

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
19 May 2023 (19.05.2023)



(10) International Publication Number
WO 2023/086439 A1

- (51) **International Patent Classification:**
A61F 2/10 (2006.01) *A61F 2/00* (2006.01)
- (21) **International Application Number:**
PCT/US2022/049490
- (22) **International Filing Date:**
10 November 2022 (10.11.2022)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
17/523,472 10 November 2021 (10.11.2021) US
- (71) **Applicant: LORIA PRODUCTS LLC [US/US];** 3625 NW 82nd Avenue, Suite 402, Miami, Florida 33166 (US).
- (72) **Inventor: LORIA, Victor;** 3625 NW 82nd Avenue, Suite 402, Miami, Florida 33166 (US).
- (74) **Agent: SLOMOWITZ, Scott, M.;** CAESAR RIVISE, PC, 7 Penn Center, 12th Floor, 1635 Market Street, Philadelphia, Pennsylvania 19103 (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, 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,

(54) **Title: HAIR IMPLANTS COMPRISING ENHANCED ANCHORING AND MEDICAL SAFETY FEATURES**

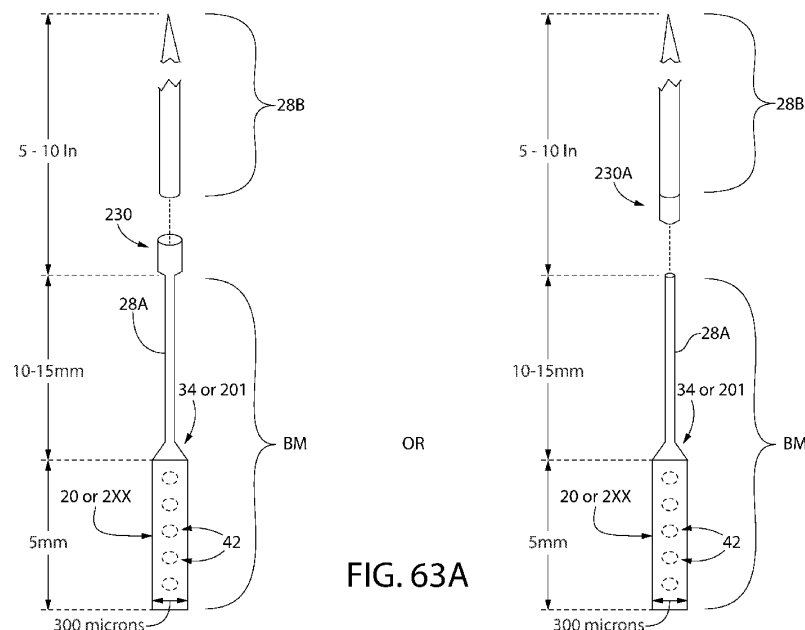


FIG. 63A

(57) **Abstract:** A hair implant having an anchor comprising an anchor body, and at least one collagen receiving structure selected from the group of at least one tunnel through the anchor body or an anchor body external surface feature. The anchor includes at least one hair strand projecting from an anchor body distal end and may include a bend, wherein the at least one collagen receiving structure, or the external surface feature, support collagen ligature growth after hair implant implantation for anchoring in the recipient. The hair implant includes a two-part construction having a base module formed of the anchor body and at least one hair stem for coupling with a long hair strand. Another alternative includes a hair strand first end that is passed through the skin, underneath and then up through the skin at another location to result in the hair strand having two portions projecting from the skin surface.

[Continued on next page]

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))*
- *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))*