

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

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2022/144495 A1

(43) International Publication Date
07 July 2022 (07.07.2022)

(51) International Patent Classification:

C10G 1/10 (2006.01) *C10G 45/38* (2006.01)
C10G 1/06 (2006.01) *C10G 1/00* (2006.01)
C10B 53/07 (2006.01) *C10G 11/18* (2006.01)

Published:

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

(21) International Application Number:

PCT/FI2021/050884

(22) International Filing Date:

16 December 2021 (16.12.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

20206383 30 December 2020 (30.12.2020) FI

(71) Applicant: NESTE OYJ [FI/FI]; Keilaranta 21, 02150 Espoo (FI).

(72) Inventors: AALTO, Pekka; c/o Neste Oyj / IPR, P.O. Box 310, 06101 Porvoo (FI). JANSOON, Kari; c/o Neste Oyj / IPR, P.O. Box 310, 06101 Porvoo (FI). PAASIKALLIO, Ville; c/o Neste Oyj / IPR, P.O. Box 310, 06101 Porvoo (FI). PÉREZ NEBREDÁ, Andrea; c/o Neste Oyj / IPR, P.O. Box 310, 06101 Porvoo (FI). SAIRANEN, Emma; c/o Neste Oyj / IPR, P.O. Box 310, 06101 Porvoo (FI).

(74) Agent: TBK; Bavariaring 4 - 6, 80336 München (DE).

(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, 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).

(54) Title: CO-PROCESSING ROUTE FOR HYDROTREATING POLYMER WASTE-BASED MATERIAL

(57) Abstract: Provided is a method for upgrading polymer waste-based material. The method comprises providing a polymer waste-based feedstock, providing a crude oil-derived feedstock, mixing the polymer waste-based feedstock, the crude oil-derived feedstock, and optionally a further feed material, to provide a feed mixture, hydrotreating the feed mixture in a FCC feed hydrotreater to provide a hydrocarbonaceous material, and recovering at least a distillate product and a distillation bottoms product from the hydrocarbonaceous material (step E).

WO 2022/144495 A1