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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
13 August 2020 (13.08.2020)

WIPO | PCT

(10) International Publication Number
WO 2020/163426 A1

(51) International Patent Classification:
B65B 7/28 (2006.01) *B65B 7/16* (2006.01)

(21) International Application Number:
PCT/US2020/016709

(22) International Filing Date:
05 February 2020 (05.02.2020)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
16/269,342 06 February 2019 (06.02.2019) US

(71) Applicant: **OWENS-BROCKWAY GLASS CONTAINER INC.** [US/US]; One Michael Owens Way, Perrysburg, OH 43551 (US).

(72) Inventors: **CHISHOLM, Brian, J.**; 6131 White Eagle W., Sylvania, OH 43560 (US). **BROZELL, Brian, J.**; 7201 Elli Harbour Lane, Maumee, OH 43537 (US).

(74) Agent: **SCHARF, Stephen, L.**; OWENS-BROCKWAY GLASS CONTAINER INC., One Michael Owens Way, Perrysburg, OH 43551 (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, 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, 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).

Published:
— *with international search report (Art. 21(3))*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(54) **Title:** COOLING SEALED PACKAGES AFTER HOT FILLING AND SEALING

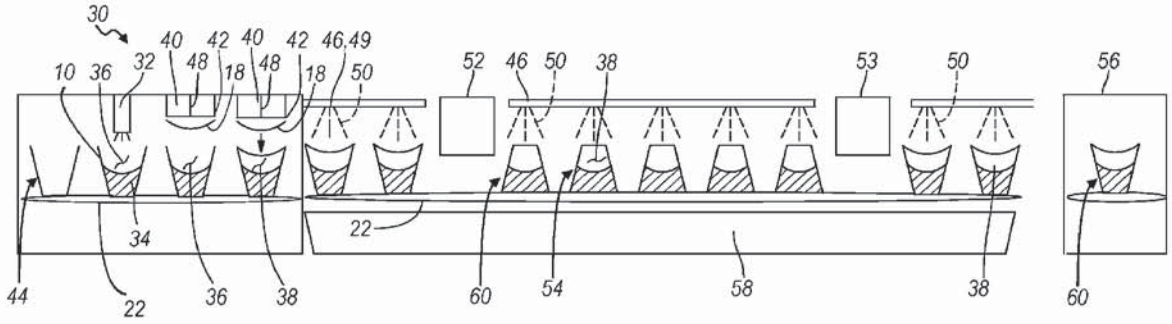


FIG. 2

(57) **Abstract:** A method of sealing a foil liner (18) to a hot-filled container (10) includes the steps of aligning a liner engagement surface (42) of a seal head (40) with a liner sealing surface (14) of the container when the container is in a first position, wherein at least a peripheral margin (20) of the foil liner is disposed between the liner engagement and sealing surfaces of the seal head and the container, respectively; applying heat between the seal head and the container to heat and attach the foil liner and the sealing surface of the container, resulting in a sealed package (60); rotating the sealed package from the first position to a second position; and applying fluid onto at least a portion of the sealed package to cool a head space (38) of the sealed package. The head space is disposed between an inner surface (16) of the container and a product (34) packaged in the sealed package.

WO 2020/163426 A1