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Scarantino et al.

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(54) **METHODS, COMPUTER PROGRAM PRODUCTS, AND DEVICES FOR CALIBRATING CHRONICALLY TISSUE IMPLANTED SENSORS USING CHRONICALLY TISSUE**

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(58) **Field of Classification Search** None
See application file for complete search history.

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(57) **ABSTRACT**

Calibration of in vivo oxygen and pH sensor systems can be performed by generating a constituent element of an environment proximate to an in vivo sensor electrode via an in vivo generating electrode and determining a level of the constituent element in the tissue via the in vivo sensor electrode. Accordingly, accurate monitoring of tissue can be achieved while reducing the need to calibrate the in vivo sensor systems using invasive procedures. Related electrode assemblies are also discussed.

44 Claims, 27 Drawing Sheets

