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(54) Title: POST APPLICATION/EXPOSURE TREATMENTS TO IMPROVE DRY DEVELOPMENT PERFORMANCE OF METAL-CONTAINING EUV RESIST

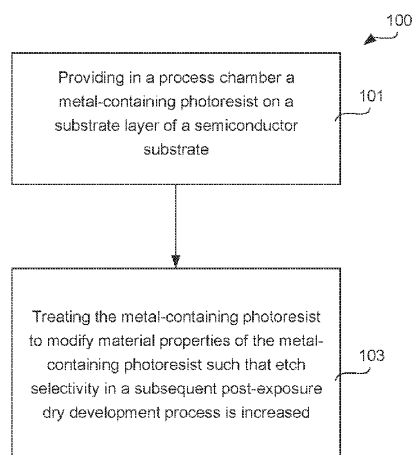


FIG. 1

(57) Abstract: Various embodiments described herein relate to methods, apparatus, and systems for treating metal-containing photoresist to modify material properties of the photoresist. For instance, the techniques herein may involve providing a substrate in a process chamber, where the substrate includes a photoresist layer over a substrate layer, and where the photoresist includes metal, and treating the photoresist to modify material properties of the photoresist such that etch selectivity in a subsequent post-exposure dry development process is increased. In various embodiments, the treatment may involve exposing the substrate to elevated temperatures and/or to a remote plasma. One or more process conditions such as temperature, pressure, ambient gas chemistry, gas flow/ratio, and moisture may be controlled during treatment to tune the material properties as desired.

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