

Title (en)
Horological balance

Title (de)
Unruh für Uhrwerk

Title (fr)
Balancier d'horlogerie

Publication
EP 2653938 A1 20131023 (FR)

Application
EP 12164691 A 20120419

Priority
EP 12164691 A 20120419

Abstract (en)
The staff (1) has a balance-spring collet (70) and a balance, where a bearing area (7) of the collet and a main bearing area (5) of the balance are arranged to maintain the collet and the balance remote from each other. A side supporting surface (81) is extended radially to receive the balance at an axial stop. The area of the collet is coupled to another side supporting surface (82). The surfaces define a collar (119). The former surface is turned on same side as a radial shoulder (51). The main area is separated from the bearing area by a seat (8) forming large diameter of collar and staff. Independent claims are also included for the following: (1) a timepiece balance (2) an assortment of timepiece (3) a timepiece movement.

Abstract (fr)
Arbre (1) de balancier d'horlogerie, comportant, autour d'un axe de pivotement (D): - une portée principale (5 ; 65) de balancier (2), - une première surface latérale d'appui (81 ; 66) radial dudit balancier (2), - une portée (6) de douille de plateau (60), - une portée (7) de virole de spiral (70), Ladite portée de virole (7) et ladite portée principale (5 ; 65) sont distantes et maintiennent à distance ladite virole (70) et ledit balancier (2), ledit arbre (1) comportant une deuxième surface latérale d'appui (82 ; 68) axial de ladite virole de spiral (70), située, ou bien au niveau d'une assiette (8) située entre ladite portée de virole (7) et ladite portée principale (5 ; 65), ou bien au niveau d'un épaulement radial que comporte ledit arbre (1) au-delà de la projection de ladite portée principale (5 ; 65), sur ledit axe de pivotement (D).

IPC 8 full level
G04B 17/06 (2006.01)

CPC (source: EP US)
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G04B 17/32 (2013.01 - US)

Citation (search report)
• [X] CH 95065 A 19220601 - KOEHN EDOUARD LOUIS [CH]
• [X] CH 270582 A 19500915 - BRENDLER WILLIAM L [US]
• [X] US 2010157743 A1 20100624 - SILVA SERGIO [CH]
• [X] CH 474101 A 19690615 - BALANCIERS REUNIES SA [CH]
• [X] GB 831161 A 19600323 - SMITH & SONS LTD S
• [X] DE 2427021 A1 19750102 - EBAUCHES BETTLACH SA
• [X] FR 1216100 A 19600421
• [X] US 1423446 A 19220718 - NEEDY WILLIAM H H
• [X] CH 700260 A2 20100730 - CARTIER CREATION STUDIO SA [CH]

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Designated extension state (EPC)
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