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Steinberg et al.

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(54) **SYSTEM, METHOD AND APPARATUS FOR IDENTIFYING MANUAL INPUTS TO AND ADAPTIVE PROGRAMMING OF A THERMOSTAT**

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F24F 2011/006; F24F 2011/0061; F24F
2011/0063; F24F 2011/0075
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(71) Applicant: **EcoFactor, Inc.**, Millbrae, CA (US)

See application file for complete search history.

(72) Inventors: **John Douglas Steinberg**, Millbrae, CA (US); **Scott Douglas Hublou**, Redwood City, CA (US); **Leo Cheung**, Sunnyvale, CA (US)

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(73) Assignee: **EcoFactor, Inc.**, Redwood City, CA (US)

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This patent is subject to a terminal disclaimer.

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(Continued)

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Primary Examiner — Marc Norman

Related U.S. Application Data

(74) *Attorney, Agent, or Firm* — Knobbe, Martens, Olson & Bear, LLP

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(57) **ABSTRACT**

(51) **Int. Cl.**

F24F 11/00 (2006.01)

G05B 19/042 (2006.01)

G05D 23/19 (2006.01)

Systems and methods are disclosed for incorporating manual changes to the setpoint for a thermostatic controller into long-term programming of the thermostatic controller. For example, one or more of the exemplary systems compares the actual setpoint at a given time for the thermostatic controller to an expected setpoint for the thermostatic controller in light of the scheduled programming. A determination is then made as to whether the actual setpoint and the expected setpoint are the same or different. Furthermore, a manual change to the actual setpoint for the thermostatic controller is compared to previously recorded setpoint data for the thermostatic controller. At least one rule is then applied for the interpretation of the manual change in light of the previously recorded setpoint data.

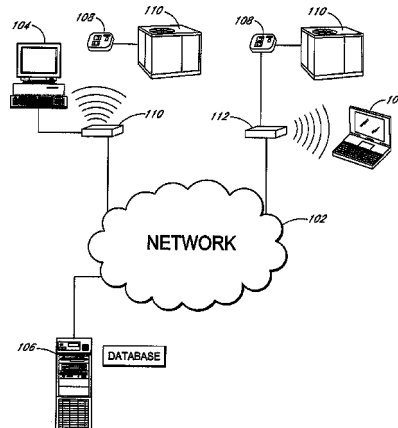
(52) **U.S. Cl.**

CPC **F24F 11/0009** (2013.01); **G05B 19/0426** (2013.01); **G05D 23/1904** (2013.01); **G05B 2219/23199** (2013.01); **G05B 2219/2614** (2013.01)

(58) **Field of Classification Search**

CPC . F24F 11/0009; F24F 11/001; F24F 11/0012; F24F 11/006; F24F 2011/0009; F24F

24 Claims, 11 Drawing Sheets



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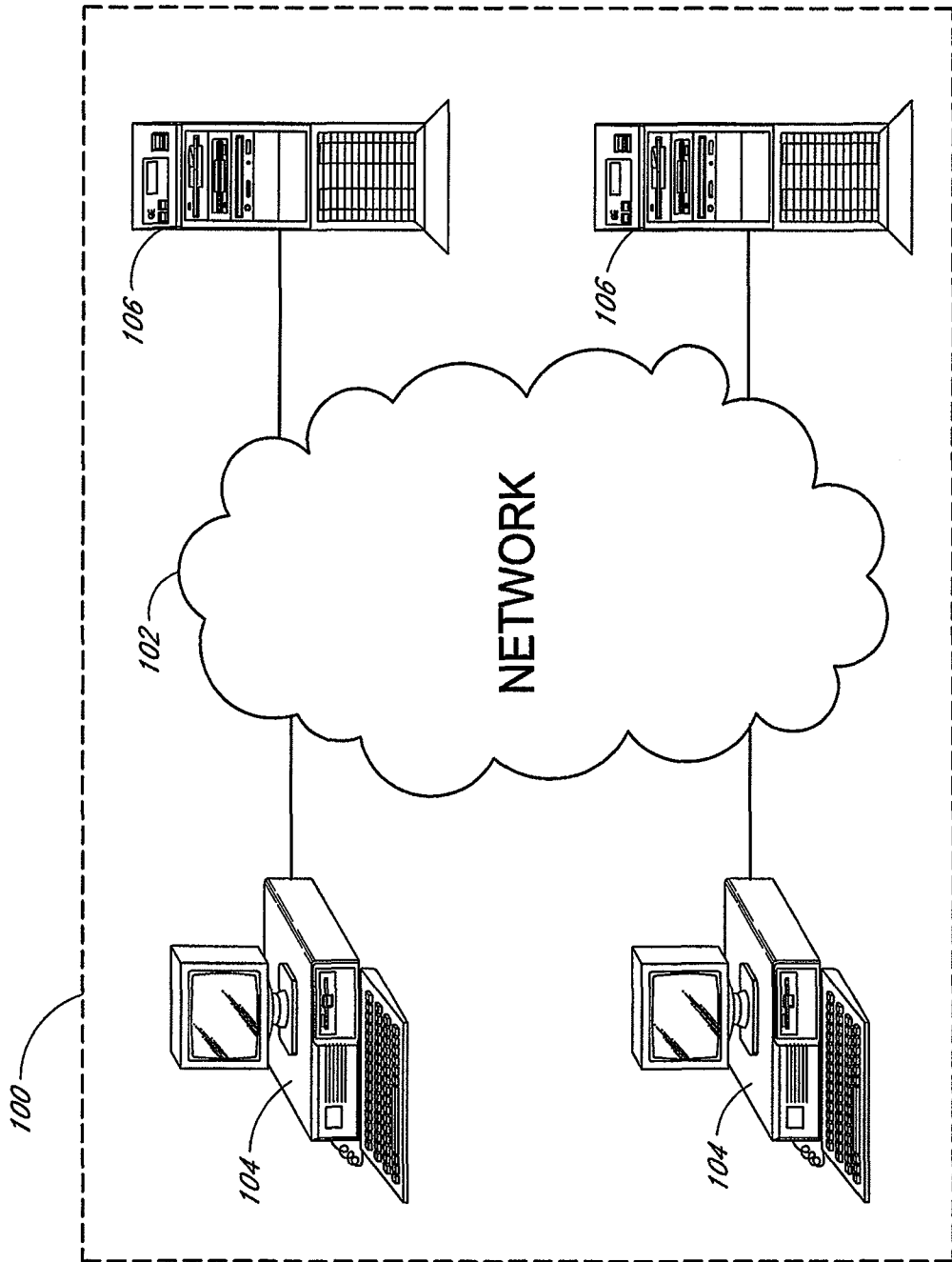
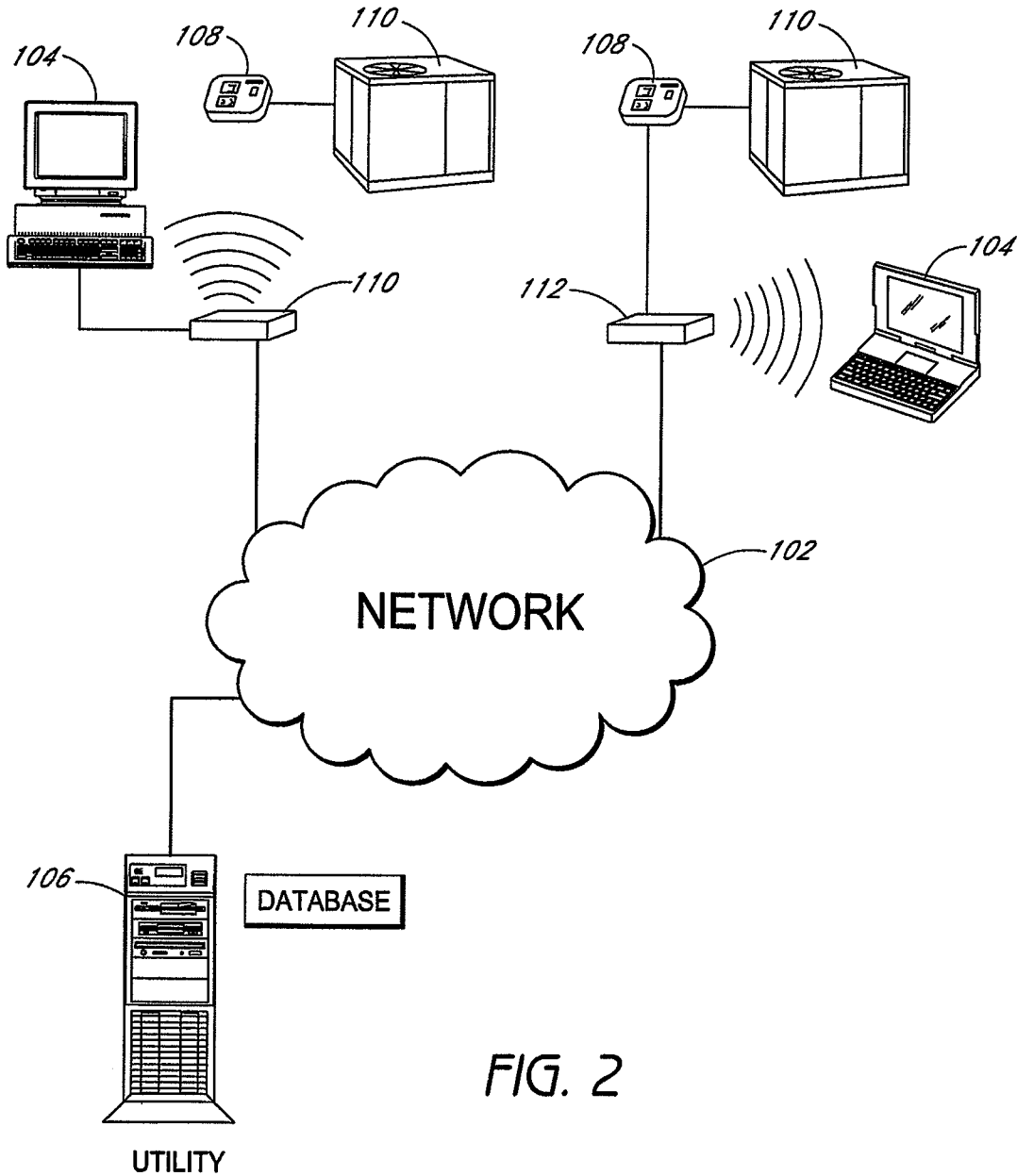


FIG. 1



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