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(54) Title: LOW MELTING POINT SPUTTER TARGETS FOR CHALCOGENIDE PHOTOVOLTAIC APPLICATIONS AND METHODS OF MANUFACTURING THE SAME

(57) Abstract: In one example embodiment, a sputter target structure for depositing semiconducting chalcogenide films is described. The sputter target includes a target body having a target body composition that comprises  $\text{Cu}_{1-x}(\text{Se}_{1-y-z}\text{S}_y\text{Te}_z)_x$ , wherein the value of x is greater than or equal to approximately 0.5, the value of y is between approximately 0 and approximately 1, the value of z is between approximately 0 and approximately 1, and the total amount of Se, S, and Te phases in the target body composition comprise less than 50 volume percent of the target body composition.



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