

Title (en)

PROCESSES FOR THE ISOMERIZATION OF NORMAL BUTANE TO ISOBUTANE

Title (de)

VERFAHREN ZUR ISOMERISIERUNG VON NORMALBUTAN ZU ISOBUTAN

Title (fr)

PROCEDES D'ISOMERISATION DE BUTANE NORMAL EN ISOBUTANE

Publication

EP 1856016 A4 20150121 (EN)

Application

EP 06738661 A 20060310

Priority

- US 2006009627 W 20060310
- US 66114305 P 20050311

Abstract (en)

[origin: WO2006099566A1] In a normal butane isomerization process where the isomerization effluent (108, 114) is fractionated in a deisobutanizer (116) operated such that a lower boiling fraction (118) is provided containing at least 80 mass-% isobutane and a higher boiling fraction (122) containing normal butane and at least 10 mass-% isobutane. The higher boiling fraction (122) is contacted with a selectively permeable membrane (124) to provide a permeate (126) containing normal butane-containing and a retentate (128) containing at least 80 mass-% isobutane. The preferred membranes are sieving membranes having a C₄ Permeate Flow Index of at least 0.01 and a C₄ Permeate Flow Ratio of at least 1.25:1.

IPC 8 full level

C07C 5/27 (2006.01); **B01D 61/14** (2006.01); **B01D 61/36** (2006.01); **C07C 7/144** (2006.01); **C07C 9/12** (2006.01)

CPC (source: EP KR US)

B01D 61/145 (2013.01 - EP); **B01D 61/362** (2013.01 - EP KR US); **B01J 8/00** (2013.01 - KR); **C07C 5/27** (2013.01 - KR); **C07C 5/277** (2013.01 - EP); **C07C 7/13** (2013.01 - KR); **C07C 7/144** (2013.01 - EP); **C10G 2400/20** (2013.01 - EP)

C-Set (source: EP)

1. **C07C 5/277 + C07C 9/12**
2. **C07C 7/144 + C07C 9/12**

Citation (search report)

- [Y] US 4347399 A 19820831 - RICE LYNN H
- [Y] FR 2695635 A1 19940318 - INST FRANCAIS DU PETROLE [FR]
- [YD] US 6090289 A 20000718 - VERDUIJN JOHANNES PETRUS [BE], et al
- [YD] US 2004033370 A1 20040219 - CHAU CHRISTOPHE [FR], et al
- [E] WO 2006099254 A1 20060921 - UOP LLC [US], et al
- [E] WO 2006099287 A1 20060921 - UOP LLC [US], et al
- See also references of WO 2006099566A1

Designated contracting state (EPC)

BE DE ES GB IT NL

DOCDB simple family (publication)

WO 2006099566 A1 20060921; AU 2006222911 A1 20060921; AU 2006222911 B2 20090604; BR PI0608998 A2 20101116; CA 2601219 A1 20060921; CA 2601219 C 20111025; CN 101171213 A 20080430; EP 1856016 A1 20071121; EP 1856016 A4 20150121; KR 100945405 B1 20100304; KR 20070106590 A 20071101; RU 2007137661 A 20090420; RU 2368594 C2 20090927

DOCDB simple family (application)

US 2006009627 W 20060310; AU 2006222911 A 20060310; BR PI0608998 A 20060310; CA 2601219 A 20060310; CN 200680015930 A 20060310; EP 06738661 A 20060310; KR 20077023094 A 20060310; RU 2007137661 A 20060310