Title (en)

DEVICE FOR REGULATING THE COMPRESSION RATIO OF AN INTERNAL COMBUSTION PISTON ENGINE

Title (de)

VORRICHTUNG ZUR REGELUNG DES VERDICHTUNGSVERHÄLTNISSES EINER HUBKOLBENBRENNKRAFTMASCHINE

Title (fr)

DISPOSITIF DE RÉGULATION DU TAUX DE COMPRESSION D'UN MOTEUR À PISTON À COMBUSTION INTERNE

Publication

EP 3693585 A4 20210630 (EN)

Application

EP 17927896 A 20171106

Priority

- UA A201709670 A 20171003
- UA 2017000108 W 20171106

Abstract (en)

[origin: WO2019070222A1] A device for regulating the compression ratio of an internal combustion piston engine comprises a working cylinder having a working piston and an outlet opening, an adjustment cylinder having an adjustment piston and an outlet opening, a receiver, a sealing collar of an adjustment piston rod, a rod having a support washer, a check valve, a safety valve, and connecting pipes. For faster and reliable pumping of air into the adjustment cylinder, a valve is arranged between the receiver and the inlet of the adjustment cylinder, and a rod securing element is arranged above the adjustment cylinder in a guide bushing above the support washer. There is a system for regulating the valve and the rod securing element using solenoids and a pressure relay.

IPC 8 full level

F02D 15/04 (2006.01); **F02B 75/28** (2006.01); **F02D 41/00** (2006.01); **F02D 41/06** (2006.01); F02D 41/20 (2006.01)

CPC (source: EP RU)

F02B 75/28 (2013.01 - EP RU); **F02D 15/04** (2013.01 - EP RU); **F02D 41/062** (2013.01 - EP); F02D 2700/03 (2013.01 - EP)

Citation (search report)

- [A] RU 2220304 C2 20031227 - BOCHKAREV SERGEJ NIKOLAEVICH
- [A] SU 1765479 A1 19920930 - IZYUMSKIJ OPTIKO MEKH Z [SU]
- [A] GB 2304151 A 19970312 - MORTON GUY STEWART [GB], et al
- See references of WO 2019070222A1

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)

EP 3693585 A1 20200812; **EP 3693585 A4 20210630**; RU 2745229 C1 20210322; UA 119917 C2 20190827; WO 2019070222 A1 20190411

DOCDB simple family (application)

EP 17927896 A 20171106; RU 2020113398 A 20171106; UA 2017000108 W 20171106; UA A201709670 A 20171003