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(71) Applicant: **The BOC Group plc**
Windlesham Surrey GU20 6HJ (GB)

(72) Inventor: **Rathbone, Thomas**
Farnham, Surrey GU9 8DG (GB)

(74) Representative: **Wickham, Michael et al**
c/o Patent and Trademark Department
The BOC Group plc
Chertsey Road
Windlesham Surrey GU20 6HJ (GB)

(54) **Air separation method**

(57) Air is separated in a double rectification column 40. An oxygen product and a nitrogen product are obtained from its lower pressure column 46. None or less than 5% of the air to be separated is liquefied upstream of the rectification. The higher pressure column 44 is operated at a pressure at its bottom in the range of 8 to 15 bar. A stream of vaporous oxygen product is passed through a main heat exchanger 36 at a pressure not

greater than the pressure at the bottom of the lower pressure column 46. A stream of liquid product is passed through the main heat exchanger 36 at a pressure between 15 and 80 bar so as to counteract the tendency for Joule-Thomson expansion of fluid separated in the higher pressure column 44 to cause relatively inefficient heat exchange in the main heat exchanger 36 at temperatures less than 160K without creating any severe pinch point in the main heat exchanger 36.

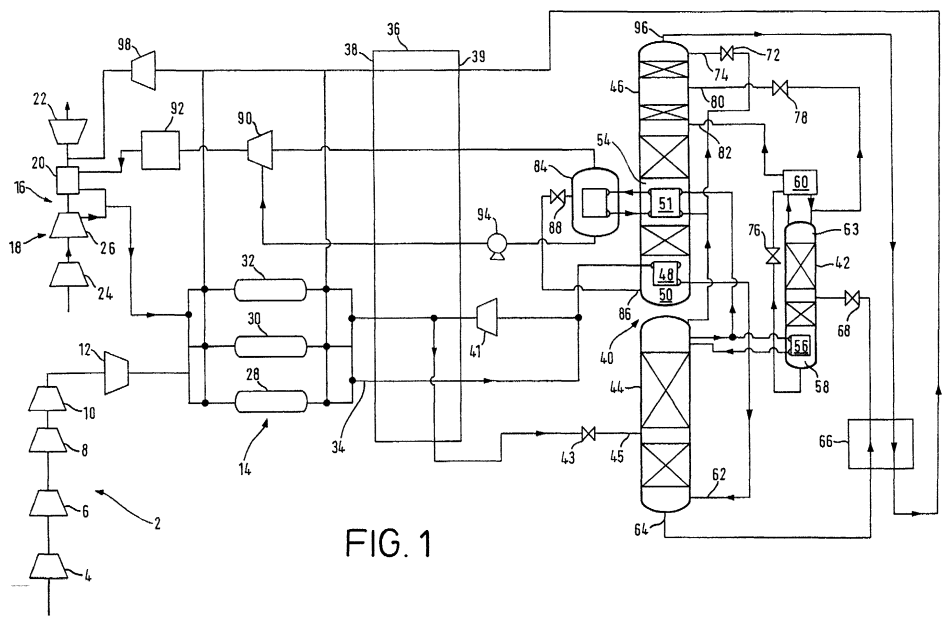


FIG. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 01 30 0189

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The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 3 July 2002	Examiner Göritz, D
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