

Title (en)
STEERING JOINT FOR A STEERABLE DRILLING SYSTEM

Title (de)
LENKVERBINDUNG FÜR EIN LENKBARES BOHRSYSTEM

Title (fr)
JOINT DE DIRECTION POUR UN SYSTÈME DE FORAGE ORIENTABLE

Publication
EP 3228809 A1 20171011 (EN)

Application
EP 16164116 A 20160406

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Abstract (en)
The invention relates to a steering joint (3) for a steerable drilling system, comprising an upper tubular (301) and a lower tubular (302) connected by a universal joint (303) which allows the upper tubular (301) to bend with respect to the lower tubular (302), wherein the universal joint (303) comprises a joint bearing socket (306) with a hollow core, comprising axially protruding cams (311) with identical extension on a substantially ringshaped face end, a cylindrical and rotatable step piston (308) with a hollow core and radial grooves (312) on a substantially ring-shaped face end, wherein the cams (311) and the grooves (312) are arranged in such a way to provide a positive force-fitting connection of the bearing socket (306) with the step piston (308), and wherein the grooves (312) are of different depth and their bases define inclined planes with respect to the plane of the face end of the step piston (308), so that the upper tubular (301) and the lower tubular (302) can be tilted with respect to each other at predefined steering angles. The invention further relates to the use of such a steering joint in a drilling system, and a drilling system with such a steering joint.

IPC 8 full level
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Citation (search report)

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