

加熱ガスビームによる低コスト連続薄膜装置
Continuous thin-film tool by heated-gas-beam
annealing and CVD at a low cost

in PV and FPD manufacturing

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HB products

Silicon
Crystal
on glass

amorphous



1. HB-CVD unit and tool
2. HB-Annealing unit and

for film printing
tool for a large substrate device

Silicon on glass



40-cm-wide HB annealing head



Scanning-HB-annealing tool



HB-CVD film printer



Continuously printed germanium
film on an aluminum foil

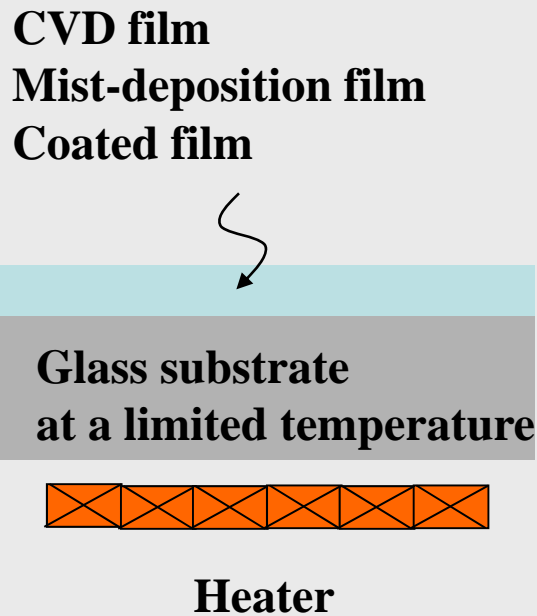
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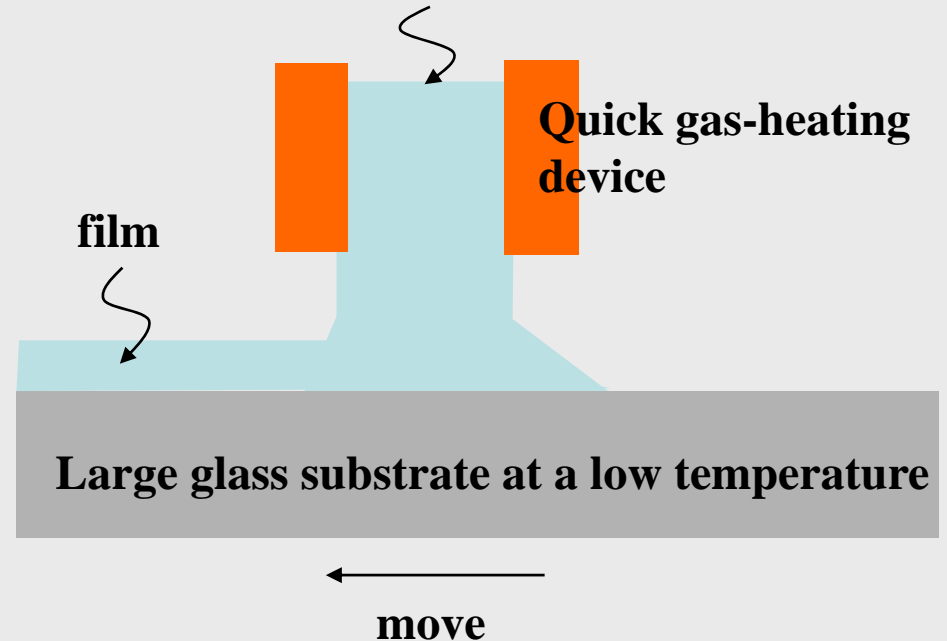
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1. HB CVD

Heated-gas-beam (HB) of SiH_4 , GeH_4 , or MO gas



Usual tool
Equilibrium reaction
By substrate heating



HB tool
Non-equilibrium reaction
By heated gas beam

HB-Annealing-head demonstration available

40-cm-long 800°C HB head



G1 size crystal

