

Title (en)
Speed governor for fuel injection pumps.

Title (de)
Drehzahlregler für Kraftstoffeinspritzpumpen.

Title (fr)
Régulateur de vitesse de rotation pour pompes à injection de combustible.

Publication
EP 0208898 A1 19870121 (DE)

Application
EP 86107678 A 19860605

Priority
DE 3525042 A 19850713

Abstract (en)
1. Speed governor for fuel injection pumps, particularly distributor injection pumps, having at least one governor lever (9, 14) pivotable about a governor lever axis (10) to adjust the fuel injection quantity injected per injection pump piston stroke, having a force which is a function of the speed, which engages the governor lever (9) at least indirectly and which counteracts the force of a governor spring arrangement (15) which is coupled to the governor lever (14) on the hand and which is actively associated with an adjustable first bracing part on the other hand, and having an auxiliary governor spring (26, 26') coupled to the governor lever (14), which is fastened to an adjustable second bracing part (27, 27', 39) along a line which is located in a plane which is penetrated at right angles by the governor lever axis (10), by which second bracing part the angular position of the axis of the auxiliary spring to its coupling point (32) is variable, characterized in that the second bracing part (27, 39) is slidable by an adjustable bolt (29, 48) along the line which has the form of a straight line located parallel somewhat to an initial position of the governor lever (9, 14), the bolt (29, 48) being rotatable and exhibiting a hooking point (34) located eccentrically to the axis (35) of the bolt for the auxiliary governor spring (36), or that the second bracing part is a sliding piece (39) which exhibits on one long side (43) a tooth system (35) which is engaged by an end of the bolt (48) provided with a pinion (46).

Abstract (de)
Es wird ein Drehzahlregler für Kraftstoffeinspritzpumpen vorgeschlagen mit einem Reglerhebel (9, 14) zur Einstellung der Kraftstoffeinspritzmenge und mit einer am Reglerhebel angreifenden Regelfeder (15), entgegen der eine drehzahlabhängige Kraft wirkt. Zur exakten Einstellung des Ungleichförmigkeitsgrads (P-Grad) wird der Regelfederanordnung (15) eine zusätzliche Regelfeder (26) zugeordnet, die entweder unterstützend oder entgegen der Regelfederanordnung wirkt und deren Wirkrichtung durch einen geradlinig in der Schwenkebene des Reglerhebels verschiebbaren Abstützpunkt (27) änderbar ist.

IPC 1-7
F02D 1/04

IPC 8 full level
F02D 1/04 (2006.01); **F02D 1/10** (2006.01)

CPC (source: EP)
F02D 1/045 (2013.01); **F02D 1/10** (2013.01)

Citation (search report)
• [Y] DE 1251076 B
• [Y] US 2317022 A 19430420 - BENJAMIN WALTER E
• [A] US 2773683 A 19561211 - HESS THOMAS D
• [A] DE 2349663 A1 19750410 - BOSCH GMBH ROBERT
• [A] FR 2287586 A1 19760507 - BOSCH GMBH ROBERT [DE]

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0208898 A1 19870121; EP 0208898 B1 19891011; DE 3525042 A1 19870115; DE 3666263 D1 19891116; JP 2513633 B2 19960703;
JP S6220634 A 19870129

DOCDB simple family (application)
EP 86107678 A 19860605; DE 3525042 A 19850713; DE 3666263 T 19860605; JP 16099186 A 19860710