

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
16 September 2021 (16.09.2021)



(10) International Publication Number
WO 2021/183854 A1

- (51) **International Patent Classification:**
CI0G 11/18 (2006.01)
- (21) **International Application Number:**
PCT/US2021/022063
- (22) **International Filing Date:**
12 March 2021 (12.03.2021)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
62/989,507 13 March 2020 (13.03.2020) US
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- (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, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN,
KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD,
ME, MG, MK, MN, 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, GH,

(54) **Title:** PRODUCTION OF LIGHT OLEFINS FROM CRUDE OIL VIA FLUID CATALYTIC CRACKING PROCESS AND APPARATUS

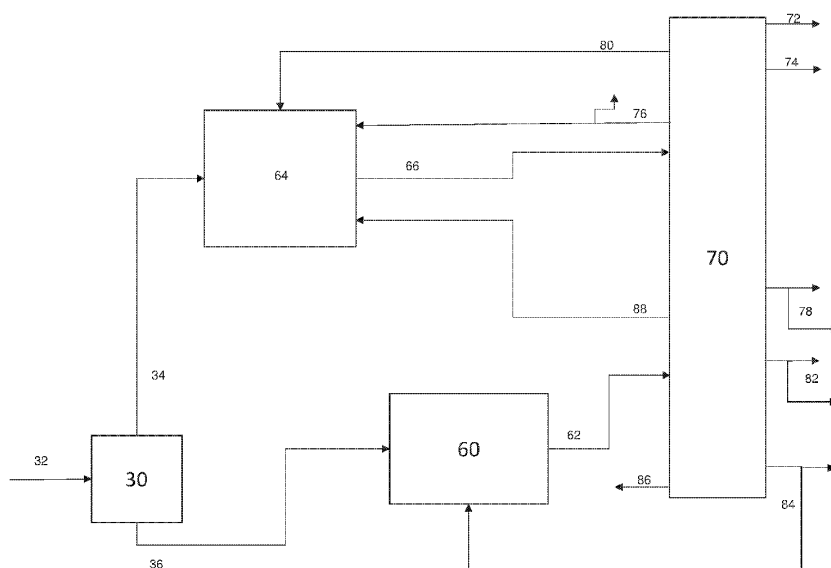


FIGURE 3

(57) **Abstract:** A reactor system configured for efficiently removing contaminants (CCR, nickel, vanadium, nitrogen, sodium, iron, calcium, chlorine etc.) from a heavy portion of the crude oil. The products are routed to a common main fractionation section. The heavy feed with lower contaminants may then be processed in a fluid catalytic cracking (FCC) unit, the overall concept employing a fluid catalytic reaction platform with carbon rejection approach. Also disclosed is a reactor system for efficiently processing crude oil in a fluid catalytic cracking unit with a dual- reactor and dual catalyst system to maximize petrochemical building blocks such as ethylene, propylene, butylenes, BTX (benzene, toluene and xylene) rich naphtha from a variety of crude oils.

[Continued on next page]

GM, KE, LR, LS, MW, MZ, NA, RW, 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, 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))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))