

Title (en)
METHOD FOR DETERMINING NITROGEN OXIDE CONTENT IN INTERNAL COMBUSTION ENGINE EXHAUST GASES CONTAINING OXYGEN

Title (de)
VERFAHREN ZUR BESTIMMUNG DES STICKOXIDGEHALTS IN SAUERSTOFFHALTIGEN ABGASEN VON BRENNKRAFTMASCHINEN

Title (fr)
PROCEDE DE DETERMINATION DE LA TENEUR EN AZOTE DE GAZ D'ECHAPPEMENT AZOTES ISSUS DE MOTEURS THERMIQUES

Publication
EP 1313935 B1 20061011 (DE)

Application
EP 01960712 A 20010828

Priority
• DE 10043383 A 20000902
• EP 0109870 W 20010828

Abstract (en)
[origin: WO0218762A1] During the operation of internal combustion engines, the combustible mixture is compressed in a combustion chamber (11) in at least one cylinder (2) by an alternately moveable piston (12). In a method designed to determine the nitrogen oxide content in exhaust gases containing oxygen, the amount of fuel fed to the cylinder (2) and the mass of air flowing in a suction pipe (15) are detected and transmitted to an electric circuit (6). The centre of gravity (S) of combustion is determined from at least one real engine operation measuring value and the amount of nitrogen oxide emission is calculated on the basis of the value for the centre of gravity (S) of combustion, also taking into account the values of the detected amount of fuel and air mass.

IPC 8 full level
F02D 35/02 (2006.01); **F02M 25/07** (2006.01); **F02D 35/00** (2006.01); **F02D 45/00** (2006.01)

CPC (source: EP US)
F02D 35/023 (2013.01 - EP US); **F02D 35/028** (2013.01 - EP US); **F02D 41/1462** (2013.01 - EP US); **F02D 2250/36** (2013.01 - EP US)

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 0218762 A1 20020307; DE 10043383 A1 20020314; DE 10043383 C2 20020620; DE 50111218 D1 20061123; EP 1313935 A1 20030528;
EP 1313935 B1 20061011; JP 2004507652 A 20040311; JP 4008810 B2 20071114; US 2004050362 A1 20040318; US 6826471 B2 20041130

DOCDB simple family (application)
EP 0109870 W 20010828; DE 10043383 A 20000902; DE 50111218 T 20010828; EP 01960712 A 20010828; JP 2002522656 A 20010828;
US 36332103 A 20030815