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Charles No

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## **Multi-functional smartwatch crown**

### **ABSTRACT**

This disclosure describes a multi-functional smartwatch crown that an improved navigation experience, e.g., for a smartwatch. The crown is designed to rotate about an axis as a rotating side button that is mapped to some smartwatch navigation actions. The crown can also be pushed in and out as a button for other navigation actions. The crown is additionally configured to be toggled up and down (jog toggle) along a side of the smartwatch, e.g., for added functionality such as increasing or decreasing volume, or for up and down pagination, etc. The crown can also be locked into different positions after being toggled up or down. The respective locked positions represent different modes of operation for the smartwatch, for example, a default mode, a work mode, and a workout mode, etc.

### **KEYWORDS**

- Smartwatch
- Crown
- User experience
- User interface
- Multi-functional crown

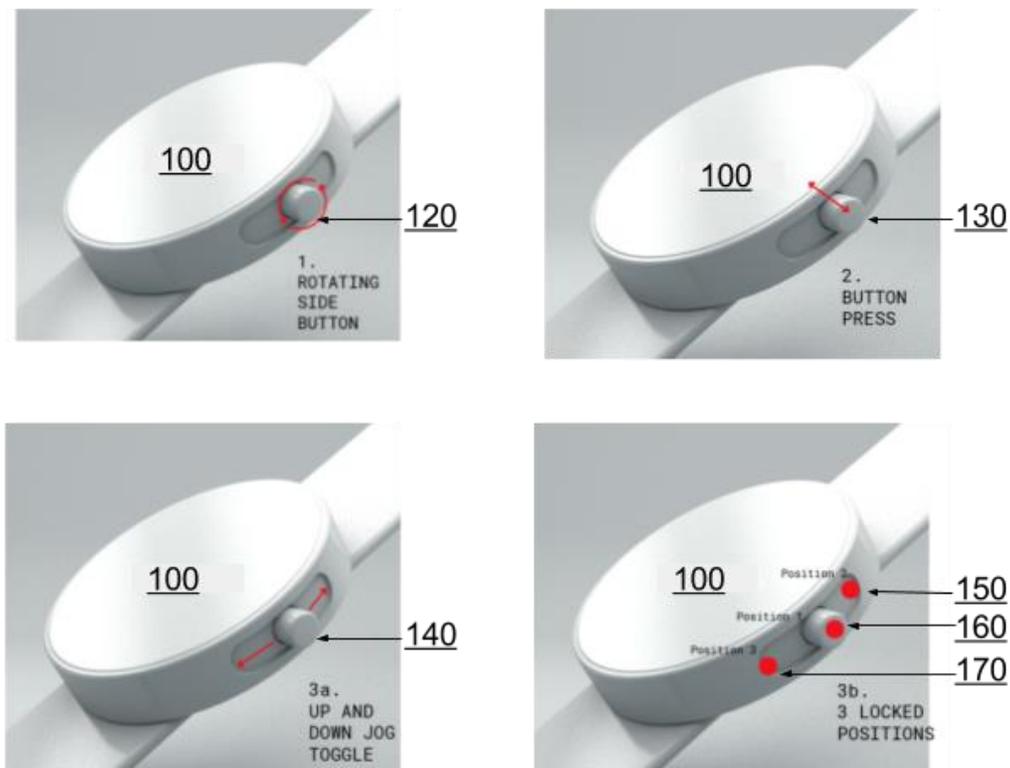
### **BACKGROUND**

Navigating a user interface displayed on a screen of a smartwatch presents challenges, e.g., since a user's finger can cover a significant portion of the smartwatch screen when the smartwatch screen is tapped or swiped upon. Enabling other ways to navigate a smartwatch can enhance user experience. As smartwatch technology becomes pervasive, there is increased demand for non-intrusive modes to navigate smartwatches.

Crowns are often employed for navigating user interfaces on smartwatches. A crown can be a cap like structure, mounted on a stem or a shaft, that can be used for winding and configuring the watches. Crowns are also employed in smartwatches for navigation. Improved functionality of a smartwatch crown can enhance user experience.

## DESCRIPTION

This disclosure describes a multifunctional smartwatch crown that allows for additional mode(s) of smartwatch screen navigation. Fig. 1 illustrates the functioning of the multifunctional crown and its different modes of operation in a smartwatch (100).



**Fig. 1: Multifunction crown for navigating a smartwatch**

The crown is designed to rotate about an axis as a rotating side button (120). The rotation can be in the clockwise or counterclockwise directions, which can be mapped to different

navigation functions. The crown can also be pressed or pushed in and out towards and away from the smartwatch as a button (130). The button presses can be mapped to various functions of the smartwatch.

The crown is additionally configured to be toggled up and down in a jog toggle manner (140). The up and down toggle of the crown expands the functionality of the controls. The up and down motion refers to the motion of the crown up and down when the user is viewing the watch face. For example, the up and down toggle can be used to turn the volume up and down of a music (or other sound-based) application. In another example, the up and down toggle can also be used for up and down pagination in a text based application.

Additional functionality can be obtained from the up and down toggle mode of the smartwatch crown by locking the crown in place at the different up and down toggle positions. In the illustrated example, the crown can be pushed up or down and locked into 3 positions. For example, the crown being locked in different positions is used to configure the watch into different modes. Position 1 (160) can represent a primary mode, position 2 (150) can represent a workout mode, and position 3 can represent a work mode, etc. When the crown is locked into a respective position, the screen, smartwatch and crown functionality is adjusted appropriately. While the figure illustrates a single crown, multiple multifunctional crowns can also be utilized and can provide additional functionality.

## CONCLUSION

This disclosure describes a multi-functional smartwatch crown that an improved navigation experience, e.g., for a smartwatch. The crown is designed to rotate about an axis as a rotating side button that is mapped to some smartwatch navigation actions. The crown can also be pushed in and out as a button for other navigation actions. The crown is additionally

configured to be toggled up and down (jog toggle) along a side of the smartwatch, e.g., for added functionality such as increasing or decreasing volume, or for up and down pagination, etc. The crown can also be locked into different positions after being toggled up or down. The respective locked positions represent different modes of operation for the smartwatch, for example, a default mode, a work mode, and a workout mode, etc.