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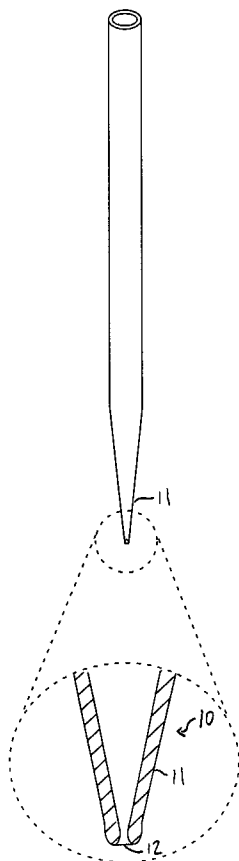
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(54) Title: PIPETTE CONFIGURATIONS AND ARRAYS THEREOF FOR MEASURING CELLULAR ELECTRICAL PROPERTIES



(57) Abstract: The present application is directed to pipette configurations, arrays of the same and methods for using such pipettes and arrays to accomplish electrical measurements, including whole cell and on cell measurements. In one aspect of the present invention, a pipette includes a hollow tubular section having a distal portion and a tip portion. A bubble is formed at the tip and includes an interior chamber in communication with the hollow tubular section at an end adjacent to the bubble portion. The bubble may have a diameter greater than the diameter of an adjacent portion of the hollow tubular section. An aperture is formed between the internal chamber and an exterior surface of the bubble to accommodate seal formation. In a second aspect of the present invention, a method for forming a glass pipette of the present invention is provided which includes the following steps: (1) heating a glass tube, (2) pulling the glass tube to form a blunt tip, (3) heating the blunt tip, and (4) applying back pressure from the tube to form a bubble including an aperture from the blunt tip.

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