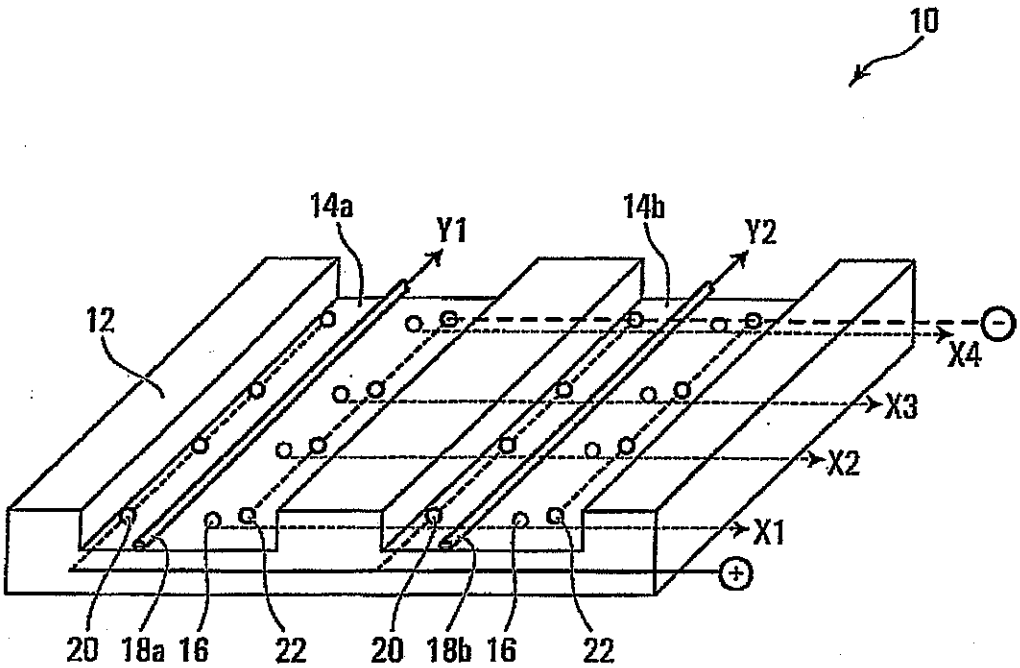


FIG. 1

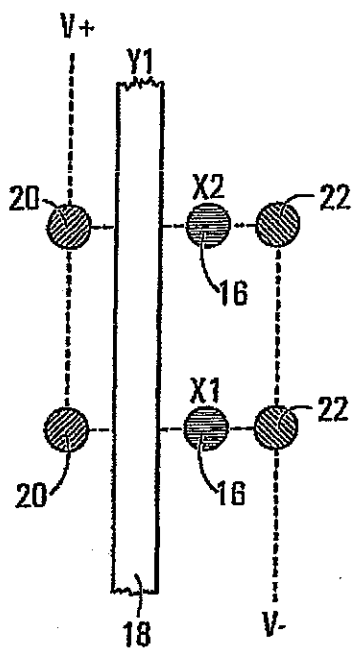


FIG. 2A

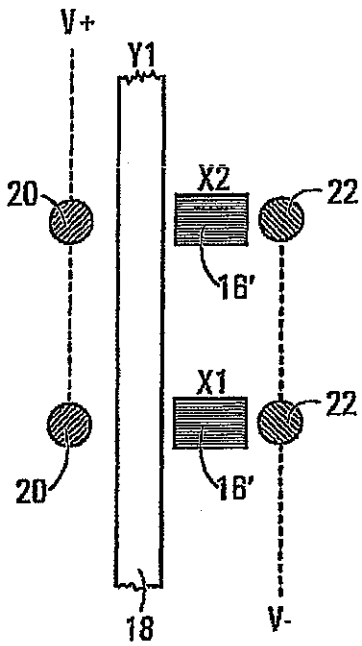


FIG. 2B

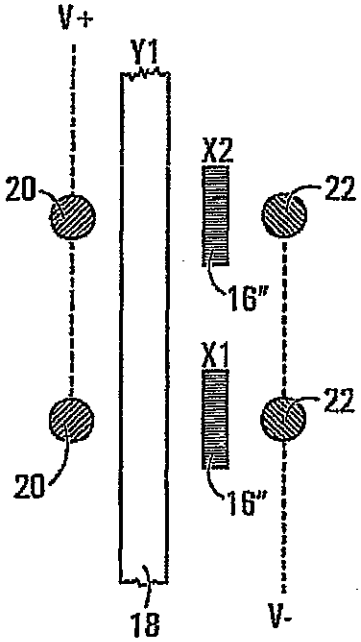


FIG. 2C

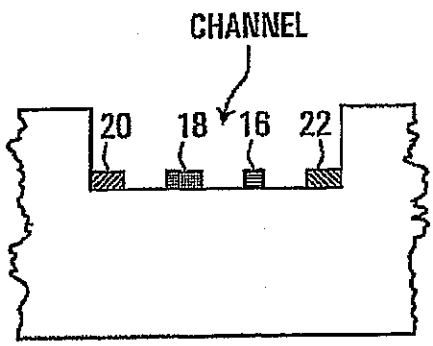


FIG. 3A

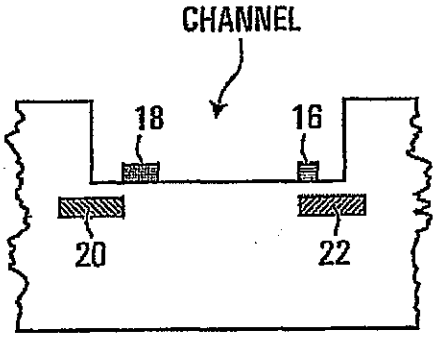


FIG. 3B

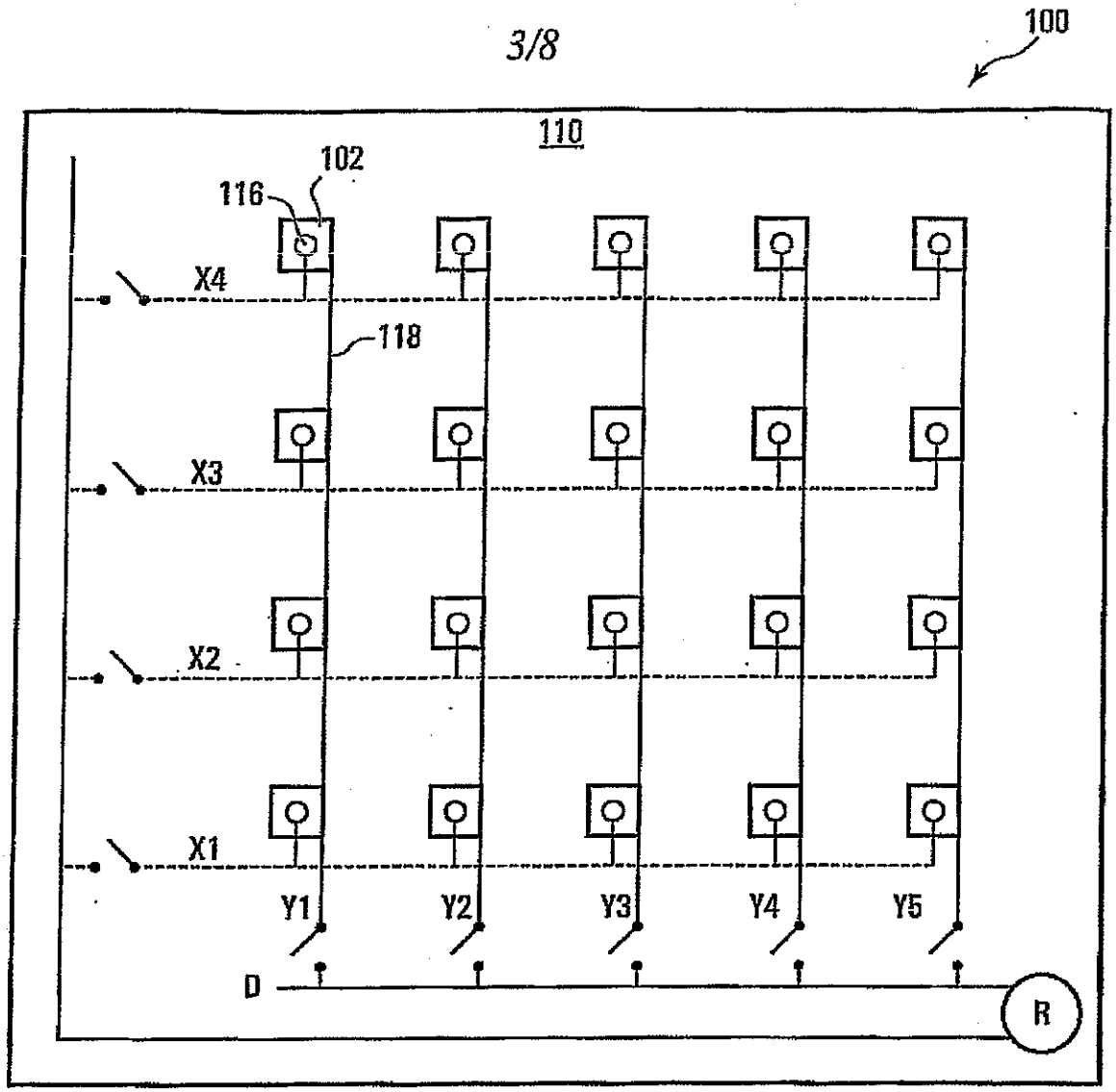


FIG. 4A

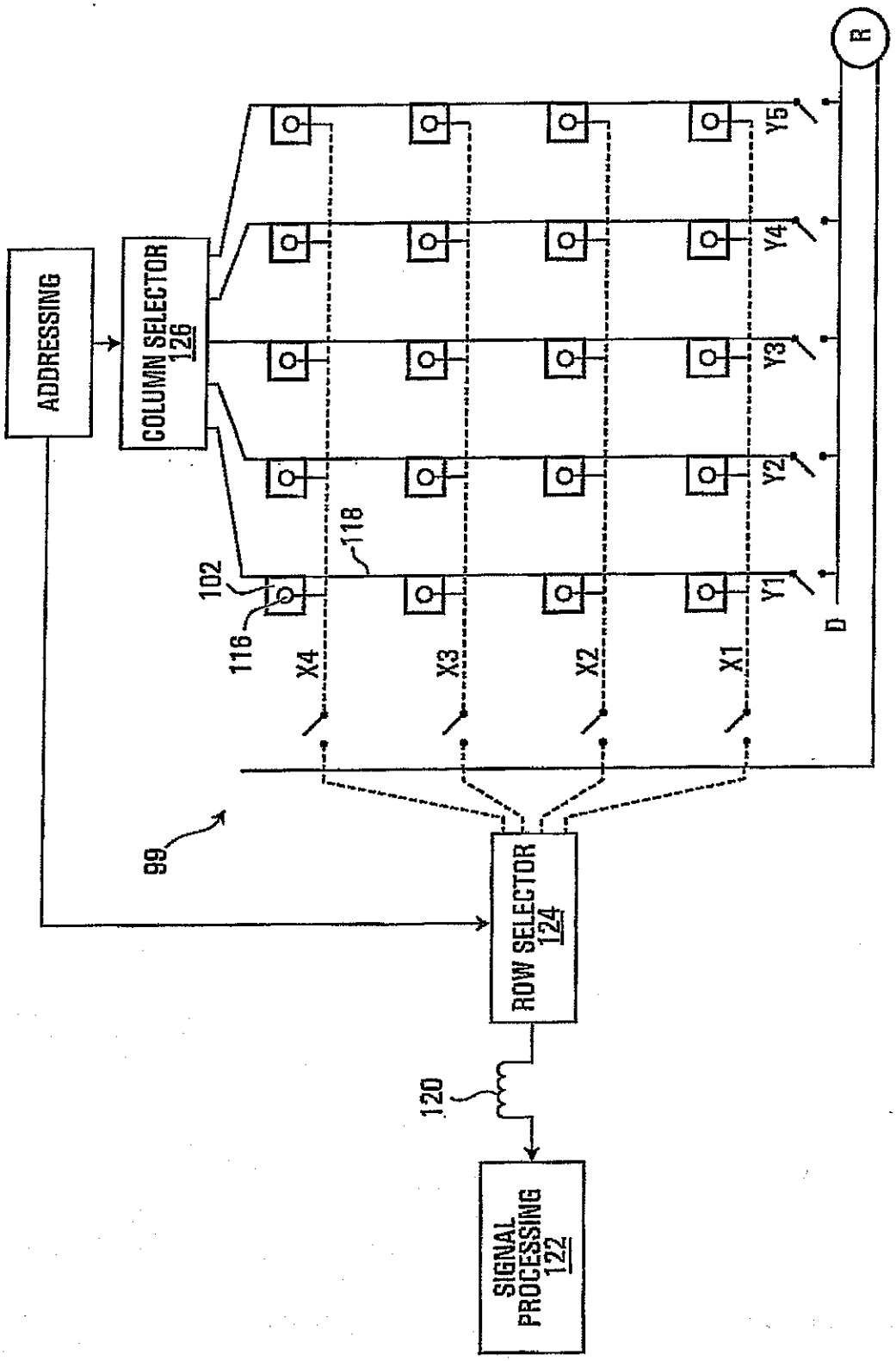

ADDRESSING
COLUMN SELECTOR 126
ROW SELECTOR 124
SIGNAL PROCESSING 122
R
D
Y5
Y4
Y3
Y2
Y1
X4
X3
X2
X1
102
116
118
120
99

FIG. 4B

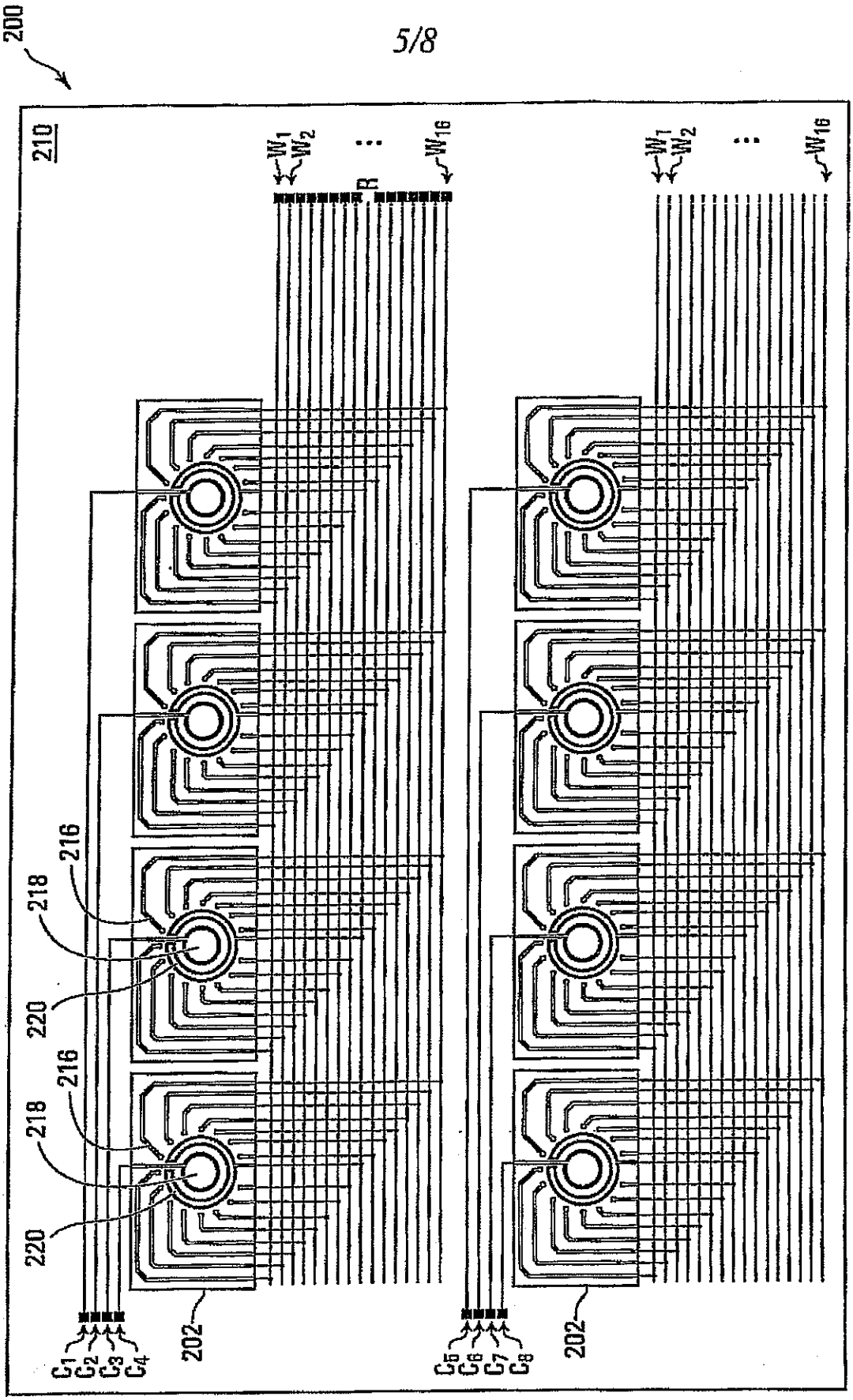


FIG. 5A

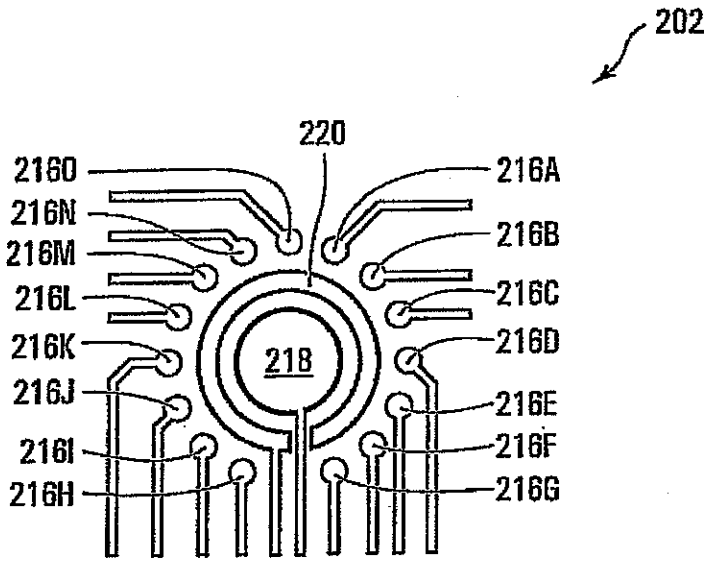

202
220
216O
216N
216M
216L
216K
216J
216I
216H
216A
216B
216C
216D
216E
216F
216G
218

FIG. 5B

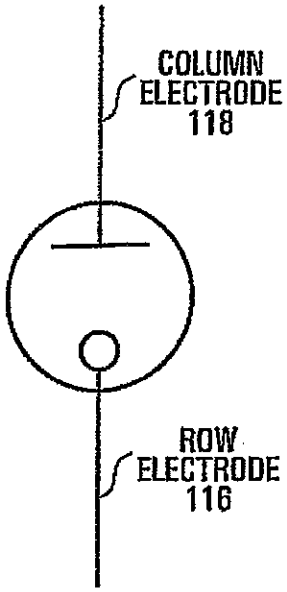

COLUMN
ELECTRODE
118
ROW
ELECTRODE
116

FIG. 6A

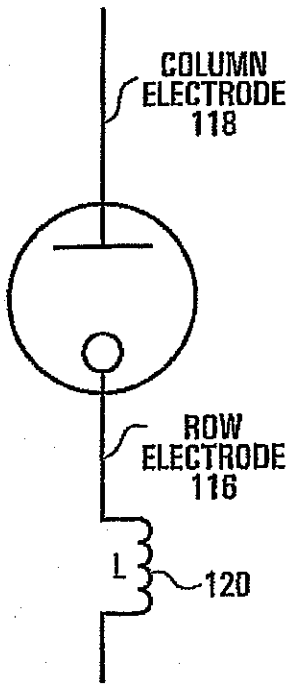

COLUMN
ELECTRODE
118
ROW
ELECTRODE
116
L
120

FIG. 6B

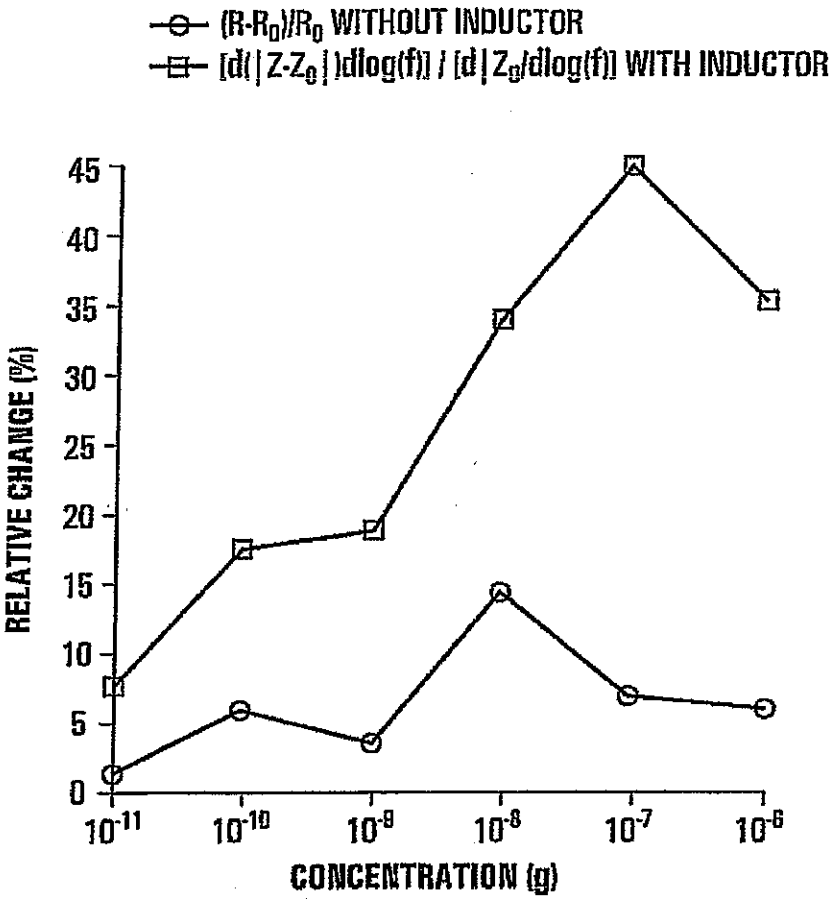

(R-R0)/R0 WITHOUT INDUCTOR
[d(|Z-Z0|)dlog(f)] / [d|Z0/dlog(f)] WITH INDUCTOR
RELATIVE CHANGE (%)
45
40
35
30
25
20
15
10
5
0
10-11
10-10
10-9
10-8
10-7
10-6
CONCENTRATION (g)

FIG. 7