

Title (en)
TOURBILLON AND WATCH WITH TOURBILLON

Title (de)
TOURBILLON UND UHR MIT TOURBILLON

Title (fr)
TOURBILLON ET HORLOGE POURVUE D'UN TOURBILLON

Publication
EP 3306417 B1 20200930 (DE)

Application
EP 17189774 A 20170907

Priority
CH 12452016 A 20160923

Abstract (en)
[origin: JP2018049013A] PROBLEM TO BE SOLVED: To provide a tourbillon capable of overcoming problems of conventional arts and especially having advantages of a flying tourbillon at least partially without receiving the problems, and a timepiece having the tourbillon.SOLUTION: Provided is a tourbillon 1 having a rotary cage rotatably arranged around a tourbillon shaft. The rotary cage includes a balance wheel 3, an escapement with an escape wheel 8, and a lever. The tourbillon is characterized in that the rotary cage includes a bearing ring 22; the bearing ring 22 is mounted by a bearing element 13 engaging with an operation surface 11 of the bearing ring in a circumferential direction.SELECTED DRAWING: Figure 1

IPC 8 full level
G04B 17/28 (2006.01)

CPC (source: CH CN EP KR US)
G04B 13/02 (2013.01 - KR); **G04B 17/285** (2013.01 - CH CN EP KR US)

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 3306417 A1 20180411; EP 3306417 B1 20200930; CH 712973 A1 20180329; CH 712973 B1 20231229; CN 107870549 A 20180403; CN 107870549 B 20211022; JP 2018049013 A 20180329; JP 7022546 B2 20220218; KR 102480836 B1 20221223; KR 20180033067 A 20180402; SG 10201707656Y A 20180427; TW 201826050 A 20180716; TW I743189 B 20211021; US 10481557 B2 20191119; US 2018088531 A1 20180329

DOCDB simple family (application)
EP 17189774 A 20170907; CH 12452016 A 20160923; CN 201710858011 A 20170920; JP 2017181331 A 20170921; KR 20170117365 A 20170913; SG 10201707656Y A 20170918; TW 106130983 A 20170911; US 201715713981 A 20170925