

# (12) United States Patent

### Masterson et al.

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### (54) FUEL AND A FUEL BURNING SYSTEM AND **METHOD**

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- (52) U.S. Cl. CPC ...... F23D 3/18 (2013.01); F23D 3/08 (2013.01); F23D 3/16 (2013.01); F23D 5/04 (2013.01)

(58) Field of Classification Search CPC ...... F23D 3/18; F23D 3/24 USPC ...... 431/292, 302, 303 See application file for complete search history.

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#### ABSTRACT (57)

A method of fueling a flame, a fuel, and a fuel burning system is provided. The system has a melted wax reservoir, a fuel, a melting grate, and a wick. The fuel has a body, a priming section, a front wall, and a bottom surface. The priming section is vertically spaced from the bottom surface and extending from the front wall to create an overhang. The priming section extends along less than the entire length of the front wall. The melting grate is configured to support the fuel. The melting grate extends above the melted wax reservoir so that fuel melted on the melting grate can be received into the melted wax reservoir. The wick has an at least partially hollow core forming a burn chamber extending above the melting grate. The fuel is configured to be positioned so the overhang is located over or adjacent to the wick.

### 19 Claims, 21 Drawing Sheets

