

Title (en)  
Horizontal pumping system

Title (de)  
Horizontales Pumpensystem

Title (fr)  
Système de pompage horizontal

Publication  
**EP 0877165 A2 19981111 (EN)**

Application  
**EP 98301354 A 19980225**

Priority  
US 85247697 A 19970507

Abstract (en)  
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.  
<IMAGE>

IPC 1-7  
**F04D 13/14**; **F04C 11/00**

IPC 8 full level  
**F04C 11/00** (2006.01); **F04C 14/02** (2006.01); **F04D 13/14** (2006.01)

CPC (source: EP)  
**F04C 11/001** (2013.01); **F04C 14/02** (2013.01); **F04D 13/14** (2013.01)

Cited by  
RU182408U1; US5951248A; CN106089745A; EA031425B1; US11154917B2; US9534603B2; US10677032B1; US11596987B2; US12036587B2; US11118588B2

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