

Title (en)

A fuel valve for large turbocharged two stroke diesel engines

Title (de)

Einspritzdüse für Zweitakt-Dieselmotoren mit großem Hubraum und Turboaufladung

Title (fr)

Soupape à carburant pour moteurs diesel de turbocompresseur à deux temps

Publication

**EP 2541037 A3 20130731 (EN)**

Application

**EP 12173343 A 20120625**

Priority

DK PA201100479 A 20110627

Abstract (en)

[origin: EP2541037A2] A fuel valve (1) for injecting fuel into the combustion chamber of a large turbocharged two stroke diesel engine, with a resiliently biased and axially movable valve needle (20) cooperating with a valve seat (22), a plurality of nozzle holes (35) distributed axially and radially over the nozzle (30), an electronically controlled valve connected to a closing chamber in for urging the valve spindle (20) to its seat (22) for alternatively connecting the closing chamber to a tank port (18) or to a fuel inlet port (16).

IPC 8 full level

**F02M 47/02** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP KR)

**F02M 47/025** (2013.01 - EP KR); **F02M 47/027** (2013.01 - EP KR); **F02M 63/0029** (2013.01 - EP KR); **F02M 63/0036** (2013.01 - EP KR); **F02M 63/0047** (2013.01 - EP KR)

Citation (search report)

- [XY] US 7249591 B2 20070731 - SHIBATA AKIRA [JP]
- [X] EP 1584814 A1 20051012 - BOSCH GMBH ROBERT [DE]
- [XY] US 2005242211 A1 20051103 - FUNAI KENJI [JP], et al
- [X] US 2007095934 A1 20070503 - WISDOM BEN [US]
- [X] WO 2007106510 A2 20070920 - STURMAN IND INC [US], et al
- [XY] DE 10055714 A1 20010613 - DENSO CORP [JP]
- [X] DE 102005060552 A1 20070621 - MAN DIESEL SE [DE]
- [X] DE 102008043985 A1 20090528 - DENSO CORP [JP]
- [Y] WO 02075150 A1 20020926 - BOSCH GMBH ROBERT [DE], et al
- [Y] WO 0236958 A1 20020510 - BOSCH GMBH ROBERT [DE], et al
- [Y] WO 2008071187 A1 20080619 - MAN DIESEL AS [DK], et al

Cited by

EP3002444A1; US10450992B2; US9909546B2; KR20190054922A; JP2019090407A

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2541037 A2 20130102; EP 2541037 A3 20130731; EP 2541037 B1 20180425**; CN 102852686 A 20130102; CN 102852686 B 20151216; DK 177456 B1 20130617; DK 201100479 A 20121228; EP 3406891 A1 20181128; EP 3406891 B1 20211103; JP 2013011274 A 20130117; JP 5526194 B2 20140618; KR 101407811 B1 20140617; KR 20130001685 A 20130104; PL 2541037 T3 20180731; PL 3406891 T3 20220221

DOCDB simple family (application)

**EP 12173343 A 20120625**; CN 201210218518 A 20120627; DK PA201100479 A 20110627; EP 18168976 A 20120625; JP 2012135438 A 20120615; KR 20120067306 A 20120622; PL 12173343 T 20120625; PL 18168976 T 20120625