

Title (en)
STATOR FOR A HELICAL GEAR PUMP

Title (de)
STATOR FÜR EINE EXZENTERSCHNECKENPUMPE

Title (fr)
STATOR POUR UNE POMPE À VIS SANS FIN EXCENTRIQUE

Publication
EP 3767105 B1 20211229 (DE)

Application
EP 19186418 A 20190716

Priority
EP 19186418 A 20190716

Abstract (en)
[origin: WO2021009275A1] The invention relates to a stator (1) for an eccentric screw pump having a rotor, wherein the stator (1) has an elastically flexible lining (3) with an outer surface (9), wherein the lining (3) is surrounded by a rigid casing (2), wherein an inner surface (4) of the lining (3) forms a double coarse thread and limits a pump cavity (5) that is extended in the axial direction (X) for receiving the rotor of the eccentric screw pump, wherein the lining (3) of the stator (1) tapers in the axial direction (X), wherein, in addition, an average wall thickness (W) of the lining (3) continuously decreases in the axial direction from an end wall thickness (WE) - present in the region of an intake side (7) of the stator (1) - until reaching a smallest average wall thickness (WM). According to the invention, it is provided that, after reaching the smallest average wall thickness (WM), the average wall thickness (W) of the lining (3) increases again at least in regions, such that a widening (10) of the lining (3) is formed right up to a discharge side (8) of the stator (1).

IPC 8 full level
F04C 2/107 (2006.01)

CPC (source: EP)
F04C 2/1075 (2013.01); **F04C 2250/30** (2013.01)

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)
EP 3767105 A1 20210120; EP 3767105 B1 20211229; CN 114341496 A 20220412; CN 114341496 B 20231013; ES 2909699 T3 20220510;
PL 3767105 T3 20220502; WO 2021009275 A1 20210121

DOCDB simple family (application)
EP 19186418 A 20190716; CN 202080059862 A 20200716; EP 2020070106 W 20200716; ES 19186418 T 20190716; PL 19186418 T 20190716