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Tavkhelidze et al.

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(54) **PROCESS FOR MAKING ELECTRODE PAIRS**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 425 days.

This patent is subject to a terminal disclaimer.

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Related U.S. Application Data

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(58) **Field of Classification Search** 29/25.02, 29/831, 842, 847; 427/250; 438/455
See application file for complete search history.

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(57) **ABSTRACT**

The present invention is a process for making a matching pair of surfaces, which involves creating a network of channels on one surface of two substrate. The substrates are then coated with one or more layers of materials, the coating extending over the regions between the channels and also partially into the channels. The two coated surfaces are then contacted and pressure is applied, which causes the coatings to be pressed into the network of channels, and surface features on one of the layers of material creates matching surface features in the other, and vice versa. It also results in the formation of a composite. In a final step, the composite is separated, forming a matching pair of surfaces.

17 Claims, 2 Drawing Sheets