

Title (en)

Air separation unit and systems incorporating the same

Title (de)

Luftabscheidereinheit und Systeme damit

Title (fr)

Unité de séparation d'air et systèmes l'incorporant

Publication

**EP 2541175 A3 20180321 (EN)**

Application

**EP 12173515 A 20120626**

Priority

US 201113174056 A 20110630

Abstract (en)

[origin: EP2541175A2] A system 50 comprising an air separation unit (ASU) 12 is provided. The ASU 12 is configured to produce liquid nitrogen and pressurize to higher pressure using a pump. ASU 12 may be further configured to produce liquid oxygen that can be directly pressurized to be used in required applications 14. System 50 may further include oxy-fuel combustion system 14, integrated gas turbines 64 and integrated enhanced oil and / or gas recovery units 78. Methods of operating the system included.

IPC 8 full level

**F25J 3/04** (2006.01)

CPC (source: EP US)

**F25J 3/04084** (2013.01 - EP US); **F25J 3/0409** (2013.01 - EP US); **F25J 3/0429** (2013.01 - EP US); **F25J 3/04296** (2013.01 - EP US);  
**F25J 3/04387** (2013.01 - EP); **F25J 3/044** (2013.01 - EP US); **F25J 3/04424** (2013.01 - EP US); **F25J 3/04533** (2013.01 - EP US);  
**F25J 3/04569** (2013.01 - EP US); **F25J 3/04575** (2013.01 - EP US); **F25J 2205/02** (2013.01 - EP US); **F25J 2205/04** (2013.01 - EP US);  
**F25J 2210/04** (2013.01 - EP); **F25J 2215/40** (2013.01 - EP); **F25J 2240/22** (2013.01 - EP); **F25J 2245/02** (2013.01 - EP);  
**F25J 2260/80** (2013.01 - EP US); **F25J 2290/12** (2013.01 - EP)

Citation (search report)

- [XAY] EP 2015013 A2 20090114 - LINDE AG [DE]
- [XAY] EP 0606027 A1 19940713 - AIR LIQUIDE [FR]
- [Y] US 2011100055 A1 20110505 - BRIGHAM WILLIAM [US], et al
- [Y] WO 2011028322 A1 20110310 - EXXONMOBIL UPSTREAM RES CO [US], et al
- [Y] US 4407135 A 19831004 - PAHADE RAVINDRA F [US]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2541175 A2 20130102; EP 2541175 A3 20180321; CN 102853633 A 20130102; CN 102853633 B 20160810; US 2013000352 A1 20130103**

DOCDB simple family (application)

**EP 12173515 A 20120626; CN 201210228197 A 20120702; US 201113174056 A 20110630**