

Title (en)

Combustion control of an internal combustion engine

Title (de)

Verbrennungsregelung für eine Brennkraftmaschine

Title (fr)

Procédé de contrôle de la combustion pour un moteur à combustion interne

Publication

EP 1279802 B1 20080319 (FR)

Application

EP 02291797 A 20020717

Priority

- FR 0110148 A 20010727
- US 20050502 A 20020723

Abstract (en)

[origin: EP1279802A1] Curves (A,A') show the pressure and energy release against crankshaft angle for a diesel/air/recirculated exhaust fuel mixture which has about 70% exhaust gas. If a smaller proportion (60%) of recirculated exhaust gas is used and 1-8 cubic mm of fuel is injected at about 15 degrees before top dead center the slow oxidation period is extended (OL2) and the pressure and energy curves (B,B') are almost identical to the previous results. An Independent claim is also included for equipment to control auto ignition by fuel injection during slow oxidation phase.

IPC 8 full level

F02B 1/12 (2006.01); **F02D 41/30** (2006.01); **F02B 7/02** (2006.01); **F02B 47/08** (2006.01); **F02D 21/08** (2006.01); **F02D 41/02** (2006.01); **F02D 41/38** (2006.01); **F02D 43/00** (2006.01); **F02M 25/07** (2006.01)

CPC (source: EP KR US)

F02B 1/12 (2013.01 - EP US); **F02B 7/02** (2013.01 - EP US); **F02B 47/08** (2013.01 - EP US); **F02D 41/30** (2013.01 - KR); **F02D 41/3041** (2013.01 - EP US); **F02D 41/3047** (2013.01 - EP US)

Cited by

FR2876744A1; FR2899283A1; EP1653068A3; US7293544B2; WO2005047666A1; EP1653068A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

EP 1279802 A1 20030129; EP 1279802 B1 20080319; AT E389791 T1 20080415; DE 60225637 D1 20080430; DE 60225637 T2 20090423; ES 2302791 T3 20080801; FR 2827910 A1 20030131; FR 2827910 B1 20040102; JP 2003106204 A 20030409; KR 20030010564 A 20030205; US 2004016415 A1 20040129; US 6701886 B2 20040309

DOCDB simple family (application)

EP 02291797 A 20020717; AT 02291797 T 20020717; DE 60225637 T 20020717; ES 02291797 T 20020717; FR 0110148 A 20010727; JP 2002217699 A 20020726; KR 20020044236 A 20020726; US 20050502 A 20020723