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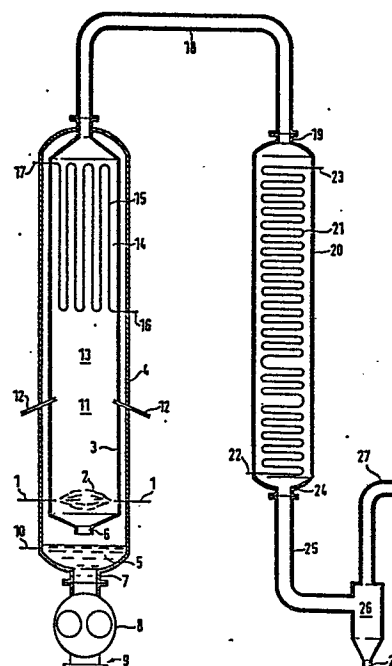
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54 **Process and apparatus for the production of synthesis gas.**

57 Process for the production of synthesis gas comprising the steps:

a) a finely divided carbonaceous fuel is partially combusted in a gasifier (2), b) liquid slag is removed from the bottom of the gasifier, c) hot crude synthesis gas containing entrained slag droplets is removed from the top of the gasifier and passes upwards through a radiation chamber (13) where it is cooled, d) the gas is passed upwards through a superheater (14) to cool it further, e) the flow of the gas is reversed in a pipe (18) connecting the superheater with an evaporator (20), f) the gas is passed downwards through the evaporator, to cool it still further, g) slag particles are separated from the cooled crude synthesis gas.

Apparatus for carrying out the process described hereinbefore.





EP 83 20 1705

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
Y	GB-A-0 783 054 (H. KOPPERS) * Page 1, line 73-page 2, line 97 *	1	C 10 J 3/46 C 10 J 3/48 C 10 J 3/86
Y	GB-A-0 837 307 (H. KOPPERS) * page 3, lines 8-104 *	1	
A		5,10	
A	FR-A-1 070 615 (BABCOCK & WILCOX) * Page 5, right-hand column, lines 5-25 *	3,5,9	
A	GB-A-0 793 466 (H. KOPPERS) * Page 4, claims 1-8 *	1,2,4,6,10	
A	DE-A-2 342 079 (H. KOPPERS) * Pages 7-8 *	1,3,10	C 10 J
A	US-A-4 188 915 (J. KUMMEL et al.)		
A	DE-B-1 421 655 (BASF) * Column 4, lines 24-49 *	1,10	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 18-01-1985	Examiner WENDLING J.P.
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	