

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
25 April 2024 (25.04.2024)



(10) International Publication Number
WO 2024/086637 A1

(51) International Patent Classification:

C10G 65/02 (2006.01) C10G 45/58 (2006.01)
C10G 65/04 (2006.01)

(21) International Application Number:

PCT/US2023/077183

(22) International Filing Date:

18 October 2023 (18.10.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/418,020 20 October 2022 (20.10.2022) US

(71) Applicant: **UOP LLC** [US/US]; 25 East Algonquin Road,
P.O. Box 5017, Des Plaines, Illinois 60017-5017 (US).

(72) Inventors: **TIWARI, Neeraj**; Honeywell International
Inc., Intellectual Property Services Group, 855 S. Mint
Street, Charlotte, North Carolina 28202 (US). **WEXLER,
James T.**; Honeywell International Inc., Intellectual Property
Services Group, 855 S. Mint Street, Charlotte, North

Carolina 28202 (US). **MININ, Marina S.**; Honeywell International Inc., Intellectual Property Services Group, 855 S. Mint Street, Charlotte, North Carolina 28202 (US).

(74) Agent: **BENINATI, John F.** et al.; Honeywell International Inc., Intellectual Property Services Group, 300 S. Tryon Street, Suite 600, Charlotte, North Carolina 28202 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, CV,

(54) Title: PROCESS FOR PRODUCING JET FUEL WITH HEAT INTEGRATION

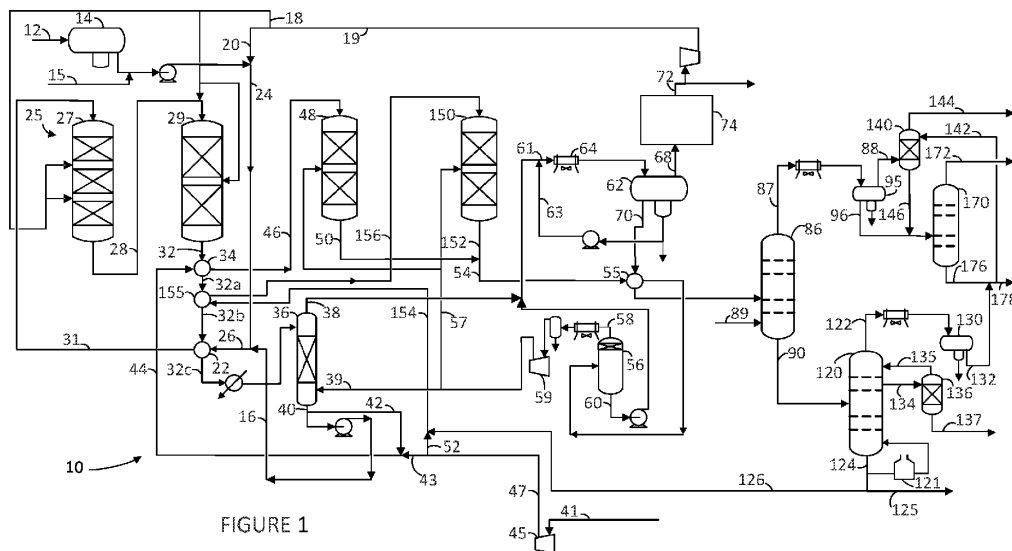


FIGURE 1

(57) Abstract: A process isolates a liquid hydrocracked stream from a liquid hydroisomerized stream, so heat in the hydrocracked stream can be preserved. Preserving heat in the hydrocracked stream avoids having to reheat the hydrocracked stream before product fractionation. Particularly, kerosene in the hydrocracked stream is not cooled with the hydroisomerized stream and then reheated in fractionation to distill the kerosene range hydrocarbons from the diesel range hydrocarbons.

[Continued on next page]

GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))