



(51) International Patent Classification:

C10G 3/00 (2006.01) C08L 23/12 (2006.01)
C08L 23/06 (2006.01) C11B 13/00 (2006.01)

(21) International Application Number:

PCT/US2023/069862

(22) International Filing Date:

10 July 2023 (10.07.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/359,546 08 July 2022 (08.07.2022) US

(71) Applicant: **CHEVRON U.S.A. INC.** [US/US]; 6001
Bollinger Canyon Road, San Ramon, CA 94583 (US).

(72) Inventors: **LIU, Tengfei**; Chevron Corporation, P.O. Box
6006, San Ramon, CA 94583 (US). **SCHMIDT, Joel, E.**;
Chevron Corporation, P.O. Box 6006, San Ramon, CA
94583 (US). **TIMKEN, Hye-Kyung, C.**; Chevron Corpo-
ration, P.O. Box 6006, San Ramon, CA 94583 (US).

(74) Agent: **HAYWORTH, Melissa, M.** et al.; Merchant &
Gould, P.O. Box 2903, Minneapolis, MN 55402 (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,
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 applicant's entitlement to apply for and be granted a
patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the
earlier application (Rule 4.17(iii))

Published:

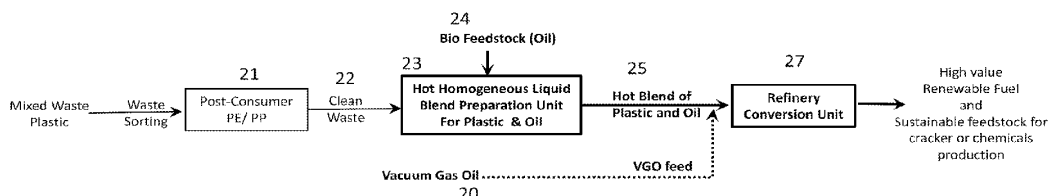
- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

14 March 2024 (14.03.2024)

(54) Title: BLEND OF WASTE PLASTIC WITH BIO FEED AND PROCESS OF PREPARATION

Figure 2
Preparation of a Hot Homogeneous Blend of Plastic and Bio Feedstock
for Direct Conversion of Plastic Waste in Conversion Units



(57) Abstract: Provided is a composition comprising a blend of a waste plastic and a bio feedstock. Also provided is a process for preparing a stable blend of a plastic and bio feedstock which can be stored or transported if desired. The amount of plastic in the blend comprises no more than 20 wt. % of the blend. The blend can be passed to a conversion unit for conversion of the waste plastic and bio feedstock. The conversion process produces clean monomers for polymerization and chemical intermediates.