

12 **EUROPEAN PATENT APPLICATION**

21 Application number: 85300232.7

51 Int. Cl.<sup>4</sup>: **C 10 J 3/52**

22 Date of filing: 14.01.85

30 Priority: 13.01.84 US 570486

43 Date of publication of application:  
31.07.85 Bulletin 85/31

88 Date of deferred publication of search report: 11.06.86

84 Designated Contracting States:  
BE DE FR GB IT

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54 **Adjustable booster for fluidized bed gasifiers.**

57 A process for optimizing the ash separation and cooling operation of a fluidized bed gasifier which produces a mixture of ash and char from a carbonaceous material, comprising the steps of feeding the carbonaceous material to a gasifier at a first rate, discharging the mixture from the gasifier at a second rate approximately equal to a rate of introduction of ash contained in the carbonaceous material fed into the gasifier, maintaining the discharge temperature of the mixture below a temperature T, injecting a first gas at a first elevation within the gasifier, injecting a second gas at a second elevation which is above the first elevation to refluidize a portion of the mixture, measuring the ash content of the discharged mixture, and measuring sintering of ash of the discharged mixture, characterized by the further steps of

(1) raising the second gas injection elevation to increase the ash content or lowering the second gas injection elevation to reduce sintering of the discharged ash, and

(2) repeating the above process until both ash content and sintering of ash of the discharged mixture is acceptable.

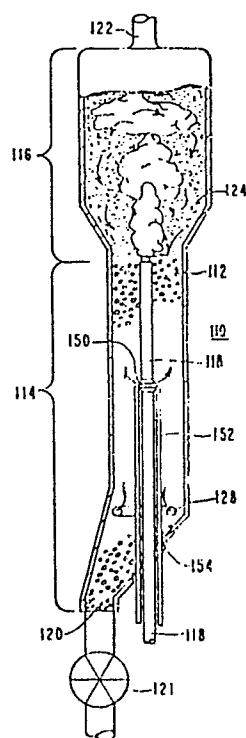


FIG. 2



European Patent  
Office

# EUROPEAN SEARCH REPORT

**01 50091**  
Application number

EP 85 30 0232

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. 4)																		
A	US-A-4 400 181 (HYDROCARBON RESEARCH) * Column 5, line 41 - column 6, line 54 *	1	C 10 J 3/52																		
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D, A	US-A-4 309 194 (SALVADOR)																				
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D, A	EP-A-0 022 897 (WESTINGHOUSE) * Pages 8,9; claims 1-7 *	1																			
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			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)																		
			C 10 J																		
The present search report has been drawn up for all claims																					
Place of search THE HAGUE		Date of completion of the search 11-03-1986	Examiner WENDLING J.P.																		
<table border="0"> <tr> <td colspan="2">CATEGORY OF CITED DOCUMENTS</td> <td>T . theory or principle underlying the invention</td> </tr> <tr> <td>X</td> <td>particularly relevant if taken alone</td> <td>E . earlier patent document, but published on, or after the filing date</td> </tr> <tr> <td>Y</td> <td>particularly relevant if combined with another document of the same category</td> <td>D . document cited in the application</td> </tr> <tr> <td>A</td> <td>technological background</td> <td>L . document cited for other reasons</td> </tr> <tr> <td>O</td> <td>non-written disclosure</td> <td></td> </tr> <tr> <td>P</td> <td>intermediate document</td> <td>&amp; . member of the same patent family, corresponding document</td> </tr> </table>				CATEGORY OF CITED DOCUMENTS		T . theory or principle underlying the invention	X	particularly relevant if taken alone	E . earlier patent document, but published on, or after the filing date	Y	particularly relevant if combined with another document of the same category	D . document cited in the application	A	technological background	L . document cited for other reasons	O	non-written disclosure		P	intermediate document	& . member of the same patent family, corresponding document
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