

Title (en)
Coupled resonator for control system

Title (de)
Gekoppelter Resonator für Regelsystem

Title (fr)
Résonateur couplé système réglant

Publication
EP 1843227 A1 20071010 (FR)

Application
EP 06007397 A 20060407

Priority
EP 06007397 A 20060407

Abstract (en)
The resonator has a low frequency hairspring (1) and a high frequency tuning fork (2) connected mechanically in a permanent manner. The hairspring and the tuning fork are made of identical or different material e.g. metal, alloy or amorphous material, monocrystalline or polycrystalline material such as glass, quartz and silicon. The tuning fork comprising two arms (4, 6) that are connected by a steady pin (8).

Abstract (fr)
Le résonateur couplé comporte un premier résonateur à basse fréquence, tel qu'un spiral (1) et un deuxième résonateur à plus haute fréquence, tel qu'un diapason (2), les deux résonateurs (1, 2) comportant des moyens de couplage mécanique permanents. Application au système réglant d'une pièce d'horlogerie.

IPC 8 full level
G04C 5/00 (2006.01); **G04B 17/06** (2006.01)

CPC (source: EP KR US)
G04B 17/066 (2013.01 - EP KR US); **G04C 5/00** (2013.01 - EP KR US)

Citation (applicant)
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Citation (search report)
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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)
EP 1843227 A1 20071010; AT E472756 T1 20100715; CN 101416127 A 20090422; CN 101416127 B 20120321; DE 602007007462 D1 20100812; EP 2008160 A1 20081231; EP 2008160 B1 20100630; HK 1131446 A1 20100122; JP 2009533917 A 20090917; JP 4982556 B2 20120725; KR 20080111523 A 20081223; TW 200746628 A 20071216; US 2010283556 A1 20101111; US 7889028 B2 20110215; WO 2007115985 A1 20071018

DOCDB simple family (application)
EP 06007397 A 20060407; AT 07727747 T 20070403; CN 200780012073 A 20070403; DE 602007007462 T 20070403; EP 07727747 A 20070403; EP 2007053276 W 20070403; HK 09109548 A 20091015; JP 2009504691 A 20070403; KR 20087027085 A 20081105; TW 96111911 A 20070403; US 29465207 A 20070403