

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
19 June 2025 (19.06.2025)



(10) International Publication Number
WO 2025/126027 A1

(51) International Patent Classification:

B31F 1/07 (2006.01) *B31F 1/36* (2006.01)
B31D 5/00 (2017.01) *A24D 3/02* (2006.01)
A24D 3/04 (2006.01) *A24D 3/08* (2006.01)
A24D 3/10 (2006.01)

(21) International Application Number:

PCT/IB2024/062418

(22) International Filing Date:

10 December 2024 (10.12.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

PCT/IB2023/062474

11 December 2023 (11.12.2023) IB

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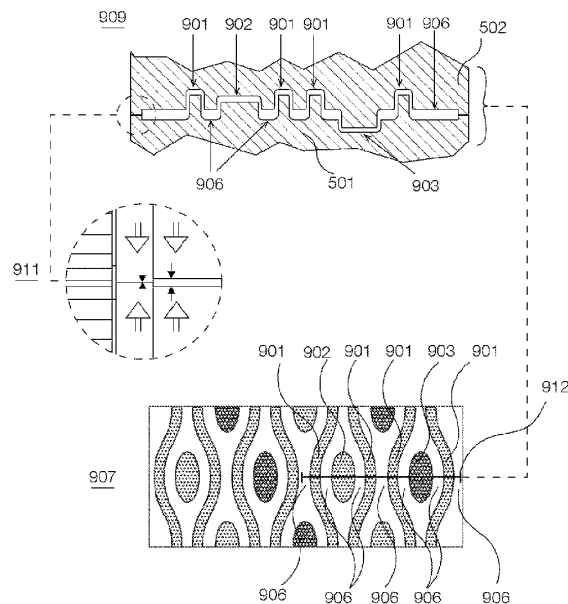
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(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, 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: A METHOD AND SET-UP FOR MANUFACTURING AN EMBOSSED SHEET OF MATERIAL AND OBTAINING A CONTROLLED MATERIAL THICKNESS AND A FILTERING ELEMENT

FIG.9a



(57) Abstract: A method for manufacturing an embossed sheet of material and obtaining a controlled material thickness, the embossed sheet of material being configured to obtain a filtering element configured for an inhalable drug delivery device, and for filtering a mainstream gas flow passing through the filtering element. The method comprises embossing the sheet of material at least with embossing features by means of an embossing rollers system in which embossing features formed on a first base surface of a first embossing roller and corresponding embossing features formed on a second base surface of a second embossing roller are in a congruence with each other, the embossing features comprising profile embossing features configured for embossing at least an aerodynamic profile on the sheet of material, configured to modify in a determined manner flow properties for the mainstream gas flow passing through the filtering element by creating a gas flow turbulence occurrence in the filtering element; embossing the sheet of material with separating

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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).

Published:

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

base surface zones located between embossing features, and corresponding to the first base surface and the second base surface. For each embossing feature the corresponding congruence is configured to be such that for a first subset of the embossing features, corresponding protrusion and recess embossing features located respectively on different embossing rollers have a value of height of the protrusion embossing feature greater than a value of depth of the recess embossing feature; thereby configuring a width of the nip between the first and the second embossing rollers, which has a first nip width value for the separating base surface zones, and different nip width values smaller than the first nip width value for embossing features of the first subset of the embossing features; thereby enabling to obtain the controlled material thickness of the embossed sheet of material with respectively a first value of the material thickness when the sheet of material is embossed with the separating base surface zones, and different values of the material thickness smaller than the first value of the material thickness when the sheet of material is embossed with embossing features of the first subset of the embossing features.