

A HOLDER APPARATUS SUITABLE FOR CARRYING AN ELECTRONIC DEVICE

Field Of Invention

The present disclosure generally relates an apparatus suitable for carrying an electronic device. More particularly, various embodiments of the disclosure relate to a holder apparatus suitable for carrying an electronic device such as an electronic tablet device.

Background

Portable electronic devices such as electronic tablet devices are becoming more and more popular. An electronic tablet device can be used for entertainment purposes such as video and/or audio playback. An electronic tablet device can also be useful for web/internet browsing.

Typically, a user of the electronic tablet device may be required to make a selection when, for example, browsing the internet or presented with a list of videos for video playback. For example, when browsing a webpage, a user may be presented with several hyperlinks and the user can make a selection based on the presented hyperlinks. In this regard, an electronic tablet device can be paired with a stylus which can be used by a user for making a selection.

As an electronic tablet device is usually carried around by a user, it is useful to provide a holder to house or carry the electronic tablet device. Furthermore, the holder can be configured to carry the stylus.

However, it may sometimes be necessary to charge the battery of the electronic tablet device.

Conventional holders may require a user to remove the electronic tablet device from its holder when there is a need to charge the battery. Perforations may also be provided at the appropriate location on a conventional holder so that the battery outlet of an electronic tablet device can be accessed for charging. Appreciably there is a need for customization since battery outlets may be located differently for different electronic tablet devices. Thus conventional holders do not allow charging of the batteries of electronic tablet devices in an efficient manner.

Moreover, although conventional holders may be configured to securely retain the stylus, to ensure that the stylus is not misplaced after use, the onus is still on the user to ensure that the stylus is kept properly in the holder.

It is therefore desirable to provide a solution to address at least one of the foregoing problems of conventional holders.

Summary of the Invention

In accordance with an aspect of the disclosure, a holder apparatus is provided.

The holder apparatus can be suitable for carrying an electronic device such as an electronic tablet device. Additionally, the holder apparatus can be configured to carry a charger module. The charger module can be configured for cooperation with a base charger in a manner so as to generate electric current.

Electric current can be transmitted to the electronic device when the electronic device is carried by the holder apparatus.

In particular, the charger module can include a charger induction coil. The base charger can include a base induction coil. The charger induction coil can be wirelessly coupled to the base induction coil when the holder apparatus is placed adjacent to the base charger. The base induction coil can be configured to create an alternating electromagnetic field. The charger induction coil can be configured to draw power from the alternating electromagnetic field and convert power drawn from the alternating electromagnetic field into electric current.

The charger module can optionally further include one or both of a power source module and a control module. The charger module can also optionally include an output module. The charger induction coil can be coupled to any of the power source module, the control module and the output module, or any combination thereof.

Additionally, one or both of the power source module and the control module can be coupled to the output module. Moreover, the output module can be configured for coupling the electronic device, when carried by the holder apparatus, to one or both of the power source module and the control module. The output module can be further configured for coupling the electronic device, when carried by the holder apparatus, to the charger induction coil.

When the power source module is coupled to the charger induction coil, electric current can be transmitted from the charger induction coil for charging the power source module. The power source module can be associated with power level.

Furthermore, when the control module is coupled to the charger induction coil, the control module can be configured to generate control signals for controlling the manner in which the charger induction coil charges the power source module.

Specifically, control signals can be based on the detected power level of the power source module and the control signals can be communicated from the control module so as to initiate charging of the power source module if the power level is detected to be below a threshold level.

Moreover, the holder apparatus can be further configured to carry one or both of a stylus and a notepad. The stylus can be suitable for use with the electronic device and the notepad can be suitable for use with the stylus.

Brief Description of the Drawings

Embodiments of the disclosure are described hereinafter with reference to the following drawings, in which:

Fig. 1a shows a system which includes a holder apparatus having a charger module and a base charger, according to an embodiment of the disclosure;

Fig. 1b shows the holder apparatus of Fig. 1a in further detail where, according to an embodiment of the disclosure, the holder apparatus can be configured to carry an electronic device such as an electronic tablet device, a stylus and a notepad, or any combination thereof;

Fig. 1c shows the charger module and the base charger of Fig. 1a in further detail, according to an embodiment of the disclosure;

Fig. 2a and Fig. 2b show the electronic device of Fig. 1b in further detail, according to an embodiment of the disclosure

Fig. 2c and Fig. 2d show the stylus of Fig. 1b in further detail, according to an embodiment of the disclosure;

Fig. 2e shows an exemplary application in association with the system of Fig. 1a, according to an embodiment of the disclosure.

Fig. 3 shows that the back cover portion of the holder apparatus of Fig. 1a can include a folding section, in accordance with an embodiment of the disclosure;

Fig. 4a and Fig. 4b show that the that the back cover portion of the holder apparatus of Fig. 3 can be folded due to the folding section according to an embodiment of the disclosure; and

Fig. 5 shows that the stylus can be carried adjacent/at the folding portion of the holder apparatus of Fig. 1a, according to an embodiment of the disclosure.

Detailed Description

Representative embodiments of the disclosure, for addressing one or more of the foregoing problems associated with conventional holders, are described hereinafter with reference to Fig. 1 and Fig. 2.

A system 100, in accordance with an embodiment of the disclosure, is shown in Fig. 1a. The system 100 can include a holder apparatus 102 and a base charger 104. The holder apparatus 102 can be configured to carry a charger module 106.

The holder apparatus 102 can, for example, be a pouch for an electronic device as will be discussed later in further detail with reference to Fig. 1b.

The holder apparatus 102 can include a front cover portion 102a, a back cover portion 102b and a folding portion 102c.

Each of the front and back cover portions 102a/102b can include a first face 102d and a second face 102e. The first face 102d opposes the second face 102e in a manner such that an edge 102f can be defined between the first and second faces 102d/102e. Appreciably, the folding portion 102c can also be associated with the aforementioned first and second faces 102d/102e.

Additionally, in accordance with another embodiment of the disclosure as will be discussed with reference to Fig. 3, one or both of the front and back cover portions 102a/102b can optionally include a folding section (not shown in Fig. 1 but will be shown later in Fig. 3). The folding section can, for example, be defined along a length of one or both of the front and back cover portions 102a/102b in a manner such that one or both of the front and back cover portions 102a/102b can be folded as will be discussed later in further detail with reference to Fig. 3 and Fig. 4. In this regard, the holder apparatus 102 can include a folding section definable along a length of one or both of the front and back cover portions 102a/102b.

The folding portion 102c can be defined between the front and back cover portions 102a/102b. The folding portion 102c can be for folding the holder apparatus 102 such that the holder apparatus 102 can be in an open configuration or a closed configuration. The open configuration is as shown in Fig. 1a where the first face 102d of the front cover portion 102a does not face the first face 102d of the back cover portion 102b. The closed configuration (not shown) can be such that the first face 102d of the front cover portion 102a and the first face 102d of the back cover portion 102b substantially face each other.

Earlier mentioned, the holder apparatus 102 can be configured to carry the charger module 106. Specifically, the holder apparatus 102 can be shaped and dimensioned to carry the charger module 106. More specifically, any one of the front cover, back cover and folding portions 102a/102b/102c, or any combination thereof, can be configured to carry the charger module 106 or at least a portion of the charger module 106.

In one example, as shown in Fig. 1a, the charger module 106 can be carried between the first and second faces 102d/102e of the back cover portion 102b. The base charger 104 can be coupled to the charger module 106 via one or both of wireless coupling and wired coupling. Additionally, the charger module 106 can be configured to cooperate with the base charger 104 in a manner as will be discussed in further detail with reference to Fig. 1c.

Referring to Fig. 1b, the holder apparatus 102 can, as mentioned in an earlier example, be a pouch for an electronic device. The electronic device can, for example, include a battery source (not shown) which can be configured to power the electronic device. The electronic device can, for example, be an electronic tablet device 108.

In one embodiment, the holder apparatus 102 can be configured to carry the electronic tablet device 108. In this regard, the holder apparatus 102 can be shaped and dimensioned in a manner so as to carry the electronic tablet device 108. For example, the holder apparatus 102 can be configured to accommodate and retain the electronic tablet device 108 in a manner such that the electronic tablet device 108 can be released from retention whenever desired.

In another embodiment, in addition to the electronic tablet device 108, the holder apparatus 102 can be further configured to carry a stylus 110 which is usable with the electronic tablet device 108. In this regard, the holder apparatus 102 can be further shaped and dimensioned in a manner so as to carry the stylus 110. For example, the holder apparatus 102 can be configured to accommodate and retain the stylus 110 in a manner such that the stylus 110 can be released from retention whenever desired.

In yet another embodiment, in addition to the electronic tablet device 108 and the stylus 110, the holder apparatus 102 can yet be further configured to carry a notepad 112 having one or more sheets of paper. In this regard, the holder apparatus 102 can yet be further shaped and dimensioned in a manner so as to carry the notepad 112. Preferably, as with, for example, the electronic tablet device 108 and the stylus 110, the notepad 112 can be released from retention whenever desired.

In yet a further embodiment, the holder apparatus 102 can be configured to carry any of the electronic tablet device 108, the stylus 110 and the notepad 112, or any combination thereof. In this regard, the holder apparatus 102 can be shaped and dimensioned to carry any of the electronic tablet device 108, the stylus 110 and the notepad 112, or any combination thereof.

In one example, as shown in Fig. 1b, the electronic tablet device 108 can be carried at the back cover portion 102b of the holder apparatus 102, the stylus 110 can be carried at the front cover portion 102a of the holder apparatus 102, and the notepad 112 can be carried at the front cover portion 102a of the holder apparatus 102.

More specifically, in one example, the electronic tablet device 108 can be carried at the first face 102d of the back cover portion 102b, the stylus 110 can be carried at the first face 102d of the front

cover portion 102a, and the notepad 112 can be carried at the first face 102d of the front cover portion 102a.

The electronic tablet device 108, the stylus 110 and the notepad 112 will be discussed later in further detail with reference to Fig. 2.

Earlier mentioned, the charger module 106 can be configured to cooperate with the base charger 104. More specifically, the charger module 106 can be configured to cooperate with the base charger 104 in a manner so as to charge and/or power the electronic device when the holder apparatus 102 carries the electronic device. The charger module 106 and the base charger 104 will be discussed in further detail with reference to Fig. 1c hereinafter.

Referring to Fig. 1c, the base charger 104 can, for example, charging station having a base induction coil 104a and a placement surface 104b. The base charger 104 can be coupled to the charger module 106.

The charger module 106 can include a charger induction coil 106a and, optionally, a power source module 106b. The charger module 106 can, optionally, further include a control module 106c and an output module 106d.

The charger induction coil 106a can be coupled to any one of the power source module 106b, the control module 106c and the output module 106d, or any combination thereof. Additionally, the electronic tablet device 108 can be coupled (not shown) to the charger module 106 via the output module 106d. Furthermore, earlier mentioned, the electronic tablet device 108 can include a battery source. In this regard, the battery source can, for example, be a primary battery pack and the power source module 106b can, for example, be an auxiliary battery pack.

In one embodiment, the charger induction coil 106a can be coupled to one or both of the power source module 106b and the control module 106c. One or both of the power source module 106b and the control module 106c can be coupled to the output module 106d. The power source module 106b can optionally be coupled to the output module 106d.

In another embodiment, the power source module 106b and the control module 106c can be omitted. In this regard, the charger induction coil 106a can be coupled directly to the output module 106d.

In yet another embodiment, any one of the power source module 106b and the control module 106c can be omitted. In this regard, the charger induction coil 106a can be coupled to the output module 106d and any one of the power source module 106b and the control module 106c. In one example, the charger induction coil 106a can be coupled to any one of the power source module 106b and the control module 106c, and directly to the output module 106d. In another example, the charger induction coil 106a can be coupled to the output module 106d via any one of the power source module 106b and the control module 106c.

In yet a further embodiment, the charger induction coil 106a can be coupled directly to the power source module 106b, the control module 106c and the output module 106d. One or both of the power source module 106b and the control module 106c can be further coupled to the output module 106d. The power source module 106b can optionally be coupled to the output module 106d.

In a first exemplary scenario, the base induction coil 104a can be wirelessly coupled to the charger induction coil 106a. Specifically, the holder apparatus 102 can be placed adjacent to the charger module 106 such that the base charger 104 can be wirelessly coupled to the charger module 106. More specifically, the holder apparatus 102 can be placed on the placement surface 104b of the base charger 104 such that the base charger 104 and the charger module 106 can be wirelessly coupled.

Additionally, the charger induction coil 106a can be coupled to the power source module 106b and the control module 106c. The power source module 106b and the control module 106c can be coupled to the output module 106d. The power source module 106b can optionally be coupled to the output module 106d. The charger module 106 can be coupled, via the output module 106d, to the electronic tablet device 108 when the holder apparatus 102 carries the electronic tablet device 108.

The base induction coil 104a can, for example, be configured to create an alternating electromagnetic field. The charger induction coil 106a can be configured to take or draw power

from the electromagnetic field. The charger induction coil 106a can be further configured to convert the power taken or drawn from the electromagnetic field into electric current.

The charger induction coil 106a can be coupled to the power source module 106b for charging it. In this manner, the power source module 106b can be inductively charged. Hence, charging of the power source module 106b can be via the manner of inductive charging.

Specifically, electric current can be transmitted from the charger induction coil 106a to charge the power source module 106b. The charger induction coil 106a can be coupled to the power source module 106b via one or both of wired coupling and wireless coupling. Furthermore, the power source module 106b can be coupled to the electronic tablet device 108 via the output module 106d in a manner such that the electronic tablet device 108 can be powered by the power source module 106b.

Additionally, the charger induction coil 106a can be coupled to the control module 106c and the control module 106c can be configured to control the manner in which the charger induction coil 106a charges the power source module 106b.

For example, one or both of the control module 106c and the electronic tablet device 108 can be configured to detect power level of the power source module 106b. If power level of the power source module 106b is detected to be below a threshold level, control signals can be generated by the control module 106c and communicated to the charger induction coil 106a so as to initiate charging of the power source module 106b.

In a more specific example, if power level of the power source module 106b is detected to be below a threshold level of below 85% of full power level, control signals can be generated by the control module 106c and communicated to the charger induction coil 106a so as to charge the power source module 106b from below 85% of full power level to at least 85% of full power level. Preferably, the power source module 106b can be charged to 100% of full power level.

The output module 106d can, in one example, be a connector portion configured for wired coupling of the charger module 106 and the electronic tablet device 108. In this regard, the power source module 106b and the control module 106c can be wire coupled, via the output module 106d, to the electronic tablet device 108.

The output module 106d can, in another example, be a communication portion such as a transceiver configured for wireless coupling of the charger module 106 and the electronic tablet device 108. In this regard, control module 106c can be wirelessly coupled, via the output module 106d, to the electronic tablet device 108 for signal communication. Furthermore, as with the foregoing discussion pertaining to inductive charging of the power source module 106b, wireless coupling of the power source module 106b and the electronic tablet device 108 to power the electronic tablet device 108 can also be achieved in an analogous manner.

In a second exemplary scenario, the base induction coil 104a can be wirelessly coupled to the charger induction coil 106a. Specifically, the holder apparatus 102 can be placed adjacent to the charger module 106 such that the base charger 104 is wirelessly coupled to the charger module 106. More specifically, the holder apparatus 102 can be placed on the placement surface 104b of the base charger 104 such that the base charger 104 and the charger module 106 can be wirelessly coupled.

Additionally, the charger induction coil 106a can be coupled to the control module 106c. The control module 106c can be coupled to the output module 106d. The charger module 106 can be coupled, via the output module 106d, to the electronic tablet device 108 when the holder apparatus 102 carries the electronic tablet device 108.

Appreciably, electric current can be transmitted from the charger induction coil 106a to charge the battery source of the electronic tablet device 108 directly.

Further appreciably, the second exemplary scenario differs from the first scenario in that the power source module 106b is omitted. In this regard, the relevant portions of the foregoing discussion pertaining to the first exemplary scenario can apply to the second exemplary scenario as appropriate.

In a third exemplary scenario, the base induction coil 104a can be wirelessly coupled to the charger induction coil 106a. Specifically, the holder apparatus 102 can be placed adjacent to the charger module 106 such that the base charger 104 is wirelessly coupled to the charger module 106. More specifically, the holder apparatus 102 can be placed on the placement surface 104b of the base charger 104 such that the base charger 104 and the charger module 106 can be wirelessly coupled. Additionally, the charger induction coil 106a can be coupled directly to the electronic device 108.

Appreciably, electric current can be communicated from the charger induction coil 106a to charge the battery source of the electronic tablet device 108 directly.

Further appreciably, the third exemplary scenario differs from the first scenario in that the power source module 106b and the control module 106c are omitted. Furthermore, the output module 106d can, optionally, be omitted. In this regard, the relevant portions of the foregoing discussion pertaining to the first exemplary scenario can apply to the third exemplary scenario as appropriate.

Earlier mentioned, the holder apparatus 102 can be configured to carry any of the electronic tablet device 108, the stylus 110 and the notepad 112, or any combination thereof.

The electronic tablet device 108, the stylus 110 and the notepad 112 will be discussed in further detail with reference to Fig. 2a to Fig. 2e hereinafter. Fig. 2a and Fig. 2b show the electronic tablet device 108 in further detail. Fig. 2c and Fig. 2d show the stylus 110 in further detail. Fig. 2e illustrates an exemplary application in association with the system 100.

Referring to Fig. 2a, the electronic tablet device 108 can include a casing 202, a display screen 204 and a communication module 206. The casing 202 can be shaped and dimensioned to carry the display screen 204 and the communication module 206.

Specifically, the casing 202 can be shaped and dimensioned to carry the display screen 204 in a manner so that the display screen 204 can be viewed by a user. Furthermore, the casing 202 can be shaped and dimensioned to carry the communication module 206 in a manner so that the communication module 206 can communicate with, for example, the stylus 110 as will be discussed in further detail with reference to Fig. 2e.

Referring to Fig. 2b, the electronic tablet device 108 can further include a processor 208 and, optionally, a storage device 210. In this regard, the casing 202 can be further shaped and dimensioned in a manner so as to carry the processor 208 and the storage device 210 therein. The processor 208 can be coupled to one or both of the display screen 204 and the communication module 206. The processor 208 can be further coupled to the storage device 210. Additionally, the communication module 206 can optionally be coupled to storage device 210.

Fig. 2c and Fig. 2d show the stylus 110 in further detail. In particular, Fig. 2c shows the stylus 110 in a first configuration 211a and Fig. 2d shows the stylus 110 in a second configuration 211b.

Referring to Fig. 2c and Fig. 2d, the stylus 110 can include a head portion 212, a body portion 214 and a tail portion 216. The body portion 214 can include a tip portion 214a. The tip portion 214a can be at one end of the body portion 214. The tip portion 214a can be analogous to the tip of a pen which is, for example, suitable for writing.

The head portion 212 can be coupled to the body portion 214. Additionally, the tail portion 216 can be coupled to the body portion 214.

Specifically, the head portion 212 can be detachably coupled to the body portion 214. Furthermore, the tail portion 216 can be detachably coupled to the body portion 214.

As shown in Fig. 2c, in the first configuration 211a, the head portion 212 is attached to the body portion 214. As shown in Fig. 2d, in the second configuration 211b, the head portion 212 is detached from the body portion 214.

In the first configuration 211a, when the head portion 212 is attached to the body portion 214, the tip portion 214a is preferably not accessible. In the second configuration 211b, when the head portion 212 is detached from the body portion 214, the tip portion 214a can preferably be accessed so that the stylus 110 can, for example, be used, in a manner analogous to a pen, for writing.

The stylus 110 can further include a tracking device 218 and a communication device 220. The stylus 110 can also include a screen portion 222. The stylus 110 can yet further include one or more control buttons 224 and an internal power source (not shown) such as a battery cell.

One or both of the body portion 214 and the tail portion 216 can be configured to carry the tracking device 218 and the communication device 220. Additionally, the screen portion 222 can be carried by either the body portion 214 or the tail portion 216. Furthermore, the control buttons 224 can be carried by one or both of the body portion 214 and the tail portion 216. Likewise, the internal power source can be carried by one or both of the body portion 214 and the tail portion 216.

Preferably, the body portion 214 carries the tracking device 218 and the screen portion 222. The tail portion 216 carries the communication device 220. Additionally the control buttons 224 and the internal power source can be carried by the body portion 214.

More specifically, the body portion 214 can be shaped and dimensioned in a manner so as to carry the tracking device 218 therein and so that the screen portion 222 can be viewed by a user. Furthermore, the tail portion 216 can be shaped and dimensioned in a manner so as to carry the communication device 220 therein. Additionally, the body portion 214 can be shaped and dimensioned in a manner so as to carry the control buttons 224 so that they can be accessed by a user.

The tracking device 218 can be coupled (not shown) to the communication device 220. Furthermore, the screen portion 222 can be coupled (not shown) to one or both of the tracking device 218 and the communication device 220. Additionally, the control buttons 224 can be coupled (not shown) to any of tracking device 218, the communication device 220, the screen portion 222, or any combination thereof.

The internal power source can be for powering any of the tracking device 218, the communication device 220 and the screen portion 222, or any combination thereof. The control buttons 224 can be for controlling any of the tracking device 218, the communication device 220 and the screen portion 222, or any combination thereof.

Fig. 2e illustrates an exemplary application in association with the system 100. Particularly, in the exemplary application, the electronic tablet device 108 and the stylus 110 can be configured to signal communicate with each other.

Specifically, the communication module 206 of the electronic tablet device 108 and the communication device 220 of the stylus 110 can be configured to signal communicate with each other. More specifically, control signals can be generated and communicated from the communication module 206 to the communication device 220. Control signals can be generated by, for example, the processor 208. Moreover, input signals can be generated and communicated from the communication device 220 to the communication module 206. The input signals can be generated by, for example, the tracking device 218.

In this regard, the processor 208 can, for example, be a microprocessor. Additionally, the tracking device 218 can, for example, be a gyroscope. Moreover, the communication module 206 and communication device 220 can each, for example, be a Bluetooth based transceiver.

For example, when in the first configuration 211a, a user can use the stylus 110, by moving it along the display screen 204, to create an electronic drawing. Electronic ink corresponding to movement of the stylus 110 along the display screen 204 can be displayed. Specifically, electronic ink corresponding to movement of the stylus 110 can be viewed via the display screen 204. Thus electronic ink viewable via the display screen 204 can correspond to the electronic drawing created by the user.

Furthermore, when in the second configuration 211b, a user can use the stylus 110 in a manner analogous to a pen to, for example, draw a picture or write on the notepad 112. Specifically, the stylus 110 can be moved along the notepad 112 in a manner so as to, for example, draw a picture or write on the notepad 112.

The tracking device 218 can be configured to track movement of the stylus 110 on the notepad 112 and communicate input signals to the electronic tablet device 108. The input signals can be communicated from the communication device 220 and received by the communication module 206.

The communication module 206 can further communicate the received input signals to the processor 208. The processor 208 can process the received input signals to produce output signals. Output signals can then be communicated from the processor 208 to the display screen 204. The output signals can be displayed via the display screen 204 as display data. Display data displayed at the display screen 204 can correspond to digital ink emulating, for example, the picture or writings on the notepad 112. The display data can, optionally, be stored in the storage device 210.

For example, as shown, a character "A" can be written, using the stylus 110, on the notepad 112. The tracking device 218 can be configured to track the movement of the stylus 110 and communicate input signals to the electronic tablet device 108. The input signals can correspond to the movement of the stylus 110 when the character "A" was written on the notepad 112. The received input signals can be communicated to and processed by the processor 208, as described earlier, such that digital ink corresponding to the character "A" can be displayed at the display screen 204.

To ensure alignment or synchronization of movement of the stylus 110 along the notepad 112 and display data displayed by the display screen 204, one or more position markers 112a can be provided along at least an edge of the notepad 112. Preferably, as shown, a position marker 112a can be provided at each corner of the notepad 112.

The stylus 110 can be configured to detect the position marker 112a and generate corresponding synchronization data which can be communicated to the electronic tablet device 108. The position marker 112a can, for example, be detected by the communication device 220. The synchronization data can be generated by the tracking device 218 and communicated to the communication device 220 which can, in turn, communicate the synchronization data to the communication module 206.

The communication module 206 can be configured to receive the synchronization data. The received synchronization data can be further communicated from the communication module 206 to the processor 208. Based on the received synchronization data communicated to the processor 208, digital ink emulating the movement of the stylus 110 along the notepad 112 can be aligned accordingly.

Additionally, digital ink emulating movement of the stylus 110 along the notepad 112 can be displayed at the display screen 204 either on a real time basis or on a time-delayed basis.

In one example, digital ink corresponding to movement of the stylus 110 can be displayed on the display screen 204 as the stylus 110 is moved along the notepad 112. In this manner, digital ink emulating movement of the stylus 110 along the notepad 112 can be displayed at the display screen 204 on a real time basis.

In another example, input signals communicated from the stylus 110 can be received by the electronic tablet device 108 and stored in the storage device 210 for future retrieval and display. In this manner, digital ink emulating movement of the stylus 110 along the notepad 112 can be displayed by the display screen 204 on a time-delayed basis.

In yet another example, the processor 208 can be configured to process received input signals such that digital ink emulating, for example, writings on the notepad 112 is displayed only after further movement of the stylus 110 cannot be detected after a predetermined time period of, for example,

5 seconds. In this manner, digital ink emulating movement of the stylus 110 along the notepad 112 can be displayed by the display screen 204 on a time-delayed basis.

Moreover, the stylus 110 can optionally be configured as a telecommunication device. Specifically, the stylus 110 can be configured such that it functions as, for example, a mobile telephone device having text messaging and voice communication functions. In one example, the stylus 110 can be configured to receive and display text messages. In another example, the stylus 110 can be configured to receive an incoming telephone transmission from another telecommunication device (not shown).

Specifically, the communication device 220 can be configured to receive telecommunication signals corresponding to, for example, text messages and/or audio signals. The telecommunication signals can be further communicated to the screen portion 222 in a manner such that the text messages can be displayed thereat. In this regard, the control buttons 224 can be used to control the stylus 110 in a manner so that the telecommunication signals can be received.

In one example, to receive an incoming telephone transmission from another telecommunication device, a user can press one of the control buttons 224. In another example, a text message can be communicated from another telecommunication device and a user can determine how the received text message can be displayed via the screen portion 222. A received text message can, for example, be displayed such that characters of the received text message are scrolled across the screen portion 222.

Furthermore, a security signal can be communicated between the electronic tablet device 108 and the stylus 110. An alarm signal can be communicated based on the security signal. Thus the security signal can be helpful in ensuring that the stylus 110 is not easily misplaced.

The alarm signal can, for example, be in the form of an audible beep. The security signal can, for example, be in the form of a train of polling signals.

In one embodiment, the stylus 110 can be configured to communicate the security signal and the electronic tablet device 108 can be configured to detect the security signal. In another embodiment, the electronic tablet device 108 can be configured to communicate the security signal and the stylus 110 can be configured to detect the security signal. In yet another embodiment, the security signal

can be communicated from each of the electronic tablet device 108 and the stylus 110, and the electronic tablet device 108 and the stylus 110 can be configured to detect the security signal communicated from each other.

In this regard, one or both of the communication module 206 and the communication device 220 can be configured to one or both of communicate and detect the security signal. Moreover, based on the security signal, the alarm signal can be communicated from one or both of the electronic tablet device 108 and the stylus 110.

In one exemplary implementation, the stylus 110 can be configured to communicate a security signal to the electronic tablet device 108. The electronic tablet device 108 can be configured to detect the security signal so as to determine whether or not the stylus 110 is in its vicinity.

Particularly, based on the security signal, if the electronic tablet device 108 is not able to detect the security signal or if the stylus 110 is detected by the electronic tablet device 108 to be beyond a predetermined distance away from it, the electronic tablet device 108 can preferably be configured to communicate an alarm signal so as to indicate that the stylus 110 may possibly be misplaced.

Earlier mentioned, one or both of the front and back cover portions 102a/102b can optionally include a folding section. The folding section can, for example, be defined along a length of one or both of the front and back cover portions 102a/102b.

Referring to Fig. 3, in accordance with an embodiment of the disclosure, the back cover portion 102b can include a folding section 300. The folding section 300 can be defined along a length of the back portion 102b. More specifically, the folding section 300 can, for example, be defined along a length, of the back cover portion 102, which can be substantially parallel relative to the folding portion 102c. In this regard, the back cover portion 102b can be folded as will be discussed later in further detail with reference to Fig. 4.

As shown in Fig. 4a and Fig. 4b, the electronic tablet device 108 can, as earlier mentioned, be carried at the back cover portion 102b. Moreover, the back cover portion 102b can be folded due to the folding section 300. Fig. 4a provides a side view and Fig. 4b provides a perspective view.

Specifically, in addition to being configurable to carry the electronic tablet device 108, the back cover portion 102b can be configured so that an edge 305 of the electronic tablet device 108 can contact a portion of the front cover portion 102a if desired.

More specifically, the back cover portion 102b can be configured to carry the electronic tablet device 108 and can be folded such that an edge 305 of the electronic tablet device 108 can contact a portion of the first face 102d of the front cover portion 102a.

Yet more specifically, one or both of the folding portion 102c and the folding section 300 can facilitate folding of the holder apparatus 102 such that an edge 305 of the electronic tablet device 108 can contact a portion of the first face 102d of the front cover portion 102a.

Appreciably, one or both of the back cover portion 102b and the folding portion 102c can be configured to facilitate flexible contact between an edge 305 of the electronic tablet device 108 and the first face 102d of the front cover portion 102a. Specifically, at least one of the back cover portion 102b and the folding portion 102c can be configured for folding in a manner so as to allow an edge 305 of the electronic tablet device 108 to contact any desired portion of the first face 102d of the front cover portion 102a.

In this manner, the holder apparatus 102 allows the electronic tablet device 108 to be supported on a surface 310 such as a tabletop or the lap of a user. Specifically, the holder apparatus 102 allows the electronic tablet device 108 to be elevated relative to the surface 310.

Furthermore extent of elevation can be adjusted in accordance with preference to, for example, viewing angle of a user. Extent of elevation can be associated with elevation angle 330. Appreciably, elevation angle 330 can be determined by at least one of the folding portion 102c and the folding section 300. Therefore angle of elevation (i.e., elevation angle 330) of the electronic tablet device 108 relative to the surface 310 can be flexibly adjusted based on at least one of the folding section 300 and the folding portion 102c.

Thus, based on at least one of the folding portion 102c and the folding section 300, the aforementioned angle of elevation can correspondingly be adjusted.

Moreover, the holder apparatus 102 can also be configured to secure the aforementioned contact between an edge 305 of the electronic tablet device 108 and the first face 102d of the front cover portion 102a. In this regard, the holder apparatus 102 can further include securing portions (not shown). The securing portions can be in the form of, for example, Velcro contacts or magnetic contacts.

For example, the holder apparatus 102 can include a first Velcro contact portion (not shown) and a second Velcro contact portion (not shown). The first Velcro contact portion can be at the supporting structures (not shown) securing the electronic tablet device 108, when carried at the back cover portion 102b. Specifically, at least a portion of the supporting structure coinciding with the edge of the electronic tablet device 108 can be provided with the first Velcro contact. The second Velcro contact can be at the first face 102d of the front cover portion 102a.

Based on the foregoing, it is appreciable that contact between the front and/or back cover portions 102a/102b and the surface 310 can be minimized. This is helpful in preventing the front and/or cover portions 102a/102b from becoming dirty due to contact with the surface 310. For example, as shown in Fig. 4a, only the folding portion 102c and an edge 360 of the back cover portion 102b are in contact with the surface 310. Thus a substantial portion of the back cover portion 102b as well as the front cover portion 102a can be kept from contact with the surface 310.

Furthermore, it is further appreciable that based on the foregoing, a section of the front cover portion 102a can be considered to protrude from/relative to the display screen 204 of the electronic tablet device 108. This section (i.e. a protruding section 370) can be useful for applications such as privacy and light blocking. For example, the protruding section 370 can be useful for impeding unauthorized viewing from another person other than a user of the electronic tablet device 108.

Earlier mentioned, the holder apparatus 102 can be configured to carry a stylus 110 which is usable with the electronic tablet device 108. In one example, the stylus 110 can be carried at the front cover portion 102a of the holder apparatus 102.

As shown in Fig. 5, the stylus 110 can, in another example, be carried adjacent/at the folding portion 102c of the holder apparatus 102. Specifically, the holder apparatus 102 can be configured to carry the stylus 110 adjacent/at the folding portion 102c. More specifically, the holder apparatus 102 can be configured to carry the stylus 110 adjacent/at the second face 102e of the folding portion 102c.

The holder apparatus 102 can further include securing segments 500 at the second face 102e of the folding portion 102c for holding the stylus 110.

Furthermore, the second face 102e of the folding portion 102c can be shaped and dimensioned to accommodate the stylus 110. Specifically, the second face 102e of the folding portion 102c can be a shaped surface which mates the general shape of the exterior of the stylus 110. For example, where the exterior of the stylus is generally cylindrical in shape (i.e., convex), the second face 102e of the folding portion 102c can be a concave surface 510.

In the foregoing manner, various embodiments of the disclosure are described for addressing at least one of the foregoing disadvantages. Such embodiments are intended to be encompassed by the following claims, and are not to be limited to specific forms or arrangements of parts so described and it will be apparent to one skilled in the art in view of this disclosure that numerous changes and/or modification can be made, which are also intended to be encompassed by the following claims.

For example, the holder apparatus 102 can be further provided with handles (not shown) for carrying the holder apparatus 102. In this regard, the holder apparatus 102 can be fashioned such that it can be carried in a manner analogous to a handbag.

In a further example, the aforementioned security signal can be communicated from one or both of the electronic tablet device 108 and the stylus 110. The security signal can be received by another electronic device. The aforementioned alarm signal can be communicated from another electronic device to alert a user that the holder apparatus 102 may potentially be misplaced. In this regard, the foregoing discussion pertaining to the communication of security signal between the electronic tablet device 108 and the stylus 110, and the communication of the alarm signal analogously applies.

In yet a further example, the tail portion 216 can include a lanyard portion (not shown) such that the stylus 110 can, for example, be worn around the neck of a user.

Claim(s)

1. A stylus which is usable with an electronic device, the stylus being configurable to generate and communicate a security signal, and the electronic device being configurable to detect the security signal so as to determine whether the stylus is in the vicinity of the electronic device,

wherein the electronic device is configurable to communicate an alarm signal if based on the security signal, the electronic device one of:

determines that the stylus is unable to be detected; and

determines that the stylus is beyond a predetermined distance away from the electronic device.