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(54) Title: METHODS FOR MAKING NEARLY PLANAR DIELECTRIC FILMS IN INTEGRATED CIRCUITS

(57) Abstract: In the fabrication of integrated circuits, one specific technique for making surfaces flat is chemical-mechanical planarization. However, this technique is quite time consuming and expensive, particularly as applied to the numerous intermetal dielectric layers - the insulative layers sandwiched between layers of metal wiring - in integrated circuits. Accordingly, the inventor devised several methods for making nearly planar intermetal dielectric layers without the use of chemical-mechanical planarization and methods of modifying metal layout patterns to facilitate formation of dielectric layers with more uniform thickness. These methods of modifying metal layouts and making dielectric layers can be used in sequence to yield nearly planar intermetal dielectric layers with more uniform thickness.