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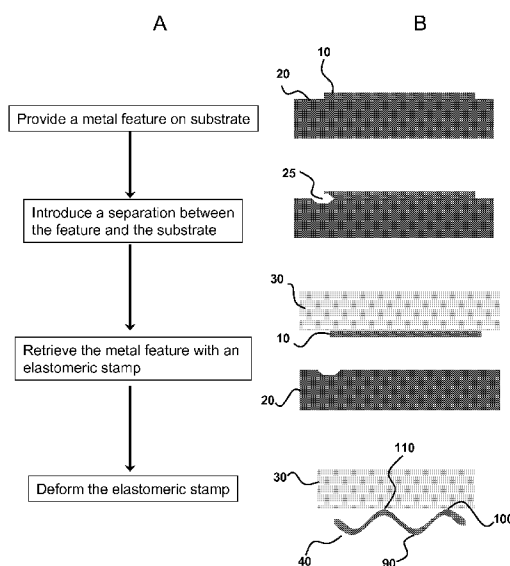
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(54) Title: CONTROLLED BUCKLING STRUCTURES IN SEMICONDUCTOR INTERCONNECTS AND NANOMEMBRANES FOR STRETCHABLE ELECTRONICS



(57) Abstract: In an aspect, the present invention provides stretchable, and optionally printable, components such as semiconductors and electronic circuits capable of providing good performance when stretched, compressed, flexed or otherwise deformed, and related methods of making or tuning such stretchable components. Stretchable semiconductors and electronic circuits preferred for some applications are flexible, in addition to being stretchable, and thus are capable of significant elongation, flexing, bending or other deformation along one or more axes. Further, stretchable semiconductors and electronic circuits of the present invention are adapted to a wide range of device configurations to provide fully flexible electronic and optoelectronic devices.

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