

Title (en)  
Pump unit

Title (de)  
Pumpenaggregat

Title (fr)  
Groupe motopompe

Publication  
**EP 2573402 A1 20130327 (DE)**

Application  
**EP 11182384 A 20110922**

Priority  
EP 11182384 A 20110922

Abstract (en)  
The pump unit has an electric motor (6) and a shaft (8) through which the electric motor is connected to an impeller (10). The shaft is surrounded by a co-rotating protective sleeve (20). The impeller is provided with a receiving sleeve (18) whose axial end is engaged with the shaft. An independent claim is included for a sewage pumping plant.

Abstract (de)  
Die Erfindung betrifft ein Pumpenaggregat mit einem Elektromotor (6) und zumindest einem über eine Welle (8) mit dem Elektromotor (6) verbundenen Laufrad (10), wobei die Welle von einer sich mitdrehenden Schutzhülse (20) umgeben ist, sowie eine Abwasserhebeanlage mit einem solchen Pumpenaggregat.

IPC 8 full level  
**F04D 13/08** (2006.01); **F04D 29/043** (2006.01)

CPC (source: EP)  
**F04D 13/08** (2013.01); **F04D 29/043** (2013.01)

Citation (search report)

- [X] NL 8303612 A 19850501 - HENDRIKUS GERARDUS BOHNCKE
- [X] DE 4444967 A1 19960620 - KLEIN SCHANZLIN & BECKER AG [DE]
- [X] US 4380416 A 19830419 - MENAGER JEAN [LU]
- [X] GB 536245 A 19410507 - FREDERIC DRURY WAYRE, et al
- [X] DE 2908733 A1 19800911 - GARDENA KRESS & KASTNER GMBH
- [A] GB 1290068 A 19720920

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
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