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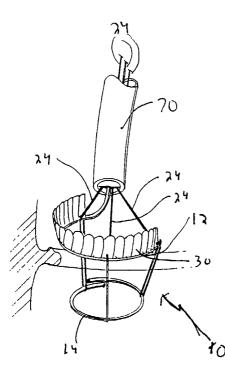
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(54) Title: PERCUTANEOUS AORTIC VALVE



(57) Abstract: The present invention provides a valve configured for insertion on the proximal and distal sides of a heart valve annulus to replace the heart valve of a patient. The valve comprises a first substantially annular portion adapted to be positioned on a proximal side of the annulus of a patient and a second substantially annular portion adpated to be positioned on a distal side of the annulus of a patient, wherein at least one of the first and second substantially annular portions is movable towards the other portion to a clamped position to clamp around the annulus. The second portion has a flow restricting portion extending therefrom and is movable between a first position to permit the flow of blood and a second position to restrict the flow of blood. Ine one embodiment, the valve has a suture joining the first and second portions to draw the first and second portions into closer proximity and a cinch member to secure the suture to maintain the first and second portions in the clamped position. In another embodiment, the first and second portions are connected by a first segment which biases the first and second portions toward the clamped position.



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INTERNATIONAL SEARCH REPORT

International Application No PCT/US 01/43879

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61F2/24 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) IPC 7 A61F A61B 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 practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Category 6 Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Α US 5 957 949 A (GREENAN TREVOR ET AL) 1,17 28 September 1999 (1999-09-28) column 5, line 11 -column 6, line 34; figures Α FR 1 386 811 A (SURGITOOL INC) 1 22 January 1965 (1965-01-22) claims; figures P,A US 6 287 339 B1 (CAMPBELL LOUIS A ET AL) 1,6,7,17 11 September 2001 (2001-09-11) claims; figures Α EP 0 920 842 A (KARPENKO VLADIMIR 1,17 LEONIDOVICH ; KRUCHININ BORIS PETROVICH (RU)) 9 June 1999 (1999-06-09) paragraph '0001!; claim 26; figures -/---Further documents are listed in the continuation of box C. Patent family members are listed in annex. ° Special categories of cited documents: *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. other means document published prior to the international filing date but later than the priority date claimed *&* document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 27 June 2002 05/07/2002 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Neumann, E Fax: (+31-70) 340-3016

INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT								
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.						
A	US 5 976 174 A (RUIZ CARLOS E) 2 November 1999 (1999-11-02)							

International application No. PCT/US 01/43879

INTERNATIONAL SEARCH REPORT

Box I	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This Inte	ernational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. χ	Claims Nos.: 20–24 because they relate to subject matter not required to be searched by this Authority, namely:
	Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
2.	Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
з	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This Inte	ernational Searching Authority found multiple inventions in this international application, as follows:
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1.	As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2.	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4.	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
	restricted to the invention in structured in the claims, it is covered by claims Nos.:
Remark	The additional search fees were accompanied by the applicant's protest.
	No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
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