

Title (en)
Method of providing multicharge ignition

Title (de)
Verfahren zur Bereitstellung von Mehrladungszündung

Title (fr)
Procédé de fourniture d'ignition multicharge

Publication
EP 2119906 A1 20091118 (EN)

Application
EP 08156187 A 20080514

Priority
EP 08156187 A 20080514

Abstract (en)
A method for providing multicharge ignition, i.e. multiple ignition sparks across the same spark plug, to an internal combustion engine is proposed. It comprises a first charging event of an ignition coil followed by a first discharge event to produce a spark, and at least one recharging event followed by a corresponding discharge event to produce a further spark, wherein: the interruption of the primary current following a recharging event is triggered based on the amount of energy stored in the ignition coil. However, each recharging event takes place for at least a predetermined minimum recharging period regardless of the amount of energy stored in the ignition coil.

IPC 8 full level
F02P 15/08 (2006.01)

CPC (source: EP)
F02P 15/08 (2013.01)

Citation (applicant)
US 6378513 B1 20020430 - BOYER JOHN W [US], et al

Citation (search report)
• [X] DE 102004056844 A1 20060601 - DAIMLER CHRYSLER AG [DE] & US 2008121214 A1 20080529 - BERTSCH DIETMAR [DE], et al
• [A] DE 10138871 A1 20020328 - DELPHI TECH INC [US]
• [A] US 2007175461 A1 20070802 - WADA JYUNICHI [JP], et al
• [A] US 2007181110 A1 20070809 - TORIYAMA MAKOTO [JP], et al
• [A] EP 1406003 A1 20040407 - HITACHI LTD [JP]
• [A] US 2004040535 A1 20040304 - MIWA TETSUYA [JP], et al
• [A] JP S60204971 A 19851016 - NISSAN MOTOR
• [DA] US 6378513 B1 20020430 - BOYER JOHN W [US], et al

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

Designated extension state (EPC)
AL BA MK RS

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