

Title (en)

ELECTRIC HEATER AND METHOD FOR DETECTING OVERHEATING IN SUCH AN ELECTRIC HEATER

Title (de)

ELEKTRISCHER HEIZER UND VERFAHREN ZUM ERKENNEN EINER ÜBERHITZUNG EINES SOLCHEN ELEKTRISCHEN HEIZERS

Title (fr)

DISPOSITIF DE CHAUFFAGE ÉLECTRIQUE ET PROCÉDÉ DE DÉTECTION DE SURCHAUFFE D'UN TEL DISPOSITIF DE CHAUFFAGE ÉLECTRIQUE

Publication

EP 3508029 B1 20230906 (DE)

Application

EP 17758537 A 20170828

Priority

- DE 102016216295 A 20160830
- EP 2017071567 W 20170828

Abstract (en)

[origin: WO2018041787A1] The invention relates to an electric heater (1) for heating fluid streams with a heating element (2) and a control device (3) for controlling a heat output produced by the heating element (2), wherein the heating element (2) has an inductance (L_RHK) that changes on the basis of the temperature, and wherein an overheating detection device (4) is provided that is configured to sense a change in the current (I_{heat}) flowing through the heating element (2) caused by a change in the inductance (L_RHK) and to compare said sensed change with a previously defined limit value and to determine overheating in the electric heater (1) in the event of the limit value being exceeded. The invention further relates to a method for detecting overheating in such an electric heater (1).

IPC 8 full level

H05B 1/02 (2006.01); **B60H 1/22** (2006.01)

CPC (source: EP)

H05B 1/0236 (2013.01)

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)

DE 102016216295 A1 20180301; CN 109644525 A 20190416; CN 109644525 B 20220809; EP 3508029 A1 20190710; EP 3508029 B1 20230906; WO 2018041787 A1 20180308

DOCDB simple family (application)

DE 102016216295 A 20160830; CN 201780053109 A 20170828; EP 17758537 A 20170828; EP 2017071567 W 20170828