



(51) International Patent Classification:

C10B 53/07 (2006.01) C10G 9/00 (2006.01)
C10G 1/10 (2006.01) C10G 51/02 (2006.01)
C10G 1/00 (2006.01)

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(21) International Application Number:

PCT/US2023/064383

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(22) International Filing Date:

15 March 2023 (15.03.2023)

(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.

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/269,487 17 March 2022 (17.03.2022) US

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(84) **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST,

(54) **Title:** CHEMICAL RECYCLING PROCESS COMPRISING MELTING, PYROLYSIS AND CRACKING WASTE PLASTIC

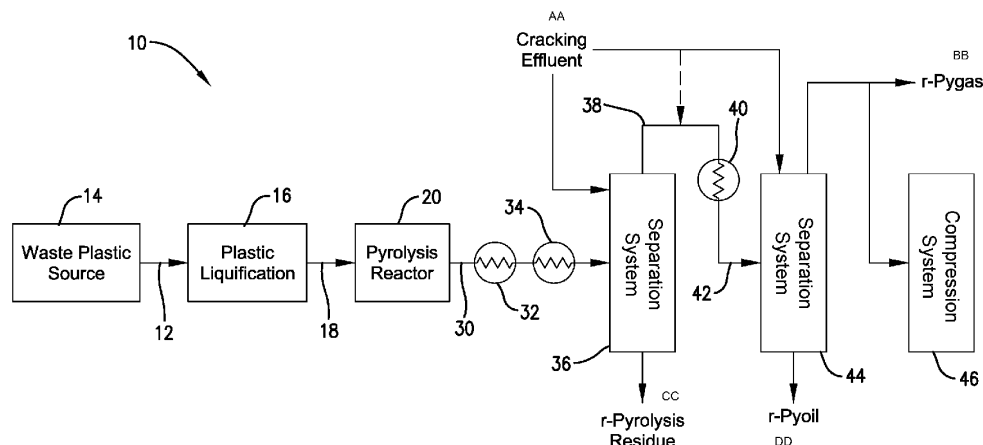


Fig. 1.

(57) **Abstract:** It has been discovered that the reliance of additional chemical processing facilities downstream of a waste plastic pyrolysis facility may be avoided by utilizing a pyrolysis facility that can both pyrolyze and crack a waste plastic feedstock to thereby form various recycle content products. More specifically, a plastic liquification system and a pyrolysis reactor operating at more severe temperatures and conditions may effectively pyrolyze and crack a waste plastic so that additional downstream processing in a cracking facility may be avoided. Consequently, the waste plastic pyrolysis configuration and process disclosed herein can obtain process efficiencies and logistical simplicity not obtainable in previous waste plastic pyrolysis scheme iterations.

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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))*