

Title (en)
DISCHARGE VALVE STRUCTURE FOR COMPRESSOR

Title (de)
AUSLASSVENTILSTRUKTUR FÜR KOMPRESSOR

Title (fr)
STRUCTURE DE SOUPAPE DE REFOULEMENT POUR COMPRESSEUR

Publication
EP 3553315 B1 20210707 (EN)

Application
EP 17881648 A 20171208

Priority
• JP 2016240052 A 20161212
• JP 2017044187 W 20171208

Abstract (en)
[origin: EP3553315A1] [Problem] To provide a compressor valve structure whereby it is possible to reduce even the stiction of a reed valve due to a lubricant without a break occurring in the reed valve or a valve seat when in high speed operation, and thus possible to maintain a stable operation. The valve structure includes a valve plate 3 which, being provided between a cylinder block having formed therein a cylinder bore and a cylinder head having formed therein a space in which to temporarily store a working fluid, has formed therein a port (a discharge port 30) which provides communication between the cylinder bore and the space; an annular valve seat 36 which is provided on the periphery of the open end of the port (discharge port 30) in the valve plate 3; and a reed valve (a discharge valve 31) which opens and closes the port (discharge port 30) by coming into and out of abutment with the valve seat 36, wherein the radial width of the valve seat 36 is made larger on the leading end side of the reed valve (discharge valve 31) than on the base end side thereof, and the outer edge of the leading end portion of the reed valve (discharge port 30) is positioned inside the outer edge of the valve seat 36 in a state where the port (discharge port 30) is closed by the reed valve (discharge valve 31) .

IPC 8 full level
F04B 39/10 (2006.01); **F04B 27/12** (2006.01)

CPC (source: EP)
F04B 27/12 (2013.01); **F04B 39/1066** (2013.01); **F04B 39/1073** (2013.01)

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

DOCDB simple family (publication)
EP 3553315 A1 20191016; **EP 3553315 A4 20200429**; **EP 3553315 B1 20210707**; CN 110073105 A 20190730; CN 110073105 B 20211203; JP WO2018110449 A1 20191024; WO 2018110449 A1 20180621

DOCDB simple family (application)
EP 17881648 A 20171208; CN 201780076832 A 20171208; JP 2017044187 W 20171208; JP 2018556638 A 20171208