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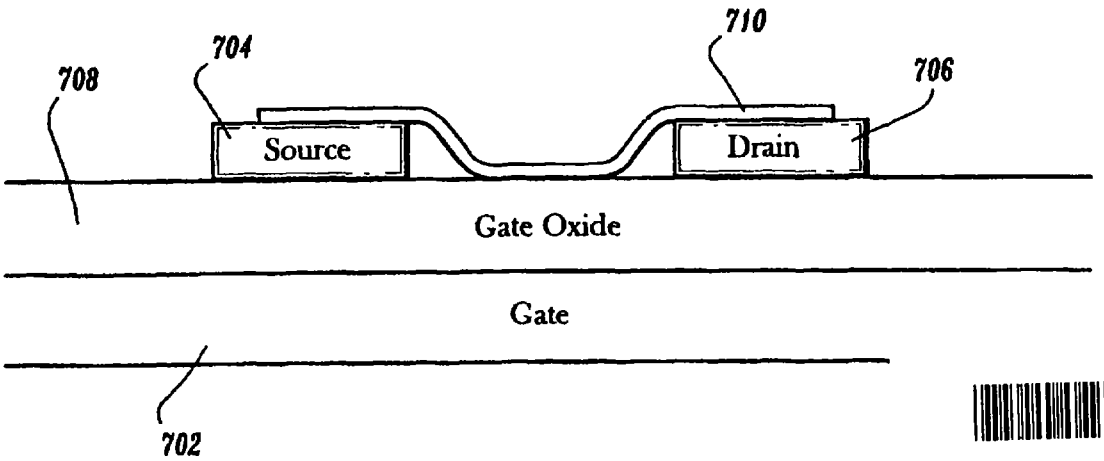
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(54) Title: SYSTEM AND METHOD FOR ELECTRICALLY INDUCED BREAKDOWN OF NANOSTRUCTURES



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(57) Abstract: A method is provided for forming a device. The method provides an insulating substrate including a source electrode, a drain electrode, and a gate electrode. The method provides carbon nanotube bundles including metallic and semiconducting component nanotubes in contact with the substrate. The method applies a voltage to the gate electrode to deplete the semiconducting component nanotubes of carriers, applies an electrical current through the nanotube, from a source electrode to a drain electrode, and breaks at least one metallic component nanotube to form a field effect transistor. The carbon nanotube bundle can be a multi-walled nanotube or a single-walled nanotube rope.

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