Colorado School of Mines
Office for Technology Transfer

Non-contact annealing of amorphous cadmium tin oxide films to make crystalline Cd_2SnO_4 films

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Description: High quality films of Cd2SnO4 are presently made by annealing amorphous cadmium tin oxide films while in contact with CdS. This contact anneal is not amenable to large scale production over large areas, such as is necessary for thin film photovoltaic modules. Mines researchers have developed a non-contact anneal to produce high quality Cd2SnO4 films.

Potential Areas of Application

- Solar cells
- Low emissivity windows
- Flat panel displays
- Photovoltaic cells

Main Advantages of this Invention

- Low cost production
- Very high optical transmission and electrical conductivity
- Tolerates high process temperatures

Intellectual Property Status: Provisional patent filed October 3, 2011

ID number: US Patent application 61/542,402

Opportunity: We are seeking an exclusive or non-exclusive licensee for marketing, manufacturing, and sale of this technology.

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