

Title (en)

METHOD FOR REDUCING HYDROCARBON EMISSIONS FROM A COLD ENGINE WITH EXTERNAL FUEL INJECTION AND ENGINE FOR THE IMPLEMENTATION OF SAID METHOD

Title (de)

VERFAHREN ZUR REDUKTION VON HC-EMISSIONEN AUS EINEM KÄLTEMOTOR MIT EXTERNER KRAFTSTOFFEINSPRITZUNG UND MOTOR ZUR AUSFÜHRUNG DIESER VERFAHRENS

Title (fr)

PROCEDE DE REDUCTION DES EMISSIONS D'HYDROCARBURES D'UN MOTEUR FROID A INJECTION INDIRECTE D'ESSENCE

Publication

**EP 2044312 A2 20090408 (FR)**

Application

**EP 07789012 A 20070615**

Priority

- FR 2007051448 W 20070615
- FR 0653103 A 20060725

Abstract (en)

[origin: WO2008012452A2] The invention relates to a method for reducing unburned hydrocarbon emissions from a cold engine with external fuel injection. Preferably, the method comprises three successive phases (I, II, III) after the cold engine is started: a first phase (I) of high pressure fuel injection (HP) during the intake, the intake valves open, a second phase (II) comprising a principal fuel injection at high pressure during the intake, the intake valves at least partly open and a secondary fuel injection at high pressure during the exhaust, intake valves closed, and a third phase (III) of injection at low pressure (BP), during the exhaust, intake valves closed. The invention also relates to an engine for the implementation of the method.

IPC 8 full level

**F02D 41/06** (2006.01); **F02D 41/34** (2006.01)

CPC (source: EP)

**F02D 41/0002** (2013.01); **F02D 41/064** (2013.01); **F02D 41/345** (2013.01); **F02D 41/047** (2013.01); **F02D 41/061** (2013.01); **F02D 2041/001** (2013.01); **F02D 2250/31** (2013.01); **F02D 2400/02** (2013.01); **Y02T 10/40** (2013.01)

Citation (search report)

See references of WO 2008012452A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

**WO 2008012452 A2 20080131**; **WO 2008012452 A3 20080410**; EP 2044312 A2 20090408; FR 2904370 A1 20080201; FR 2904370 B1 20081017

DOCDB simple family (application)

**FR 2007051448 W 20070615**; EP 07789012 A 20070615; FR 0653103 A 20060725