

Title (en)

HEATER BUNDLES HAVING VIRTUAL SENSING FOR THERMAL GRADIENT COMPENSATION

Title (de)

HEIZBÜNDEL MIT VIRTUELLER ABTASTUNG ZUR KOMPENSATION VON THERMISCHEN GRADIENTEN

Title (fr)

FAISCEAU D'ÉLÉMENTS CHAUFFANTS DOTÉ DE DÉTECTION VIRTUELLE POUR LA COMPENSATION DE GRADIENT THERMIQUE

Publication

**EP 4057776 A2 20220914 (EN)**

Application

**EP 22161472 A 20220310**

Priority

US 202117197556 A 20210310

Abstract (en)

A system includes a heater bundle having at least one heater assembly (18) with a plurality of heater units. At least one of the heater units (52) defines at least one independently controlled heating zone, and a plurality of power conductors are electrically connected to the heater units. A power supply device (14) includes a controller (15) configured to modulate power to the at least one independently controlled heating zone through the power conductors, and the controller (15) is configured to calculate temperature within the at least one heater unit based on a predefined model and at least one input, and the controller (15) modulates power to the at least one heater unit based on the calculated temperature.

IPC 8 full level

**H05B 1/02** (2006.01); **H05B 3/48** (2006.01)

CPC (source: CN EP KR)

**F24H 1/103** (2013.01 - KR); **F24H 9/1818** (2013.01 - CN); **F24H 9/2028** (2013.01 - KR); **H05B 1/0244** (2013.01 - EP KR); **H05B 1/0283** (2013.01 - CN KR); **H05B 3/02** (2013.01 - KR); **H05B 3/04** (2013.01 - CN KR); **H05B 3/18** (2013.01 - KR); **H05B 3/48** (2013.01 - EP KR); **H05B 3/82** (2013.01 - CN KR); **F24H 1/103** (2013.01 - EP); **F24H 9/2028** (2013.01 - EP); **H05B 2203/037** (2013.01 - EP)

Citation (applicant)

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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 4057776 A2 20220914**; **EP 4057776 A3 20221221**; CA 3151374 A1 20220910; CN 115087158 A 20220920; JP 2022140403 A 20220926; KR 20220127174 A 20220919; MX 2022002934 A 20220912

DOCDB simple family (application)

**EP 22161472 A 20220310**; CA 3151374 A 20220309; CN 202210233722 A 20220310; JP 2022037256 A 20220310; KR 20220029708 A 20220308; MX 2022002934 A 20220309