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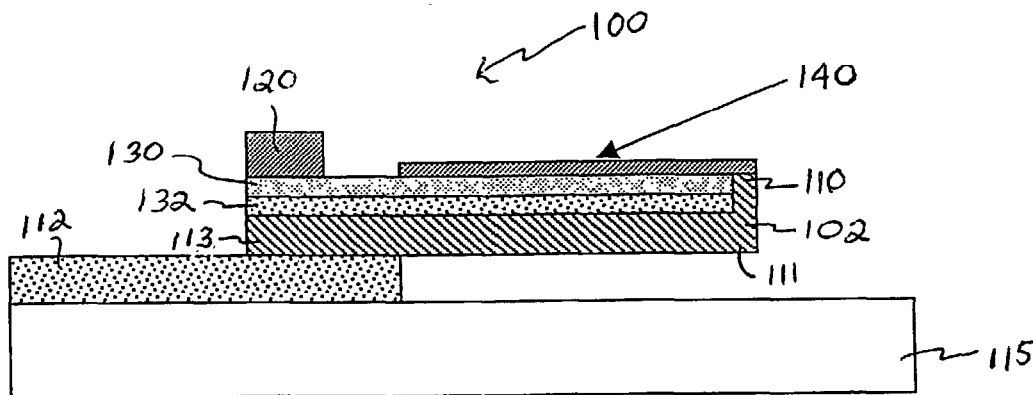
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(54) Title: TUNABLE CANTILEVER APPARATUS AND METHOD FOR MAKING SAME



(57) Abstract: Mass distribution within programmable surface control devices is controlled by the presence or absence of an electrodeposition of metal and/or metal ions from a solid solution upon application of a suitable electric field. One such programmable surface control device includes a tunable cantilever assembly (100) whose resonant frequency is changed by depositing and dissolving an electrodeposit (140) on a surface of a solid electrolyte layer (130) using an electric field applied between sacrificial electrode (120) and conducting cantilever tip (110).



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