

Title (en)
Two stage rotary compressor

Title (de)
Zweistufiger Drehkompressor

Title (fr)
Compresseur rotatif à deux étages

Publication
EP 2551526 A3 20170809 (EN)

Application
EP 12167431 A 20120510

Priority
JP 2011165094 A 20110728

Abstract (en)
[origin: EP2551526A2] A two stage rotary compressor (100) of the internal high-pressure type includes a low stage cover (19) that covers a low stage outlet port (16) and forms a low stage discharge space (20) therein. Further, the two stage compressor (100) includes a compression mechanism (3) provided with an intermediate passage (51) that connects the low stage discharge space (20) and the high stage compression chamber (35) and a bypass mechanism (a bypass port (23), a bypass valve (24), and a bypass valve guard (25)) in the low stage cover (19), in which the bypass mechanism opens when a load is smaller than a predetermined load and in which the bypass mechanism connects the low stage discharge space (20) and a discharge pressure space (53).

IPC 8 full level
F04C 18/356 (2006.01); **F04C 23/00** (2006.01); **F04C 28/06** (2006.01); **F04C 28/26** (2006.01)

CPC (source: EP KR)
F04C 18/356 (2013.01 - KR); **F04C 18/3564** (2013.01 - EP); **F04C 23/00** (2013.01 - KR); **F04C 23/001** (2013.01 - EP); **F04C 23/008** (2013.01 - EP); **F04C 28/065** (2013.01 - EP); **F04C 28/26** (2013.01 - EP); **F04C 29/12** (2013.01 - KR)

Citation (search report)
• [X] WO 2011055444 A1 20110512 - MITSUBISHI ELECTRIC CORP [JP], et al & EP 2497955 A1 20120912 - MITSUBISHI ELECTRIC CORP [JP]
• [A] JP 2003097471 A 20030403 - MATSUSHITA ELECTRIC IND CO LTD
• [A] JP H10141270 A 19980526 - MATSUSHITA ELECTRIC IND CO LTD
• [A] US 2010284847 A1 20101111 - HAN JEONG-MIN [KR], et al

Cited by
US2020049137A1; US11965498B2

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2551526 A2 20130130; EP 2551526 A3 20170809; EP 2551526 B1 20190501; CN 102900669 A 20130130; CN 102900669 B 20150429; JP 2013029059 A 20130207; JP 5586537 B2 20140910; KR 101376872 B1 20140320; KR 20130014337 A 20130207; RU 2012122456 A 20131210; RU 2501978 C1 20131220

DOCDB simple family (application)
EP 12167431 A 20120510; CN 201210176442 A 20120531; JP 2011165094 A 20110728; KR 20120052277 A 20120517; RU 2012122456 A 20120530