

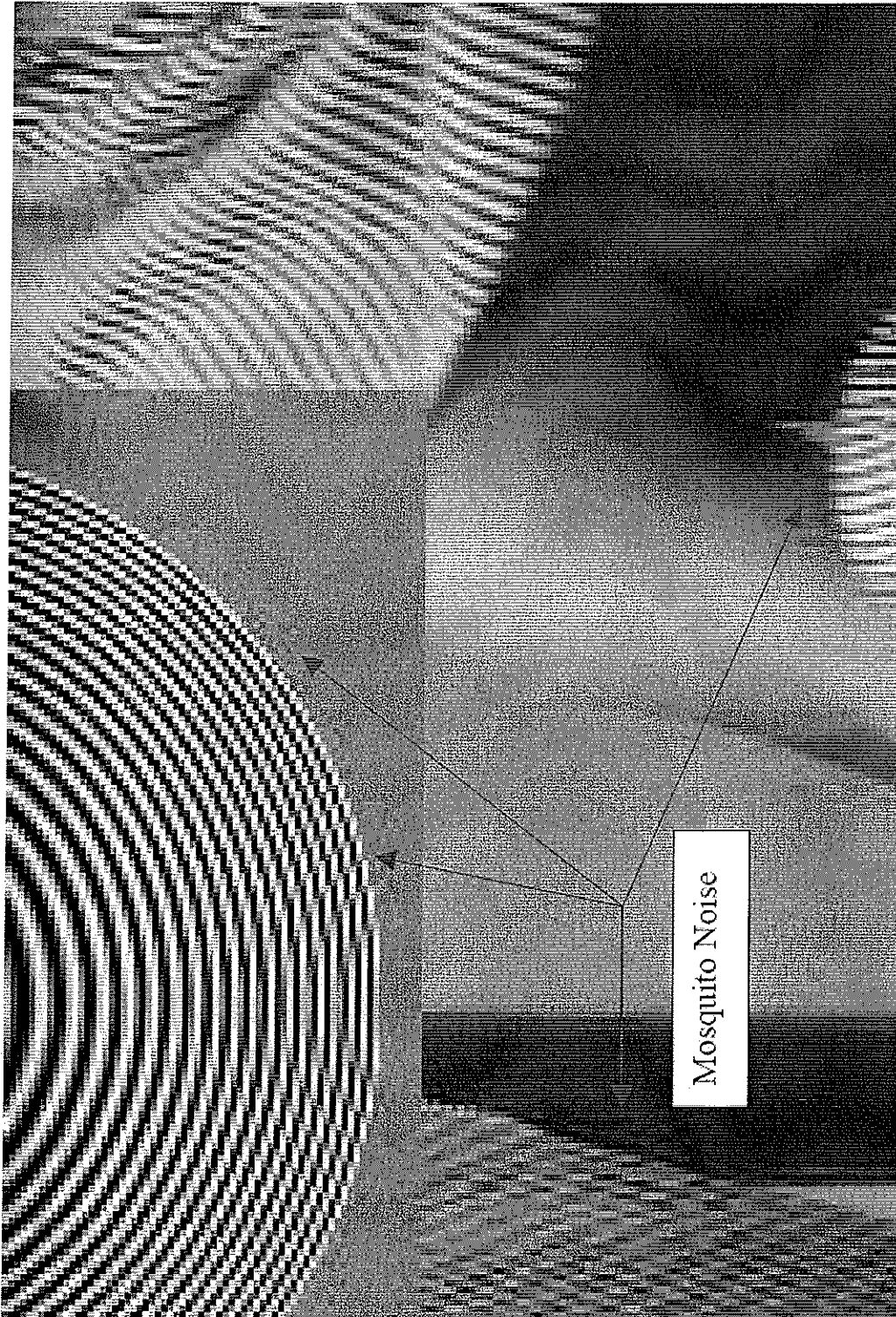


Fig. 1A

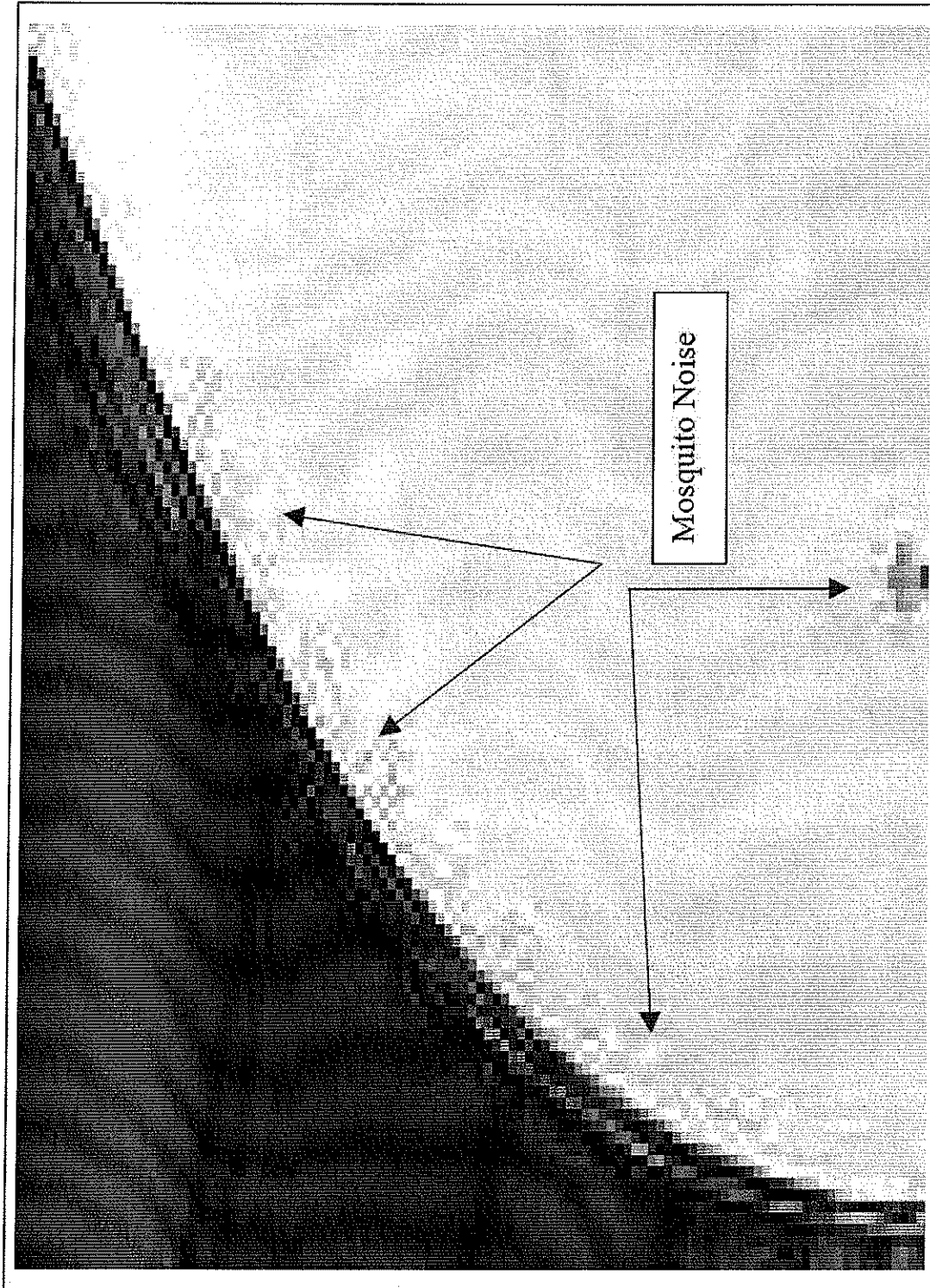
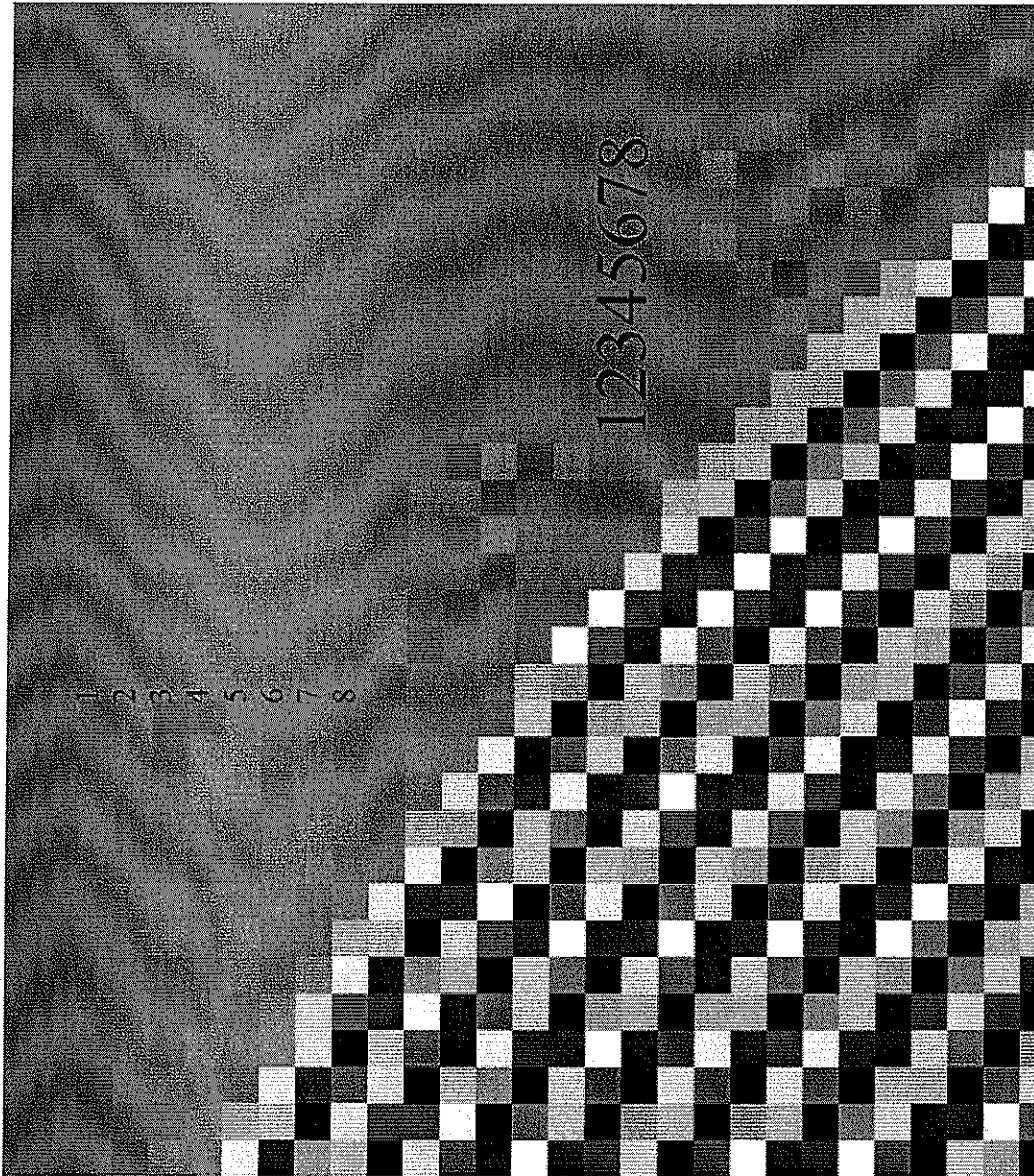
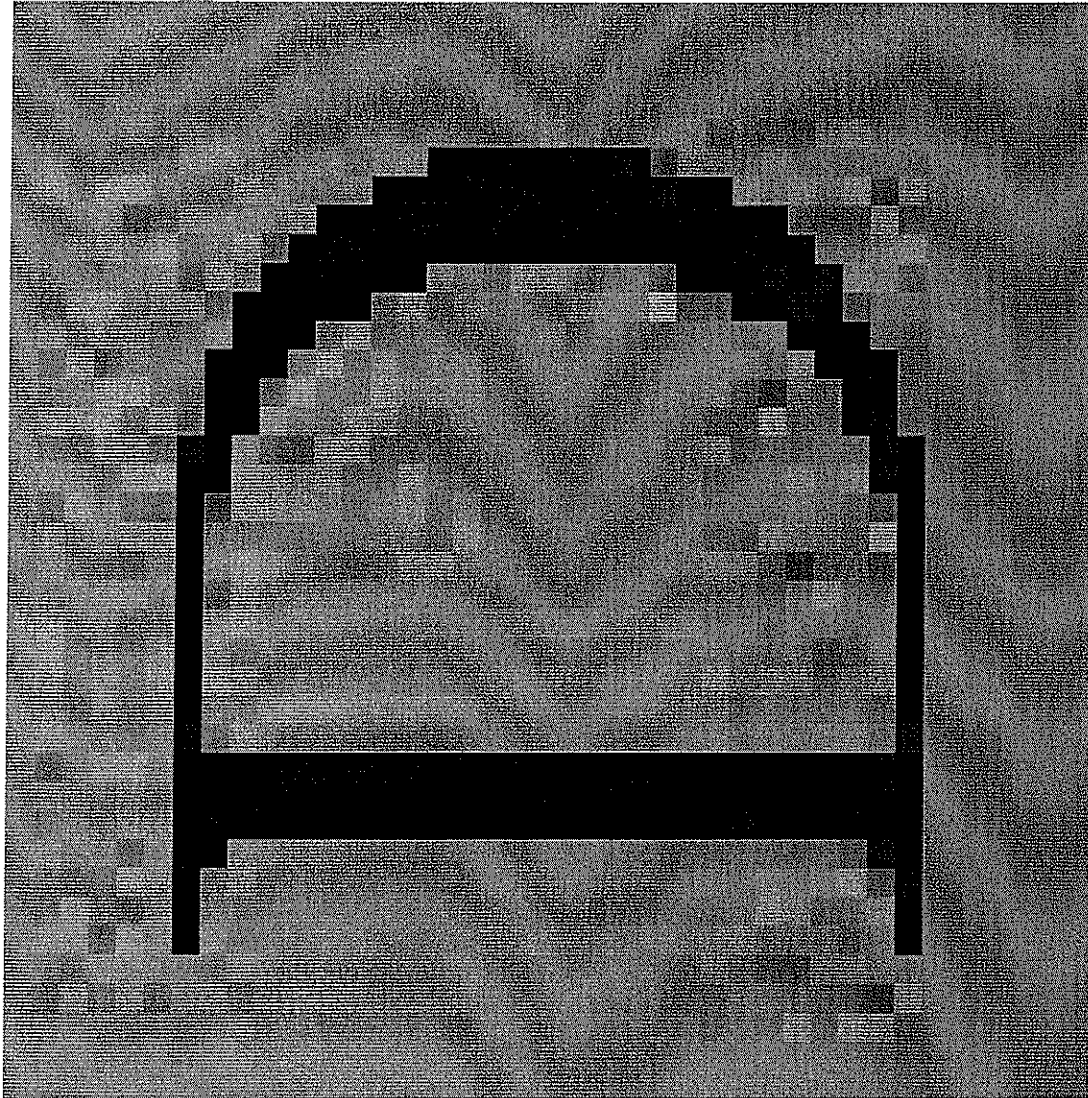


Fig. 1B



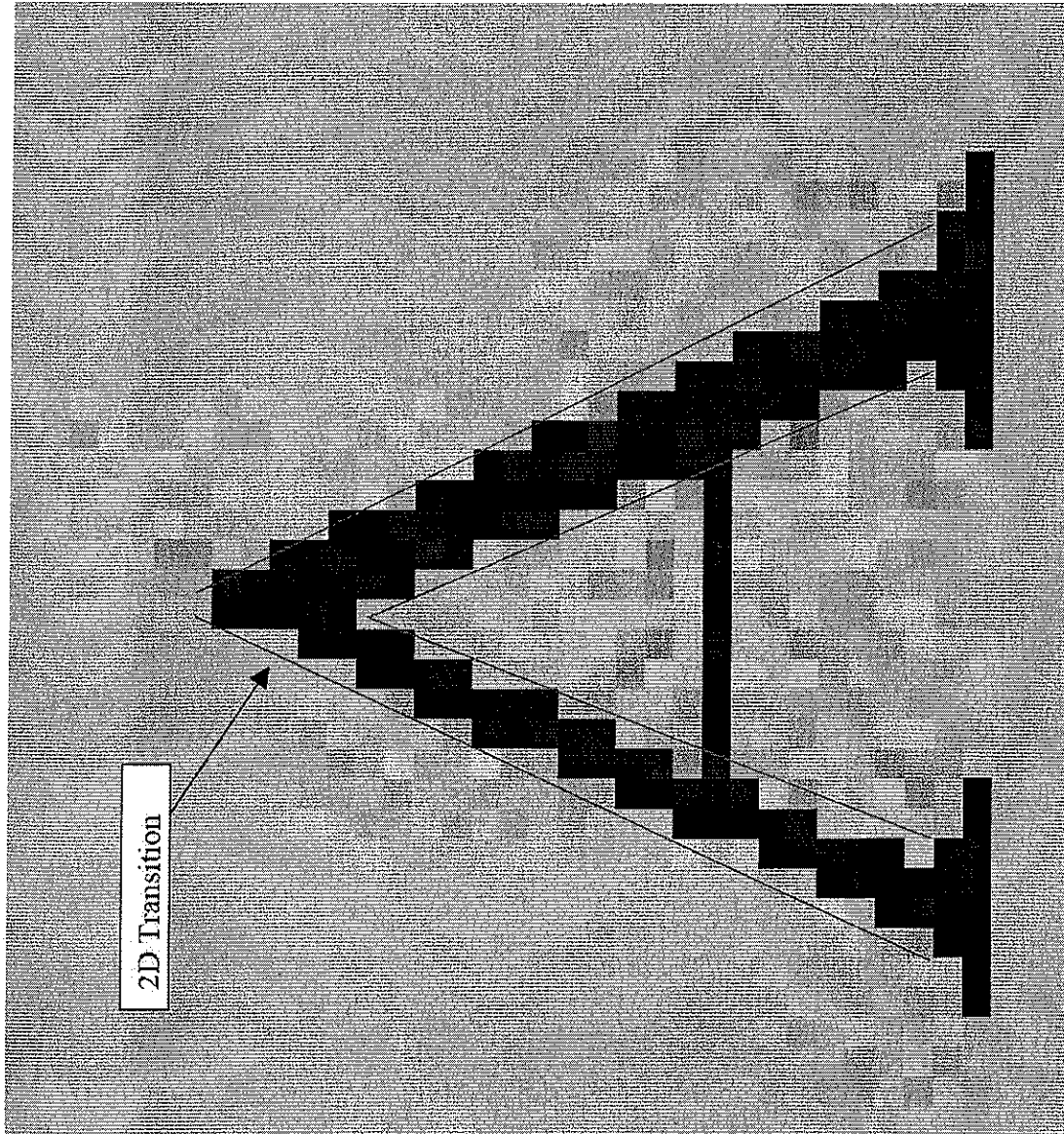
: Typical Mosquito noise region is 8x8 pixles area.

Fig. 1C



Mosquito noise is near transition area

Fig. 1D



Mosquito noise most likely near 2D transition area.

Fig. 1E

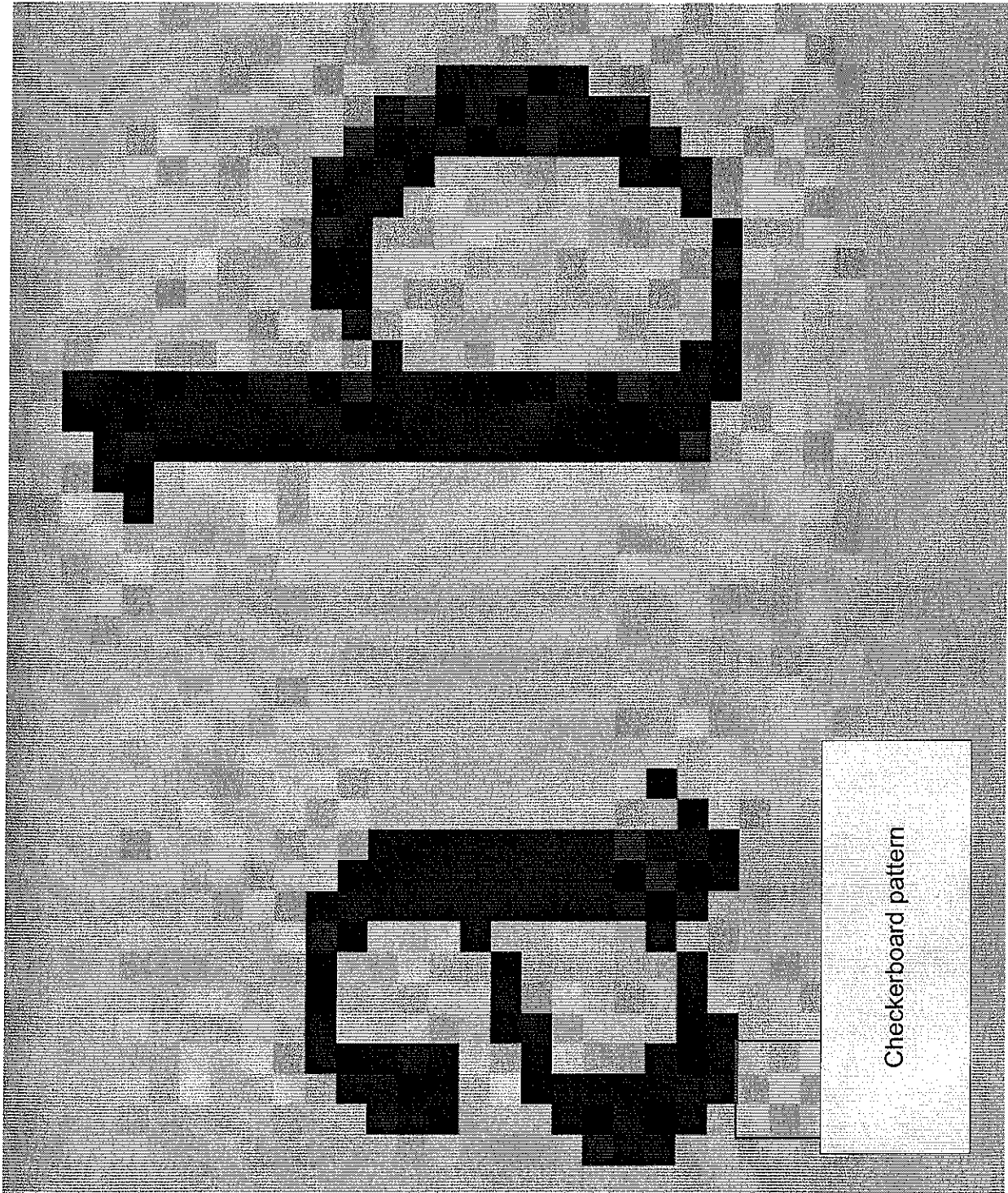


Fig. 1F



Fig. 1G

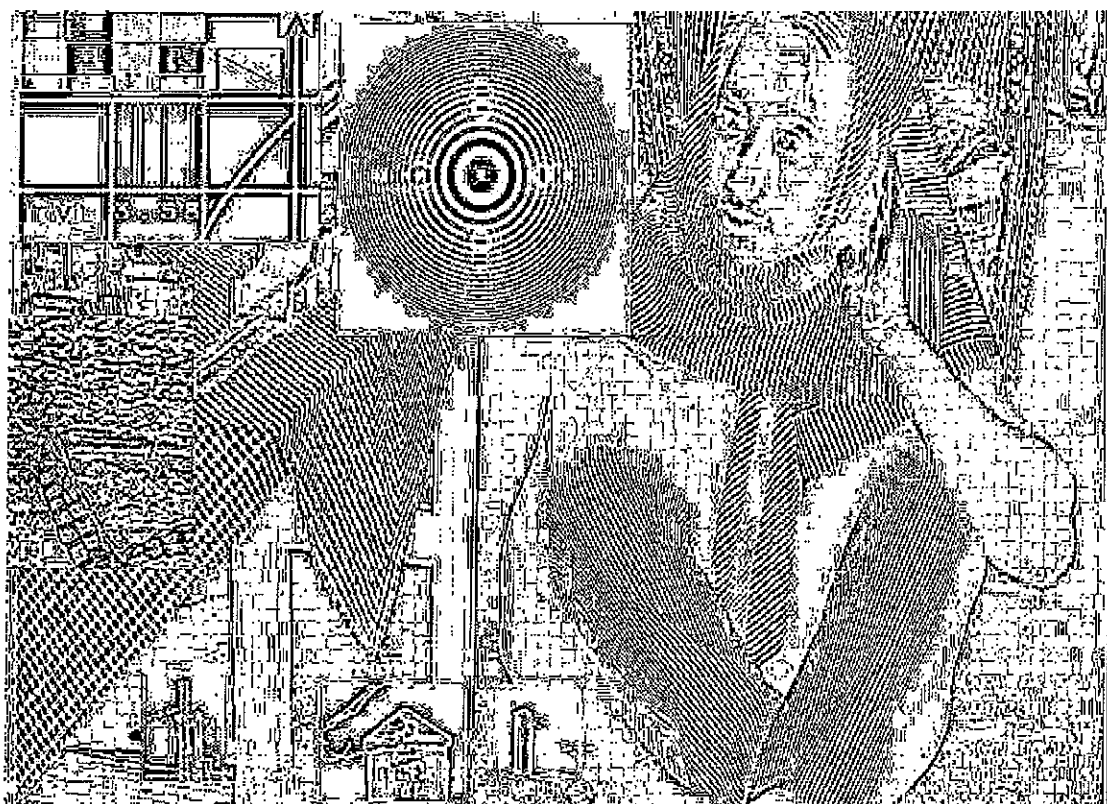


Fig. 1H

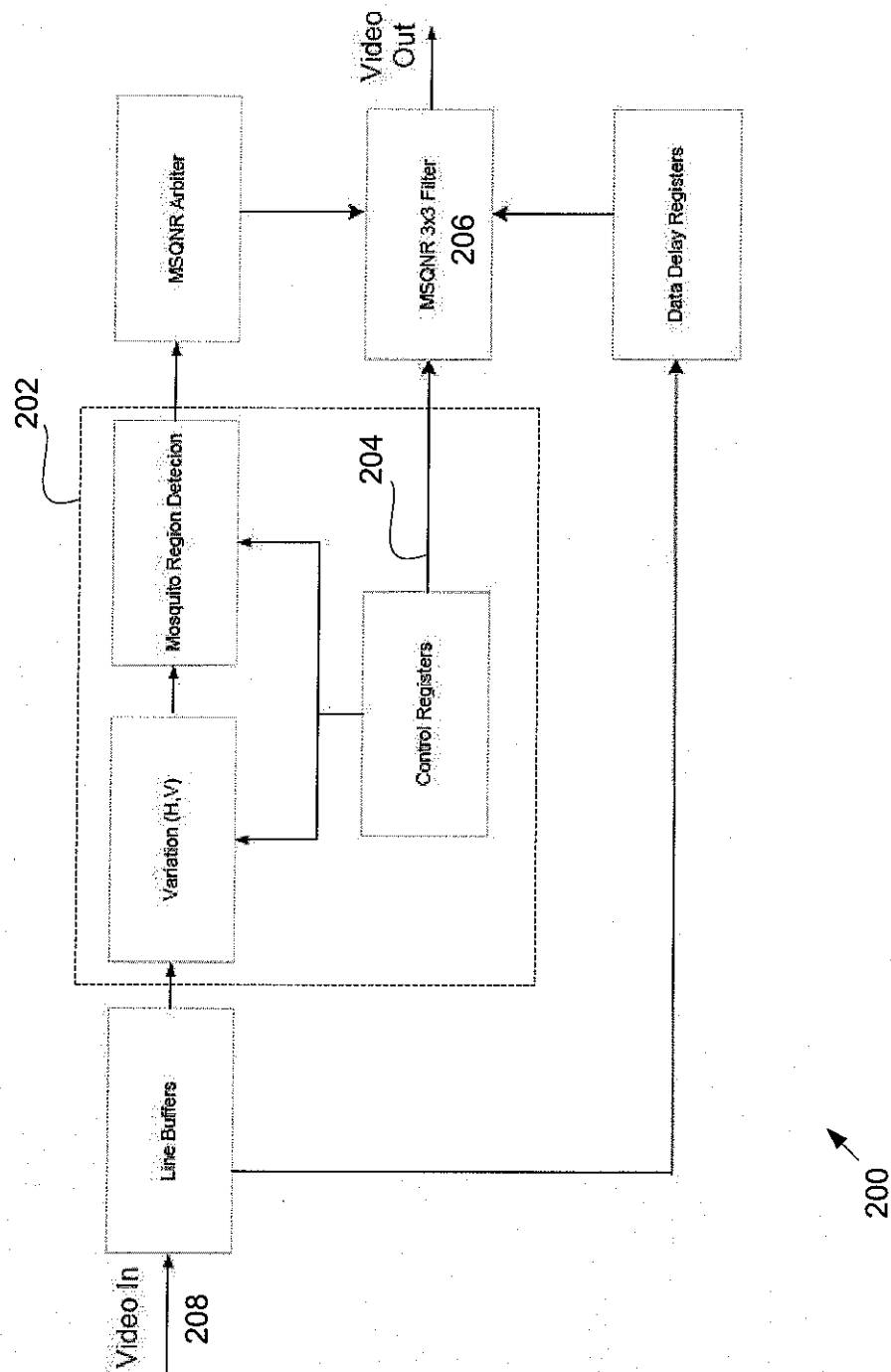
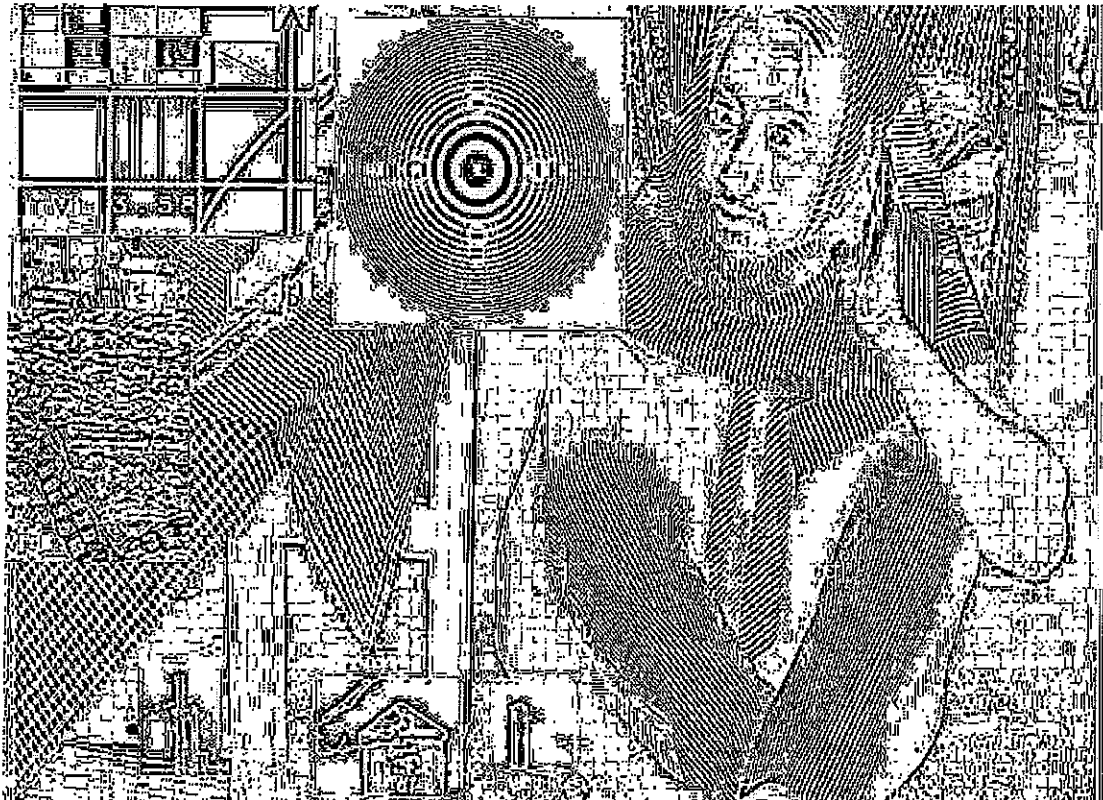
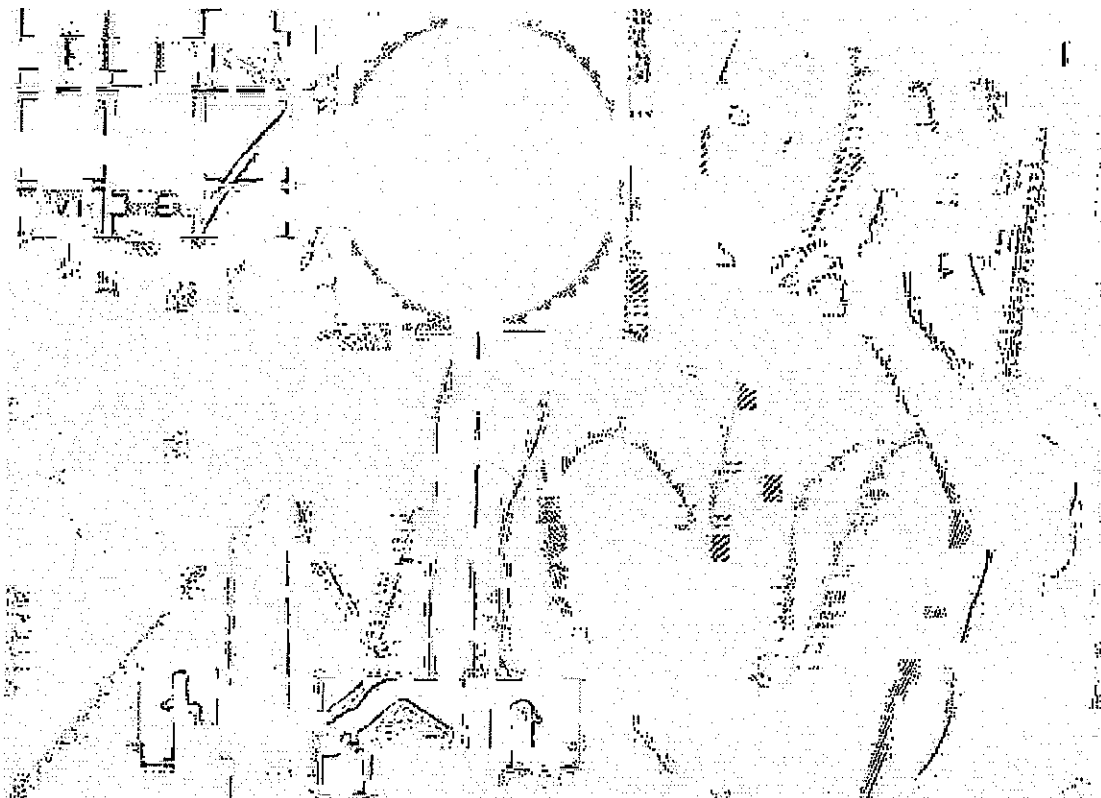


Fig. 2



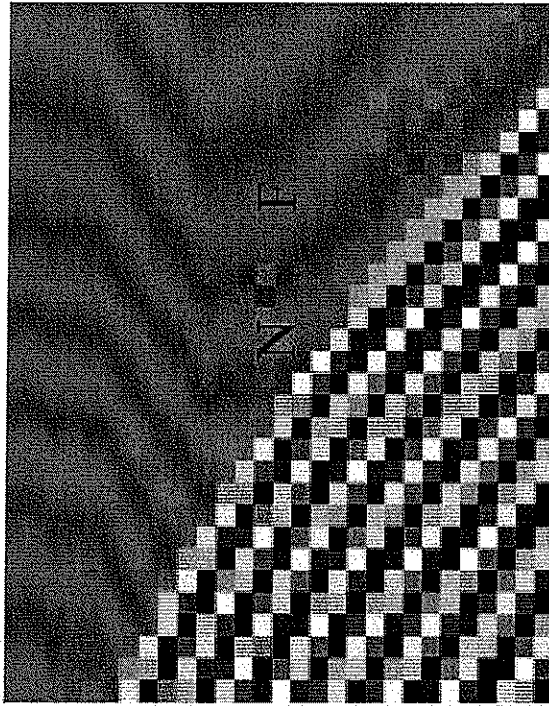
Using global mosquito noise reduction

Fig. 3A



Using region based (local) mosquito noise reduction

Fig. 3B



N is noisy region F is flat region

Fig. 4

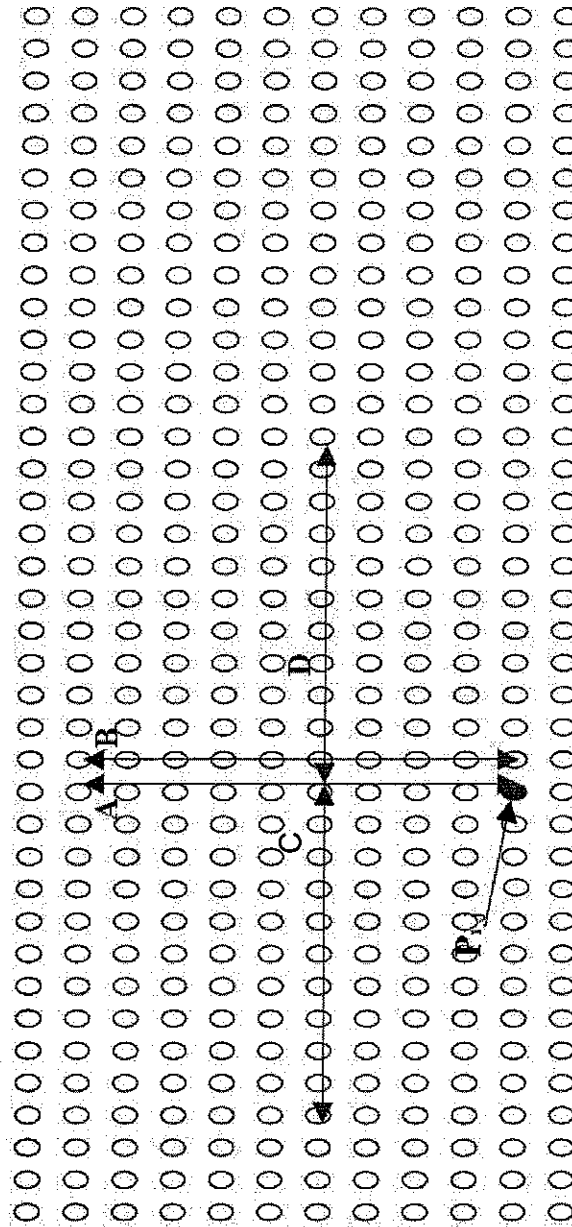


Fig. 5

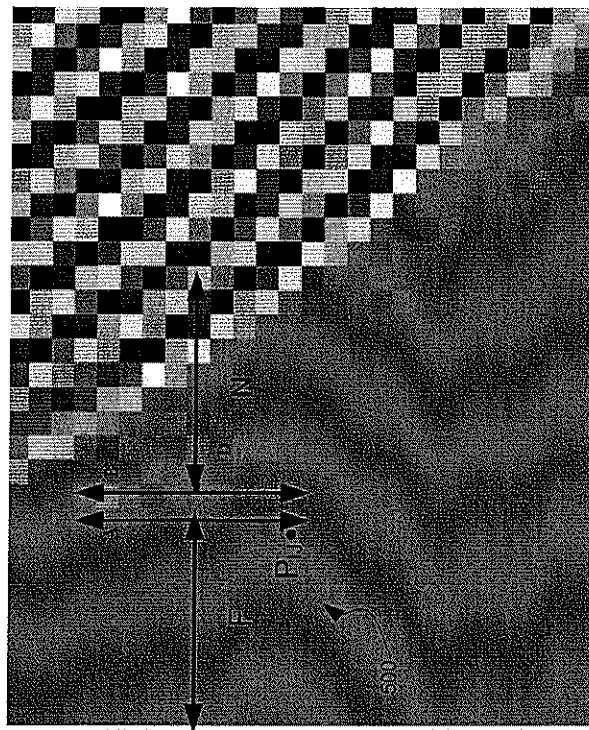


Fig. 6

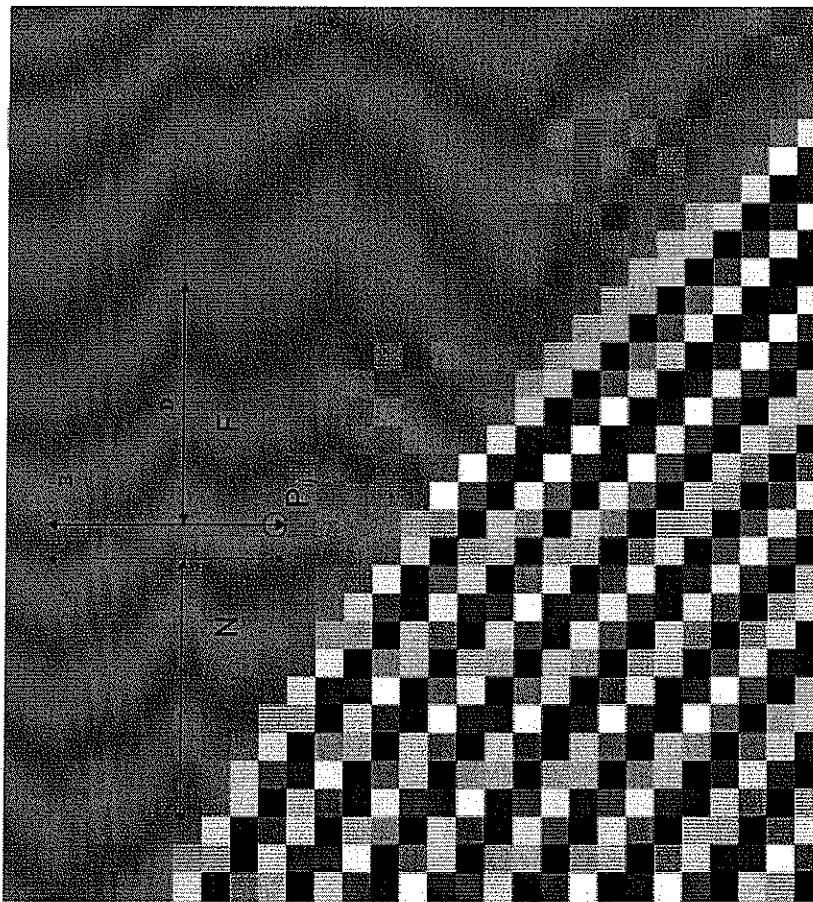


Fig. 7

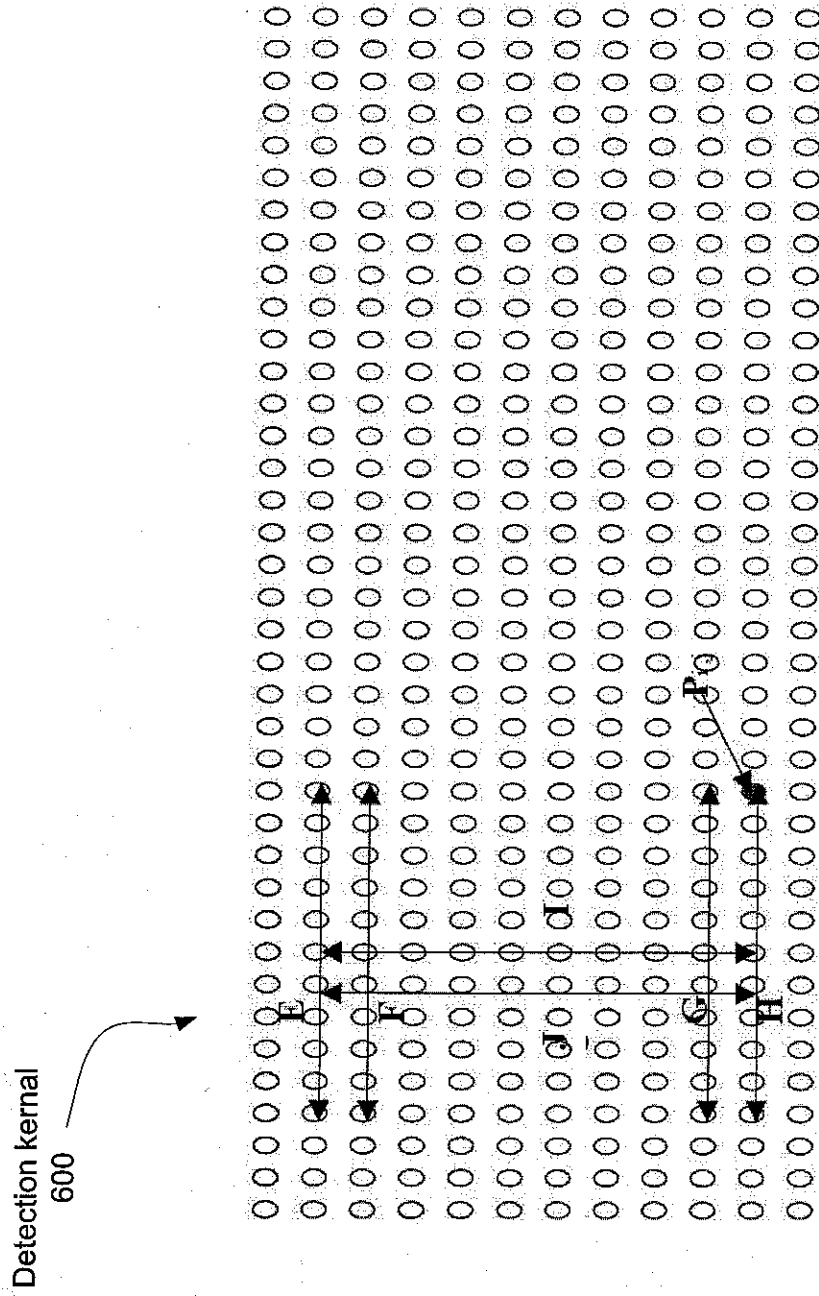
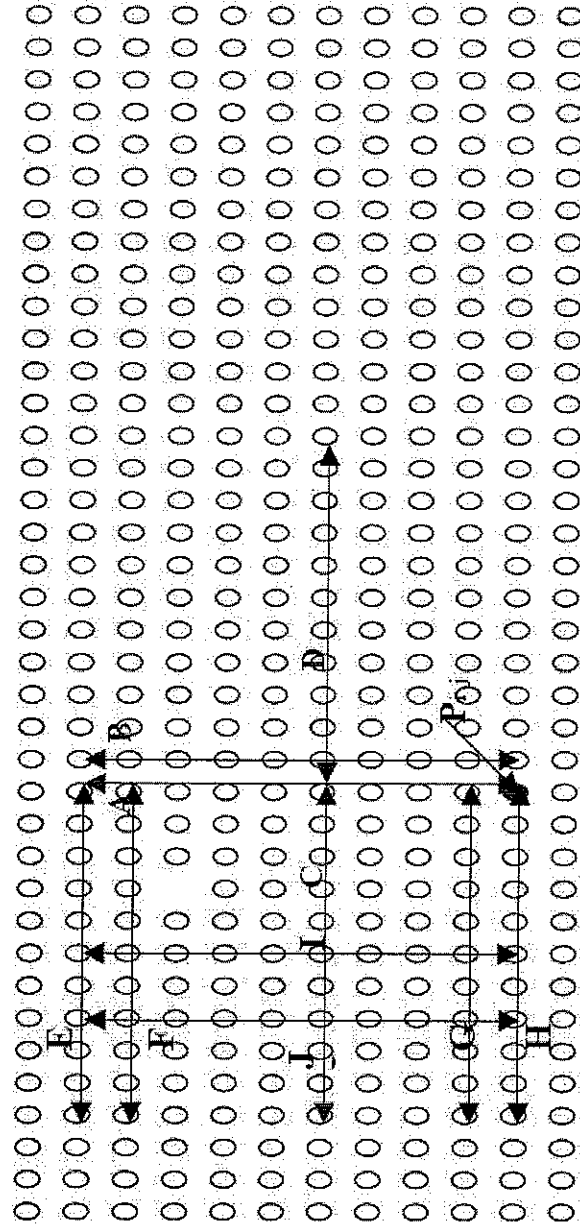


Fig. 8

COMPOSITE DETECTION
KERNAL



COMPOSITE KERNAL

Fig. 9

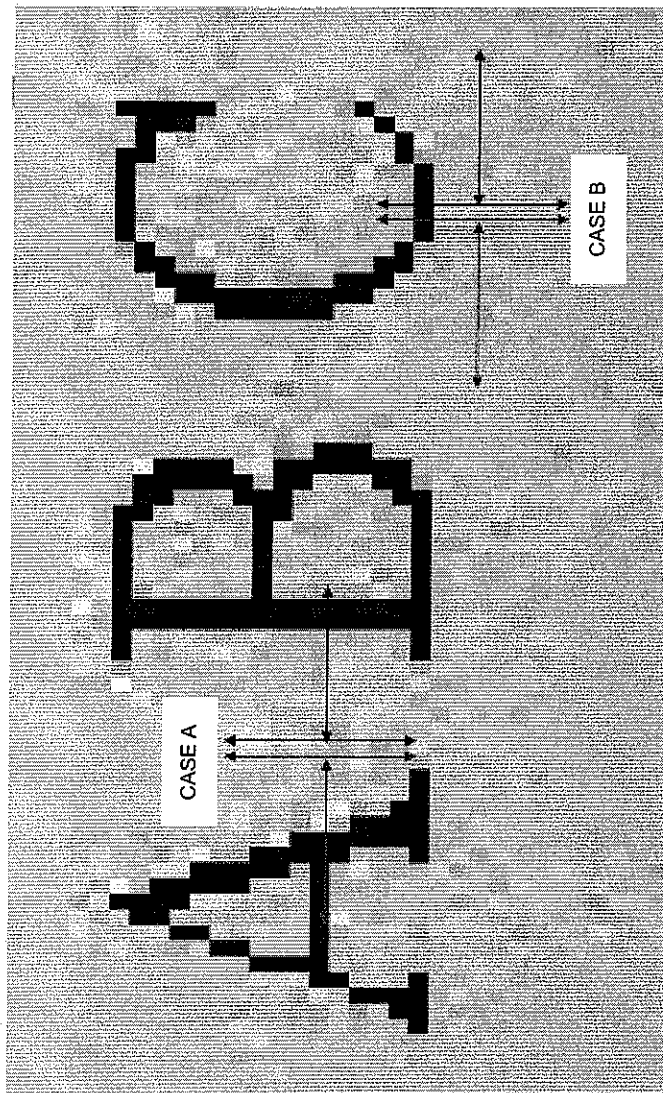


Fig. 10

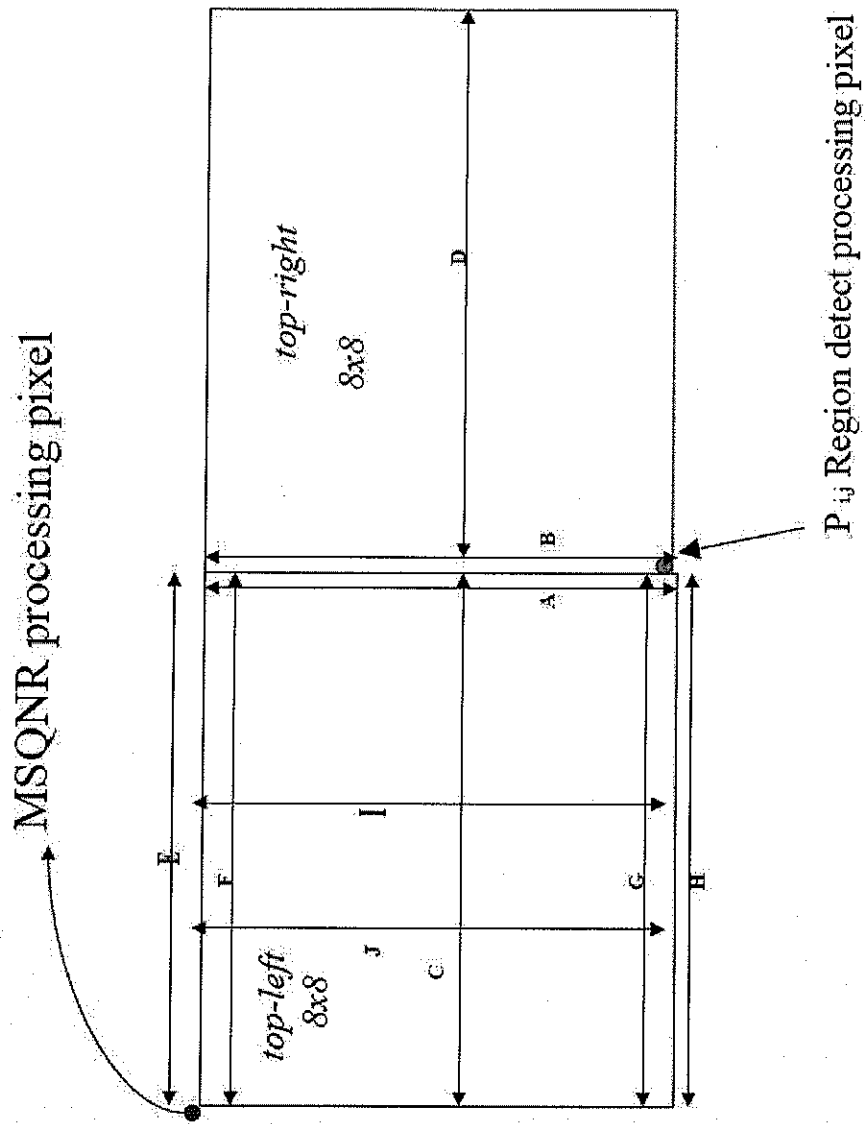
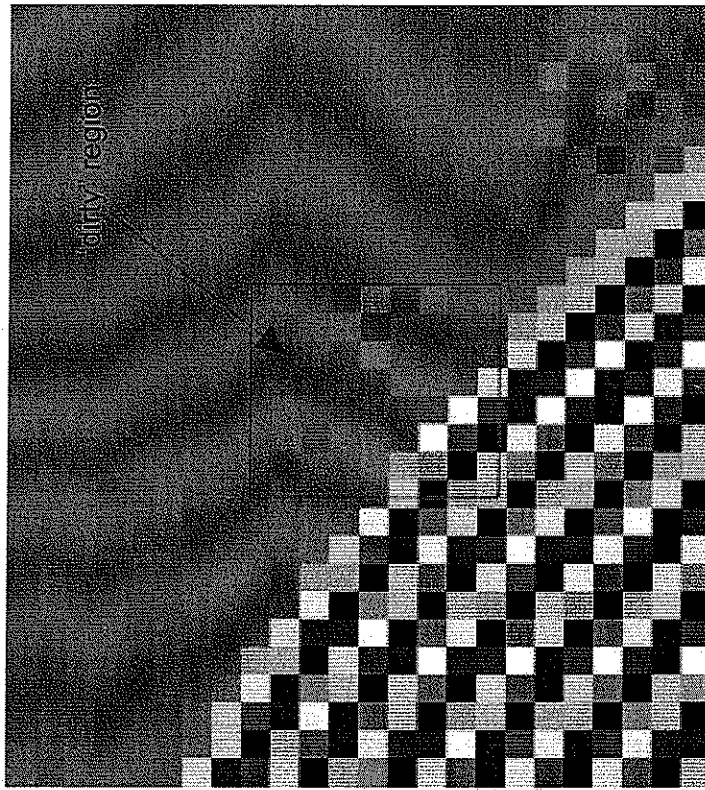
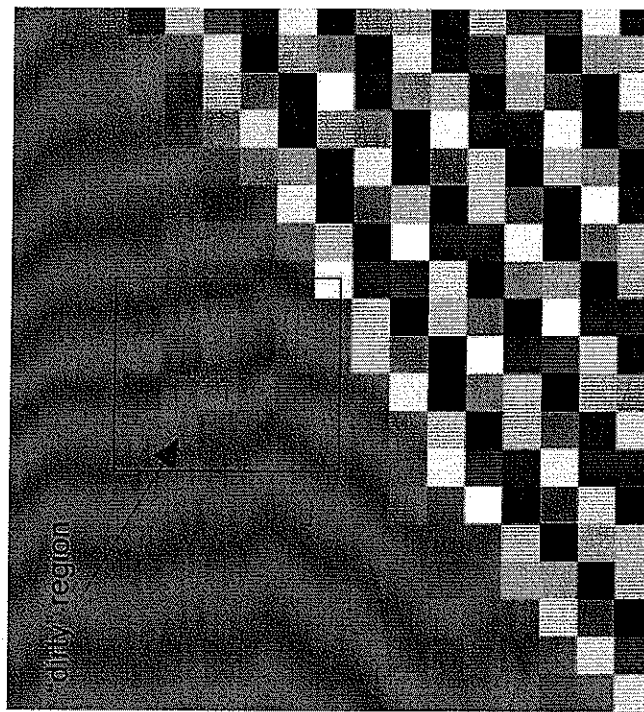


Fig. 11



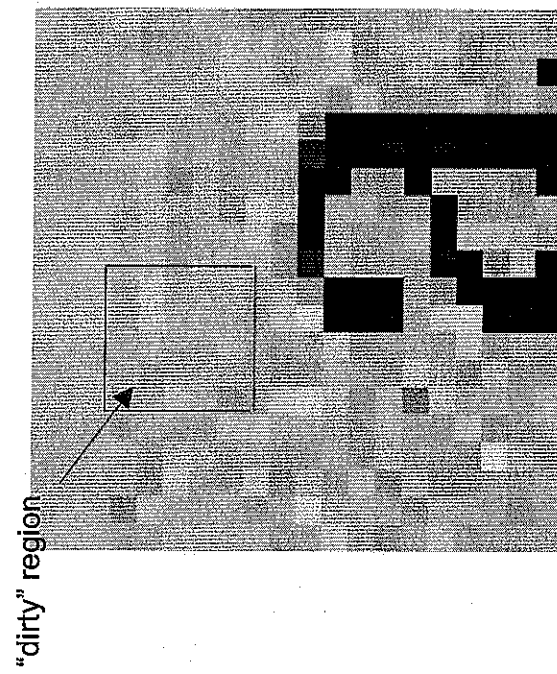
Left region

Fig. 12



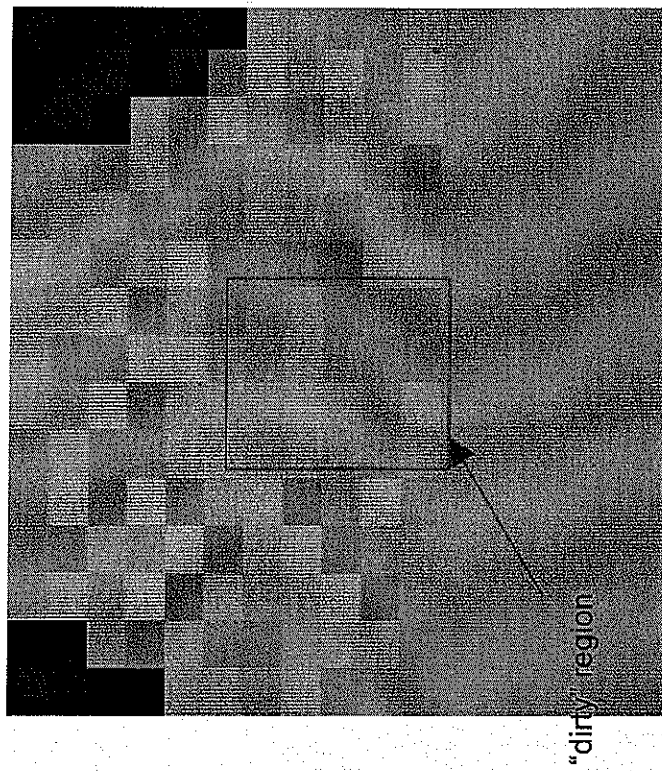
Right region

Fig. 13



Bottom region

Fig. 14



Top region

Fig. 15

Registers		Description
1	Threshold_Low_Y	The minimum value of fluctuation of vertical variation Kernel_1.
2	Threshold_High_Y	The maximum value of fluctuation of vertical variation Kernel_1.
3	Threshold_Min_Y	The smallest value of fluctuation of vertical variation Kernel_1.
4	Threshold_Low_X2	The minimum value of fluctuation of horizontal variation for Kernel_2.
5	Threshold_High_X2	The maximum value of fluctuation of horizontal variation Kernel_2.
6	Threshold_Min_X2	The smallest value of fluctuation of horizontal variation Kernel_2.

Table 1: Registers of Region Detection

Fig. 16

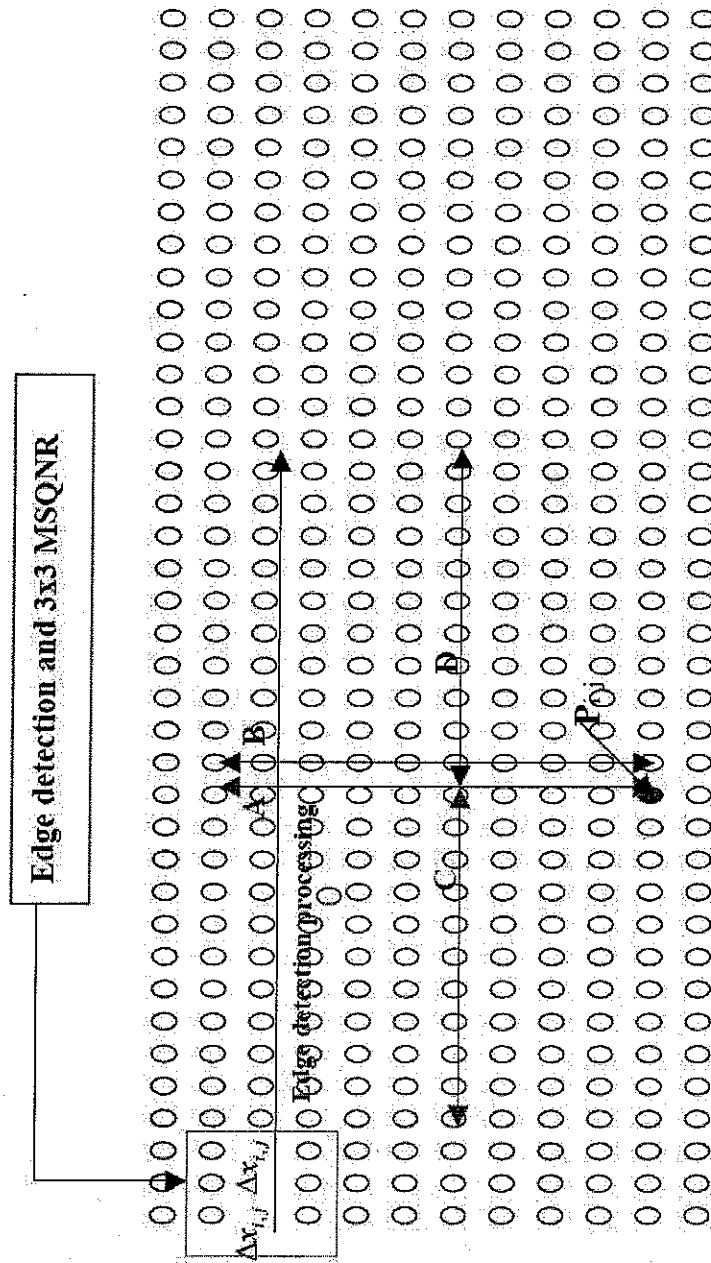


Fig. 17

	Registers	Description	Default
1	Threshold_Low_Y	The minimum value of fluctuation of vertical variation Kernel_1.	24
2	Threshold_High_Y	The maximum value of fluctuation of vertical variation Kernel_1.	180
3	Threshold_Min_Y	The smallest value of fluctuation of vertical variation Kernel_1.	10
4	Threshold_Low_X2	The minimum value of fluctuation of horizontal variation for Kernel_2.	8
5	Threshold_High_X2	The maximum value of fluctuation of horizontal variation Kernel_2.	255
6	Threshold_Min_X2	The smallest value of fluctuation of horizontal variation Kernel_2.	20
7	nLRDQWinSize	Left/Right region detail qualifying window size.	3
8	nTBDQWinSize	Top/Bottom region detail qualifying window size.	7
9	nDetectRegionSize	Size of detect kernel.	8
10	nLRregionSize	Left/Right region size.	16
11	nTBregionSize	Top/Bottom region size.	16
12	nLRDQThreshold	Left/Right region detail qualifying threshold.	16
13	nTBDQThreshold	Top/Bottom region detail qualifying threshold.	38
14	nTBThreshold_Min_Y	The smallest value of fluctuation of vertical variation Kernel_2.	80
15	nTBThreshold_Max_Y	The maximum value of fluctuation of vertical variation Kernel_2.	255
16	nHoriEdgeThreshold	Left/Right region horizontal edge detect threshold.	16
17	nTBVertDetalThreshold	Top/Bottom region vertical different threshold.	8
18	nTBVertMaxEdgeThreshold	Top/Bottom region vertical different Maximum threshold.	16
19	nTBVertEdgeThreshold	Top/Bottom region vertical edge detect threshold.	16

Fig. 18

Table 1

nHoriEdgeThreshold: is used to set the regions detection's horizontal edge detection threshold. All regions, include left, right, top/bottom will use same edge detection threshold.

nTBVertDetaThreshold: is used to set the threshold of two each other adjacent pixels in Top/Bottom region vertical edge detection.

nTBVertMaxEdgeThreshold: is used to set the threshold of two adjacent pixels in Top/Bottom region vertical edge detection.

nTBVertEdgeThreshold: is used to set the Top/Bottom region detection's vertical edge detection thresholds.

nLRDQWinSize: is used to set the window size of left or right region detail qualifying.

nTBDQWinSize: is used to set the window size of top/bottom region detail qualifying.

nDetectRegionSize: is used to set the all region detection's window size. It will determine how many pairs variation are going to be used for region detection kernel.

nLRregionSize: is used to set the mosquito dirty region window size for left or right region.

nTBDQWinSize: is used to set the mosquito dirty region window size for top/bottom region.

nThreshold_Min_Y: is used to set the minimum value of vertical variations.

nThreshold_Low_Y: is used to set the median value of vertical variations.

nThreshold_High_Y: is used to set the maximum value of vertical variations.

nLRDQThreshold: is used to set the minimum value of detail qualifying for left or right regions.

Fig. 19