comparing the color vector for each decision section to a color lookup table to determine a probability of the decision section corresponding to monetary banknotes;

selecting color sections from decision sections having the probability exceeding a first predetermined threshold;

comparing color vectors for surrounding sections of each color section to the color lookup table;

determining an average probability of the surrounding sections corresponding to monetary banknotes;

selecting bill sections from color sections, the bill sections having surrounding sections with the average probability being greater than a second predetermined threshold;

comparing pixels contained within the bill sections with a pixel lookup table to determine matching pixels; and

recording the location of the matching pixels as probable sections in the color binary decision map.

12. The method of claim **11** further comprising:

removing noise in the color binary decision map according to a noise removal algorithm;

separating objects in the color binary decision map through a flood-fill algorithm; and

defining boundaries for the objects in the color binary decision map through a morphological dilation algorithm.

13. The method of claim **11** further comprising determining the average probability of the surrounding sections corresponding to monetary banknotes according to the frequency of occurrence of color vectors of the surrounding sections in the lookup table.

14. The method of claim **11** wherein the pixel lookup table is created by extracting color histogram data for pixels of the valid monetary banknote, and counting a frequency of occurrence for different values of color histogram data for pixels of the valid monetary banknote.

15. The method of claim **11** further comprising determining matching pixels according to the frequency of occurrence of the color histogram data of the pixels in the pixel lookup table.

16. The method of claim **11** wherein the color vector for each decision section is defined according to color histogram data through a six dimensional space, the six dimensional space comprising the width of the first color, the width of the second color, the width of the third color, the median value of the first color, the median value of the first color minus the median value of the second color, and the median value of the first color minus the median value of the third color.

17. The method of claim **11** further comprising creating the color lookup table by dividing an image of the valid monetary banknote into a number of table sections, extracting color histogram data for each table section, assigning a color vector for each table section according to the color histogram data of the test section, and counting a frequency of occurrence of each assigned color vector within the valid monetary banknote.

18. The method of claim **11** further comprising determining the probability of the decision section corresponding to monetary banknotes according to the frequency of occurrence in the color lookup table.

19. The method of claim **11** wherein the decision sections are substantially equal to the image sections.

20. The method of claim **1** wherein the texture feature map is a gray level map having gray level values as the texture values for each feature section, the first texture value threshold range corresponding to a gray level of the valid monetary bill, and the second texture value threshold range also corresponding to a gray level of the valid monetary bill.

21. The method of claim **1** wherein the texture feature map is a halftone map having halftone values as the texture values for each feature section, the first texture value threshold range corresponding to halftone values of the valid monetary bill, and the second texture value threshold range also corresponding to halftone values of the valid monetary bill.

22. The method of claim **21** wherein the halftone values for each feature section are determined according to a color range and a color gradient range of pixels within the feature section.

23. The method of claim **22** wherein the color range and the color gradient range of pixels within the feature section are determined according to a color hue of the pixels within the YUV color domain.

24. The method of claim **22** wherein the color range and the color gradient range of pixels within the feature section are determined according to a color hue of the pixels within the YCbCr color domain.

25. The method of claim **1** wherein the texture feature map is a binary edge map having edge values as the texture values for each feature section, the first texture value threshold range corresponding edge values of the valid monetary bill, and the second texture value threshold range also corresponding to edge values of the valid monetary bill.

26. The method of claim **25** wherein the binary edge map is generated by:

comparing gray level values of pixels within the feature sections to a predetermined threshold level;

assigning pixels with gray level values greater than the predetermined threshold to a first value;

assigning pixels with gray level values lower than the predetermined threshold to a second value; and

mapping assigned values of the pixels onto the binary edge map.

27. The method of claim **26** further comprising determining edge values for each feature section by:

determining a first frequency of alternating of values in a first direction of the binary edge map;

determining a second frequency of alternating of values in a second direction of the binary edge map;

determining a third frequency of alternating of values in a third direction of the binary edge map;

determining a fourth frequency of alternating values in a fourth direction of the binary edge map; and

calculating the edge value according to the first frequency, the second frequency, the third frequency, and the fourth frequency.

28. The method of claim **27** further comprising determining the edge value for each feature section according to a maximum frequency, a minimum frequency, and a difference between the maximum frequency and the minimum frequency for each of the first frequency, the second frequency, the third frequency, and the fourth frequency.

29. The method of claim **1** wherein calculating the texture property value for each object comprises generating a mean value of the texture feature values for verification sections corresponding to the object.

30. The method of claim **1** wherein calculating the texture property value for each object comprises generating a vari-