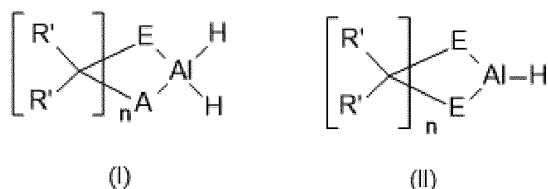


Claims

1. Process for preparing inorganic metal-containing films comprising bringing a solid substrate in contact with a compound of general formula (I) or (II) in the gaseous state

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wherein A is NR₂ or OR with R being an alkyl group, an alkenyl group, an aryl group, or a silyl group,

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E is NR or O,

n is 1, 2 or 3, and

R' is hydrogen, an alkyl group, an alkenyl group, an aryl group, or a silyl group,

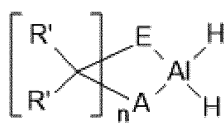
wherein if n is 2 and E is NR or A is OR, at least one R in NR or OR bears no hydrogen atom in the 1-position.

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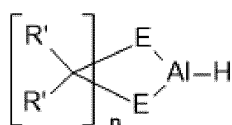
2. The process according to claim 1, wherein R is methyl, ethyl, tert-butyl, trimethylsilyl or two R form together a five membered ring and R' is hydrogen.
3. The process according to any of the claims 1 or 2, wherein a metal-containing compound is deposited from the gaseous state onto the solid substrate before bringing it in contact with a compound of general formula (I) or (II).
4. The process according to claim 3, wherein the metal-containing compound contains Ti, Ta, Mn, Mo, W, Al, Co, Ga, Ge, Sb, or Te.
5. The process according to claim 3 or 4, wherein the metal-containing compound is a metal halide.
6. The process according to claim 1 or 2, wherein the adsorbed compound of general formula (I) or (II) is decomposed.
7. The process according to any of the claims 3 to 6, wherein the sequence containing bringing a solid substrate in contact with a compound of general formula (I) or (II) and depositing a metal-containing compound or decomposing the adsorbed compound of general formula (I) or (II) is performed at least twice.

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8. The process according to any of the claims 1 to 7, wherein the compound of general formula (I) has a molecular weight of not more than 600 g/mol.
9. The process according to any of the claims 1 to 8, wherein the compound of general formula (I) has a vapor pressure at least 1 mbar at a temperature of 200 °C.
10. A compound of general formula (I) or (II)



(I)



(II)

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wherein A is NR₂ or OR with R being an alkyl group, an alkenyl group, an aryl group, or a silyl group,

E is NR or O,

n is 0, 1 or 2, m is 0, 1 or 2, and

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R' is hydrogen, an alkyl group, an alkenyl group, an aryl group, or a silyl group

wherein if n is 2 and E is NR or A is OR, at least one R in NR or OR bears no hydrogen atom in the 1-position.

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11. The compound according to claim 10, wherein R' is hydrogen and R is methyl, ethyl, tert-butyl or trimethylsilyl, or two R form together a five-membered ring.