

Title (en)

Rechargeable battery powered utility pump with series centrifugal pump configuration

Title (de)

Mit einer wiederaufladbaren Batterie versorgte Pumpe mit Reihen-Zentrifugalpumpenkonfiguration

Title (fr)

Pompe électrique alimentée par une batterie rechargeable avec une configuration de pompe centrifuge en séries

Publication

EP 2594801 A3 20140430 (EN)

Application

EP 12193034 A 20121116

Priority

US 201113300174 A 20111118

Abstract (en)

[origin: EP2594801A2] A utility pump is provided featuring a housing and battery configuration, where the housing is configured with a series configuration of integral pumps, and also configured with a battery receiving portion having electrical terminals for receiving power for providing to the series configuration of the integral pumps, and where the battery has a protruding portion with corresponding electrical terminals configured to contact the electrical terminals to provide power to the series configuration of the integral pumps when the protruding portion of the battery is inserted into the battery receiving portion of the housing and rotated in one direction to an "ON" position, and also configured not to contact the electrical terminals when the battery is not rotated to the "ON" position.

IPC 8 full level

F04D 13/06 (2006.01); **F04D 13/08** (2006.01); **F04D 29/42** (2006.01)

CPC (source: EP)

F04D 13/068 (2013.01); **F04D 13/086** (2013.01); **F04D 29/426** (2013.01)

Citation (search report)

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- [Y] US 2005241926 A1 20051103 - GROH WILLIAM S [US], et al
- [Y] US 5445900 A 19950829 - MILLER JR KENNETH [US], et al
- [A] US 5094591 A 19920310 - WHITLEY II WARWICK M [US], et al

Cited by

CN106785179A; NL1043675B1; EP3530959A1

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 2594801 A2 20130522; EP 2594801 A3 20140430; EP 2594801 B1 20171011; AU 2012254972 A1 20130606; AU 2012254972 A8 20151029; AU 2012254972 B2 20150702; AU 2012254972 B8 20151029; CA 2795964 A1 20130518; CA 2795964 C 20170411; CN 103133357 A 20130605; CN 103133357 B 20161228; DK 2594801 T3 20171127; MX 2012013390 A 20130604; NZ 603709 A 20140530

DOCDB simple family (application)

EP 12193034 A 20121116; AU 2012254972 A 20121119; CA 2795964 A 20121116; CN 201210598999 A 20121119; DK 12193034 T 20121116; MX 2012013390 A 20121116; NZ 60370912 A 20121119