

Title (en)  
Vertical centrifugal pump module

Title (de)  
Vertikales Kreiselpumpenaggregat

Title (fr)  
Ensemble de pompe centrifuge verticale

Publication  
**EP 1564410 A3 20090701 (DE)**

Application  
**EP 05001887 A 20050129**

Priority  
• DE 102004007090 A 20040213  
• DE 102004029557 A 20040618

Abstract (en)  
[origin: EP1564410A2] An upright semi-submerged rotary pump is installed in a tank or basin. The pump has a top-mounted electric motor (1) on a pillar link (5) to a submerged housing (11) with the pump wheel (12). The housing (11) encloses a riser pipe (17) and drive shaft (3). The pipe is fabricated without a flange or other expanded part at its end-face. The end-face is attached to the post and housing by equidistant bolts.

IPC 8 full level  
**F04D 13/08** (2006.01); **F04D 29/62** (2006.01)

CPC (source: EP US)  
**F04D 13/08** (2013.01 - EP US); **F04D 29/628** (2013.01 - EP US)

Citation (search report)  
• [X] DE 1528888 A1 19691009 - WERNERT & CO KG H  
• [A] DE 19507771 A1 19951012 - SIEBEC SA [FR]  
• [A] EP 0529379 A1 19930303 - KSB AG [DE]

Cited by  
CN107939737A; CN114294268A

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR LV MK YU

DOCDB simple family (publication)  
**EP 1564410 A2 20050817**; **EP 1564410 A3 20090701**; **EP 1564410 B1 20161116**; US 2005191192 A1 20050901; US 7828531 B2 20101109

DOCDB simple family (application)  
**EP 05001887 A 20050129**; US 5616805 A 20050214