20. The system of claim 14 wherein the processor is programmed to inspect at least one orthogonal pair of triangular zones associated with the source of blockage for the two intersecting light beam paths.

21. The system of claim 14 wherein the processor monitors the output of each light receiving element associated with the activated light emitting element for blockage of a light beam path by being programmed to:

compare the profile of the output to an expected profile having a time-based noise threshold;

identify a light beam as noise if there is a pulse edge in the profile prior to the noise threshold;

identify a light beam as connected if there is a pulse edge in the profile after the noise threshold; and

identify all other light beams as blocked.

22. The system of claim 21 wherein the time-based noise threshold is defined by the response time of the light receiving element.

23. The system of claim 21 wherein the processor comprises a state counter for counting the identification of a light beam over successive triggers of the light emitting element associated with the light beam and outputting a confirmed blocked or connect identification after the counter has reached a specified value.

24. The system of claim 23 wherein the specified value is at least two successive triggers of the associated light emitting element.

25. A method of determining the location of a touch event within a display area surrounded by a touch frame having a plurality of light emitting elements and a plurality of light receiving elements forming a plurality of triangular zones of light beam paths each having a slope and endpoints, the number and positioning of receivers being sufficient to form partially overlapping zone pairs, said method comprising:

for each of the plurality of triangular zones, storing the slopes and end points of each light beam path;

randomly activating the light emitting elements, one at a time;

monitoring the output of each light receiving element associated with the activated light emitting element for blockage of a light beam path; and

upon such blockage, calculating the location of the source of blockage based on the slopes and end points of at least two intersecting blocked light-beam paths.

26. The method of claim 25 wherein monitoring the output of each light receiving element associated with the activated light emitting element for blockage of a light beam path comprises:

comparing the profile of the output to an expected profile having a time-based noise threshold;

identifying a light beam as noise if there is a pulse edge in the profile prior to the noise threshold;

identifying a light beam as connected if there is a pulse edge in the profile after the noise threshold; and

identifying all other light beams as blocked.

27. The method of claim 26 wherein the time-based noise threshold is defined by the response time of the light receiving element.

28. The method of claim 26 wherein identifying a light beam as connected or blocked comprises:

counting the identification of a light beam over successive triggers of the light emitting element associated with the light beam; and

outputting a confirmed blocked or connect identification after the counter has reached a specified value.

29. The method of claim 28 wherein the specified value is at least two successive triggers of the associated light emitting element.

30. A touchframe system for determining the position of a touch event within a display area, said system comprising:

a plurality of light emitting elements positioned around the perimeter of the display area;

a plurality of light receiving elements, each of the light receiving elements in combination with a plurality of the light emitting elements forming a zone of light beam paths, the number and positioning of receivers being sufficient to form partially overlapping zone pairs such that the touch event lies within at least one partially overlapping zone pair; and

a processor programmed to:

randomly activate the light emitting elements, one at a time;

monitor the output of each light receiving element associated with the activated light emitting element for blockage of a light beam path; and

upon such blockage, calculate the location of the touch event associated with the blockage based on the slopes and end points of at least two intersecting blocked light-beam paths.

31. The system of claim 30 further comprising a memory device having stored therein the slopes and end points of each light beam path within each of the zones

32. The system of claim 30 wherein:

the number and positioning of receivers is sufficient to form redundant overlapping zone pairs such that the touch event lies within at least two partially overlapping zone pairs; and

the processor is programmed to calculate the location of the touch event based on the slopes and end point of a pair of intersecting blocked light-beam paths from each of the at least two partially overlapping zone pairs.

33. The system of claim 32 wherein the processor is programmed to calculate the location of the touch event using the most orthogonally overlapping zone pairs.

34. The system of claim 32 wherein the processor is programmed to:

individually calculate a location of the touch event for each pair of intersecting blocked light-beam paths; and

average the individual results to obtain the location of the touch event.

35. The system of claim 32 wherein the zones are triangular with a row of light emitting elements forming one side of the triangle and one light receiving element forming an apex opposite the row of light emitting elements.

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