Title (en)
   Compressor unloader.

Title (de)
   Entlastungsvorrichtung für Verdichter.

Title (fr)
   Dispositif de déchargement pour compresseur.

Publication
   EP 0573144 A1 19931208 (EN)

Application
   EP 93303142 A 19930422

Priority
   • US 145293 A 19930107
   • US 89171992 A 19920601

Abstract (en)
   An unloader (11) to facilitate starting and idling an air compressor motor (12). In one embodiment, the compressor (10) has a valve (29), such
   as an inlet or suction valve, having one or more reeds (28) which are biased to a normally closed position. An end of a wire or spring or a similar
   mechanism (37) is mounted to hold the valve open to unload the compressor when the motor is stopped or operated below a predetermined
   minimum speed. The compressor motor (12) also drives a fan (35) which cools the compressor. When the motor (12) reaches the predetermined
   minimum speed, cooling air flow from the fan moves a vane (42) which is connected to move the wire, spring or other mechanism (37) clear of
   the valve (29), allowing the valve to close to load the compressor (10). In a modified embodiment of a starting unloader, an opening (110) is
   provided to vent the high pressure output from the compressor (90) when the motor (91) is stopped or idling. When the compressor motor reaches a
   predetermined speed, a flow of cooling air from a fan (93) driven by the motor moves a vane (111) to close the vent passage (110). <IMAGE>

IPC 1-7
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IPC 8 full level
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CPC (source: EP)
   F04B 35/04 (2013.01); **F04B 39/066** (2013.01); **F04B 49/243** (2013.01)

Citation (search report)
   • [A] US 4519752 A 19850528 - VALENTIN INGO [US]
   • [A] PATENT ABSTRACTS OF JAPAN vol. 7, no. 44 (M-195)(1189) 22 February 1983 & JP-A-57 193 786 (SANWA) 29 November 1982

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