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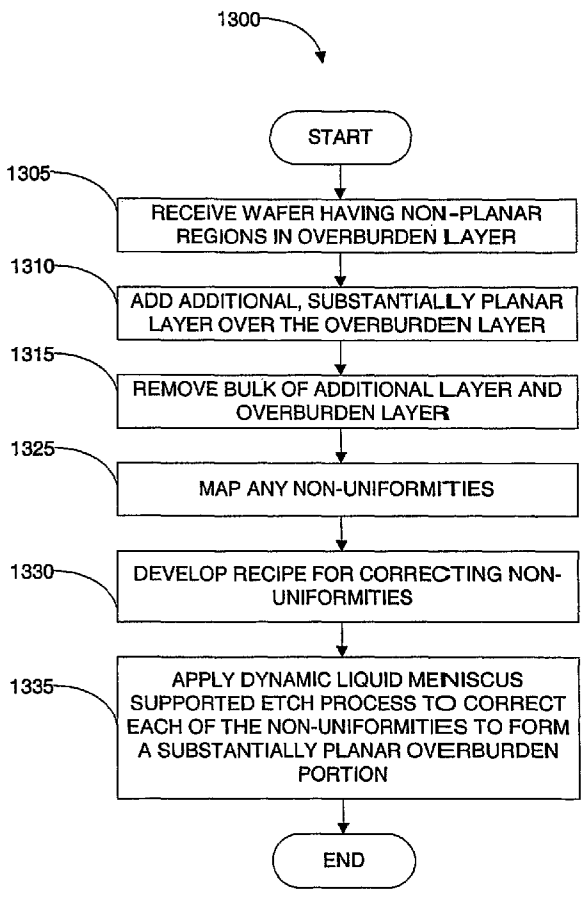
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(54) Title: STRESS FREE ETCH PROCESSING IN COMBINATION WITH A DYNAMIC LIQUID MENISCUS



(57) Abstract: A system and method for planarizing and controlling non-uniformity on a patterned semiconductor substrate includes receiving a patterned semiconductor substrate. The patterned semiconductor substrate having a conductive interconnect material filling multiple features in the pattern. The conductive interconnect material having an overburden portion. A bulk of the overburden portion is removed and a remaining portion of the overburden portion has a non-uniformity. The non-uniformity is mapped, optimal solution determined and a dynamic liquid meniscus etch process recipe is developed to correct the non-uniformity. A dynamic liquid meniscus etch process, using the dynamic liquid meniscus etch process recipe, is applied to correct the non-uniformity to substantially planarize the remaining portion of the overburden portion.

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