

Title (en)

An ignition control unit to control multiple ignitions

Title (de)

Zündungssteuerungseinheit zur Steuerung mehrerer Zündungen

Title (fr)

Unité de commande d'allumage pour contrôler des allumages multiples

Publication

**EP 2290223 A1 20110302 (EN)**

Application

**EP 09169020 A 20090831**

Priority

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Abstract (en)

The invention relates to the field of ignition control units. The ignition control unit ICU (10) receives from ECU (13) timing information to start a first spark, threshold values of primary and/or secondary current to control multiple sparks in a combustion cycle. The ECU sends the required information to ICU using the gap between two pulses to encode the required information. The ICU decodes the received information and starts the first spark in dependence of the timing information received. The ICU controls the subsequent sparks based on the threshold values received from the ECU for primary and/or secondary current.

IPC 8 full level

**F02P 15/08** (2006.01); **F02P 3/05** (2006.01)

CPC (source: EP)

**F02P 3/051** (2013.01); **F02P 15/10** (2013.01)

Citation (applicant)

US 6032657 A 20000307 - ROSSI DANIELE [IT], et al

Citation (search report)

- [X] WO 2009053162 A1 20090430 - BOSCH GMBH ROBERT [DE], et al
- [A] US 5476084 A 19951219 - MORGANTI CARL R [US], et al
- [A] WO 2009012836 A1 20090129 - DAIMLER AG [DE], et al
- [A] US 2003154954 A1 20030821 - VOGEL MANFRED [DE], et al

Cited by

US11378051B2; US2015211474A1; JP2019190328A; EP2650530A1; EP2873850A1; DE102011077357B4; DE102014109974A1; DE102014109974B4; US11466657B2; CN106662064A; FR2988435A1; CN104204468A; RU2616726C2; US9777696B2; US9915207B2; WO2013139974A1; US10036362B2; WO2016020087A1

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