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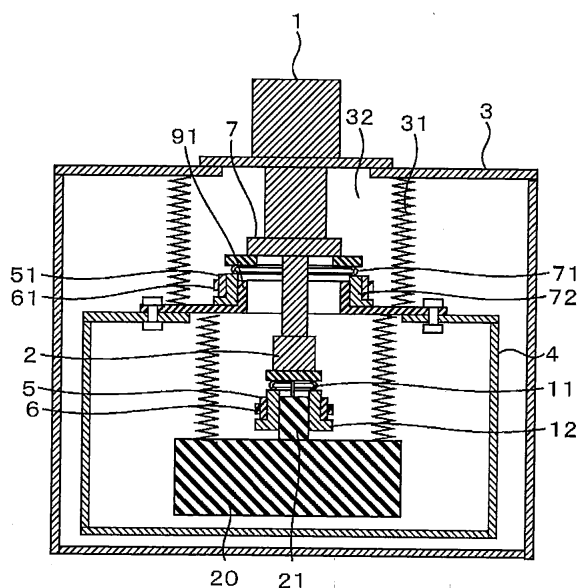
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(54) **Cryogenic refrigerator coupling structure**

(57) For providing a refrigerator coupling structure for enabling attaching/detaching and re-cooling of the refrigerator in a short time-period, by suppressing a heat movement from the refrigerator at the room temperature to an object to be cooled, which is cooled down to cryogenic temperature when attaching a cryogenic refrigerator thereon, while suppressing a volume of heat invasion

into the object to be cooled, it has a heat contact portion (12,72) having a flexible portion (11) at least in a part thereof, which is coupled with a cold stage of the cryogenic refrigerator (1), wherein on an outer peripheral portion of this heat contact portion is provided a heat contracting ring (5), which has a heat contraction rate larger than that of the heat contact portion.

**FIG. 1**





## EUROPEAN SEARCH REPORT

Application Number  
EP 11 17 6360

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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)
X	US 5 853 198 A (RICHIED DONALD E [US] ET AL) 29 December 1998 (1998-12-29)	1-6	INV. F25D19/00
Y	* abstract; figures 1-6 * * column 1, line 4 - line 32 * * column 2, line 56 - line 62 * * column 3, line 60 - line 62 *	7	ADD. F25B9/10
Y	----- US 2009/272127 A1 (RADOVINSKY ALEXEY L [US] ET AL) 5 November 2009 (2009-11-05)	7	
A	* abstract; figures 1-4 * -----	1-6	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC) F25D
Place of search The Hague		Date of completion of the search 12 March 2015	Examiner Yousufi, Stefanie
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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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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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82