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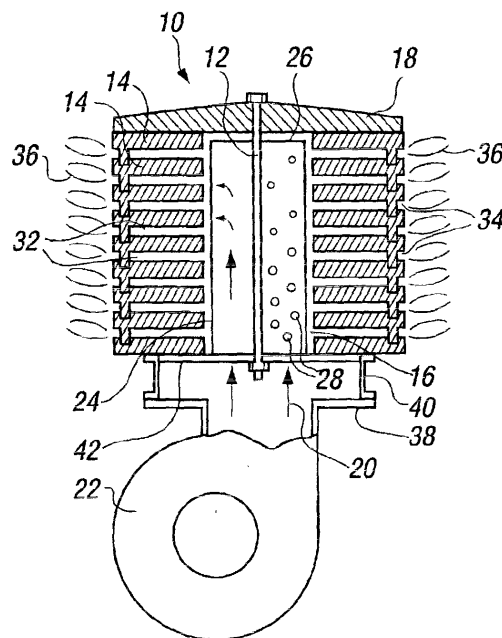
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(54) **Improvements relating to fuel/air pre-mixed burners**

(57) A gas burner (10) is provided comprising a plurality of annular plate elements (14) stacked to form at least a part of the burner body and to define therein a hollow interior (16). A combustible gas/air mixture (20) is supplied to the interior of the burner through one end of the stack and optionally said supply is fan (22) assisted. The plate elements are stacked together in adjacent fashion but are separated from one another by protrusions provided on one side of the plates which are received by recesses provided in adjacent plates which are of a depth less than that of the protrusions. Thus not only are the plates separated from one another to define a plurality of passages (32) which lead in a direction transverse to the stack height from the interior to flame ports (34) on the outside of the body and through which the combustible gas/air mixture can flow, but the protrusions and recesses provide an extremely convenient means of assembling the burner.



**FIG 1**



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EUROPEAN SEARCH REPORT

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| DOCUMENTS CONSIDERED TO BE RELEVANT   |  |   |  |
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| Category  | Citation of document with indication, where appropriate, of relevant passages  | Relevant to claim   | CLASSIFICATION OF THE APPLICATION (Int.Cl.6) |
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| Y   | * page 6, line 24 - page 8, line 33 *<br>* page 10, line 2 - line 17 *<br>* figures 1-7 *  | 1,2,5,6   |  |
| Y   | ---<br>US 5 002 038 A (RIEHL FRED)<br>26 March 1991 (1991-03-26)<br>* column 4, line 31 - line 47; figures 2-4 *   | 1,2,5,6   |  |
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| The present search report has been drawn up for all claims  |  |   |  |
| Place of search<br><b>THE HAGUE</b>   |  | Date of completion of the search<br><b>15 December 1999</b>   | Examiner<br><b>Phoa, Y</b>                   |
| CATEGORY OF CITED DOCUMENTS   |  | T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>L : document cited for other reasons<br>-----<br>& : member of the same patent family, corresponding document |  |
| X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document |  |   |  |

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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EP 99 10 7675

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  
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