

Title (en)
MULTIPLE-STAGE COMPRESSOR

Title (de)
MEHRSTUFIGER VERDICHTER

Title (fr)
COMPRESSEUR À ÉTAGES MULTIPLES

Publication
EP 2322804 A1 20110518 (EN)

Application
EP 09811306 A 20090907

Priority
• JP 2009004416 W 20090907
• JP 2008229561 A 20080908

Abstract (en)

There is provided a highly efficient multiple-stage compressor provided with a bypass pipe. A multiple-stage compressor 11 comprises a sealed housing 12; a low-stage side compression mechanism 13 and a high-stage side compression mechanism 15, both being provided in the sealed housing 12; an electric motor 14 for driving the low-stage side compression mechanism 13 and the high-stage side compression mechanism 15; a suction pipe 21 for supplying a refrigerant to the low-stage side compression mechanism 13; a discharge pipe 19 connected to the sealed housing 12 to discharge the refrigerant compressed by the high-stage side compression mechanism 15; a bypass pipe 22 branched from the suction pipe 21 to allow a cavity 12a on the refrigerant passage downstream side of the electric motor 14 and the suction pipe 21 to communicate with each other; and a valve 23 provided in the bypass pipe 22 to selectively permit or inhibit the supply of refrigerant to an intermediate-pressure chamber. Figure 2

IPC 8 full level
F04C 23/00 (2006.01); **F04B 39/12** (2006.01); **F04C 28/26** (2006.01); **F04C 29/12** (2006.01)

CPC (source: EP)
F04B 39/123 (2013.01); **F04C 23/005** (2013.01); **F04C 23/008** (2013.01); **F04C 28/26** (2013.01); **F04C 18/0215** (2013.01); **F04C 18/356** (2013.01)

Cited by
CN105332888A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
EP 2322804 A1 20110518; EP 2322804 A4 20160928; EP 2322804 B1 20180815; JP 2010059944 A 20100318; JP 5330776 B2 20131030;
WO 2010026776 A1 20100311

DOCDB simple family (application)
EP 09811306 A 20090907; JP 2008229561 A 20080908; JP 2009004416 W 20090907