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Black et al.

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(54) **FLANGED SELF-CLOSING MICROCHANNEL ARRAY**

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CPC **A61N 1/0556** (2013.01); **A61B 5/04001** (2013.01); **A61B 5/4851** (2013.01)

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See application file for complete search history.

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(57) **ABSTRACT**
Devices and methods for implanting neural interface technology in mammals are provided. A device can include an array of self-closing channels; two flanges that flank the array of channels, the flanges can be used to open the self-closing channels; and a plurality of cuff electrodes disposed at a circumference of each self-closing channel, the plurality of cuff electrodes being optimally disposed to detect a maximum amplitude of an action potential signal.

12 Claims, 13 Drawing Sheets

