

Title (en)

CASING SUBASSEMBLY FOR A TIMEPIECE, WATCH OR JEWEL

Title (de)

UNTEREINHEIT ZUR VERKLEIDUNG EINER UHR, ARMBANDUHR ODER EINES SCHMUCKSTÜCKS

Title (fr)

SOUS-ENSEMBLE D'HABILLAGE POUR PIECE D'HORLOGERIE OU MONTRE OU BIJOU

Publication

EP 3796104 A1 20210324 (FR)

Application

EP 19198517 A 20190920

Priority

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Abstract (en)

[origin: CN112540529A] A sub-assembly (100) composed of external components, including a bolting device (3) placed between a first component (1) and a second component (2) that press a joint (9) together. The bolting device(3) fixes the first component (1) and the second component(2) together by axially blocking the first component (1). The bolting device (3) cooperates with the second component (2) to surround a ball(6), and the ball (6) occupies a directional accommodation cavity (260) in the second component (2) or the bolting device (3). A cavity (261) is included and has a depth greater than the diameter of the ball (6). The cavity (261) is surrounded by a channel (262). The depth of the channel (262) is less than the diameter of the ball (6) and is defined by a limit boundary (270). When a gravitationalfield and/or a magnetic field acts, the ball (6) can occupy both the directional accommodating cavity (260) included in the bolting device (3) or the second member (2) and the complementary accommodating cavity (26) whose depth is less than the diameter of the ball (6). Thereby, when the ball (6) is supported on the channel (262) and the complementary accommodating cavity (26) at the same time. The relative driving between the bolting device (3) and the second component (2) is realized by the ball (6).

IPC 8 full level

G04B 19/28 (2006.01); **G04B 37/08** (2006.01)

CPC (source: CN EP US)

A44C 5/147 (2013.01 - US); **A44C 11/00** (2013.01 - CN); **G04B 19/283** (2013.01 - EP US); **G04B 37/0008** (2013.01 - CN); **G04B 37/08** (2013.01 - EP); **G04B 37/087** (2013.01 - EP); **G04B 37/106** (2013.01 - US); **G04B 37/11** (2013.01 - US)

Citation (search report)

- [A] EP 1760556 A1 20070307 - SWATCH GROUP MAN SERV AG [CH]
- [A] EP 1278108 A1 20030122 - SWATCH GROUP MAN SERV AG [CH]
- [A] FR 2201496 A1 19740426 - GRABER SA MANUF BOITES MONTRES [CH]
- [A] US 2003210614 A1 20031113 - COOPER MARTIN R [US], et al

Cited by

EP4194967A1

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 3796104 A1 20210324; **EP 3796104 B1 20220420**; CN 112540529 A 20210323; CN 112540529 B 20220322; JP 2021051062 A 20210401; JP 7018096 B2 20220209; US 11650547 B2 20230516; US 2021088975 A1 20210325

DOCDB simple family (application)

EP 19198517 A 20190920; CN 202010985387 A 20200918; JP 2020133684 A 20200806; US 202017025571 A 20200918