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Libbus et al.

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(54) **CARDIAC RHYTHM MANAGEMENT
DEVICE WITH NEURAL SENSOR**

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This patent is subject to a terminal dis-
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See application file for complete search history.

(57) **ABSTRACT**

Various aspects of the present subject matter relate to a device. In various embodiments, the device comprises at least one port adapted to connect to at least one lead, a CRM functions module connected to the port and adapted to provide at least one CRM function using the lead, a neural function module, and a controller connected to the CRM functions module and the neural function module. The at least one CRM function includes a function to provide an electrical signal to the lead to capture cardiac tissue. The neural function module includes a signal processing module connected to the port and adapted to receive and process a nerve traffic signal from the lead into a signal indicative of the nerve traffic. The controller is adapted to implement a CRM therapy based on the signal indicative of the nerve traffic. Other aspects are provided herein.

12 Claims, 15 Drawing Sheets

