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(54) Title: USB DOCK

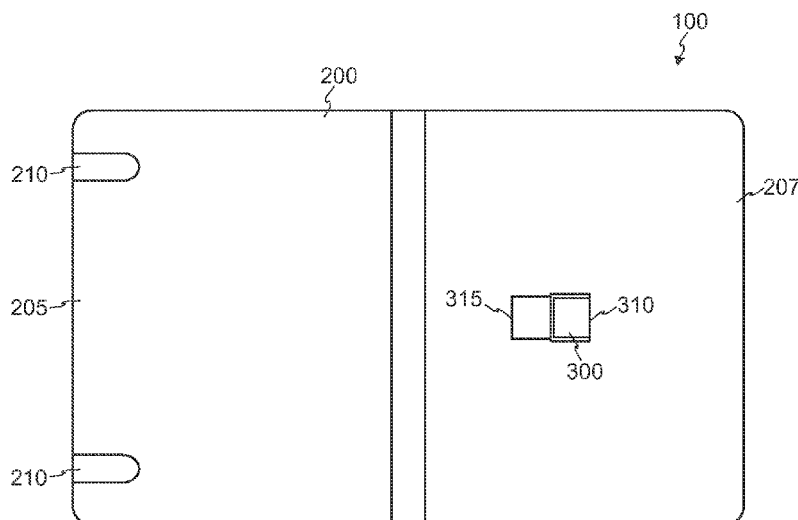


Fig. 1

(57) Abstract: A USB device securement apparatus is disclosed. The USB device securement apparatus includes a dock that includes a device side and an attachment side. The device side of the dock receives the USB device and the attachment side of the dock is coupled to a surface. This arrangement provides proper securement of the USB device during retail, transportation, and storage.

USB Dock

FIELD OF THE INVENTION

5 [001] The present invention relates to an apparatus that holds any type of a Universal Serial Bus (“USB”) device.

BACKGROUND OF THE INVENTION

10 [002] The use of media storage devices such as USBs, compact disks (CD), and digital video disks (DVD) are known in the prior art. For the purposes of retail, transportation, and storage, CD and DVD media devices are usually held in place by a dock and are normally contained in a packaging case. Currently, however, there is no USB dock that will properly secure a USB device within a packaging case or to other surfaces. Therefore, it is desirable to have a securement and packaging apparatus for a USB device where the apparatus is a dock that secures the USB device within a packaging case or to a
15 surface.

 [003] Various techniques have been disclosed in United States Patent Nos. 4702374 (Keiner), 6733329 (Yang), 6739452 (Rochelo), 6839239 (Lee), 7293647 (Wong et al.), 7306159 (Rochelo), U.S. Patent Application Nos. 20030062275 (Rochelo), 20040038592 (Yang), 20050150796 (Wong), 20060144751 (Tsang), 20060266671 (Langerak), and
20 20070163913 (Or et al.) to overcome the problems with media securement devices. However, these disclosures suffer from one or more of the following disadvantages. First, none of these inventions include a dock for a USB device. Second, none of these inventions are simple designs that are easy and relatively inexpensive to manufacture.

SUMMARY OF THE INVENTION

[004] A securement apparatus for use with a USB device comprises a dock. The dock includes a device side and an attachment side. The USB device fits into the device side
5 of the dock and the attachment side couples the dock to a surface.

[005] The present invention is directed to a securement apparatus for use with a USB device.

[006] It is a further object of the present invention to provide a securement apparatus for use with a USB device such that the securement apparatus is integrally coupled
10 to a surface.

[007] It is a further object of the present invention to provide a securment apparatus that protects and secures a USB device.

[008] It is a further object of the present invention to provide a securement apparatus that protects and secures a USB flash drive.

15 [009] It is a further object of the present invention to provide a securement apparatus that protects and secures a USB flash drive and its protective cap.

[010] It is a further object of the present invention to provide a securement apparatus that is easy and inexpensive to manufacture.

[011] The novel features that are considered characteristic of the invention are set
20 forth with particularity in the appended claims. The invention itself, however, both as to its structure and its operation together with the additional object and advantages thereof will best be understood from the following description of the preferred embodiment of the USB dock when read in conjunction with the accompanying drawings. Unless specifically noted,

it is intended that the words and phrases in the specification and claims be given the ordinary and accustomed meaning to those of ordinary skill in the applicable art or arts. If any other meaning is intended, the specification will specifically state that a special meaning is being applied to a word or phrase. Likewise, the use of the words “function” or “means” in the Description of Preferred Embodiments is not intended to indicate a desire to invoke the special provision of 35 U.S.C. §112, paragraph 6 to define the invention. To the contrary, if the provisions of 35 U.S.C. §112, paragraph 6 are sought to be invoked to define the invention(s), the claims will specifically state the phrases “means for” or “step for” and a function, without also reciting in such phrases any structure, material, or act in support of the function.

[012] Moreover, even if the provisions of 35 U.S.C. §112, paragraph 6 are invoked to define the inventions, it is intended that the inventions not be limited only to the specific structure, material or acts that are described in the preferred embodiments, but in addition, include any and all structures, materials or acts that perform the claimed function, along with any and all known or later developed equivalent structures, materials, or acts for performing the claimed function.

BRIEF DESCRIPTION OF THE DRAWINGS

[013] **Fig. 1** shows a top view of a preferred embodiment of the invention integrated into an outer packaging surface.

[014] **Fig. 2** shows a cross section top view of the dock of a preferred embodiment of the invention.

[015] **Fig. 2A** shows a cross section of the inside of the dock of the preferred embodiment of the invention.

[016] **Fig. 3** shows a cross section side view of the dock of the preferred embodiment of the invention.

[017] **Fig. 4A** shows a perspective view of the dock of the preferred embodiment of the invention.

5 [018] **Fig. 4B** shows a perspective view of the dock of the preferred embodiment of the invention.

DESCRIPTION OF PREFERRED EMBODIMENTS

[019] As shown in **Figs. 4A** and **4B**, a preferred embodiment of the USB dock **300** includes a device side **310** and an attachment side **320**. A USB device is coupled to the dock
10 **300** such that it cannot be detached during retail, transportation, or storage of the device. The device side **310** of the dock **300** has a hollowed center to allow the USB device to slide in to place such that the USB device is secured to the dock **300**. The attachment side **320** of the dock **300** can be coupled to any surface such that the dock **300** and USB device are secured in place. This coupling can be via a mold where the dock **300** is formed as part of
15 an outer packaging **200**, as seen in **Fig. 1**, or via an adhesive, such as glue, hook and loop type fastener, etc. (not shown) that grips the surface.

[020] As shown in **Figs. 2** and **2A**, the inside of the device side **310** of the dock **300** includes a rounded interior wall **312**. This wall **312** allows a smooth insertion of the USB device into the device side **310** of the dock **300**. Because all USB devices are the same
20 size, the dimensions of the device side **310** of the dock **300** will be a standardized size. This feature allows easy manufacturing of the dock **300**.

[021] In the preferred embodiment of the dock **300**, the attachment side **320** of the dock **300** is a round plastic disc that is molded onto the dock **300**. The round disc includes

an adhesive that is used to couple the dock **300** to a surface. The adhesive can be glue, hook and loop type fastener, or any other suitable adhesive material. Additionally, the surface to which the dock **300** is coupled can be any type of smooth surface such as a plastic packaging case, a wall, a tabletop, a display rack, etc. The dock **300** secures the USB device to the surface and aids in shipping, display, storage, etc.

[022] In an alternate embodiment of the invention, the USB dock **300** is designed to secure a USB flash drive. In this embodiment, the dock **300** may include a cap side **315** in addition to the device side **310**. The cap side **315** of the dock **300** secures the protective cap of the USB flash drive. As shown in **Figs. 2-4**, the device side **310** and the cap side **315** of the dock **300** are oriented such that they face opposite directions. The cap side **315** of the dock **300** is structured to receive the protective cap of the USB flash drive. The dock **300**, however, does not have to include a cap side **315**. This alternate embodiment accommodates USB flash drives that do not include a protective cap.

[023] In this embodiment, the cap side **315** of the dock **300** and the device side **310** of the dock **300** are coupled together such that they are one piece. Because the USB flash drive and its protective cap are, by their nature, a standardized size, the dock **300** is easily sized to accommodate the pieces. Further, it is preferred that the dock **300** is made of plastic or some other rigid, protective material. The dock **300**, however, can be made of any appropriate material.

[024] As seen in **Fig. 1**, in this embodiment, the outer surface is a plastic packaging case **200**. The plastic packaging **200** is a standard 14mm digital video disc (DVD) case. When the case is open, the left side **205** of the outer packaging **200** includes the standard clips **210** that hold a booklet with information and instructions for operating the enclosed

media device. The right side **207** of the outer packaging **200** includes the dock **300**. The dock **300** is integrally molded to the outer packaging **200** such that it will not separate from the outer packaging **200** during shipment or display. This can be done with adhesive or by molding the outer packaging **200** and the dock **300** as one piece. Alternate embodiments of the outer packaging **200** include compact disc (CD) jewel cases, software packaging, and video game packaging to name a few. While it is preferred that the outer packaging is made of plastic, it can be any material that will support and protect the media device inside and will hold the dock **300** securely in place. The dock **300** can be coupled to either side of the outer packaging **200**. It is preferred, however, to mold the dock **300** on the right side of the packaging. Additionally, the dock **300** can be located at any location vertically and/or horizontally on the outer packaging **200**. In the preferred embodiment of the invention, the dock **300** is positioned such that an additional type of media (i.e., CD, DVD, video game) can be placed on the same side of the outer packaging **200** as the USB device.

[025] The preferred embodiment of the invention is described in the Description of Preferred Embodiments. While these descriptions directly describe the one embodiment, it is understood that those skilled in the art may conceive modifications and/or variations to the specific embodiments shown and described herein. Any such modifications or variations that fall within the purview of this description are intended to be included therein as well. Unless specifically noted, it is the intention of the inventor that the words and phrases in the specification and claims be given the ordinary and accustomed meanings to those of ordinary skill in the applicable art(s). The foregoing description of a preferred embodiment and best mode of the invention known to the applicant at the time of filing the application has been presented and is intended for the purposes of illustration and description. It is not

intended to be exhaustive or to limit the invention to the precise form disclosed, and many modifications and variations are possible in the light of the above teachings. The embodiment was chosen and described in order to best explain the principles of the invention and its practical application and to enable others skilled in the art to best utilize the invention in various embodiments and with various modifications as are suited to the particular use contemplated.

5

CLAIMS

What is claimed is:

1. A securement apparatus for use with a Universal Serial Bus device comprising:
 - 5 a. a dock, wherein said dock further comprises:
 - i. a device side; and
 - ii. an attachment side;
 - b. such that said device side of said dock receives said Universal Serial Bus device; and
 - 10 c. such that said attachment side of said dock is coupled to a surface.
2. The apparatus of claim 1 wherein said dock is plastic.
3. The apparatus of claim 1 wherein said surface is an outer packaging.
4. The apparatus of claim 3 wherein said attachment side of said dock is integrally molded into said outer packaging such that said dock and said outer packaging are one piece.
- 15 5. The apparatus of claim 3 wherein said attachment side of said dock further comprises an adhesive such that said adhesive couples said dock to said outer packaging.
6. The apparatus of claim 3 wherein said outer packaging is selected from the group consisting of:
 - 20 a. plastic;
 - b. paper; and
 - c. any combination thereof.
7. The apparatus of claim 1 wherein said Universal Serial Bus device is a Universal Serial Bus flash drive.
- 25 8. The device of claim 7 wherein said dock further comprises a cap side such that said cap side of said dock receives a cap of the Universal Serial Bus flash drive.

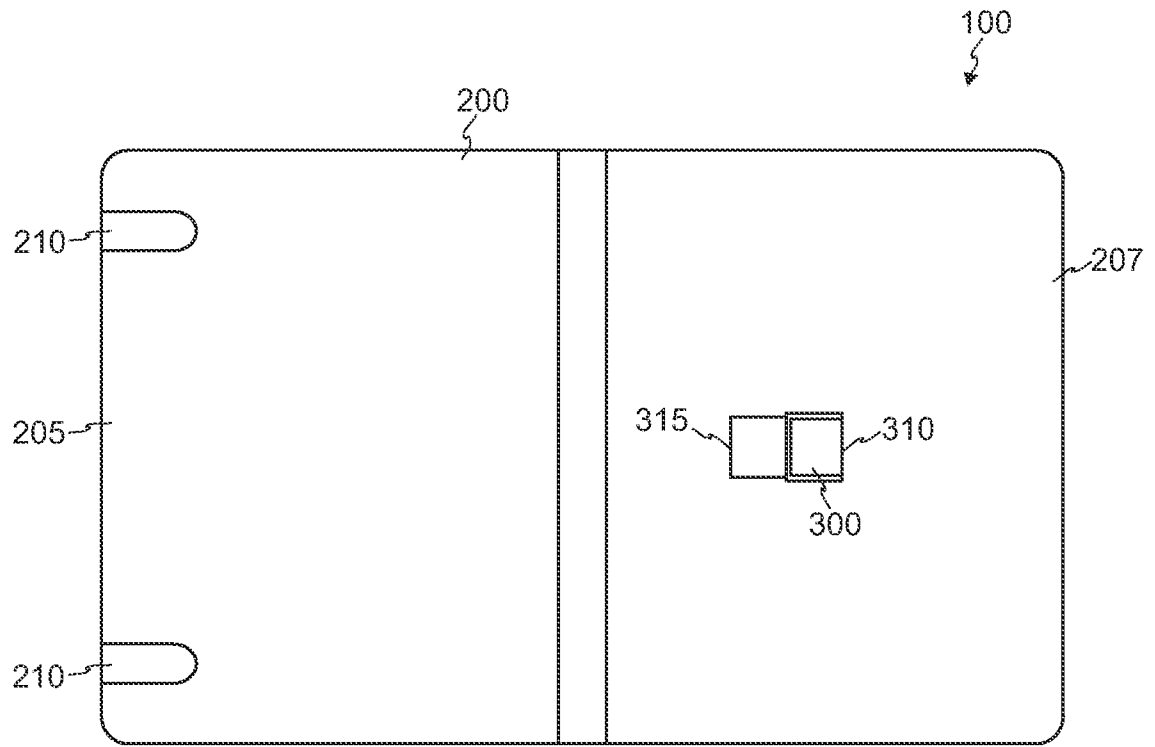


Fig. 1

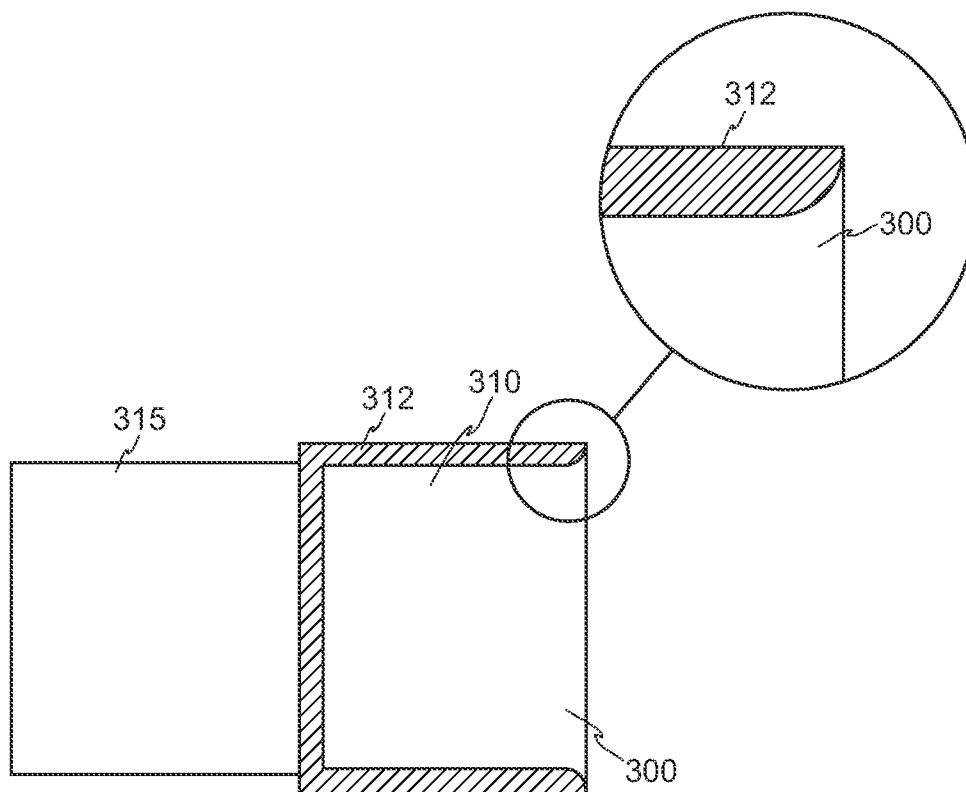


Fig. 2A

Fig. 2

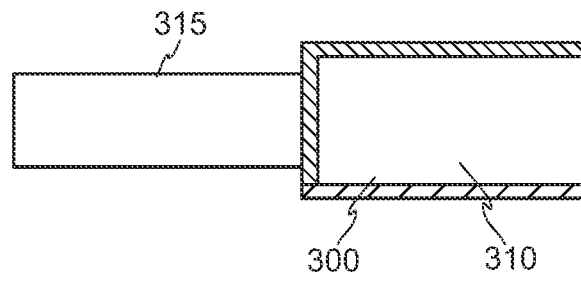


Fig. 3

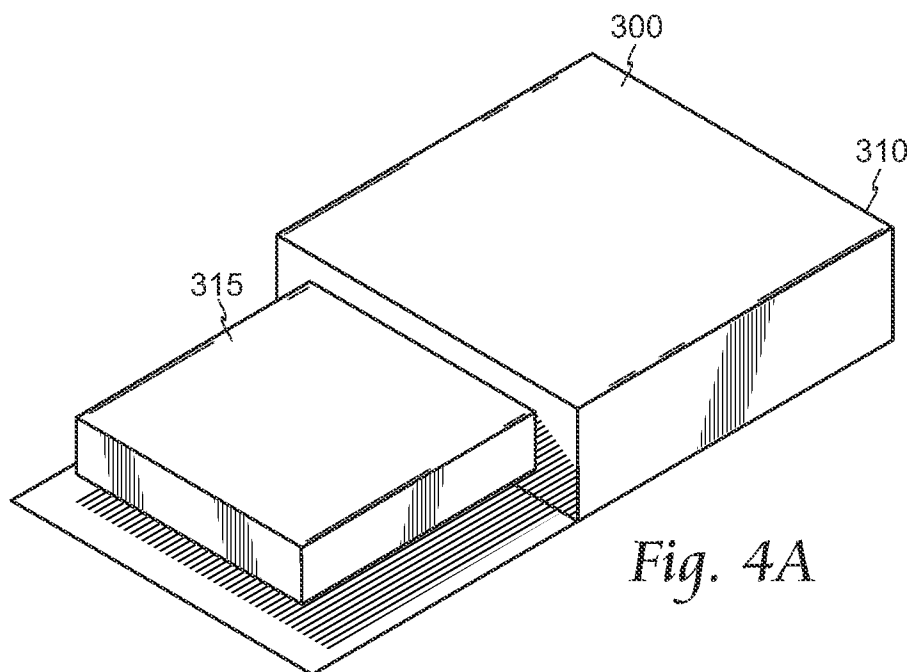


Fig. 4A

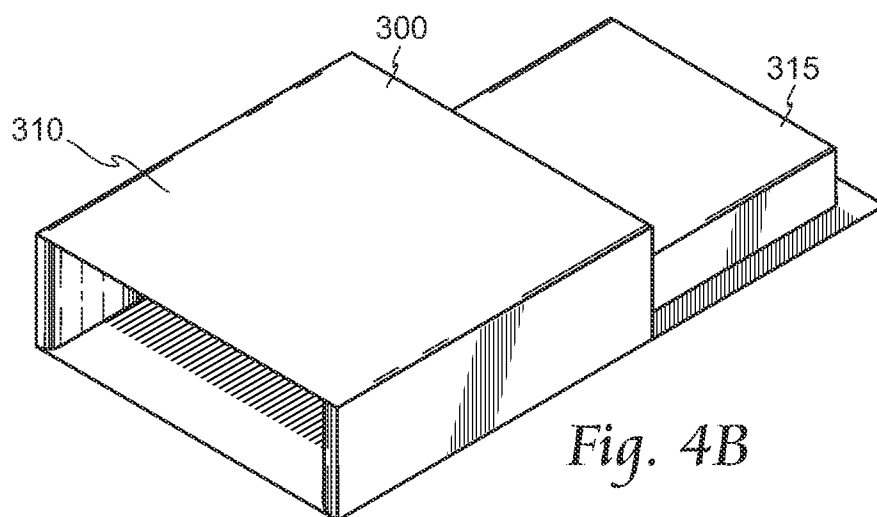


Fig. 4B

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/061015**A. CLASSIFICATION OF SUBJECT MATTER****G06F 1/00(2006.01)i, G06F 1/16(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC G06F, H05K, G06K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility models and applications for Utility models since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS(KIPO internal)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2007 0055822 A1 (ITZHAK POMERANTZ et al.) 8 March 2007 See abstract & Fig. 1	1-8
A	US 6 862 175 B1 (PHILIP SCOTT MCCLENDON et al.) 1 March 2005 See Column 2, Line 46 - Column 5, Line 51 & Figs. 1-2	1-8
A	US 2006 0038023 A1 (WESLEY G. BREWER et al.) 23 February 2006 See abstract & Fig.1	1-8
A	US 6 587 348 B2 (SHINICHI KONDO) 1 July 2003 See abstract	1-8

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2008/061015Patent document
cited in search reportPublication
datePatent family
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