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(54)

Horizontal pumping system

(57)

A multi-pump horizontal pumping system has a support structure (12) with a plurality of pumps (18) horizontally connected thereto in parallel and side-by-side relationship. A gear box (16) operatively interconnects an electric motor (14) to each of the pumps with a thrust bearing (30) operatively connected to each pump shaft (32) of each pump between the gear box and each pump. Piping (36) conveys fluids to and from the pumps in parallel or series flow. The multi-pump arrangement provides redundant pumping ability in remote locations where pumps fail more often than the electric motors, and in remote locations where size and weight considerations prevent the use of multiple single-pump horizontal pumping systems.

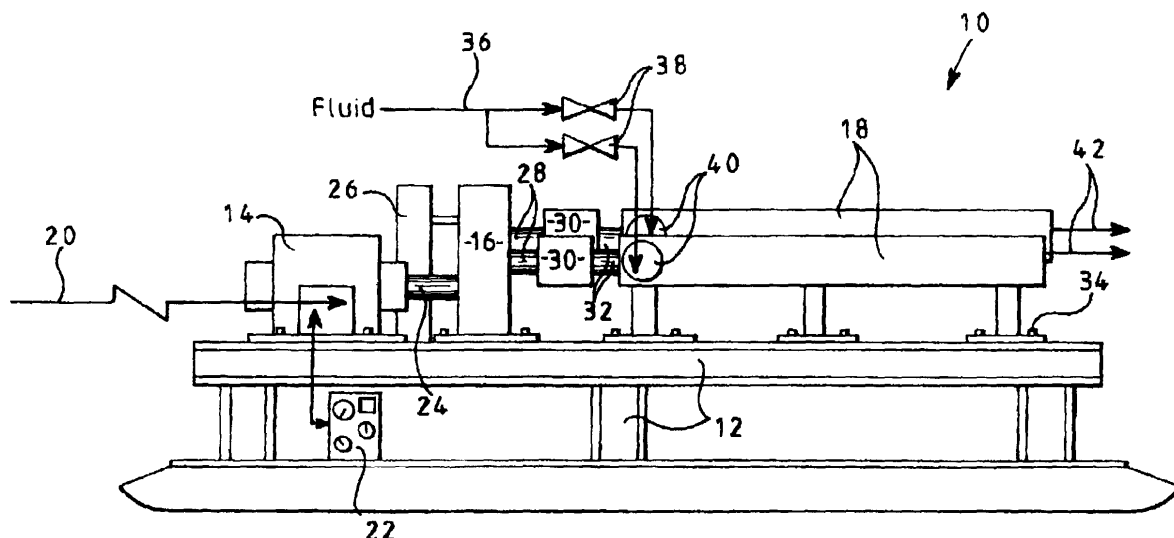


FIG 1



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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 9 June 1999	Examiner Zidi, K
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	

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Application Number
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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			

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EP 98 30 1354

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