

Title (en)
SELF-IGNITING INTERNAL COMBUSTION ENGINE

Title (de)
BRENNKRAFTMASCHINE MIT SELBSTZÜNDUNG

Title (fr)
MOTEUR À COMBUSTION INTERNE À AUTO-ALLUMAGE

Publication
EP 1608856 A1 20051228 (DE)

Application
EP 04724291 A 20040330

Priority

- EP 2004003339 W 20040330
- DE 10315149 A 20030403

Abstract (en)
[origin: WO2004088109A1] The invention relates to a method for operating an internal combustion engine consisting in directly injecting fuel in a combustion chamber as pre-injection main injection and optionally post-injection, with the aid of an injector nozzle provided with several injecting borings,, the pre-injection being preferably carried out in a cadenced manner. The aim of said invention is to reduce a combustion temperature and to avoid increased pressure in the combustion chamber. For this purpose, a certain quantity of water is introduced in the combustion chamber during or and after the pre-injection.

IPC 1-7
F02B 47/02; F02M 43/04; F02M 25/03; F02D 41/40

IPC 8 full level
F02B 3/10 (2006.01); **F02B 15/00** (2006.01); **F02B 47/02** (2006.01); **F02D 41/40** (2006.01); **F02M 25/03** (2006.01); **F02M 43/00** (2006.01); **F02M 43/04** (2006.01); **F02M 45/04** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP US)
F02B 47/02 (2013.01 - EP US); **F02D 41/3035** (2013.01 - EP US); **F02D 41/402** (2013.01 - EP US); **F02M 25/0227** (2013.01 - EP US); **F02M 25/03** (2013.01 - EP US); **F02M 43/04** (2013.01 - EP US); **F02M 45/04** (2013.01 - EP US); **F02B 3/06** (2013.01 - EP US); **Y02T 10/40** (2013.01 - EP US)

Citation (search report)
See references of WO 2004088109A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 10315149 A1 20041014; EP 1608856 A1 20051228; JP 2006522262 A 20060928; US 2006037563 A1 20060223; WO 2004088109 A1 20041014

DOCDB simple family (application)
DE 10315149 A 20030403; EP 04724291 A 20040330; EP 2004003339 W 20040330; JP 2006504910 A 20040330; US 24176905 A 20050930