

SlickFeel: Sliding and Clicking Haptic Feedback on a Touchscreen

【Main Content】:

Piezoelectric tactile feedback screen

【SlickFeel】 :

A tactile display that provides two different types of feedback to a finger on the touch screen during typical swipe and click operations.

The piezo one have the advantage of faster response time and wider bandwidth.

Implimented by TPAD piezoelectric.

【DEMO SCENARIOS】:

Developed two demo schemes for one SlickFeel. The first is a simple demo that demonstrates the different tactile sensations that SlickFeel can achieve. As shown in Figure 2, the screen displays four buttons: the two buttons pressed show a rough surface texture (higher friction), and the two buttons on the right show a smooth surface texture (less friction) .

The second demo embeds swipe and click haptic feedback into the thumb typing scenario (Figure 3), when the user holds the tablet at the same time with their hands. The typing interface consists of two input areas in the lower left and right corners of the touch screen and a letter selection ribbon, which is located behind the text input cursor and highlights three consecutive letters in the English alphabet.

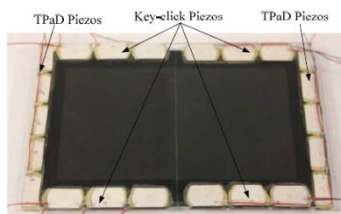


Figure 1. SlickFeel setup

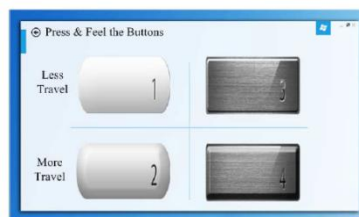


Figure 2. Button-click Interface

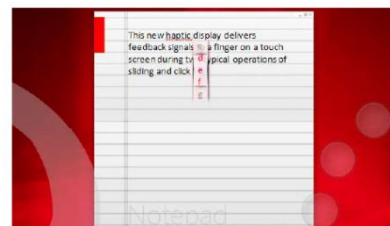


Figure 3. Thumb-typing interface