

Title (en)  
ELECTRIC COMPRESSOR

Title (de)  
ELEKTRISCHER VERDICHTER

Title (fr)  
COMPRESSEUR ÉLECTRIQUE

Publication  
**EP 2873858 A4 20160323 (EN)**

Application  
**EP 13791594 A 20130430**

Priority  
• JP 2012114708 A 20120518  
• JP 2013062532 W 20130430

Abstract (en)  
[origin: EP2873858A1] [Object] To provide an electric compressor which allows a reduction in size by reducing a dimension in an axial direction, and allows to enhance flexibility of a position for forming an intake port and layout of a refrigerant route. Even though the intake port is not arranged in the vicinity of a drive circuit, the drive circuit is sufficiently cooled. [Abstract] In a configuration including: a compressing mechanism 3 and an electric motor 4 configured to drive the compressing mechanism 3 in a housing, wherein the electric motor 4 includes : a stator 21 formed by winding coils on a stator core 24 fixed in the housing 2; and a rotor 22 fixedly mounted on a drive shaft 10 and rotatably arranged inside the stator 21, so that compressed fluid is introduced to the compressing mechanism 3 through an electric motor storage space 12a that houses the electric motor 4, a fluid introducing passage 31 extended along the axial direction of the drive shaft 10 is formed between the housing 2 and the stator core 24, and the intake port 30 configured to introduce the compressed fluid is provided at the position of the housing 2 facing the outer peripheral surface of the stator core 24 and is connected to the fluid introducing passage 31.

IPC 8 full level  
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Citation (search report)  
• [XYI] US 6131406 A 20001017 - BAROWSKY HELMUT [DE], et al  
• [YDA] JP 2008184995 A 20080814 - DENSO CORP  
• [X] DE 102007042318 A1 20090312 - KNORR BREMSE SYSTEME [DE]  
• [X] US 6042346 A 20000328 - DOI YOSHIMASA [JP]  
• [X] JP 2009191761 A 20090827 - DENSO CORP  
• [X] JP 2012090412 A 20120510 - DENSO CORP  
• See references of WO 2013172189A1

Cited by  
EP3396162A1; EP4112940A4; FR3065758A1

Designated contracting state (EPC)  
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