

Title (en)

Hydrocracking processes having an enhanced efficiency of hydrogen utilization.

Title (de)

Hydrokrackverfahren mit verbessertem Wasserstoff-Nutzungsgrad.

Title (fr)

Procédé d'hydrocraquage à efficacité élevée de l'utilisation d'hydrogène.

Publication

**EP 0061259 A1 19820929 (EN)**

Application

**EP 82301236 A 19820311**

Priority

- US 24322081 A 19810312
- US 24327381 A 19810313

Abstract (en)

A hydrocrackate (14) from a hydrocracking zone (10) operating under hydrocracking conditions is separated into vapor phase has a greater concentration of hydrogen than the minimum concentration of hydrogen in the vapor phase in the hydrocracking zone. at least a portion of the separated vapor phase (22) is contacted with the feed side of a polymeric membrane in a permeator (28), the membrane being selective to the permeation of hydrogen as compared to the permeation of methane, and the opposite side of the polymeric membrane is maintained at a pressure sufficiently below the pressure at the feed side of the polymeric membrane to permeate hydrogen to the opposite side of the polymeric membrane and to provide a hydrogen permeate (30) having a concentration of hydrogen greater than the concentration of hydrogen in the separated vapor phase (22) and greater than the concentration of hydrogen feed gas (44, 46). The hydrogen permeate (30) is compressed and recycled to the hydrocracking zone (10).

IPC 1-7

**C10G 49/22; C10G 47/00; C01B 3/50**

IPC 8 full level

**C10G 49/22** (2006.01)

CPC (source: EP)

**C10G 49/22** (2013.01)

Citation (search report)

- [Y] US 3471397 A 19691007 - FORTMAN JOHN T
- [Y] US 3733260 A 19730515 - DAVIES J, et al
- [A] FR 2265673 A1 19751024 - RAFFINAGE CIE FRANCAISE [FR]
- [Y] OIL & GAS JOURNAL, vol. 78, no. 21, May 1980, pages 63-68, Tulsa Oklahoma (USA);

Cited by

EP0952203A1; CN109970029A; EP1930397A1; EP0448439A1; FR2659964A1; US7306651B2; US7785547B2

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

**EP 0061259 A1 19820929**

DOCDB simple family (application)

**EP 82301236 A 19820311**