

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
05 June 2025 (05.06.2025)



(10) International Publication Number
WO 2025/117792 A3

(51) International Patent Classification:

B29C 65/18 (2006.01) *B65B 69/00* (2006.01)
B29C 65/78 (2006.01) *B65B 51/30* (2006.01)
B65B 9/02 (2006.01)

(21) International Application Number:

PCT/US2024/057815

(22) International Filing Date:

27 November 2024 (27.11.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/603,139 28 November 2023 (28.11.2023) US

(71) Applicant: **AMGEN INC.** [US/US]; c/o Amgen Inc.,
One Amgen Center Drive, Thousand Oaks, California
91320-1799 (US).

(72) Inventor: **JENSEN, Jan Mikael**; c/o Amgen Inc.,
One Amgen Center Drive, Thousand Oaks, California
91320-1799 (US).

(74) Agent: **LEE, Eunice**; c/o Amgen Inc., One Amgen Center
Drive, Thousand Oaks, California 91320-1799 (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,

(54) Title: AUTOMATED SYSTEMS AND METHODS FOR FOIL PACKAGING COMPONENTS

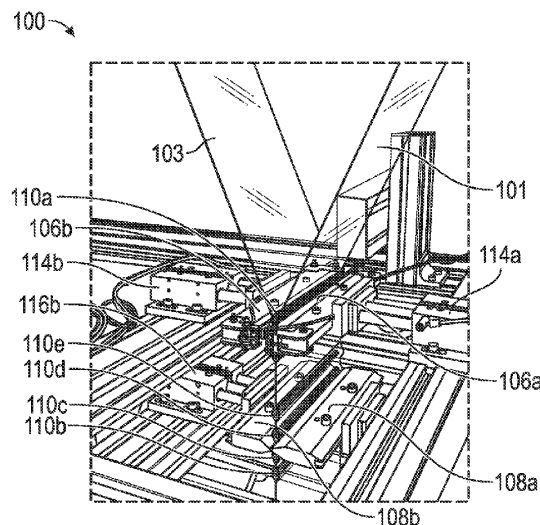


FIG. 3A

(57) Abstract: System (100) and method of foil packaging components of a drug delivery device (110), e.g. autoinjector, pen injector, involving introducing first and second sheets of foil (101, 103) into a welding assembly with welding bars (106a, 106b), welding the sheets of foil (101, 103) together to form a first weld (112), providing a pen injector component (110) between the sheets of foil (101, 103) above the first welded, moving the sheets of foil (101, 103) downwards, and welding the first and second sheets of foil (101, 103) together to form a second weld (112) above the pen injector component (110). This can provide a foil packaging (120) with the pen injector components (110). Also disclosed is a system (200) and method for unloading or unpacking the foil packaged components of drug delivery device (110) which involves pushing a rod (210) between the welds in the foil packaging (120).

[Continued on next page]

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, 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).

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))*

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))*

(88) Date of publication of the international search report:

03 July 2025 (03.07.2025)