

Title (en)
Determination of ignition spark duration

Title (de)
Zündfunkenbrenndauerbestimmung

Title (fr)
Détermination de la durée d'étincelle d'allumage

Publication
EP 2416004 A3 20140521 (DE)

Application
EP 11004406 A 20110530

Priority
AT 13282010 A 20100806

Abstract (en)
[origin: EP2416004A2] The method involves measuring the temporal gradient of the primary current flowing on the primary side and dividing the temporal gradient into a spark burning phase (23) and a subsequent free-wheeling phase of a high voltage-transmitter. The temporal gradient of the primary current is mapped in the spark burning phase by a function and in the free-wheeling phase by another function. Independent claims are also included for the following: (1) an ignition device with a measuring device; and (2) an internal combustion engine with a regulating device.

IPC 8 full level
F02P 17/12 (2006.01); **F02P 3/04** (2006.01); **F02P 3/08** (2006.01)

CPC (source: EP US)
F02P 3/04 (2013.01 - EP US); **F02P 3/0853** (2013.01 - EP US); **F02P 17/12** (2013.01 - EP US)

Citation (search report)

- [I] EP 1078162 A1 20010228 - HOEFLICH GARY R [US]
- [A] DE 19953710 A1 20010510 - BOSCH GMBH ROBERT [DE]
- [A] DE 4116642 A1 19920227 - BOSCH GMBH ROBERT [DE]
- [A] WO 9102153 A1 19910221 - VOLKSWAGEN AG [DE]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2416004 A2 20120208; EP 2416004 A3 20140521; EP 2416004 B1 20171129; AT 510034 A4 20120115; AT 510034 B1 20120115; US 2012031382 A1 20120209; US 8662059 B2 20140304

DOCDB simple family (application)
EP 11004406 A 20110530; AT 13282010 A 20100806; US 201113171860 A 20110629