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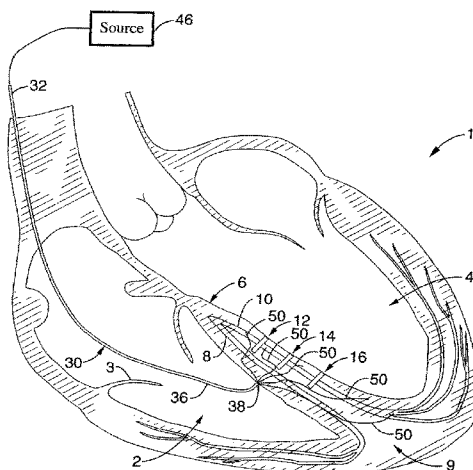
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(54) Title: CARDIAC STIMULATION SYSTEM AND METHOD



(57) Abstract: A cardiac stimulation assembly includes an energy (46) source coupled to an energy emitter (50) that extends from a delivery member (30) into a region of tissue in the heart. An array of the emitters (50) are adapted to extend from a delivery assembly and into unique locations along the region of tissue, such as by use of extendable, pre-shaped needles. A volume of conductive agent (18) is delivered into the region and enhances stimulation of the region with the energy emitter (50). The agent may be an injectable preparation of living cells that express production of connexin, e.g. connexin 43, and may be genetically modified to over-express such production. The agent may include a non-living material, such as conductive polymer of metal or combination thereof. The combination of energy emitters (50) and conductive agent (18) enhances stimulation of the region. Delivering the stimulation assembly and conductive agent into the interventricular septum allows for improved biventricular septal pacing.