

Title (en)  
Process and apparatus for the separation of air by cryogenic distillation

Title (de)  
Verfahren und Vorrichtung zur Abscheidung von Luft durch kryogene Destillation

Title (fr)  
Processus et appareil pour la séparation de l'air par distillation cryogénique

Publication  
**EP 2662654 A1 20131113 (EN)**

Application  
**EP 12305506 A 20120507**

Priority  
EP 12305506 A 20120507

Abstract (en)  
In a process for the separation of air by cryogenic distillation, purified air is cooled in a heat exchanger (400) and sent to a first column (100) of a column system operating at between 9 and 17 bars abs, oxygen rich liquid (30) is removed from the bottom of the second column, pressurized, vaporized in the heat exchanger and removed as a pressurized gaseous oxygen product (51), nitrogen rich fluid (42, 60) is removed from at least one column of the column system, warmed in the heat exchanger and removed as a gaseous nitrogen product (50, 52), the ratio between the gaseous nitrogen product and the pressurized gaseous oxygen product being greater than 3.6, oxygen rich liquid (26) is removed from the bottom of the second column, expanded and vaporized in a top condenser (73) of the second column to produce a waste stream (25, 53), nitrogen rich gas from the top of the second column is condensed in the top condenser and sent back to the second column and nitrogen rich gas from the top of the first column is condensed in a bottom vaporizer (70) of the second column and sent back at least in part to the first column.

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Citation (applicant)  
FR 2930328 A1 20091023 - AIR LIQUIDE [FR]

Citation (search report)  
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