

CLAIMS

What is claimed is:

1. A system comprising:

- 5 a memory;
- a processor coupled to the memory,
- a power transmitter unit (PTU);
- a wireless interface which is to allow the processor to communicate with another device;
- 10 the processor including an apparatus which is to:
- dynamically send a first request to an adjustable power source to adjust a power supply for the processor, the adjustable power source being external to the system;
- send a second request to the adjustable power source when it is
- 15 determined that the power transmitter unit (PTU) is to adjust its wireless power transmission, wherein the adjustment determination is made based on one of the following:
- real-time power consumption needs of the another device under different software demand scenarios, including at least one of: “idle,”
- 20 “web browsing,” and “video playback”,
- wireless power delivery efficiency resulting from the relative spatial alignment of the PTU and a power receiving unit (PRU) of the another device, and
- an optimal battery charging efficiency of the another device; and
- 25 receive a power ready signal from the adjustable power source when the adjustable power source is to provide the adjusted power supply to the processor.

2. Machine readable storage media having machine readable instructions that when executed cause a machine to perform an operation which comprises:

- 30 send a first message to a device over a bus, the first message is to indicate an adjustable power source nature of an apparatus;
- receive a first request from the device over the bus, the request is to indicate a new voltage or current specification;
- determine whether the adjustable power source can meet the request, and to send a
- 35 decision of the determination to the device; and

receive a second request from the device when it is determined that a power transmitter unit (PTU) of the device is to adjust its wireless power transmission, wherein the adjustment determination is made based on one of the following:

5 real-time power consumption needs of another device under different software demand scenarios, including at least one of: “idle,” “web browsing,” and “video playback”,

 wireless power delivery efficiency resulting from the relative spatial alignment of the PTU and a power receiving unit (PRU) of the another device, and an optimal battery charging efficiency of the another device.

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3. The machine readable storage media of claim 2 having machine readable instructions that when executed cause the machine to perform an operation which comprises:

 send a second message to the device, the second message is to indicate that the requested new voltage or current specification based power supply is being provided to the
15 device.

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4. The machine readable storage media of claim 3, wherein the first message is a Source_Capabilities message of a Universal Serial Bus (USB) Power Delivery Specification, and wherein the second message is a Power Supply Ready message of the USB Power Delivery
20 Specification.

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5. The machine readable storage media of claim 2 having machine readable instructions that when executed cause the machine to perform an operation which comprises:

 receive a second request to provide a fixed power supply; and
25 provide a fixed power supply to the device in response to the second request.

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6. The machine readable storage media of claim 2 having machine readable instructions that when executed cause the machine to perform an operation which comprises:

 receive a third request to provide a power supply to charge a battery; and
30 provide a power supply to the battery in response to the third request.

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7. The machine readable storage media of claim 2 having machine readable instructions that when executed cause the machine to perform an operation which comprises:

 receive a fourth request to provide a variable power supply; and
35 provide a variable power supply to the device in response to the fourth request.

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