

Title (en)

CONTROLLABLE VARIABLE INERTIA FLUID HEATING AND STORAGE SYSTEM

Title (de)

STUEBERBARES FLÜSSIGKEITSERHITZUNGS- UND LAGERUNGSSYSTEM MIT VARIABLER TRÄGHEIT

Title (fr)

SYSTÈME DE CHAUFFAGE ET DE STOCKAGE DE FLUIDE À INERTIE VARIABLE POUVANT ÊTRE COMMANDÉ

Publication

EP 2820357 A2 20150107 (EN)

Application

EP 13716838 A 20130213

Priority

- PT 10615612 A 20120213
- PT 10638012 A 20120614
- IB 2013051174 W 20130213

Abstract (en)

[origin: WO2013121361A2] Controllable variable inertia water storage system for heating and/or cooling, comprising: a plurality of water storage volumes for storing and heating water, these being either a vessel comprising sub-volumes or independent multiple vessels, said volumes being interconnected in series; a water inlet and outlet connect to the interconnected volumes; an independent water heater and/or cooler for each volume. Method for operating said system comprising: defining target sub-temperatures for each volume, wherein said target sub-temperatures are sequentially higher for each volume, in the direction of the water flow from inlet to outlet; increasing the target sub-temperatures in periods of forecasted higher demand, and, inversely, decreasing the target sub-temperatures in periods of forecasted lower demand; heating the volumes up to the target sub-temperatures, when the user indicates so or when a source of heat is available.

IPC 8 full level

F24H 1/20 (2006.01); **F24D 17/00** (2006.01); **F24D 19/10** (2006.01); **F24H 9/20** (2006.01); **F28D 20/00** (2006.01)

CPC (source: EP US)

F24D 17/0031 (2013.01 - EP); **F24D 17/0036** (2013.01 - EP); **F24D 19/1006** (2013.01 - EP US); **F24H 1/20** (2013.01 - EP); **F24H 9/2007** (2013.01 - EP US); **F28D 20/0039** (2013.01 - EP); **Y02B 10/20** (2013.01 - EP); **Y02B 10/70** (2013.01 - EP); **Y02E 60/14** (2013.01 - EP)

Citation (search report)

See references of WO 2013121361A2

Citation (examination)

WO 2010136609 A2 20101202 - COLIPU AS [DK], et al

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)

WO 2013121361 A2 20130822; WO 2013121361 A3 20131031; WO 2013121361 A4 20131219; EP 2820357 A2 20150107

DOCDB simple family (application)

IB 2013051174 W 20130213; EP 13716838 A 20130213