



(43) International Publication Date
13 December 2001 (13.12.2001)

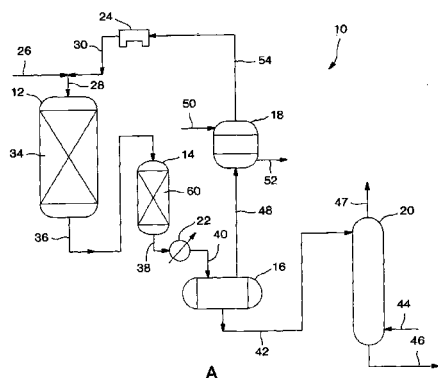
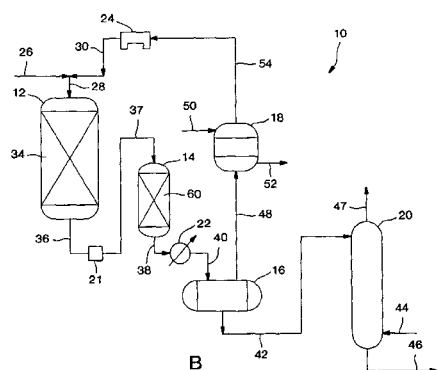
(10) International Publication Number
WO 01/94502 A1

PCT

- | | |
|---|---|
| <p>(51) International Patent Classification⁷: C10G 45/06,
45/08</p> | <p>125 Hockenbury Drive, Glen Gardner, NJ 08826-3520 (US). DEMMIN, Richard, Alan; 424 Dennison Street, Highland Park, NJ 08904 (US). GREELEY, John, Peter; 15 Forsgate Terrace, Annandale, NJ 08801 (US).</p> |
| <p>(21) International Application Number: PCT/US00/35701</p> | |
| <p>(22) International Filing Date: 5 December 2000 (05.12.2000)</p> | <p>(74) Agents: HUGHES, Gerard, J. et al.; ExxonMobil Research and Engineering Company, P.O. Box 900, Annandale, NJ 08801 (US).</p> |
| <p>(25) Filing Language: English</p> | |
| <p>(26) Publication Language: English</p> | <p>(81) Designated States (<i>national</i>): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW.</p> |
| <p>(30) Priority Data:
09/470,267 22 December 1999 (22.12.1999) US
09/685,709 10 October 2000 (10.10.2000) US</p> | |
| <p>(71) Applicant: EXXONMOBIL RESEARCH AND ENGINEERING COMPANY [US/US]; P.O. Box 900, 1545 Route 22 East, Annandale, NJ 08801 (US).</p> | <p>(84) Designated States (<i>regional</i>): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,</p> |
| <p>(72) Inventors: COOK, Bruce, Randall; 1101 Monroe Drive, Stewartsville, NJ 08886 (US). ERNST, Richard, Harry;</p> | |

[Continued on next page]

- (54) Title:** HIGH TEMPERATURE DEPRESSURIZATION FOR NAPHTHA MERCAPTAN REMOVAL



(57) Abstract: The invention relates to naphtha hydrodesulfurization incorporating either high temperature depressurization or controlled heating for mercaptan removal. More particularly, the invention relates to a naphtha hydrodesulfurization process, wherein the hot naphtha exiting the desulfurization reactor (12) contains mercaptans, most of which are removed without olefin loss, by depressurizing the hot naphtha (14), thermally treating the hot naphtha, or some combination thereof. The desulfurized naphtha may be cooled and condensed to a liquid, separated (16) from the gaseous H₂S, stripped and sent to a mogas pool.



IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*