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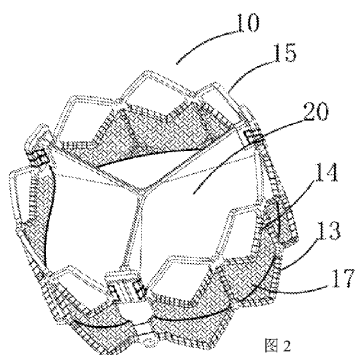
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本国际公布:

— 包括国际检索报告 (条约第 21 条 (3))。

(54) Title: CONNECTING STRUCTURE OF STENT AND VALVE LEAFLET AND INTERVENTIONAL VALVE-IN-VALVE AND INTERVENTIONAL AORTIC VALVE APPLYING CONNECTING STRUCTURE

(54) 发明名称: 一种支架和瓣叶的连接结构及应用该连接结构的介入瓣中瓣和介入主动脉瓣



(57) Abstract: A connecting structure of a stent (10) and valve leaflets (20), and an interventional valve-in-valve and an interventional aortic valve applying the connecting structure. The stent (10) is a metal mesh tube, the valve leaflets (20) are three fan-shaped leaflets (20) disposed inside of the stent; the three fan-shaped leaflets (20) each have a free edge (21), an arc-shaped bottom edge (22) and a leaflet boundary connecting portion (23) extending on both sides. Three connecting posts (11) are evenly distributed on the metal mesh tube, and the boundary connecting portion (23) of the fan-shaped leaflet (20) comprises a radially folding connecting portion (231) and an axially folding connecting portion (232). The radially folding connecting portion (231) of each fan-shaped leaflet (20) passes through a connecting post (11) from inside to outside and then folds, and the axially folding connecting portion (232) folds inside of the connecting post (11) and is then connected by a suture and fixed to the connecting post (11). The connecting structure of the stent (10) and the valve leaflet (20) can avoid the concentration of stress when the valve leaflets (20) open and close as well as the friction produced between the valve leaflets (20) and the stent (10), thereby achieving a hemodynamic effect similar to that of a biological valve, as well as similar durability.

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(57) 摘要：一种支架(10)和瓣叶(20)的连接结构及应用该连接结构的介入瓣中瓣和介入主动脉瓣。其中的支架(10)为金属网管，瓣叶(20)为三个设置于该支架内侧的扇形瓣叶(20)，三个扇形瓣叶(20)均具有游离缘(21)、弧形底边(22)以及延伸于两侧的瓣叶交界连接部(23)。金属网管上均布有三个连接柱(11)，扇形瓣叶(20)的交界连接部(23)包括径向翻转连接部(231)和轴向翻转连接部(232)。每一扇形瓣叶(20)的径向翻转连接部(231)穿过连接柱(11)从内侧穿向外侧后翻折、轴向翻转连接部(232)在连接柱(11)内侧翻折后再由缝线连接并固定于该连接柱(11)。该支架(10)和瓣叶(20)的连接结构可避免瓣叶(20)开启与关闭时的应力集中和与支架(10)之间产生摩擦，实现了与生物瓣相近的血流动力学效果和类似的耐久性功能。