

Title (en)

MULTI-CYLINDER INTERNAL COMBUSTION ENGINE AND METHOD FOR THE OPERATION THEREOF

Title (de)

MEHRZYLINDRIGE BRENNKRAFTMASCHINE UND VERFAHREN ZUM BETREIBEN EINER MEHRZYLINDRIGEN BRENNKRAFTMASCHINE

Title (fr)

MOTEUR A COMBUSTION INTERNE POLYCYLINDRIQUE, ET PROCEDE POUR FAIRE FONCTIONNER UN MOTEUR A COMBUSTION INTERNE POLYCYLINDRIQUE

Publication

EP 1682754 B1 20170118 (DE)

Application

EP 04740846 A 20040709

Priority

- EP 2004007563 W 20040709
- DE 10352498 A 20031111

Abstract (en)

[origin: WO2005052329A1] The invention relates to a multi-cylinder internal combustion engine and a method for the operation thereof. An exhaust gas duct and one respective gas intake valve (E) and gas discharge valve (A) are allocated to the cylinders. Furthermore, at least one of the cylinders (1-6) of the internal combustion engine (B) is provided with an additional discharge valve (Z) by means of which a flow connection is established between the combustion chamber and the exhaust gas duct in the open state thereof. According to the invention, an exhaust gas composition and/or an exhaust gas temperature which is/are different from the exhaust gas composition and/or exhaust gas temperature obtained during normal operation and support/s regeneration of an exhaust gas purifying unit that is disposed in the exhaust gas duct can be adjusted in connection with a regeneration mode used for regenerating said exhaust gas purifying unit by actuating the additional discharge valve (Z) of at least one cylinder. According to the inventive method, the additional discharge valve (Z) of at least one cylinder is at least temporarily opened in connection with a regeneration process of the exhaust gas purifying unit.

IPC 8 full level

F01N 3/023 (2006.01); **F01L 1/34** (2006.01); **F01N 3/08** (2006.01)

CPC (source: EP US)

F01L 1/34 (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT SE

DOCDB simple family (publication)

DE 10352498 A1 20050609; EP 1682754 A1 20060726; EP 1682754 B1 20170118; JP 2007510852 A 20070426; JP 4355962 B2 20091104; US 2007221166 A1 20070927; US 7293405 B2 20071113; WO 2005052329 A1 20050609

DOCDB simple family (application)

DE 10352498 A 20031111; EP 04740846 A 20040709; EP 2004007563 W 20040709; JP 2006538660 A 20040709; US 57907304 A 20040709