

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
13 August 2020 (13.08.2020)



(10) International Publication Number
WO 2020/163145 A1

- (51) **International Patent Classification:**
A61F 2/24 (2006.01)
- (21) **International Application Number:**
PCT/US2020/015798
- (22) **International Filing Date:**
30 January 2020 (30.01.2020)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
62/801,598 05 February 2019 (05.02.2019) US
- (71) **Applicant: EDWARDS LIFESCIENCES CORPORATION** [US/US]; One Edwards Way, Irvine, CA 92614 (US).
- (72) **Inventors: YANG, Yimin;** Edwards Lifesciences, One Edwards Way, Legal Department, Irvine, CA 92614 (US).
- (74) **Agent: HO, Pui, Tong et al.;** Edwards Lifesciences, One Edwards Way, Irvine, CA 92614 (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, 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, 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, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ,

(54) **Title:** PROSTHETIC HEART VALVE WITH SUTURE LOOP PREVENTING MEMBER

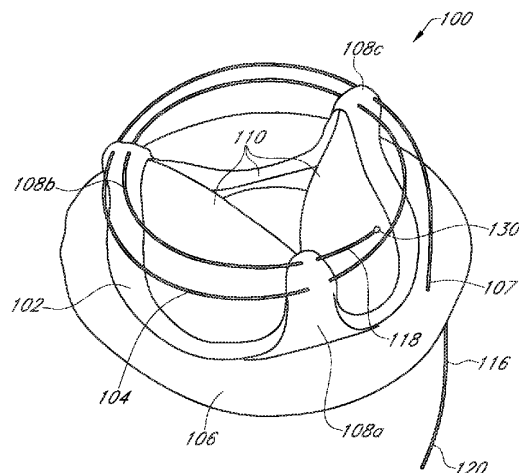


FIG. 4

(57) **Abstract:** A prosthetic heart valve system includes a prosthetic heart valve having an inflow side, and an outflow side. The heart valve further includes a base at the inflow side, a plurality of commissure posts and valve leaflets secured to the commissure posts to permit flow through the heart valve. An antidoop member has a first portion on the inflow side of the heart valve and a second portion on the outflow side of the heart valve. The second portion of the antidoop member is arranged along each commissure post at the tip of each commissure post, and arranged along at least one commissure post twice to form a loop around all of the commissure posts. The antidoop member is made of a material sufficiently flexible to be removed from the commissure posts without damaging the heart valve yet rigid enough to retain its shape when coming in contact with sutures.

[Continued on next page]



WO 2020/163145 A1

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).

Published:

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