

Title (en)
SYSTEM AND METHOD FOR PROVIDING DOMESTIC HOT WATER

Title (de)
SYSTEM UND VERFAHREN ZUM BEREITSTELLEN VON BRAUCHWARMWASSER

Title (fr)
SYSTÈME ET PROCÉDÉ DE PRODUCTION D'EAU CHAUDE DOMESTIQUE

Publication
EP 4253847 A1 20231004 (EN)

Application
EP 22164659 A 20220328

Priority
EP 22164659 A 20220328

Abstract (en)
A system for providing domestic hot water and a method using the system is provided. The system comprises a heat pump, a mains water supply, a heat exchanger establishing a thermal connection between a fluid line exiting the mains water supply and a fluid line exiting the heat pump, a thermal energy storage device connected to the heat pump, and a controller having different operation modes and being configured to select between them and control the heat pump based on a selected operation mode. In a first operation mode, thermal energy is provided from the heat pump to the thermal energy storage device, but not to the heat exchanger, whereas in a second operation mode, thermal energy is provided from the heat pump to the heat exchanger. The configuration of the controller to switch to the second operation mode allows the system and method to provide domestic hot water continuously, i.e. without downtimes.

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

CPC (source: EP)
F24D 17/02 (2013.01); **F24D 19/1054** (2013.01); **F24D 2200/08** (2013.01); **F24D 2200/12** (2013.01); **F24D 2200/20** (2013.01); **F24D 2220/08** (2013.01); **F24D 2220/10** (2013.01)

Citation (applicant)
• US 9581340 B2 20170228 - RUTHERFORD ROBERT G [CA]
• US 2006196955 A1 20060907 - MOXON BILL [US], et al
• GB 2464162 A 20100414 - SAMPSON BRIAN A [GB]
• WO 2020227216 A1 20201112 - COX MARSHALL [US], et al

Citation (search report)
• [X] EP 3032181 A1 20160615 - VAILLANT GMBH [DE]
• [X] CN 111750528 A 20201009 - UNIV NORTHWESTERN POLYTECHNICAL
• [X] EP 2515050 A1 20121024 - HITACHI APPLIANCES INC [JP]

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 4253847 A1 20231004; CN 116817348 A 20230929; JP 2023145383 A 20231011

DOCDB simple family (application)
EP 22164659 A 20220328; CN 202310287424 A 20230322; JP 2023043040 A 20230317