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(54) **SODIUM/MOLYBDENUM COMPOSITE METAL ARTICLES AND METHODS FOR PRODUCING METAL ARTICLES**

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(52) **U.S. Cl.**  
USPC ..... **419/42**; 419/58; 419/68

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USPC ..... 75/245, 338, 351; 148/513; 419/32, 419/34, 38, 49, 66, 68; 420/429; 423/53  
See application file for complete search history.

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(57) **ABSTRACT**

A method for producing a metal article may include: Producing a supply of a composite metal powder by: providing a supply of molybdenum metal powder; providing a supply of a sodium compound; combining the molybdenum metal powder and the sodium compound with a liquid to form a slurry; feeding the slurry into a stream of hot gas; and recovering the composite metal powder; and consolidating the composite metal powder to form the metal article, the metal article comprising a sodium/molybdenum metal matrix. Also disclosed is a metal article produced accordance with this method.

**16 Claims, 5 Drawing Sheets**

