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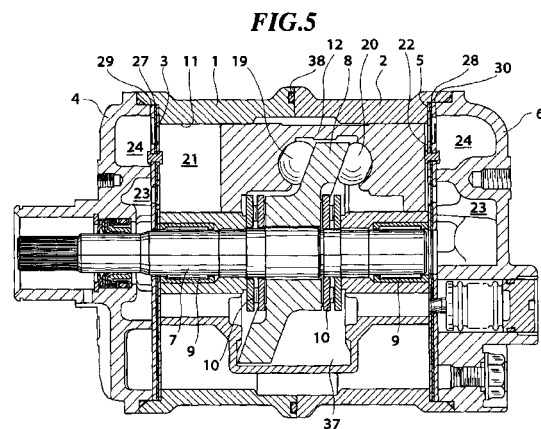
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(54) **Reciprocating compressor**

(57) A reciprocating compressor comprises a cylinder block (1,2) having a plurality of compression chambers (21,22) formed therein and on at least one of opposite ends of respective pistons (12) slidably received within respective cylinder bores (11). A cylinder head (4,6) is secured to the cylinder block (1,2) and has a high-pressure chamber (24) and a low-pressure chamber (23) formed therein. A separating member is arranged between the cylinder block (1,2) and the cylinder head (4,6) and has a valve sheet (27,28), a valve plate (3,5) and a stopper plate (29,30). The valve sheet (27,28) is formed with suction valves (27d,28d) and discharge valves (27a,28a). The valve plate (3,5) is arranged between the valve sheet (27,28) and the cylinder block (1,2) and is formed with refrigerant outlet ports (3a,5a) and a plurality of relief holes (3b,5b) each opening into a corresponding one of the compression chambers (21,22) for communicating with a corresponding one of refrigerant inlet ports (29d,30d) formed through the stopper plate (29,30) when a corresponding one of the suction valves (27d,28d) opens. The stopper plate (29,30) is arranged between the valve sheet (27,28) and the cylinder head (4,6) and is formed with the refrigerant inlet ports (29d,30d), with a plurality of refrigerant outlet ports (3a,5a) each opening into the high-pressure chamber (24) for communication with a corresponding one of the relief holes (3b,5b), when a corresponding

one of the discharge valves (27a,28a) opens, and with a plurality of stoppers (29a,30a) each setting a limit to an amount of opening of a corresponding one of the discharge valves (27a,28a). The valve sheet (27,28), the valve plate (3,5), and the stopper plate (29,30) can be combined into a unit.





European Patent  
Office

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 (Int.Cl.6)
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			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			F04B
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>14 June 2000</b>	Examiner <b>Ingelbrecht, P</b>
CATEGORY OF CITED DOCUMENTS		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	
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			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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EP 98 30 3118

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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