

- k. for each set of contact data, associating each sensor with one or more datum regarding the state of the sensor;
- l. for each set of contact data, creating groups of sensor identifications, each group representing sensors that correspond to a single hand part;
- m. for each set of contact data, evaluating both sensor data associated with each group and stored data, to estimate path and contact information for each group, wherein stored data from the third set of contact data, comprises information associated with the first set of contact data and the second set of contact data;
- n. for each set of contact data, associating each group with either a right hand or left hand;
- o. for each set of contact data, associating each group with a specific hand part; and
- p. for each set of contact data, storing a information comprising at least a portion of the information about each group.

13. The method of claim 12 wherein contact data is produced with respect to objects within the sensing range of the touch sensor, whether or not objects are touching the touch sensor.

14. The method of claim 12 wherein hand parts comprise at least two of the following: index finger, middle finger, ring finger, pinky finger, inner palm heel, or outer palm heel.

15. The method of claim 12 comprising the further step of estimating the position of each hand.

16. The method of claim 15 wherein the step of creating groups of sensor identifications, each group representing

sensors that correspond to a single hand part, incorporates the evaluation of prior hand position information.

17. A system for interpreting the output of a touch sensor comprising:

- q. a touch sensor comprising a touch surface and a plurality of sensors distributed beneath the touch surface, each sensor represented by a sensor identification;
- r. one or more datum associated with the state of the sensor at a particular time;
- s. a data structure identifying groups of sensor identifications, each group representing sensors that correspond to a single hand part;
- t. program instructions for interpreting the data structure and other information regarding the sensors to estimate path and contact information for each group;
- u. program instructions for associating each group with either a right hand or left hand;
- v. program instructions for associating each group with a specific hand part.

18. The method of claim 17 wherein hand parts comprise at least two of the following: index finger, middle finger, ring finger, pinky finger, inner palm heel, or outer palm heel.

19. The method of claim 17 further comprising a feedback unit for making information available to other system module regarding prior processing results.

20. The method of claim 1 wherein the path is an expression representing the movement of a particular hand part over time.

* * * * *