Title (en)

BEVEL GEAR

Title (de)

SCHRAUBRAD

Title (fr)

ROUE CONIQUE

Publication

EP 2032877 A2 20090311 (DE)

Application

EP 07764361 A 20070612

Priority

- DE 2007001042 W 20070612
- DE 102006030097 A 20060628

Abstract (en)

[origin: WO2008000220A2] The invention relates to a bevel gear, the rim gear (2) of which is produced by injection moulding with a plastic around a base body (I). The aim of the invention is to produce an inventive bevel gear in which there is a connection between the base body (1) and the rim gear (2) the strength of which also permits the transmission of high torques. The base body (1) of the inventive bevel gear is embodied as a flange, around the disc-shaped region (1') of which the plastic rim gear (2) is injection moulded. The region (1") of reduced diameter adjacent to the region (1') forms a hub for rotationally fixed mounting of the bevel gear on a shaft. According to the invention, the flange region (1') has, axially on both sides, several recesses (3, 3'), distributed around the circumference thereof running principally in the axial direction but not extending through said region (1'). The recesses (3, 3') have a swallow-tailed form such that the sections (4, 4') of the outer circumference of the region (1') remaining between them are back-cut by the edges of the recesses (3, 3') running in the axial direction.

IPC 8 full level

F16H 55/06 (2006.01)

CPC (source: EP US)

F16H 55/06 (2013.01 - EP US); F16H 55/17 (2013.01 - EP US); F16H 2055/065 (2013.01 - EP US); Y10T 74/19698 (2015.01 - EP US)

Citation (search report)

See references of WO 2008000220A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

WO 2008000220 A2 20080103; **WO 2008000220 A3 20080327**; BR Pl0714072 A2 20121218; CN 101479505 A 20090708; CN 101479505 B 20111228; DE 102006030097 B3 20080214; EP 2032877 A2 20090311; JP 2009541679 A 20091126; MX 2009000242 A 20090123; US 2009282939 A1 20091119

DOCDB simple family (application)

DE 2007001042 W 20070612; BR PI0714072 A 20070612; CN 200780023698 A 20070612; DE 102006030097 A 20060628; EP 07764361 A 20070612; JP 2009516880 A 20070612; MX 2009000242 A 20070612; US 30629807 A 20070612