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(54) Title: METHOD FOR SINGLE CHAMBER PROCESSING OF PECVD-TI AND CVD-TIN FILMS IN IC MANUFACTURING

(57) Abstract

A single chamber method for depositing a stack including titanium and titanium mitride on a wafer surface. Titanium is deposited by plasma enhanced chemical vapor deposition and then plasma nitrided. Titanium nitride is subsequently deposited by a thermal chemical vapor deposition process. Advantageously, the temperatures of the substrate and showerhead as well as the internal chamber pressue are maintained at substantially constant values throughout deposition of the stack.

