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- (71) **Applicant: EDWARDS LIFE SCIENCES CORPORATION** [US/US]; One Edwards Way, Irvine, CA 92614 (US).
- (72) **Inventors: BIALAS, Michael, R.;** Edwards Lifesciences, One Edwards Way, Legal Department, Irvine, CA 92614 (US). **HICKS, Kristen;** Edwards Lifesciences, One Edwards Way, Legal Department, Irvine, CA 92614 (US). **MURAD, Michael, C.;** Edwards Lifesciences, One Edwards Way, Legal Department, Irvine, CA 92614 (US). **SENESH, Gil;** Edwards Lifesciences, One Edwards Way, Legal Department, Irvine, CA 92614 (US). **VU, Quang,**

Ngoc; Edwards Lifesciences, One Edwards Way, Legal Department, Irvine, CA 92614 (US). **ANGELICO, Gonzalo, German;** Edwards Lifesciences, One Edwards Way, Legal Department, Irvine, CA 92614 (US). **CERQUEIRA, Carla, Susana;** Edwards Lifesciences, One Edwards Way, Legal Department, Irvine, CA 92614 (US). **LOW, Victoria, Mariko;** 204 Trailblaze, Irvine, CA 92618 (US). **FERNANDEZ, Andrea;** 8215 East White Oak Ridge, Unite 59, Orange, CA 92869 (US). **BRITZMAN, Karl, J.;** Edwards Lifesciences, One Edwards Way, Legal Department, Irvine, CA 92614 (US). **HOYE, Shannon, Nicole;** Edwards Lifesciences, One Edwards Way, Legal Department, Irvine, CA 92614 (US). **WHITEHEAD, Haley, Nicole;** Edwards Lifesciences, One Edwards Way, Legal Department, Irvine, CA 92614 (US).

- (74) **Agent: GERMAN, Joel, B. et al.;** Edwards Life Sciences, One Edwards Way, Irvine, CA 92614 (US).

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- (54) **Title:** METHODS AND SYSTEMS FOR ALIGNING A COMMISSURE OF A PROSTHETIC HEART VALVE WITH A COMMISSURE OF A NATIVE VALVE

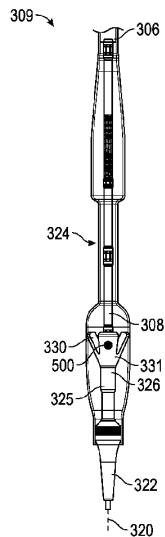


FIG. 28

(57) **Abstract:** Methods and systems for rotationally aligning a commissure of a prosthetic heart valve with a commissure of a native valve are disclosed. As one embodiment, a delivery apparatus can include a first shaft that is configured to rotate around a central longitudinal axis of the delivery apparatus; a second shaft extending through the first shaft and having a distal end portion extending distally beyond a distal end portion of the first shaft; an inflatable balloon coupled to the distal end portion of the first shaft; and a shoulder arranged within the balloon and a radiopaque marker mounted on or embedded within the shoulder at a location spaced radially outward from an outer surface of the distal end portion of the second shaft. The marker can be reflection asymmetric along an axis that is parallel to the central longitudinal axis.

NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW,
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