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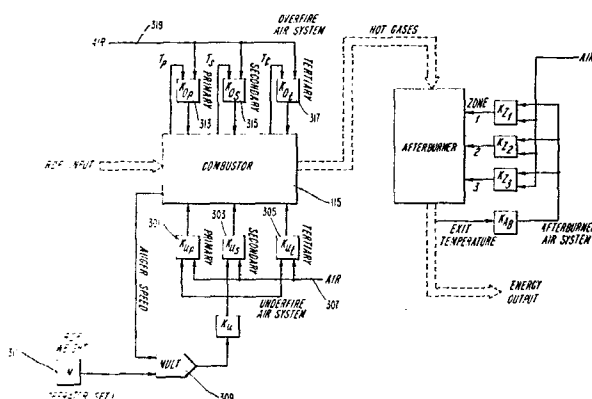
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(54)

Starved-air combustor.

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Combustion apparatus capable of consuming non-conventional fuels such as the byproducts of wood, pulp, and paper mills, and household and commercial refuse comprising a combustion chamber (115) which is divided into a plurality of combustion chamber zones (p, s, t) with separate overfire (125, 263, 267) and underfire (255, 256, 259) airflows individually provided for each zone (p, s, t). Fuel is fed to the combustor (115) in selectable constant weight batches and the supply of underfire air is proportional to the rate at which an auger (121) rotates to convey the fuel (253) through the combustor (115). Overfire air is supplied to each combustion zone (p, s, t) in an inverse relationship to the variance of a sensed temperature within the zone from a predetermined temperature. An afterburner (129) is provided as a secondary combustor chamber to combust all combustible material in the gaseous output.



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EUROPEAN SEARCH REPORT

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EP 81 10 3467

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	US-A-3 727 564 (ANDERSON) *Column 1, lines 5-25, 56-63; column 2, lines 21-41; figures*	1, 12	F 23 G 5/02 F 23 N 1/02 F 23 N 3/00
Y	DE-A-2 708 737 (TYER) *Claims 1, 2; page 5, lines 21-27; page 7, lines 3-18; page 8, lines 18-20; page 10, lines 11-28; page 15, lines 8-28; page 16, lines 1-5; page 17, lines 18-28; page 18, lines 1-5; figures 1, 4*	1, 3, 4, 5, 6, 9	
A	AUFBEREITUNGSTECHNIK, vol. 15, no. 12, 1974, pages 691-696, Wiesbaden (DE); R. RASCH: "Müllentgasung und-vergasung". *Page 694, picture 4, e scale; column 1, report about the test arrangement in Kalundborg*	4, 6, 8	
A	DE-B-1 751 494 (MARTIN) *Column 1, lines 37-68; column 2, lines 1-18, 29-40; figures 1, 3*	4, 6, 8	F 23 G F 23 L F 23 N C 10 B C 10 J
A	FR-A-2 445 930 (BAN) *Page 4, lines 9-12; figure 1* & US - A - 4 263 857	4, 6, 8	
A	US-A-3 691 019 (BRIMHALL) *Figures 1, 3; column 3, lines 24-36*	11	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 27-05-1982	Examiner SARRE K. J. K. TH.
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			