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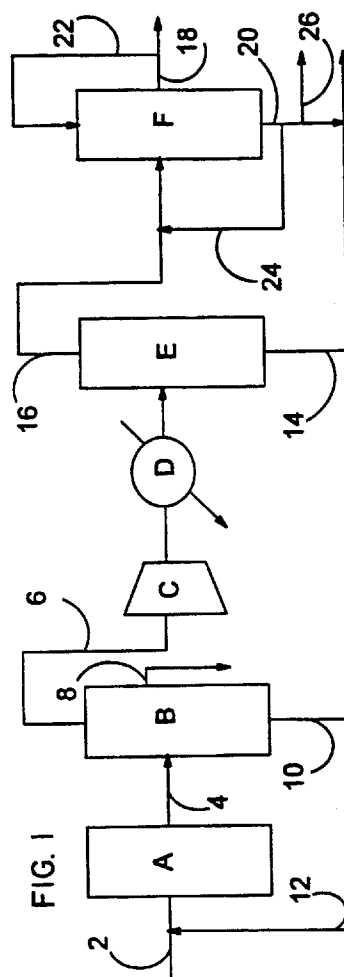
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(54) **Catalytic cracking process.**

(57) A hydrocarbon stream is cracked in Plant A to produce a hot gaseous stream which is separated in a fractionator B. A gaseous stream containing hydrogen and C₁-C₄ hydrocarbons is taken from the fractionator B, is raised in pressure in compressor C and is cooled in a heat exchanger D. The cooled gaseous stream is separated in a demethaniser E, and an off-gas comprising hydrogen and C₁ to C₃ hydrocarbons is withdrawn from the demethaniser E. The off-gas is subjected to separation by pressure swing adsorption or temperature swing adsorption at an adsorption temperature of about 0 to about 250°C in a bed of adsorbent which selectively adsorbs ethylene and propylene, thereby adsorbing substantially all of the ethylene and propylene from the gas stream. The ethylene and/or propylene is recovered upon bed regeneration.





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 94 30 8703

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.6)
A	US-A-5 245 099 (UOP) ---		C10G70/04
A	US-A-4 992 601 (ENERGIA ANDINA) ---		
A	GB-A-890 555 (SHELL) ---		
A	US-A-3 078 636 (UNION CARBIDE) ---		
A	EP-A-0 520 672 (BOC GROUP) ---		
P,A	EP-A-0 572 239 (BOC GROUP) -----		
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			C10G C07C
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		22 August 1995	Michiels, P
<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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