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### (54) Pyrolytic self-cleaning ovens

(57) A pyrolytic self-cleaning oven has a cavity 2 heated by a grill element 4 during a self-cleaning pyrolytic operation, the fumes emitted passing through a porous plug bearing an oxidation catalyst 11 to remove smoke before the gases are vented at outlet 9. The cycling of the element 4 is controlled by an electronic controller 13 which receives a signal from a temperature sensor 15 on the catalytic plug. Thus, when the oven temperature initially rises and volatile substances are vaporised, resulting in an exothermic reaction at the cat-

alyst, the element 4 is switched off. Only when a substantial amount of the volatile soil has been evaporated will the temperature at the oxidation catalyst fall causing the control means 13 to switch the element 4 back on. In this way, the self-cleaning operation is controlled by the temperature of the oxidation catalyst, and the cleaning operation is terminated with reference to either a fixed temperature in the oven having been reached or a fixed temperature differential between the catalyst temperature and the oven temperature having been achieved.

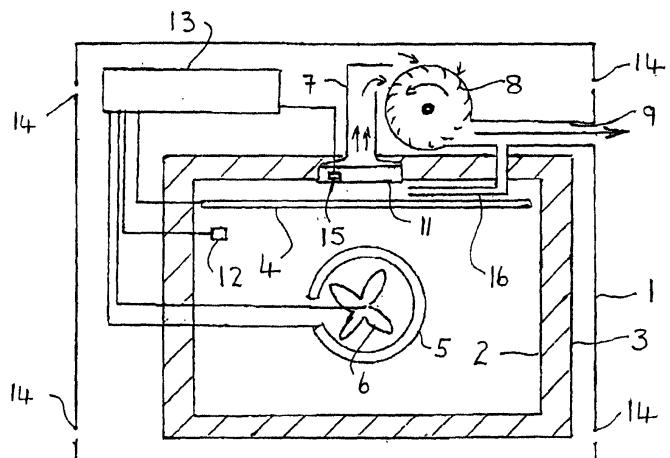


FIGURE 1

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## EUROPEAN SEARCH REPORT

Application Number

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DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.6)						
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim							
X	US 4 292 501 A (MAITENAZ PAUL) 29 September 1981 (1981-09-29) * the whole document *	1-5, 7, 8	F24C14/02						
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			F24C F23G						
<p>The present search report has been drawn up for all claims</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Place of search</td> <td style="width: 33%;">Date of completion of the search</td> <td style="width: 34%;">Examiner</td> </tr> <tr> <td>MUNICH</td> <td>31 July 2000</td> <td>Filtr, G</td> </tr> </table> <p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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  &amp; : member of the same patent family, corresponding document</p>				Place of search	Date of completion of the search	Examiner	MUNICH	31 July 2000	Filtr, G
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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

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31-07-2000

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