

Title (en)

Fuel injector having dual mode capabilities and engine using same

Title (de)

Kraftstoffeinspritzventil mit dualer Betriebsfähigkeiten und Motor mit solchem Ventil

Title (fr)

Injecteur de combustible avec capacité bi-mode et moteur utilisant cet injecteur

Publication

EP 1321662 A8 20040825 (EN)

Application

EP 02021789 A 20020926

Priority

- US 32798401 P 20011009
- US 20719302 A 20020729

Abstract (en)

[origin: EP1321662A1] A solitary fuel injector (30, 230, 330, 430, 530, 630) for a diesel engine (10) that is capable of injecting fuel for a homogeneous charge compression ignition injection event, a conventional injection event. The solitary fuel injector (30, 230, 330, 430, 530, 630) also has a mixed mode that includes a homogeneous charge compression ignition injection and a conventional injection in a single compression stroke for the engine (10). <IMAGE>

IPC 1-7

F02M 61/18; **F02M 61/16**; **F02M 47/02**

IPC 8 full level

F02D 41/30 (2006.01); **F02D 41/40** (2006.01); **F02M 45/02** (2006.01); **F02M 45/08** (2006.01); **F02M 47/00** (2006.01); **F02M 47/02** (2006.01); **F02M 55/00** (2006.01); **F02M 57/02** (2006.01); **F02M 59/46** (2006.01); **F02M 61/04** (2006.01); **F02M 61/06** (2006.01); **F02M 61/10** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01); **F02M 63/00** (2006.01); **F02B 1/12** (2006.01)

CPC (source: EP US)

F02D 41/3035 (2013.01 - EP US); **F02D 41/3064** (2013.01 - EP US); **F02D 41/402** (2013.01 - EP US); **F02M 45/02** (2013.01 - EP US); **F02M 47/027** (2013.01 - EP US); **F02M 55/002** (2013.01 - EP US); **F02M 57/025** (2013.01 - EP US); **F02M 59/46** (2013.01 - EP US); **F02M 61/042** (2013.01 - EP US); **F02M 61/045** (2013.01 - EP US); **F02M 61/06** (2013.01 - EP US); **F02M 61/161** (2013.01 - EP US); **F02M 61/18** (2013.01 - EP US); **F02M 61/182** (2013.01 - EP US); **F02M 63/0007** (2013.01 - EP US); **F02M 63/0026** (2013.01 - EP US); **F02M 63/0064** (2013.01 - EP US); **F02B 1/12** (2013.01 - EP US); **F02M 45/086** (2013.01 - EP US); **F02M 59/466** (2013.01 - EP US); **F02M 59/468** (2013.01 - EP US); **F02M 2200/315** (2013.01 - EP US); **F02M 2200/46** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US); **Y02T 10/40** (2013.01 - EP US)

Cited by

CN105229297A; AT501914B1; FR2871524A1; EP1605158A3; CN104428522A; EP2857668A4; EP2998559A1; EP1923566A1; FR2908838A1; DE102006014071B3; EP2634414A4; US9828929B2; US7225791B2; WO2012072864A1; WO2005017342A1; WO2005001255A1; WO2006058617A3; WO2006058640A1; WO2013088428A3

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

EP 1321662 A1 20030625; **EP 1321662 A3 20040922**; **EP 1321662 A8 20040825**; **EP 1321662 B1 20060510**; DE 60211293 D1 20060614; DE 60211293 T2 20070419; DE 60229177 D1 20081113; JP 2003161220 A 20030606; JP 4861594 B2 20120125; US 2003066509 A1 20030410; US 6725838 B2 20040427; US RE44082 E 20130319

DOCDB simple family (application)

EP 02021789 A 20020926; DE 60211293 T 20020926; DE 60229177 T 20020926; JP 2002296681 A 20021009; US 20719302 A 20020729; US 41225106 A 20060426