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(54) **Apparatus and method for burning combustible gases**

(57) An apparatus for burning the combustible components of a gas stream. The apparatus comprises a stack pipe (4, 10) having one end in communication with a gas supply pipe (2) for receiving a gas stream; means (5) for introducing air into the stack pipe to produce an air and gas mixture; a mixing zone (6); means (14) for igniting the air and gas mixture; means (8) for stabilizing; and means (12) located at the other end of the stack pipe for inhibiting downwash. Also disclosed is a method for burning the combustible components of a gas stream utilizing the apparatus.

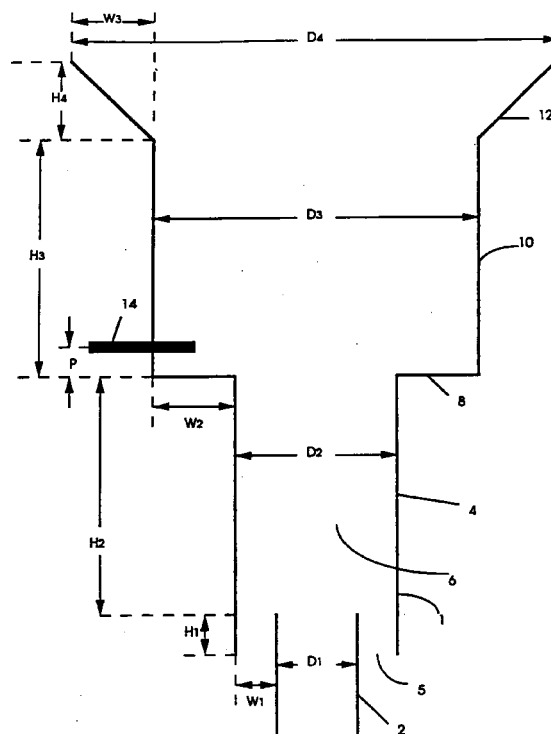


FIGURE 1

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EUROPEAN SEARCH REPORT

Application Number
EP 99 10 0417

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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)
A	US 3 893 810 A (LIENTZ LA CLEDE) 8 July 1975 * column 1, line 63 - column 2, line 57 * * column 3, line 21 - line 30 * * column 4, line 12 - line 62 * * column 5, line 17 - line 24 * * figures 1-6 *	1,3	F23G7/08 F23D14/74
A	GB 1 249 967 A (SWITHENBANK) 13 October 1971 * page 1, line 37 - line 44 * * page 1, line 76 - line 91 * * figure 1 *	1,3	
A	EP 0 388 886 A (HITACHI LTD) 26 September 1990 * column 7, line 46 - column 8, line 35 * * column 10, line 44 - column 12, line 9 * * figures 3,7,8 *	1-5	
A	GB 1 193 820 A (IVOR HAWKES) 3 June 1970		TECHNICAL FIELDS SEARCHED (Int.Cl.6)
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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 18 June 1999	Examiner Phoa, Y
<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 & : member of the same patent family, corresponding document</p>			

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

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