

Title (en)
WATER SUPPLY DEVICE AND REFRIGERATOR COMPRISING SAME

Title (de)
WASSERVERSORGUNGSVORRICHTUNG UND KÜHLSCHRANK DAMIT

Title (fr)
APPAREIL D'ALIMENTATION EN EAU ET RÉFRIGÉRATEUR LE COMPRENANT

Publication
EP 4123248 A4 20230809 (EN)

Application
EP 20925513 A 20200916

Priority
• CN 202010182450 A 20200316
• CN 2020115642 W 20200916

Abstract (en)
[origin: EP4123248A1] The present invention discloses an automatic water supply device and a refrigerator having the same. The automatic water supply device comprises a water vessel(100), a bracket(200) for placing the water vessel(100), a detection device(300), and a water supply mechanism(400) for supplying water to the water vessel(100), the water vessel(100) comprising a water filling port(110); the detection device(300) comprises a sensing unit(320) and a switch movably connected to the bracket, and the sensing unit(320) comprises a sensor(321) fitted with the switch and an inductive element(322) capable of rising or falling along with a liquid level; the water supply mechanism(400) comprises a water supply pipe(410) and a water valve provided on the water supply pipe(410), and an outlet of the water supply pipe corresponds to the water filling port(110) of the water vessel(100); the automatic water supply device further comprises a controller, the sensor(321) switches between an ON state and an OFF state based on the movement of the switch, and the water vessel(100) is placed on the bracket(200) to touch the switch, thereby driving the sensor(321) to be in the ON state; the sensor(321) detects a position of the inductive element(322) in the ON state to judge the liquid level in the water vessel(100); the controller controls the water valve to open or close according to the detection signal received from the sensor(321).

IPC 8 full level
F25D 23/10 (2006.01); **A47J 31/00** (2006.01)

CPC (source: CN EP)
F25D 23/126 (2013.01 - CN EP); **F25D 29/003** (2013.01 - CN); **F25D 29/005** (2013.01 - CN); **F25D 2700/00** (2013.01 - EP); **F25D 2700/06** (2013.01 - CN)

Citation (search report)
• [YA] US 2018187964 A1 20180705 - PARK SANG MIN [KR], et al
• [YA] WO 2019148874 A1 20190808 - FOSHAN SHUNDE MIDEA WATER DISPENSER MFG CO LTD [CN], et al
• [A] CN 105806025 A 20160727 - QINGDAO HAIER CO LTD
• [A] WO 2018121569 A1 20180705 - QINGDAO HAIER JOINT STOCK CO LTD [CN]
• [A] EP 1645825 A1 20060412 - WHIRLPOOL CO [US]
• [A] US 2015197417 A1 20150716 - STAGG MICHAEL E [US], et al
• [A] US 2017137277 A1 20170518 - COMSA CORNEL [US], et al
• See references of WO 2021184710A1

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)
EP 4123248 A1 20230125; EP 4123248 A4 20230809; AU 2020436117 A1 20221013; AU 2020436117 B2 20231109; CN 113405310 A 20210917; CN 113405310 B 20230317; WO 2021184710 A1 20210923

DOCDB simple family (application)
EP 20925513 A 20200916; AU 2020436117 A 20200916; CN 202010182450 A 20200316; CN 2020115642 W 20200916