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(54) Title: METHODS FOR PREPARING RUTHENIUM METAL FILMS

(57) Abstract: The present invention provides methods for the preparation of ruthenium metal films from liquid ruthenium complexes of the formula (diene)Ru(CO)₃, wherein "diene" refers to linear, branched, or cyclic dienes, bicyclic dienes, tricyclic dienes, fluorinated derivatives thereof, combinations thereof, or derivatives thereof additionally containing heteroatoms such as halide, Si, S, Se, P, As, N, or O, in the presence of an oxidizing gas.