

Title (en)
Horological hairspring

Title (de)
Spiralfeder einer Uhr

Title (fr)
Spiral d'horlogerie

Publication
EP 2690508 B1 20150225 (FR)

Application
EP 12178081 A 20120726

Priority
EP 12178081 A 20120726

Abstract (en)
[origin: EP2690508A1] The spring (1) has a stopping unit (11) and a complementary stopping unit (12) quincuncial staggered with respect to each other. The stopping unit and the complementary stopping unit are arranged to define different maximum angular travel values to gradually limit the amplitude of pivoting between two ends (3, 4) of the spring during angular or radial accelerations of the spring such that the stopping unit and the complementary stopping unit are attached with an abutment to gradually modify the resulting rigidity of the spring by deactivating or reactivating of the coils. An independent claim is also included for a timepiece movement unit.

IPC 8 full level
G04B 17/06 (2006.01); **G04B 17/26** (2006.01)

CPC (source: EP KR RU US)
G04B 17/06 (2013.01 - KR); **G04B 17/066** (2013.01 - EP US); **G04B 17/26** (2013.01 - EP US); **G04B 43/002** (2013.01 - EP US);
G04B 1/14 (2013.01 - RU)

Cited by
EP2884347A1

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

DOCDB simple family (publication)
EP 2690508 A1 20140129; EP 2690508 B1 20150225; CH 706766 A2 20140131; CN 103576528 A 20140212; CN 103576528 B 20160615;
HK 1194492 A1 20141017; JP 2014025938 A 20140206; JP 5503788 B2 20140528; KR 101513797 B1 20150420; KR 20140013934 A 20140205;
RU 2013135097 A 20150127; RU 2615595 C2 20170405; TW 201411302 A 20140316; TW I602038 B 20171011; US 2014029390 A1 20140130;
US 8821007 B2 20140902

DOCDB simple family (application)
EP 12178081 A 20120726; CH 11702012 A 20120726; CN 201310320766 A 20130726; HK 14107968 A 20140804; JP 2013155241 A 20130726;
KR 20130083501 A 20130716; RU 2013135097 A 20130725; TW 102125206 A 20130715; US 201313948626 A 20130723