FULL SIZE USB SWYPE KEYBOARD

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Full Size USB Swype Keyboard

Abstract: A USB-enabled full-size swype keyboard can interface to a docking station, a desktop computer, or a notebook computer. The keyboard includes sensors that detect motion, and translate that motion into the predictive text applications on the coupled computer. The sensors can be implemented through mechanical keyboard buttons or on an ultra-thin touch panel of glass, plastic, or film.
This disclosure relates to the field of computer systems.

A USB-enabled full-size swype keyboard is disclosed.

A swype keyboard is a virtual keyboard in which a user enters words by sliding a finger or a stylus from letter-to-letter of the word in succession, lifting the finger only between words. A swype keyboard allows users to input text/data into applications in a more efficient manner than traditional keyboards, as characters are input by moving the finger around the keyboard, rather than keying in each character. Solutions exist on mobile phones, however these devices are not intended for large scale data input, and the screens are significantly smaller than required for presentations or composition development, leading to inaccuracies and user frustration.

According to the present disclosure, a USB-enabled swype keyboard can interface to a docking station, a desktop computer, or a notebook computer.

The disclosed keyboard includes sensors that detect motion, and translate that motion into the predictive text applications on the coupled computer. In one example, these sensors can be implemented in the existing keys on a keyboard. In another example, the sensors can be implemented on an ultra-thin touch panel of glass, plastic, or film, rather than through mechanical keyboard buttons. The touch sensors provide input to the keyboard controller which in turn provides input to the application.

The user uses the swype keyboard by activating the sensors by moving a finger over the specific keys. A predictive text application takes input from the keyboard controller and displays the proper word or phrases. Adaptive word/phrase libraries for individual users may be built and stored on the device in order to enhance predictive nature of input device.

The keyboard with sensor also eliminates the recurring finger motion that cause carpal tunnel symptoms.

The disclosed keyboard advantageously provides a user with ergonomically safer, single input motion that reduces carpal tunnel problems. Where traditional mechanical keys are used, dual input capability (key or swype) is provided. Where a glass/plastic/film keyboard is used, there are no moving parts, reduced tooling cost; the need for localized keys is eliminated, and the keyboard can have a reduced thickness.

_Disclosed by David C. Vinson, John D. Roche, Prasad N. Ayyagari, and Diep V. Nguyen, HP Inc._