

Title (en)
CHEMICAL VAPOR DEPOSITION REACTOR

Title (de)
CVD-REAKTOR

Title (fr)
REACTEUR DE DEPOT CHIMIQUE EN PHASE VAPEUR

Publication
EP 1451387 A1 20040901 (EN)

Application
EP 02789987 A 20021204

Priority
• US 0238565 W 20021204
• US 33763901 P 20011204
• US 21427202 A 20020806

Abstract (en)
[origin: WO03048414A1] A chemical vapor deposition CVD reactor 900 comprising: a reactor chamber 950 a substrate holder 46 located within the reactor chamber a gas inlet system 922 arranged to provide a gas flow rotating above the substrate holder and a gas exhaust port 930. The flow characteristics of the precursor gas are controlled to equalize the thin film thickness across the substrate surface by forcing the gas into a smaller volume as it moves across the substrate. With a central exhaust, this is done by reducing the height 1506, 1524 of the reactor chamber with increasing proximity to the center 1508 of the reactor chamber so that the reactor volume per unit distance decreases as the gas moves from the inlet to the exhaust.
[origin: WO03048414A1] A chemical vapor deposition (CVD) reactor (900) comprising: a reactor chamber (950); a substrate holder (46) located within the reactor chamber; a gas inlet system (922) arranged to provide a gas flow rotating above the substrate holder; and a gas exhaust port (930). The flow characteristics of the precursor gas are controlled to equalize the thin film thickness across the substrate surface by forcing the gas into a smaller volume as it moves across the substrate. With a central exhaust, this is done by reducing the height (1506, 1524) of the reactor chamber with increasing proximity to the center (1508) of the reactor chamber so that the reactor volume per unit distance decreases as the gas moves from the inlet to the exhaust.

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C23C 16/455

IPC 8 full level
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See references of WO 03048414A1

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