

Title (en)  
Positive-displacement-type refrigerant compressor with a novel oil-separating and lubricating system

Title (de)  
Verdrängungskompressor für Kältemittel mit Ölabscheidungs- und Schmiersystem

Title (fr)  
Compresseur volumétrique pour réfrigérant avec système de séparation d'huile et de lubrification

Publication  
**EP 0971128 A3 20000830 (EN)**

Application  
**EP 99113594 A 19990708**

Priority  
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• JP 9644899 A 19990402

Abstract (en)  
[origin: EP0971128A2] A positive-displacement-type refrigerant compressor having a compression chamber, in which a refrigerant introduced from a suction system is compressed and discharged as a compressed refrigerant at a high pressure, and an oil-separating and lubricating system for lubricating an interior of the compressor by an oil component separated from the refrigerant, which has an oil-separating unit to separate the oil from the compressed refrigerant, an oil-storing chamber to store the separated oil, an oil-supply passage to supply the oil from the oil-storing chamber to the suction system, a valve assembly arranged in the oil supply passage for regulating an amount of flow of the oil from the oil-storing chamber to the suction system, which includes a first valve chamber, a movable valve actuating element in the first valve chamber to actuate a valve element to open and close a valve port which provides a fluid communication between the upstream and downstream of the oil-supply passage. The valve element moves in response to a movement of the valve actuating element and closes the valve port when the pressure introduced from the compression chamber and acting on the movable valve actuating element is overcome by an elastic restoring force acting on the movable valve actuating element. <IMAGE>

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**F04B 39/0207** (2013.01); **F04B 39/16** (2013.01)

Citation (search report)  
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• [A] PATENT ABSTRACTS OF JAPAN vol. 015, no. 155 (M - 1104) 18 April 1991 (1991-04-18)  
• [DA] PATENT ABSTRACTS OF JAPAN vol. 018, no. 644 (M - 1718) 7 December 1994 (1994-12-07)

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