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**Jurczynszak et al.**

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- (54) **FLUID HEATING SYSTEM AND INSTANT FLUID HEATING DEVICE**
- (71) Applicant: **EEMAX, INC.**, Waterbury, CT (US)
- (72) Inventors: **Eric R. Jurczynszak**, Berlin, CT (US); **Jeff Hankins**, Southbury, CT (US); **Chris Hayden**, Shelton, CT (US); **Emily Morris**, Torrington, CT (US); **Roland Opena**, Cromwell, CT (US); **Nicholas Visinski**, Fairfield, CT (US)
- (73) Assignee: **EEMAX, INC.**, Waterbury, CT (US)
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- (63) Continuation of application No. 13/840,066, filed on Mar. 15, 2013, now Pat. No. 9,140,466.
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- (51) **Int. Cl.**  
**F24H 1/10** (2006.01)  
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- (52) **U.S. Cl.**  
CPC ..... **F24H 9/2028** (2013.01); **F24H 1/101** (2013.01); **F24H 1/105** (2013.01); **H05B 1/0283** (2013.01); **F24D 17/0089** (2013.01)

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

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*Primary Examiner* — Thor Campbell

(74) *Attorney, Agent, or Firm* — Oblon, McClelland, Maier & Neustadt, L.L.P.

(57) **ABSTRACT**

A fluid heating system may be installed for residential and commercial use, and may deliver fluid at consistent high temperatures for cooking, sterilizing tools or utensils, hot beverages and the like, without a limit on the number of consecutive discharges of fluid. The fluid heating system is installed with a tankless fluid heating that includes an inlet port, an outlet port, a drain port, at least one heat source connected with the inlet port, and a valve manifold connected to the at least one heat source, the drain port, and the outlet port. A temperature sensor is downstream of the at least one heat source and connected to the valve manifold. The valve manifold is operated so that an entire volume of a fluid discharge from the fluid heating system is delivered at a user-specified temperature (including near boiling fluid) on demand, for every demand occurring over a short period of time.

**15 Claims, 8 Drawing Sheets**

