

Title (en)

REINFORCEMENT STRUCTURE FOR ELECTRICALLY DRIVEN COMPRESSOR

Title (de)

VERSTÄRKUNGSSTRUKTUR FÜR ELEKTRISCH ANGETRIEBENEN KOMPRESSOR

Title (fr)

STRUCTURE DE RENFORCEMENT POUR COMPRESSEUR À ENTRAÎNEMENT ÉLECTRIQUE

Publication

**EP 3875761 A4 20220803 (EN)**

Application

**EP 19878881 A 20191028**

Priority

- JP 2018203462 A 20181030
- JP 2019042087 W 20191028

Abstract (en)

[origin: EP3875761A1] An object is to provide an electric compressor reinforcement structure such that when a mounting leg is formed on an outer face of a cover that an inverter housing has on an endmost side in an axial direction of an electric compressor, a space in the inverter housing is not crushed even when a strong force acts on the electric compressor due to a collision or the like at a front of a vehicle. A housing 6 of an electric compressor 1 has an inverter housing 9 that is formed of a side wall portion 91 and a partitioning wall 92 and in which an inverter device 5 is housed, the inverter housing 9 is closed to a front of the electric compressor 1 by a cover 10 on which a mounting leg 103 is formed, and a hollow protruding portion 104 protruding in a dome form centered on the mounting leg 103 is provided on an outer face of the cover 10, whereby a load exerted from the front of the electric compressor 1 is dispersed to prevent the space in the inverter housing 9 from being crushed.

IPC 8 full level

**F01C 21/10** (2006.01); **F04B 35/04** (2006.01); **F04B 39/12** (2006.01); **F04C 18/02** (2006.01); **F04C 28/28** (2006.01)

CPC (source: EP)

**F01C 21/10** (2013.01); **F04B 35/04** (2013.01); **F04B 39/121** (2013.01); **F04C 18/0215** (2013.01); **F04C 28/28** (2013.01); **F04C 2240/808** (2013.01)

Citation (search report)

- [XY] EP 2075470 A2 20090701 - TOYOTA JIDOSHOKKI KK [JP]
- [A] US 2013057120 A1 20130307 - TAKASU YOGO [JP], et al
- [YA] EP 3222852 A1 20170927 - MITSUBISHI HEAVY IND LTD [JP]
- [A] CN 203430779 U 20140212 - FUJIAN SNOWMAN COMPRESSOR TECHNOLOGY CO LTD
- [A] US 2017259647 A1 20170914 - NISHIBORI KEI [JP], et al
- See also references of WO 2020090701A1

Cited by

EP4321357A1

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)

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JP WO2020090701 A1 20210924; WO 2020090701 A1 20200507

DOCDB simple family (application)

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