

Title (en)
PUMP DEVICE, SERVICE WATER SYSTEM, METHOD FOR OPERATING THE SERVICE WATER SYSTEM AND SELF-LEARNING METHOD FOR THE PUMP DEVICE IN THE SERVICE WATER SYSTEM

Title (de)
PUMPENVORRICHTUNG, BRAUCHWASSERSYSTEM, VERFAHREN ZUM BETREIBEN EINES BRAUCHWASSERSYSTEMS UND SELBSTLERNVERFAHREN FÜR EINE FÖRDERPUMPE EINES BRAUCHWASSERSYSTEMS

Title (fr)
POMPE, SYSTÈME D'EAU SANITAIRE, PROCÉDÉ DE FONCTIONNEMENT D'UN SYSTÈME D'EAU SANITAIRE ET PROCÉDÉ D'AUTOAPPRENTISSAGE DE LA POMPE DANS LE SYSTÈME D'EAU SANITAIRE

Publication
EP 3377770 B1 20200108 (DE)

Application
EP 16798445 A 20161114

Priority
• DE 102015119883 A 20151117
• EP 2016077579 W 20161114

Abstract (en)
[origin: WO2017085015A1] Disclosed is a pump device to be arranged on a recirculation pipe (24) in an industrial water system (10), said pump device comprising a delivery pump (116), a check valve (32) and a bypass pipe (34) for the check valve (32); the bypass pipe (34) is arranged parallel to the check valve (32), and a combination (36) consisting of the check valve (32) and the bypass pipe (34) is arranged in series to the delivery pump (116).

IPC 8 full level
F04D 15/00 (2006.01); **F04D 15/02** (2006.01); **F24D 17/00** (2006.01); **F24D 19/10** (2006.01)

CPC (source: EP US)
F04D 13/06 (2013.01 - US); **F04D 15/0005** (2013.01 - EP US); **F04D 15/0011** (2013.01 - EP US); **F04D 15/0083** (2013.01 - EP US); **F04D 15/0209** (2013.01 - EP US); **F24D 17/0078** (2013.01 - EP US); **F24D 19/1051** (2013.01 - EP US)

Citation (examination)
FR 2398976 A1 19790223 - SAUNIER DUVAL [FR]

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

DOCDB simple family (publication)
DE 102015119883 A1 20170518; CN 108291551 A 20180717; CN 108291551 B 20200214; EP 3377770 A1 20180926; EP 3377770 B1 20200108; US 11221149 B2 20220111; US 2018347831 A1 20181206; WO 2017085015 A1 20170526

DOCDB simple family (application)
DE 102015119883 A 20151117; CN 201680067021 A 20161114; EP 16798445 A 20161114; EP 2016077579 W 20161114; US 201615776560 A 20161114