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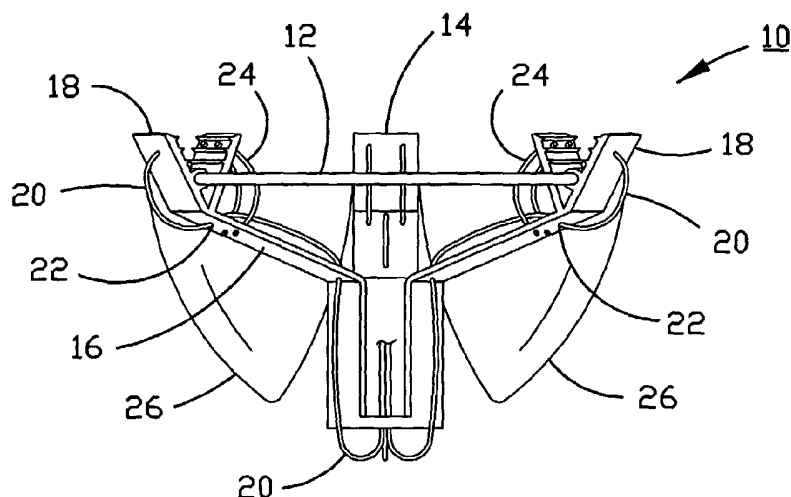
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[Continued on next page]

(54) Title: PERCUTANEOUS HEART VALVE



(57) Abstract: A percutaneously inserted bistable heart valve prosthesis (10) is folded inside a catheter for transseptal delivery to the patient's heart for implantation. The heart valve (10) has an annular ring (12), a body member (14) having a plurality of legs (16), each leg (16) connecting at one end to the annular ring (12), claws (18) that are adjustable from a first position to a second position by application of external force so as to allow ingress of surrounding heart tissue into the claws (18) in the second position, and leaflet membranes connected to the annular ring (12), the body member (14) and/or the legs (16), the leaflet membranes having a first position for blocking blood flow therethrough and a second position for allowing blood flow therethrough. The heart valve (10) is designed such that upon removal of the external force the claws (18) elastically revert to the first position so as to grip the heart tissue positioned within the claws (18), thereby holding the heart valve (10) in place.. The heart valve (10) may be used as a prosthesis for the mitral valve, aortic valve, pulmonary valve, or tricuspid valve by adapting the annular ring to fit in a respective mitral, aortic, pulmonary, or tricuspid valve opening of the heart.



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/23211

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61F 2/24

US CL : 623/2.12, 2.14, 2.16, 2.22

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 623/2.12, 2.14, 2.16, 2.22

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,759,759 A (WALKER et al.) 26 July 1998 (26.07.1998), Abstract, column 5 and lines 14-36.	1-24
A	US 6,494,909 B2 (GREENHALGH) 17 December 2002 (17.12.2002), Abstract, column 1, lines 51-67, column 2 and lines 1-30.	1-24
A	US 6,517,576 B2 (GABBAY) 11 February 2003 (11.02.2003), Abstract, column 1, lines 66 and 67, column 2 and lines 1-19.	1-24

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:

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