

Title (en)
Polygonal hairspring for a timepiece resonator

Title (de)
Polygonale Spirale für Schwinger einer Uhr

Title (fr)
Spiral polygonal pour un résonateur horloger

Publication
EP 2887152 A2 20150624 (FR)

Application
EP 14193409 A 20141117

Priority
• EP 13197318 A 20131216
• EP 14193409 A 20141117

Abstract (en)
[origin: CN204389879U] The utility model relates to a hairspring (1, 21, 41 and 61) used for a clock resonator. The hairspring comprises a band (3, 23, 43 and 63) winding itself and forming a plurality of loops (S1, S2, S'1, S'2, S3 and Sint). According to the hairspring used for clock resonator, the band (3, 23, 43 and 63) is formed by a series of integrated prism portions (P1, P2, Px, P'x, Py, P'y and Pz), one of two opposite faces (Fint and Fext) is formed by a series of integrated rectangular portions to form a polygonal hairspring (1, 21, 41 and 61). The utility model further relates to at least clock comprising the hairspring.

Abstract (fr)
Spiral (1, 21, 41, 61) pour un résonateur horloger comportant une lame (3, 23, 43, 63) enroulée sur elle-même selon plusieurs spires (S 1 , S 2 , S' 1 , S' 2 , S 3 , S int). La lame (3, 23, 43, 63) est formée par une succession de portions (P 1 , P 2 , P x , P' x , P y , P' y , P z) prismatiques solidaires entre elles ou l'une desdites au moins deux faces (F int , F ext) opposées étant formée par une succession de portions rectangulaires solidaires entre elles afin de former un spiral (1, 21, 41, 61) polygonal. Ledit spiral est destiné au domaine des résonateurs pour pièce d'horlogerie.

IPC 8 full level
G04B 17/06 (2006.01)

CPC (source: EP US)
G04B 17/063 (2013.01 - US); **G04B 17/066** (2013.01 - EP US)

Cited by
EP4398047A1; DE102023135139A1; DE102023133827A1

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 2884346 A1 20150617; CN 104714393 A 20150617; CN 104714393 B 20180102; CN 204389879 U 20150610; EP 2887152 A2 20150624; EP 2887152 A3 20160608; EP 2887152 B1 20230104; HK 1211710 A1 20160527; JP 2015118086 A 20150625; JP 5978282 B2 20160824; US 2015168916 A1 20150618; US 9268307 B2 20160223

DOCDB simple family (application)
EP 13197318 A 20131216; CN 201410784427 A 20141216; CN 201420797799 U 20141216; EP 14193409 A 20141117; HK 15112379 A 20151216; JP 2014248748 A 20141209; US 201414553298 A 20141125