

Title (en)
ELECTRICALLY DRIVEN SCROLL COMPRESSOR

Title (de)
ELEKTRISCH BETRIEBENER SPIRALVERDICHTER

Title (fr)
COMPRESSEUR À SPIRALES À ENTRAÎNEMENT ÉLECTRIQUE

Publication
EP 3239526 A4 20180808 (EN)

Application
EP 15872905 A 20151217

Priority
• JP 2014260226 A 20141224
• JP 2015085398 W 20151217

Abstract (en)
[origin: EP3239526A1] [Object] To improve the accuracy of the supporting surface for an orbiting scroll by suppressing the deformation of an end plate. [Solution] An electrically driven scroll compressor 1 includes a compression mechanism accommodation housing member 5 for accommodating a compression mechanism 3 that is a combination of a fixed scroll 11 and an orbiting scroll 21 and a motor accommodation housing member 6 for accommodating an electric motor 4 for driving the compression mechanism 3. The motor accommodation housing member 6 includes a motor fixing part 12 to which a stator 16 of the electric motor 4 is fixed by close-fitting, an end plate 13 having an orbiting scroll side end surface 22 that is a support surface for the orbiting scroll 21, and a low rigidity part 14 for making connection between the motor fixing part 12 and the end plate 13. The low rigidity part 14 has rigidity lower than in the motor fixing part 12 and the end plate 13. When the stator 16 is fixed to the motor fixing part 12 by close-fitting and the motor fixing part 12 undergoes diameter expansion deformation, the low rigidity part 14 is elastically deformed to absorb the elastic deformation of the motor fixing part 12.

IPC 8 full level
F04C 18/02 (2006.01); **F01C 21/10** (2006.01)

CPC (source: EP)
F01C 21/10 (2013.01); **F04C 18/02** (2013.01); **F04C 18/0215** (2013.01); **F04C 29/063** (2013.01)

Citation (search report)
• [YA] EP 2500517 A2 20120919 - TOYOTA JIDOSHOKKI KK [JP]
• [YA] KR 20130094652 A 20130826 - HALLA VISTEON CLIMATE CONTROL [KR]
• [YA] EP 1950377 A1 20080730 - TOYOTA JIDOSHOKKI KK [JP]
• See references of WO 2016104336A1

Cited by
US10508543B2; US11454241B2; US11898557B2; US11067080B2; US10683865B2; US11885328B2; US11047389B2; US11473572B2;
US11933299B2; US10519815B2; US10774690B2; US11530703B2; US10865793B2; US11692550B2

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DOCDB simple family (publication)
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JP 6587636 B2 20191009; JP WO2016104336 A1 20171005; WO 2016104336 A1 20160630

DOCDB simple family (application)
EP 15872905 A 20151217; CN 201580068389 A 20151217; JP 2015085398 W 20151217; JP 2016566179 A 20151217