

Title (en)
VARIABLE DISPLACEMENT DIESEL ENGINE

Title (de)
DIESELMOTOR MIT VERÄNDERLICHEN HUB

Title (fr)
MOTEUR DIESEL A CYLINDREE VARIABLE

Publication
EP 1066457 A4 20040728 (EN)

Application
EP 98913101 A 19980326

Priority
US 9805832 W 19980326

Abstract (en)
[origin: CA2324404A1] In accordance with the invention, the number of operative cylinders (1, 2, 3) of Diesel engines (10) is reduced under low load by shutting off fuel injectors (11, 21, 31) and deactivating the intake valves (1Vi, 2Vi, 3Vi) and exhaust valves (1Ve, 2Ve, 3Ve) to selected cylinders (11, 21, 31). The inactive cylinders are heated up by glow plugs (1GP, 2GP, 3GP) to a minimum temperature prior to being reactivated. A computer (7) controls the number of operative cylinders (1, 2, 3) according to load, and to alternate between operative cylinders to provide for even wear so that maintenance cost is minimized.

IPC 1-7
F02B 77/00; F02D 41/36; F02D 41/12; F02P 19/02

IPC 8 full level
F02B 3/08 (2006.01); **F02B 77/00** (2006.01); **F02D 17/02** (2006.01); **F02D 41/00** (2006.01); **F02D 41/12** (2006.01); **F02D 41/36** (2006.01); **F02D 45/00** (2006.01); **F02P 19/02** (2006.01)

CPC (source: EP)
F02D 41/0087 (2013.01); **F02P 19/026** (2013.01)

Citation (search report)

- [XY] US 4639871 A 19870127 - SAKAI TUGUYASU [JP], et al
- [Y] US 4509488 A 19850409 - FOERSTER HANS-JOACHIM [DE], et al
- [A] US 4781160 A 19881101 - LOEHR JOACHIM [DE], et al
- [A] US 4391255 A 19830705 - STAERZL RICHARD E
- See references of WO 9949193A1

Designated contracting state (EPC)
DE GB SE

DOCDB simple family (publication)
AU 6773098 A 19991018; AU 763652 B2 20030731; CA 2324404 A1 19990930; EP 1066457 A1 20010110; EP 1066457 A4 20040728; JP 2002507690 A 20020312

DOCDB simple family (application)
AU 6773098 A 19980326; CA 2324404 A 19980326; EP 98913101 A 19980326; JP 2000538134 A 19980326