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(54) **Title**: PLASMA-ACTIVATED DEPOSITION OF CONFORMAL FILMS

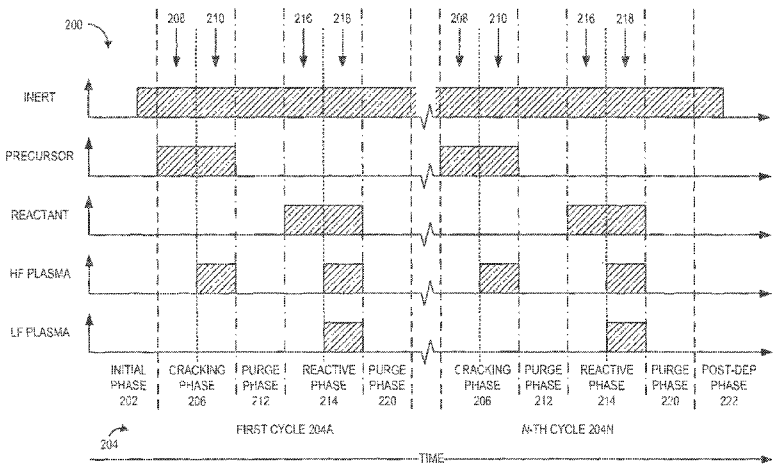


FIG. 2

(57) **Abstract**: Methods and hardware for depositing thin conformal films using plasma-activated conformal film deposition (CFD) processes are described herein. In one example, a method for forming a thin conformal film comprises, in a first phase, generating precursor radicals off of a surface of the substrate and adsorbing the precursor radicals to the surface to form surface active species; in a first purge phase, purging residual precursor from the process station; in a second phase, supplying a reactive plasma to the surface, the reactive plasma configured to react with the surface active species and generate the thin conformal film; and in a second purge phase, purging residual reactant from the process station.

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