

Title (en)  
Chronograph module for wristwatch

Title (de)  
Chronographmodul für Armbanduhr

Title (fr)  
Module chronograph pour montre bracelet

Publication  
**EP 2282240 A2 20110209 (FR)**

Application  
**EP 10176455 A 20051026**

Priority  
• EP 05801381 A 20051026  
• CH 17682004 A 20041026

Abstract (en)  
The regulating unit has a balance (3) connected to a movable permanent magnet (30) that oscillates along a circular path around a rotational axis of the balance. Fixed permanent magnets (40) generate magnetic field to return the balance to a stable equilibrium position. An escapement maintains movement of the balance around the equilibrium position, where movement of the balance is constituted by oscillations around the axis. An independent claim is also included for a mechanical movement for a wristwatch including a regulating unit.

Abstract (fr)  
Organe réglant pour montre-bracelet, comprenant: un balancier, un organe de rappel magnétique pour ramener ledit balancier vers au moins une position d'équilibre stable, un échappement pour entretenir une oscillation du balancier autour de ladite position d'équilibre.

IPC 8 full level  
**G04C 5/00** (2006.01)

CPC (source: EP KR US)  
**G04B 17/20** (2013.01 - KR); **G04C 3/066** (2013.01 - EP US); **G04C 5/005** (2013.01 - EP US)

Citation (applicant)  
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• US 3921386 A 19751125 - KELLER HANS  
• US 3714773 A 19730206 - DIERSBOCK G  
• US 3665699 A 19720530 - CHALLANDES CLAUDE  
• US 3161012 A 19641215 - ANDRE HUG, et al  
• DE 2424212 A1 19751127 - MAUTHE GMBH FRIEDR  
• GB 1444627 A 19760804 - ITT  
• US 2003137901 A1 20030724 - TOKORO TAKESHI [JP], et al

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EP3650954A1; US11573530B2

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

DOCDB simple family (publication)  
**WO 2006045824 A2 20060504; WO 2006045824 A3 20060817**; AT E481662 T1 20101015; AT E557328 T1 20120515; CN 101091141 A 20071219; CN 101091141 B 20120321; DE 602005023633 D1 20101028; EP 1805565 A2 20070711; EP 1805565 B1 20100915; EP 2282240 A2 20110209; EP 2282240 A3 20110223; EP 2282240 B1 20120509; HK 1113830 A1 20081017; JP 2008518221 A 20080529; JP 4607966 B2 20110105; KR 100918186 B1 20090922; KR 20070067732 A 20070628; RU 2007119565 A 20081210; RU 2356079 C2 20090520; US 2007201317 A1 20070830; US 7396154 B2 20080708

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**EP 2005055582 W 20051026**; AT 05801381 T 20051026; AT 10176455 T 20051026; CN 200580044962 A 20051026; DE 602005023633 T 20051026; EP 05801381 A 20051026; EP 10176455 A 20051026; HK 08103991 A 20080409; JP 2007538419 A 20051026; KR 20077011896 A 20070525; RU 2007119565 A 20051026; US 78981707 A 20070426