US009638461B2

(12) **United States Patent**
Wait et al.

(10) **Patent No.: US 9,638,461 B2**
(45) **Date of Patent: May 2, 2017**

(54) **METHOD FOR OPERATING A REFRIGERATOR APPLIANCE**

(71) Applicant: **General Electric Company**, Schenectady, NY (US)

(72) Inventors: **Keith Wesley Wait**, Louisville, KY (US); **William Everette Gardner**, Louisville, KY (US)

(73) Assignee: **Haier US Appliance Solutions, Inc.**, Wilmington, DE (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 441 days.

(21) Appl. No.: **14/181,772**

(22) Filed: **Feb. 17, 2014**

(65) **Prior Publication Data**

US 2015/0232320 A1 Aug. 20, 2015

(51) **Int. Cl.**

F25D 3/12	(2006.01)
F25D 31/00	(2006.01)
B67D 1/00	(2006.01)
B67D 1/08	(2006.01)
F25D 23/12	(2006.01)

(52) **U.S. Cl.**

CPC ***F25D 31/005*** (2013.01); ***B67D 1/0014*** (2013.01); ***B67D 1/0858*** (2013.01); ***B67D 1/0888*** (2013.01); ***F25D 23/126*** (2013.01); *F25D 2700/04* (2013.01)

(58) **Field of Classification Search**

CPC .. F25D 31/005; F25D 23/126; F25D 2700/04; B67D 1/0014; B67D 1/0858; B67D 1/0888

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

7,206,559	B2	4/2007	Meade, II	
7,298,871	B2	11/2007	Lee et al.	
8,341,029	B1	12/2012	Ramalingam et al.	
8,515,574	B2	8/2013	Studor et al.	
2007/0081696	A1	4/2007	Brennan et al.	
2009/0236333	A1*	9/2009	Ben-Shmuel	H05B 6/6402 219/702
2009/0293735	A1*	12/2009	Van Dillen	A47J 31/0668 99/295
2011/0016910	A1*	1/2011	Bak	F25D 29/00 62/449
2012/0102993	A1*	5/2012	Hortin	F25D 23/126 62/189
2012/0285986	A1*	11/2012	Irvin	B67D 1/0041 222/1
2013/0108249	A1*	5/2013	Krause	B67D 3/0022 392/465

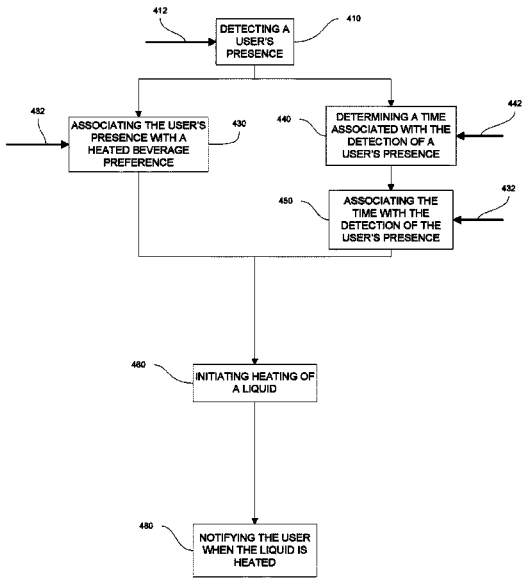
FOREIGN PATENT DOCUMENTS

JP	H11-250346	9/1999

* cited by examiner

Primary Examiner — Patrick M Buechner
(74) *Attorney, Agent, or Firm* — Dority & Manning, P.A.

(57) **ABSTRACT**

Refrigerator appliances and methods for operating refrigerator appliances are provided. In one embodiment, a method includes detecting a user's presence, associating the user's presence with a heated beverage preference, and initiating heating of a liquid stored in the refrigerator appliance. The detecting step, the associating step and the initiating step are performed by a controller of the refrigerator appliance.

14 Claims, 7 Drawing Sheets