12. The method as recited in claim 11, wherein the second constant is between 0 and 1.0.

13. The method as recited in claim 5, wherein the upper bound for the corresponding defect element is determined by multiplying the magnitude of the defect element by a function of the spatial frequency of the corresponding element.

14. The method as recited in claim 13, wherein the function is near unity for low frequencies and rises with increasing frequency.

15. The method as recited in claim 13, wherein the lower bound for the corresponding defect element is determined by multiplying the magnitude of the defect element by a second function of the spatial frequency of the corresponding element.

16. The method as recited in claim 15, wherein the second function is near unity at low frequencies and decreases at higher frequencies.

17. The method as recited in claim 1, wherein the upper bound is a function of the select pixel of the defect image and another pixel adjacent to the select pixel.

18. The method as recited in claim 17, wherein the function includes finding the maximum of the select pixel and the adjacent pixel.

19. The method as recited in claim 1, wherein the lower bound is a function of the select pixel of the defect image and another pixel adjacent to the select pixel.

20. The method as recited in claim 19, wherein the function includes finding the minimum of the select pixel and the adjacent pixel.

21. The method as recited in claim 5, wherein a second region is defined to include a second plurality of pixels from the defect image that is offset from the first region by substantially the dimensions of an adjacent pixel, applying the transform to the second plurality of pixels to generate a second plurality of defect elements from the transform, and wherein the function determining the upper bound for the element is further characterized as comprising the step of finding the maximum of the corresponding defect element from the transform and corresponding second defect element from the second transform.

22. The method as recited in claim 21, wherein the spatial direction of offset of the second region is selected such that the correlation of the second plurality of defect elements to the plurality of elements generated from the first image is maximized.

23. The method as recited in claim 1, wherein the bounding function is further defined to comprise the steps of

selecting a ratio of the upper and lower bounds, adding the upper and lower bounds in proportion to the ratio to produce a blended bound;

subtracting the blended bound from the corresponding element of the first image to produce a corrected element; and

adjusting the ratio such that the magnitude of the element of the corrected image is minimized.

24. The method as recited in claim 23, wherein adjusting the ratio is performed by the steps of

subtracting the upper bound from the corresponding element of the first image to produce a first candidate correction;

subtracting the lower bound from the corresponding element of the second image to produce a second candidate correction;

producing a corrected element of substantially 0 if the first and second candidate corrections are of opposite sign, and a corrected element corresponding to the one of the first and second candidate corrections that is smallest in magnitude if the first and second candidate corrections are of the same sign.

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