

Title (en)
CATHODE HAVING VARIABLE MAGNET CONFIGURATION

Title (de)
KATHODE MIT VARIABLEM MAGNETKONFIGURATION

Title (fr)
CATHODE A CONFIGURATION VARIABLE DES AIMANTS

Publication
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Application
EP 98964215 A 19981221

Priority
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Abstract (en)
[origin: WO0038214A1] A sputtering system (10) for depositing a thin film onto a substrate (148) is disclosed wherein the system includes an evacuable chamber (12) which includes the substrate. In particular, the system includes a target (144) positioned within the chamber, wherein the target has a back surface and a sputtering surface (146). Further, the system includes plasma for eroding the target to provide material for forming the thin film wherein erosion of the target occurs in a predetermined erosion pattern and is controlled by a shape of the plasma. The system also includes a support (150) for supporting the substrate opposite the sputtering surface. A magnet arrangement is provided which provides a magnetic field on the target for controlling the shape of the plasma, wherein the magnet arrangement is positioned adjacent the back surface. The magnet arrangement (28) includes a plurality of magnet segments (36-50) which may be moved into desired positions so as to change the shape of the magnet arrangement. This enables adjustment of a dwell time of the magnetic field over predetermined portions of the target to change the shape of the plasma and thus change the erosion pattern of the target.

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