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(54) **NEUROSTIMULATION IN A NEURAL FULCRUM ZONE FOR THE TREATMENT OF CHRONIC CARDIAC DYSFUNCTION**

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CPC A61N 1/36; A61N 1/05; A61N 1/04; A61N 1/362; A61N 1/18; A61N 1/32
See application file for complete search history.

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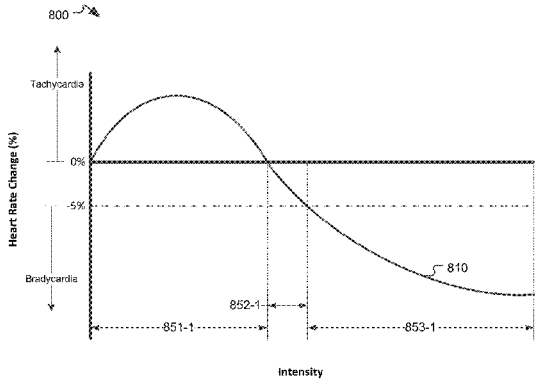
(57) **ABSTRACT**

Systems and methods are provided for delivering neurostimulation therapies to patients for treating chronic heart failure. A neural fulcrum zone is identified and ongoing neurostimulation therapy is delivered within the neural fulcrum zone. This neural fulcrum zone corresponds to a combination of stimulation parameters at which autonomic engagement is achieved, while the tachycardia-inducing stimulation effects are offset by the bradycardia-inducing effects, thereby minimizing side effects such as significant heart rate changes while providing a therapeutic level of stimulation.

27 Claims, 7 Drawing Sheets