

Title (en)
EXHAUST GAS TURBOCHARGER INTERNAL COMBUSTION ENGINE

Title (de)
ABGASTURBOLADERBRENNKRAFTMASCHINE

Title (fr)
MOTEUR A COMBUSTION INTERNE TURBOCOMPRESSE

Publication
EP 1853811 A1 20071114 (DE)

Application
EP 06704100 A 20060116

Priority
• EP 2006000319 W 20060116
• DE 102005008103 A 20050221

Abstract (en)
[origin: WO2006087062A1] The invention relates to an exhaust gas turbocharger internal combustion engine comprising at least one cylinder in which a fuel-air mixture which is pre-compressed by means of a compressor (10) is compressed and burned. Exhaust gas is created, that is evacuated from the cylinder and released in a turbine (19). Part of the exhaust gas evacuated from the cylinder is recirculated, before it is released in the turbine (19), via a high-pressure recirculation system provided with an exhaust gas cooling device comprising at least two cooling circuits that are guided through heat exchanging blocks (26,27) that are successively connected in the flow direction of the exhaust gas. The aim of the invention is to create an exhaust gas turbocharger internal combustion engine that can be economically produced and has a high output. To this end, the heat exchanging block (27) arranged the furthest downstream in the flow direction of the exhaust gas is vertically arranged in such a way that exhaust gas passes through the heat exchanging block (27), upwardly or downwardly, parallel to the working line. A condensate collection and/or evacuation device is provided on the lower end of the heat exchanging block.

IPC 8 full level
F02M 25/07 (2006.01)

CPC (source: EP US)
F02B 29/0468 (2013.01 - EP US); **F02M 26/05** (2016.02 - EP US); **F02M 26/06** (2016.02 - EP US); **F02M 26/24** (2016.02 - EP US); **F02M 26/31** (2016.02 - EP US); **F02D 9/04** (2013.01 - EP US); **F02M 26/15** (2016.02 - EP US); **Y02T 10/12** (2013.01 - EP US)

Citation (search report)
See references of WO 2006087062A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2006087062 A1 20060824; CN 101124395 A 20080213; DE 102005008103 A1 20060831; EP 1853811 A1 20071114; JP 2008530439 A 20080807; US 2008190108 A1 20080814; US 7921648 B2 20110412

DOCDB simple family (application)
EP 2006000319 W 20060116; CN 200680005485 A 20060116; DE 102005008103 A 20050221; EP 06704100 A 20060116; JP 2007555471 A 20060116; US 81532706 A 20060116