

Title (en)

Molten metal pump and emergency pump-out of molten metal

Title (de)

Metalschmelzpumpe und Notfallabpumpen von Metallschmelze

Title (fr)

Pompe de métal en fusion et vidange par pompage de métal en fusion en urgence

Publication

**EP 2811166 A1 20141210 (EN)**

Application

**EP 14171529 A 20140606**

Priority

US 201361832376 P 20130607

Abstract (en)

A molten metal pump comprised of a metal base (119) defining a pumping chamber (118) is provided. The pump further includes a motor mount (129) adapted to receive a motor (111), at least one metal post (125) extending between the base (119) and the motor mount (129), and a metal shaft (113) disposed between the motor (111) and an impeller (117) disposed in the pumping chamber (118). A bearing ring (121) engages the impeller (117). The pumping chamber (118) will include an inlet (134) and an outlet (133). A steel riser tube (132) in fluid communication with the outlet (133) is also provided.

IPC 8 full level

**F04D 7/06** (2006.01)

CPC (source: EP US)

**F04D 7/065** (2013.01 - EP US); **F04D 13/08** (2013.01 - US); **F04D 29/046** (2013.01 - EP US); **F04D 29/18** (2013.01 - EP US); **F04D 29/426** (2013.01 - EP US)

Citation (applicant)

US 5634770 A 19970603 - GILBERT RONALD E [US], et al

Citation (search report)

- [XAI] DE 102004009546 A1 20050908 - STRIKOWESTOFEN GMBH [DE]
- [IA] US 3776660 A 19731204 - ANDERSON L, et al
- [IA] US 6439860 B1 20020827 - GREER KARL [US]
- [IA] WO 9825031 A2 19980611 - COOPER PAUL V [US]
- [I] WO 9815736 A1 19980416 - METAULLICS SYSTEM CO L P [US]
- [IA] WO 0028219 A1 20000518 - METAULLICS SYSTEMS CO LP [US]
- [IA] US 2012328428 A1 20121227 - THUT BRUNO H [US]
- [IA] US 2004096330 A1 20040520 - GILBERT RONALD [US], et al
- [IA] US 6187096 B1 20010213 - THUT BRUNO H [US]
- [IA] US 2003059302 A1 20030327 - MORDUE GEORGE S [US], et al
- [A] US 6152691 A 20001128 - THUT BRUNO H [US]

Cited by

CN108916058A; CN109973395A; CN108240328A; EP3655658A4; WO2019018733A1; US11795950B2

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 2811166 A1 20141210; EP 2811166 B1 20180815**; AU 2014203104 A1 20150115; AU 2014203104 B2 20180719; US 2014363309 A1 20141211; US 2021148374 A1 20210520

DOCDB simple family (application)

**EP 14171529 A 20140606**; AU 2014203104 A 20140606; US 201414294858 A 20140603; US 202117157625 A 20210125