Title (en)

## HEATING SYSTEM AND METHOD

Title (de)

HEIZSYSTEM UND -VERFAHREN

Title (fr)

SYSTÈME ET PROCÉDÉ DE CHAUFFAGE

Publication

# EP 3561394 A2 20191030 (EN)

Application EP 19

# EP 19166922 A 20190402

Priority

NL 2020714 A 20180404

Abstract (en)

Heaters for homes come in various shapes and size, such as gas heaters burning gas to convert gas to heat. These heaters have most of the time to support multiple flows of water, commonly at different temperatures. It is an object of the invention to provide a heating system with lower complexity and improved efficiency. The current invention provides for a heating system comprising: a flow-through electrical heater for heating a primary heat conductive fluid; a fluid buffer for buffering the primary heat conductive fluid, wherein the fluid buffer comprises: a buffer input in fluid communication with the flow-through electrical heater for receiving the heated primary heat conductive fluid; a first heat exchanger having a first primary side for flow through of the primary heat conductive fluid and a first secondary side for flow through of a first secondary heat conductive liquid and being arranged for exchanging heat between the primary heat conductive fluid and the first secondary heat conductive liquid, wherein the first primary side is arranged downstream of the buffer input; a second heat exchanger having a second primary side for flow through of the primary heat conductive fluid and a second secondary side for flow through of a second secondary heat conductive liquid and being arranged for exchanging heat between the primary heat conductive fluid and the second secondary heat conductive liquid, wherein the second primary side is arranged downstream of the buffer input and wherein the second secondary heat conductive liquid is separated from the first secondary heat conductive liquid; and control means arranged for controlling the temperature of the first secondary heat conductive liquid exiting the first heat exchanger and/ or the second secondary heat conductive liquid exiting the second heat exchanger, wherein the control means comprise a flow sensor for detecting flow of the second secondary heat conductive liquid through the second secondary side of the second heat exchanger; and flow control means arranged for controlling flow of the first secondary heat conductive liquid through the first heat exchanger based on measurements of the flow sensor.

IPC 8 full level

F24D 3/08 (2006.01); F24D 19/00 (2006.01); F24D 19/10 (2006.01)

CPC (source: EP US)

F24D 3/08 (2013.01 - EP); F24D 19/0092 (2013.01 - EP); F24D 19/1066 (2013.01 - EP US); F24D 2200/08 (2013.01 - EP); F24D 2220/0235 (2013.01 - EP)

Cited by

#### WO2021261730A1

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)

## EP 3561394 A2 20191030; EP 3561394 A3 20200122; NL 2020714 B1 20191010

DOCDB simple family (application)

EP 19166922 A 20190402; NL 2020714 A 20180404