

Title (en)

A method and a device for supplying fuel to an internal combustion engine

Title (de)

Verfahren und Vorrichtung zur Brennstoffversorgung einer Brennkraftmaschine

Title (fr)

Méthode et dispositif pour alimenter en carburant un moteur à combustion interne

Publication

**EP 0790395 B1 20020109 (EN)**

Application

**EP 97102329 A 19970213**

Priority

JP 2690396 A 19960214

Abstract (en)

[origin: EP0790395A2] According to the present invention, the state of a liquid fuel such as diesel fuel is made a supercritical state by raising the pressure and the temperature of the fuel above the critical pressure and temperature. Then, the fuel is injected from the fuel injection valve into the combustion chamber of the engine in the supercritical state. When the fuel in the supercritical state is injected into the combustion chamber of the engine, it forms an extremely fine uniform mist in the entire combustion chamber. Therefore, the combustion of the engine is largely improved.  
<IMAGE>

IPC 1-7

**F02B 51/00**; C10G 9/00

IPC 8 full level

**F02B 51/00** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP)

**F02B 51/00** (2013.01); **F02B 3/06** (2013.01)

Citation (examination)

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- US 5408957 A 19950425 - CROWLEY TIMOTHY J [US]
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NL1012936C2; US2019323459A1; US10794340B2; US6276347B1; US6688108B1; US11608799B2; WO0050748A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 0790395 A2 19970820**; **EP 0790395 A3 19971119**; **EP 0790395 B1 20020109**; DE 69709465 D1 20020214; DE 69709465 T2 20020711

DOCDB simple family (application)

**EP 97102329 A 19970213**; DE 69709465 T 19970213