

Title (en)

METHOD FOR PROVIDING A PURIFIED CRUDE GASEOUS C4 FRACTION AS AN INPUT STREAM FOR AN EXTRACTIVE DISTILLATION USING A SELECTIVE SOLVENT

Title (de)

VERFAHREN ZUR BEREITSTELLUNG EINES DAMPFFÖRMIGEN GEREINIGTEN ROH-C4-SCHNITTES ALS EINSATZSTROM FÜR EINE EXTRAKTIVDESTILLATION MIT EINEM SELEKTIVEN LÖSUNGSMITTEL

Title (fr)

PROCÉDÉ D'OBTENTION D'UNE FRACTION C4 BRUTE PURIFIÉE SOUS FORME DE VAPEUR EN TANT QUE COURANT DE DÉPART D'UNE DISTILLATION EXTRACTIVE AU MOYEN D'UN SOLVANT SÉLECTIF

Publication

EP 2802637 B1 20170322 (DE)

Application

EP 13700159 A 20130110

Priority

- EP 12150824 A 20120111
- EP 2013050366 W 20130110
- EP 13700159 A 20130110

Abstract (en)

[origin: WO2013104692A1] The invention relates to a method for providing a purified crude gaseous C4 fraction (2) as an input stream for an extractive distillation using a selective solvent in order to obtain crude 1,3-butadiene on the basis of a liquid crude C4-fraction (1) as a feed stream, containing C3 hydrocarbons, C4 oligomers, C4 polymers, and C5+ hydrocarbons together with butanes, butenes, and 1,3-butadiene. The method has the steps of 1) separating the C4 oligomers, C4 polymers, and C5+ hydrocarbons up to the respective residual content previously specified for the purified crude gaseous C4 fraction and 2) evaporating the liquid crude C4 fraction in an evaporator tank (VK). The invention is characterized in that the evaporator tank (VK) is associated with a stripping column (K) with one or more separating stages, the liquid C4 fraction (1) being fed to the stripping column in the upper region of the stripping column. The stripping column directly exchanges gas and liquid with the evaporator tank (VK) in the lower region of the stripping column, and the purified crude gaseous C4 fraction (2) is drawn off from the stripping column in the upper region. The stripping column (K) is operated without a condenser at the column head.

IPC 8 full level

C10G 21/28 (2006.01); **B01D 3/14** (2006.01); **C10G 21/14** (2006.01); **C10L 3/12** (2006.01)

CPC (source: EP)

C10G 21/12 (2013.01); **C10G 21/28** (2013.01); **C10L 3/12** (2013.01)

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

DOCDB simple family (publication)

WO 2013104692 A1 20130718; CN 104053752 A 20140917; CN 104053752 B 20160831; EP 2802637 A1 20141119; EP 2802637 B1 20170322; JP 2015508409 A 20150319; JP 6067748 B2 20170125; KR 102049312 B1 20191128; KR 20140120329 A 20141013

DOCDB simple family (application)

EP 2013050366 W 20130110; CN 201380005242 A 20130110; EP 13700159 A 20130110; JP 2014551607 A 20130110; KR 20147021970 A 20130110