

Title (en)
HEATER BUNDLES WITH LOCAL POWER SWITCHING

Title (de)
HEIZBÜNDEL MIT LOKALER LEISTUNGSSCHALTUNG

Title (fr)
CHAUFFAGE SANS GAINÉ AVEC COMMUTATION DE PUISSANCE LOCALE

Publication
EP 4057775 A3 20221214 (EN)

Application
EP 22161471 A 20220310

Priority
US 202117197542 A 20210310

Abstract (en)
A heater system (10) includes a heater bundle. The heater bundle includes at least one heater assembly, where the heater assembly includes a plurality of heater units (52), and more than one of the heater units (52) defines at least one independently controlled heating zone. The heater bundle includes a plurality of power conductors (56) electrically connected to the independently controlled heating zone. The heater system (10) includes means for determining temperature and at least one power switch (120), the power switch (120) disposed proximate the heater bundle. The heater system (10) includes at least one controller (15) configured to modulate power to the independently controlled heating zones (62) through the power conductors (56) based on the determined temperature to provide a desired power output along a length of the heater assembly. The controller is configured to provide power to the power switch (120).

IPC 8 full level
H05B 3/48 (2006.01); **F24H 1/10** (2022.01); **F24H 9/20** (2022.01); **H05B 1/02** (2006.01)

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Citation (search report)
• [XYI] US 2017254564 A1 20170907 - EVERLY MARK [US], et al
• [XYI] US 2017254565 A1 20170907 - EVERLY MARK D [US], et al
• [XYI] WO 2018009768 A1 20180111 - WATLOW ELECTRIC MFG [US]
• [Y] KR 20200057687 A 20200526 - KIM NO EUL [KR]
• [Y] DE 2400478 A1 19750717 - ECKERFELD GEB REIP ELISABETH
• [Y] US 2021018221 A1 20210121 - NOLTE HUBERT [DE], et al
• [A] US 10448458 B2 20191015 - OHSE JEREMY [US], et al

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Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
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EP 22161471 A 20220310; CA 3151372 A 20220309; CN 202210233701 A 20220310; JP 2022037253 A 20220310; KR 20220029695 A 20220308; MX 2022002935 A 20220309