

Title (en)

METHOD FOR OPERATING AN INTERNAL COMBUSTION ENGINE, DEVICE, AND INTERNAL COMBUSTION ENGINE

Title (de)

VERFAHREN ZUM BETREIBEN EINER BRENNKRAFTMASCHINE, EINRICHTUNG, BRENNKRAFTMASCHINE

Title (fr)

PROCÉDÉ SERVANT À FAIRE FONCTIONNER UNE MACHINE À COMBUSTION INTERNE, DISPOSITIF, MACHINE À COMBUSTION INTERNE

Publication

EP 3625446 A1 20200325 (DE)

Application

EP 18725464 A 20180515

Priority

- DE 102017110855 A 20170518
- EP 2018062535 W 20180515

Abstract (en)

[origin: WO2018210817A1] The invention relates to a method for operating an internal combustion engine comprising a motor which has a crankshaft, wherein a charge air flow delivered to the motor is compressed by means of a compressor via a second rotational movement, and a power turbine for producing a first rotational movement is charged with an exhaust gas flow discharged from the motor. According to the invention the following steps are provided: in a first operational mode operating the internal combustion engine in four-stroke mode, and in a second operational mode operating the internal combustion engine in two-stroke mode. Furthermore, according to the invention the crankshaft can be driven by the power turbine via the first rotational movement, and the compressor can be driven by the crankshaft via the second rotational movement, wherein the second rotational movement for the compressor can be set differently from the first rotational movement of the power turbine.

IPC 8 full level

F02B 41/10 (2006.01); **F02B 69/06** (2006.01); **F02B 75/02** (2006.01)

CPC (source: EP US)

F01N 5/04 (2013.01 - EP US); **F02B 25/14** (2013.01 - US); **F02B 25/145** (2013.01 - EP); **F02B 37/04** (2013.01 - EP); **F02B 37/12** (2013.01 - EP);
F02B 39/04 (2013.01 - US); **F02B 39/12** (2013.01 - EP US); **F02B 41/10** (2013.01 - EP US); **F02B 63/06** (2013.01 - US);
F02B 69/06 (2013.01 - EP US); **F02B 75/02** (2013.01 - EP US); **F02D 23/00** (2013.01 - EP); **F02D 23/005** (2013.01 - US);
F02D 41/0007 (2013.01 - EP); **F02B 2075/025** (2013.01 - US); **F02B 2075/027** (2013.01 - US); **Y02T 10/12** (2013.01 - EP)

Citation (search report)

See references of WO 2018210817A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2018210817 A1 20181122; CN 110799738 A 20200214; DE 102017110855 A1 20181122; DE 102017110855 B4 20191017;
EP 3625446 A1 20200325; US 2020080471 A1 20200312

DOCDB simple family (application)

EP 2018062535 W 20180515; CN 201880032858 A 20180515; DE 102017110855 A 20170518; EP 18725464 A 20180515;
US 201916687006 A 20191118