

Title (en)

Method of operating a combustion engine

Title (de)

Verfahren für den Betrieb eines Verbrennungsmotors

Title (fr)

Procédé de fonctionnement d'un moteur à combustion

Publication

EP 2772631 A1 20140903 (EN)

Application

EP 13157358 A 20130301

Priority

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Abstract (en)

A method of operating a combustion engine is specified. The combustion engine comprises a cylinder, a piston, an injection valve and a pressure sensor, wherein the cylinder and the piston delimit a combustion chamber, and wherein the method comprises injecting fuel with the injection valve into the combustion chamber in a load condition of the combustion engine and measuring a pressure signal in the combustion chamber with the pressure sensor. It is determined (32) during the load condition a value of an integral net heat release of the load condition corresponding to an actual angle of the combustion engine and depending on the pressure signal. It is retrieved (34) during the load condition a value of an integral net heat release of an overrun condition of the combustion engine corresponding to the actual angle. And it is determined (36) during the load condition a value of an integral gross heat release of the load condition corresponding to the actual angle depending on the value of the integral net heat release of the overrun condition and the value of the integral net heat release in the load condition.

IPC 8 full level

F02D 35/02 (2006.01)

CPC (source: EP)

F02D 35/023 (2013.01); **F02D 35/028** (2013.01)

Citation (applicant)

- US 2010121555 A1 20100513 - FISCHER WOLFGANG [DE], et al
- PISCHINGER; KRAF3NIG; TAUCAR; SAMS: "Thermodynamik der Verbrennungskraftmaschine", 1989, SPRINGER

Citation (search report)

- [XA] EP 1936156 A1 20080625 - DELPHI TECH INC [US]
- [A] DE 102006001271 A1 20070712 - SIEMENS AG [DE]
- [A] US 2009055074 A1 20090226 - ISHIGURO TETSUYA [JP], et al
- [A] DE 102008004221 A1 20090716 - BOSCH GMBH ROBERT [DE]

Cited by

KR20200024933A; CN111051670A; WO2019034260A1

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