

Title (en)

METHOD FOR ADJUSTING A CHARGE PRESSURE IN AN INTERNAL COMBUSTION ENGINE HAVING A PRESSURE-WAVE SUPERCHARGER

Title (de)

VERFAHREN ZUR EINSTELLUNG EINES LADEDRUCKES IN EINER BRENNKRAFTMACHINE MIT EINEM DRUCKWELLENLADER

Title (fr)

PROCÉDÉ DE RÉGLAGE D'UNE PRESSION DE SURALIMENTATION DANS UN MOTEUR À COMBUSTION INTERNE AU MOYEN D'UN COMPRESSEUR À ONDES DE PRESSION

Publication

EP 2536933 A1 20121226 (DE)

Application

EP 11714680 A 20110217

Priority

- DE 102010008385 A 20100217
- DE 2011000144 W 20110217

Abstract (en)

[origin: WO2011100958A1] The present invention relates to a method for adjusting a charge pressure of an internal combustion engine (A), the charge pressure being built up by a pressure-wave supercharger (B), and a channel 1 (O) for drawing in fresh air, a channel 2 (P) for discharging the compressed fresh air, a channel 3 (Q) for supplying exhaust gas, and a channel 4 (R) for discharging exhaust gas being connected to the pressure-wave supercharger (B), and the pressure-wave supercharger (B) having a cold-gas housing, to which channel 1 (O) and channel 2 (P) are connected, a gas pocket valve (F), which is arranged in the area of channel 3 (Q), and a blowoff valve (H), which connects the channel 2 (P) to the channel 3 (Q), characterized in that a control disk (D) for adjusting the pressure-wave process by means of a geometric offset of channel 3 - 4 from channel 1 - 2 is arranged in the cold-gas housing and the charge pressure is adjusted or controlled according to a control disk position (a) and/or a gas pocket valve position (b) and/or a rotor speed (c) of the pressure-wave supercharger (B) and/or a blowoff valve position (d).

IPC 8 full level

F02B 33/42 (2006.01); **F02B 39/16** (2006.01); **F02D 41/00** (2006.01)

CPC (source: EP US)

F02B 33/42 (2013.01 - EP US); **F02B 37/00** (2013.01 - US); **F02D 41/0007** (2013.01 - EP US); **F02D 41/064** (2013.01 - EP US); **F02D 41/1446** (2013.01 - EP US); **F02D 2200/021** (2013.01 - EP US); **F02D 2200/0406** (2013.01 - EP US); **F02D 2200/0414** (2013.01 - EP US); **F02D 2200/703** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP US)

Citation (search report)

See references of WO 2011100958A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

DE 102010008385 A1 20110818; EP 2536933 A1 20121226; EP 2562381 A1 20130227; JP 2013047523 A 20130307; JP 2013519826 A 20130530; US 2013206116 A1 20130815; WO 2011100958 A1 20110825

DOCDB simple family (application)

DE 102010008385 A 20100217; DE 2011000144 W 20110217; EP 11714680 A 20110217; EP 12184690 A 20110217; JP 2012236363 A 20121026; JP 2012553179 A 20110217; US 201113578945 A 20110217