



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**23.02.2000 Bulletin 2000/08**

(51) Int Cl.7: **F23D 14/58**

(43) Date of publication A2:  
**13.10.1999 Bulletin 1999/41**

(21) Application number: **99302724.2**

(22) Date of filing: **07.04.1999**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU**  
**MC NL PT SE**  
 Designated Extension States:  
**AL LT LV MK RO SI**

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(30) Priority: **08.04.1998 JP 9586298**  
**01.03.1999 JP 5256699**

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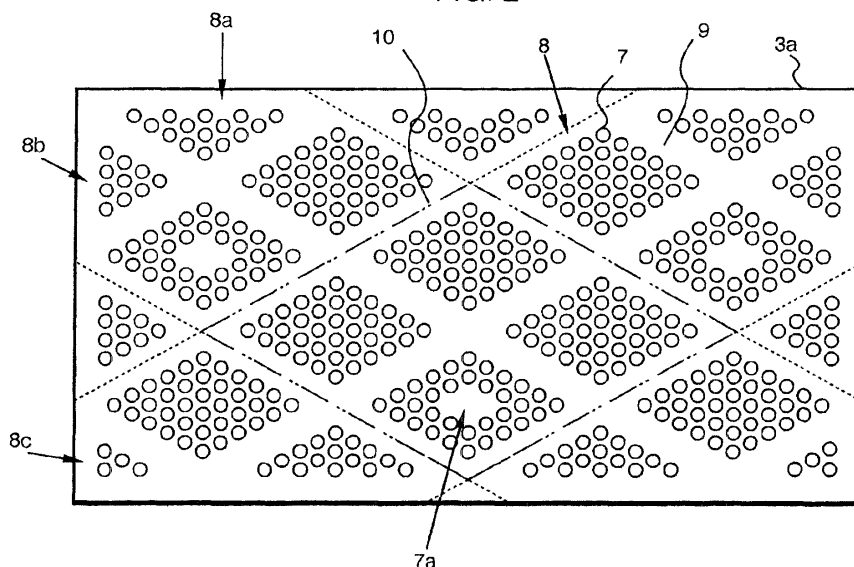
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(54) **Burner plate**

(57) A burner plate (3a) is incorporated in a gas burner for burning a mixture of a fuel gas and air added at a predetermined excess air ratio in total primary combustion to heat a heat exchanger. The burner plate comprises a heat-resistant plate having a plurality of burner ports (7) defined therein and extending from a surface of the plate to an opposite surface thereof. The burner ports are divided into a plurality of burner port groups

(8) which are spaced from each other by gaps (9). The burner port groups include burner port groups each having in a central area (7a) thereof as many burner ports closed as effective to limit an extension of flames produced from the burner port groups and suppress combustion resonant sounds generated by vibrations of the flames in coaction with a natural frequency of the gas burner.

FIG. 2





European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number  
EP 99 30 2724

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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 6 December 1999	Examiner Coquau, S
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			

EPO FORM 1503 03 82 (F04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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