

Title (en)  
METHOD FOR DETECTING FAILED COMBUSTION IN AN INTERNAL COMBUSTION ENGINE BY A COMBINATION OF COMBUSTION  
IRREGULARITY INDICES

Title (de)  
VERFAHREN ZUM ERKENNEN EINER NICHTERFOLGTEN VERBRENNUNG IN EINEM VERBRENNUNGSMOTOR DURCH EINE  
KOMBINATION VON VERBRENNUNGSIRREGULARITÄTSINDIZES

Title (fr)  
PROCEDE DE DETECTION DE RATES DE COMBUSTION DANS UN MOTEUR A COMBUSTION INTERNE PAR COMBINAISON D'INDICES  
D'IRREGULARITE DE COMBUSTION

Publication  
**EP 1595125 A1 20051116 (FR)**

Application  
**EP 04710015 A 20040211**

Priority  
• EP 2004001249 W 20040211  
• FR 0302056 A 20030220

Abstract (en)  
[origin: FR2851611A1] The method involves calculating a current value of an index representative of irregularities of engine running at a time (t). Current value of observation function E(t) at the same time is calculated from the current value of the index. The current value of E(t) is compared with a predetermined threshold value. Combustion false start of the engine is detected when the current value of E(t) exceeds the threshold value. Index is calculated from linear combination of elementary indexes, each index representing running irregularities of engine. Each elementary index is multiplied by predetermined coefficient obtained from similar running conditions on reference engine.

IPC 1-7  
**G01M 15/00**

IPC 8 full level  
**G01M 15/11** (2006.01)

CPC (source: EP KR US)  
**F02B 77/08** (2013.01 - KR); **F02D 41/22** (2013.01 - KR); **G01M 15/00** (2013.01 - KR); **G01M 15/11** (2013.01 - EP US); **G06F 17/10** (2013.01 - KR); **Y10S 123/00** (2013.01 - KR)

Citation (search report)  
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Designated contracting state (EPC)  
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DOCDB simple family (publication)  
**FR 2851611 A1 20040827; FR 2851611 B1 20050408**; EP 1595125 A1 20051116; JP 2006518826 A 20060817; JP 4340285 B2 20091007; KR 20050103298 A 20051028; MX PA05008895 A 20060309; US 2006167614 A1 20060727; US 7203592 B2 20070410; WO 2004074806 A1 20040902

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**FR 0302056 A 20030220**; EP 04710015 A 20040211; EP 2004001249 W 20040211; JP 2006501801 A 20040211; KR 20057015393 A 20050819; MX PA05008895 A 20040211; US 54653405 A 20050822