

Title (en)  
CENTRIFUGAL COMPRESSOR

Publication  
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Application  
**EP 88110809 A 19880706**

Priority  
JP 18229987 A 19870723

Abstract (en)  
[origin: EP0301285A1] An improved centrifugal compressor having a single casing (1) and yet containing therein a plurality of stages of centrifugal compressors, is disclosed herein. The disclosed centrifugal compressor comprises a plurality of axles (3, 7, 12) each having centrifugal impellers, electromagnetic bearings (13, 14, 15, 16, 17, 18, 29) for supporting the axles (3, 7, 12) in a non-contact manner at their opposite ends, coupling means (19) for coupling adjacent ones among the plurality of axles (3, 7, 12) arrayed in series so as to compressively transport gas sucked from one side towards the other side, in such manner that misalignment of their axes with one another may be allowed, a casing (1) for supporting the plurality of coupled axles (3, 7, 12) integrally with the electromagnetic bearings (13, 14, 15, 16, 17, 18, 29) therefor and having a suction port (2) of gas at one end in the axial direction and a delivery port (11) thereof at the other end, and seal means (23) around the axle provided on the side having the delivery port (11) of the casing (1).

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IPC 8 full level  
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