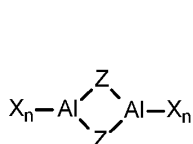
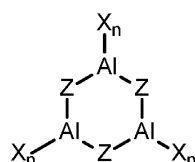


Claims

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



(I)



(II)

wherein Z is NR₂, PR₂, OR, SR, CR₂, SiR₂,

X is H, R' or NR'₂, wherein at least one X is H,

n is 1 or 2, and

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

2. The process according to claim 1, wherein R is methyl, ethyl, iso-propyl, sec-butyl, tert-butyl, trimethylsilyl.
3. The process according to claim 1 or 2, wherein at least one X for each Al atom is H.
4. The process according to any of the claims 1 to 3, wherein Z is NR₂, PR₂, OR, or SR.
5. The process according to any of the claims 1 to 4, wherein the metal- or semimetal-containing compound contains Ti, Ta, Mn, Mo, W, Ge, Ga, As, In, Sb, Te, Al or Si.
6. The process according to any of the claims 1 to 5, wherein the metal- or semimetal-containing compound is a metal or semimetal halide.
7. The process according to any of the claims 1 to 6, wherein the sequence containing (a) and (b) is performed at least twice.
8. The process according to any of the claims 1 to 7, wherein the compound of general formula (I) or (II) 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) or (II) has a vapor pressure at least 1 mbar at a temperature of 200 °C.
10. Use of a compound of general formula (I) or (II) as reducing agent in a vapor deposition process.