

Title (en)
PROCESS FOR HYDROCRACKING A HYDROCARBON FEEDSTOCK

Title (de)
VERFAHREN ZUM HYDROCRACKEN EINES KOHLENWASSERSTOFFROHSTOFFES

Title (fr)
PROCÉDÉ D'HYDROCRAQUAGE D'UNE CHARGE HYDROCARBONÉE

Publication
EP 2930225 A1 20151014 (EN)

Application
EP 15166420 A 20111005

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- US 42105810 P 20101208
- US 201161436873 P 20110127
- EP 11773391 A 20111005
- EP 2010006411 W 20101020
- EP 2011004949 W 20111005

Abstract (en)
A hydrocracking process comprising the steps of: (a) combining a hydrocarbonaceous feedstock and a heavy bottom fraction recycle stream with a hydrogen-rich gas to obtain a mixture comprising hydrocarbonaceous feedstock and hydrogen; (b) catalytically hydrocracking the mixture comprising hydrocarbonaceous feedstock and hydrogen in a hydrocracking zone to obtain a hydrocracked effluent; (c) separating the hydrocracked effluent into a first vapour portion and a first liquid portion in a separation zone; (d) heating the first liquid portion to form a vapourised first liquid portion; (e) feeding the vapourised first liquid portion to a fractionation section producing individual product fractions including a heavy bottom fraction comprising unconverted oil at the bottom zone of the fractionation section; (f) withdrawing from the fractionation section the heavy bottom fraction; (g) splitting the heavy bottom fraction in a stream for stripping and a heavy bottom fraction recycle stream; (h) directing, as a first stream the stream for stripping, as a second stream a stripping medium and as an optional third stream, a recycled portion of stripped liquid, to a counter current stripping column and withdrawing from said stripping column an overhead vapour and a stripped liquid; (i) feeding the overhead vapour to the fractionation section, to a recycle stream or to a position upstream the fractionation section; and (j) removing at least a part of the stripped liquid from the counter current stripping column as a net purge of unconverted oil characterized in said process further comprising the step of (k) transferring thermal energy to at least one of said first stream, second stream and optional third stream prior to directing said stream to the counter current stripping column.

IPC 8 full level
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Citation (applicant)

- US 6361683 B1 20020326 - KALNES TOM N [US]
- US 6858128 B1 20050222 - HOEHN RICHARD K [US], et al
- US 4961839 A 19901009 - STINE LAURENCE O [US], et al
- US 5120427 A 19920609 - STINE LAURENCE O [US], et al
- US 4447315 A 19840508 - LAMB PAUL R [US], et al

Citation (search report)

- [XDAY] US 4961839 A 19901009 - STINE LAURENCE O [US], et al
- [YDA] US 6361683 B1 20020326 - KALNES TOM N [US]
- [YD] US 6858128 B1 20050222 - HOEHN RICHARD K [US], et al
- [XDY] US 5120427 A 19920609 - STINE LAURENCE O [US], et al
- [Y] US 6190535 B1 20010220 - KALNES TOM N [US], et al
- [Y] US 2006213809 A1 20060928 - BARTHELET KARIN [FR], et al

Cited by
US11180701B2; WO2021025893A1

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