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(54) Title: METHOD AND SYSTEM FOR TREATING ACUTE HEART FAILURE BY NEUROMODULATION

(57) Abstract: Methods and systems of treating acute heart failure by applying a therapy signal at least one sympathetic cardiopulmonary fiber surrounding the pulmonary trunk that affects heart contractility more than heart rate. Methods and systems also include adjusting the signal to effectuate treatment.

INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC(8) - A61N 1/00; A61N 1/362 (2008.01)  
 USPC - 607/116, 607/9 600/17  
 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)  
 ICP(8): A61N 1/00; A61N 1/362 (2008.01)  
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
 USPC: 607/116, 115, 48, 2, 6, 9, 600/17 16 (text search)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 PubWEST(USPT,PGPB,EPAB,JPAB); DialogPRO(Engineering/Life Science Research); Google Scholar

Search Terms: *sympathetic, neuromodulation, heart, inotropic, pulmonary artery nerves, cardiac contractility*

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2006/0085046 A1 (REZAI et al.) 20 April 2006 (20.04.2006). entire document, especially paras [0012], [0027], [0038].	1-25
Y	Ardell, JL et al. Differential sympathetic regulation of automatic, conductile, and contractile tissue in dog heart. IN: Amer. J. Physiol. November 1988. Vol. 255 No. 5 (Pt 2) Pages: H1050 -H1059. Entire Document, especially abstract and Fig. 8	1-25
Y	US 2006/0058597 A1 (MACHADO et al.) 16 April 2006 (16.04.2006). entire document, especially paras [0005], [0014].	9, 18-21, 25

Further documents are listed in the continuation of Box C.

* 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 invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means	
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