

Title (en)
MULTISTAGE TURBOCHARGER ARRANGEMENT

Title (de)
MEHRSTUFIGE TURBOLADERANORDNUNG

Title (fr)
AGENCEMENT DE TURBOCOMPRESSEUR À ÉTAGES MULTIPLES

Publication
EP 4211341 A1 20230719 (DE)

Application
EP 21770267 A 20210910

Priority
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Abstract (en)
[origin: WO2022053634A1] A multistage turbocharger arrangement (100) is provided according to this disclosure. The multistage turbocharger arrangement (100) comprises a high-pressure turbocharger unit (110) comprising a first housing unit (134), a high-pressure turbine (113) and a high-pressure compressor (114), wherein the high-pressure turbine (113) and the high-pressure compressor (114) are rotationally coupled to one another via a high-pressure turbocharger shaft. The multistage turbocharger arrangement also comprises a low-pressure turbocharger unit (120) comprising a second housing unit (136), a low-pressure turbine (123) and a low-pressure compressor (124), wherein the low-pressure turbine (123) and the low-pressure compressor (124) are rotationally coupled to one another via a low-pressure turbocharger shaft. The high-pressure turbine (113) is fluidically coupled to the low-pressure turbine (123) via an exhaust gas line (132) in order to conduct exhaust gas from the high-pressure turbine (113) to the low-pressure turbine (123). The low-pressure compressor (124) is fluidically coupled to the high-pressure compressor (114) via a line in order to conduct fluid from the low-pressure compressor (124) to the high-pressure compressor (114). The high-pressure turbocharger unit (110) and the low-pressure turbocharger unit (120) are releasably interconnected. The low-pressure turbocharger unit (120) supports the high-pressure turbocharger unit (110).

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