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(54) Stirling cooler

(57) Disclosed is a stirling cooler, in which a cylinder (54) is fixedly installed in a case(50), a flange(55) is protruded perpendicularly from an outer surface of the cylinder(54) in a radial direction of the cylinder(54), a stair (51,51') on which the flange(55) is seated is installed in the case(50) in an axial direction of the cylinder(54), and a packing(70) is interposed between the stair(51,51') of the case(50) and the flange(55) of the cylinder(54), thereby preventing the packing(70) from influencing an axis of the cylinder(54) and thus maintaining the sealed state between the case(50) and the cylinder(54).

FIG. 2



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	DOCUMENTS CONSIDERE Citation of document with indicatic	where appropriate	Relevant	CLASSIFICATION OF THE	
Category	of relevant passages	mere appropriate,	to claim	APPLICATION (IPC)	
x	US 6 327 862 B1 (HANES 11 December 2001 (2001- * column 2, line 30 - c figure 1 *	12-11)	1-10	INV. F25B9/14	
x	US 2003/221427 A1 (0'BA 4 December 2003 (2003-1 * paragraph [0033] - pa figures 7-10 *	2-04) ragraph [0050];	1-10		
				TECHNICAL FIELDS SEARCHED (IPC)	
				F25B F25D	
	The present search report has been di	•			
	Place of search Munich	Date of completion of the search	Szi	Examiner lagyi, B	
X : parti Y : parti docu	TEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with another ment of the same category	T : theory or princ E : earlier patent t after the filing c D : document cite L : document cite	l iple underlying the i document, but publis date d in the application d for other reasons	derlying the invention ent, but published on, or e application her reasons	
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EP 04 01 6097

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 6327862	B1	11-12-2001	AU CN DE GB JP WO	7481201 1426522 10196129 2378749 2003532046 0181840	A TO A T	07-11-2001 25-06-2003 18-06-2003 19-02-2003 28-10-2003 01-11-2001
US 2003221427	A1	04-12-2003	AU WO US	2003225308 03102375 2004182077	A1	19-12-2003 11-12-2003 23-09-2004

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