

Title (en)
Method for determining operating parameters of an injection system

Title (de)
Verfahren zur Bestimmung von Parametern eines Einspritzsystems

Title (fr)
Procédé de détermination des paramètres de fonctionnement d'un dispositif d'injection

Publication
EP 1705355 A1 20060927 (FR)

Application
EP 05290675 A 20050325

Priority
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Abstract (en)
The method involves calculating an average speed of an injector in the order of injection cycles of an engine cycle. An injection control signal including a test pulse with an adjustable parameter is applied to the injector to be tested. An average speed of the injector to be tested is calculated. A difference between the average speeds is calculated. The above steps are repeated for another engine cycle by varying the parameter. A value of the parameter is determined for which the average speed difference exceeds a preset threshold and the value is stored. The average speeds of the injector and the injector to be tested are equal to the speed of an internal combustion engine realized on measurement periods recovering injection cycles associated to the injector and the injector to be tested respectively.

IPC 8 full level
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F02D 41/2441 (2013.01 - EP US); **F02D 41/403** (2013.01 - EP US)

Citation (applicant)
• EP 0740068 A2 19961030 - LUCAS IND PLC [GB]
• EP 0937891 A2 19990825 - LUCAS IND PLC [GB]
• FR 2720787 A1 19951208 - RENAULT VEHICULES IND [FR]

Citation (search report)
• [A] EP 1350941 A1 20031008 - TOYOTA MOTOR CO LTD [JP], et al
• [DA] FR 2720787 A1 19951208 - RENAULT VEHICULES IND [FR]
• [A] EP 1388661 A2 20040211 - FIAT RICERCHE [IT]

Cited by
FR3055665A1; FR2917462A1; CN103967677A; CN112943500A; CN114544180A; US8374770B2; WO2009092474A1

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DE 602005004892 T2 20090305; JP 2006275046 A 20061012; JP 4774516 B2 20110914; US 2006224299 A1 20061005;
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