

Title (en)
TRIPOD CONSTANT VELOCITY JOINT

Title (de)
TRIPODE-GLEICHLAUFGELENK

Title (fr)
JOINT TRIPODE HOMOCINÉTIQUE

Publication
EP 2596258 A1 20130529 (DE)

Application
EP 11726751 A 20110615

Priority
• DE 102010031752 A 20100721
• EP 2011059900 W 20110615

Abstract (en)
[origin: WO2012010375A1] The invention relates to a tripod constant velocity joint, having an outer joint part (2) which has a central cavity (4) and three openings (5) originating therefrom and arranged in an equally distributed manner around the circumference, each opening having two axially parallel guide tracks (6a, 6b) that are parallel and opposite one another around the circumference, wherein said joint also has an inner joint part (3), which is arranged within the cavity in the outer joint part and has three pins (7) having a spherical outer contour (8) and arranged in an equally distributed manner around the circumference, each pin projecting radially into one of the openings of the outer joint part, and said joint additionally has three tripod rollers (9) each having a roller inner ring (10), a roller outer ring (11) and a plurality of cylindrical rolling bodies (12) arranged annularly between the roller rings. The inner wall (13) of each inner ring (10) is in sliding contact with the outer contour of the associated pin (7), and the outer wall (15) of the each roller outer ring (11) is in sliding contact with the guide tracks (6a, 6b) of the associated opening (5). The frictional and wear properties of the constant velocity joint (1) are improved by means of a suitable surface treatment of each of the walls that are in sliding contact with another component.

IPC 8 full level
F16D 3/205 (2006.01)

CPC (source: EP US)
F16C 33/605 (2013.01 - EP); **F16D 3/2055** (2013.01 - EP US); **F16D 3/24** (2013.01 - US); **F16C 19/46** (2013.01 - EP); **F16D 2003/2026** (2013.01 - EP US)

Citation (search report)
See references of WO 2012010375A1

Citation (examination)
ESCHMANN, HASBERGEN, WEIGAND: "Ball and Roller Bearings", part Table 99 1985, WILEY, Chichester, ISBN: 0471262838, pages: 67

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)
DE 102010031752 A1 20120126; CN 103026088 A 20130403; EP 2596258 A1 20130529; US 2013116055 A1 20130509; WO 2012010375 A1 20120126

DOCDB simple family (application)
DE 102010031752 A 20100721; CN 201180035747 A 20110615; EP 11726751 A 20110615; EP 2011059900 W 20110615; US 201113810717 A 20110615