Title (en)
   Detent escapement for timepieces

Title (de)
   Chronometerhemmung für Uhren

Title (fr)
   Echappement à detente pour pièce d'horlogerie

Publication
   EP 1770452 A1 20070404 (FR)

Application
   EP 05109056 A 20050930

Priority
   EP 05109056 A 20050930

Abstract (en)
   The escapement has an escape wheel (1) pivoted on an axis (X1), and a balance pivoted on an axis (X2). A detent (11) is pivoted on an axis (X3) and supports a pallet lock (21) interacting with a tooth of an escape wheel along a length of penetration to block the wheel in an idle phase over a course of which a balance exerts a free arc of oscillation. An impulse pallet (7) interacts with another tooth of the escape wheel, when the detent is pivoted for freeing the escape wheel. The teeth are placed on both sides of center lines (L) joining the axes (X1, X2) in the idle phase.

IPC 8 full level
   G04B 15/06 (2006.01)

CPC (source: EP US)
   G04B 15/06 (2013.01 - EP US); **G04B 17/063** (2013.01 - EP US)

Citation (applicant)
   • CH 3299 A 18910831 - JAMES EMILE [CH]
   • EP 1544689 A1 20050622 - MONTRES BREGUET SA [CH]

Citation (search report)
   • [XA] US 180290 A 18760725
   • [A] CH 3299 A 18910831 - JAMES EMILE [CH]

Cited by
   EP2506091A3; CN102736504A; CH712052A1; CH700091A1; CN104737080A; RU2629546C2; EP3293583A1; EP2660661A3; EP2037335A3;
   EP2687916A1; WO2017125194A1; WO2018046563A1; EP2450757A1; US8556499B2; EP2450756A1; US8602637B2; EP2450755A1;
   US8439556B2

Designated contracting state (EPC)
   AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
   AL BA HR MK YU

DOCDB simple family (publication)
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   DE 602006006464 D1 20090604; EP 1941326 A2 20080709; EP 1941326 B1 20090422; ES 2326340 T3 20091007; HK 1118344 A1 20090206;
   JP 2009510425 A 20090312; JP 4898814 B2 20120321; RU 2008117152 A 20091110; RU 2408042 C2 20101227; US 2008219103 A1 20080911;
   US 7458717 B2 20081202; WO 2007039558 A2 20070412; WO 2007039558 A3 20070628

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   EP 05109056 A 20050930; AT 06806882 T 20060929; CN 200680036057 A 20060929; DE 602006006464 T 20060929;
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   RU 2008117152 A 20060929; US 8824206 A 20060929