FIG. 1A

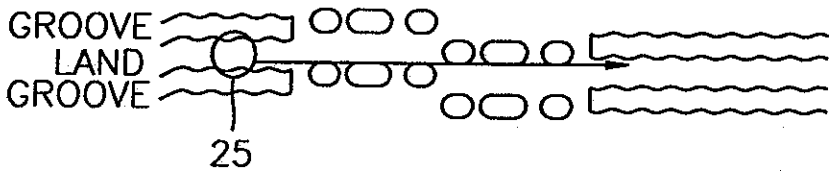


FIG. 1B

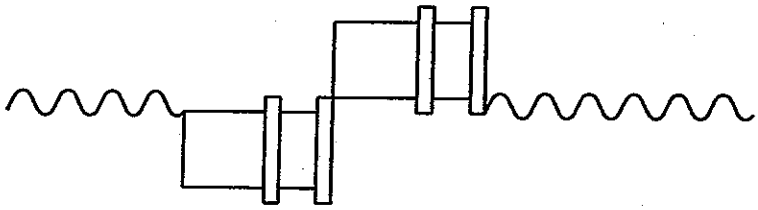


FIG. 2A

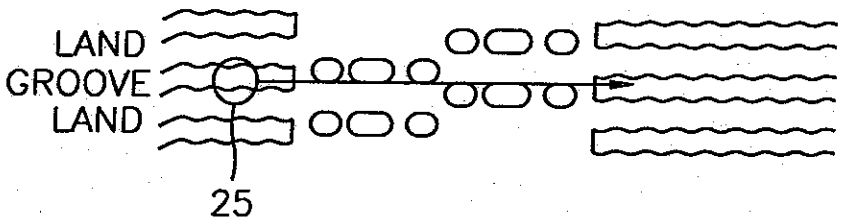


FIG. 2B

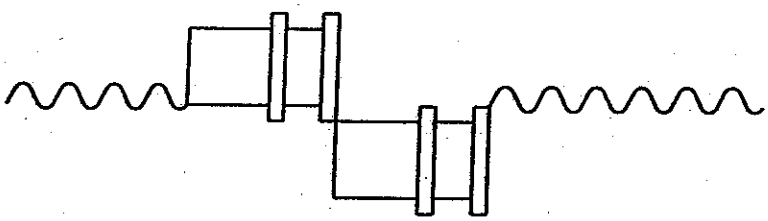


FIG. 3

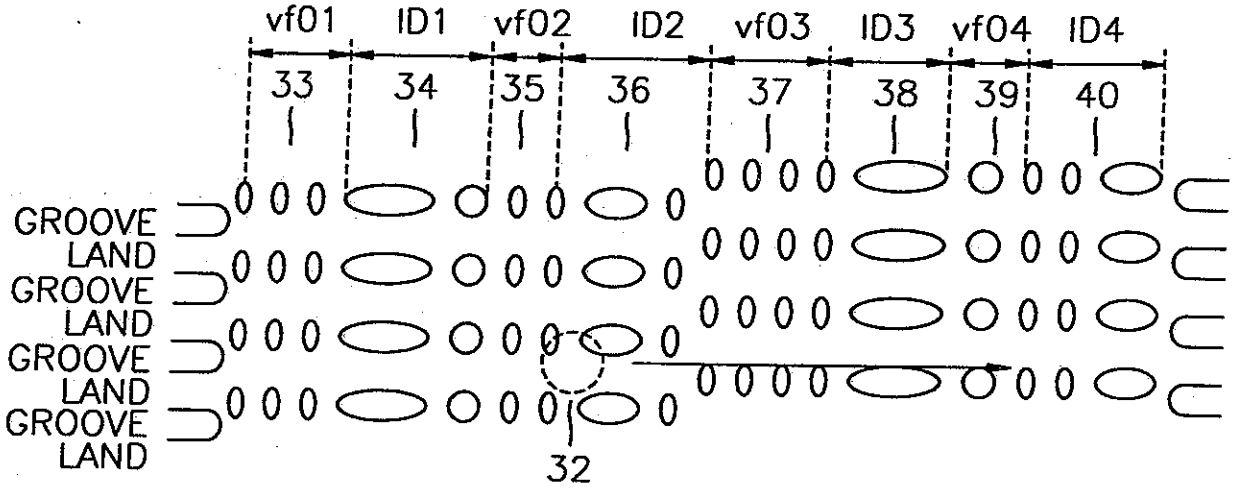


FIG. 4A

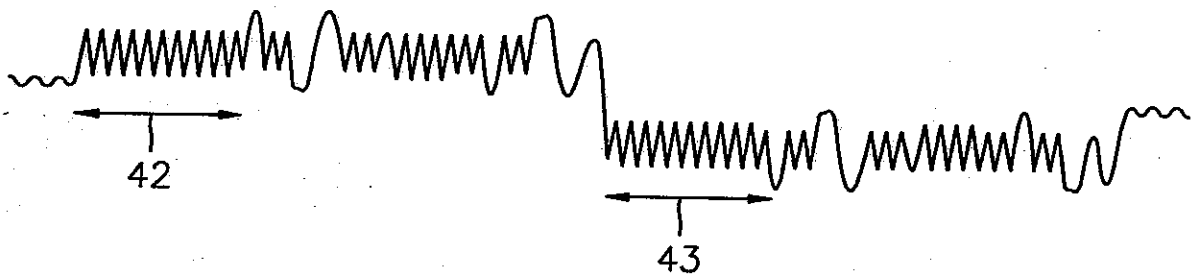


FIG. 4B

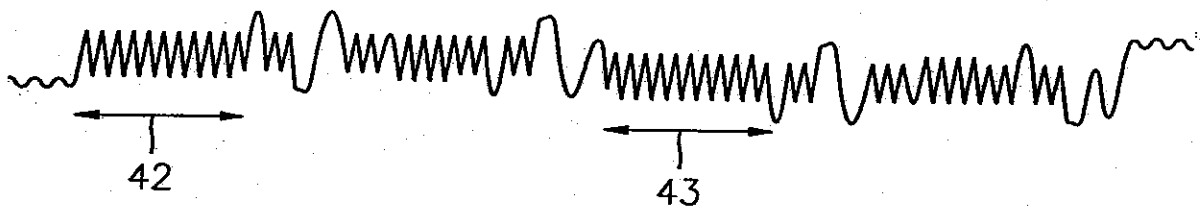


FIG. 5

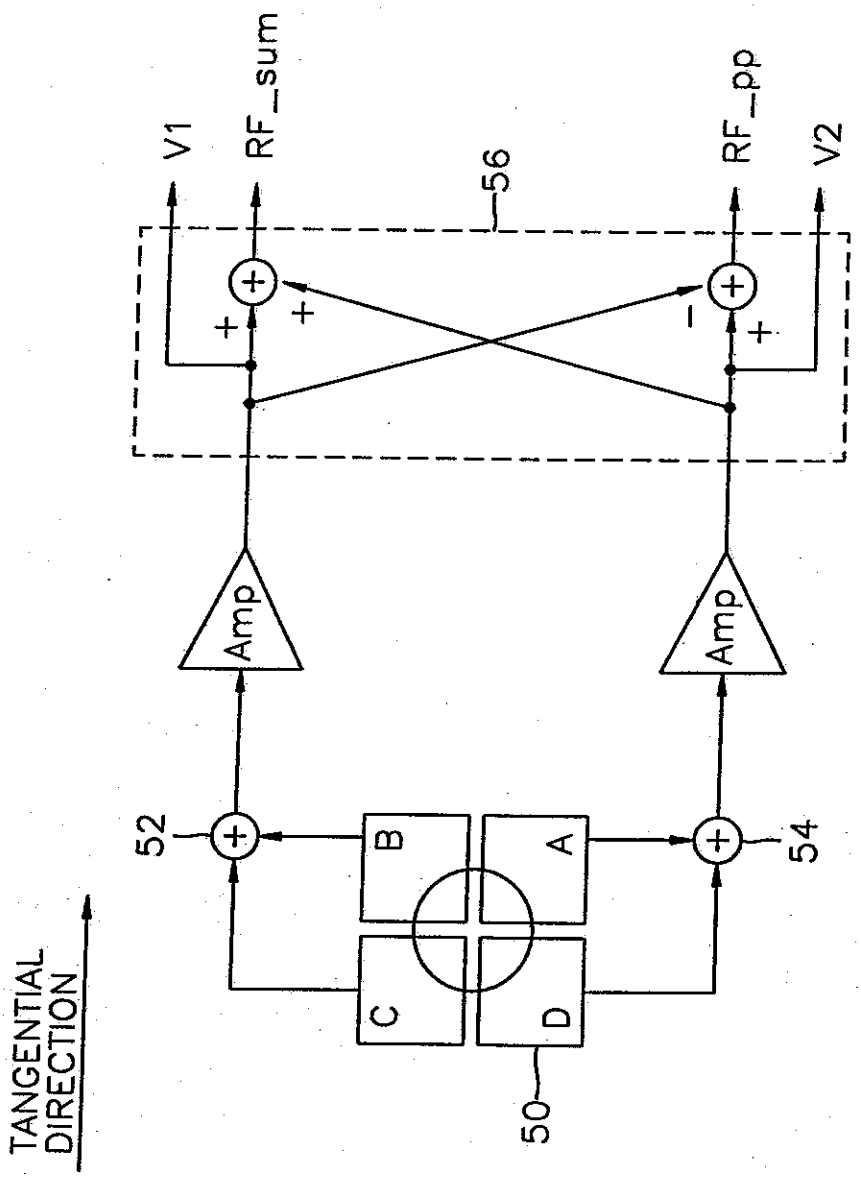

V1
RF_sum
RF_pp
V2
56
+
+
−
+
Amp
Amp
52
54
B
A
C
D
50
TANGENTIAL DIRECTION

FIG. 6

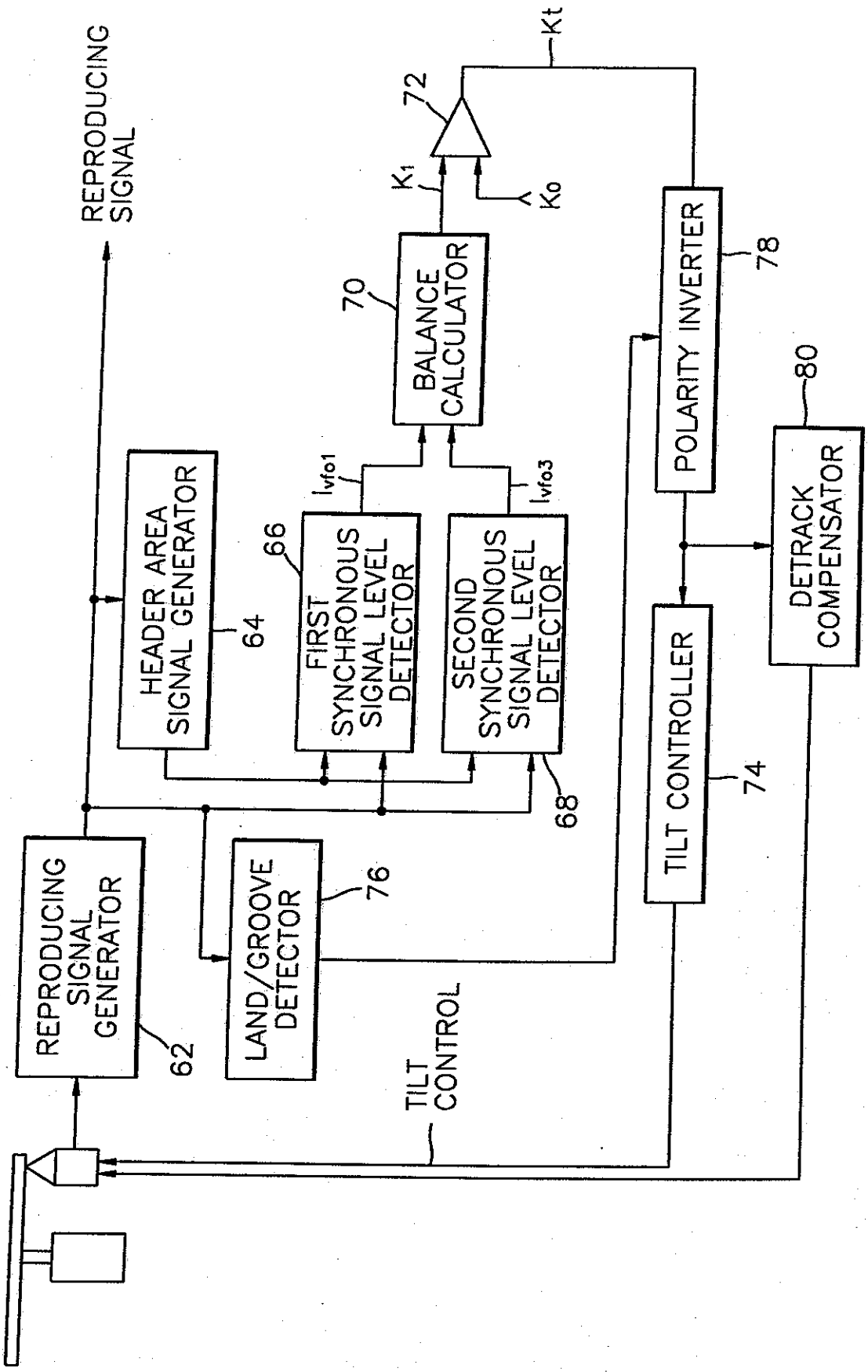

REPRODUCING SIGNAL
Kt
72
K1
Ko
70
BALANCE CALCULATOR
POLARITY INVERTER
78
80
DETRACK COMPENSATOR
HEADER AREA SIGNAL GENERATOR
64
66
Ivfo1
FIRST SYNCHRONOUS SIGNAL LEVEL DETECTOR
Ivfo3
SECOND SYNCHRONOUS SIGNAL LEVEL DETECTOR
68
TILT CONTROLLER
74
REPRODUCING SIGNAL GENERATOR
62
LAND/GROOVE DETECTOR
76
TILT CONTROL

FIG. 7

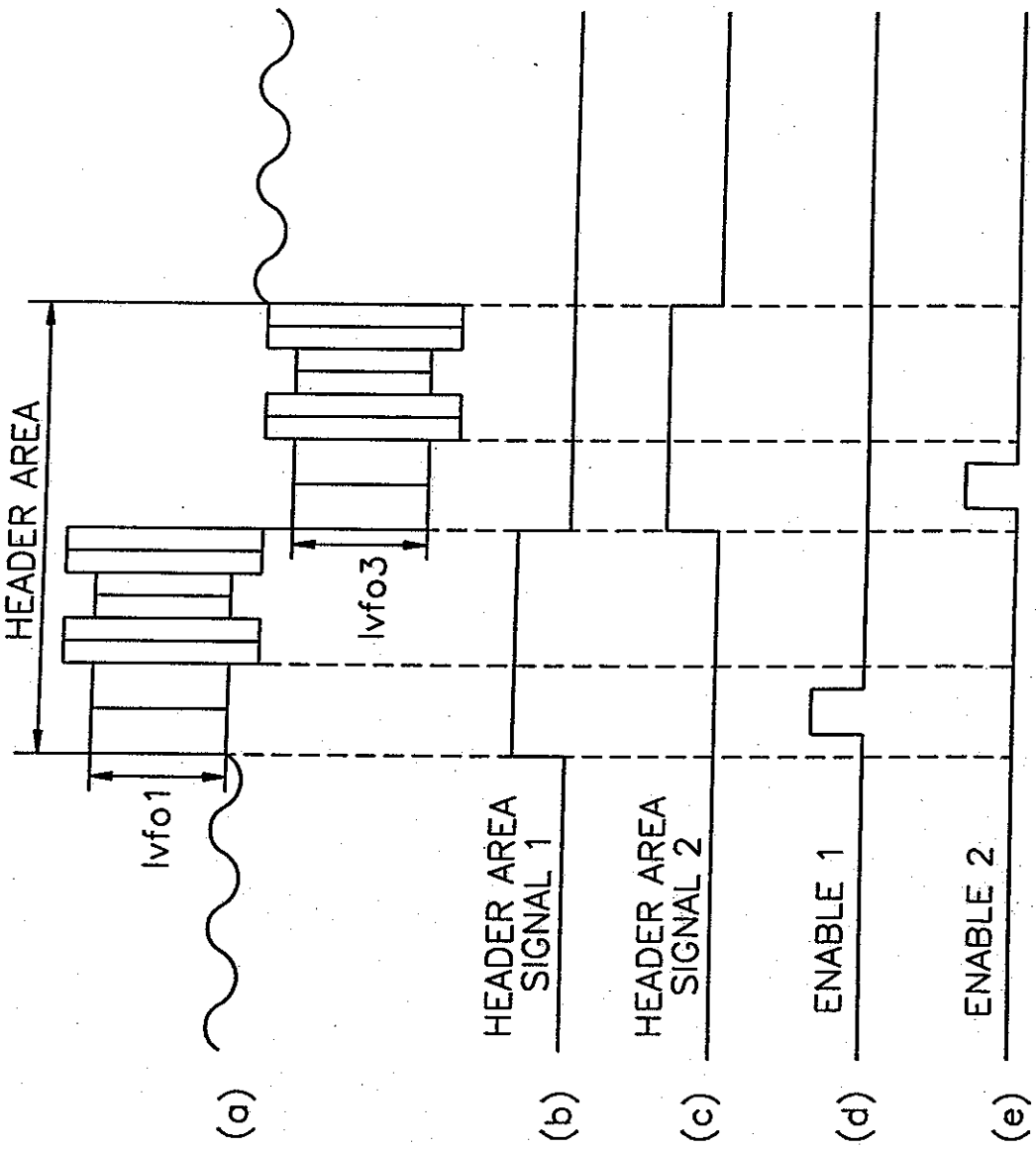

HEADER AREA
lvfo1
lvfo3
(a)
HEADER AREA SIGNAL 1
(b)
HEADER AREA SIGNAL 2
(c)
ENABLE 1
(d)
ENABLE 2
(e)

FIG. 8

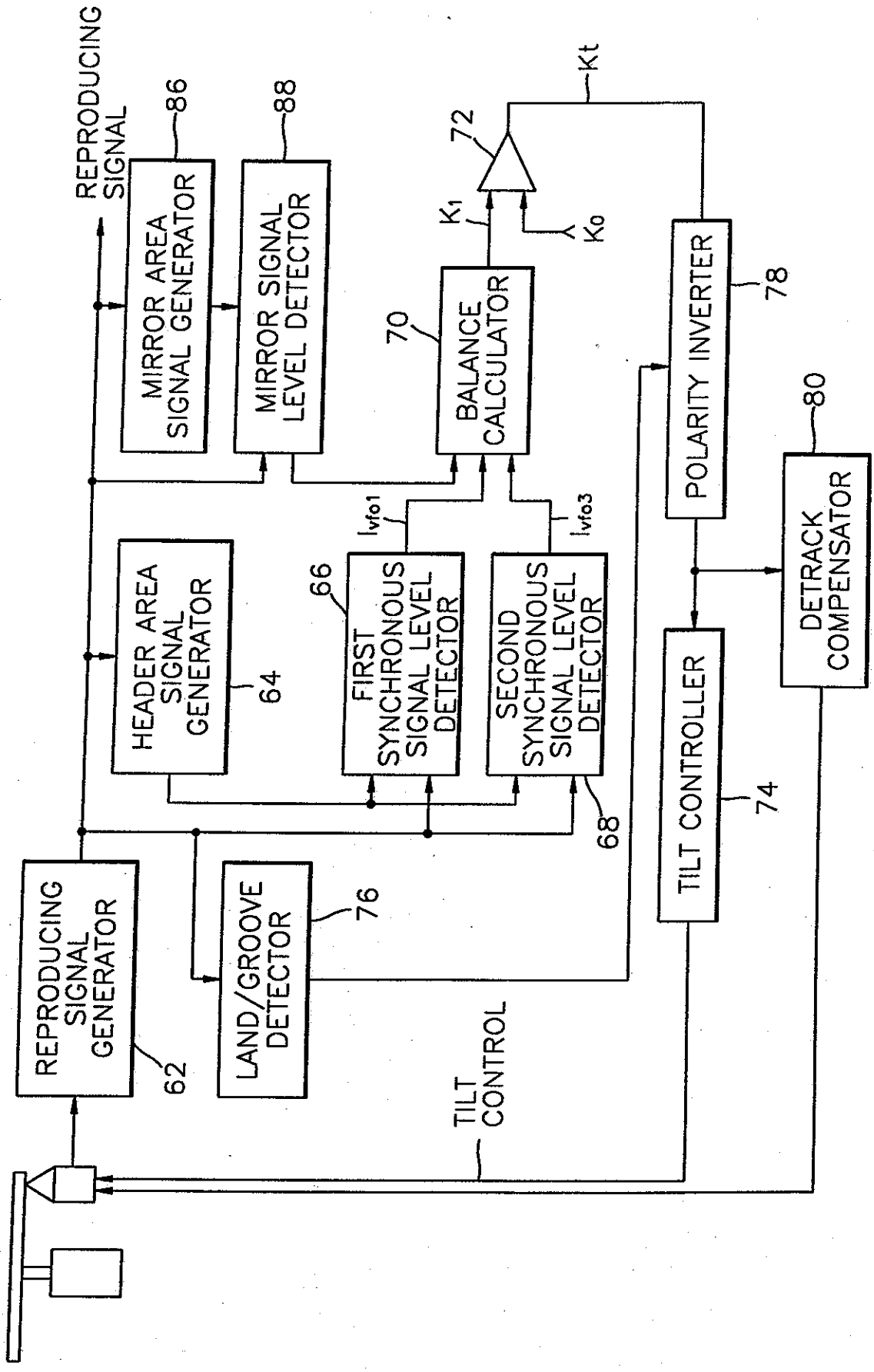

REPRODUCING SIGNAL
86
MIRROR AREA SIGNAL GENERATOR
88
MIRROR SIGNAL LEVEL DETECTOR
72
Kt
K1
Ko
70
BALANCE CALCULATOR
78
POLARITY INVERTER
80
DETRACK COMPENSATOR
HEADER AREA SIGNAL GENERATOR
64
66
FIRST SYNCHRONOUS SIGNAL LEVEL DETECTOR
SECOND SYNCHRONOUS SIGNAL LEVEL DETECTOR
68
TILT CONTROLLER
74
REPRODUCING SIGNAL GENERATOR
62
LAND/GROOVE DETECTOR
76
TILT CONTROL

FIG. 9

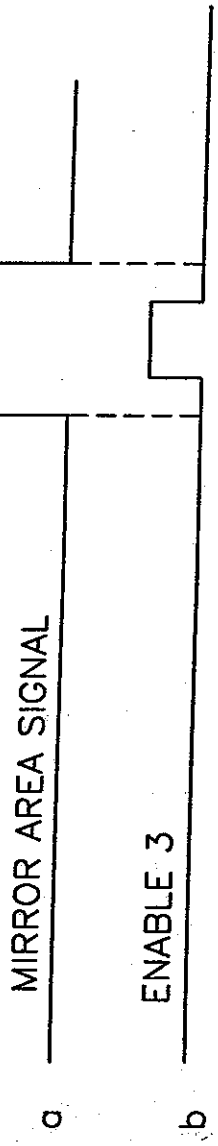

MIRROR AREA SIGNAL
ENABLE 3
a
b

FIG. 10

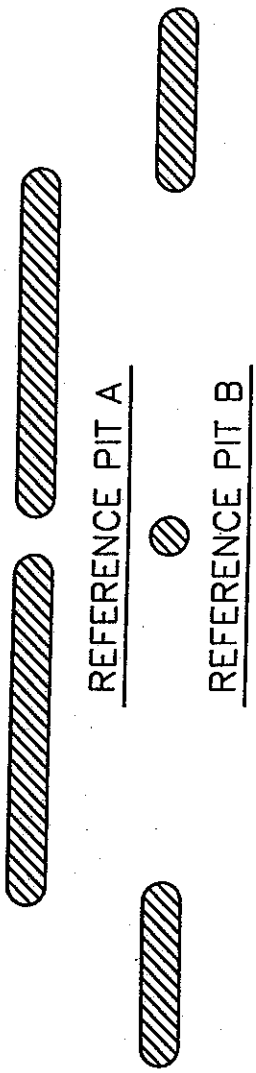

REFERENCE PIT A
REFERENCE PIT B

FIG. 11

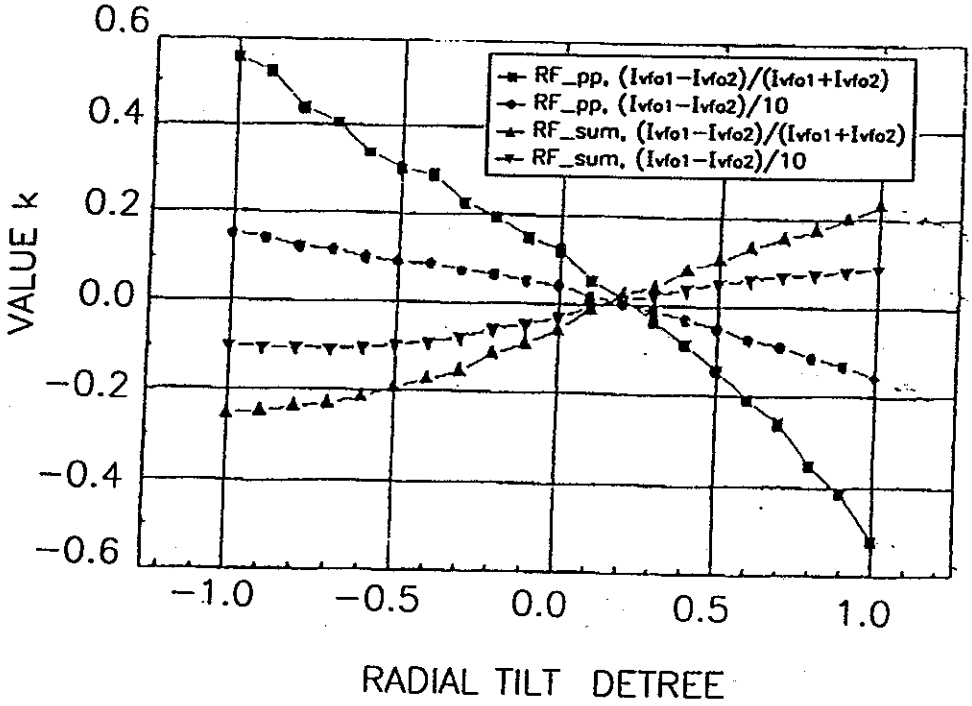
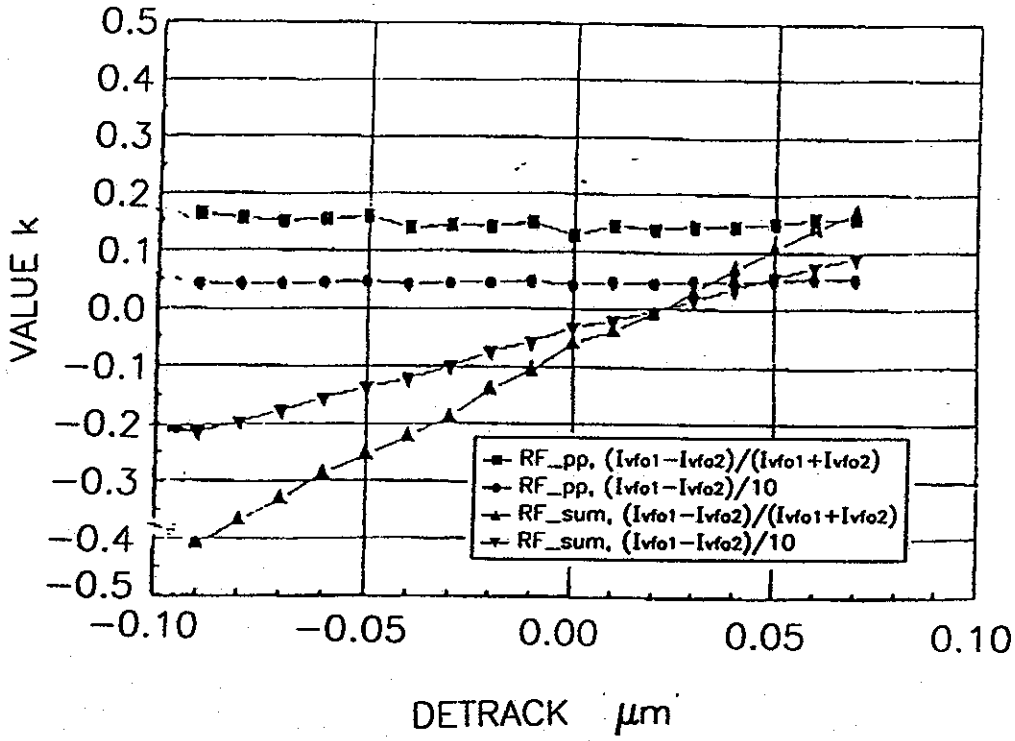

0.6
0.4
0.2
0.0
−0.2
−0.4
−0.6
VALUE k
−1.0
−0.5
0.0
0.5
1.0
RADIAL TILT DETREE
RF_pp, (Ivfo1−Ivfo2)/(Ivfo1+Ivfo2)
RF_pp, (Ivfo1−Ivfo2)/10
RF_sum, (Ivfo1−Ivfo2)/(Ivfo1+Ivfo2)
RF_sum, (Ivfo1−Ivfo2)/10

FIG. 12


0.5
0.4
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
VALUE k
−0.10
−0.05
0.00
0.05
0.10
DETRACK μm
RF_pp, (Ivfo1−Ivfo2)/(Ivfo1+Ivfo2)
RF_pp, (Ivfo1−Ivfo2)/10
RF_sum, (Ivfo1−Ivfo2)/(Ivfo1+Ivfo2)
RF_sum, (Ivfo1−Ivfo2)/10