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(71) Applicant: **THE REGENTS OF THE UNIVERSITY OF MICHIGAN** [US/US]; Office of Technology Transfer, 1600 Huron Parkway, 2nd Floor, Ann Arbor, MI 48109-2590 (US).

(72) Inventors; and

(71) Applicants : **PARODI, Juan** [AR/AR]; Don Basco 3235 San Isidro, Pcia. Bs As, Buenos Aires 1642 (AR). **BERGUER, Ramon** [US/US]; 5755 Bloomfield Glens Rd., West Bloomfield, MI 48322 (US).

(74) Agent: **KRIEGEL, Jeremy, R.**; Marshall, Gerstein & Borun LLP, 233 S. Wacker Drive, 6300 Wills Tower, Chicago, IL 60606-6357 (US).

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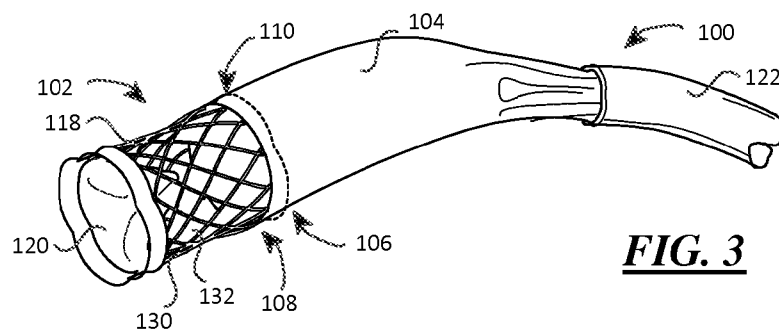
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(54) Title: SYSTEM AND METHOD TO LIMIT CEREBRAL ISCHEMIA



**FIG. 3**

(57) Abstract: A system to limit cerebral ischemia occurring as a consequence of aortic valve replacement includes an aortic valve having proximal and distal ends, a sleeve having proximal and distal ends, the proximal end of the sleeve disposed at the distal end of the aortic valve, and a filter attached to the distal end of the sleeve to receive blood and particles passing from the proximal end of the sleeve to the distal end of the sleeve and to separate the particles from the blood. A related method includes introducing a system into a heart of a patient, the system comprising an aortic valve having proximal and distal ends and a sleeve having a proximal end disposed at the distal end of the valve, implanting the valve in an aortic valve annulus, and filtering blood that has passed through the valve into the sleeve.



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2014/062427

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61F 2/24 (2014.01)

CPC - A61F 2/2418, 2/013 (2014.12)

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(8) - A61F 2/01, 2/24; A61B 17/12 (2014.01)

CPC - A61F 2/013, 2/2418; A61 B17/12109 (2014.12) (keyword delimited)

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

USPC - 623/2.1, 1.26; 606/200

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

PatBase, Google Patents, Google Scholar

Search terms used: aortic valve replacement, aortic valve filter, cerebral ischemia filter

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2005/0015112 A1 (COHN et al) 20 January 2005 (20.01.2005) entire document	1-4,8-13,15-20
Y		5-7,14
Y	US 2008/0033459 A1 (SHAFI et al) 07 February 2008 (07.02.2008) entire document	5-7
Y	US 2002/0032468 A1 (HILL et al) 14 March 2002 (14.03.2002) entire document	14
A	US 2008/0195199 A1 (KHERADVAR et al) 14 August 2008 (14.08.2008) entire document	1-20
A	US 2004/0093060 A1 (SEGUIN et al) 13 May 2004 (13.05.2008) entire document	1-20

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

## \* Special categories of cited documents:

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents  
P.O. Box 1450, Alexandria, Virginia 22313-1450

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Authorized officer:

Blaine R. Copenheaver

PCT Helpdesk: 571-272-4300

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