

Title (en)

MEMS BOLOMETER SENSOR FOR MEASURING TEMPERATURE IN AN EXHAUST PIPE OF AN AUTOMOTIVE VEHICLE

Title (de)

MEMS-BOLOMETERSENSOR ZUR MESSUNG DER TEMPERATUR IN EINEM ABGASROHR EINES KRAFTFAHRZEUGS

Title (fr)

CAPTEUR BOLOMÈTRE MEMS POUR MESURER LA TEMPÉRATURE DANS UN TUYAU D'ÉCHAPPEMENT D'UN VÉHICULE AUTOMOBILE

Publication

EP 3362665 A4 20190522 (EN)

Application

EP 16861041 A 20161031

Priority

- US 201514928232 A 20151030
- US 2016059717 W 20161031

Abstract (en)

[origin: WO2017075588A1] A control system for an internal combustion engine includes a temperature sensor and an engine controller. The sensor measures the temperature of exhaust gas passing through an exhaust manifold of the engine during each cycle. The controller selectively operates the engine in a first state and a second state. In the first, normal state, a quantity of fuel based on an open loop fuel mass command value is injected into the engine each cycle. In the second state, the controller determines a temperature of the exhaust gas during a normal cycle, injects the quantity and additional fuel into the engine during a second cycle, determines the temperature of the exhaust gas during the second cycle, compares the temperatures, and adjusts the command value for fuel to be injected each cycle when operating the engine in the first state.

IPC 8 full level

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F01N 2560/06 (2013.01); **F02D 2200/0614** (2013.01); **Y02T 10/40** (2013.01)

Citation (search report)

- [XYI] US 2013245920 A1 20130919 - VOS DAVID W [US], et al
- [XYI] US 2010258099 A1 20101014 - ANDERSSON MARTIN N [US], et al
- [Y] US 2015117490 A1 20150430 - FEYH ANDO [DE], et al
- [A] DE 102005031591 A1 20070125 - MAN DIESEL SE [DE]
- [A] US 7258107 B2 20070821 - JOHNSON DANIEL J [US], et al
- See references of WO 2017075588A1

Designated contracting state (EPC)

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