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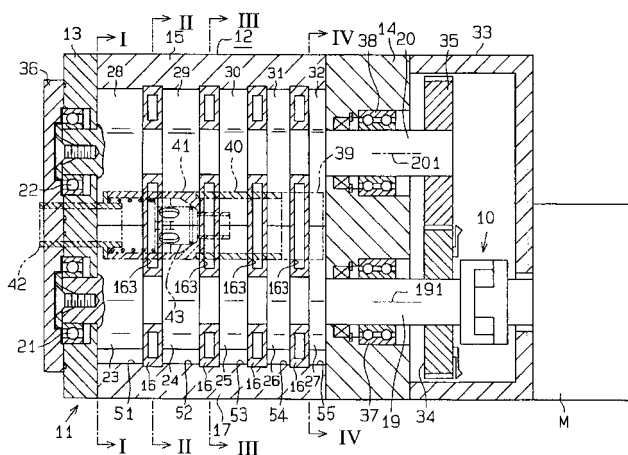
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(54) **Vacuum pump**

(57) Passage structure for a vacuum pump has a rotary shaft, a gas transferring assembly and a backflow preventing means. The gas transferring assembly is driven based on rotation of the rotary shaft. Vacuum action is generated by transferring gas due to motion of the gas transferring assembly. The backflow preventing means is constituted of a guide pipe, a valve hole forming portion, a valve body and a return spring, and is interposed in a gas passage. The guide pipe accommodates the valve body and the return spring, and forms a tapered valve hole. The valve body is constituted of a

shutter closing the valve hole, a cylindrical circumferential wall, a plurality of slide contact portions disposed on an outer circumferential surface of the circumferential wall so as to be distributed around the inner circumferential surface of the guide pipe, and a seal ring fitted to a periphery of the shutter. The valve body opens and closes the valve hole. The return spring urges the valve body in a direction to close the valve hole. A plurality of the slide contact portions keeps in slide contact with one of the guide pipe and the valve body, and is interposed between an inner circumferential surface of the guide pipe and the valve body.

Fig. 1





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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			F04C F04B F16K F25B
Place of search		Date of completion of the search	Examiner
THE HAGUE		14 January 2003	Lequeux, F
CATEGORY OF CITED DOCUMENTS			
<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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