

Title (en)
TURBO COMPRESSOR

Title (de)
TURBOVERDICHTER

Title (fr)
TURBOCOMPRESSEUR

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Application
EP 10795284 A 20101209

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Abstract (en)
[origin: WO2011082942A2] The invention relates to a turbo compressor which comprises a compressor housing in which an incoming gas volume flow is supplied to a bladed wheel channel through an inlet channel, is compressed in the bladed wheel channel by a bladed wheel and is carried away by the bladed wheel through an outlet channel. The turbo compressor further comprises a flow deviation channel provided in the compressor housing which flow deviation channel extends outside the bladed wheel channel and the inlet channel and an inlet-side opening of which runs into the inlet channel and a bladed wheel-side opening runs into the bladed wheel channel, said flow deviation channel carrying a deviation volume flow depending on a pressure difference between the openings. In order to improve said turbo compressor such that it can be optimally operated at volume flows that lie far below the values of volume flow for which the turbo compressor is designed, the flow deviation channel, starting from the bladed wheel-side opening, has a flow area that increases towards the inlet-side opening.

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