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(54) **COMBUSTION SYNTHESIS METHOD AND BORON-CONTAINING MATERIALS PRODUCED THEREFROM**

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USPC **423/276**; 423/289; 423/263; 423/297

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

(57) **ABSTRACT**

One embodiment of the present disclosure provides a method of making a ceramic material that contains boron and a metal. A metal source, an oxidizer, a boron source, and a fuel source are combined. These reactants are then heated at, or to, a temperature sufficient to initiate a combustion reaction. The combustion reaction produces a ceramic material that includes boron and the metal. The present disclosure also provides materials formed by the disclosed method, as well as methods and systems using such materials.

19 Claims, 13 Drawing Sheets

