

## **Abstract**

A small sensor surface designed to control a smart phone or Mobile Internet Device (MID). The sensor surface may be mounted on the side of the proposed device in a position where a user's thumb or finger naturally falls when holding the device in his/her hand. The sensor surface is simultaneously convex and concave, providing both visual and physical cues for the use of the sensor surface. The sensor may include capacitive sensing, optical sensing and pressure sensing capabilities to interpret thumb gestures into device control.

Figures 1A and 1B