

Title (en)

METHOD AND APPARATUS FOR LIQUEFYING A HYDROCARBON-CONTAINING FEED STREAM

Title (de)

VERFAHREN UND VORRICHTUNG ZUR VERFLÜSSIGUNG EINES KOHLENWASSERSTOFFREICHEN STROMES

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR LIQUÉFIER UN COURANT D'HYDROCARBURES

Publication

EP 2052197 B1 20180516 (EN)

Application

EP 07788440 A 20070815

Priority

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Abstract (en)

[origin: WO2008020044A2] Method and apparatus for liquefying a hydrocarbon stream such as natural gas from a feed stream. The method comprises at least the steps of : (a) providing the feed stream (10); (b) first cooling the feed stream (10) against a first cooling refrigerant being cycled in a first cooling refrigerant circuit (100), thereby obtaining a cooled gas stream (20), wherein the first cooling refrigerant comprises > 90 mol% propane; (c) second cooling the cooled gas stream (20) obtained in step (b) into a liquid against a first mixed refrigerant being cycled in a first mixed refrigerant circuit (200), wherein said second cooling is in two or more heat exchangers (42, 44), at least two of which are operating at different pressures, thereby obtaining a liquefied stream (60); and (d) sub-cooling the liquefied stream (60) obtained in step (c) against a second mixed refrigerant or against a nitrogen refrigerant being cycled in a sub-cooling refrigerant circuit (300), thereby obtaining a sub-cooled hydrocarbon stream (70).

IPC 8 full level

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CPC (source: EP US)

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Cited by

US10480851B2; US10663221B2; US11408676B2; US9441877B2; US10502483B2

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