

Title (en)  
Refrigerant compressor for HFC 134a.

Title (de)  
Kältemittelverdichter für R 134A.

Title (fr)  
Compresseur de refroidissement pour R 134A.

Publication  
**EP 0438922 A1 19910731 (EN)**

Application  
**EP 90314364 A 19901228**

Priority  
JP 33973089 A 19891228

Abstract (en)  
A refrigerant compressor for using HFC 134a as a refrigerant and a refrigerator oil such as polyether type oil, polyester type oil, or similar type compatible therewith is disclosed. The refrigerant compressor includes a component of iron type substrate having a compound layer mainly made of iron sulphide on sliding portions such as sliding parts and the shaft in the compression mechanism. In a rotary type compressor, the sliding blade can have such a compound layer at its sliding surface. The hardness of the compound layer mainly made of iron sulphide can be considerable, substantially reducing metal contact and preventing adhesive abrasion; the primary cause of abrasion of sliding portions. Since such a compound layer essentially consisting of iron sulphide is stable under moist conditions, even if used in conjunction with polyether type oil, polyester type oil, or similar types of oil and HFC 134a, corrosion and abrasion through dissolution of the compound layer can also be largely prevented. <IMAGE>

IPC 1-7  
**F04B 39/02; F25B 31/00**

IPC 8 full level  
**F04B 39/00** (2006.01); **C23C 30/00** (2006.01); **F01C 21/10** (2006.01); **F04B 39/02** (2006.01); **F16J 10/00** (2006.01); **F25B 31/00** (2006.01); **F25B 31/02** (2006.01)

CPC (source: EP KR)  
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Citation (search report)  
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• [A] FROID. vol. 42, no. 654, 15 December 87, PARIS FR pages 39 - 43; MARIOTON: "PRéVENIR PLUT^OT QUE GUérIR"

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