

Title (en)

METHOD FOR MINIMIZING ENERGY CONSUMPTION OF A STORAGE WATER HEATER THROUGH ADAPTATIVE LEARNING LOGIC

Title (de)

VERFAHREN ZUR MINIMIERUNG VOM ENERGIEVERBRAUCH IN EINEM HEISSWASSERSPEICHER DURCH ADAPTIVEN LERNEN LOGIK

Title (fr)

METHODE POUR MINIMISER LA CONSOMMATION D'ENERGIE D'UN CHAUFFE-EAU A ACCUMULATION A TRAVERS DE LA LOGIQUE A APPRENTISSAGE ADAPTATIF

Publication

EP 2362931 A1 20110907 (EN)

Application

EP 09764038 A 20091117

Priority

- IB 2009007494 W 20091117
- IT AN20080052 A 20081128

Abstract (en)

[origin: WO2010061264A1] Method for managing a storage water heater (1) comprising a first learning step during a first drawing cycle and a second step of management of said water heater (1) in subsequent cycles that repeat substantially unchanged relative to the first cycle. During said first step, information is acquired on the water heating speed (lwh) and for each drawing (Pk), on the corresponding drawing start times (tik.) and temperature drops (?Tk) caused. During said second step, using the data learnt in the first step, for each drawing (Pk) the water heating is started with an advance time (?tadvance) relative to the drawing start time (tik) sufficient for bringing the temperature (Tm) to the drawing temperature value (Tset.k) required for ensuring said drawing (Pk). Said drawing temperature value (Tset.k) is given by formula Tset.k = ?Tk + Treq.max + 5 where term Treq.max has a predetermined value that depends on the type of water heater (1).

IPC 8 full level

F24H 9/20 (2006.01)

CPC (source: EP US)

F24H 9/2021 (2013.01 - EP US); **F24H 15/175** (2022.01 - EP US); **F24H 15/225** (2022.01 - EP US); **F24H 15/269** (2022.01 - EP US);
F24H 15/281 (2022.01 - EP US); **F24H 15/37** (2022.01 - EP US); **F24H 15/395** (2022.01 - EP US); **F24H 15/421** (2022.01 - EP US);
F24H 15/486 (2022.01 - EP US)

Citation (search report)

See references of WO 2010061264A1

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

WO 2010061264 A1 20100603; EP 2362931 A1 20110907; EP 2362931 B1 20160217; ES 2572359 T3 20160531; IT 1392118 B1 20120222;
IT AN20080052 A1 20100529; PL 2362931 T3 20160831

DOCDB simple family (application)

IB 2009007494 W 20091117; EP 09764038 A 20091117; ES 09764038 T 20091117; IT AN20080052 A 20081128; PL 09764038 T 20091117