

Title (en)
ROLLER PISTON FOR A HYDRAULIC MACHINE, INTEGRAL WITH A CENTERING ELEMENT FORMED TO LIMIT FRICTION WITH A ROLLER

Title (de)
WALZENKOLBEN FÜR EINE HYDRAULISCHE MASCHINE MIT INTEGRIERTEM ZENTRIERELEMENT ZUR BEGRENZUNG DER REIBUNG MIT EINER WALZE

Title (fr)
PISTON À GALET POUR MACHINE HYDRAULIQUE, VENU DE MATIÈRE AVEC ÉLÉMENT DE CENTRAGE FORMÉ POUR LIMITER LES FROTTEMENTS AVEC UN GALET

Publication
EP 3472465 B1 20200805 (FR)

Application
EP 17729511 A 20170615

Priority
• FR 1655631 A 20160616
• EP 2017064726 W 20170615

Abstract (en)
[origin: WO2017216321A1] The invention relates to a piston (1) having a roller (120) designed to receive a roller (120) and to slide in a cylinder (2) along a sliding axis (C-C'), said piston (1) comprising: – a body (110) having a guiding surface (111), – an upper portion (110a) with a cradle-shaped recess (112) in line with a rolling axis (R-R'), designed to receive the roller (120), in which the cradle (112) is of the diverging edge type, that is to say that it closes at less than 180° with respect to the rolling axis (R-R'), – at least one centering element (130) forming an axial stop for the roller (120) and configured to keep the roller (120) axially centered in the cradle (112) with respect to the rolling axis (R-R'), the piston (1) being characterized in that the body (110), the at least one centering element (130) and the upper portion (110a) consist of a single, unique and integral part, and in that the centering element (130) has a suitable shape or proposes means for limiting the contact surface with the roller.

IPC 8 full level
F04B 1/04 (2020.01); **F04B 53/14** (2006.01)

CPC (source: EP RU)
F04B 1/04 (2013.01 - RU); **F04B 1/0408** (2013.01 - EP); **F04B 1/0426** (2013.01 - EP); **F04B 53/14** (2013.01 - EP RU)

Cited by
US12018566B2; DE102021124659B4; US12065933B2

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)
WO 2017216321 A1 20171221; BR 112018076084 A2 20190326; CN 109563819 A 20190402; CN 109563819 B 20200403; EP 3472465 A1 20190424; EP 3472465 B1 20200805; FR 3052819 A1 20171222; FR 3052819 B1 20190719; RU 2018147044 A 20200716; RU 2018147044 A3 20200915; RU 2746697 C2 20210419

DOCDB simple family (application)
EP 2017064726 W 20170615; BR 112018076084 A 20170615; CN 201780049520 A 20170615; EP 17729511 A 20170615; FR 1655631 A 20160616; RU 2018147044 A 20170615