

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
06 June 2024 (06.06.2024)



(10) International Publication Number
WO 2024/114557 A1

(51) International Patent Classification:
C10B 53/00 (2006.01) C10G 1/00 (2006.01)
C10B 57/00 (2006.01)

(21) International Application Number:
PCT/CN2023/134238

(22) International Filing Date:
27 November 2023 (27.11.2023)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
22022065048,9 02 December 2022 (02.12.2022) HK

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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, 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,

(54) Title: NOVEL PROCESS-BASED APPARATUS FOR PYROLYSIS OF ORGANIC WASTES

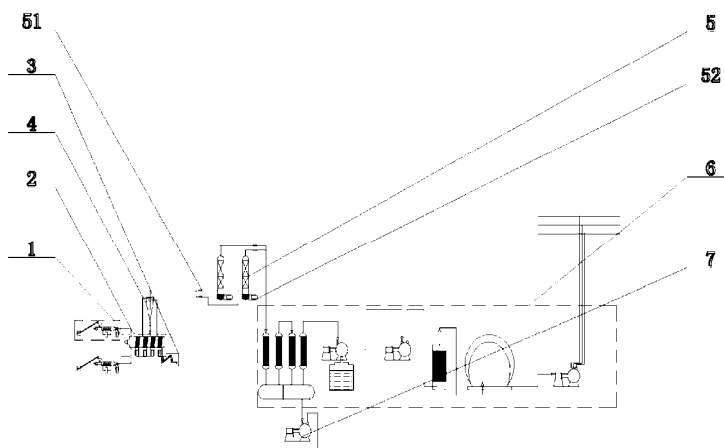


FIG. 1

(57) Abstract: A novel process-based apparatus for pyrolysis of organic wastes is disclosed. The apparatus includes: a feeding mechanism (1), a pyrolysis reaction mechanism (2), a carbon black slagging mechanism (3), a cyclone vacuum cleaner (4), a catalytic converter (5), a gas treatment mechanism (6), and a crude oil pump (7); wherein two said feeding mechanisms (1) are both connected to the pyrolysis reaction mechanism (2), the carbon black slagging mechanism (3) is connected to under a right end of the pyrolysis reaction mechanism (2) via a pipeline, the cyclone vacuum cleaner (4) is arranged at an upper end of the pyrolysis reaction mechanism (2), two said catalytic converters (5) are connected at a top end of the cyclone vacuum cleaner (4) via a pipeline, the gas treatment mechanism (6) is connected to a high end of the catalytic converter (5) via a pipeline, and the crude oil pump (7) is connected to a lower end of the gas treatment mechanism (6) via a pipeline. With the above technical solution of the present disclosure, the apparatus employs a single reaction kettle system, and implements continuous feeding, continuous pyrolysis, continuous discharging, effective use of incondensable gas, and energy saving and emission reduction while fully utilizing inherited heat energy to achieve energy saving

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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, 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).

Declarations under Rule 4.17:

- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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))*