

United States Patent [19]

Kinney et al.

[54] DUAL PROCESSOR ELECTRIC POWER TRIP UNIT

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- [73] Assignee: Siemens Energy & Automation, Inc., Alpharetta, Ga.
- [21] Appl. No.: 753,286
- [22] Filed: Aug. 30, 1991
- [51] Int. Cl.⁵ H02H 3/08

[56] References Cited

U.S. PATENT DOCUMENTS

4,470,092	9/1984	Lombardi	361/23
4,689,712	8/1987	Demeyer	361/96

US005311392A

[11] Patent Number: 5,311,392

[45] Date of Patent: May 10, 1994

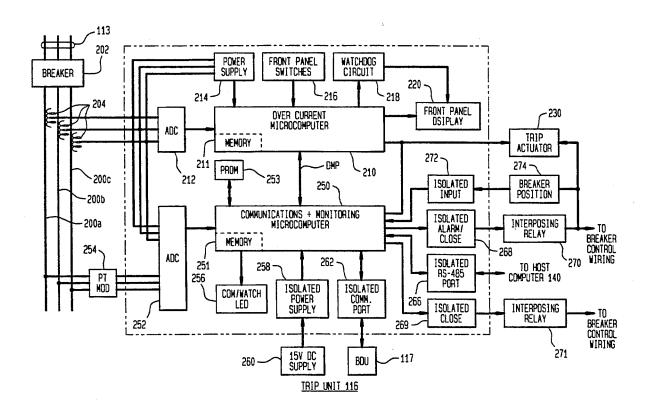
4,710,845	12/1987	Demeyer
		Trenkler et al
		Milkovic 324/142
4,996,646	2/1991	Farrington 364/483
		Hartman

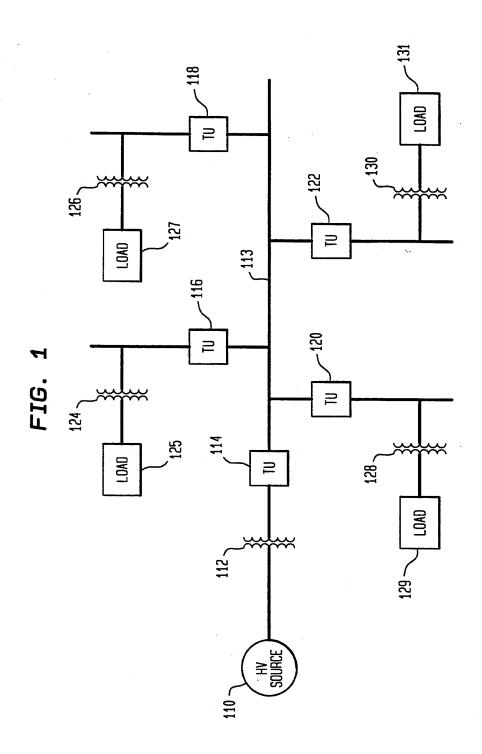
Primary Examiner—A. D. Pellinen Assistant Examiner—S. Jackson

[57] ABSTRACT

A low voltage electric power monitoring and circuit breaker system includes two processors. The first processor activates the circuit breaker when an overcurrent condition is detected and the second processor monitors the current sensed by the first processor and activates the circuit breaker for overcurrent conditions which should have caused the first processor to activate the breaker. If a current of this magnitude is detected, the second processor activates the circuit breaker as a backup protection for the first circuit breaker.

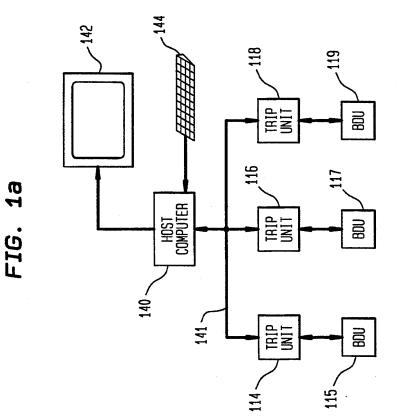
18 Claims, 14 Drawing Sheets





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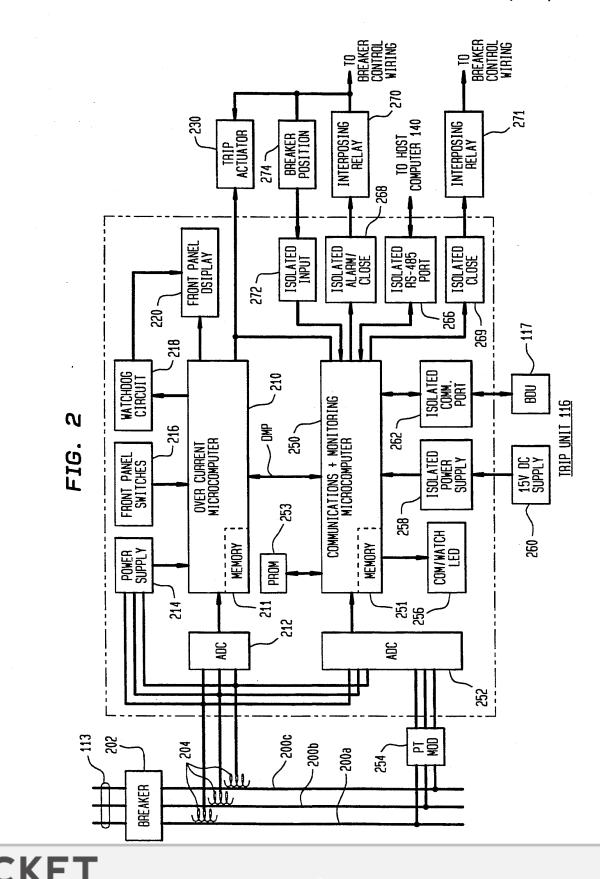


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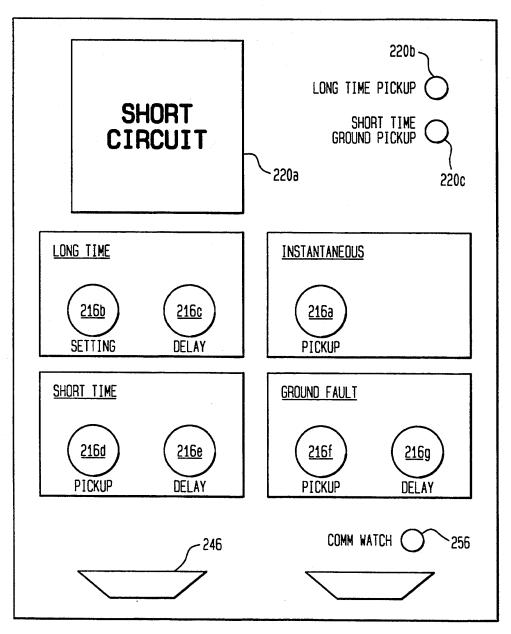
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FIG. 2a



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