

Title (en)  
SCROLL COMPRESSOR WITH BYPASS PORT

Title (de)  
SPIRALVERDICHTER MIT BYPASS

Title (fr)  
COMPRESSEUR À SPIRALES COMPRENANT UNE DÉRIVATION

Publication  
**EP 3339646 A1 20180627 (EN)**

Application  
**EP 17209864 A 20171221**

Priority  
JP 2016251233 A 20161226

Abstract (en)  
Provided is a scroll compressor capable of inhibiting occurrence of pulsation of a fluid. The scroll compressor includes: an on/off valve (38) that opens when the capacity control operation of a fluid is turned on, and returns a mid-compression fluid, which is discharged to an intermediate chamber (81), to a suction chamber (17); and a second check valve (42) that opens when the capacity control operation is turned off and when a pressure in the intermediate chamber (81) becomes higher than a pressure in a discharge chamber (16), and discharges the mid-compression fluid, which is discharged to the intermediate chamber (81), to the discharge chamber (16) via a discharge port (85).

IPC 8 full level  
**F04C 28/10** (2006.01); **F04C 18/02** (2006.01); **F04C 28/26** (2006.01)

CPC (source: EP)  
**F04C 18/0207** (2013.01); **F04C 18/0261** (2013.01); **F04C 28/10** (2013.01); **F04C 28/26** (2013.01)

Citation (applicant)  
JP H0861269 A 19960308 - NIPPON SOKEN, et al

Citation (search report)  
• [X] US 5674058 A 19971007 - MATSUDA MIKIO [JP], et al & JP H0861269 A 19960308 - NIPPON SOKEN, et al  
• [A] EP 1953388 A1 20080806 - MITSUBISHI HEAVY IND LTD [JP]  
• [A] EP 2541066 A1 20130102 - HITACHI LTD [JP]  
• [A] EP 2679823 A1 20140101 - HITACHI LTD [JP]  
• [A] US 2013136640 A1 20130530 - HASEGAWA HIROSHI [JP], et al

Cited by  
CN110925195A; US11131302B2

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 3339646 A1 20180627**; **EP 3339646 B1 20240313**; **EP 3339646 C0 20240313**; ES 2975080 T3 20240703; JP 2018105194 A 20180705; JP 6606804 B2 20191120

DOCDB simple family (application)  
**EP 17209864 A 20171221**; ES 17209864 T 20171221; JP 2016251233 A 20161226