

(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 2023/117980 A1

(51) International Patent Classification:		21216326.5	21 December 2021 (21.12.2021)	EP
<i>G06Q 10/30</i> (2023.01)	<i>G06Q 10/10</i> (2012.01)	21216327.3	21 December 2021 (21.12.2021)	EP
<i>G06Q 10/0833</i> (2023.01)	<i>H04L 9/40</i> (2022.01)	21216333.1	21 December 2021 (21.12.2021)	EP
<i>G06Q 50/04</i> (2012.01)	<i>H04L 9/00</i> (2006.01)	22166573.0	04 April 2022 (04.04.2022)	EP
(21) International Application Number:		22167945.9	12 April 2022 (12.04.2022)	EP
PCT/EP2022/086762		22172609.4	10 May 2022 (10.05.2022)	EP
(22) International Filing Date:		22172611.0	10 May 2022 (10.05.2022)	EP
19 December 2022 (19.12.2022)		22172615.1	10 May 2022 (10.05.2022)	EP
(25) Filing Language:		22172617.7	10 May 2022 (10.05.2022)	EP
English		22172619.3	10 May 2022 (10.05.2022)	EP
(26) Publication Language:		22194793.0	09 September 2022 (09.09.2022)	EP
English		22194800.3	09 September 2022 (09.09.2022)	EP
(30) Priority Data:		22194808.6	09 September 2022 (09.09.2022)	EP
21216268.9	21 December 2021 (21.12.2021)	22194815.1	09 September 2022 (09.09.2022)	EP
21216269.7	21 December 2021 (21.12.2021)	22194818.5	09 September 2022 (09.09.2022)	EP
21216270.5	21 December 2021 (21.12.2021)	22201672.7	14 October 2022 (14.10.2022)	EP
21216271.3	21 December 2021 (21.12.2021)	63/416,091	14 October 2022 (14.10.2022)	US
21216286.1	21 December 2021 (21.12.2021)	22202183.4	18 October 2022 (18.10.2022)	EP
21216292.9	21 December 2021 (21.12.2021)	22211421.7	05 December 2022 (05.12.2022)	EP

(54) Title: ENVIRONMENTAL ATTRIBUTES FOR PLASTIC ADDITIVES

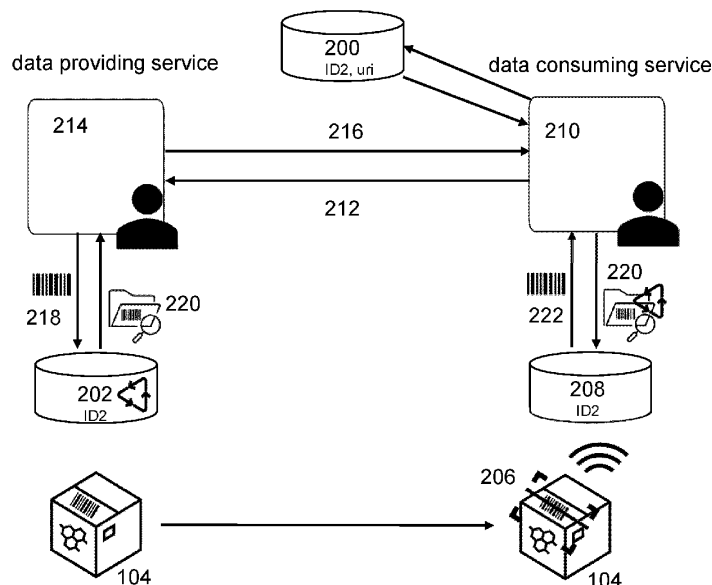


Fig. 4

(57) Abstract: Disclosed are systems for producing a plastic additive associated with a digital asset, methods for producing a plastic additive associated with a digital asset, apparatuses for generating a digital asset, computer-implemented methods for generating a chemical passport, computer program elements for generating a digital asset, uses of a plastic additive associated with a digital asset, uses of a digital asset, products produced from the plastic additive and associated with a digital asset, a digital asset including one or more decentral identifier(s) and data related to the environmental impact data, apparatuses for producing a product associated with the digital asset and methods for producing a product associated with the digital asset.

[Continued on next page]

- (71) **Applicant:** BASF SE [DE/DE]; Carl-Bosch-Strasse 38, 67056 Ludwigshafen am Rhein (DE).
- (72) **Inventors:** GRUMBRECHT, Bastian; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE). KLOSTERHALFEN, Steffen; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE). ANDERLOHR, Christopher Alec; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE). KRÜGER, Christian; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE). BINDER, Martin; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE). ALBA PEREZ, Ana; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE). WENZL, Kurt; Pfalzgrafenstraße 1, 67056 Ludwigshafen (DE). LEED, Marina Grace Dickens; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE). LOISEL, Katell; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE). DOWLING, Zachary Thomas; 100 Park Avenue, Florham Park, New Jersey 07932 (US). BARTH, Natalie; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE). PISTILLO, Alessandro; Carl-Bosch-Straße 38, 67056 Ludwigshafen (DE).
- (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