

Title (en)

Motor-pump unit with pressure and flow sensors.

Title (de)

Motorpumpengruppe mit Druck- und Förderstromsensoren.

Title (fr)

Groupe motopompe à capteurs de pression et de débit.

Publication

EP 0390627 A1 19901003 (FR)

Application

EP 90400653 A 19900313

Priority

FR 8904243 A 19890331

Abstract (en)

A pump (1) with delivery pipework (2), a variable speed gear (4) causing the pump (1) to rotate and a start-stop circuit (7) for the variable speed gear (4), together with an analog pressure transducer (6) controlling the variable speed gear (4) and a flow transducer (5) controlling the start-stop circuit (7). <IMAGE>

IPC 1-7

F04D 15/00

IPC 8 full level

F04D 15/00 (2006.01)

CPC (source: EP)

F04D 15/0066 (2013.01)

Citation (search report)

- [X] US 2741986 A 19560417 - SMITH MARSDEN C
- [X] PUMPS, POMPES, PUMPEN. no. 10, octobre 1984, MORDEN GB pages 361 - 366; E.STYGAR: "The use of electronics in centrifugal pumps"
- [A] PATENT ABSTRACTS OF JAPAN vol. 3, no. 93 (M-68)(141) 8 août 1979, & JP-A-54 69802 (HITACHI SEISAKUSHO) 5 mai 1979,
- [A] PATENT ABSTRACTS OF JAPAN vol. 12, no. 121 (M-686)(2968) 15 avril 1988, & JP-A-62 248897 (SHINDO PUMP) 29 octobre 1987,

Cited by

EP1431583A3; ES2177371A1; EP0619432A1; EP0973082A1; CN108799141A; EP0709575A1; US5580221A; GB2298239A; GB2298239B; US5673732A; US5769134A; US5934508A; US6070760A; US6234759B1; WO9816880A1; CN108700899A; EP3469444A4; WO2007134896A1; WO2010094606A3; US11692752B2; WO2017214701A1; US11053945B2; US11767849B2

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