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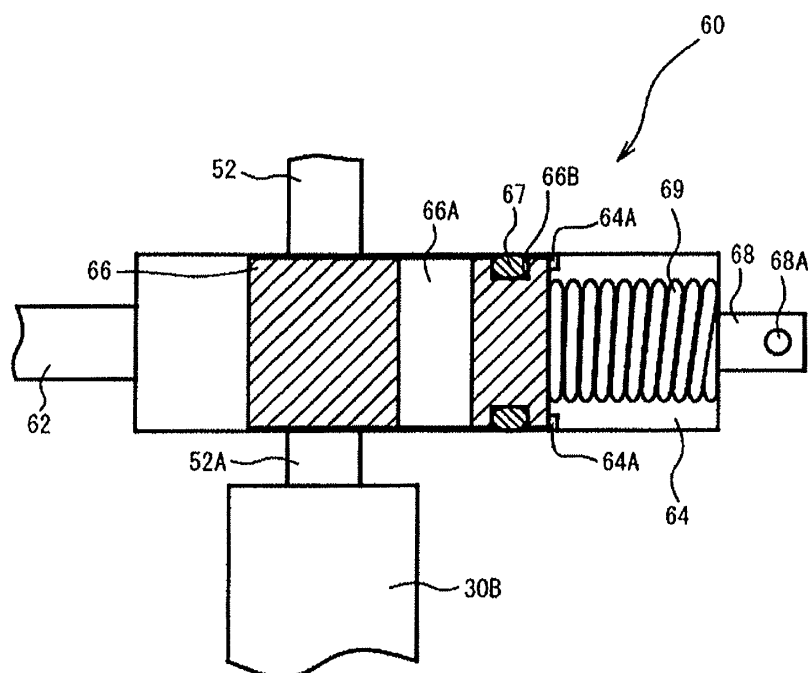
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(54) **Scroll compressor**

(57) A scroll compressor includes a housing (10), a fixed scroll (26), a movable scroll (28) both disposed in the housing (10), and an injection passage (52) through which medium-pressure refrigerant is introduced into a compression chamber (30B). The scroll compressor further includes a selector device (60) connecting the com-

pression chamber (30B) to the injection passage (52) or disconnecting the compression chamber (30B) from the injection passage (52) with the change of the pressure or the temperature of the refrigerant in the suction chamber (38).

**FIG. 3**





## EUROPEAN SEARCH REPORT

Application Number  
EP 13 16 1233

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	EP 1 936 197 A1 (EMERSON CLIMATE TECHNOLOGIES [US]) 25 June 2008 (2008-06-25) * paragraphs [0002], [0003], [0014] - [0030] * * figures 1,3-6 *	1-5	INV. F04C18/02 F04C29/00
A	EP 2 085 617 A2 (LG ELECTRONICS INC [KR]) 5 August 2009 (2009-08-05) * paragraphs [0004], [0005], [0006] * * paragraph [0034] - paragraph [0066] * * figures 3,4,8,9 *	1-5	
			TECHNICAL FIELDS SEARCHED (IPC)
			F04C
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 18 January 2016	Examiner Bocage, Stéphane
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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 ..... &amp; : member of the same patent family, corresponding document</p>			

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

EP 13 16 1233

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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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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 1936197	A1	25-06-2008	CN	101205916 A	25-06-2008
			EP	1936197 A1	25-06-2008
			US	2008152526 A1	26-06-2008
-----					
EP 2085617	A2	05-08-2009	CN	101498302 A	05-08-2009
			EP	2085617 A2	05-08-2009
			KR	20090084298 A	05-08-2009
			US	2009196781 A1	06-08-2009
-----					

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