

Title (en)  
Elevated pressure liquefier

Title (de)  
Hochdruckverflüssiger

Title (fr)  
Liquéfacteur à pression élevée

Publication  
**EP 0580345 B1 19960214 (EN)**

Application  
**EP 93305480 A 19930713**

Priority  
US 91656592 A 19920720

Abstract (en)  
[origin: EP0580345A1] The energy efficiency of dual cryogenic distillation of air to produce liquid product in which refrigeration is generated by an expander scheme is improved by operating the low pressure distillation column (721) at an elevated pressure (170 to 350 kPa) vis-a-vis the prior art.  
<IMAGE>

IPC 1-7  
**F25J 3/04; F25J 3/02**

IPC 8 full level  
**F25J 3/04** (2006.01)

CPC (source: EP KR)  
**F25J 3/04296** (2013.01 - EP KR); **F25J 3/04315** (2013.01 - EP KR); **F25J 3/04345** (2013.01 - EP KR); **F25J 3/04351** (2013.01 - EP KR);  
**F25J 3/04393** (2013.01 - EP KR); **F25J 3/04412** (2013.01 - EP KR); **F25J 3/04678** (2013.01 - EP KR); **F25J 2200/20** (2013.01 - EP KR);  
**F25J 2200/52** (2013.01 - EP KR); **F25J 2205/02** (2013.01 - EP KR); **F25J 2245/42** (2013.01 - EP KR)

Cited by  
EP1750074A1; FR2830928A1; EP0684437A1; US5533339A; US7219514B2; WO03033978A3; WO2021204424A3

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

DOCDB simple family (publication)  
**EP 0580345 A1 19940126; EP 0580345 B1 19960214**; CA 2100402 A1 19940121; DE 69301555 D1 19960328; DE 69301555 T2 19960801;  
ES 2085116 T3 19960516; JP H06159929 A 19940607; KR 940002589 A 19940217

DOCDB simple family (application)  
**EP 93305480 A 19930713**; CA 2100402 A 19930713; DE 69301555 T 19930713; ES 93305480 T 19930713; JP 17777393 A 19930719;  
KR 930013420 A 19930716