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(54) Title: TAILORABLE ELECTRODE CAPPING FOR MICROFLUIDIC DEVICES

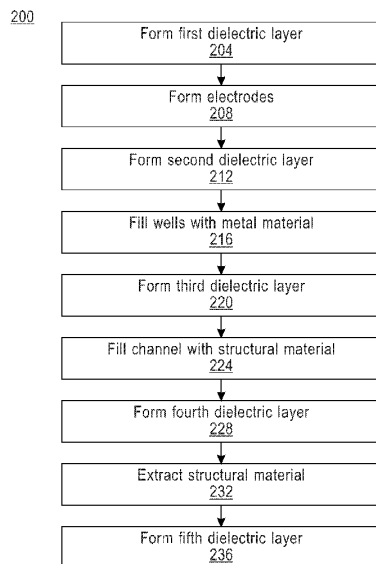


FIG. 2

(57) Abstract: A method of forming a microfluidic device is disclosed. The method includes forming a first dielectric layer on a substrate, forming electrodes partially into the first dielectric layer, and forming a second dielectric layer on the electrodes. The method includes filling, with a metal material, two wells formed in the second dielectric layer such that the metal material is in direct contact with the electrodes. The method includes forming a third dielectric layer on the metal material and second dielectric layer. The method includes filling, with a structural material, a channel formed between the wells such that the structural material does not directly contact the electrodes. The method includes forming a fourth dielectric layer on the third dielectric layer and the structural material, extracting the structural material through at least one vent hole in the fourth dielectric layer, and forming a fifth dielectric layer on the fourth dielectric layer.

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