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(71) Applicant and

(72) Inventor: **ZWEIG, Stepen, Eliot** [US/US]; 224 Vista de
Sierra, Los Gatos, CA 95030 (US).

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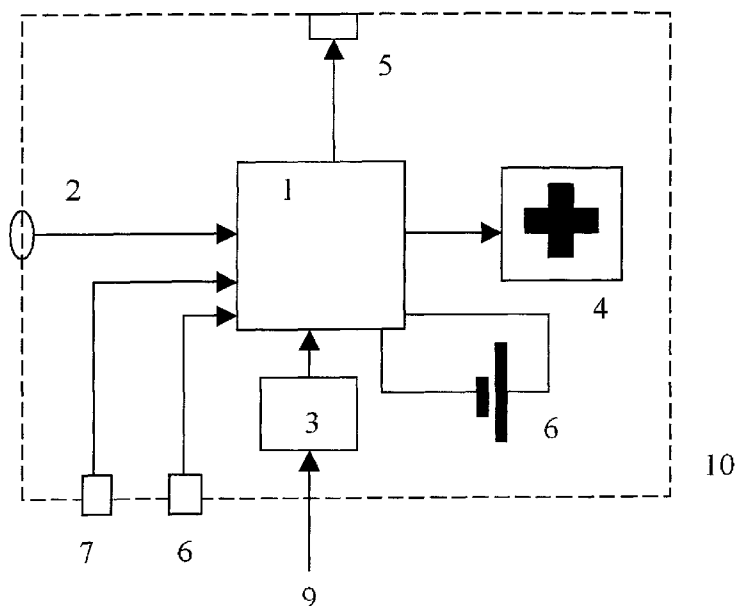
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(54) Title: ELECTRONIC TIME-TEMPERATURE INDICATOR AND LOGGER



(57) Abstract: This invention covers improved electronic time-temperature indicators (10) with a visual output (4), and other devices and methods by which the thermal (2) history of a complex material, which may not obey a simple exponential Arrhenius law degradation equation, may be monitored, and the subsequent fitness for use of the tracked material may be quickly ascertained. In particular, the invention discloses a rapidly reprogrammable electronic time-temperature tag (1) that may be easily customized with the thermal time-temperature stability profile on an arbitrary material, using electronic data transfer methods. Using this device, a single, low-cost, generic time-temperature tag may be mass-produced, and then subsequently programmed to mimic the stability characteristics of nearly any material of interest.

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