

Title (en)

METHOD AND DEVICE FOR DETERMINING THE ION FLOW IN INTERNAL COMBUSTION ENGINES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERFASSUNG DES IONENSTROMS AN BRENNKRAFTMASCHINEN

Title (fr)

PROCEDE ET DISPOSITIF DE DETERMINATION DU FLUX IONIQUE SUR LES MOTEURS A COMBUSTION INTERNE

Publication

**EP 0943055 B1 20031001 (DE)**

Application

**EP 98943636 A 19980703**

Priority

- DE 9801839 W 19980703
- DE 19744163 A 19971007

Abstract (en)

[origin: DE19744163A1] The method involves performing offset correction of the ionic current signals, and then performing masking and multiplexing operations of the signals. The method involves measuring the ionic current signal (s1) in each cylinder, for offset correction before each ignition operation, and then determining the level of the measuring signal of each cylinder. During a masking operation, the measuring signal in a second signal (s2), which is extracted from the measuring signal, is replaced by the value of the level of the signal in each cylinder and is also subtracted from the signal until the next ignition operation. The channels for multiplexing, are combined together by addition of the signals of the relevant cylinder to produced a third signal (s3). An Independent claim is included for a device for processing the ionic current signals.

IPC 1-7

**F02P 17/12**

IPC 8 full level

**F02P 17/12** (2006.01)

CPC (source: EP US)

**F02P 17/12** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR IT SE

DOCDB simple family (publication)

**DE 19744163 A1 19990408**; DE 59809800 D1 20031106; EP 0943055 A1 19990922; EP 0943055 B1 20031001; JP 2001507426 A 20010605; US 6185500 B1 20010206; WO 9918350 A1 19990415

DOCDB simple family (application)

**DE 19744163 A 19971007**; DE 59809800 T 19980703; DE 9801839 W 19980703; EP 98943636 A 19980703; JP 52073499 A 19980703; US 31904199 A 19990601