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Tillmann et al.

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(54) **DEVICE FOR THE SIMULTANEOUS APPLICATION OF ELECTRICAL SIGNALS AND MEASUREMENT OF THE ELECTRICAL POTENTIAL IN A SAMPLE**

(75) Inventors: **Axel Tillmann**, Aldenhoven (DE); **Andreas Kemna**, Düsseldorf (DE); **Egon Zimmermann**, Inden-Altdorf (DE); **Walter Glaas**, Elsdorf (DE); **Arre Verweerd**, Aachen (DE)

(73) Assignee: **Forschungszentrum Julich GmbH**, Julich (DE)

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(52) **U.S. Cl.** **324/715**; 324/713

(58) **Field of Classification Search** 324/715, 324/691, 713, 723, 724, 354, 355, 72.5
See application file for complete search history.

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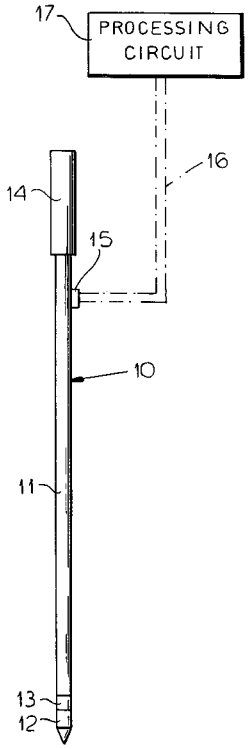
Primary Examiner—Anjan Deb
Assistant Examiner—John Teresinski
(74) *Attorney, Agent, or Firm*—Andrew Wilford

(57) **ABSTRACT**

An electrode, in the form of a spike, for insertion into a sample, has a large-area jacket adapted for applying an excitation current to the sample and a small-area tip electrically decoupled from the jacket, at which a potential measurement is made.

7 Claims, 4 Drawing Sheets