

Title (en)
Process and installation for producing oxygen under pressure

Title (de)
Verfahren und Anlage zur Herstellung von Drucksauerstoff

Title (fr)
Procédé et installation de production d'oxygene sous pression

Publication
EP 0611218 B2 20020807 (FR)

Application
EP 94400300 A 19940211

Priority
FR 9301622 A 19930212

Abstract (en)
[origin: EP0611218A1] All the air is compressed to a first high pressure and is then separated into two fractions. The first fraction, constituting at least 70% of the throughput, is supercompressed to a second high pressure and cooled in a heat-exchange line (6) to an intermediate temperature, at which a part is turbined (at 4) at the medium pressure whereas the rest is liquefied. The second fraction is cooled and liquefied (20A) in a heat-exchange line, in one or more flows, at one or more pressures lying between the said first high pressure and the said second high pressure.
<IMAGE>

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 3/04084** (2013.01 - EP US); **F25J 3/0409** (2013.01 - EP US); **F25J 3/04145** (2013.01 - EP US); **F25J 3/04175** (2013.01 - EP); **F25J 3/042** (2013.01 - EP US); **F25J 3/04236** (2013.01 - EP US); **F25J 3/04278** (2013.01 - EP US); **F25J 3/04296** (2013.01 - EP US); **F25J 3/04303** (2013.01 - EP US); **F25J 3/04375** (2013.01 - EP); **F25J 3/04393** (2013.01 - EP US); **F25J 3/04412** (2013.01 - EP US); **F25J 2205/04** (2013.01 - EP US); **F25J 2270/90** (2013.01 - EP US); **F25J 2290/10** (2013.01 - EP US); **F25J 2290/62** (2013.01 - EP US); **Y10S 62/913** (2013.01 - EP US); **Y10S 62/94** (2013.01 - EP US)

Citation (opposition)
Opponent :

- EP 0588690 A1 19940323 - AIR LIQUIDE [FR]
- US 5157926 A 19921027 - GUILLEMINOT ODILE [FR]
- EP 0464630 A1 19920108 - UNION CARBIDE IND GASES TECH [US]
- US 4303428 A 19811201 - VANDENBUSSCHE GERARD
- De Percin, G.: "La production d'oxygène sous pression", Bulletin of the International Institute of Refrigeration (Supplement) 1955, pp. 27 to 37

Cited by
FR2828273A1; FR2928446A1; DE102012017488A1

Designated contracting state (EPC)
BE DE ES FR GB IT NL SE

DOCDB simple family (publication)
EP 0611218 A1 19940817; **EP 0611218 B1 19981104**; **EP 0611218 B2 20020807**; AU 5506094 A 19940818; AU 660385 B2 19950622; CA 2115399 A1 19940813; CA 2115399 C 20050426; CN 1100514 A 19950322; CN 1101924 C 20030219; DE 69414282 D1 19981210; DE 69414282 T2 19990617; DE 69414282 T3 20030320; ES 2124856 T3 19990216; ES 2124856 T5 20030301; FR 2701553 A1 19940819; FR 2701553 B1 19950428; JP H06241650 A 19940902; US 5426947 A 19950627; ZA 94968 B 19940824

DOCDB simple family (application)
EP 94400300 A 19940211; AU 5506094 A 19940211; CA 2115399 A 19940210; CN 94101375 A 19940208; DE 69414282 T 19940211; ES 94400300 T 19940211; FR 9301622 A 19930212; JP 1367794 A 19940207; US 18684494 A 19940127; ZA 94968 A 19940211