

Title (en)
Circulation pump with magnetic coupling with separating can monitoring

Title (de)
Magnetgekoppelte Kreiselpumpe mit Spalttopfüberwachung

Title (fr)
Pompe centrifuge à accouplement magnétique dotée d'une surveillance du manchon d'entrefer

Publication
EP 2546524 A3 20150121 (DE)

Application
EP 12175418 A 20120706

Priority
CH 11832011 A 20110715

Abstract (en)
[origin: EP2546524A2] The pump has a separating can (1) including a hat-shaped separation wall (10) e.g. massive wall, which is partially transparent for a magnetic and/or electric field, for contactlessly driving a pump wheel. The pump wheel is arranged in the separating can. A metal wire (20) and a flexible printed circuit board monitor the can in terms of an area. The wire and the board are arranged within a wall material of the wall or directly on a surface of the wall to monitor integrity of the wall. The wire and the board include a thickness lying in a range preferably from 0.1 mm to 0.3 mm. The separation wall is made of ceramics, polymer or fiber composite material.

IPC 8 full level
F04D 13/02 (2006.01); **F04D 15/00** (2006.01)

CPC (source: EP)
F04D 13/025 (2013.01); **F04D 15/0088** (2013.01)

Citation (search report)
• [Y] DE 3704671 A1 19880825 - RICHTER CHEMIE TECHNIK GMBH [DE]
• [Y] US 2005158511 A1 20050721 - SABOL STEPHEN M [US], et al
• [XA] EP 0610562 A1 19940817 - JUNKALOR GMBH [DE]
• [A] DE 3639719 A1 19880601 - REINECKER HEYKO [DE]
• [A] US 2006056960 A1 20060316 - SABOL STEPHEN M [US], et al
• [A] EP 1091128 A1 20010411 - CP PUMPEN AG [CH]

Cited by
CN106050684A; EP3530950A1; FR3078115A1

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)
EP 2546524 A2 20130116; EP 2546524 A3 20150121; EP 2546524 B1 20160824; CH 705235 A1 20130115

DOCDB simple family (application)
EP 12175418 A 20120706; CH 11832011 A 20110715