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(54) **Suction opening of a screw compressor**

(57) A screw compressor includes a casing (3) forming a bore (4) for accommodating a male rotor (1) and a female rotor (2) of which lobes mesh with each other, an axial suction port (11) on a suction side of the casing, and a delivery port on a delivery side, the axial suction port configured by a contour line including a line (15) along a male lobe profile and a line (18) along a female lobe profile, and the line (15) along the male lobe profile disposed at a predetermined displacement angle ($\Delta f1$) toward a rotational direction of the male rotor from a following side contour line position of a male lobe groove (5) at which position the volume of a working chamber (9) formed by the male lobe groove of the male rotor, a female lobe groove (6) of the female rotor and the bore is maximum.

FIG.1A

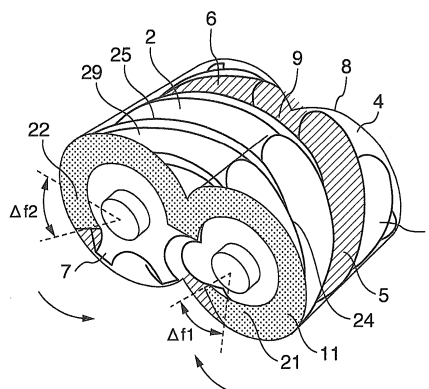
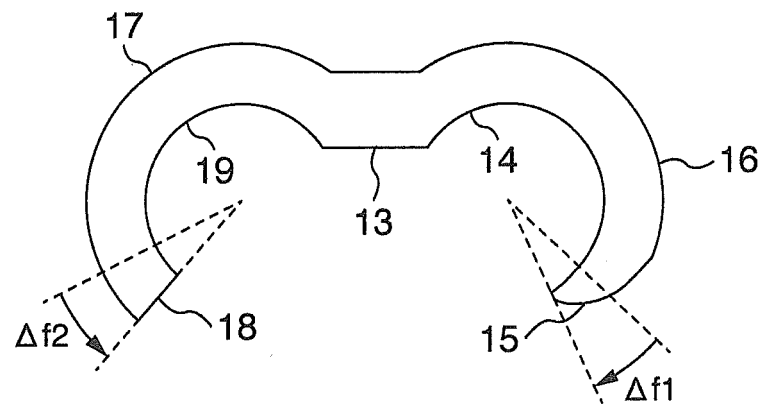


FIG.1B





EUROPEAN SEARCH REPORT

Application Number
EP 11 16 7299

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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 2 457 314 A (ALF LYSHOLM) 28 December 1948 (1948-12-28) * the whole document * * figure 1 * * column 3, line 66 - column 4, line 16 *	1-4	INV. F04C18/08 F04C18/16 F04C29/12
X	US 2 481 527 A (ROBERT NILSSON HANS) 13 September 1949 (1949-09-13) * the whole document * * column 4, line 30 - line 60 *	1-4	
			TECHNICAL FIELDS SEARCHED (IPC)
			F04C F01C
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 18 August 2014	Examiner Sbresny, Heiko
<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 & : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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18-08-2014

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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