

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

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2022/136976 A1

(43) International Publication Date
30 June 2022 (30.06.2022)

(51) International Patent Classification:

C10G 9/36 (2006.01) *C10G 75/00* (2006.01)
C10G 9/20 (2006.01) *C10G 69/06* (2006.01)
C10G 45/02 (2006.01) *C10G 55/04* (2006.01)

Published:

- with international search report (Art. 21(3))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

(21) International Application Number:

PCT/IB2021/060935

(22) International Filing Date:

24 November 2021 (24.11.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

63/128,263 21 December 2020 (21.12.2020) US

(71) Applicant: **SABIC GLOBAL TECHNOLOGIES B.V.**
[NL/NL]; Plasticslaan 1, 4612 PX Bergen OP Zoom (NL).

(72) Inventors: **FARAJZADEH BIBALAN**, Safa; Urmonderbaan 22, PO Box 3008, 6160AH Geleen (NL). **FRISSEN, Martijn**; Urmonderbaan 22, PO Box 3008, 6160AH Geleen (NL).

(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).

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))

(54) Title: SYSTEMS AND METHODS FOR STEAM CRACKING HYDROCARBONS

(57) Abstract: Systems and methods for steam cracking a hydrocarbon stream are disclosed. The methods include steam cracking a hydrocarbon stream in a steam cracker that comprises polymer composite tubes in the convection section of the steam cracking furnaces.

WO 2022/136976 A1