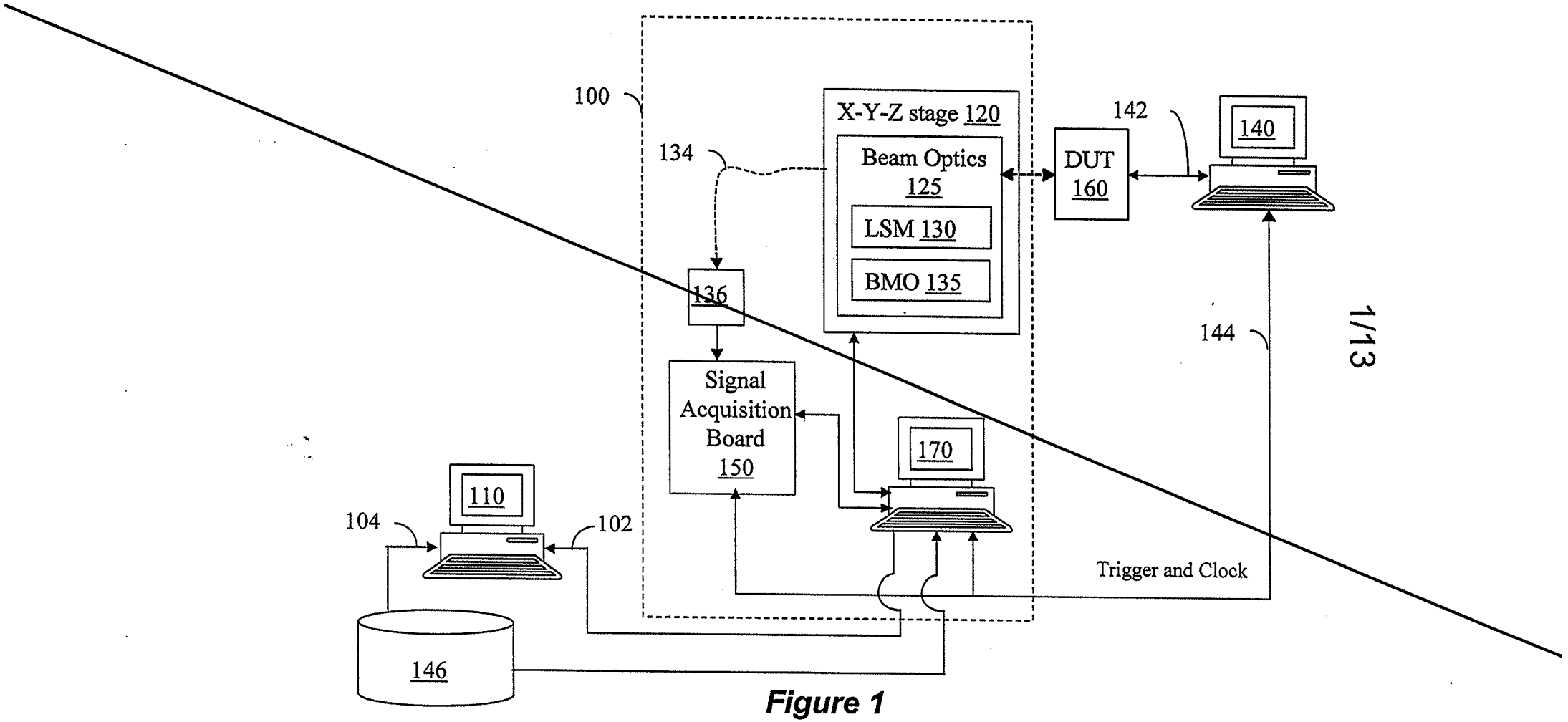

100
X-Y-Z stage 120
Beam Optics 125
LSM 130
BMO 135
134
136
142
140
DUT 160
144
Signal Acquisition Board 150
170
110
104
102
146
Trigger and Clock

Figure 1

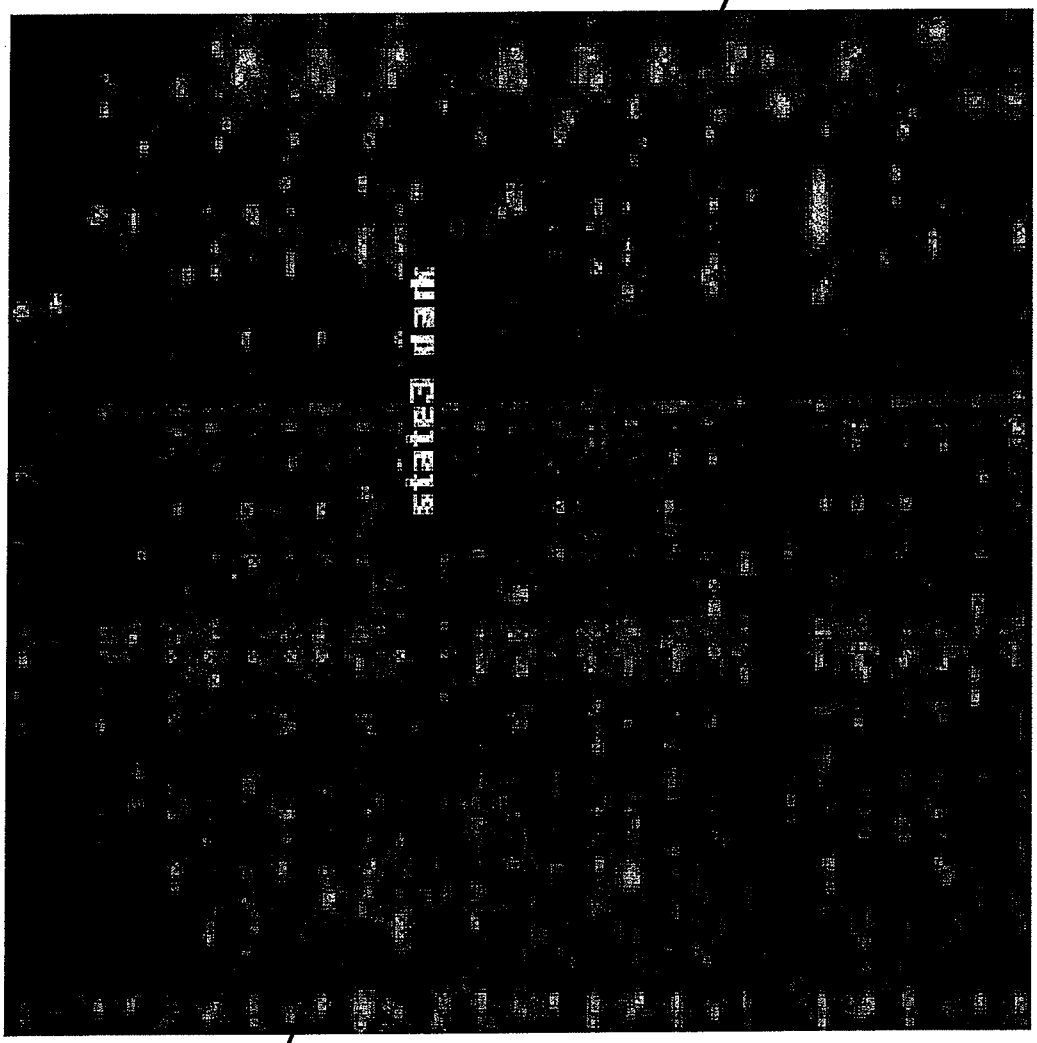


Figure 2

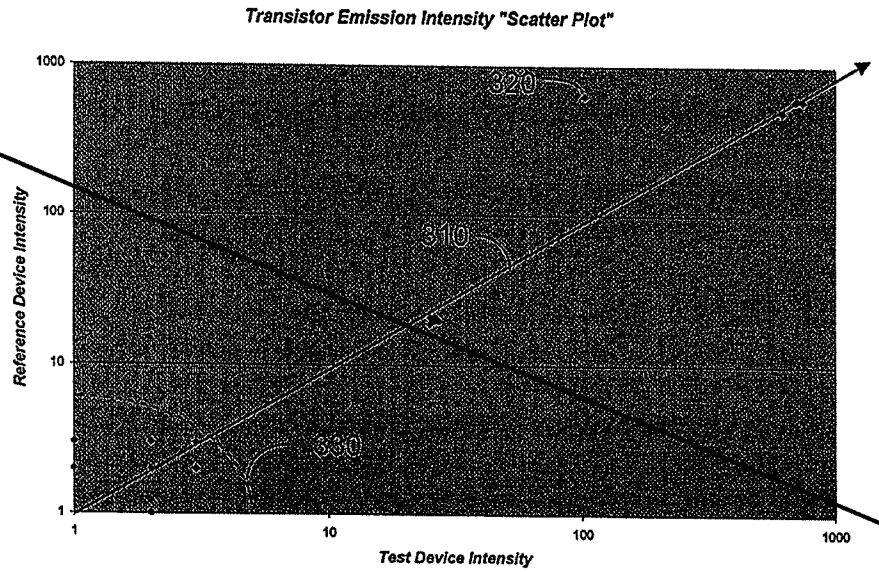


Figure 3

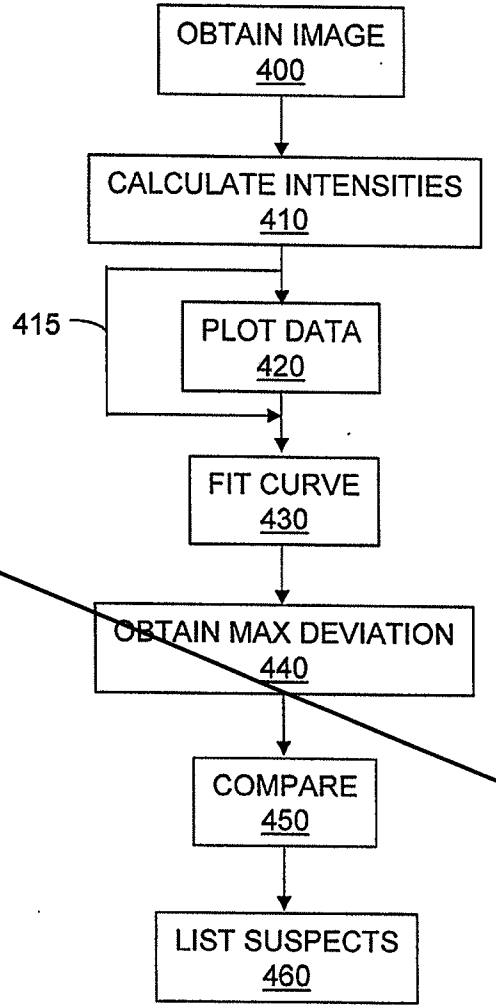


Figure 4

ANALOG MODE- EMISSION INTENSITY				
CELL NAME	TRANSISTOR NAME	TEST DEVICE INTENSITY	REFERENCE DEVICE INTENSITY	TEST/REF CORRELATION
FILE-INPUT A	N1	745	600	95%
FILE-INPUT A	N2	2	1	80%
FILE-INPUT A	P1	2	3	90%
FILE-INPUT A	P2	26	20	96%
FILE-CONTROL A	N1	1	2	80%
FILE-CONTROL A	N2	3	2	90%
FILE-CONTROL A	N3	2	3	90%
FILE-CONTROL A	P1	25	21	96%
FILE-CONTROL A	P2	27	20	95%
FILE-CONTROL A	P3	26	21	96%
FILE-CONTROL B	N1	700	602	98%
FILE-CONTROL B	N2	698	604	96%
FILE-CONTROL B	N3	702	610	95%
FILE-CONTROL B	P1	2	3	90%
FILE-CONTROL B	P2	3	3	97%
FILE-CONTROL B	P3	2	2	96%
FILE-CONTROL C	N1	2	1	80%
FILE-CONTROL C	N2	1	3	75%
FILE-CONTROL C	N3	3	2	90%
FILE-CONTROL C	P1	25	19	98%
FILE-CONTROL C	P2	26	21	95%
FILE-CONTROL C	P3	27	20	96%
FILE-INPUT B	N1	102	636	0.02%
FILE-INPUT B	P1	2	3	90%
FILE- INPUT C	N1	620	500	96%
FILE- INPUT C	P1	3	2	90%

Table 1

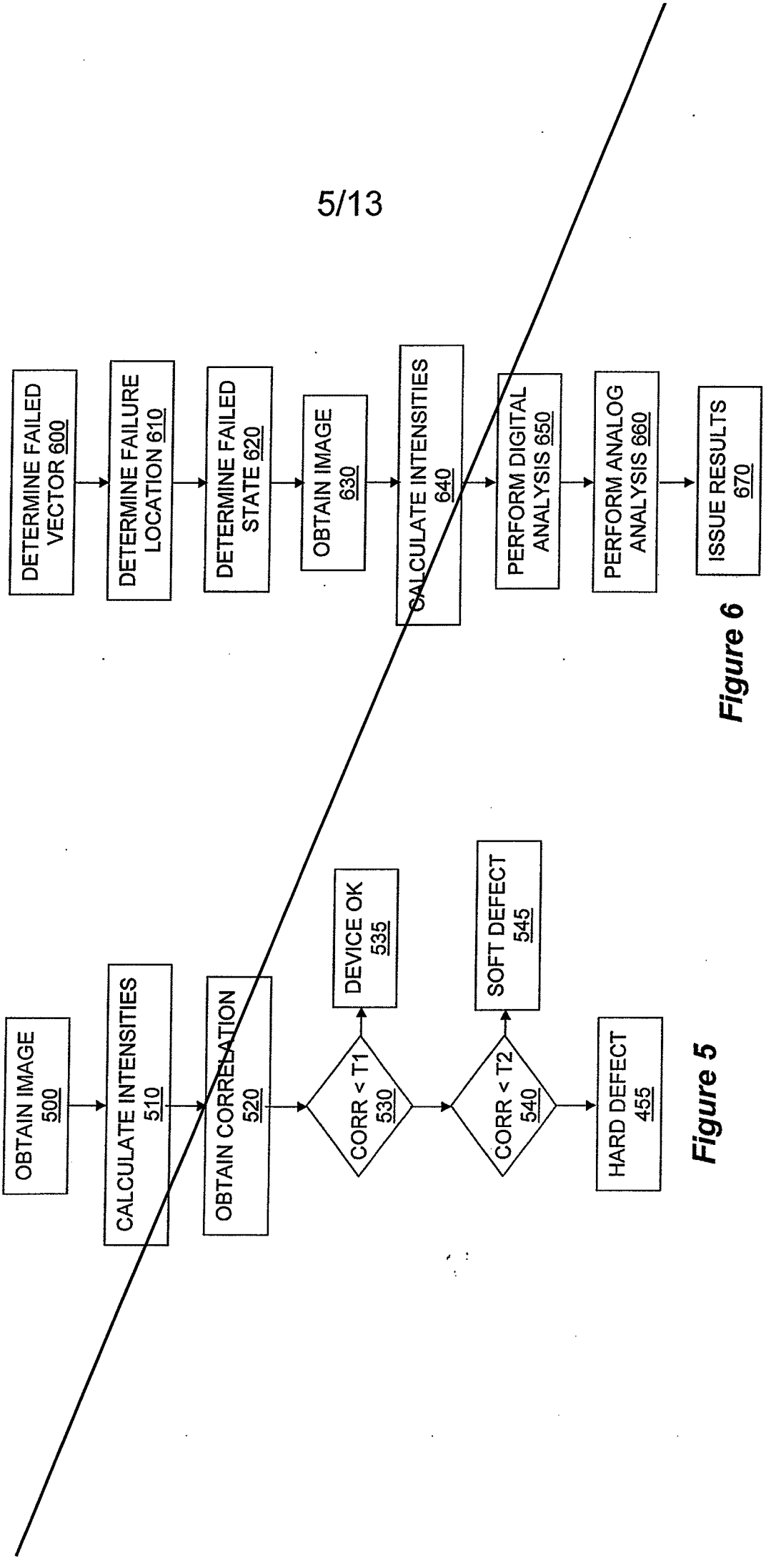


Figure 5

Figure 6

		DIGITAL MODE	
CELL NAME	**TEST DEVICE**	**REFERENCE DEVICE**	**THEORETICAL VALUE**
FILE-INPUT A	1	1	1
FILE-CONTROL A	0	0	0
FILE-CONTROL B	1	1	1
FILE-CONTROL C	0	0	0
FILE-INPUT B	1	0	0
FILE- INPUT C	0	0	0
REGISTER-A1	1	1	1
REGISTER-B1	1	1	1
REGISTER-C1	0	0	0
REGISTER-A2	1	1	1
REGISTER-B2	1	1	1
REGISTER-C2	1	1	1
REGISTER-A3	0	0	0
REGISTER-B3	0	1	1
REGISTER-C3	0	0	0
REGISTER-A4	1	1	1
REGISTER-B4	0	0	0
REGISTER-C4	0	0	0
	RECOMMENDED ACTION:-NAVIGATE TO CONTROL- B3		
ANOMALOUS EMISSION SITE IN CELL NAME- REGISTER B3			

Table 2

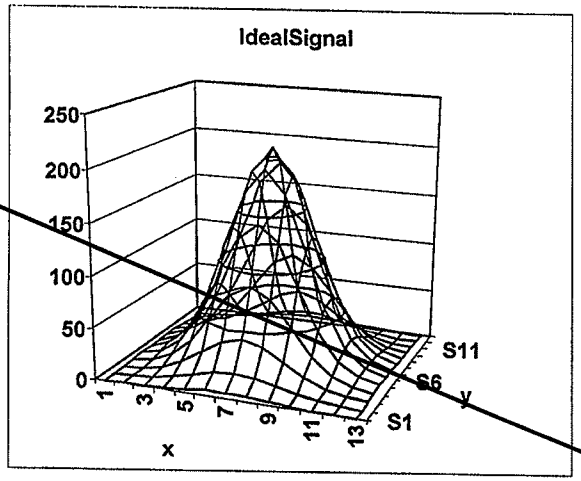


Figure 7

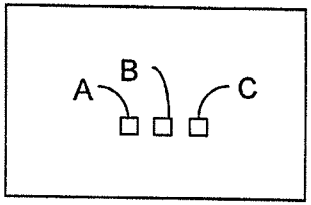


Figure 9

STATE	A B C
1	000
2	100
3	010
4	001
5	110
0	011
7	101
8	111

Table 3

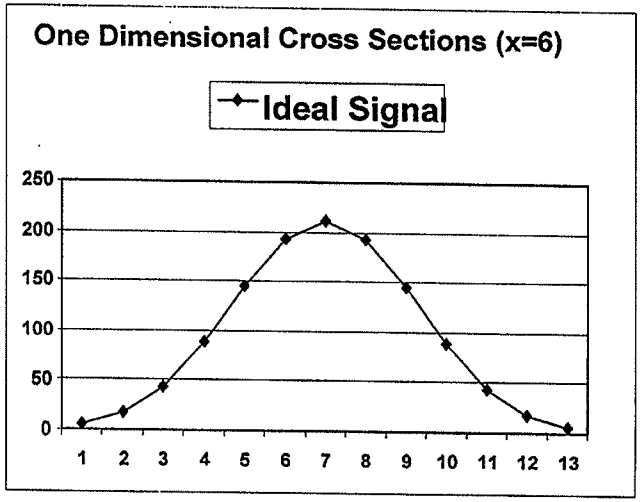


Figure 8

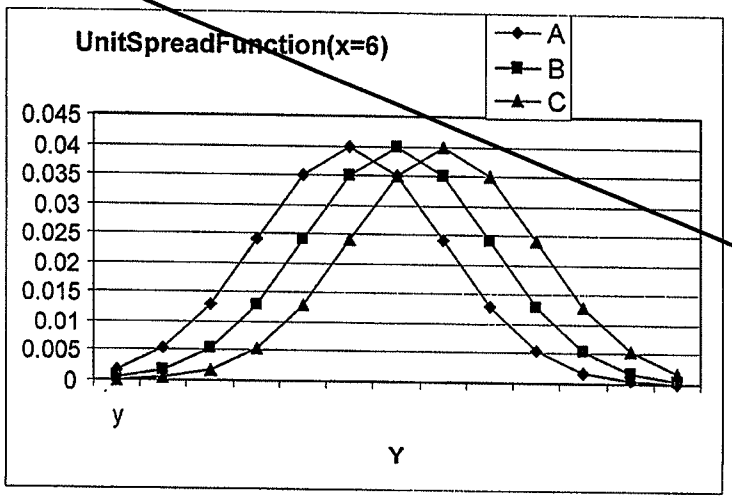


Figure 10

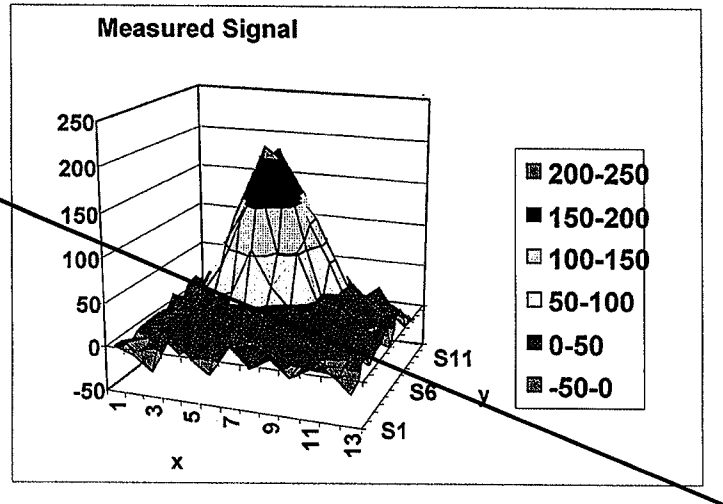


Figure 11

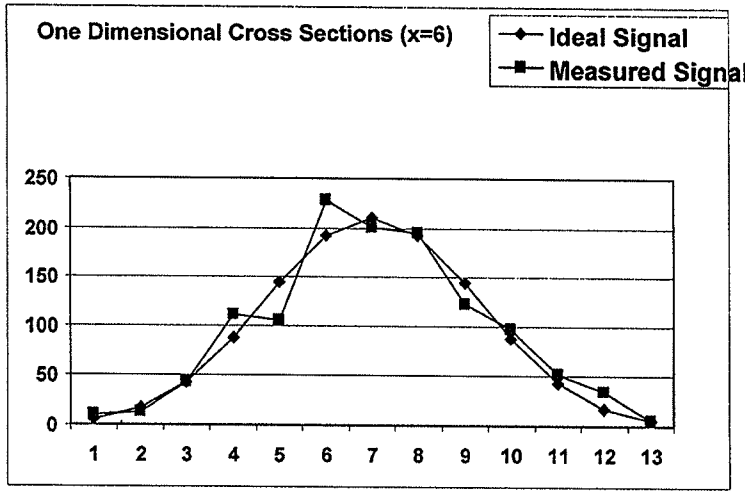


Figure 12

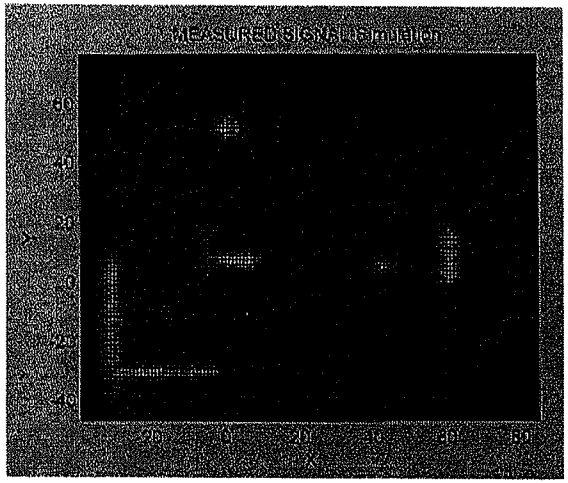


Figure 13

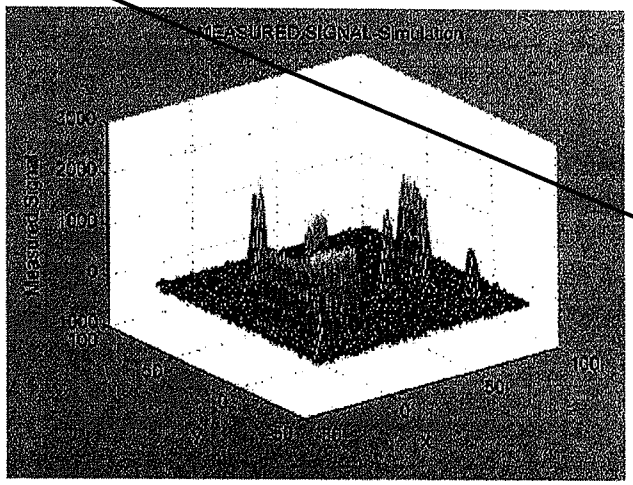


Figure 14

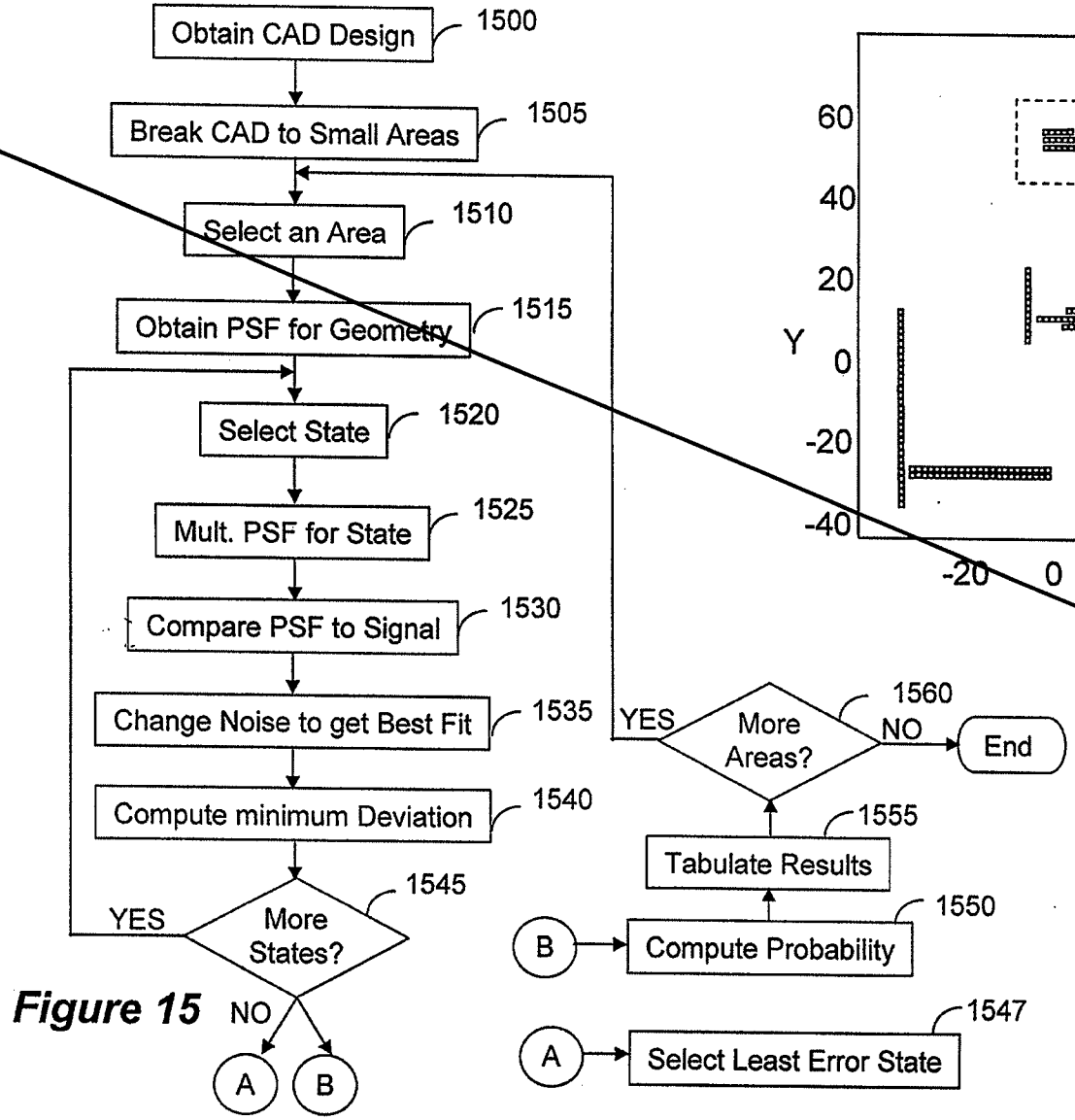


Figure 15

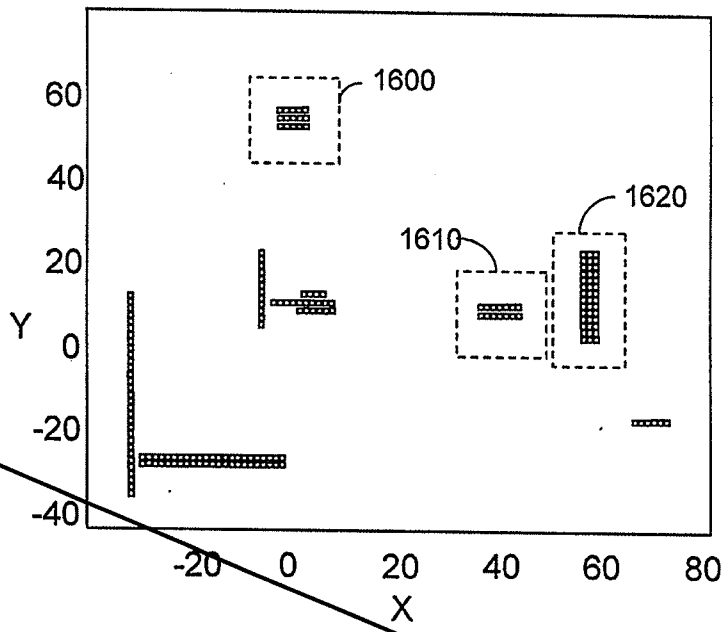


Figure 16

DATA SUMMARY TABLE

STATE	INTENSITY			SIGMA(+-)			STATISTICS		
	tA	tB	tC	tSigA	tSigB	tSigC	tChiSq	tChiDist	tFdist
000	0.00	0.00	0.00	0.00	0.00	0.00	7087.97	0.00	0.00%
100	5683.38	0.00	0.00	107.44	0.00	0.00	652.43	0.00	0.00%
010	0.00	5956.67	0.00	0.00	110.04	0.00	221.86	0.00	10.72%
001	0.00	0.00	5714.51	0.00	0.00	107.42	653.29	0.00	0.00%
110	418.14	5556.36	0.00	280.84	288.92	0.00	219.31	0.00	11.50%
011	0.00	5498.56	481.15	0.00	288.86	281.07	218.63	0.00	11.92%
101	3101.31	0.00	3136.71	158.45	0.00	158.61	177.66	0.26	65.86%
111	3493.73	-755.47	3529.27	574.03	1061.85	574.38	176.84	0.25	0.00%

Table 4

STATE	INTENSITY			SIGMA(+-)			STATISTICS		
	tA	tB	tC	tSigA	tSigB	tSigC	tChiSq	tChiDist	tFdist
POOLED	3093.34	15.20	3128.77	220.79	292.84	220.60	177.69		

Table 5

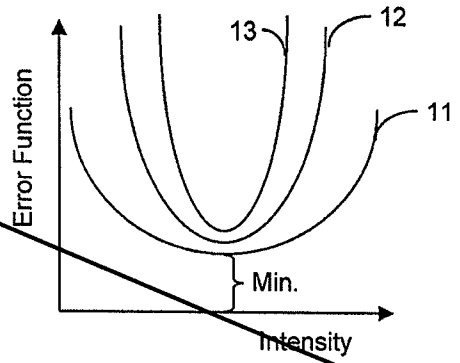


Figure 17

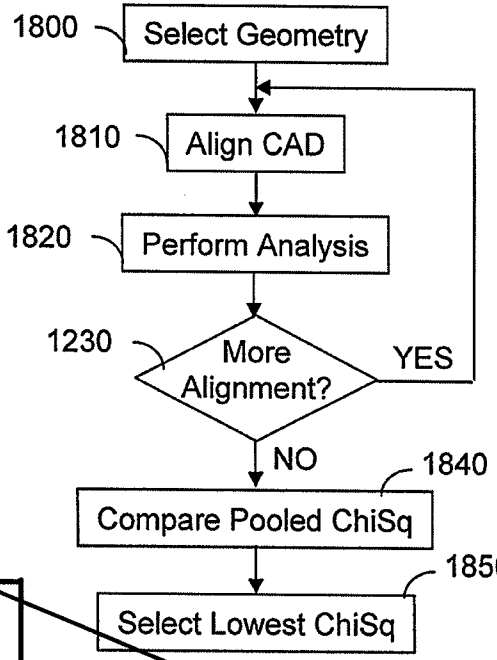


Figure 18

	BLENDED DATA.... ???		BLENDED VERDICT	Actual Value	Cumm. ON Probability
	INTENSITY	Sigma(+/-)			
A weighted	3093.34	220.79	ON	3000	77.4%
B weighted	15.20	292.84	?	0	34.1%
C weighted	3128.77	220.60	ON	3000	77.8%

Table 6

'Transis...	Intensity	Xmin	Xmax	Ymin	Ymax	'Estimate'	'Sigma'	'ON/OFF'	'Probab...
1	1000	4	10	6	6	1102.2	88.55	'ON'	0.99819
2	2000	5	8	10	10	1999.5	159.19	'ON'	0.99873
3	3000	40	47	5	5	3023	92.256	'ON'	1
4	4000	-4	-4	2	20	3997.9	32.295	'ON'	1
5	5000	70	76	-20	-20	5068.1	63.679	'ON'	1
6	6000	40	47	7	7	6079.5	94.437	'ON'	1
7	7000	-30	-30	-32	-38	6874.5	69.181	'ON'	1
8	8000	-30	-30	-30	10	8030.4	23.123	'ON'	1
9	9000	-28	0	-29	-31	9000.4	27.89	'ON'	1
10	10000	-2	10	8	8	9896.2	72.292	'ON'	1
11	6000	60	60	0	20	5914.2	160.16	'ON'	1
12	0	61	61	0	20	153.98	291.91	'?'	0.4993
13	6000	62	62	0	20	5935.8	161.38	'ON'	1
14	0	0	1	50	50	56.01	561.22	'?'	0.22461
15	25000	2	3	50	50	23493	1417.8	'ON'	0.99959
16	0	4	5	50	50	811.84	1031	'?'	0.55934
17	25000	0	1	52	52	24993	1127.2	'ON'	0.99996
18	0	2	3	52	52	2616.5	2337	'?'	0.67231
19	25000	4	5	52	52	23891	1239	'ON'	0.9998
20	0	0	1	54	54	118.43	645.52	'?'	0.44438
21	25000	2	3	54	54	24677	968.27	'ON'	0.99996
22	0	4	5	54	54	1.109e-...	0.029079	'OFF'	0.0006...

Table 7

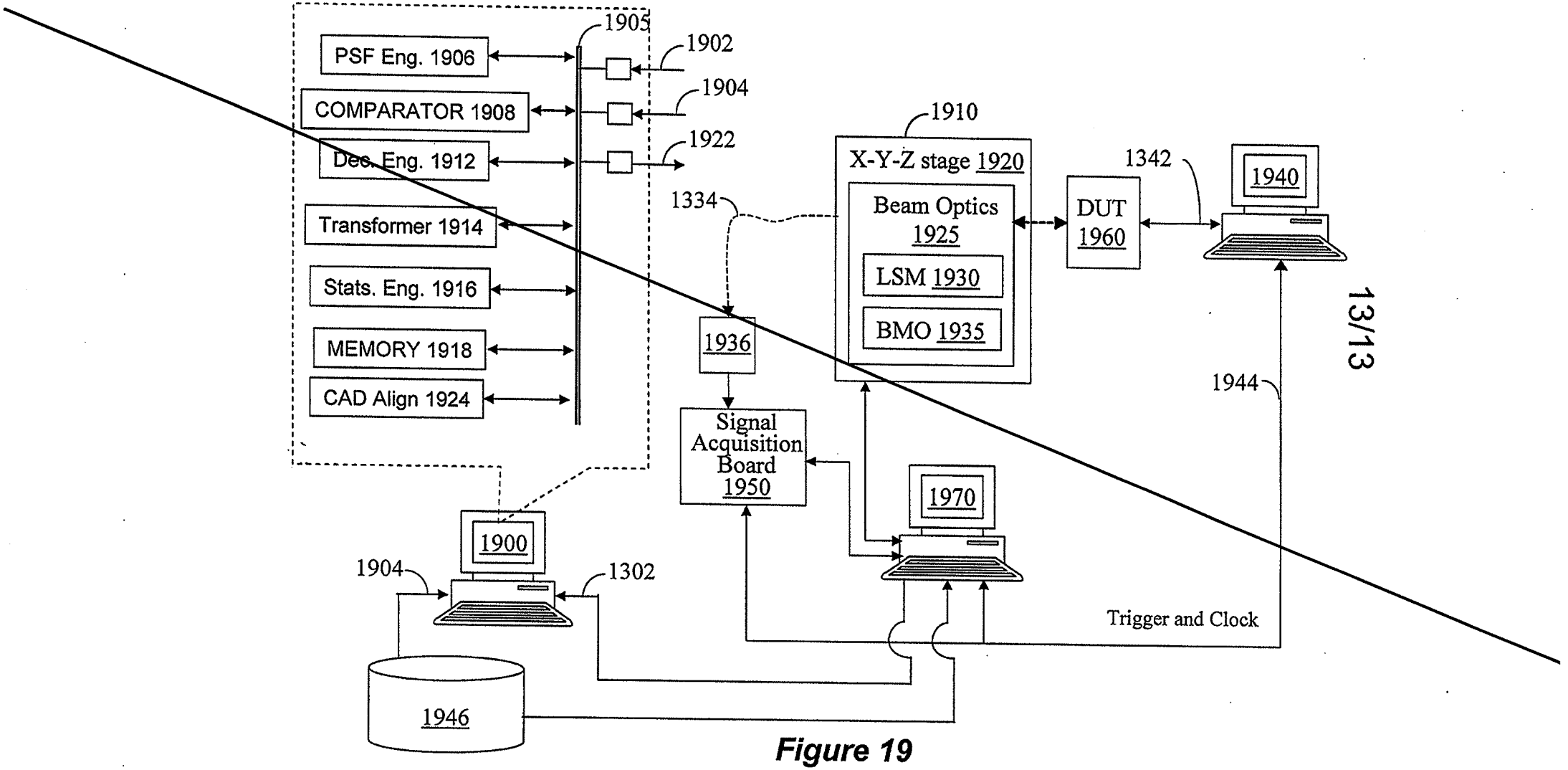

1905
PSF Eng. 1906
1902
COMPARATOR 1908
1904
Dec. Eng. 1912
1922
Transformer 1914
Stats. Eng. 1916
MEMORY 1918
CAD Align 1924
1910
X-Y-Z stage 1920
1334
Beam Optics 1925
LSM 1930
BMO 1935
DUT 1960
1342
1940
1936
1944
Signal Acquisition Board 1950
1970
1900
1904
1302
Trigger and Clock
1946

Figure 19

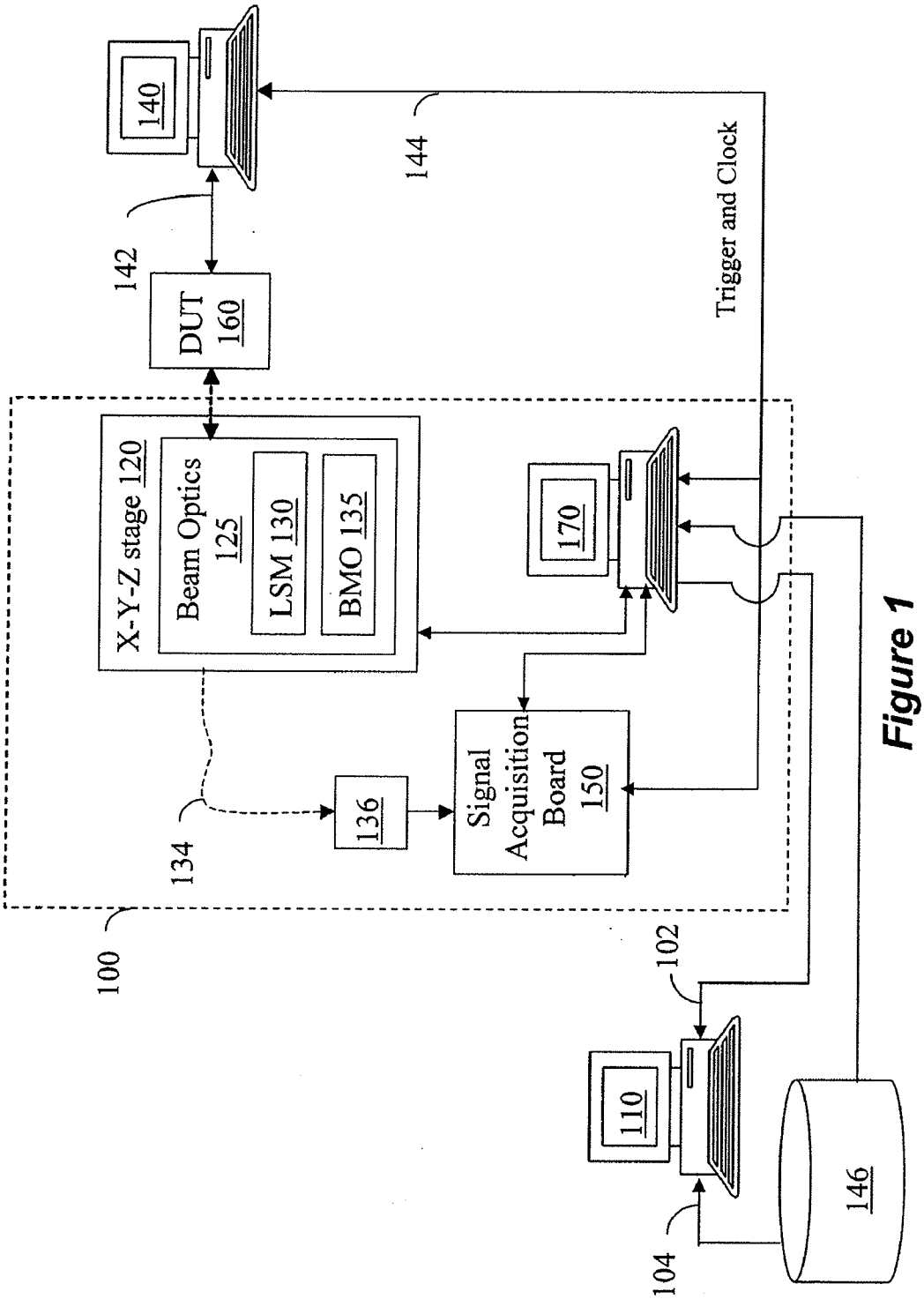

140
144
Trigger and Clock
142
DUT
160
X-Y-Z stage 120
Beam Optics
125
LSM 130
BMO 135
170
134
136
Signal
Acquisition
Board
150
100
102
110
146
104

Figure 1

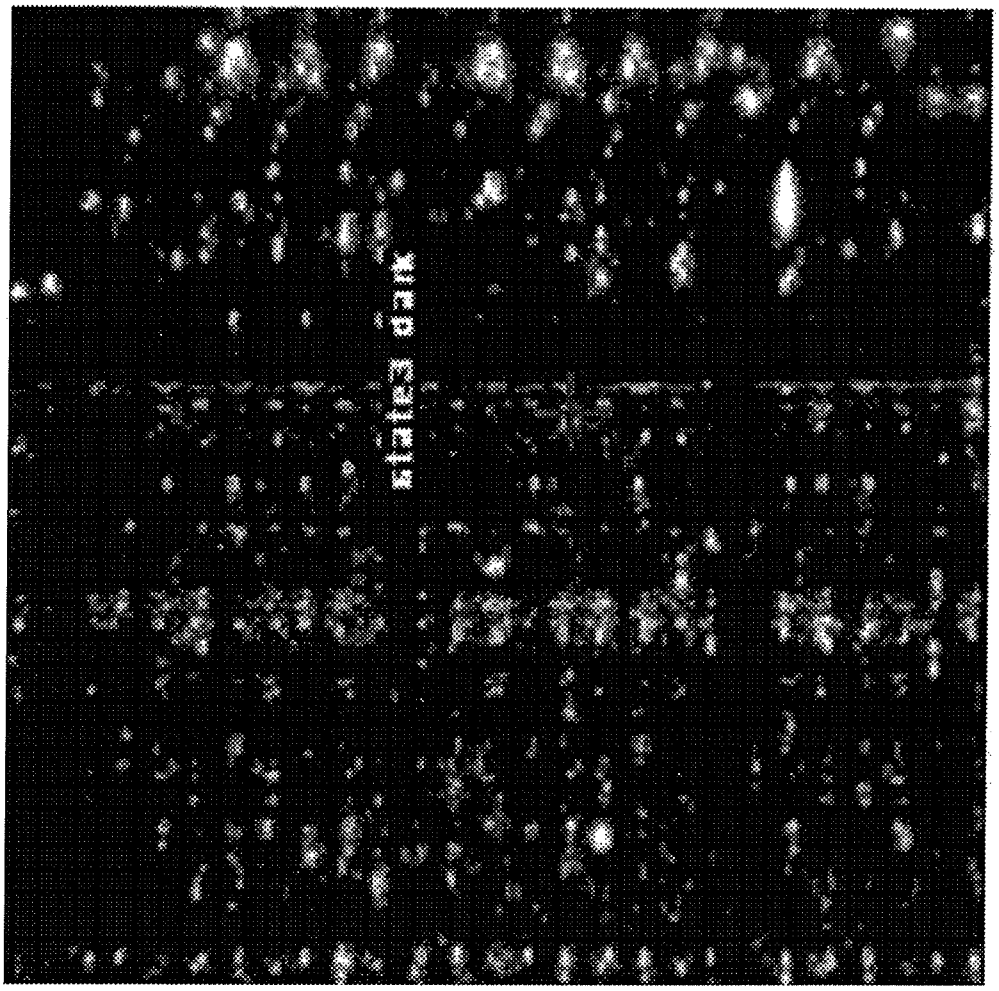


Figure 2

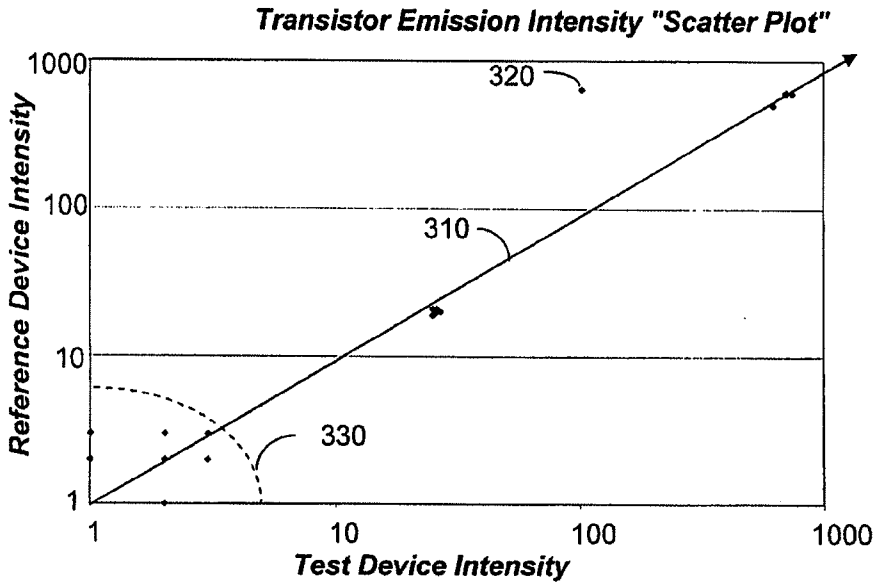


Figure 3

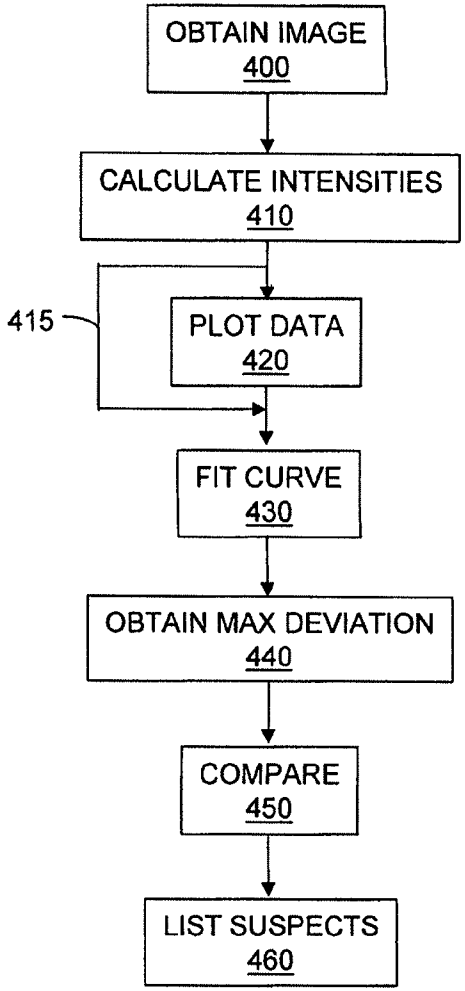


Figure 4

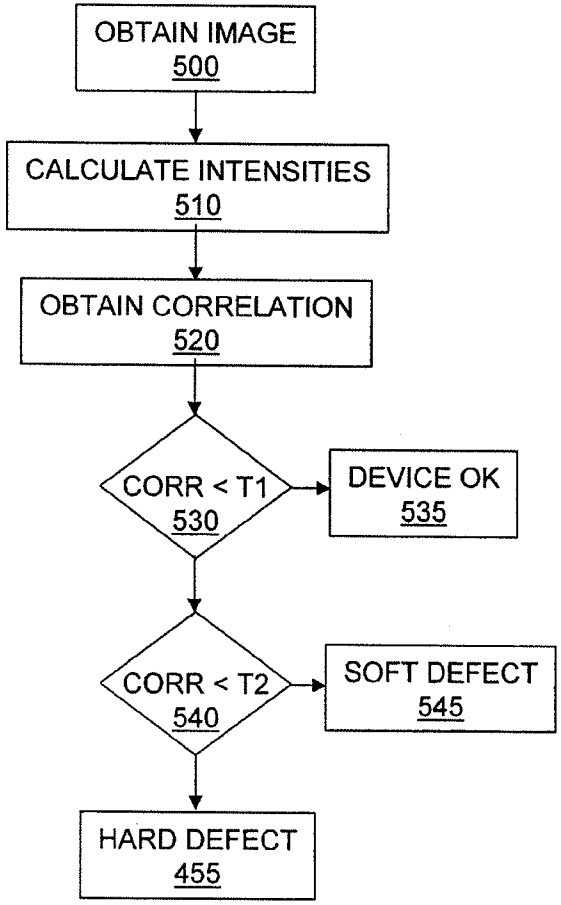


Figure 5

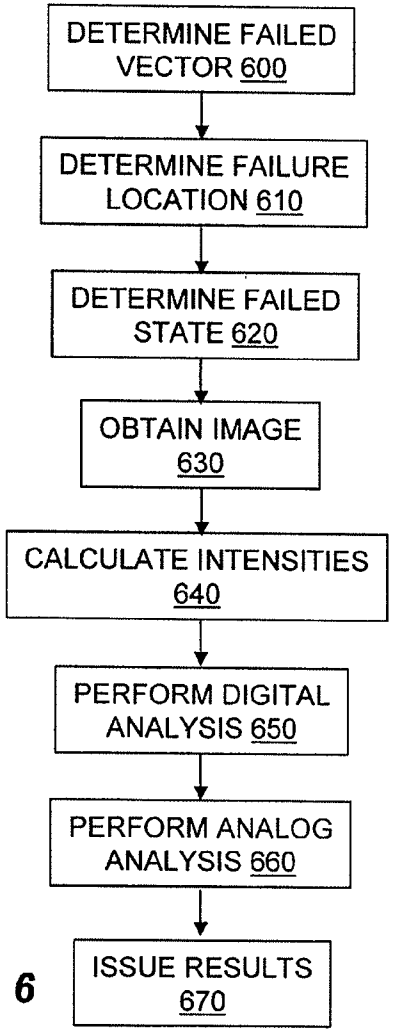


Figure 6

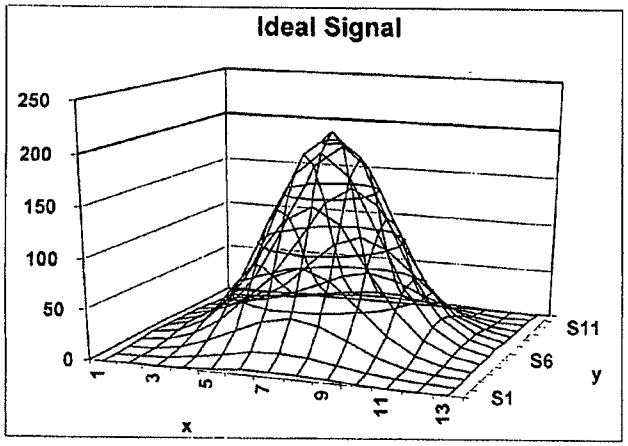


Figure 7

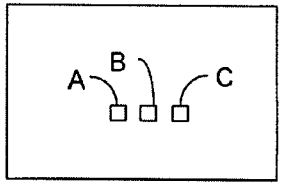


Figure 9

STATE	A B C
1	000
2	100
3	010
4	001
5	110
0	011
7	101
8	111

Table 3

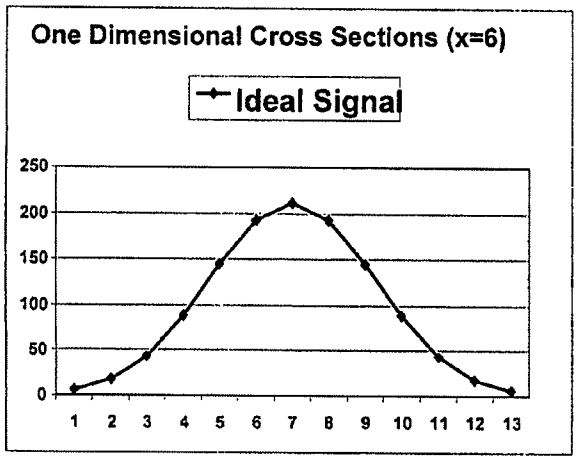


Figure 8

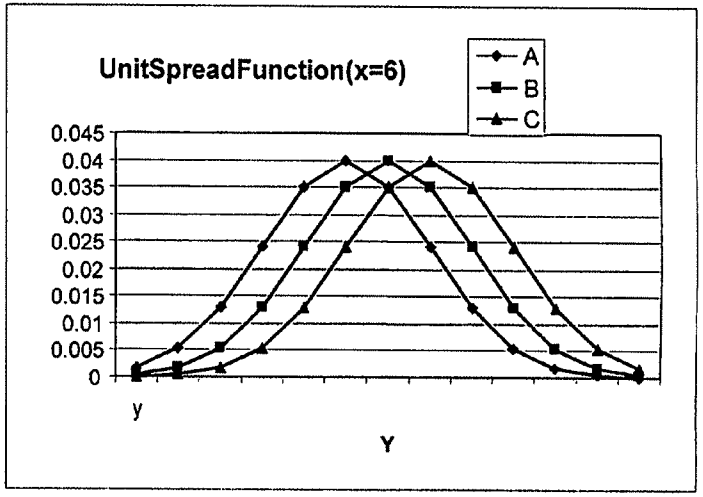


Figure 10

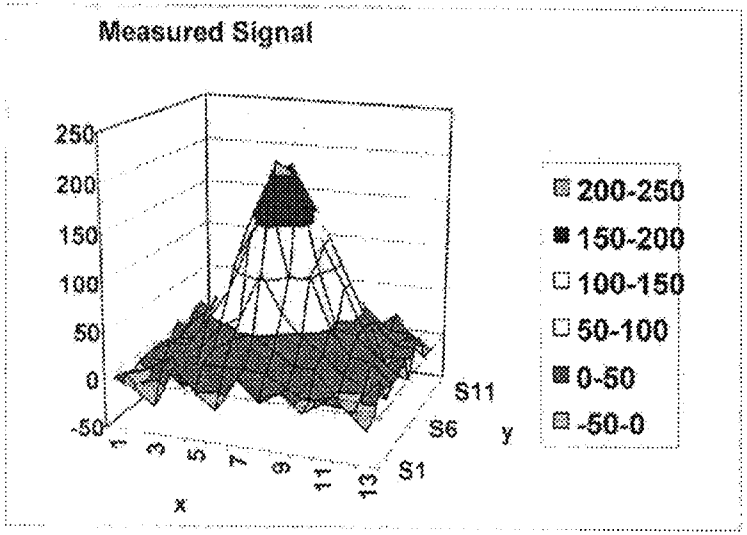


Figure 11

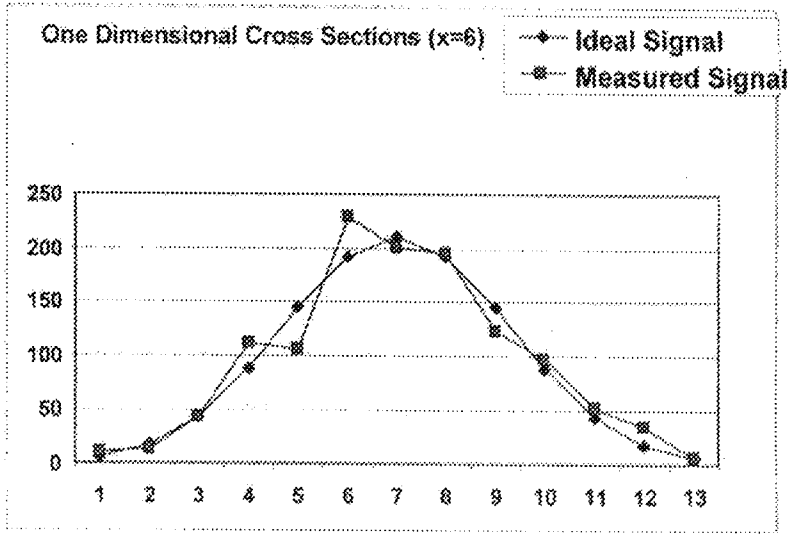


Figure 12

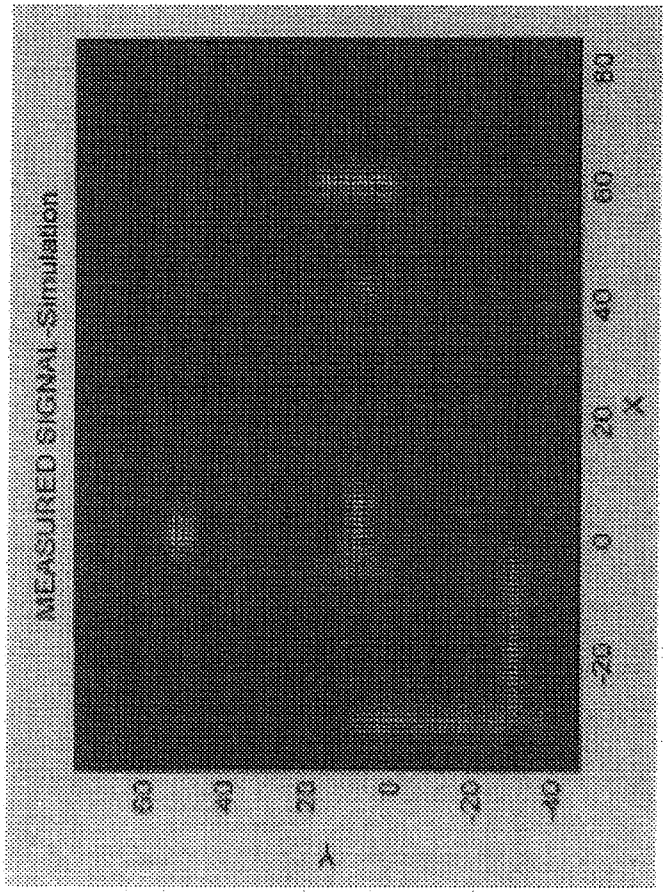


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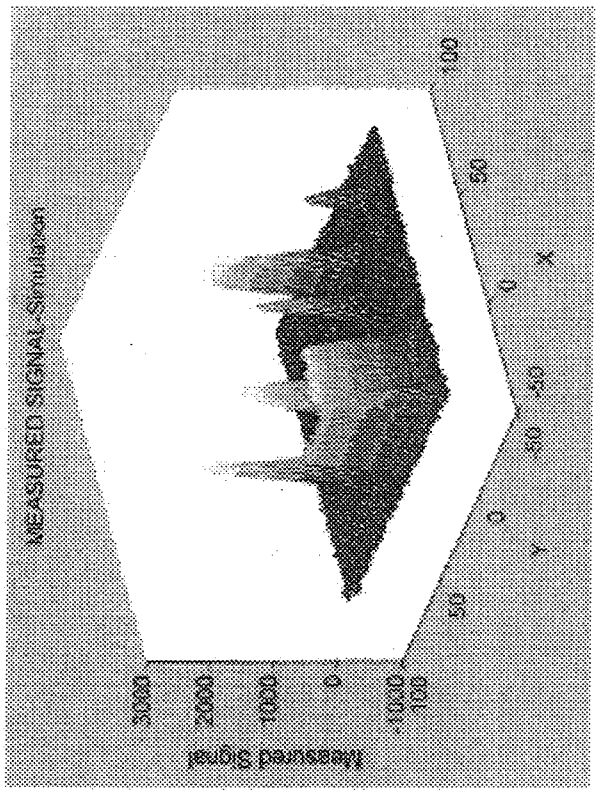

MEASURED SIGNAL Simulated
Measured Signal
5000
2500
0
-2500
-5000
100
50
0
-50
-100
X
Y

Figure 14

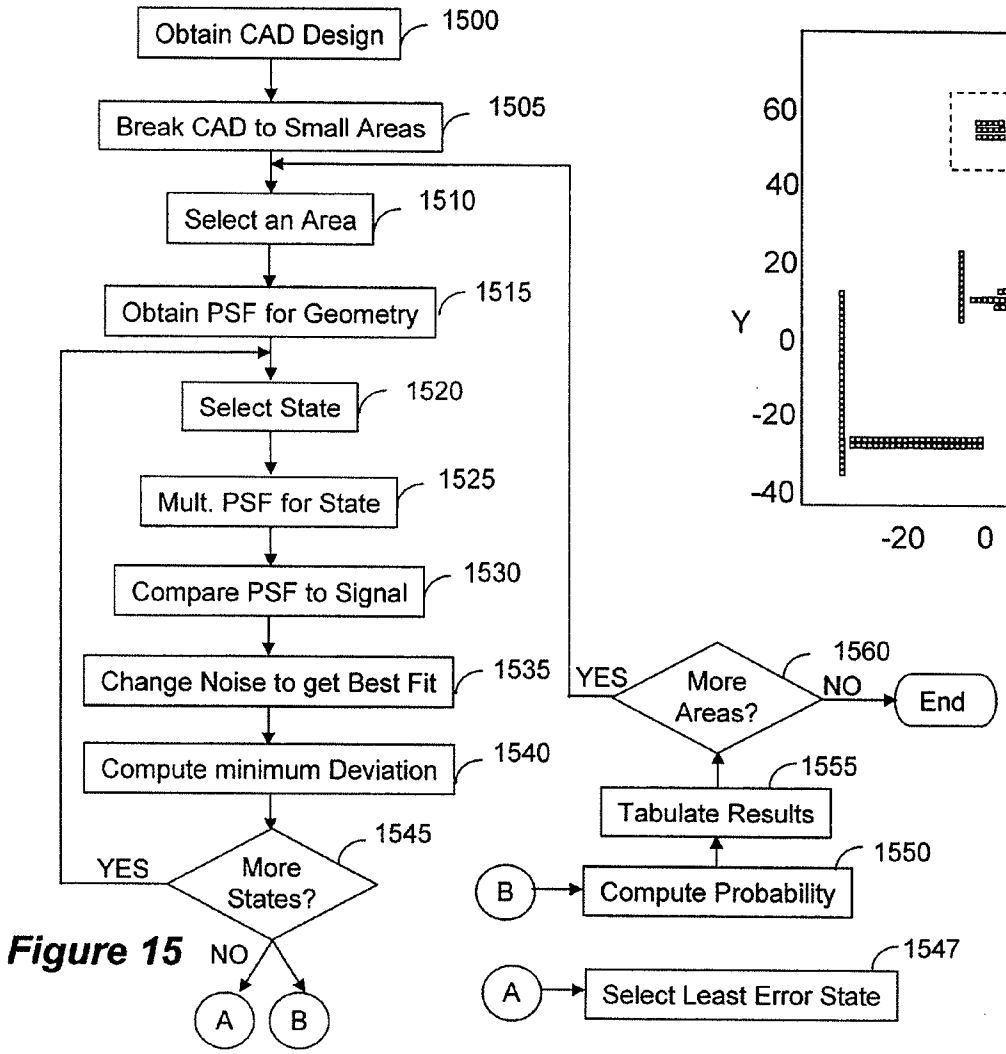


Figure 15

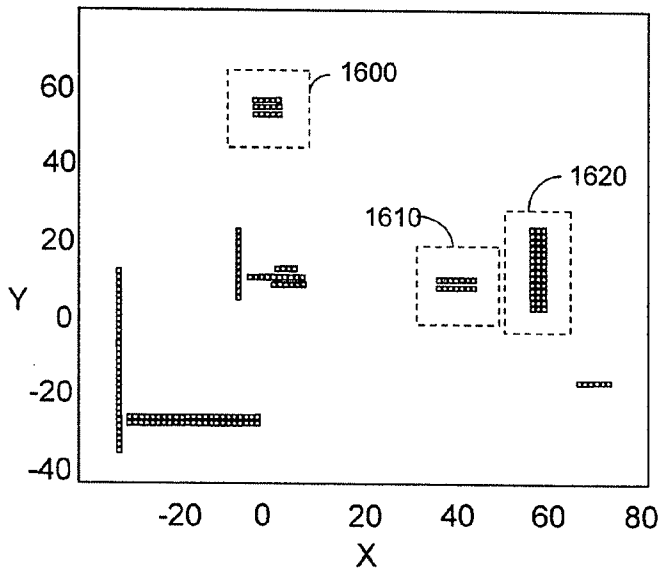


Figure 16

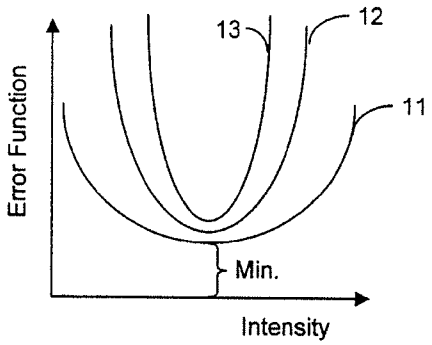


Figure 17

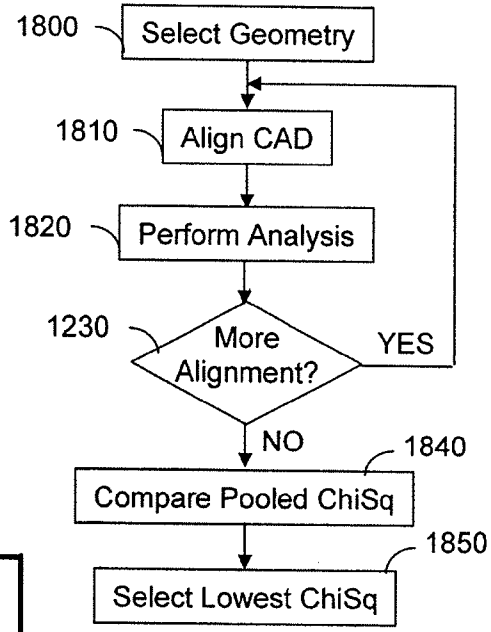


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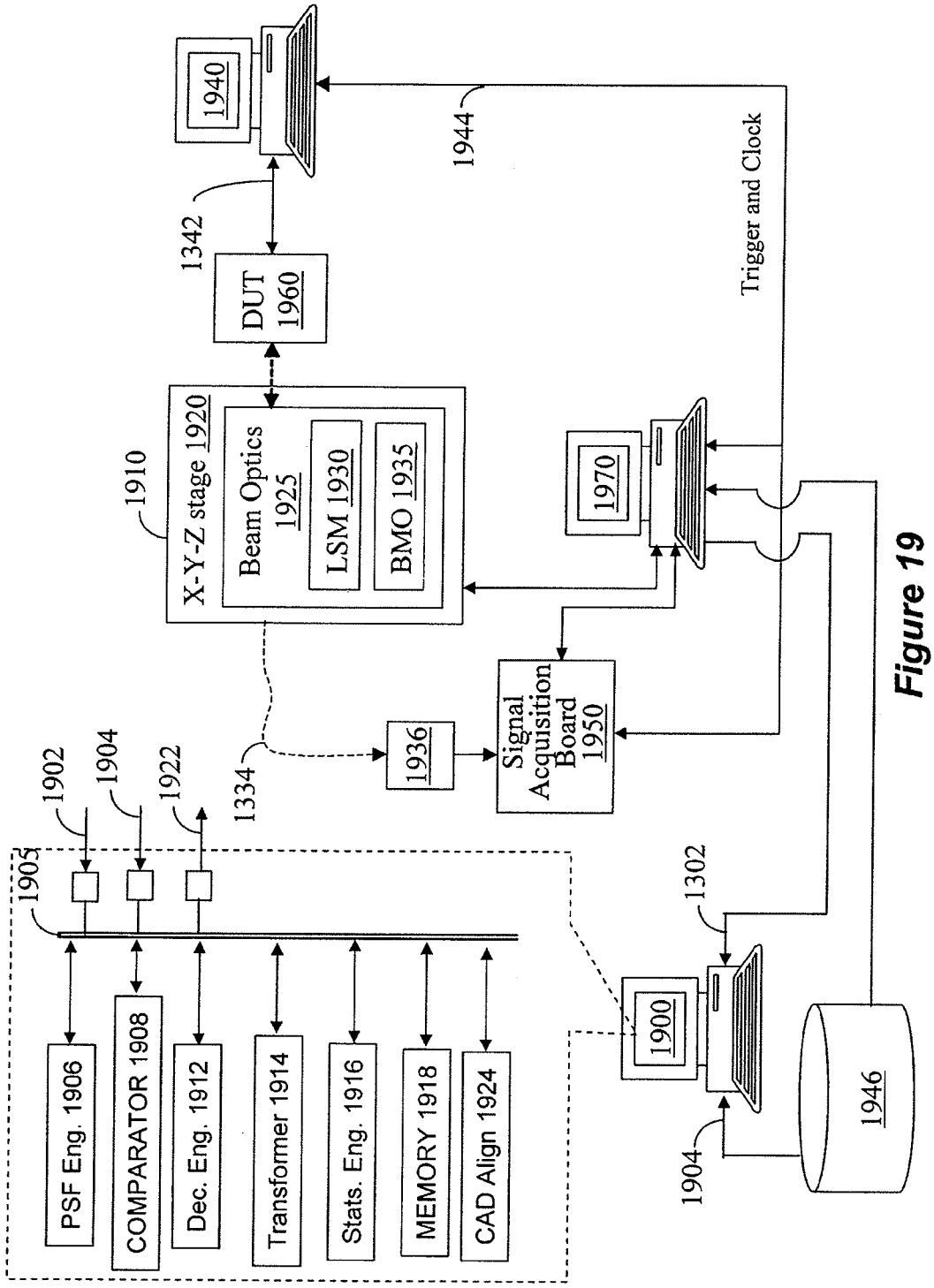

1940
1944
Trigger and Clock
1342
DUT 1960
1910
X-Y-Z stage 1920
Beam Optics 1925
LSM 1930
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Signal Acquisition Board 1950
1334
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1904
1922
1905
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PSF Eng. 1906
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Dec. Eng. 1912
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MEMORY 1918
CAD Align 1924
1900
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1946

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FILE-CONTROL B	P1	2	3	90%
FILE-CONTROL B	P2	3	3	97%
FILE-CONTROL B	P3	2	2	96%
FILE-CONTROL C	N1	2	1	80%
FILE-CONTROL C	N2	1	3	75%
FILE-CONTROL C	N3	3	2	90%
FILE-CONTROL C	P1	25	19	98%
FILE-CONTROL C	P2	26	21	95%
FILE-CONTROL C	P3	27	20	96%
FILE-INPUT B	N1	102	636	0.02%
FILE-INPUT B	P1	2	3	90%
FILE- INPUT C	N1	620	500	96%
FILE- INPUT C	P1	3	2	90%

Table 1

		DIGITAL MODE	
CELL NAME	**TEST DEVICE**	**REFERENCE DEVICE**	**THEORETICAL VALUE**
FILE-INPUT A	1	1	1
FILE-CONTROL A	0	0	0
FILE-CONTROL B	1	1	1
FILE-CONTROL C	0	0	0
FILE-INPUT B	1	0	0
FILE- INPUT C	0	0	0
REGISTER-A1	1	1	1
REGISTER-B1	1	1	1
REGISTER-C1	0	0	0
REGISTER-A2	1	1	1
REGISTER-B2	1	1	1
REGISTER-C2	1	1	1
REGISTER-A3	0	0	0
REGISTER-B3	0	1	1
REGISTER-C3	0	0	0
REGISTER-A4	1	1	1
REGISTER-B4	0	0	0
REGISTER-C4	0	0	0
	RECOMMENDED ACTION:-NAVIGATE TO CONTROL- B3		
ANOMALOUS EMISSION SITE IN CELL NAME- REGISTER B3			

Table 2

DATA SUMMARY TABLE

STATE	INTENSITY			SIGMA(+-)			STATISTICS		
	tA	tB	tC	tSigA	tSigB	tSigC	tChiSq	tChiDist	tFdist
000	0.00	0.00	0.00	0.00	0.00	0.00	7087.97	0.00	0.00%
100	5683.38	0.00	0.00	107.44	0.00	0.00	652.43	0.00	0.00%
010	0.00	5956.67	0.00	0.00	110.04	0.00	221.86	0.00	10.72%
001	0.00	0.00	5714.51	0.00	0.00	107.42	653.29	0.00	0.00%
110	418.14	5556.36	0.00	280.84	288.92	0.00	219.31	0.00	11.50%
011	0.00	5498.56	481.15	0.00	288.86	281.07	218.63	0.00	11.92%
101	3101.31	0.00	3136.71	158.45	0.00	158.61	177.66	0.26	65.86%
111	3493.73	-755.47	3529.27	574.03	1061.85	574.38	176.84	0.25	0.00%

Table 4

STATE	INTENSITY			SIGMA(+-)			STATISTICS		
	tA	tB	tC	tSigA	tSigB	tSigC	tChiSq	tChiDist	tFdist
POOLED	3093.34	15.20	3128.77	220.79	292.84	220.60	177.69		

Table 5

'Transis...	Intensity	Xmin	Xmax	Ymin	Ymax	'Estimate'	'Sigma'	'ON/OFF'	'Probab...
1	1000	4	10	6	6	1102.2	88.55	'ON'	0.99819
2	2000	5	8	10	10	1999.5	159.19	'ON'	0.99873
3	3000	40	47	5	5	3023	92.256	'ON'	1
4	4000	-4	-4	2	20	3997.9	32.295	'ON'	1
5	5000	70	76	-20	-20	5068.1	63.679	'ON'	1
6	6000	40	47	7	7	6079.5	94.437	'ON'	1
7	7000	-30	-30	-32	-38	6874.5	69.181	'ON'	1
8	8000	-30	-30	-30	10	8030.4	23.123	'ON'	1
9	9000	-28	0	-29	-31	9000.4	27.89	'ON'	1
10	10000	-2	10	8	8	9896.2	72.292	'ON'	1
11	6000	60	60	0	20	5914.2	160.16	'ON'	1
12	0	61	61	0	20	153.98	291.91	'?'	0.4993
13	6000	62	62	0	20	5935.8	161.38	'ON'	1
14	0	0	1	50	50	56.01	561.22	'?'	0.22461
15	25000	2	3	50	50	23493	1417.8	'ON'	0.99959
16	0	4	5	50	50	811.84	1031	'?'	0.55934
17	25000	0	1	52	52	24993	1127.2	'ON'	0.99996
18	0	2	3	52	52	2616.5	2337	'?'	0.67231
19	25000	4	5	52	52	23891	1239	'ON'	0.9998
20	0	0	1	54	54	118.43	645.52	'?'	0.44438
21	25000	2	3	54	54	24677	968.27	'ON'	0.99996
22	0	4	5	54	54	1.109e-...	0.029079	'OFF'	0.0006...

Table 7