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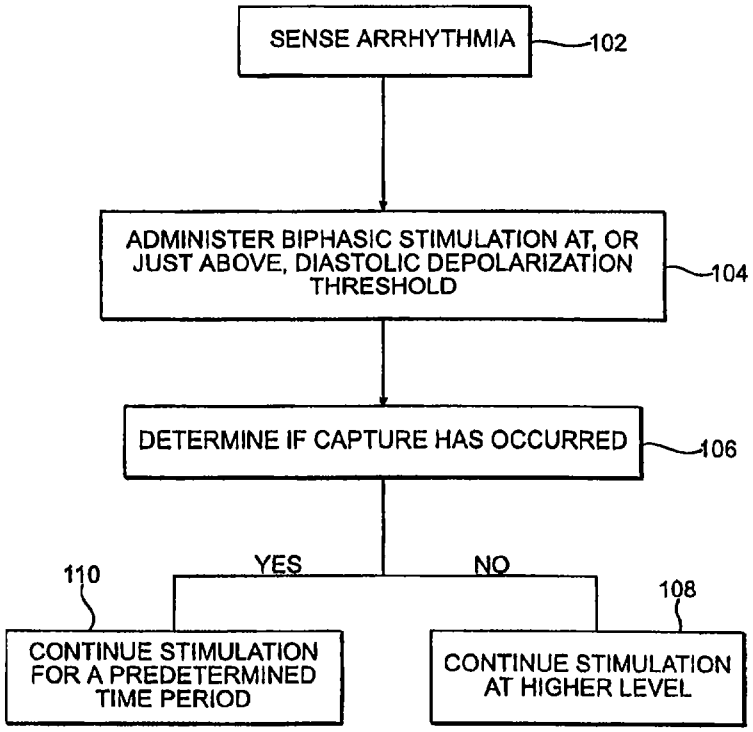


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(54) Title: ANTITACHYCARDIAL PACING

(57) Abstract

Protocols for antitachycardial pacing including biphasic stimulation administered at, or just above, the diastolic depolarization the shold potential; biphasic or conventional stimulation initiated at, or just above, the diastolic depolarization threshold potential, reduced, upon capture, to below threshold; and biphasic or conventional stimulation administered at a level set just below the diastolic depolarization threshold potential. These protocols result in reliable cardiac capture with a lower stimulation level, thereby causing less damage to the heart, extending battery life, causing less pain to the patient and having greater therapeutic effectiveness. In those protocols using biphasic cardiac pacing, a first and second stimulation phase is administered. The first stimulation phase has a predefined polarity, amplitude and duration. The second stimulation phase also has a predefined polarity, amplitude and duration. The two phases are applied sequentially. Contrary to current trought, anodal stimulation is first applied and followed by cathodal stimulation. In this fashion, pulse conduction through the cardiac muscle is improved together with the increase in contractility.





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