

Title (en)

A fuel valve for large stroke diesel engines

Title (de)

Einspritzdüse für Dieselmotoren mit großem Hubraum

Title (fr)

Soupape à carburant pour moteurs diesel à longue course

Publication

EP 2378109 A1 20111019 (EN)

Application

EP 11001060 A 20110210

Priority

DK PA201000309 A 20100415

Abstract (en)

A fuel valve (1) for a large two-stroke diesel engine with a nozzle (30) with conventionally arranged nozzle bores (35) that have a center line (36) substantially coinciding with the center line (34) of the axial bore (33) of the nozzle (30) and a hollow cut-off shaft (40) received in the axial bore (33) in the nozzle (30). The cut-off shaft (40) moves in unison with a valve needle (20) and closes the nozzle holes (35) when the valve needle (20) rests on its seat (22) so that the sac volume is practically zero.

IPC 8 full level

F02M 61/04 (2006.01); **F02M 61/06** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP KR)

F02M 61/042 (2013.01 - EP KR); **F02M 61/06** (2013.01 - EP KR); **F02M 61/182** (2013.01 - EP KR)

Citation (search report)

- [I] EP 1063416 A2 20001227 - DELPHI TECH INC [US]
- [I] EP 0713967 A1 19960529 - ZEXEL CORP [JP]
- [I] JP H08296533 A 19961112 - NIPPON CLEAN ENGINE LAB
- [A] US 4339080 A 19820713 - KOPSE ODON

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 2378109 A1 20111019; **EP 2378109 B1 20130320**; CN 102220924 A 20111019; CN 102220924 B 20131009; DK 201000309 A 20111016; DK 2378109 T3 20130617; JP 2011226465 A 20111110; JP 5269928 B2 20130821; KR 101251395 B1 20130405; KR 20110115526 A 20111021; PL 2378109 T3 20130830; RU 2011105685 A 20120820; RU 2486364 C2 20130627

DOCDB simple family (application)

EP 11001060 A 20110210; CN 201110056277 A 20110309; DK 11001060 T 20110210; DK PA201000309 A 20100415; JP 2011029525 A 20110215; KR 20110033286 A 20110411; PL 11001060 T 20110210; RU 2011105685 A 20110215