

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
23 March 2023 (23.03.2023)



(10) International Publication Number
WO 2023/042063 A1

- (51) International Patent Classification:
B29D 11/00 (2006.01) *B29C 45/26* (2006.01)
- (21) International Application Number:
PCT/IB2022/058587
- (22) International Filing Date:
12 September 2022 (12.09.2022)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
63/243,988 14 September 2021 (14.09.2021) US
- (71) Applicant: **ALCON INC.** [CH/CH]; Rue Louis-d'Affry 6,
1701 Fribourg (CH).
- (72) Inventors: **SCHWAB, Matthias**; c/o CIBA Vision GmbH,
Industriering 1, 63868 Grosswallstadt (DE). **BRAUN,**
Matthias; c/o CIBA Vision GmbH, Industriering 1, 63868
Grosswallstadt (DE). **BIEL, Roger**; c/o CIBA Vision
GmbH, Industriering 1, 63868 Grosswallstadt (DE). **SCH-**

WEIZER, Nils; c/o CIBA Vision GmbH, Industriering 1,
63868 Grosswallstadt (DE). **GOLLAS, Nicholas**; c/o CI-
BA Vision GmbH, Industriering 1, 63868 Grosswallstadt
(DE). **ZONG, Shu**; c/o Ciba Vision GmbH, Industriering 1,
63868 Grosswallstadt (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, 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,

(54) Title: PRODUCTION LINE FOR THE PRODUCTION OF OPHTHALMIC LENSES

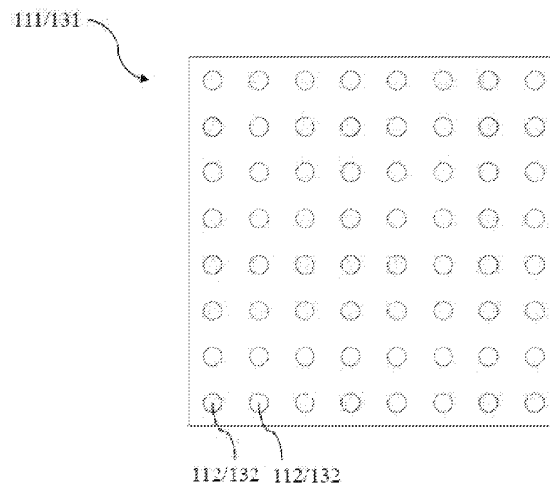


Fig. 5

(57) Abstract: An automated production line for the production of ophthalmic lenses comprises: - a production line front end comprising: - a first and a second injection-molding machine, - a casting module, - a filling station and a capping station, - a stacking module and a curing module, - a destacking module and a demolding and delensing module - a production line back end comprising: - a treatment module, - an inspection module, wherein self-driving shuttles in the inspection module can form a queue and act as a buffer for the primary packaging module if an interruption of the primary packaging module and variations of the cycle time in the primary packaging module are buffered so that the extraction module is able to operate largely independently from the upstream and downstream components of the manufacturing line.

[Continued on next page]

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).

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))*
- *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*