

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
29 June 2023 (29.06.2023)



(10) International Publication Number
WO 2023/117972 A1

(51) International Patent Classification:	22172609.4	10 May 2022 (10.05.2022)	EP
<i>G06Q 10/30</i> (2023.01)	<i>G06Q 10/10</i> (2012.01)	22172611.0	10 May 2022 (10.05.2022) EP
<i>G06Q 10/0833</i> (2023.01)	<i>H04L 9/40</i> (2022.01)	22172615.1	10 May 2022 (10.05.2022) EP
<i>G06Q 50/04</i> (2012.01)	<i>H04L 9/00</i> (2006.01)	22172617.7	10 May 2022 (10.05.2022) EP
		22172619.3	10 May 2022 (10.05.2022) EP
(21) International Application Number:	PCT/EP2022/086749	22194793.0	09 September 2022 (09.09.2022) EP
		22194800.3	09 September 2022 (09.09.2022) EP
(22) International Filing Date:	19 December 2022 (19.12.2022)	22194808.6	09 September 2022 (09.09.2022) EP
		22194815.1	09 September 2022 (09.09.2022) EP
(25) Filing Language:	English	22194818.5	09 September 2022 (09.09.2022) EP
(26) Publication Language:	English	22201672.7	14 October 2022 (14.10.2022) EP
		63/416,091	14 October 2022 (14.10.2022) US
(30) Priority Data:		22202183.4	18 October 2022 (18.10.2022) EP
21216268.9	21 December 2021 (21.12.2021) EP	22211421.7	05 December 2022 (05.12.2022) EP
21216269.7	21 December 2021 (21.12.2021) EP		
21216270.5	21 December 2021 (21.12.2021) EP	(71) Applicant: BASF SE [DE/DE]; Carl-Bosch-Strasse 38, 67056 Ludwigshafen Am Rhein (DE).	
21216271.3	21 December 2021 (21.12.2021) EP	(72) Inventors: FREY, Bodo ; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE). MAYER, Marion ; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE). FEYEN, Mathias ; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE). BECK-ENBACH, Jasmin ; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE). ALBA PEREZ, Ana ; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE).	
21216286.1	21 December 2021 (21.12.2021) EP		
21216292.9	21 December 2021 (21.12.2021) EP		
21216326.5	21 December 2021 (21.12.2021) EP		
21216327.3	21 December 2021 (21.12.2021) EP		
21216333.1	21 December 2021 (21.12.2021) EP		
22166573.0	04 April 2022 (04.04.2022) EP		
22167945.9	12 April 2022 (12.04.2022) EP		

(54) Title: BALANCING OF ENVIRONMENTAL ATTRIBUTES IN PRODUCTION NETWORKS

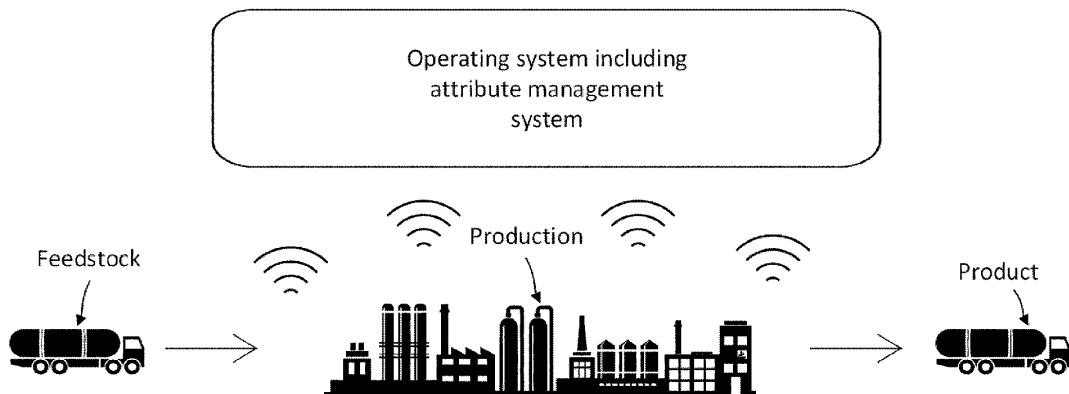


Fig. 1

(57) Abstract: Disclosed are methods, apparatuses, and systems for producing at least one chemical product associated with one or more environmental attribute(s) and for assigning at least one environmental attribute to at least one chemical product produced by a chemical production network.

[Continued on next page]

(74) **Agent: BASF IP ASSOCIATION**; BASF SE GBI - C006,
67056 Ludwigshafen (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, 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, 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, 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).

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