

Title (en)

METHOD FOR SETTING THE TOOTH FACE POSITION OF A GEAR WHEEL

Title (de)

VERFHAREN ZUR EINSTELLUNG DER ZAHNFLANKENPOSITION EINES ZAHNRADS

Title (fr)

PROCÉDÉ PERMETTANT DE RÉGLER LA POSITION D'UN FLANC DE DENT D'UNE ROUE DENTÉE

Publication

EP 2255105 A1 20101201 (DE)

Application

EP 08873351 A 20081218

Priority

- DE 2008002132 W 20081218
- DE 102008013983 A 20080312

Abstract (en)

[origin: CA2717908A1] The invention relates to a method for setting the tooth face position of a gear wheel (2), which is positively connected to a double helical pinion shaft (1). A hydraulic press fit (4, 4a) is formed between the gear wheel (2) and pinion shaft (1) in order to be able to eliminate a non-positive connection of the gear wheel (2) shrink-fitted onto the pinion shaft (1), shrink-fitting the gear wheel (2) in order to set the gear wheel position. The setting is carried out by determining a tooth face apex point (A) of the double helix of the pinion shaft (1). A radial plane (E) at a predetermined axial offset (AV) from the tooth face apex point (A) and a radial offset (RV) with respect to the tooth face apex point (A) are defined. The intersecting point (S) of a tooth face (11) of the gear wheel (2) must be located in the predetermined radial offset (RV) in the radial plane (E). Such a pinion shaft (1) is used particularly in a power-splitting spur gearbox (12), wherein an input shaft is multiply engaged with several pinion shafts (1) via a double helix, the gear wheels (2) of the pinion shafts (1) in turn being multiply engaged with a common output shaft (15).

IPC 8 full level

F16H 1/48 (2006.01)

CPC (source: EP US)

B23P 11/022 (2013.01 - EP US); **F16D 1/0858** (2013.01 - EP US); **F16D 1/12** (2013.01 - EP US); **F16H 1/22** (2013.01 - EP US); **F16H 1/48** (2013.01 - EP US); **F16H 57/12** (2013.01 - EP US); **F16H 2057/125** (2013.01 - EP US); **Y10T 29/49464** (2015.01 - EP US); **Y10T 74/19628** (2015.01 - EP US); **Y10T 74/19679** (2015.01 - EP US)

Citation (search report)

See references of WO 2009112003A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

DE 102008013983 B3 20090813; CA 2717908 A1 20090917; EP 2255105 A1 20101201; US 2011017004 A1 20110127; US 8453532 B2 20130604; WO 2009112003 A1 20090917

DOCDB simple family (application)

DE 102008013983 A 20080312; CA 2717908 A 20081218; DE 2008002132 W 20081218; EP 08873351 A 20081218; US 92226508 A 20081218