

Title (en)  
PUMP

Publication  
**EP 0537128 A3 19930714 (EN)**

Application  
**EP 92850211 A 19920909**

Priority  
• US 77351391 A 19911009  
• US 86145792 A 19920401

Abstract (en)  
[origin: EP0537128A2] A centrifugal pump having an impeller (38) which is associated with a motor and a drive shaft (16,14) and that is enclosed within a housing (28). The housing (28) is mounted in surrounding, spaced and non-contacting relationship, with respect to the impeller (38) and drive shaft (14) contains fluid inlet (26,26') through which fluids are directed by the impeller (28) to an outlet from the housing (28). Also provided is a pump which operates from remote locations.

IPC 1-7  
**F04D 1/00**; **F04D 29/20**; **F04D 17/16**; **F04D 29/26**

IPC 8 full level  
**F04D 7/02** (2006.01); **F04D 1/00** (2006.01); **F04D 17/16** (2006.01); **F04D 29/20** (2006.01); **F04D 29/26** (2006.01); **F04D 29/28** (2006.01); **F04D 31/00** (2006.01)

CPC (source: EP)  
**F04D 1/006** (2013.01); **F04D 17/162** (2013.01); **F04D 29/20** (2013.01); **F04D 29/263** (2013.01)

Citation (search report)  
• [AD] US 4688987 A 19870825 - ERICSON WALLACE W [US], et al  
• [A] US 3411013 A 19681112 - VOGELSANG ROGER G  
• [A] US 2215559 A 19400924 - MORGAN FRED P  
• [A] GB 1226229 A 19710324  
• [A] DE 422200 C 19251127 - PAUL HARIVEAU  
• [A] US 5051071 A 19910924 - HAENTJENS WALTER D [US]

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AT BE DE DK ES FR GB GR IT LU MC NL PT SE

DOCDB simple family (publication)  
**EP 0537128 A2 19930414**; **EP 0537128 A3 19930714**; **EP 0537128 B1 19960522**; AT E138451 T1 19960615; BR 9203887 A 19930427; CA 2077582 A1 19930410; DE 69210937 D1 19960627; DE 69210937 T2 19961002; DK 0537128 T3 19961014; ES 2087504 T3 19960716; GR 3020052 T3 19960831; IL 103095 A0 19930221; IL 103095 A 19961114; JP H05195992 A 19930806; NO 923869 D0 19921005; NO 923869 L 19930413

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