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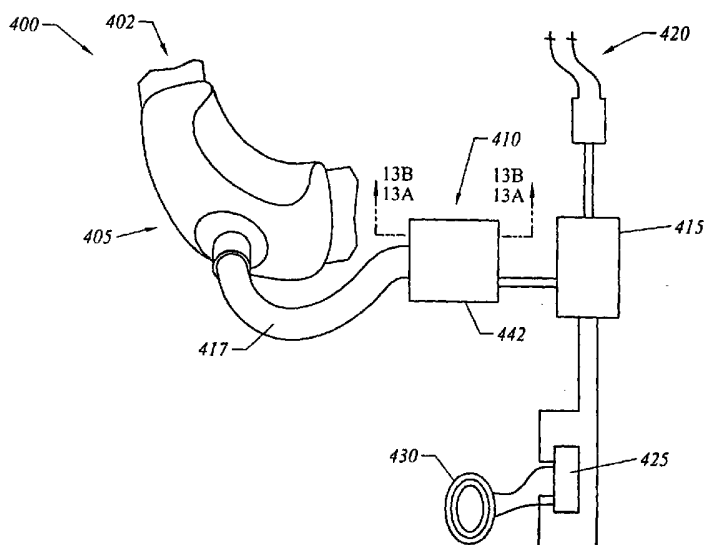
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[Continued on next page]

(54) Title: VASCULAR ASSIST DEVICE AND METHODS



(57) Abstract: Several electroactive polymer actuated vascular assist devices are provided that can be readily implanted within the body of a patient without coming in direct blood contact, including a vascular assist device (405) and a pump (410). The devices are also readily repositioned and/or removed from contact with the internal vasculature or may even be turned off remotely. In addition, there is provided a method of fabrication and a method of implanting such devices. There are also provided methods for the augmentation of a body lumen through the use of hemodynamic signals such as pressure or ECG signals to synchronize EAP actuation in the vascular assist system



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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US CL : 600/16

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. : 600/16-18

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.
Y, E	US 2004/0068220 A1 (Couvillon et al) 08 April 2004 (08.04.2004), See abstract.	182-186,190-192,197
Y, E	US 2004/0167375 A1 (Couvillon) 26 August 2004 (26.08.2004), See abstract.	86,88-99,182-186,188,190-192,194,197
A, P	US 2004/0010180 A1 (Scorvo) 15 January 2004 (15.01.2004), See entire document.	1-197
A, P	US 2003/0117044 A1 (Urano et al) 26 June 2003 (26.06.2003), See entire document.	1-197
A	US 6,376,971 B1 (Peltine et al) 23 April 2002 (23.04.2002), See entire document.	1-197
A, E	US 6,749,556 B2 (Banik) 15 June 2004 (15.06.2004), See entire document.	1-197



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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
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