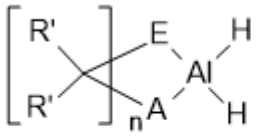
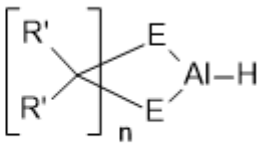
Claims

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



(I)



(II)

wherein A is NR_2 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 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,
wherein a metal-containing compound is deposited from the gaseous state onto the solid substrate before bringing it in contact with the~~a~~ compound of general formula (I) or (II).

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 claim 1, wherein the metal-containing compound contains Ti, Ta, Mn, Mo, W, Al, Co, Ga, Ge, Sb, or Te.

4. The process according to any one of the preceding claims, wherein the metal-containing compound is a metal halide.

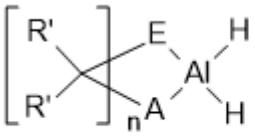
5. The process according to claim 1 or claim 2, wherein the adsorbed compound of general formula (I) or (II) is decomposed.

6. The process according to any one of the preceding claims, 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.

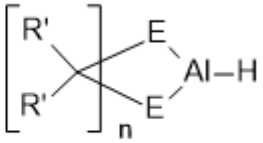
7. The process according to any one of the preceding claims, wherein the compound of general formula (I) has a molecular weight of not more than 600 g/mol.

8. The process according to any one of the preceding claims, wherein the compound of general formula (I) has a vapor pressure at least 1 mbar at a temperature of 200 °C.

9. A compound of general formula (I) or (II)



(I)



(II)

wherein A is NR_2 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 1, 2 or 3, ~~m 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 and wherein if n is 2 in formula (I) E is O or A is OR.

10. The compound according to claim 9, wherein R' is hydrogen and R is R is methyl, ethyl, tert-butyl or trimethylsilyl, or two R form together a five-membered ring.