Title (en)
Air separation method

Title (de)
Verfahren zur Luftzerlegung

Title (fr)
Méthode de séparation de l'air

Publication
EP 1120616 A2 20010801 (EN)

Application
EP 01300189 A 20010110

Priority
GB 0002084 A 20000128

Abstract (en)
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. <IMAGE>

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F25J 3/04

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CPC (source: EP)
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