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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 August 2025 (14.08.2025)

WIPO | PCT

(10) International Publication Number
WO 2025/171016 A1

(51) International Patent Classification:
A23N 12/12 (2006.01) *A23N 12/10* (2006.01)

(21) International Application Number:
PCT/US2025/014606

(22) International Filing Date:
05 February 2025 (05.02.2025)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/549,815 05 February 2024 (05.02.2024) US

(71) Applicant: **BELLWETHER COFFEE CO.** [US/US]; 1710 4th Street, Berkeley, California 94710 (US).

(72) Inventors; and

(71) Applicants: **RIVE, Peter** [—/PT]; c/o Bellwether Coffee Co., 1710 4th Street, Berkeley, California 94710 (US). **SANDHU, Jasvir** [US/US]; c/o Bellwether Coffee Co., 1710 4th Street, Berkeley, California 94710 (US). **LOPEZ, Ricardo** [US/US]; c/o Bellwether Coffee Co., 1710 4th Street, Berkeley, California 94710 (US). **SCHMEHL, Peter** [US/US]; c/o Bellwether Coffee Co., 1710 4th Street, Berkeley, California 94710 (US). **SCHMEHL, Stewart** [US/US]; c/o Bellwether Coffee Co., 1710 4th Street, Berkeley, California 94710 (US). **WRIGHT, William** [—/US]; c/o Bellwether Coffee Co., 1710 4th Street, Berkeley, California 94710 (US). **LEELHASUWAN, Parinya N.** [—/US]; c/o Bellwether Coffee Co., 1710 4th Street, Berkeley, California 94710 (US). **FRENCH, William Henry, III** [—/US]; c/o Bellwether Coffee Co., 1710 4th Street, Berkeley, California 94710 (US).

(74) Agent: **HUTTER, Christopher** et al.; Cooley LLP, Attn: IP Docketing, 1299 Pennsylvania Avenue, NW, Suite 700, Washington, District of Columbia 20004 (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,

(54) Title: SINGLE-BATCH AND MULTI-BATCH CONVERTIBLE ROASTING APPARATUS AND METHODS

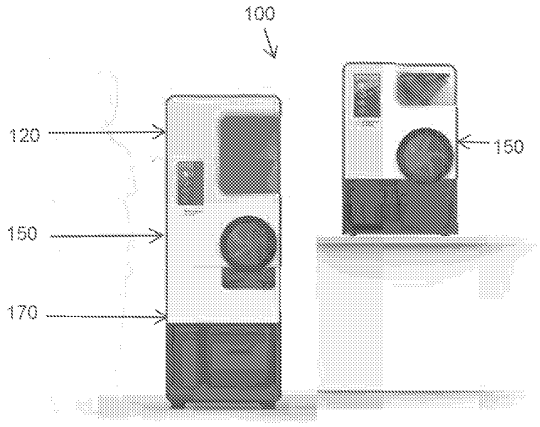


FIG. 3

(57) Abstract: An apparatus according to an embodiment includes a bean roaster core, an autoloader configured to be removably coupled to the bean roaster core, and a bulk receiver configured to be removably coupled to the bean roaster core. The bean roaster core includes a roasting drum and a recirculating air subsystem fluidically coupled to the roasting drum, and has a single-batch configuration and a multi-batch configuration. The bean roaster core is in the multi-batch configuration when the autoloader is removably coupled to the bean roaster core. The autoloader is not removably coupled to the bean roaster core when the bean roaster core is in the single-batch configuration. The bulk receiver is configured to receive a product or a byproduct of a roasting process from the bean roaster core when the bean roaster core is in the multi-batch configuration and the bulk receiver is removably coupled to the bean roaster core.

WO 2025/171016 A1

[Continued on next page]

TJ, TM, TN, TR, TT, TZ, UA, UG, US, UY, 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).

Published:

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