

[54] INTERNAL PERFORMANCE MONITORING BY EVENT SAMPLING

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[52] U.S. Cl. 364/200

[58] Field of Search 364/200, 900

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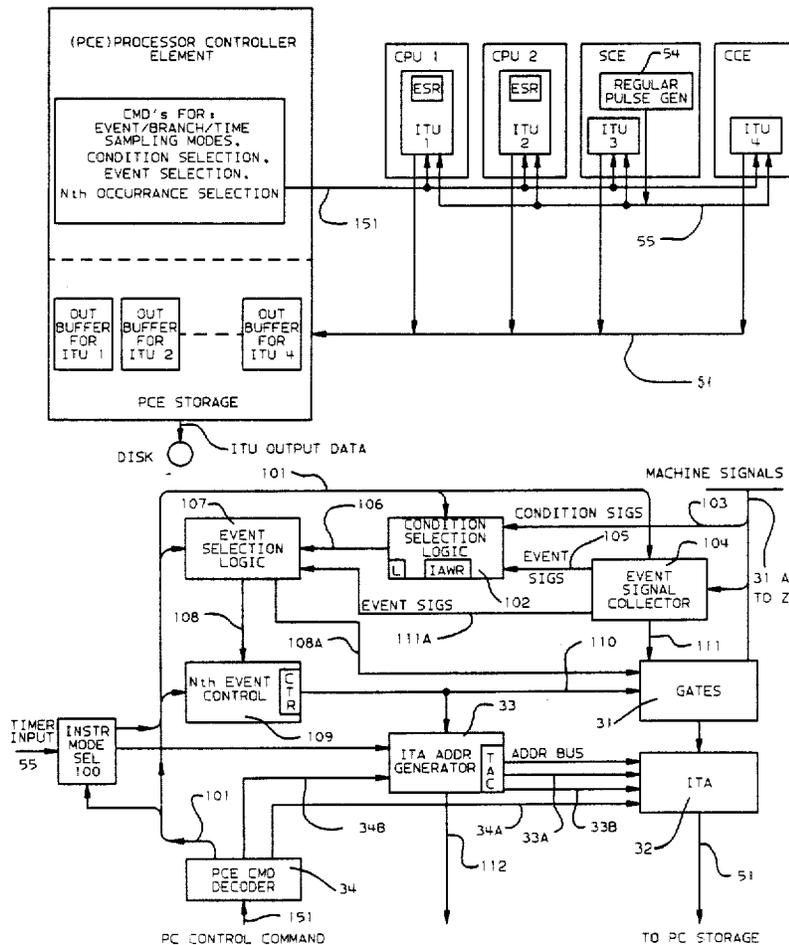
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[57] ABSTRACT

The disclosure provides event-controlled operations for an internal hardware/software monitor for a processor in a data processing system. It embeds and distributes in each processor at least one instrumentation table unit (ITU) and event detection circuitry to detect events and conditions for collecting event-sampled hardware signals provided in the processor hardware in which the respective ITU is embedded. Instrumentation measurement is controlled centrally in the system. Sampling of the CPU signals for recording in the ITU is done at (or a sub-multiple of) the occurrence rate of the selected event(s) in the processor. The sampled signals are recorded in the ITU. The ITUs of plural processors are asynchronously operated in a system. The event-driven monitoring circuitry may be solely provided in an ITU, or it may be superimposed on a timer-driven internal instrumentation system of the type described in U.S. Pat. No. 4,590,550 in which the ITU is shared between event and timer driven modes of operation. Branch-taken event monitoring is also included in the disclosure.

14 Claims, 2 Drawing Sheets



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