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Wynn et al.

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[54] **OVERCURRENT PROTECTION SYSTEMS**

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[76] Inventors: **Craig Wynn**, 4207 Manuela Ave., Palo Alto, Calif. 94306; **St. Elmo Nickols, III**, P.O. Box 671, Los Gatos, Calif. 95031-0671

Primary Examiner—Michael J. Sherry

[*] Notice: This patent is subject to a terminal disclaimer.

[57] **ABSTRACT**

[21] Appl. No.: **09/280,356**

An overcurrent protection system containing (1) a current sensing means; (2) a first switch coupled to the current sensing means; (3) a voltage sensing means; (4) a PTC device; and (5) a second switch coupled to the voltage sensing means. In one type of system, the second switch is connected in series with a parallel combination of the first switch and the PTC device; and the voltage sensing means is connected in parallel with a series combination of (i) the second switch and (ii) the parallel combination of the first switch and the PTC device. In another type of system, the first switch, the PTC device and the voltage sensing means are connected in parallel with each other; and the second switch (i) is a switch which latches in the open position and (ii) is connected in series with the parallel combination of the first switch, the PTC device and the voltage sensing means.

[22] Filed: **Mar. 29, 1999**

Related U.S. Application Data

[63] Continuation of application No. 08/958,808, Oct. 28, 1997, abandoned, which is a continuation-in-part of application No. 08/867,682, Jun. 2, 1997, Pat. No. 5,831,803.

[51] Int. Cl.⁷ **H02H 3/00**

[52] U.S. Cl. **361/7; 361/9; 361/94; 361/106; 361/166; 361/187; 361/93.5; 361/93.6**

[58] Field of Search 361/93.1, 93.5, 361/93.6, 93.7, 93.8, 93.9, 94, 103, 106, 3, 5-9, 13, 166, 187; 338/22 R

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13 Claims, 2 Drawing Sheets

