

Title (en)
SCREW COMPRESSOR

Title (de)
SCHRAUBENVERDICHTER

Title (fr)
COMPRESSEUR À VIS

Publication
EP 3524818 A4 20191120 (EN)

Application
EP 17875093 A 20171019

Priority
• JP 2016231286 A 20161129
• JP 2017037793 W 20171019

Abstract (en)
[origin: EP3524818A1] A screw compressor according to some embodiments includes a screw rotor, a rotor casing accommodating the screw rotor, and an internal-volume-ratio-adjusting valve capable of changing internal volume ratio. The internal-volume-ratio-adjusting valve includes a valve body movable along an axial direction of the screw rotor and defining a gas-discharge position, and a cylinder containing at least one pressurizing chamber with a cylinder rod and a piston. The cylinder rod is coupled to the valve body and disposed along the axial direction. The piston is fixed inside the pressurizing chamber to the cylinder rod and divides the pressurizing chamber into two pressurizing spaces along the axial direction. The screw compressor further includes a first communication passage connecting one of the two pressurizing spaces with the discharge gas passage, and a second communication passage connecting the other with a just-before-discharge tooth space immediately before a tooth space that communicates with the discharge port.

IPC 8 full level
F04C 18/16 (2006.01); **F04C 28/12** (2006.01); **F04C 28/26** (2006.01)

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F04C 18/14 (2013.01 - US); **F04C 18/16** (2013.01 - EP); **F04C 28/12** (2013.01 - EP); **F04C 28/125** (2013.01 - US); **F04C 28/26** (2013.01 - EP)

Citation (search report)
• No further relevant documents disclosed
• See references of WO 2018100911A1

Cited by
EP3786453A1

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

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BA ME

DOCDB simple family (publication)
EP 3524818 A1 20190814; **EP 3524818 A4 20191120**; JP WO2018100911 A1 20191017; US 2020040896 A1 20200206;
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EP 17875093 A 20171019; JP 2017037793 W 20171019; JP 2018553706 A 20171019; US 201716339449 A 20171019