

Title (en)

Helical gear pump.

Title (de)

Exzentrerschneckenpumpe.

Title (fr)

Pompe à vis excentrée.

Publication

EP 0381413 A2 19900808 (EN)

Application

EP 90300894 A 19900129

Priority

GB 8902230 A 19890201

Abstract (en)

A helical gear pump is described in which the geometry of the stator (8) and rotor (22) are modified such that the interference is significantly more at the locations of the minor diameter d than the locations of the major diameter D of the rotor. The rotor (22) is preferably plasma coated with modified chromium oxide and the base metal of the rotor is advantageously machined so that in the region of locations of major diameter D, the thickness of the plasma coating (28) is less and, in the region of the locations of minor diameter d, the thickness of the plasma coating (28) is greater than in the remainder of the rotor (22) while allowing the interference to be significantly more at the locations of the minor diameter d than at the locations of the major diameter D.

IPC 1-7

F04C 2/107; F04C 5/00

IPC 8 full level

F04C 2/107 (2006.01)

CPC (source: EP)

F04C 2/1073 (2013.01)

Cited by

EP0627556A1; DE102017104768A1; EP0985826A1; AU754641B2; US6220837B1; WO2018162360A1; WO2004081347A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0381413 A2 19900808; EP 0381413 A3 19901205; FI 900500 A0 19900131; GB 2228976 A 19900912; GB 2228976 B 19930811; GB 8902230 D0 19890322; NO 172200 B 19930308; NO 172200 C 19930616; NO 900446 D0 19900131; NO 900446 L 19900802

DOCDB simple family (application)

EP 90300894 A 19900129; FI 900500 A 19900131; GB 8902230 A 19890201; NO 900446 A 19900131