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(54) Title: METHODS OF FORMING RUTHENIUM-CONTAINING FILMS WITHOUT A CO-REACTANT

(57) Abstract: Methods of forming ruthenium-containing films by pulsed chemical vapor deposition are provided. The methods include at least one deposition cycle. The deposition cycle includes pulsing a zerovalent Ru precursor with a carrier gas in the absence of a co-reactant onto a surface of a substrate, and delivering a purge gas to the surface of the substrate.

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