fixé à un pont (3), ledit mécanisme (1) comportant deux goupilles (74) pour pincer ou toucher, lors du fonctionnement du spiral, la spire externe (77) dudit ressort-spiral (71). Lesdites deux goupilles (74) sont monobloc avec ledit pont (3).

IPC 8 full level
G04B 18/06 (2006.01); **G04B 18/02** (2006.01)

CPC (source: EP US)
G04B 17/06 (2013.01 - EP US); **G04B 17/325** (2013.01 - EP US); **G04B 18/025** (2013.01 - EP US); **G04B 18/06** (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 577194 B5 19760630 - EBAUCHES BETTLACH SA
• [A] GB 705991 A 19540324 - GEORGE HERBERT KENNETH ATKINSO, et al
• [A] DE 1676077 U 19540513 - KRATZMANN EDWIN [DE]
• [A] DE 2041114 A1 19720224 - GRAESSLIN FEINWERKTECH
• [A] FR 2253235 A1 19750627 - EBAUCHESFABRIK ETA AG [CH]
• [A] DE 7539924 U 19760506

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CH712225A1; EP4016198A1; EP3032354A1; CN105652629A; EP4357858A1; US9811054B2; US12055896B2; WO2024141601A1; WO2024141600A1

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

DOCDB simple family (publication)
EP 2781970 A1 20140924; EP 2781970 B1 20160316; CH 707814 A2 20140930; CN 104062884 A 20140924; CN 104062884 B 20170524; HK 1202655 A1 20151002; JP 2014182144 A 20140929; JP 5806752 B2 20151110; KR 101514920 B1 20150423; KR 20140114783 A 20140929; TW 201447517 A 20141216; TW I612401 B 20180121; US 2014286143 A1 20140925; US 9217992 B2 20151222

DOCDB simple family (application)
EP 13160029 A 20130319; CH 6322013 A 20130319; CN 201410102830 A 20140319; HK 15102952 A 20150323; JP 2014054681 A 20140318; KR 20140031462 A 20140318; TW 103104729 A 20140213; US 201414204098 A 20140311