

Title (en)
INTERNAL COMBUSTION ENGINE WITH AN EXHAUST GAS SYSTEM

Title (de)
BRENNKRAFTMASCHINE MIT EINER ABGASANLAGE

Title (fr)
MOTEUR À COMBUSTION INTERNE ÉQUIPÉ D'UN SYSTÈME D'ÉCHAPPEMENT

Publication
EP 3701132 A1 20200902 (DE)

Application
EP 18773943 A 20180906

Priority
• DE 102017218838 A 20171023
• EP 2018073950 W 20180906

Abstract (en)
[origin: WO2019081109A1] The invention relates to an internal combustion engine (1) with an exhaust gas system (2) for discharging exhaust gas of the internal combustion engine (1). The internal combustion engine (1) has a turbocharger comprising a turbine (3) and a compressor. The turbine (3) is arranged in the exhaust gas system (2) between the internal combustion engine (1) and a first exhaust gas purification device (4), and the compressor is arranged in a fresh-air tract of the internal combustion engine (1). A secondary air line (5) is provided, by means of which the fresh-air tract can be connected to the exhaust gas system (2) between the compressor and the internal combustion engine (1) so as to conduct fresh air. A noise damper (6) is provided in the exhaust gas system (2) downstream of the first exhaust gas purification device (4) in the flow direction of the exhaust gas, a second exhaust gas purification device (7) is arranged in the exhaust gas system (2) downstream of the noise damper (6) in the flow direction of the exhaust gas, and the secondary air line (5) opens into the exhaust gas system (2) between the noise damper (6) and the second exhaust gas purification device (7). The design according to the invention allows the internal combustion engine (1) to be operated at a high load with a mixture enrichment.

IPC 8 full level
F01N 1/00 (2006.01); **F01N 3/021** (2006.01); **F01N 3/08** (2006.01); **F01N 3/10** (2006.01); **F01N 3/20** (2006.01); **F01N 3/32** (2006.01); **F01N 13/00** (2010.01)

CPC (source: EP)
F01N 1/00 (2013.01); **F01N 3/021** (2013.01); **F01N 3/0842** (2013.01); **F01N 3/101** (2013.01); **F01N 3/2066** (2013.01); **F01N 3/326** (2013.01); **F01N 13/009** (2014.06); **F01N 2230/02** (2013.01); **F01N 2230/04** (2013.01); **F01N 2240/02** (2013.01); **F01N 2260/022** (2013.01); **F01N 2340/06** (2013.01); **F01N 2430/06** (2013.01); **F01N 2570/10** (2013.01); **Y02T 10/12** (2013.01)

Citation (search report)
See references of WO 2019081109A1

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)
DE 102017218838 A1 20190425; EP 3701132 A1 20200902; WO 2019081109 A1 20190502

DOCDB simple family (application)
DE 102017218838 A 20171023; EP 18773943 A 20180906; EP 2018073950 W 20180906