

Title (en)  
REFRIGERATING CYCLE DEVICE

Title (de)  
VORRICHTUNG MIT KÄLTEKREISLAUF

Title (fr)  
DISPOSITIF A CYCLE DE REFRIGERATION

Publication  
**EP 1288594 A1 20030305 (EN)**

Application  
**EP 01936860 A 20010605**

Priority  
• JP 0104755 W 20010605  
• JP 2000167272 A 20000605

Abstract (en)  
A refrigerating cycle system of the present invention uses a hydrocarbon refrigerant, and lubricating oil that does not include silicone. Also, the refrigerating cycle system of the present invention includes a detachable sensor section which detects the leakage of the hydrocarbon refrigerant. Even when the gas detecting sensor becomes unusable, the refrigerating cycle system can be safely used by replacing the gas detecting sensor with new one. Further, the refrigerating cycle system of the present invention is provided with silicone removing filters or sulfur compound removing filters in the sensor section. Also, the refrigerating cycle system of the present invention is provided with one of infrared type, hydrogen flame ionization type, and optical interference type sensors. By using the refrigerating cycle system of the present invention, it is possible to provide an inexpensive refrigerating cycle system which is environment-friendly and excellent in safety. <IMAGE>

IPC 1-7  
**F25B 49/02**

IPC 8 full level  
**F25B 1/00** (2006.01); **F25B 9/00** (2006.01); **F25B 49/02** (2006.01); **F25B 31/00** (2006.01); **F25D 23/06** (2006.01)

CPC (source: EP)  
**F25B 9/002** (2013.01); **C10N 2040/30** (2013.01); **F25B 31/002** (2013.01); **F25B 2400/12** (2013.01); **F25B 2500/222** (2013.01); **F25D 23/061** (2013.01); **F25D 2400/24** (2013.01)

Designated contracting state (EPC)  
AT BE CH CY DE FR GB IT LI

DOCDB simple family (publication)  
**EP 1288594 A1 20030305**; **EP 1288594 A4 20080409**; CN 1243205 C 20060222; CN 1522356 A 20040818; JP 2001349648 A 20011221; JP 3386780 B2 20030317; WO 0194863 A1 20011213

DOCDB simple family (application)  
**EP 01936860 A 20010605**; CN 01810655 A 20010605; JP 0104755 W 20010605; JP 2000167272 A 20000605