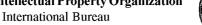
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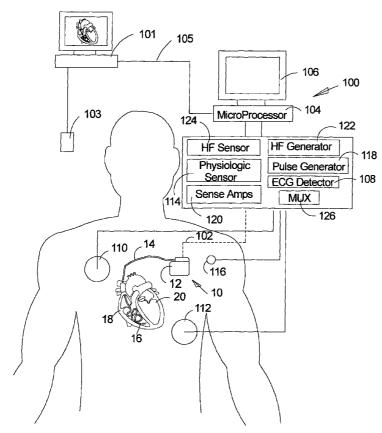
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[Continued on next page]

(54) Title: MULTI-ELECTRODE APPARATUS AND METHOD FOR TREATMENT OF CONGESTIVE HEART FAILURE



(57) Abstract: An apparatus (100) and method for treatment of congestive heart failure from the right side of the heart. An implantable cardiac stimulation system (10) with a multi-electrode lead (14) having three or more selectable electrodes (E1, E2....En), together with apparatus for identifying an optimal subset of electrodes (114, 120, 124, 104), apparatus for shaping a propagating wave front, and apparatus for modifying the intrinsic ventricular cardiac activation sequence (104, 108, 118, 122, 126), or generating simultaneous or near simultaneous pacing pulses to the septum or right ventricular outflow tract during ventricular systole in order to improve left ventricular cardiac efficiency and reduce mitral regurgitation in patients with dilated cardiomyopathy. A three dimensional map of electrode placement may be calculated. A sub set of the available electrodes in the right side of the heart is selected for stimulation such that septal motion during systole is reduced or the mitral valve area is stiffened to reduce mitral regurgitation.

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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 ap	propriate, of the relevant passages	Relevant to claim No.
<b>X</b>	US 5,800,465 A (THOMPSON et al) 01 September 1998, see entire		1-2, 18-53, 62-69
	document.		3-17, 54-61
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