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(54) **HEATER BUNDLES HAVING VARIABLE POWER OUTPUT WITHIN ZONES**

(57) A heater system (10) includes a heater bundle (12) with heater assemblies (18), at least one of the heater assemblies (18) having a plurality of heater units, at least one heater unit having an independently controlled heating zone, and the at least one heater assembly (18) having a physical construction configured to deliver a variable power output per unit length along a length of the at least one heater assembly (18). A plurality of power conductors are electrically connected to the plurality of heater units and the heater system (10) further includes a means for determining temperature. A power supply device (14) includes a controller (15) configured to modulate power to the independently controlled heating zone through the power conductors based on the determined temperature to provide a desired power output along a length of the at least one heater assembly (18).

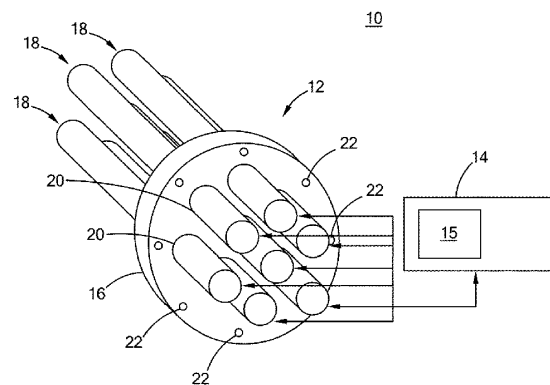


FIG. 1

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PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention.
This report shall be considered, for the purposes of
subsequent proceedings, as the European search report

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INCOMPLETE SEARCH

The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.

Claims searched completely :

Claims searched incompletely :

Claims not searched :

Reason for the limitation of the search:

see sheet C

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EPO FORM 1503 03.82 (P04E07)

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| Place of search | Date of completion of the search | Examiner |
| Munich | 27 October 2022 | Gea Haupt, Martin |
| CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document | | |



PARTIAL EUROPEAN SEARCH REPORT

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INCOMPLETE SEARCH
SHEET C

Application Number

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Claim(s) completely searchable:
1-15

Claim(s) not searched:
16-22

Reason for the limitation of the search:

The search has been restricted to the subject-matter indicated by the applicant in his letter of 06.09.2022 filed in reply to the invitation pursuant to Rule 62a(1) EPC, i.e. claims 1 to 15 have been searched.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82