[0058] While some specific embodiments of the invention have been shown the invention is not to be limited to these embodiments. For example, most functions performed by electronic hardware components may be duplicated by software emulation. Thus, a software program could issue a command to mimic a user event command code. The algorithm detecting a user event command, even though an actual user event has not occurred, directly transitions the processor to a higher state of performance. In an embodiment, a prioritize event may be a software command issued to invoke the direct transition the processor to a higher state of performance. The invention is to be understood as not limited by the specific embodiments described herein, but only by scope of the appended claims.

Claims

1. A method, comprising:

detecting (402) an event to transition an integrated circuit of a computing system to a higher state of performance, the integrated circuit having multiple states of performance including a first state of performance, a second state of performance higher than
the first state of performance, and a third state of performance higher than the second state of performance, the computing system having a power supply which includes a battery;
determining (404) whether the event is a user-initiated event or a software-initiated event;
if the event is a user-initiated event directly transitioning (406) the integrated circuit from the first state of performance to the third state of performance if the event is a software-initiated event transitioning (408) the integrated circuit from the first state of performance to the second state of performance.

2. The method of claim 1, wherein the user event is defined by a programming environment within which the computing system is operating.

3. The method of claim 1, wherein directly transitioning comprises transitioning without delay.

4. The method of claim 1, further comprising:

operating the integrated circuit at the third state of performance for a predefined period of time based upon thermal considerations to operate at the third state of performance without failure.

5. The method of claim 4, wherein the computing system comprises a laptop computer.

6. The method of claim 1, wherein the computing system comprises a personal digital assistant.

7. An apparatus, comprising:

means (136) for detecting a user-initiated event or a software-initiated event in a computing system;
the computing system including an integrated circuit (112) having multiple states of performance including a first state of performance, a second state of performance higher than the first state of performance, and a third state of performance higher than the second state of performance;
means for determining whether a detected event is a user-initiated event or a software-initiated event; and
means (130, 134) for directly transitioning the integrated circuit from the first state of performance to the third state of performance based upon detecting that the event is a user-initiated event or for transitioning the integrated circuit from the first state of performance to the second state of performance based upon detecting that the event is a software-initiated event.

8. The apparatus of claim 7, further comprising:

means (134) for changing an operating frequency of the integrated circuit (112) to change the state of performance of the integrated circuit.

9. The apparatus of claim 7, further comprising:

means (130) for changing an operating voltage level of the integrated circuit (112) to change the state of performance of the integrated circuit.

10. The apparatus of one of claims 7 to 9, comprising:

a computer readable medium;
and
a program stored in the computer readable medium to manage power consumption within the first integrated circuit, instructions associated with the program to directly transition the first integrated circuit (112) from the first state of performance to the third state of performance based upon detecting a user event.

11. The apparatus of claim 10, wherein the first state of performance comprises a first voltage level and a first operating frequency.

12. The apparatus of claim 10, wherein the third state of performance comprises a second integrated circuit co-processing instructions with the first integrated