

Title (en)

DEVICE FOR THE HEATING OF THE ADMISSION AIR IN THE COMBUSTION ENGINE BY MEANS OF A FLAME STARTING SYSTEM

Publication

EP 0492084 A3 19931013 (DE)

Application

EP 91118286 A 19911026

Priority

DE 4041630 A 19901222

Abstract (en)

[origin: EP0492084A2] The invention relates to a method for the heating of the admission air in combustion engines by means of a flame starting system which has at least one glow plug and is controlled such that, during a first time period, the glow plug is continuously preheated and, in a second following time period, is operated in a pulsed manner and that the glow plug is switched off after the expiry of a safety time. In order to preheat the glow plug while taking into account the instantaneous temperature of the glow plug during cooling and the applied voltage in such a way that the temperature required for a restart is achieved within a narrow tolerance range, it is proposed that the renewed preheating time of the glow plug in the case of a repeated starting procedure taking place after the expiry of the safety time should be specified in accordance with a value determined from the glow plug temperature, the instantaneous glow plug temperature being determined from the cooling time of the glow plug after it has been switched off. <IMAGE>

IPC 1-7

F02P 19/02

IPC 8 full level

F02N 19/06 (2010.01); **F02P 19/02** (2006.01)

CPC (source: EP US)

F02P 19/025 (2013.01 - EP US)

Citation (search report)

- [AD] DE 3342865 A1 19850605 - DAIMLER BENZ AG [DE]
- [A] GB 2099920 A 19821215 - DIESEL KIKI CO
- [A] DE 3316447 A1 19831215 - NISSAN MOTOR [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 3 (M-349)9. Januar 1985 & JP-A-59 153 979 (NIPPON DENSO KK) 1. September 1984
- [A] PATENT ABSTRACTS OF JAPAN vol. 8, no. 267 (M-343)7. Dezember 1984 & JP-A-59 138 775 (TOYOTA JIDOSHA KK) 9. August 1984
- [A] PATENT ABSTRACTS OF JAPAN vol. 8, no. 120 (M-300)6. Juni 1984 & JP-A-59 025 084 (YANMAR DIESEL KK) 8. Februar 1984

Cited by

JP2010531403A; DE102007031613B4; FR2702249A1; FR2910564A1; US7899609B2; WO2008077947A1

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