

Title (en)
Sealed electric compressor

Title (de)
Versiegelter elektrischer Verdichter

Title (fr)
Comresseur électrique scellé

Publication
EP 1911975 A1 20080416 (EN)

Application
EP 07019353 A 20071002

Priority
JP 2006272851 A 20061004

Abstract (en)

A sealed electric compressor includes a compression unit (30) and an electric motor (6) disposed inside a sealed housing (2), a reservoir chamber (23) located at the bottom of the housing (2) and holding a lubricant to be supplied to bearings (28, 16) rotatably supporting a drive shaft (12) of the motor (6), and a return path (80) for deflecting the lubricant supplied to lubricate the bearings (28, 16), away from a rotor (7) of the motor (6), and directing it to the reservoir chamber (23). The return path (80) includes a seal ring (82) between a main support (14) with a bearing (16) and the drive shaft (12) to stop the lubricant supplied to lubricate the bearings (28, 16) from flowing down the outer cylindrical face of the drive shaft (12) toward the rotor (7), and a discharge hole (84) formed in the main support (14) to discharge the lubricant stopped by the seal ring (82) from the outer cylindrical face of the main support (14) toward a stator (8) of the motor (6).

IPC 8 full level

F04C 29/02 (2006.01); **F04C 23/00** (2006.01)

CPC (source: EP)

F04C 23/008 (2013.01); **F04C 29/026** (2013.01); **F04C 2210/1027** (2013.01); **F04C 2210/1072** (2013.01); **F04C 2240/603** (2013.01)

Citation (search report)

- [XY] EP 0924430 A1 19990623 - MITSUBISHI HEAVY IND LTD [JP]
- [X] US 6386840 B1 20020514 - WILLIAMS JOHN R [US], et al
- [Y] JP H0610864 A 19940121 - MITSUBISHI ELECTRIC CORP
- [Y] US 4762471 A 19880809 - ASANUMA HAJIME [JP], et al
- [AD] JP H1047269 A 19980217 - MITSUBISHI ELECTRIC CORP

Cited by

CN104870816A; US10132317B2; WO2010131061A1; WO2017106030A1

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AL BA HR MK RS

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