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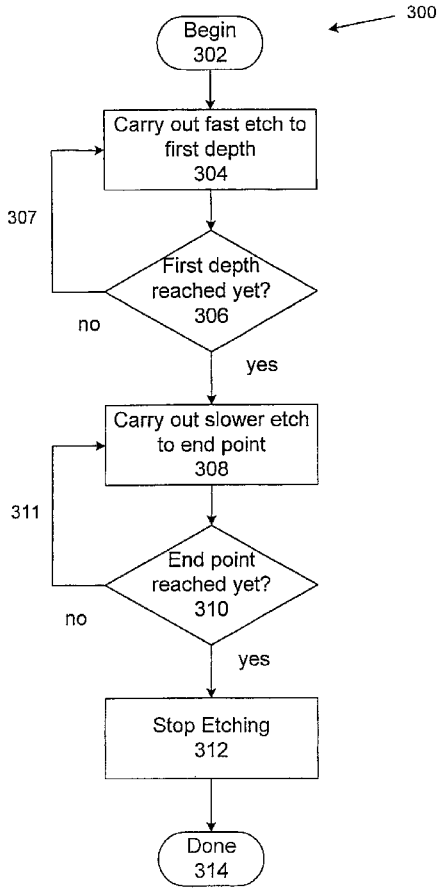
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(54) Title: APPARATUS AND METHOD FOR CONTROLLING ETCH DEPTH



(57) Abstract: An apparatus and method for etching a feature in a wafer with improved depth control and reproducibility is described. The feature is etched at a first etching rate and then at a second etching rate, which is slower than the first etching rate. An optical end point device is used to determine the etching depth and etching is stopped so that the feature has the desired depth. Two different etching rates provides high throughput with good depth control and reproducibility. The apparatus includes an etching tool in which a chuck holds the wafer to be etched. An optical end point device is positioned to measure the feature etch depth. An electronic controller communicates with the optical end point device and the etching tool to control the tool to reduce the etch rate part way through etching the feature and to stop the etching tool, so that that the feature is etched to the desired depth.

WO 2004/030050 A3

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