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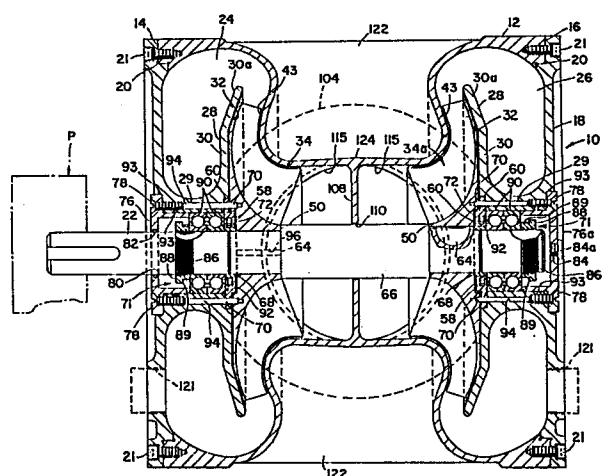
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54 **Centrifugal, inline, opposed balance gas blower.**

57 A centrifugal blower for use in moving gas at relatively high flow rates through a line system comprising a stationary housing (12) having a shaft (22) within the housing for rotation therein, the housing having a pair of axially spaced plenum chambers (24, 26) with opposed impellers (34, 34a) mounted on the shaft in secured relation and disposed in the respective chamber, for rotation with respect thereto to pressurize the gas. The blower is capable of providing a vacuum up to 18 inches of mercury at its inlet. A gas inlet (104) for supplying gas to the blower chamber and a gas outlet for exiting pressurized gas from the blower chamber is provided for each of the chambers, with the gas inlet and the gas outlet being disposed in line, crosswise of the shaft, whereby minimum thrust forces are applied to the blower during operation thereof, resulting in a relatively long service life for the blower and especially the shaft bearings. The blower construction is such that the shaft bearings (71) may be expeditiously replaced if that becomes desirable or necessary, without disassembly of the entire blower.





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EUROPEAN SEARCH REPORT

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EP 86 10 0069

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
A	GB-A- 8 156 (MASCHINENFABRIK OERLIKON)(A.D. 1915) * Page 1, lines 8-25; figure 2 * ---	1	F 04 D 17/12 F 04 D 29/42
A	GB-A- 3 626 (P.W. ALLDAY)(A.D. 1914) * Page 1, line 15 - page 2, line 6; figure 1 * ---	1-4	
A	GB-A- 854 127 (POWER JETS) * Page 1, lines 34-50; figure * -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			F 04 D 17/00 F 04 D 25/00 F 04 D 29/00
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 22-02-1988	Examiner DIMITROULAS P.
CATEGORY OF CITED DOCUMENTS 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 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			