

Title (en)

ENGINE COOLING FAN IMPELLER WITH REINFORCED SHROUD

Title (de)

KRAFTFAHRZEUG-LÜFTERRAD MIT VERSTÄRKTEM DECKBAND

Title (fr)

ROUE DE VENTILATEUR DE REFROIDISSEMENT DE MOTEUR AVEC VIROLE RENFORCÉE

Publication

EP 2724031 B1 20170809 (DE)

Application

EP 12732970 A 20120615

Priority

- DE 102011105451 A 20110622
- EP 2012002519 W 20120615

Abstract (en)

[origin: WO2012175179A1] The invention relates to a fan (34) of a motor vehicle, which fan (34) is, in particular, a main fan of an internal combustion engine. The fan (34) comprises a fan wheel (2) with an outer ring (10) which has a substantially L-shaped ring cross section with the formation of a radial limb (14) and an axial limb (12). The radial limb (14) has a cross-sectional enlargement (16) on the free-end side.

IPC 8 full level

F04D 29/02 (2006.01)

CPC (source: EP US)

F04D 29/023 (2013.01 - EP US); **F04D 29/325** (2013.01 - US); **F04D 29/326** (2013.01 - EP US)

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)

DE 102011105451 A1 20121227; CN 103620229 A 20140305; CN 103620229 B 20160817; EP 2724031 A1 20140430;
EP 2724031 B1 20170809; ES 2641252 T3 20171108; US 2014105746 A1 20140417; US 9765794 B2 20170919; WO 2012175179 A1 20121227

DOCDB simple family (application)

DE 102011105451 A 20110622; CN 201280030975 A 20120615; EP 12732970 A 20120615; EP 2012002519 W 20120615;
ES 12732970 T 20120615; US 201314138336 A 20131223