

Title (en)

Method for the manufacture of conditioned ethane and an apparatus therefor

Title (de)

Verfahren zur Herstellung von konditioniertem Ethan und Vorrichtung dafür

Title (fr)

Procédé pour la fabrication de l'éthane conditionné et appareil prévu à cet effet

Publication

EP 2749830 A1 20140702 (EN)

Application

EP 12199555 A 20121227

Priority

EP 12199555 A 20121227

Abstract (en)

In a method and an apparatus ethylene and an ethane stream are produced from a C2 hydrocarbon stream (510) comprising ethane and ethylene. The C2 hydrocarbon stream (510) is fractionated in a C2 fractionator (600) to provide a C2 overhead stream (610) comprising ethylene and a C2 bottoms stream (620) comprising ethane. A portion of the C2 bottoms stream (620) comprising ethane is conditioned, wherein expanding the portion (630) of the C2 bottoms stream (620) to form an expanded portion (710), and wherein removing a gaseous C2 stream (810) from the expanded portion (710) to provide a conditioned ethane stream (820). The conditioned ethane stream (820) is in the liquid state and at a pressure in the range of from about 1 to 2 bar, and at least 95 mol% thereof consists of ethane.

IPC 8 full level

F25J 3/02 (2006.01)

CPC (source: EP)

F25J 3/0219 (2013.01); **F25J 3/0233** (2013.01); **F25J 3/0238** (2013.01); **F25J 3/0242** (2013.01); **F25J 2210/12** (2013.01); **F25J 2215/04** (2013.01); **F25J 2215/62** (2013.01); **F25J 2215/64** (2013.01); **F25J 2245/02** (2013.01); **F25J 2260/20** (2013.01); **F25J 2290/34** (2013.01); **F25J 2290/62** (2013.01)

Citation (applicant)

US 2010000251 A1 20100107 - VAN AKEN MICHAEL GIJSBERT [NL], et al

Citation (search report)

- [XYI] US 3996030 A 19761207 - SCHEIBEL EDWARD G
- [Y] WO 2007018506 A1 20070215 - INNOVENE USA LLC [US], et al
- [Y] US 2011132033 A1 20110609 - PRIM ERIC [US]
- [Y] WO 2011039279 A2 20110407 - SHELL INT RESEARCH [NL], et al
- [Y] US 3729944 A 19730501 - KELLEY C, et al
- [A] US 5675054 A 19971007 - MANLEY DAVID [US], et al
- [I] HAHESY M F ET AL: "OPTIMIZE ETHYLENE RECOVERY", HYDROCARBON PROCESSING, GULF PUBLISHING CO. HOUSTON, US, 1 April 1999 (1999-04-01), pages 117, XP001207021, ISSN: 0018-8190

Cited by

CN107548446A; US10928128B2; WO2016178792A3

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 2749830 A1 20140702; WO 2014102113 A2 20140703; WO 2014102113 A3 20151001; WO 2014102113 A9 20140821

DOCDB simple family (application)

EP 12199555 A 20121227; EP 2013077115 W 20131218