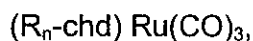


ABSTRACT

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The invention concerns the use of the ruthenium containing precursor having the formula



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wherein:

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- ($R_n\text{-chd}$) represents a cyclohexadiene (chd) ligand substituted with n substituents R , any R being in any position on the chd ligand;
- n is an integer comprised between 1 and 8 ($1 \leq n \leq 8$) and represents the number of substituents on the chd ligand;
- R is selected from the group consisting of C1-C4 linear or branched alkyls, alkylamides, alkoxides, alkylsilylamides, amidinates, carbonyl and/or fluoroalkyl for R being located in any of the eight available position on the chd ligand, while R can also be oxygen O for substitution on the C positions in the chd cycle which are not involved in a double bond

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for the deposition of a Ru containing film on a substrate.

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Figure 2