

Title (en)

Air separation process and apparatus by low temperature rectification

Title (de)

Verfahren und Vorrichtung zur Luftzerlegung durch Tieftemperaturrektifikation

Title (fr)

Procédé de séparation d'air par rectification à basse température

Publication

EP 0758733 A3 19970730 (DE)

Application

EP 96112620 A 19960805

Priority

DE 19529681 A 19950811

Abstract (en)

[origin: EP0758733A2] Low temp. rectification is used for air sepn. by a process in which air (1) is compressed (3) to at least the max. pressure within the rectifier column system (16) and is split into a first stream (4) as charge to the system and second stream (5) as oxidn. agent in a chemical reaction (6). First stream is cooled (14) to dew point temp. and is introduced (15) into one rectifier column (17). Liq. prod. stream (27) is withdrawn from the column and its pressure is increased (28). Process stream (30) of low temp. rectification is re-compressed to pressure above max. system pressure. Prod. stream is evapd. by indirect heat exchange (14) with at least part of re-compressed process stream. At least part of energy of expansion of off gas (8) of chemical reaction is used for the re-compression.

IPC 1-7

F25J 3/04

IPC 8 full level

F25J 3/04 (2006.01)

CPC (source: EP US)

F25J 3/04018 (2013.01 - EP US); **F25J 3/04024** (2013.01 - EP US); **F25J 3/0403** (2013.01 - EP US); **F25J 3/0409** (2013.01 - EP US); **F25J 3/04103** (2013.01 - EP US); **F25J 3/04127** (2013.01 - EP US); **F25J 3/04145** (2013.01 - EP US); **F25J 3/04296** (2013.01 - EP US); **F25J 3/04357** (2013.01 - EP US); **F25J 3/04412** (2013.01 - EP US); **F25J 3/046** (2013.01 - EP US); **Y10S 62/915** (2013.01 - EP US)

Citation (search report)

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- [A] EP 0383994 A2 19900829 - LINDE AG [DE]
- [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 019 (M - 919) 16 January 1990 (1990-01-16)

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DOCDB simple family (application)

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