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(54) Title: IMPROVED AND MODIFIED TUNGSTEN-TITANIUM SPUTTERING TARGETS

(57) Abstract: A novel WTi target is described as having a Ti particle size similar to that of the W particle size. The target also contains controlled microstructural multi- phases characterized by an absence of a β (titanium-tungsten) alloy lamellar phase structure. The combination of controlled microstructural phases and controlled particle size improves overall sputtering performance whereby the sputtered face reduces formation of nodules which can flake off and deposit onto the resultant film to produce film defects during sputtering.



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