September 19, 2019

WATERPROOF PORTABLE ELECTRONIC DEVICE

HP INC

Waterproof Portable Electronic Device

Abstract: A portable electronic device is made completely waterproof by inserting one portion of the device inside a cavity of another portion of the device, and providing a seal at the entrance to the cavity.

This disclosure relates to the field of portable electronic devices.

A technique is disclosed that allows a portable electronic device, such as a portable computer which can operate in both a laptop/notebook mode and a tablet mode, to be made completely waterproof.

Portable electronic devices and computers are made to go anywhere, and this can include environments where they can be exposed to, and/or immersed in, a liquid such as water. If these liquids enter the enclosure of the device, the electronics therein can be damaged or destroyed. In some products, a portion of the device (e.g. a keyboard) may be waterproof, but other portions of the device may not be.

According to the present disclosure, and as understood with reference to the Figure, an entire electronic device can be configured in a manner so as to be completely waterproof.

Consider the example of a portable computer 10 that can operate in both a laptop/notebook mode and a tablet mode. In such a device, the keyboard 20 can be detached from the display 30 in order to operate the computer in tablet mode via a touchscreen display, without using the keyboard 20.

The display unit 30 is formed with a cavity into which the keyboard 20 can be inserted. The exterior of the display unit 30 itself is waterproof, as is an end portion 25 of the keyboard 20. When the keyboard 20 is inserted in the display unit, a watertight seal 40 prevents water from entering the cavity.

The disclosed technique advantageously prevents water ingress to an entire electronic device without requiring the use of a complex mechanical structure.

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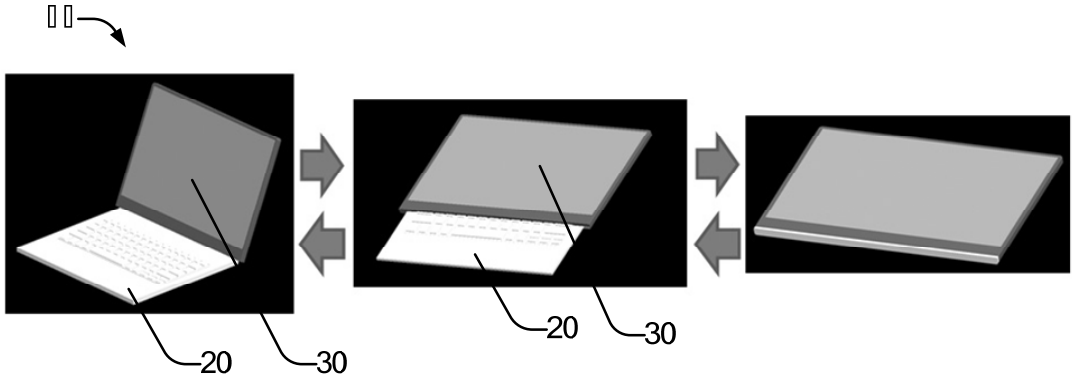
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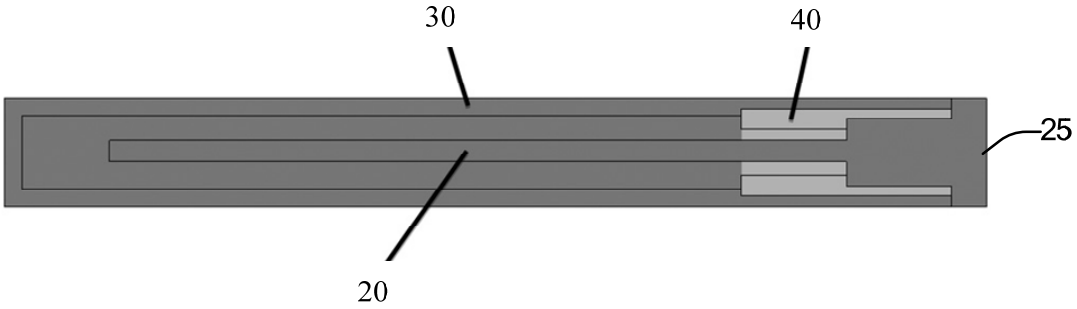
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