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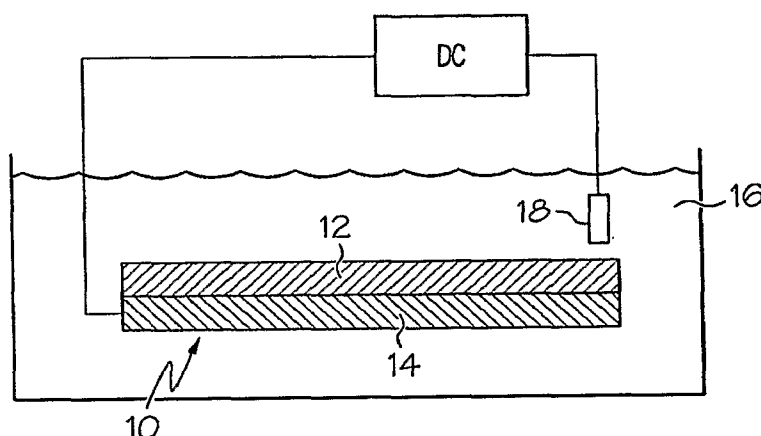


FIG. 1

(57) Abstract: Medical devices or components thereof having electroactive polymer actuators embedded within at least a portion of the device or component thereof, and novel electroactive polymer actuators formed with a conductive substrate layer and an electroactive polymer layer, the electroactive polymer actuated upon application of a voltage to surrounding liquid electrolyte, the actuators may be embedded within an inert polymer matrix material, or within solid polyelectrolyte matrix material.

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/005195

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61L29/14

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)

A61F A61L A61M

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, COMPENDEX, EMBASE, INSPEC, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 03/049658 A (COCHLEAR LTD [AU]; WALLACE GORDON [AU]; SPINKS GEOFF [AU]; ZHOU DEZHI) 19 June 2003 (2003-06-19) page 10, lines 2-25 page 12, lines 4-14 claims 3,7-10,17,21	1,2,6-8, 11
X	MAZZOLDI A ET AL: "CONDUCTIVE POLYMER BASED STRUCTURES FOR A STEERABLE CATHETER" PROCEEDINGS OF THE SPIE, SPIE, BELLINGHAM, VA, vol. 3987, 6 March 2000 (2000-03-06), pages 273-280, XP008019508 ISSN: 0277-786X page 278 "6. Realization of monolithic micro-actuator" figure 5	1,5,7-11

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

☒ See patent family annex.

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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.
X	<p>US 2005/165439 A1 (WEBER JAN [US] ET AL) 28 July 2005 (2005-07-28) paragraphs [0074], [0075], [0112]; figure 25</p> <p>-----</p>	<p>1,3,4, 12-25</p>

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 03049658	A	19-06-2003	NONE
US 2005165439	A1	28-07-2005	CA 2554197 A1 11-08-2005
			EP 1708778 A1 11-10-2006
			JP 2007521871 T 09-08-2007
			WO 2005072809 A1 11-08-2005