

Title (en)
WATERING PUMP

Title (de)
BEWÄSSERUNGSPUMPE

Title (fr)
POMPE D'ARROSAGE

Publication
EP 4191065 A1 20230607 (EN)

Application
EP 21212039 A 20211202

Priority
EP 21212039 A 20211202

Abstract (en)
A pump (100) includes a body (102) defining an inlet (104) and an outlet (106). A first valve (300) selectively opens a backflow opening (110). The first valve (300) includes a first valve housing (306), such that a first valve body (308) is biasingly coupled by a first spring (310) within the first valve housing (306). The first valve body (308) moves the first spring (310) to a first compressed state, and to a first uncompressed state. A second valve (312) provided within the first valve (300) includes a second valve body (314). The second valve body (314) is biasingly coupled by a second spring (316) within the first valve body (308). The second valve body (314) moves the second spring (316) to a second compressed state to allow flow of the liquid, and to a second uncompressed state to disallow flow of the liquid through the second valve (312).

IPC 8 full level
F04D 1/00 (2006.01); **F04D 9/00** (2006.01); **F04D 15/00** (2006.01); **F16K 1/00** (2006.01)

CPC (source: CN EP)
F04D 1/00 (2013.01 - CN EP); **F04D 9/005** (2013.01 - EP); **F04D 15/0005** (2013.01 - CN); **F04D 15/0011** (2013.01 - EP)

Citation (applicant)
CN 206144850 U 20170503 - LEO GROUP ZHEJIANG PUMP CO LTD

Citation (search report)
• [A] EP 1729009 A1 20061206 - PEDROLLO SPA [IT]
• [A] JP S5151003 A 19760506 - HITACHI LTD

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4191065 A1 20230607; **EP 4191065 B1 20240117**; CN 116221126 A 20230606; HU E065119 T2 20240528

DOCDB simple family (application)
EP 21212039 A 20211202; CN 202211425872 A 20221115; HU E21212039 A 20211202