Claims

1. An apparatus comprising:
an interface to a component providing a first functionality, and
an interface to near field communication component providing near field communication functionality,
a battery interface,
a battery control circuit, connected to said battery interface, wherein said battery control circuit is provided to control the operation of said apparatus in accordance with a battery charging condition of a battery connected to said battery interface, wherein said battery control circuit provides a number of operating conditions for said apparatus in accordance with the charging condition of a battery connected to said battery interface, said charging condition including two or more operating conditions from the selection of:
   - normal operation conditions,
   - a software cut-off condition,
   - a hardware cut-off condition, and
   - a battery cut-off condition,

   wherein said apparatus comprises a storage to store configurations of a near field communication component connected via said interface to a near field communication component for at least two of said operation conditions.

2. Apparatus according to claim 1, further comprising a component providing said at least one functionality, connected to said interface to said at least one functionality,
a battery, connected to said battery interface, and/or
a near field communication component, connected to said interface to a near field communication component.

3. Apparatus according to claim 1 or 2, characterized in that said near field communication component is provided with a dedicated memory, storing information on how operate said near field communication component or said apparatus under normal operation, software cut-off, hardware cut-off and/or said battery cut-off conditions upon detecting a near field communication wakeup event.

4. Apparatus according to one of the claim 1 to 3, characterized in that said apparatus comprises a storage to store configurations of said battery control circuit for at least two of said operation conditions.

5. Apparatus according to one of the preceding claims, characterized in that said first functionality comprises cellular telephone functionality.

6. Apparatus providing at least one interface to at least one functionality, said apparatus comprising:
a component providing an interface to said at least one functionality,
a battery interface, and
a battery control circuit, connected to said battery interface, wherein said battery control circuit is provided to control the operation of said apparatus in accordance with a battery charging condition of a battery connected to said battery interface, wherein said battery control circuit provides a number of operation conditions for said apparatus in accordance with the charging condition of said battery connected to said battery interface, said charging condition including two or more operation conditions from the selection of:
- normal operation conditions,
- a software cut-off condition,
- a hardware cut-off condition, and
- a battery cut-off condition,

wherein said apparatus comprises a user configurable storage to store configurations of said apparatus for at least two of said operation conditions.

7. Apparatus according to claim 6, further comprising
a component providing said at least one functionality, connected to said interface to said at least one functionality, and
a battery, connected to said battery interface.

8. Apparatus according to claim 6 or 7, characterized in that said apparatus comprises a user interface, and wherein said battery control circuit is configurable by a user input via said interface.

9. Apparatus according one of the preceding claims 6 to 8, characterized in that said at least one functionality comprises at least one functionality selected from the group of cellular telephone functionality, a near field communication functionality or data reproduction functionality.

10. Method for operating an near field communication enabled Apparatus, said method comprising the steps of:
detecting an near field communication event,
determining the current operation condition of said apparatus,
determining the configuration of said near field communication component related to said detected operation condition, and
operating a near field component of said apparatus in accordance with said determined configuration of said near field communication component.

11. Method according to claim 10, wherein said operation condition can comprise a normal operation condition, and at least one of the following operation conditions
- software cut-off condition,
- hardware cut-off condition, and
- battery cut-off condition.

12. Method according to claim 10 or 11, further comprising using the received RF energy of said near field communication event, to power said near field communication component of an apparatus.

13. Method according to anyone of claims 10 to 12, wherein said determination of said current operation condition determines that the operation condition of the apparatus, is the software cut-off or hardware cut-off condition,
wherein said method further comprises
powering said near field component of said apparatus, after detecting said near field communication event.

14. Method according to anyone of claims 10 to 13, further comprising, receiving a user input defining the configurations of said near field communication component for at least two of said normal operation, software cut-off, hardware cut-off and/or battery cut-off conditions, and storing said configurations of said near field communication component in a storage of said apparatus.

15. Computer program product for executing a method for operating an apparatus, comprising program code sections for carrying out the steps of anyone of claims 10 to 14, when said program is run on an apparatus.

16. Computer program product for executing a method for operating an apparatus, comprising program code sections stored on a machine-readable medium for carrying out the steps of anyone of claims 10 to 14, when said program product is run on a mobile electronic multifunctional device.

CLAIMS

1. An apparatus comprising:

an interface to a near field communication component configured to provide near field communication functionality;

a battery interface; and

a battery control circuit, connected to said battery interface,

wherein said battery control circuit is configured to control operation of said apparatus in accordance with a battery charging condition of a battery connected to the battery interface and to allow operation of the near field communication component when the battery charging condition is any of at least two of:

a normal operation condition;

a software cut-off condition; and

a hardware cut-off condition,

wherein said apparatus further comprises a storage configured to store configurations of the near field communication component connected via said interface to said near field communication component to allow operation of said near field communication component when said battery charging condition is at least one of the software cut-off condition and the hardware cut-off condition,

and wherein at least one software application is unavailable to a user when said battery charging condition is the software cut-off condition and said apparatus has at least substantially reduced hardware functionality available to a user when said battery charging condition is the hardware cut-off condition.

2. An apparatus according to claim 1, further comprising:

an additional interface to a component configured to provide a first functionality.

3. An apparatus according to claim 2, further comprising:

a component configured to provide said first functionality, connected to said additional interface;

a battery, connected to said battery interface; and/or

a near field communication component, connected to said interface to said near field communication component.

4. An apparatus according to claim 1, wherein said near field communication component is configured with a dedicated memory configured to store information on how to operate said near field communication component under said normal operation, software cut-off, and/or hardware cut-off conditions upon detecting a near field communication wakeup event.

5. An apparatus according to claim 4, wherein said dedicated memory is partially powered.

6. An apparatus according to claim 1, wherein said apparatus further comprises a user interface, and wherein said storage is configured to be configurable by a user input via said user interface.

7. An apparatus according to claim 2, wherein said first functionality comprises cellular telephone functionality.

8. An apparatus, comprising:

a battery interface; and

a battery control circuit, connected to said battery interface,

wherein said battery control circuit is configured to control operation of said apparatus in accordance with a charging condition of a battery connected to said battery interface to allow operation of a component of the apparatus when the battery charging condition is any of at least two of:

a normal operation condition;

a software cut-off condition; and

a hardware cut-off condition,

wherein said apparatus further comprises a user configurable storage to store configurations of said apparatus to allow operation of said component of said apparatus when said battery charging condition is at least one of the software cut-off condition and the hardware cut-off condition,

and wherein at least one software application is unavailable to a user when said battery charging condition is the software cut-off condition and said apparatus has at least substantially reduced hardware functionality available to a user when said battery charging condition is the hardware cut-off condition.

9. An apparatus of claim 8, further comprising:

an interface to at least one functionality.

10. An apparatus according to claim 9, further comprising:

a component configured to provide said at least one functionality, connected to said interface to said at least one functionality; and

a battery, connected to said battery interface.

11. An apparatus according to claim 8, further comprising:

a user interface, and wherein said battery control circuit is configured to be configurable by a user input via said user interface.

12. An apparatus according to claim 9, wherein said at least one functionality comprises at least one functionality selected from the group of cellular telephone functionality, a near field communication functionality and a data reproduction functionality.

13. A method, comprising:

detecting a near field communication event;

detecting a charging condition of a battery of a near field communication enabled apparatus;

determining a configuration of a near field communication component of said apparatus related to said detected charging condition of said battery;

allowing operation of the near field communication component of said apparatus based on the detected battery charging condition, wherein the detected battery charging condition is any of at least two of:

a normal operation condition;

a software cut-off condition; and

a hardware cut-off condition; and

storing configurations of the near-field communication component to allow operation of said near field communication component when said battery charging condition is at least one of the software cut-off condition and the hardware cut-off condition,

wherein at least one software application is unavailable to a user when said battery charging condition is the software cut-off condition and said apparatus has at least substantially reduced hardware functionality available to a user when said battery charging condition is the hardware cut-off condition.

14. A method according to claim 13, further comprising:

using received radio frequency energy of said near field communication event to power said near field communication component of said apparatus.

15. A method according to claim 13, further comprising:

using a part of received radio frequency energy of said near field communication event to read from a memory device in which information is stored related to the configuration of said near field communication component related to said detected charging condition of said battery.

16. A method according to claim 13, further comprising:

detecting a voltage of a battery of said apparatus;

determining a configuration of said near field communication component of said apparatus related to said detected battery charging condition; and

operating said near field communication component of said apparatus in accordance with said determined configuration of said near field communication component of said apparatus.

17. A method according to claim 13, further comprising:

receiving a user input defining a configuration of said apparatus for at least two of a normal operation, a software cut-off, and a hardware cut-off condition; and

storing said configuration of said apparatus in a storage of said apparatus.

18. A method according to claim 13, further comprising:

receiving a user input defining a configuration of said near field communication component for at least two of a normal operation, a software cut-off, and a hardware cut-off condition; and

storing said configuration of said near field communication component in a storage of said apparatus.

19. A method, comprising:

receiving a user input defining configurations of a mobile electronic device to allow operation of a component of said mobile electronic device when a battery charging condition is at least one of a software cut-off condition and a hardware cut-off condition;

storing said configurations of said mobile electronic device in a storage of said mobile electronic device; and

allowing operation of the component of the mobile electronic device when the battery charging condition is any of at least two of a normal operation condition, the software cut-off condition and the hardware cut-off condition,

wherein at least one software application is unavailable to a user when said battery charging condition is the software cut-off condition and said apparatus has at least substantially reduced hardware functionality available to a user when said battery charging condition is the hardware cut-off condition.

20. A method according to claim 19, further comprising:

detecting a charging condition of a battery;

determining a configuration of said mobile electronic device related to said detected charging condition of said battery; and

operating said mobile electronic device in accordance with said determined configuration of said mobile electronic device.

21. An article of manufacture, comprising:

a computer readable non-transitory medium containing computer processor readable code, which when executed by a processor causes an apparatus to perform:

detecting a near field communication event;

detecting a charging condition of a battery of a near field communication enabled apparatus;

determining a configuration of a near field communication component of said apparatus based on said detected charging condition of said battery; and

allowing operation of the near field communication component of said apparatus based on the detected battery charging condition, wherein the detected battery charging condition is any of at least two of:

a normal operation condition;

a software cut-off condition; and

a hardware cut-off condition; and

storing configurations of the near-field communication component to allow operation of said near field communication component when said battery charging condition is at least one of the software cut-off condition and the hardware cut-off condition,

wherein at least one software application is unavailable to a user when said battery charging condition is the software cut-off condition and said apparatus has at least substantially reduced hardware functionality available to a user when said battery charging condition is the hardware cut-off condition.

22. An article of manufacture, comprising:

a computer readable non-transitory medium containing computer processor readable code, which when executed by a processor causes an apparatus to perform:

receiving a user input defining configurations of a mobile electronic device to allow operation of a component of said mobile electronic device when a battery charging condition is at least one of a software cut-off condition and a hardware cut-off condition;

storing said configurations of said mobile electronic device in a storage of said mobile electronic device; and

allowing operation of the component of the mobile electronic device when the battery charging condition is any of at least two of a normal operation condition, the software cut-off condition and the hardware cut-off condition, wherein at least one software application is unavailable to a user when said battery charging condition is the software cut-off condition and said apparatus has at least substantially reduced hardware functionality available to a user when said battery charging condition is the hardware cut-off condition.

23. An apparatus according to claim 1, further comprising:

an additional interface to a component configured to provide a first functionality;

wherein said first functionality is not available on any of the software cut-off condition and/or the hardware cut-off condition, while the near field communication component is still available on one or more of the cut-off conditions.

24. An apparatus according to claim 8, further comprising:

an additional interface to a component configured to provide a first functionality;

wherein said first functionality is not available on any of the software cut-off condition and/or the hardware cut-off condition, while the near field communication component is still available on one or more of the cut-off conditions.