In another embodiment, as shown in FIG. **19**, the housing **364** does not include a facade **370**, but rather a mask **372** that is printed on interior portion of the top glass **374** of the touch screen **354** that extends between the sides of the housing **364**. This particular arrangement makes the mask **372** look submerged in the top glass **356**. The mask **372** serves the same function as the facade **370**, but is a more elegant solution. In one implementation, the mask **372** is a formed from high temperature black polymer. In the illustrated embodiment of FIG. **19**, the touch screen **354** is based on mutual capacitance sensing and thus the sensing layer **358** includes driving lines **376** and sensing lines **378**. The driving lines **376** are disposed on the top glass **356** and the mask **372**, and the sensing lines **378** are disposed on the bottom glass **360**. The driving lines and sensing lines **376** and **378** are insulated from one another via a spacer **380**. The spacer **380** may for example be a clear piece of plastic with optical matching materials retained therein or applied thereto.

In one embodiment and referring to both FIGS. **18** and **19**, the electronic device **350** corresponds to a tablet computer. In this embodiment, the housing **364** also encloses various integrated circuit chips and other circuitry **382** that provide computing operations for the tablet computer. By way of example, the integrated circuit chips and other circuitry may include a microprocessor, motherboard, Read-Only Memory (ROM), Random-Access Memory (RAM), a hard drive, a disk drive, a battery, and various input/output support devices.

While this invention has been described in terms of several preferred embodiments, there are alterations, permutations, and equivalents, which fall within the scope of this invention. For example, although the touch screen was primarily directed at capacitive sensing, it should be noted that some or all of the features described herein may be applied to other sensing methodologies. It should also be noted that there are many alternative ways of implementing the methods and apparatuses of the present invention. It is therefore intended that the following appended claims be interpreted as including all such alterations, permutations, and equivalents as fall within the true spirit and scope of the present invention.

What is claimed is:

1. A digital signal processing method, comprising:
- receiving raw data, the raw data including values for each transparent capacitive sensing node of a touch screen;
- filtering the raw data;
- generating gradient data;
- calculating the boundaries for touch regions base on the gradient data; and
- calculating the coordinates for each touch region.

2. The method as recited in claim **1** wherein the boundaries are calculated using a watershed algorithm.

3. The digital signal processing method as recited in claim **1**, wherein, prior to receiving the raw data, converging analog signals from each transparent capacity e sensing node of the touch screen into digitized signals corresponding to the analog signals, the digital signals constituting the raw data.

4. The digital signal processing method as recited in claim **1**, wherein filtering the raw data comprises reducing noise in the raw data.

5. The digital signal processing method as recited in claim **1**, wherein the raw for each transparent capacitive sensing node of a touch screen corresponds to a data point, and filtering the raw data removes single data points that are not connected to other data points.

6. The digital signal processing method as recited in claim **1**, wherein filtering the raw data generates filtered raw data, and generating the gradient data is based on the filtered raw data.

7. The digital signal processing method as recited in claim **1**, wherein the transparent capacitive sensing node of the touch screen produce a relatively low capacitive coupling value when a touch event occurs on the touch screen as compared to a no touch event, and wherein the gradient data corresponds to the capacitive coupling values.

8. The digital signal processing method as recited in claim **1**, wherein calculating the coordinates of each touch region comprises calculating a centroid of each touch region with the raw data associated with each touch region.

9. The digital signal processing method as recited in claim **1**,
- wherein, prior to receiving the raw data, converging analog signals from each transparent capacity e sensing node of the touch screen into digitized signals corresponding to the analog signals, the digital signals constituting the raw data;
- wherein the raw for each transparent capacitive sensing node of a touch screen corresponds to a data point, and filtering the raw data removes single data points that are not connected to other data points; and
- wherein filtering the raw data generates filtered raw data, and generating the gradient data is based on the filtered raw data.

10. The digital signal processing method as recited in claim **9**, wherein calculating the coordinates of each touch region comprises calculating a centroid of each touch region with the raw data associated with each touch region.

11. A computer system comprising:
- a processor configured to execute instructions and to carry out operations associated with the computer system;
- a display device that is operatively coupled to the processor;
- a touch screen that is operatively coupled to the processor, the touch screen having transparent capacitive sensing nodes and providing analog data indicative of a touch event on the touch screen;
- an analog to digital converter for receiving the analog data and providing digital raw data at an output thereof;
- the processor operative in execution the instructions for:
  - receiving the digital raw data, the digital raw data including values for each transparent capacitive sensing node of a touch screen;
  - filtering the digital raw data to provide filtered raw data;
  - generating gradient data from the filtered raw data;
  - calculating the boundaries for touch regions base on the gradient data; and
  - calculating the coordinates for each touch region.

12. The computer system as recited in claim **11**, wherein the processor calculates the boundaries using a watershed algorithm.

13. The computer system as recited in claim **11**, wherein the processor performs the filtering of the raw data for reducing noise in the raw data.

14. The computer system as recited in claim **11**, wherein the raw for each transparent capacitive sensing node of a touch screen corresponds to a data point, and the processor performs the filtering of the raw data for removing single data points that are not connected to other data points.

15. The computer system as recited in claim **11**, wherein the processor calculates the coordinates of each touch region by calculating a centroid of each touch region with the digital raw data associated with each touch region.

16. A non-transitory computer readable medium including at least computer code executable by a computer, the computer executing the computer code for: