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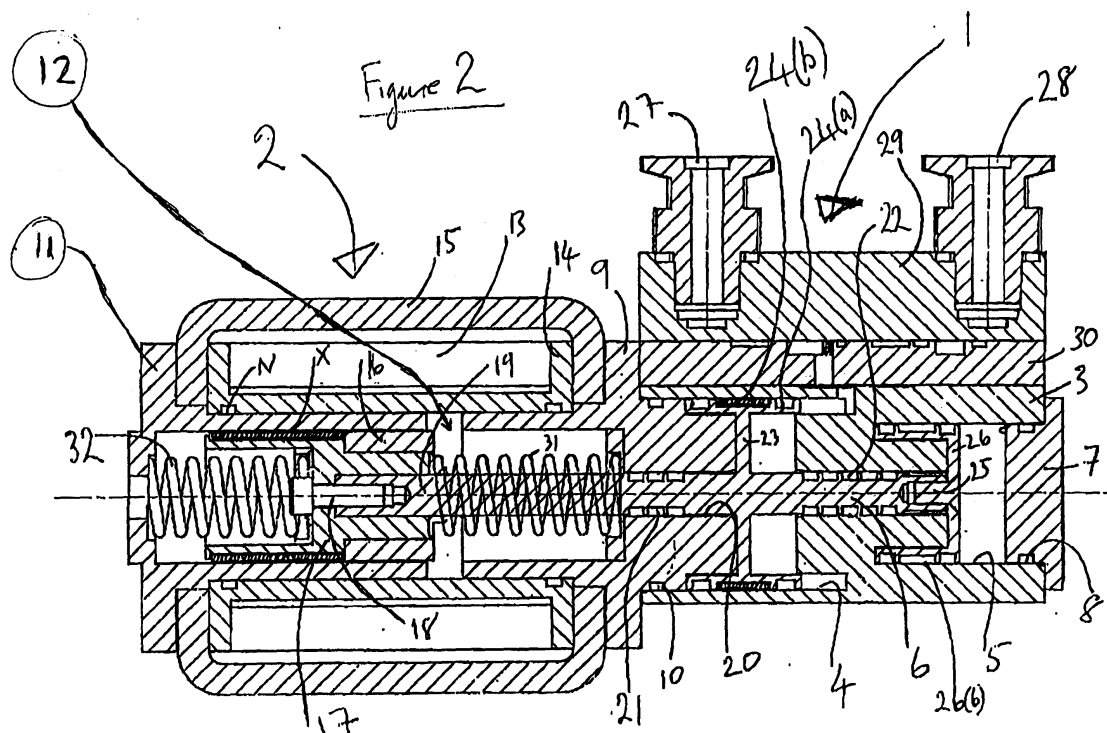
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(54) **Improvements in vacuum pumps**

(57) A vacuum pump which comprises a multi-stage reciprocating piston mode of operation in which piston reciprocation is effected by electromagnetic drive means and a counter-acting spring means and in which

the pump stages are connected in series between a pump inlet and a pump outlet such that, in use, gas being transferred through the pump passes through the stages in turn.





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 97 30 1303

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Place of search THE HAGUE		Date of completion of the search 8 April 1999	Examiner Ingelbrecht, P
<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>			

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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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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