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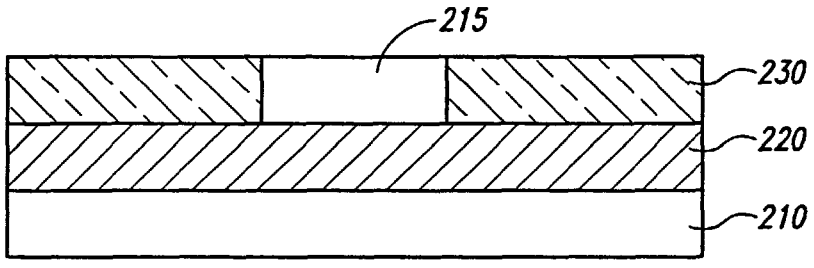
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(54) Title: METHOD FOR MULTILEVEL COPPER INTERCONNECTS FOR ULTRA LARGE SCALE INTEGRATION



(57) Abstract: A method of manufacturing integrated circuits using a thin metal oxide film (220) as a seed layer for building multilevel interconnects structures in integrated circuits. Thin layer metal oxide films (220) are deposited on a wafer (210), and standard optical lithography is used to expose the metal oxide film (220) in a pattern corresponding to a metal line pattern (215). The metal oxide film (220) is converted to a layer of metal (240), and a metal film (250) may then be deposited on the converted oxide film (260) by either selective CVD or electroless plating. Via holes (280) are then fabricated in a similar process using via hole lithography. The process is continued until the desired multilevel structure is fabricated.

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