12. The touch-sensing device of claim 11 wherein the touch-sensing device is integral with the electronic or electromechanical device.

13. The touch-sensing device of claim 11 wherein the one or more ellipse parameters comprise one or more parameters selected from the group consisting of position, shape, size, orientation, eccentricity, major radius, minor radius, and any combination thereof.

14. The method of claim 13 wherein the one or more ellipse parameters are used to distinguish a pixel group associated with a fingertip from a pixel group associated with a thumb.

15. The touch-sensing device of claim 10 wherein the contact tracking and identification module is adapted to compute one or more eigenvalues and one or more eigenvectors to fit the ellipse.

16. The touch-sensing device of claim 10 wherein the contact tracking and identification module is further adapted to:

track a path of one or more pixel groups through a plurality of time-sequenced proximity images;

fit an ellipse to at least one of the one or more pixel groups in a first proximity image of the plurality of time-sequenced proximity images; and

track a change in one or more ellipse parameters associated with the fitted ellipse through two or more of the time-sequenced proximity images.

17. The touch-sensing device of claim 16 further comprising a host communication interface adapted to transmit the change in at least one of the one or more ellipse parameters as a control signal to an electronic or electromechanical device.

18. The touch-sensing device of claim 17 wherein the touch-sensing device is integral with the electronic or electromechanical device.

19. The touch-sensing device of claim 17 wherein the change in one or more ellipse parameters used as a control input to an electronic or electromechanical device comprises one or more parameters selected from the group consisting of position, shape, size, orientation, eccentricity, major radius, minor radius, and any combination thereof.

20. The touch-sensing device of claim 16 wherein the contact tracking and identification module is adapted to compute one or more eigenvalues and one or more eigenvectors to fit the ellipse.

21. The touch-sensing device of any one of claims **10-12** and **16-18** wherein the touch-sensing device is fabricated on or integrated with a display device.

22. The touch-sensing device of claim 21, wherein the display device comprises a liquid crystal display (LCD) or a light-emitting polymer display (LPD).

23. A computer-readable medium having embodied thereon instructions executable by a machine to perform a method according to any of claims **1-9**.

24. A touch-sensing device comprising:

means for producing a proximity image representing a scan of a plurality of electrodes of a touch-sensitive surface, the proximity image having a plurality of pixels corresponding to the touch-sensing electrodes; and

means for segmenting the proximity image into one or more pixel groups, each pixel group representing a touch object on or near the touch-sensitive surface; and

means for fitting an ellipse to at least one of the pixel groups.

25. The touch-sensing device of claim 24 wherein the touch object comprises at least a portion of a hand.

26. The touch-sensing device of claim 24 wherein the touch object comprises at least a portion of one or more fingers.

27. The touch-sensing device of claim 24 wherein the touch object comprises at least a portion of a body part.

28. The touch-sensing device of claim 27 wherein the body part comprises one or more of a hand, a finger, an ear, or a cheek.

29. The touch-sensing device of claim 24 further comprising means for transmitting one or more ellipse parameters as a control signal to an electronic or electromechanical device.

30. The touch-sensing device of claim 27 wherein the touch-sensing device is integral with the electronic or electromechanical device.

31. The touch-sensing device of claim 24 further comprising:

means for tracking a path of one or more pixel groups through a plurality of time-sequenced proximity images;

means for fitting an ellipse to at least one of the pixel groups in a plurality successive proximity images; and

means for tracking a change in one or more ellipse parameters through a plurality of time-sequenced proximity images.

32. The touch-sensing device of claim 29 further comprising means for transmitting the change in the one or more ellipse parameters as a control signal to an electronic or electromechanical device.

33. The touch-sensing device of claim 32 wherein the touch-sensing device is integral with the electronic or electromechanical device.

34. The touch-sensing device of any one of claims **24** and **29-33** wherein the touch-sensing device is fabricated on or integrated with a display device.

35. The touch-sensing device of claim 34, wherein the display device comprises a liquid crystal display (LCD) or a light-emitting polymer display (LPD).

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