

Title (en)
FRESH GAS SUPPLY DEVICE FOR AN INTERNAL COMBUSTION ENGINE

Title (de)
FRISCHGASVERSORGUNGSVORRICHTUNG FÜR EINE VERBRENNUNGSKRAFTMASCHINE

Title (fr)
DISPOSITIF D'ALIMENTATION EN GAZ FRAIS POUR MOTEUR À COMBUSTION INTERNE

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Application
EP 11725084 A 20110614

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Abstract (en)
[origin: WO2011157676A1] The invention relates to a fresh gas supply device (10) for an internal combustion engine (1) having an exhaust gas turbocharger (2), comprising the following: a charge air inlet (12) for letting in compressed charge air (41) from the exhaust gas turbocharger (2); an outlet (13) which is connected to the charge air inlet (12), wherein said connection can be closed by means of at least one backflow flap (24) that can be pivoted about a rotational flap axis (25); a compressed air inlet (29) for letting compressed air (51, 52) into the outlet (13); an adjusting unit (26) for adjusting the at least one backflow flap (24); at least one additional turbocharging unit (30) comprising an air turbine (33) and a compressor (34) coupled thereto, wherein the air turbine (33) is disposed upstream of the compressed air inlet (29) in the flow direction of the compressed air (51, 52) and compressed air (51, 52) can flow through said air turbine, and wherein the compressor (34) is designed to take in and compress additional charge air (42) from the charge air inlet (12) and deliver compressed additional charge air (43) to the outlet (13).

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