

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
15 September 2022 (15.09.2022)



(10) International Publication Number
WO 2022/189987 A1

(51) International Patent Classification:

A61N 5/01 (2022.01) A61B 17/34 (2022.01)
A61N 5/10 (2022.01)

TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(21) International Application Number:

PCT/IB2022/052084

(22) International Filing Date:

09 March 2022 (09.03.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/159,499 11 March 2021 (11.03.2021) US

Published:

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

(71) Applicant: **ALPHA TAU MEDICAL LTD.** [IL/IL]; 5 Kiryat HaMada Street, 9777605 Jerusalem (IL).

(72) Inventors: **MAGEN, Ofer**; 9 Alexander Pen Street, 4541509 Hod Hasharon (IL). **ZELLNER, Or**; 10 Hovavei Zion Street, 6314812 Tel Aviv-Yaffo (IL). **MAKOVSKY, Sraya**; 30 Ben Zvi Street, 9903032 Beit Shemesh (IL). **KELSON, Itzhak**; 94 Dizengoff Street, 6439606 Tel Aviv (IL).

(74) Agent: **KLIGLER & ASSOCIATES PATENT ATTORNEYS LTD.**; P.O. Box 57651, 6157601 Tel Aviv (IL).

(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, 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,

(54) Title: **RADIOTHERAPY APPLICATOR**

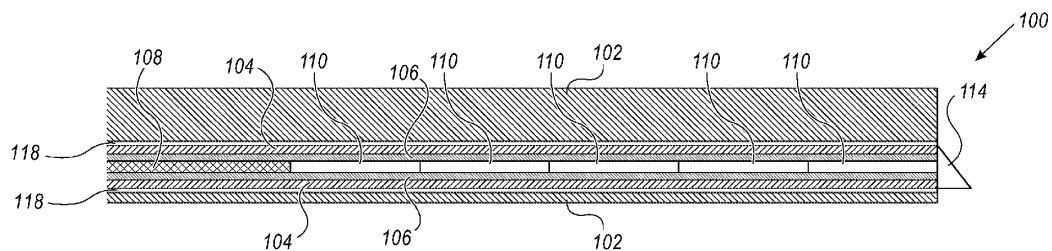


FIG. 1

(57) Abstract: An applicator for delivery of radiotherapy seeds to a tumor of a patient through an elongate needle (104). The elongate needle comprises a needle handle (204) and a needle tube having a given length for insertion into the patient. The applicator comprises an elongate applicator tube (106) designed to pass through the elongate needle, wherein the elongate applicator tube defines an internal channel which receives one or more radiotherapy seeds (110), an applicator handle (210) configured to be attached to the needle handle (204); and a stylet (108) within the elongate applicator tube. The elongate applicator tube is longer than the elongate needle.

WO 2022/189987 A1