

Title (en)  
OVERHEAD RECYCLE PROCESS APPARATUS AND METHOD OF OVERHEAD RECYCLE PROCESSING OF HYDROCARBONS

Title (de)  
ÜBERIRDISCHE RECYCLINGVERARBEITUNGSVORRICHTUNG UND VERFAHREN ZUR ÜBERIRDISCHEN RECYCLINGVERARBEITUNG VON KOHLENWASSERSTOFFEN

Title (fr)  
PROCÉDÉ DE RECYCLAGE DE SURDÉBIT, APPAREIL ET PROCÉDÉ DE TRAITEMENT DE RECYCLAGE DE SURDÉBIT D'HYDROCARBURES

Publication  
**EP 3382306 A1 20181003 (EN)**

Application  
**EP 17164141 A 20170331**

Priority  
EP 17164141 A 20170331

Abstract (en)  
An overhead recycle process apparatus (100) comprises a heat exchange arrangement (116, 118, 120, 146, 150, 198) and a separator (110) in fluid communication with an absorber (104) and a de-ethaniser (106), the absorber (104) having a reflux inlet port (164). An ethane rectifier (170) in fluid communication with the de-ethaniser (106) is also provided, the de-ethaniser (106) being arranged to provide cooling by heat exchange to an overhead stream path (194) of the ethane rectifier (170). The ethane rectifier (170) comprises a reflux drum (182) having an ethane outlet port (184) and a vapour phase outlet port (185) in fluid communication with the reflux inlet port (164) of the absorber (104).

IPC 8 full level  
**F25J 3/02** (2006.01)

CPC (source: EP US)  
**F25J 3/0209** (2013.01 - EP US); **F25J 3/0233** (2013.01 - EP US); **F25J 3/0238** (2013.01 - EP US); **F25J 3/0242** (2013.01 - EP US); **F25J 2200/04** (2013.01 - EP US); **F25J 2200/32** (2013.01 - EP US); **F25J 2200/72** (2013.01 - EP US); **F25J 2200/74** (2013.01 - EP US); **F25J 2200/78** (2013.01 - EP US); **F25J 2205/04** (2013.01 - EP US); **F25J 2215/62** (2013.01 - EP US); **F25J 2240/02** (2013.01 - EP); **F25J 2245/02** (2013.01 - EP US)

Citation (applicant)  
US 4617039 A 19861014 - BUCK LOREN L [US]

Citation (search report)

- [XAY] DE 19643152 A1 19980423 - LINDE AG [DE]
- [XAY] US 2010011810 A1 20100121 - MAK JOHN [US], et al
- [XA] US 2007012072 A1 20070118 - QUALLS WESLEY [US], et al
- [XA] US 2011048067 A1 20110303 - FISCHER BEATRICE [FR], et al
- [XA] US 2577701 A 19511204 - HARVEY DEMING PHILIP, et al

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 3382306 A1 20181003**; AU 2018246973 A1 20191010; US 2020116427 A1 20200416; WO 2018177874 A1 20181004

DOCDB simple family (application)  
**EP 17164141 A 20170331**; AU 2018246973 A 20180322; EP 2018057272 W 20180322; US 201816499652 A 20180322