Title (en)

METAL COMPLEXES HAVING 4-H, 6-H OR 8-H DIHYDROAZULENYL LIGANDS AND USE THEREOF

Title (de)

METALLKOMPLEXE MIT 4-H-, 6-H- ODER 8-H-DIHYDROAZULENYL-LIGANDEN UND DEREN VERWENDUNG

Title (fr)

COMPLEXES MÉTALLIQUES COMPRENANT DES LIGANDS 4-H-, 6-H- OU 8-H-DIHYDROAZULÉNYLE ET LEUR UTILISATION

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Abstract (en)

[origin: WO2022175111A1] The invention relates to a process for preparing compounds of the general formula MAYn(AzuH) (I), where MA = alkali metal, Y = neutral ligand, n = 0, 1, 2, 3 or 4. AzuH is azulene (bicyclo[5.3.0]decapentaene) or an azulene derivative that bears a hydride anion H- in the 4, 6 or 8 position in addition to a hydrogen atom. The invention additionally provides compounds obtainable by this process, and a process using such compounds for preparation of complexes of metals of groups 6 to 12. The invention further relates to complexes of middle and later transition metals (groups 6 to 12) which each have at least one H-dihydroazulenyl anion (AzuH)1-, and to the use of all the aforementioned transition metal complexes as precatalysts or catalysts or electron transfer reagents in a chemical reaction or as precursor compounds for production of a layer containing a metal M, or of a metal layer consisting of the metal M, especially on at least one surface of a substrate. The invention also provides a substrate obtainable by such a process.

IPC 8 full level

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