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**Shaw et al.**

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(54) **SPHERICAL MOLYBDENUM DISULFIDE POWDERS, MOLYBDENUM DISULFIDE COATINGS, AND METHODS FOR PRODUCING SAME**  
  
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(51) **Int. Cl.**  
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(52) **U.S. Cl.**  
USPC ..... **428/402**; 106/287.18; 423/561.1;  
427/180; 427/446

(57) **ABSTRACT**

(58) **Field of Classification Search**  
None  
See application file for complete search history.

Molybdenum disulfide powders include substantially spherically-shaped particles of molybdenum disulfide that are formed from agglomerations of generally flake-like sub-particles. The molybdenum disulfide powders are flowable and exhibit uniform densities. Methods for producing a molybdenum disulfide powder may include the steps of: Providing a supply of molybdenum disulfide precursor material; providing a supply of a liquid; providing a supply of a binder; combining the molybdenum disulfide precursor material with the liquid and the binder to form a slurry; feeding the slurry into a stream of hot gas; and recovering the molybdenum disulfide powder, the molybdenum disulfide powder including substantially spherically-shaped particles of molybdenum disulfide formed from agglomerations of generally flake-like sub-particles.

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