

Title (en)
MECHANICAL SYSTEM COMPRISING A CONNECTING DEVICE BETWEEN A WEARING PART AND THE SUPPORT THEREOF, AND BUCKET OF A HEAVY-CONSTRUCTION MACHINE

Title (de)
MECHANISCHES SYSTEM MIT VERBINDUNGSVORRICHTUNG ZWISCHEN EINEM VERSCHLEISSTEIL UND STÜTZE DAFÜR SOWIE SCHAUFEL EINER TIEFBAUMASCHINE

Title (fr)
SYSTÈME MÉCANIQUE COMPRENANT UN DISPOSITIF DE LIAISON ENTRE UNE PIÈCE D'USURE ET SON SUPPORT, ET GODET D'ENGIN DE TRAVAUX PUBLICS

Publication
EP 3047074 A1 20160727 (FR)

Application
EP 14766999 A 20140918

Priority
• FR 1359079 A 20130920
• EP 2014069869 W 20140918

Abstract (en)
[origin: WO2015040101A1] The present invention relates to a mechanical system (1), comprising a support (10), a wearing part (20) and a connecting device (30) between the wearing part (20) and the support thereof (10). The device (30) comprises an elastic sheath (40) provided with an internal cavity (47) and with an external wall (44) that is adjustable in a housing (14) of the support (10), and a pin (50) having an elongate body along a pin axis (X50). According to the invention, the device (30) also comprises a cam (60) provided with an external wall (63) that is adjustable in the internal cavity (47) of the sheath (40) and with an internal cavity (64) intended to receive the pin (50), and when the device (30) is positioned in the housing (14) of the support (10), the pin (50) and the cam (60) are able to rotate as one in the internal cavity (47) of the sheath (40), between an insertion configuration (A) of the pin (50) into the cam (60) and at least one locking configuration in which the pin (50) bears, radially with respect to the pin axis (X50), against the wearing part (20), while the cam (60) bears against the sheath (40) and deforms the external wall (44) thereof counter to the housing (14) of the support (10), thereby forming a coupling connection between the wearing part (20) and the support (10).

IPC 8 full level
E02F 9/28 (2006.01); **F16B 21/02** (2006.01); **F16B 39/282** (2006.01)

CPC (source: EP RU US)
E02F 9/28 (2013.01 - US); **E02F 9/2808** (2013.01 - RU); **E02F 9/2816** (2013.01 - US); **E02F 9/2825** (2013.01 - EP US); **E02F 9/2833** (2013.01 - RU); **E02F 9/2841** (2013.01 - EP US); **E02F 9/2858** (2013.01 - RU); **E02F 9/2883** (2013.01 - 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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2015040101 A1 20150326; AR 097716 A1 20160413; AU 2014323143 A1 20160407; AU 2014323143 B2 20171130; BR 112016006022 A2 20170801; BR 112016006022 B1 20211005; CA 2924223 A1 20150326; CA 2924223 C 20210914; CL 2016000648 A1 20161104; CN 105723034 A 20160629; CN 105723034 B 20181218; EP 3047074 A1 20160727; EP 3047074 B1 20180221; ES 2667427 T3 20180510; FR 3011013 A1 20150327; FR 3011013 B1 20151030; JP 2016530420 A 20160929; JP 6448650 B2 20190109; KR 102246372 B1 20210429; KR 20160056894 A 20160520; MX 2016003595 A 20160819; RU 2016109977 A 20170921; RU 2667173 C2 20180917; US 2016319520 A1 20161103; US 9920503 B2 20180320

DOCDB simple family (application)
EP 2014069869 W 20140918; AR P140103494 A 20140919; AU 2014323143 A 20140918; BR 112016006022 A 20140918; CA 2924223 A 20140918; CL 2016000648 A 20160318; CN 201480051940 A 20140918; EP 14766999 A 20140918; ES 14766999 T 20140918; FR 1359079 A 20130920; JP 2016543396 A 20140918; KR 20167007283 A 20140918; MX 2016003595 A 20140918; RU 2016109977 A 20140918; US 201415023173 A 20140918