

Title (en)

TWO-STAGED CHARGING SYSTEM FOR EXHAUST GAS RECIRCULATION

Title (de)

ZWEISTUFIGES AUFLADESYSTEM FÜR ABGASREZIRKULATION

Title (fr)

SYSTÈME DE SURALIMENTATION À DEUX ÉTAGES POUR RECIRCULATION DE GAZ D'ÉCHAPPEMENT

Publication

EP 2356328 A1 20110817 (DE)

Application

EP 09756725 A 20091118

Priority

- EP 2009065377 W 20091118
- EP 08169361 A 20081118
- EP 08171209 A 20081210
- EP 09756725 A 20091118

Abstract (en)

[origin: WO2010057910A1] According to an exemplary embodiment of the invention, a charging system for an internal combustion engine is provided in which the charging is adapted to be in two stages, wherein the EGR turbocharger operates in parallel with the high pressure turbochargers. The two-stage charging brings about an improvement in the charging efficiency, whereby the EGR compressor has to overcome a higher pressure difference.

IPC 8 full level

F02M 25/07 (2006.01); **F02B 37/013** (2006.01); **F02D 41/00** (2006.01)

CPC (source: EP KR)

F01N 5/04 (2013.01 - EP); **F02B 37/004** (2013.01 - EP); **F02B 37/007** (2013.01 - EP); **F02B 37/013** (2013.01 - EP KR);
F02B 37/18 (2013.01 - EP); **F02D 23/00** (2013.01 - KR); **F02M 26/07** (2016.02 - EP); **F02M 26/08** (2016.02 - EP); **F02M 26/10** (2016.02 - EP);
F02M 26/23 (2016.02 - EP); **F02B 33/40** (2013.01 - EP); **F02B 37/24** (2013.01 - EP); **F02B 39/10** (2013.01 - EP); **Y02T 10/12** (2013.01 - EP)

Citation (search report)

See references of WO 2010057910A1

Citation (examination)

GB 497188 A 19381214 - MASCHF AUGSBURG NUERNBERG AG

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

WO 2010057910 A1 20100527; EP 2356328 A1 20110817; KR 20110086617 A 20110728

DOCDB simple family (application)

EP 2009065377 W 20091118; EP 09756725 A 20091118; KR 20117013919 A 20091118