

## ACCESSORY CASE WITH A POWER SUPPLY

### CROSS-REFERENCE TO RELATED APPLICATION(S)

[0001] This application claims the benefit of priority to U.S. Provisional Application No. 62/834,312, filed on Apr. 15, 2019, titled “ACCESSORY CASE WITH A POWER SUPPLY,” the disclosure of which is incorporated herein by reference in their entirety.

### FIELD

[0002] The following description relates to accessory devices suitable for use with electronic devices, such as portable electronic devices. In particular, the following description relates to folios that include a case and a cover that can pivot relative to the receptacle. The case provides the accessory device with a space or volume to carry the electronic device, while the cover carries a power supply, or battery, and can pivot to cover the receptacle.

### BACKGROUND

[0003] Accessory devices can include a battery located on a back wall of the accessory device. At this location, the battery is generally behind an electronic device positioned in the accessory device such that the device display is not obstructed. While the accessory device battery provides charging capability to a battery located in the electronic device, the location of the accessory device battery may provide some limitations and drawbacks. For example, electronic devices are known to include antennae for circuitry that supports multiple wireless communication functions. In some instances, the accessory device battery can interfere with the ability of the antennae to transmit and receive wireless communication. As a result, the location of the antennae in the electronic device can limit the accessory device battery in terms of the size and the location. Alternatively, the location of the accessory device battery on the back of the accessory device may require alterations to the design layout of the electronic device, which leads to additional engineering testing and associated changes.

### SUMMARY

[0004] In one aspect, an accessory device for use with an electronic device is described. The accessory device may include a receptacle having a size and shape to receive the electronic device. The accessory device may further include a cover coupled to the receptacle by a hinge that allows the cover to pivot with respect to the receptacle. The accessory device may further include a power supply carried by the cover. The power supply can be electrically coupled with the electronic device when the electronic device is retained in the receptacle.

[0005] In another aspect, accessory device for use with an electronic device is described. The accessory device may include a first portion that defines an internal volume that is capable of receiving the electronic device. The accessory device may further include a second portion coupled to the first portion by a hinge. The second portion may carry a power supply. In some instances, a closed position may include the second portion covering the internal volume. Further, in some instances, an open position may include i)

the first portion being uncovered by the second portion and ii) the power supply being laterally displaced with respect to the first portion.

[0006] In another aspect, an accessory device for use with an electronic device is described. The accessory device may include a receptacle that includes a bottom wall and side-walls that extend from the bottom wall. The sidewalls can combine with the bottom wall to define an internal volume capable of receiving the electronic device. The accessory device may further include a front cover pivotally coupled with the receptacle by a hinge. The accessory device may further include a power supply embedded in the front cover. The power supply can be configured to provide power to a battery of the electronic device. The accessory device may further include an electrical contact positioned on the receptacle and electrically coupled to the power supply. In some instances, receipt of the electronic device in the receptacle is capable of causing the electronic device to electrically couple to the electrical contact.

[0007] Other systems, methods, features and advantages of the embodiments will be, or will become, apparent to one of ordinary skill in the art upon examination of the following figures and detailed description. It is intended that all such additional systems, methods, features and advantages be included within this description and this summary, be within the scope of the embodiments, and be protected by the following claims.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The disclosure will be readily understood by the following detailed description in conjunction with the accompanying drawings, wherein like reference numerals designate like structural elements, and in which:

[0009] FIG. 1 illustrates a front isometric view of an embodiment of an accessory device, showing the accessory device in an open position, in accordance with some described embodiments;

[0010] FIG. 2 illustrates a front isometric view of the accessory device shown in FIG. 1, showing the accessory device in a closed position;

[0011] FIG. 3 illustrates a front isometric view of an embodiment of an electronic device, in accordance with some described embodiments;

[0012] FIG. 4 illustrates a rear isometric view of the electronic device shown in FIG. 3, showing additional features of the electronic device;

[0013] FIG. 5 illustrates a front isometric view of an alternate embodiment of an accessory device, showing the accessory device with a connector, in accordance with some described embodiments;

[0014] FIG. 6 illustrates a rear isometric view of an embodiment of an accessory device and an electronic device positioned in the accessory device, in accordance with some described embodiments;

[0015] FIG. 7 illustrates a rear isometric view of an alternate embodiment of an accessory device, showing the accessory device with charging modules, in accordance with some described embodiments;

[0016] FIG. 8 illustrates a plan view of an embodiment of an accessory device, showing the accessory device with a cover that holds a power supply that is removable from the cover, in accordance with some described embodiments;