

Publication

**EP 0138182 A3 19850619**

Application

**EP 84112033 A 19841008**

Priority

DE 3337837 A 19831018

Abstract (en)

[origin: US4565498A] The invention discloses a rotary gas compressor for liquids which includes an impeller housing, an impeller rotatably mounted in the housing, a housing cover, a control disc arranged between the housing and the cover, and a suction intake and pressure outlet provided on the housing cover. Within the housing cover suction and pressure chambers are defined by a separating web arranged between the cover and the control disc. Into the suction chamber opens the suction intake provided on the housing cover; a suction slot provided in the control disc then provides communication with the impeller. The pressure outlet connection communicates with the pressure chamber, and a pressure slot provided in the control disc then also communicates with the impeller. One or more additional pressure apertures are arranged in the control disc adjacent to the pressure slot, and resilient valve tongues cover all of the additional pressure apertures, except for one aperture to which a pressure relief pipe is connected. The pressure relief pipe communicates at one end with the non-valved additional aperture, and at its opposite end it communicates within the pressure region of the compressor with the gas to be supplied, at a level above the liquid ring. The pressure relief pipe allows gas and/or liquid to flow in either direction for pressure relief purposes.

IPC 1-7

**F04C 19/00**; **F04C 29/10**

IPC 8 full level

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CPC (source: EP US)

**F04C 28/28** (2013.01 - EP US); **F04C 29/122** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

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**EP 0138182 A2 19850424**; **EP 0138182 A3 19850619**; **EP 0138182 B1 19880309**; AU 3430084 A 19850426; AU 562688 B2 19870618; DE 3337837 A1 19850425; DE 3469780 D1 19880414; JP S60108583 A 19850614; US 4565498 A 19860121; US 4610602 A 19860909

DOCDB simple family (application)

**EP 84112033 A 19841008**; AU 3430084 A 19841017; DE 3337837 A 19831018; DE 3469780 T 19841008; JP 21935284 A 19841018; US 62903784 A 19840709; US 74655685 A 19850619