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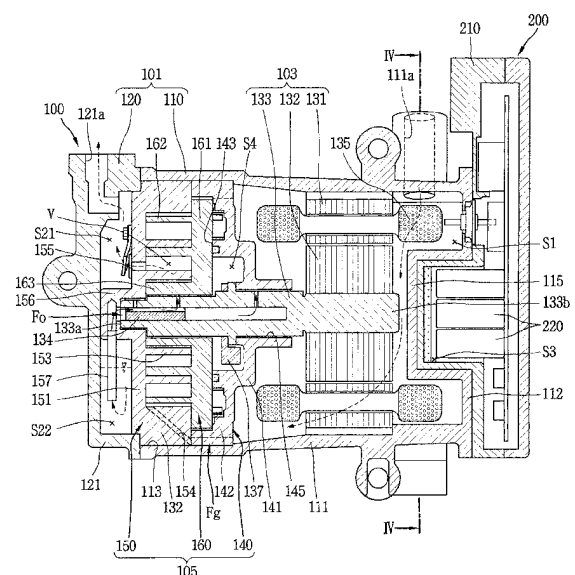
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(54) **MOTOR-OPERATED COMPRESSOR**

(57) A motor-operated compressor includes a casing having a sealed internal space, a first scroll fixed in a radial direction in the internal space of the casing, a second scroll engaged with the first scroll to make an orbiting motion to form a pair of two compression chambers with the first scroll, a frame fixed on the opposite side of the first scroll in a radial direction with the second scroll interposed therebetween, a driving motor provided on the opposite side of the second scroll with the frame interposed therebetween, and a rotary shaft having a first end portion coupled to the second scroll in an off-centered manner and a second end portion coupled to the driving motor and transmitting a rotational force from the driving motor to the second scroll, wherein the first end portion of the rotary shaft forms a fixed end supported in the radial direction by members positioned on both sides of the second scroll in an axial direction and the second end portion of the rotary shaft forms a free end coupled to a rotor of the driving motor on the opposite side of the first end portion with respect to the frame.

FIG. 2





EUROPEAN SEARCH REPORT

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 EP 18 21 1251

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DOCUMENTS CONSIDERED TO BE RELEVANT			
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Y	* the whole document *	9	
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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
Munich		8 November 2019	Sbresny, Heiko
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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EUROPEAN SEARCH REPORT

Application Number
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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A	* the whole document * * figure 1 * * paragraph [0022] * -----	3,5-9	
			TECHNICAL FIELDS SEARCHED (IPC)
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 8 November 2019	Examiner Sbresny, Heiko
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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Application Number

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 2-9(completely); 1(partially)

A motor-operated scroll compressor reduced in length.

1.1. claims: 2-4(completely); 1(partially)

A motor-operated scroll compressor reduced in length with a certain bearing arrangement for providing a compressor reduced in length having improved thermal properties and easier manufacturing for the fixed scroll.

1.2. claims: 5-7(completely); 1(partially)

A motor-operated scroll compressor with a certain inverter arrangement for providing improved cooling of the inverter.

1.3. claims: 8, 9(completely); 1(partially)

A motor-operated scroll compressor reduced in length with a decompression member in a lubrication passage for reducing the amount of lubricant.

2. claims: 10-14(completely); 1(partially)

A motor-operated scroll compressor reduced in length with compression chambers on both sides of the orbiting member for providing are more stable operating behaviour.

Please note that all inventions mentioned under item 1, although not necessarily linked by a common inventive concept, could be searched without effort justifying an additional fee.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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