

Title (en)
Pit pump

Title (de)
Sickerpumpe

Title (fr)
Pompe à puisard

Publication
EP 1229251 A1 20020807 (EN)

Application
EP 01310441 A 20011213

Priority
US 77241901 A 20010129

Abstract (en)

The invention provides a pit pump having a submersible hydraulic drive motor (3), a pump (28), and a bearing block assembly (7). The pump (28) has a body (20), a fluid inlet in the body, a fluid outlet (29) in the body, and an impeller (18) operatively positioned in the body, whereby fluid can be pumped between the fluid inlet and fluid outlet (29). The bearing block assembly (7) operatively connects the hydraulic drive motor (3) to the impeller (18) of the pump (28), whereby the submersible hydraulic drive motor (3) is spaced apart from the pump (28). The bearing block assembly (7) preferably includes a housing (7a) and a drive shaft (7b) operatively positioned for rotational movement within the housing, whereby rotational movement can be transferred from the hydraulic drive motor (3) to the impeller (18) of the pump (28). The bearing block assembly (7) preferably has at least one grease nipple (9) and at least one bleeder nipple (8) for maintaining grease lubrication within the bearing block assembly (7). Furthermore, the bearing block assembly (7) is preferably lubricated with an extreme-pressure, water-resistant, and high-temperature grease.

<IMAGE>

IPC 1-7
F04D 13/04; F04D 13/08; F04D 29/60; F04D 29/40; F04D 29/04

IPC 8 full level
F04D 13/04 (2006.01); **F04D 29/04** (2006.01); **F04D 29/046** (2006.01); **F04D 29/049** (2006.01)

CPC (source: EP US)
F04D 13/04 (2013.01 - EP US); **F04D 13/046** (2013.01 - EP US); **F04D 29/0462** (2013.01 - EP US); **F04D 29/049** (2013.01 - EP US)

Citation (search report)

- [XY] US 5306124 A 19940426 - BACK CARL F [US]
- [PX] US 6276824 B1 20010821 - DE JAGER VERNON [GB]
- [XY] US 2934245 A 19600426 - EMENY GEORGE B
- [AY] US 4289456 A 19810915 - ISHIHARA MASAMITSU
- [AY] US 2525370 A 19501010 - ABRAHAM POLLAK
- [A] EP 0740079 A1 19961030 - WESTINGHOUSE ELECTRIC CORP [US]
- [A] US 4308000 A 19811229 - OAKES WILLIAM J

Cited by
US11208859B2; WO2020190748A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
EP 1229251 A1 20020807; CA 2367874 A1 20020729; US 2002102164 A1 20020801

DOCDB simple family (application)
EP 01310441 A 20011213; CA 2367874 A 20020115; US 77241901 A 20010129