

Title (en)
SYSTEM FOR REGULATING THE RICHNESS OF AN INJECTION THERMAL ENGINE WITH ADAPTIVE RICHNESS REFERENCE INPUT

Title (de)
VERFAHREN ZUM REGELN DES KRAFTSTOFF/LUFT -VERHALTNISSES EINER BRENNKRAFTMASCHINE MIT ADAPTIVERKRAFTSTOFF/LUFT -VERHALTNIS-SOLLWERT

Title (fr)
SYSTEME DE REGULATION DE LA RICHESSE D'UN MOTEUR THERMIQUE A INJECTION AVEC CONSIGNE DE RICHESSE ADAPTATIVE

Publication
EP 0948711 B1 20021127 (FR)

Application
EP 97912271 A 19971028

Priority
• FR 9701931 W 19971028
• FR 9613369 A 19961031

Abstract (en)
[origin: FR2755184A1] The invention concerns a system for regulating the richness of the air-fuel mixture in a controlled injection thermal engine, consisting of a fast regulating loop comprising a Smith predictor and by a slow regulating loop adapting the reference input richness to the instability phenomena of engine torque estimated at each outer dead center on the basis of the respective torque values at previous outer dead centers computed by a software torquemeter. It works out an estimator of instability phenomena invariant to transient phases and to cylinders, and comprises an expert system for determining the heuristic reference input richness.

IPC 1-7
F02D 41/14

IPC 8 full level
F02D 41/00 (2006.01); **F02D 41/14** (2006.01)

CPC (source: EP)
F02D 41/008 (2013.01); **F02D 41/1401** (2013.01); **F02D 41/1475** (2013.01); **F02D 41/1479** (2013.01); **F02D 41/1486** (2013.01); **F02D 41/1497** (2013.01); **F02D 41/1498** (2013.01); **F02D 2041/1409** (2013.01); **F02D 2041/1426** (2013.01); **F02D 2041/1433** (2013.01); **F02D 2250/18** (2013.01); **F02D 2250/28** (2013.01)

Designated contracting state (EPC)
DE ES GB IT

DOCDB simple family (publication)
FR 2755184 A1 19980430; FR 2755184 B1 19990115; AU 4952597 A 19980522; DE 69717491 D1 20030109; DE 69717491 T2 20030724; EP 0948711 A1 19991013; EP 0948711 B1 20021127; WO 9819062 A1 19980507

DOCDB simple family (application)
FR 9613369 A 19961031; AU 4952597 A 19971028; DE 69717491 T 19971028; EP 97912271 A 19971028; FR 9701931 W 19971028