



(51) International Patent Classification:

B29C 64/106 (2017.01) *B29C 64/386* (2017.01)
B01L 3/00 (2006.01) *B29C 64/393* (2017.01)
B29C 64/343 (2017.01) *B33Y 30/00* (2015.01)

(21) International Application Number:

PCT/CA2022/051855

(22) International Filing Date:

16 December 2022 (16.12.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/290,595 16 December 2021 (16.12.2021) US

(71) Applicant: **ASPECT BIOSYSTEMS LTD.** [CA/CA];
1781 W 75th Ave, Vancouver, British Columbia V6P 6P2
(CA).

(72) Inventors: **BEYER, Simon**; 1781 W 75th Ave, Vancouver,
British Columbia V6P 6P2 (CA). **STEINER, Sebastian**;
1781 W 75th Ave, Vancouver, British Columbia V6P 6P2
(CA). **WILFART, Florentin**; 1781 W 75th Ave, Vancou-

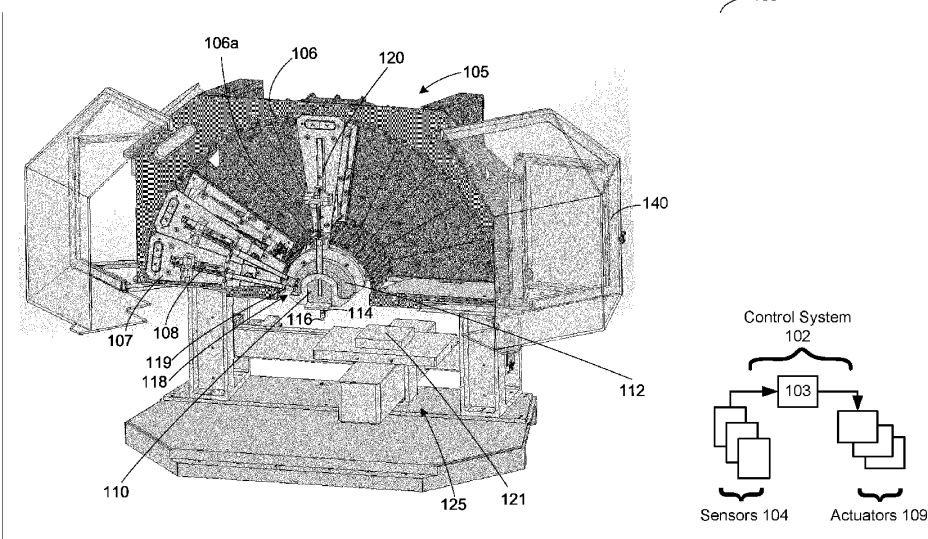
ver, British Columbia V6P 6P2 (CA). **LAIDLAW, Shaun**;
1781 W 75th Ave, Vancouver, British Columbia V6P 6P2
(CA). **BROWN, Keddie**; 1781 W 75th Ave, Vancouver,
British Columbia V6P 6P2 (CA). **XU, Zhensong**; 1781 W
75th Ave, Vancouver, British Columbia V6P 6P2 (CA).
PERSSON, Henrik; 1781 W 75th Ave, Vancouver, British
Columbia V6P 6P2 (CA). **HAKIMI, Navid**; 1781 W 75th
Ave, Vancouver, British Columbia V6P 6P2 (CA). **LOOK-
ER, Adam**; 34 Owen Avenue, Gananoque, Ontario K7G
2V4 (CA).

(74) Agent: **SALISBURY, Clare** et al.; Gowling WLG (Canada) LLP, 550 Burrard Street, Suite 2300, Bentall 5, Vancouver, British Columbia V6C 2B5 (CA).

(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, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS,

(54) Title: RADIAL PUMP ASSEMBLY AND METHODS OF USING SAME

FIG. 1A



(57) Abstract: Aspects of the disclosure include a pump assembly comprising a plurality of pumps (e.g. syringe pumps) positioned in a radial array on a mounting bracket. In embodiments, each syringe pump of the plurality of syringe pumps comprises a housing comprising a syringe retainer and a plunger driver. The pump assembly serves to minimize internal volume when used as part of a multi-channel microfluidic bioprinting system.

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