

Title (en)  
TIMEPIECE OSCILLATOR

Title (de)  
OSZILLATOR FÜR UHR

Title (fr)  
OSCILLATEUR HORLOGER

Publication  
**EP 3584640 A1 20191225 (FR)**

Application  
**EP 19183765 A 20160613**

Priority  
• EP 19183765 A 20160613  
• EP 16174244 A 20160613

Abstract (en)  
[origin: US2017357213A1] A timepiece shaft (1), especially a balance shaft (1), comprising a first functional portion (2a; 2b) including at least one part (221a, 221b) of a pivot-shank (22a; 22b) and/or at least one part (211a, 211b) of a pivot (21a, 21b), the first functional portion being made of ceramic and a first outer diameter (D1) of the first functional portion being less than 0.5 mm, or less than 0.4 mm, or less than 0.2 mm, or less than 0.1 mm

Abstract (fr)  
Oscillateur (100) du type balancier-spiral comprenant un axe de balancier (1), l'axe de balancier comprenant une première portion fonctionnelle (2a ; 2b) incluant au moins une partie (221aa ; 221b) d'un tigeon (22a ; 22b) et/ou au moins une partie (211aa ; 211b) d'un pivot (21a ; 21b), la première portion fonctionnelle étant en céramique et un premier diamètre extérieur (D1) de la première portion fonctionnelle étant inférieur à 0.5 mm, voire inférieur à 0.4 mm, voire inférieur à 0.2 mm, voire inférieur à 0.1 mm

IPC 8 full level  
**G04B 13/02** (2006.01); **G04B 1/16** (2006.01); **G04B 15/14** (2006.01)

CPC (source: CH CN EP US)  
**G04B 1/16** (2013.01 - CN EP US); **G04B 13/02** (2013.01 - EP US); **G04B 13/022** (2013.01 - US); **G04B 13/026** (2024.01 - CH CN); **G04B 15/14** (2013.01 - CN EP US); **G04B 17/063** (2013.01 - CH CN US); **G04B 17/32** (2013.01 - CH CN); **G04B 17/34** (2013.01 - CN US); **G04B 31/00** (2013.01 - CH CN); **G04B 31/06** (2013.01 - US)

Citation (applicant)  
• EP 2757423 A1 20140723 - OMEGA SA [CH]  
• EP 2757424 A1 20140723 - OMEGA SA [CH]

Citation (search report)  
• [DXA] EP 2757424 A1 20140723 - OMEGA SA [CH]  
• [A] CH 705906 A2 20130628 - ETA SA MFT HORLOGERE SUISSE [CH]  
• [A] CH 705905 A2 20130628 - ETA SA MFT HORLOGERE SUISSE [CH]  
• [A] US 2002114225 A1 20020822 - DAMASKO KONRAD [DE]  
• [A] EP 2735540 A1 20140528 - DIAMAZE MICROTECHNOLOGY S A [CH], et al

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 3258325 A1 20171220; EP 3258325 B1 20191030**; CH 712552 A2 20171215; CH 712552 B1 20211215; CN 107490950 A 20171219; CN 107490950 B 20210507; CN 113110010 A 20210713; EP 3584640 A1 20191225; EP 3584640 B1 20230111; EP 4177677 A1 20230510; JP 2018028529 A 20180222; JP 2023011848 A 20230124; JP 7214335 B2 20230130; US 11982977 B2 20240514; US 2017357213 A1 20171214; US 2022373977 A1 20221124

DOCDB simple family (application)  
**EP 16174244 A 20160613**; CH 7662017 A 20170613; CN 201710439362 A 20170612; CN 202110419759 A 20170612; EP 19183765 A 20160613; EP 22216886 A 20160613; JP 2017114859 A 20170612; JP 2022176828 A 20221104; US 201715618859 A 20170609; US 202217877578 A 20220729