EXHIBIT A

(12) **United States Patent**　　(10) Patent No.:　　**US 6,819,539 B1**
Wright et al.　　(45) Date of Patent:　　**Nov. 16, 2004**

(54) **METHOD FOR CIRCUIT RECOVERY FROM OVERSTRESS CONDITIONS**

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(51) Int. Cl.^{7} **H02H 3/24**
(52) U.S. Cl. **361/90**
(58) Field of Search 361/86, 87, 90, 361/91.1, 93.1, 93.9

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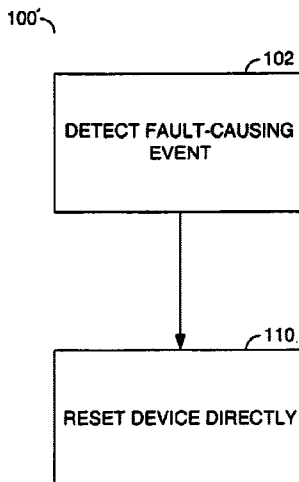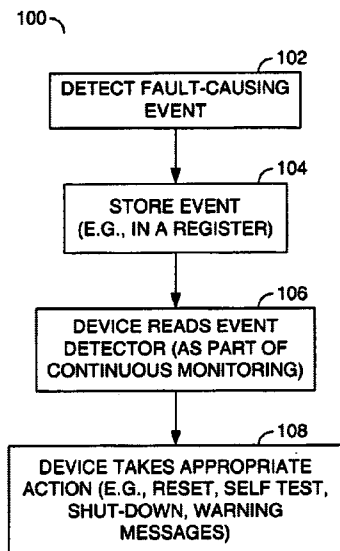
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(57) **ABSTRACT**

A method for circuit recovery from overstress conditions, comprising the steps of (A) detecting an event and (B) resetting a device when the event is a first predetermined type and providing recovery when the event is a second predetermined type.

14 Claims, 5 Drawing Sheets

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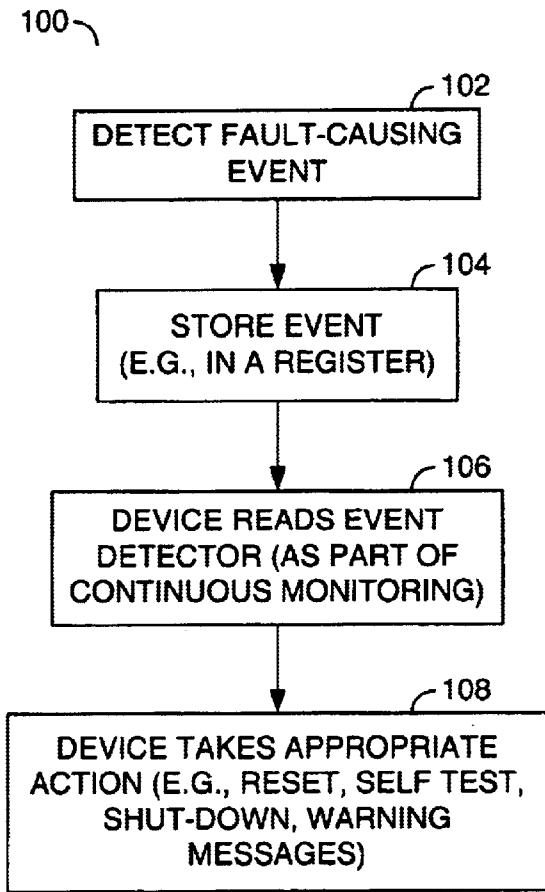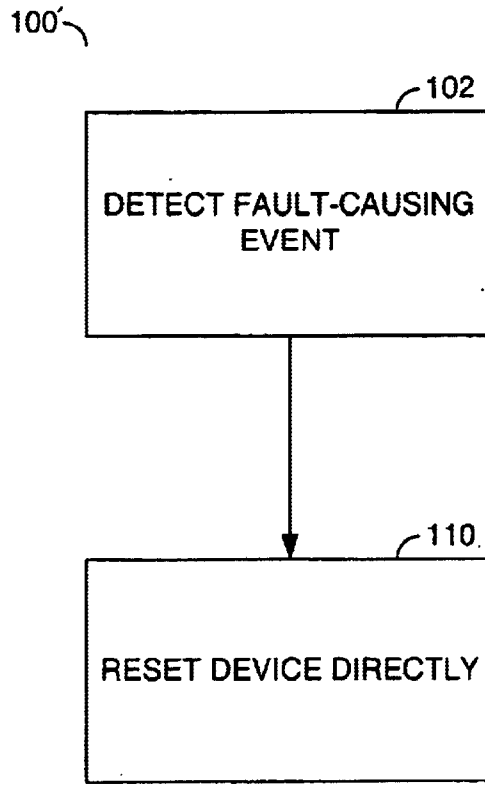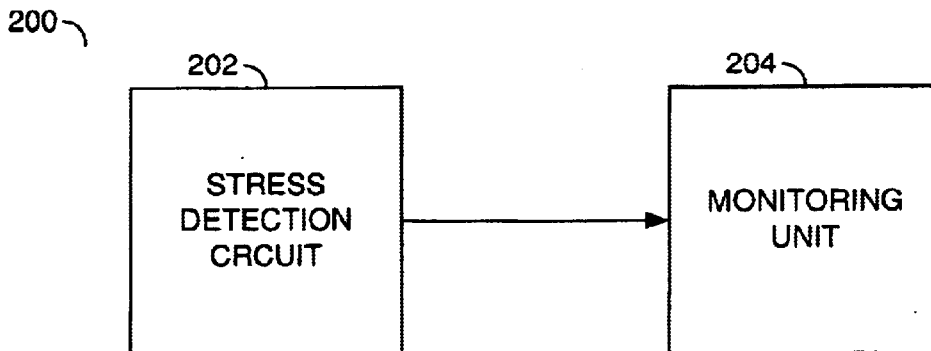
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100

102

DETECT FAULT-CAUSING
EVENT

104

STORE EVENT
(E.G., IN A REGISTER)

106

DEVICE READS EVENT
DETECTOR (AS PART OF
CONTINUOUS MONITORING)

108

DEVICE TAKES APPROPRIATE
ACTION (E.G., RESET, SELF TEST,
SHUT-DOWN, WARNING
MESSAGES)

FIG. 1a

100'

102

DETECT FAULT-CAUSING
EVENT

110

RESET DEVICE DIRECTLY

FIG. 1b

200

202

STRESS
DETECTION
CRCUIT

204

MONITORING
UNIT

FIG. 2

FIG. 3a

FIG. 3b

DOCKET ALARM
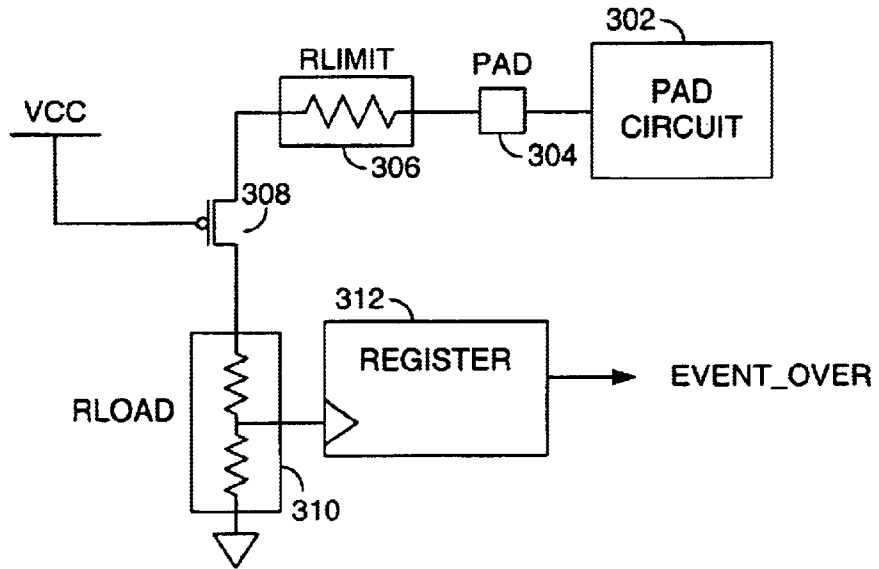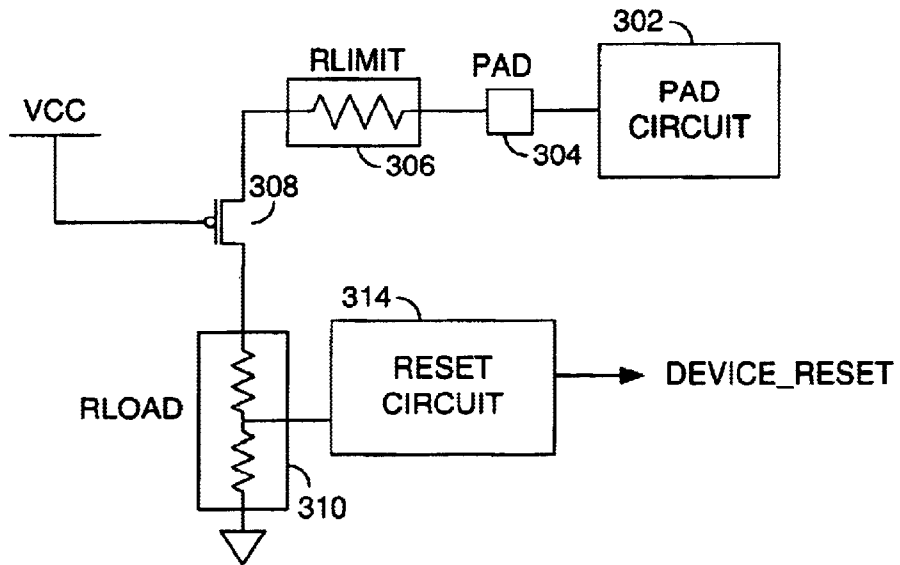
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