

set or subset quickly following synchronized touchdown, and wherein each such motion generates a tap signal of the selected kind.

**115.** The method of claim 109, wherein one of the distinctive finger motions is sliding of the finger set or subset across the surface, and wherein such motion continuously generates slide signals of the selected kind which include measurements of the sliding motion.

**116.** The method of claim 109, wherein asynchronous touchdown quickly followed by liftoff of a finger forms a new subset of one finger and generates a tap event dependent on the location on the surface of the touchdown.

**117.** The method of claim 109, wherein generation of input signals is accompanied by generation of activation signals to a light or sound generating feedback device, and wherein the activation signals depend upon the kinds of input signals currently selected.

**118.** The method of claim 109, wherein a new subset of fingers is formed upon simultaneous finger release from the all fingers resting state, wherein this new subset consists of those fingers which remain on the surface, and wherein this new subset chooses a new kinds of input signals which can be generated in response to further distinctive finger motions.

**119.** A method for continuing generation of cursor movement or scrolling signals from a tangential motion of a touch device over a touch-sensitive input device surface after touch device liftoff from the surface if the touch device operator indicates that cursor movement continuation is desired by accelerating or failing to decelerate the tangential motion of the touch device before the touch device is lifted, the method comprising the following steps:

measuring, storing and transmitting to a computing device two or more representative tangential velocities during touch device manipulation;

computing and storing a liftoff velocity from touch device positions immediately prior to the touch device liftoff;

comparing the liftoff velocity with the representative tangential velocities, and entering a mode for continuously moving the cursor if a tangential liftoff direction approximately equals the representative tangential directions and a tangential liftoff speed is greater than a predetermined fractional multiple of representative tangential speeds;

continuously transmitting cursor movement signals after liftoff to a computing device such that the cursor movement velocity corresponds to one of the representative tangential velocities; and

ceasing transmission of the cursor movement signals when the touch device engages the surface again, if comparing means detects significant deceleration before liftoff, or if the computing device replies that the cursor can move no farther or a window can scroll no farther.

**120.** The method of claim 119, wherein one of the representative tangential velocities is a weighted average of several instantaneous velocities.

**121.** The method of claim 119, wherein the touch surface is a multi-touch surface, the touch devices are fingers, the cursor movement velocity is the hand translation, rotation, or scaling velocity extracted from the touching fingers, and the mode for continuously moving the cursor is entered when the velocity of the dominant hand motion component passes the deceleration test as the last fingers are lifted.

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