

Title (en)

Method for evaluating the opening angle of an air throttle

Title (de)

Verfahren zur Bestimmung des Drosselklappenwinkels

Title (fr)

Méthode pour déterminer l'angle d'ouverture d'un papillon

Publication

**EP 1002942 A3 20011004 (DE)**

Application

**EP 99119248 A 19990928**

Priority

DE 19853410 A 19981119

Abstract (en)

[origin: EP1002942A2] The method involves several circuits (KF1-3) determining the choke flap position from the air mass flow and the difference pressure across the choke flap using a choke flap model. The model is defined by a sub-critical air flow through the choke flap and contains at least two characteristic fields. The first characteristic field describes at least two relationships between the choke flap angle and air mass at different pressure differences and the second the non-linear transition between the characteristic lines in the first field.

IPC 1-7

**F02D 11/10**; **F02D 41/18**; **F02D 41/00**

IPC 8 full level

**F02D 45/00** (2006.01); **F02D 11/10** (2006.01); **F02D 41/00** (2006.01); **F02D 41/18** (2006.01); **F02D 41/24** (2006.01)

CPC (source: EP US)

**F02D 11/105** (2013.01 - EP US); **F02D 41/2422** (2013.01 - EP US); **F02D 2200/0402** (2013.01 - EP US); **F02D 2200/0406** (2013.01 - EP US); **F02D 2250/16** (2013.01 - EP US)

Citation (search report)

- [Y] US 4549517 A 19851029 - KAMIYAMA SHUICHI [JP]
- [Y] DE 19802843 A1 19980730 - DENSO CORP [JP]
- [A] WO 9735106 A2 19970925 - SIEMENS AG [DE], et al
- [A] DE 4319015 A1 19941215 - VDO SCHINDLING [DE]
- [A] US 5273019 A 19931228 - MATTHEWS GREGORY P [US], et al

Cited by

DE102013213310B4; FR2821388A1; DE102013213310A1; WO02068806A1

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**EP 1002942 A2 20000524**; **EP 1002942 A3 20011004**; **EP 1002942 B1 20040602**; DE 19853410 A1 20000525; DE 59909641 D1 20040708; ES 2218926 T3 20041116; JP 2000161120 A 20000613; US 6318163 B1 20011120

DOCDB simple family (application)

**EP 99119248 A 19990928**; DE 19853410 A 19981119; DE 59909641 T 19990928; ES 99119248 T 19990928; JP 32853899 A 19991118; US 43427599 A 19991105