

Title (en)
COMPRESSOR

Title (de)
VERDICHTER

Title (fr)
COMPRESSEUR

Publication
EP 3447296 A4 20190306 (EN)

Application
EP 17843391 A 20170808

Priority
• JP 2016164355 A 20160825
• JP 2017028710 W 20170808

Abstract (en)
[origin: EP3447296A1] Provided is a compressor in which an appropriate pulsation frequency component of a fluid can be sufficiently reduced by a muffler while the performance of the compressor is ensured. A compressor 1 is provided with a compression mechanism 4 that compresses a refrigerant, and a muffler 10 that reduces pulsation of the refrigerant compressed by the compression mechanism 4. The muffler 10 is provided with: a muffler body 11 that takes refrigerant into the interior thereof from the compression mechanism; and a cover 12 that forms a cavity 120 with an outer periphery 11S of the muffler body 11, the cover 12 discharging the refrigerant taken in from the interior of the muffler body 11. A plurality of openings 11H passing through in the plate thickness direction are formed in the muffler body 11, separately from a discharge port 11P through which refrigerant passes into the cavity 120 from the interior of the muffler body 11. Due to the relationship between the speed of sound C, the cross-sectional area S of each of the openings 11H, the plate thickness L, and the volume V of the cavity 120, Helmholtz resonance arises in air masses 15 located inside the openings 11H leading into the cavity 120, whereby sound is absorbed.

IPC 8 full level
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CPC (source: EP)
F04B 39/00 (2013.01); **F04C 23/00** (2013.01); **F04C 23/008** (2013.01); **F04C 29/06** (2013.01); **F04C 29/061** (2013.01); **F04C 29/065** (2013.01)

Citation (search report)
• [XI] JP H11210660 A 19990803 - MITSUBISHI ELECTRIC CORP
• [XI] WO 2013168194 A1 20131114 - MITSUBISHI ELECTRIC CORP [JP], et al
• [A] JP 2012072679 A 20120412 - DAIKIN IND LTD
• See references of WO 2018037906A1

Cited by
CN110630471A; WO2023187438A1

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)
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