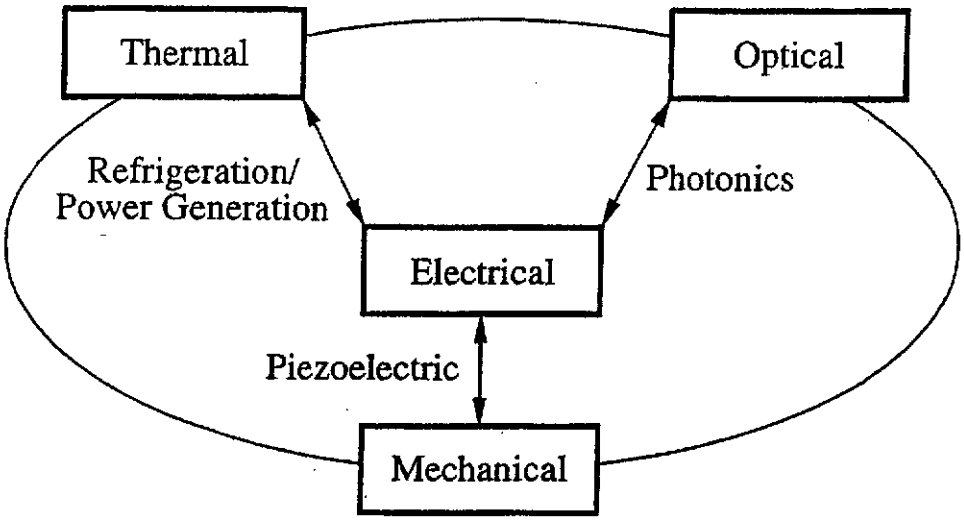


FIG. 1

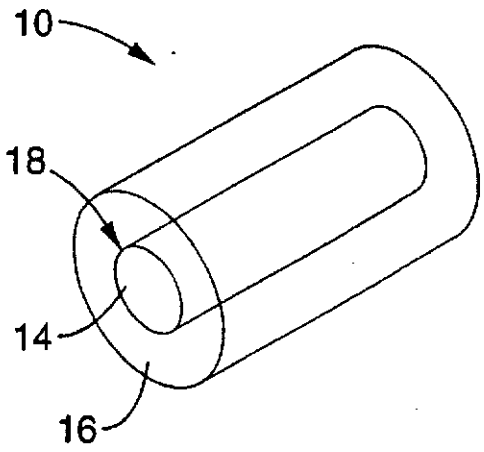


FIG. 2

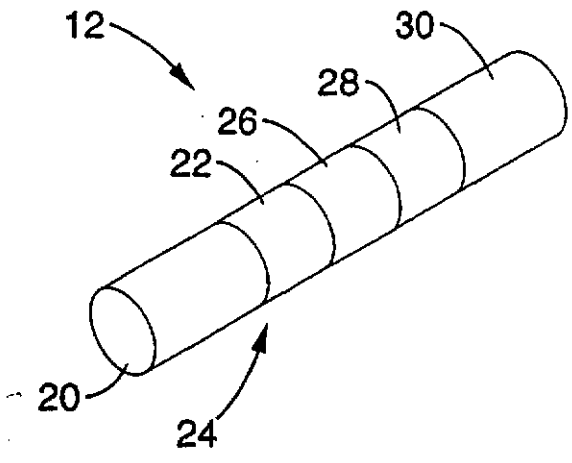


FIG. 3

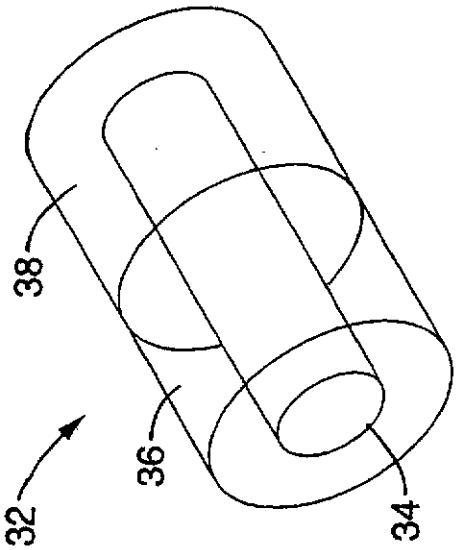


FIG. 4

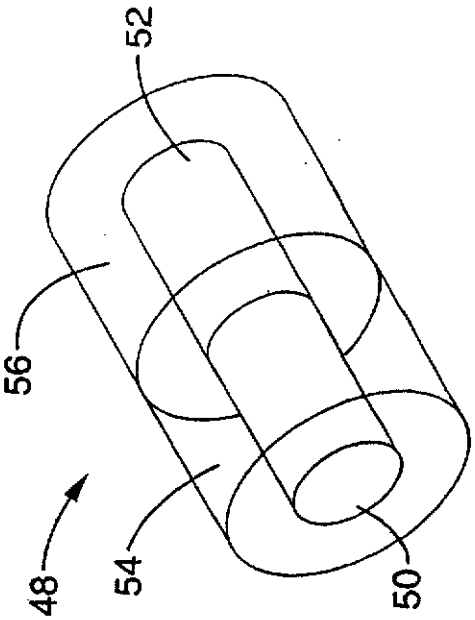


FIG. 6

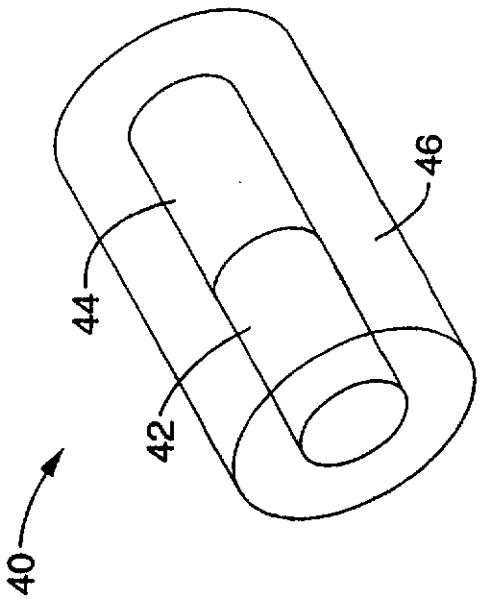


FIG. 5

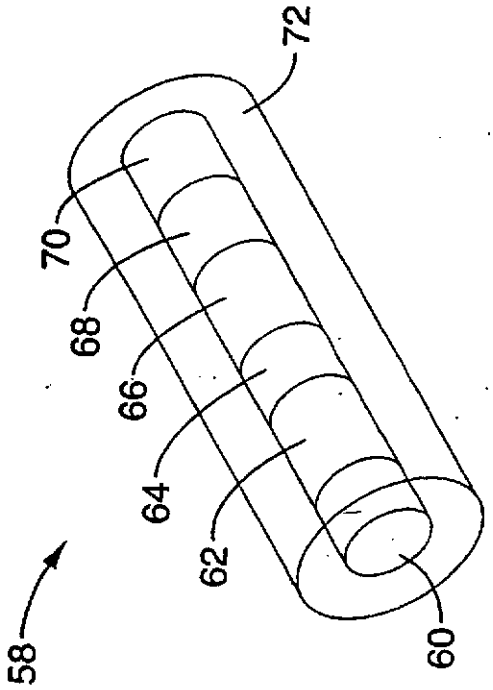


FIG. 7

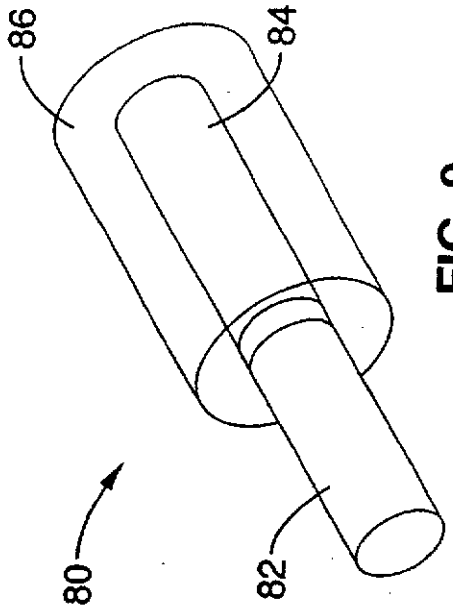


FIG. 9

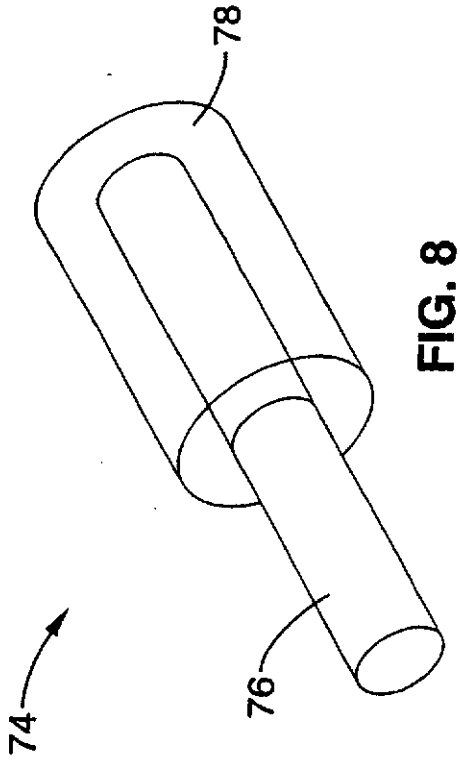


FIG. 8

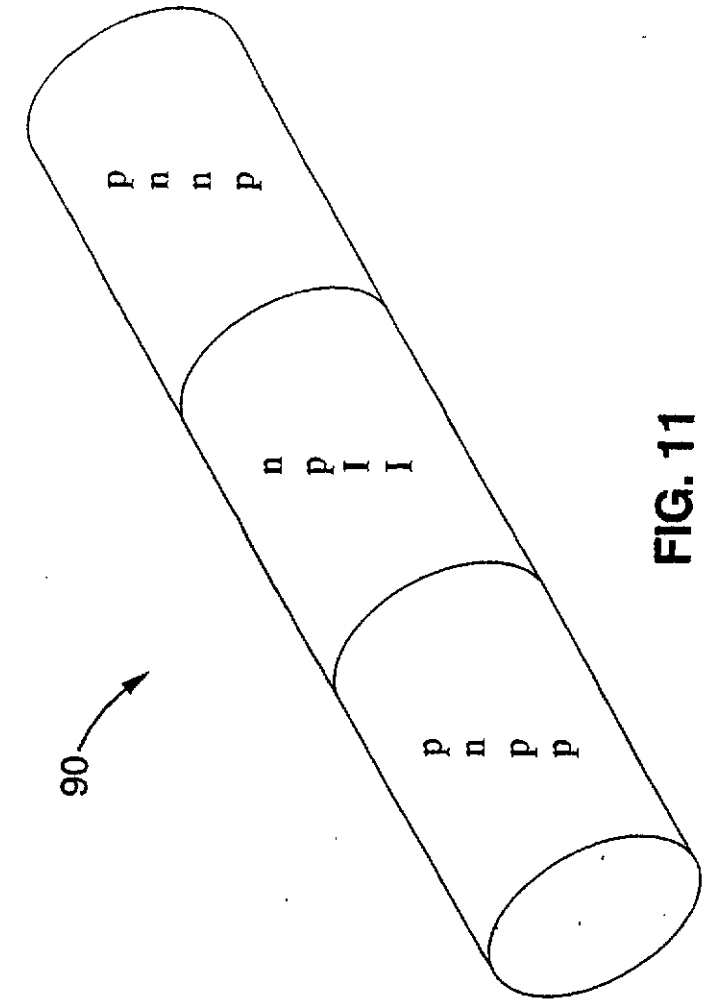


FIG. 11

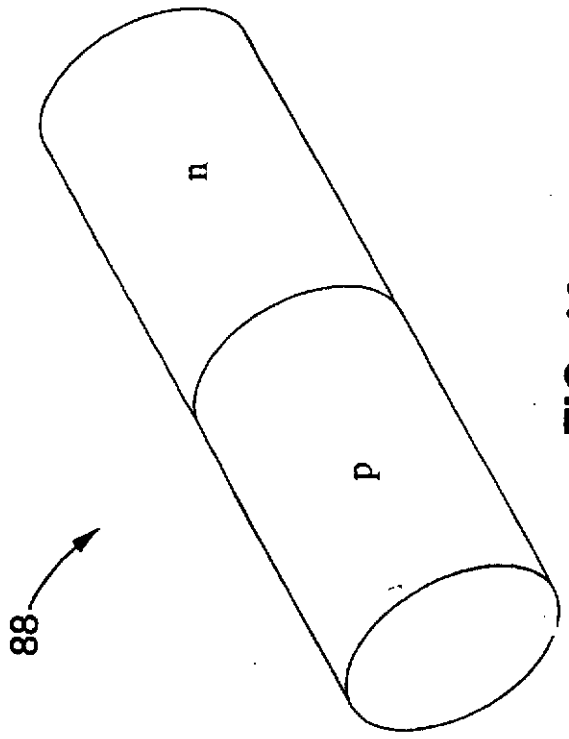


FIG. 10

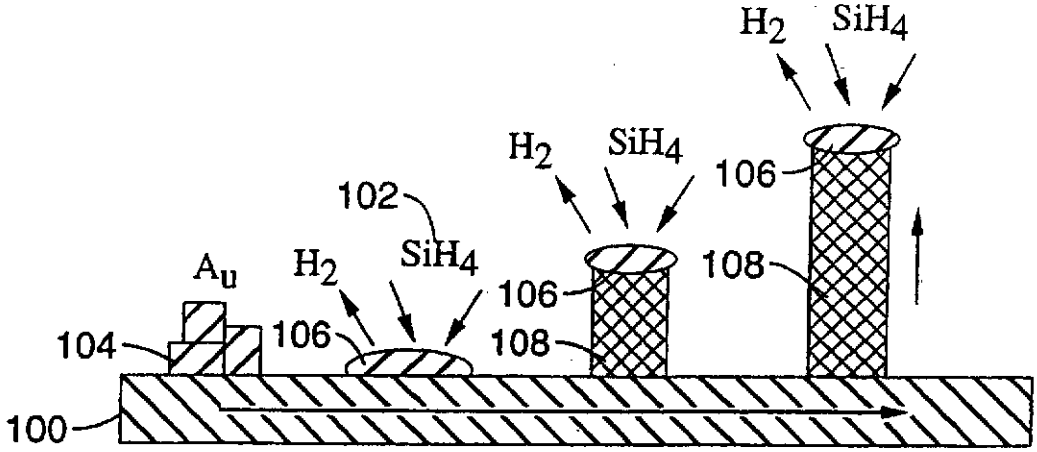


FIG. 12



FIG. 13

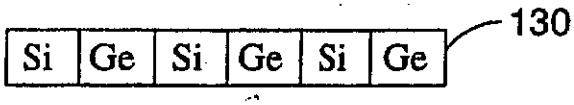


FIG. 14

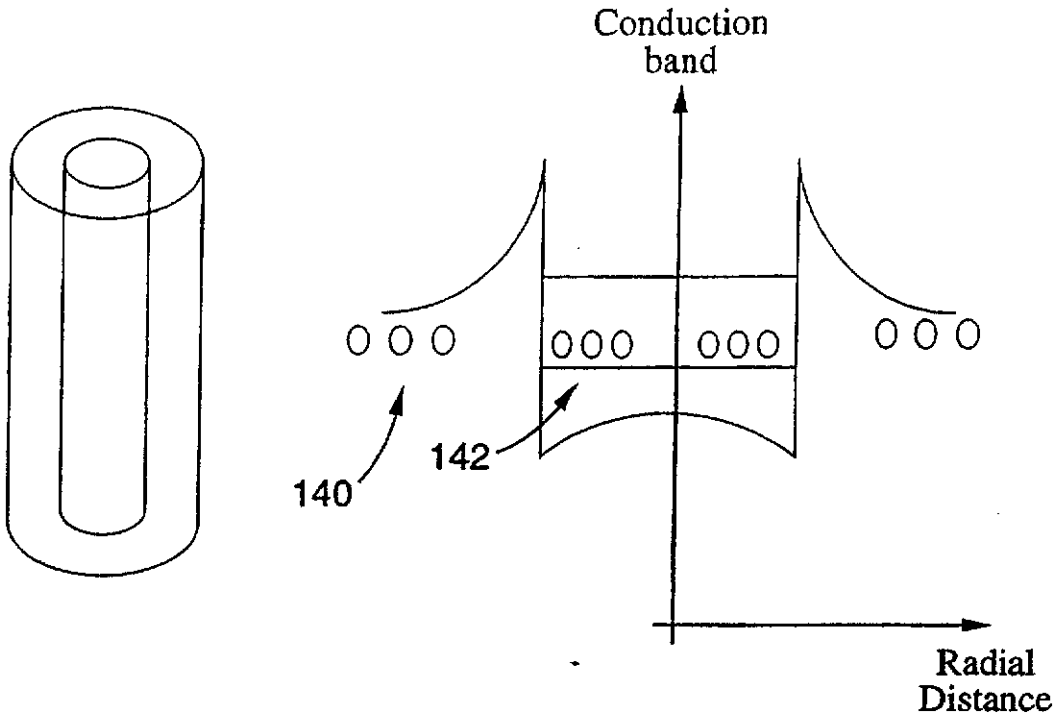

Conduction
band
140
142
Radial
Distance

FIG. 15

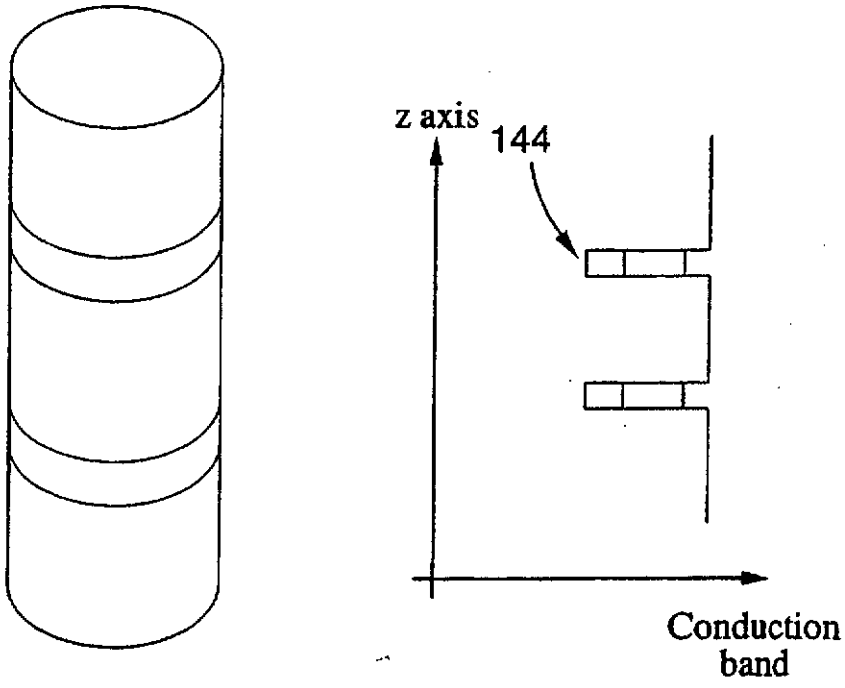

z axis
144
Conduction
band

FIG. 16

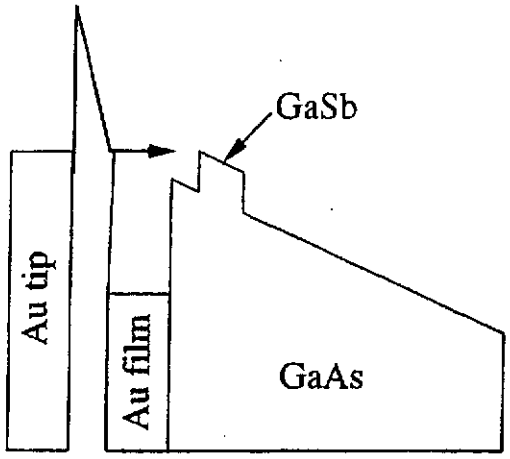


FIG. 17

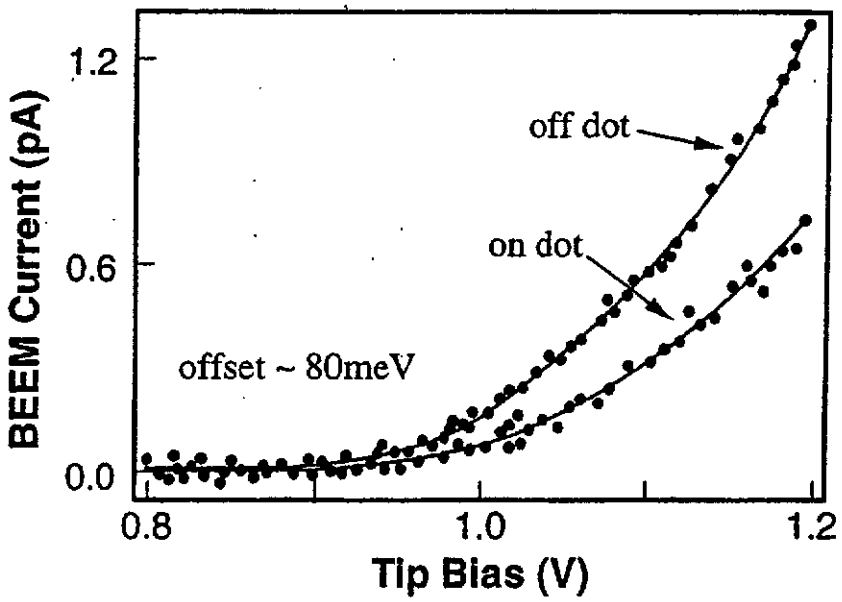


FIG. 18

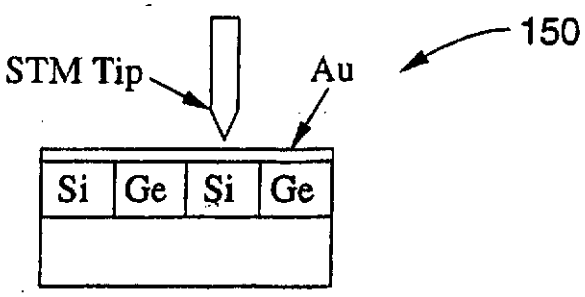


FIG. 19

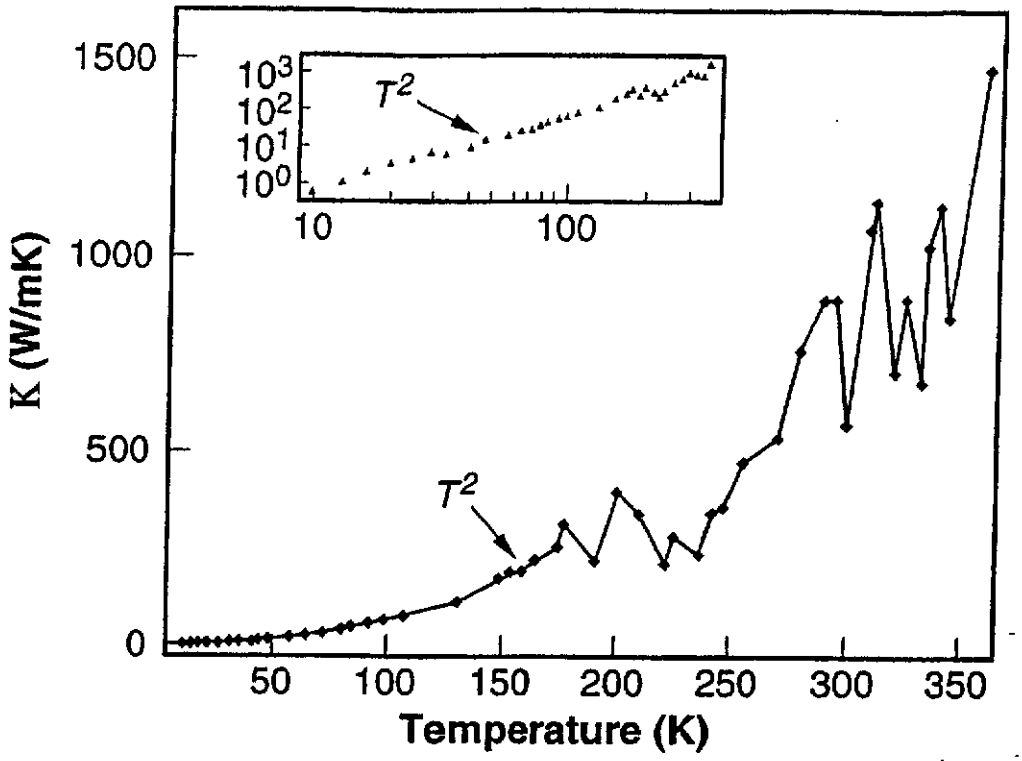

1500
1000
500
0
K (W/mK)
50
100
150
200
250
300
350
Temperature (K)
T^2
10^3
10^2
10^1
10^0
10
100

FIG. 20

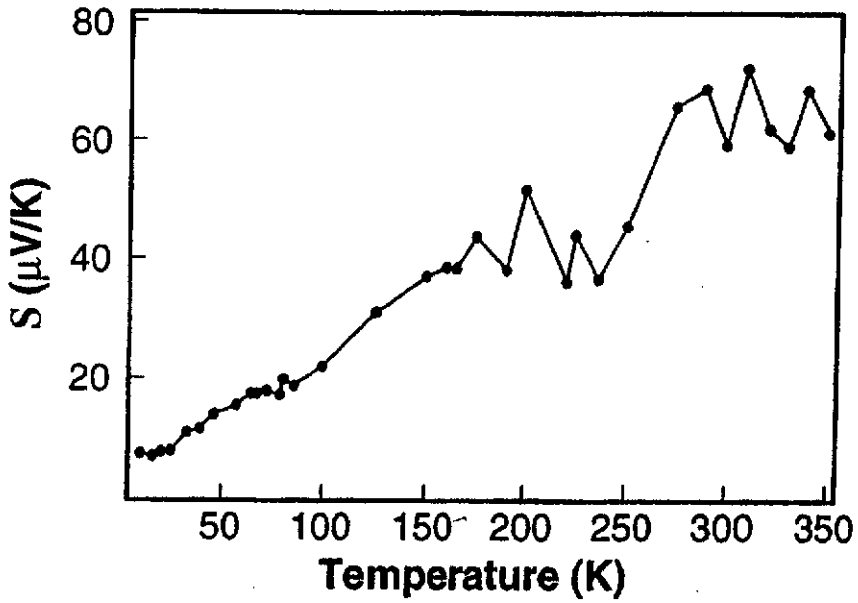

80
60
40
20
S (μV/K)
50
100
150
200
250
300
350
Temperature (K)

FIG. 21

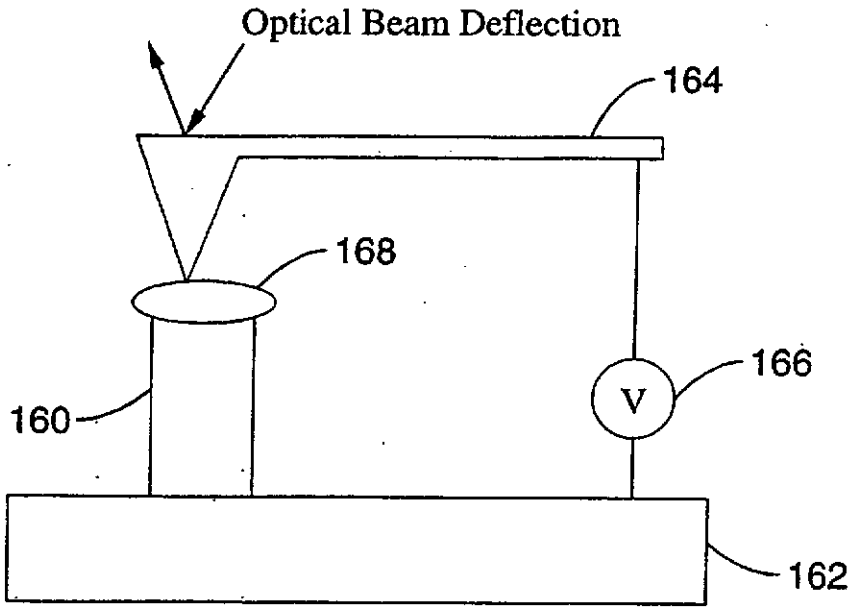


FIG. 22

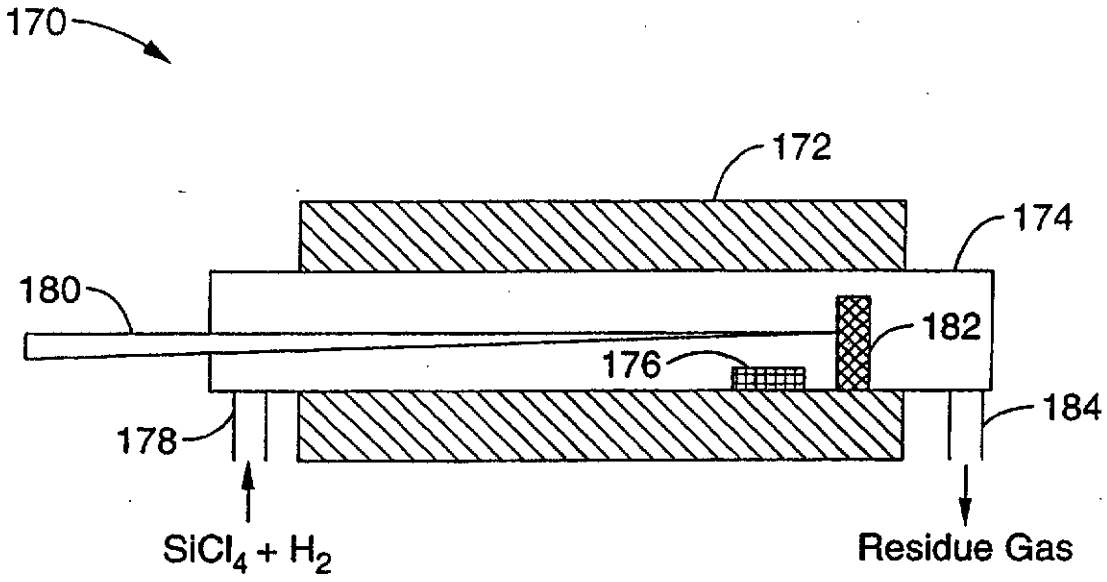

170
172
174
180
182
176
178
184
$SiCl_4 + H_2$
Residue Gas

FIG. 23

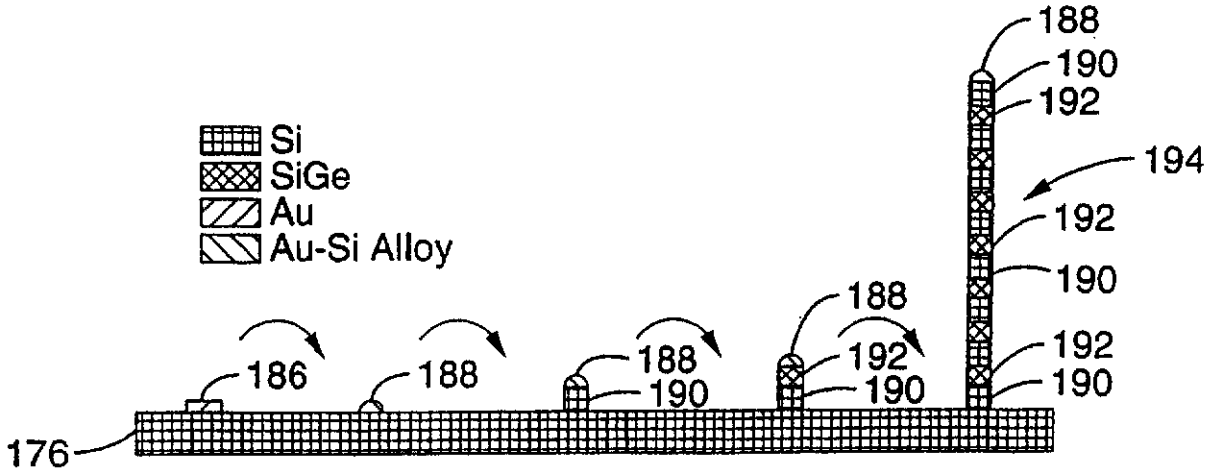

Si
SiGe
Au
Au-Si Alloy
188
190
192
194
192
190
188
192
190
192
190
186
188
188
190
176

FIG. 24

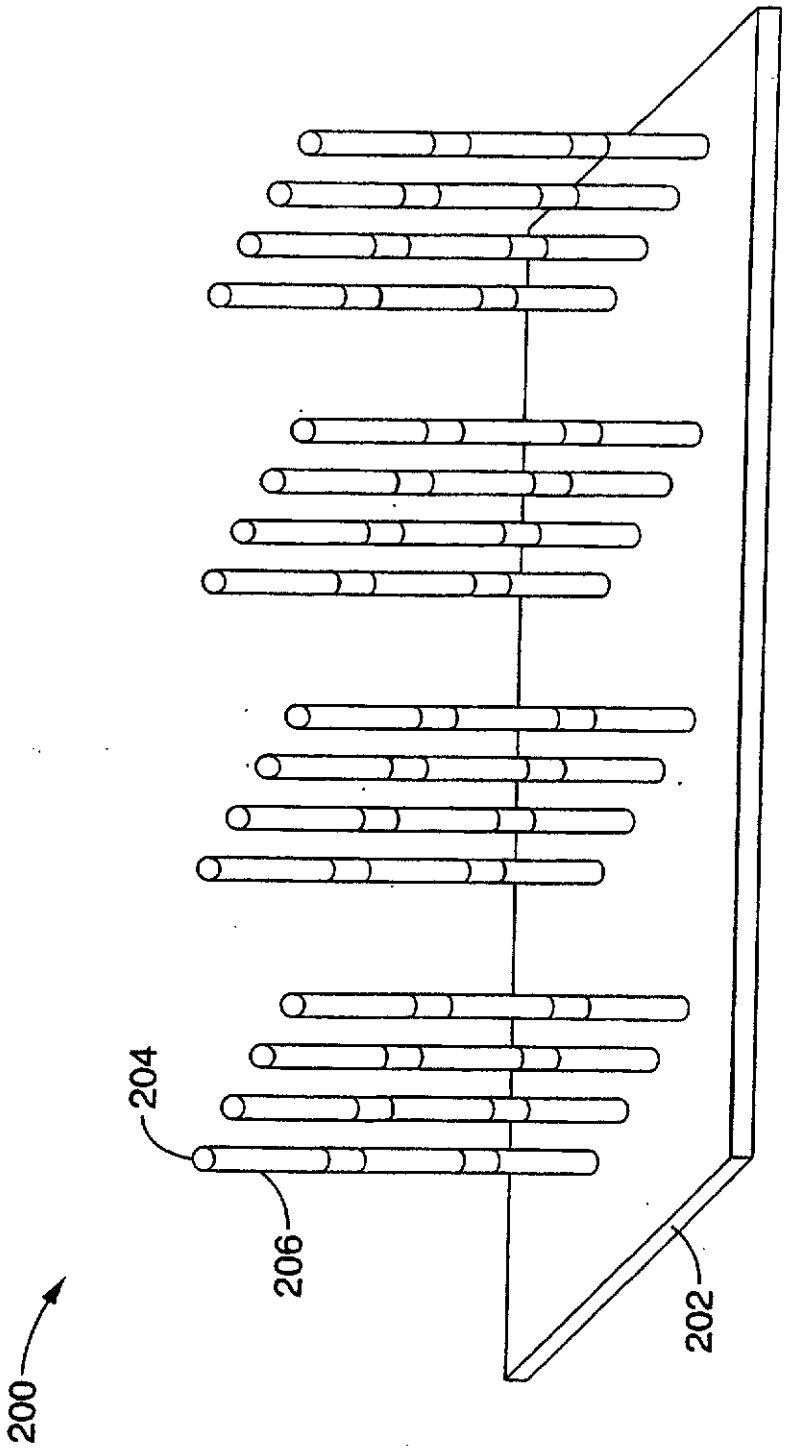


FIG. 25

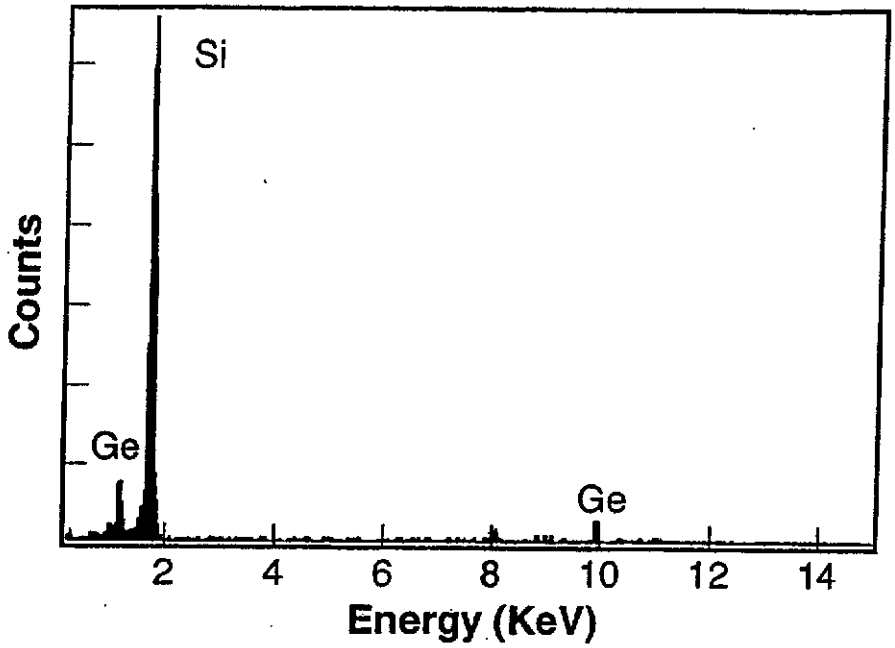

Si
Ge
Ge
Counts
2
4
6
8
10
12
14
Energy (KeV)

FIG. 26

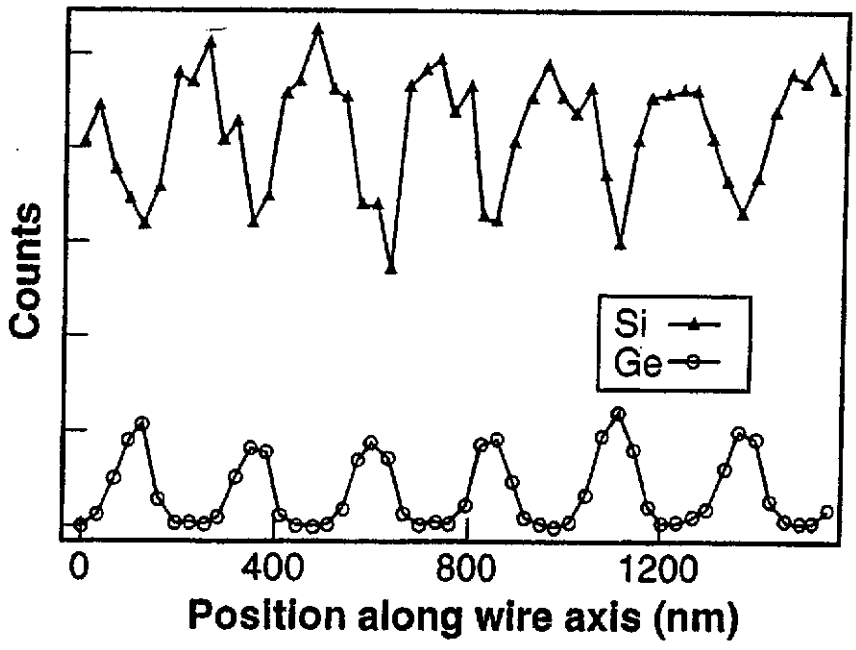

Counts
Si
Ge
0
400
800
1200
Position along wire axis (nm)

FIG. 27

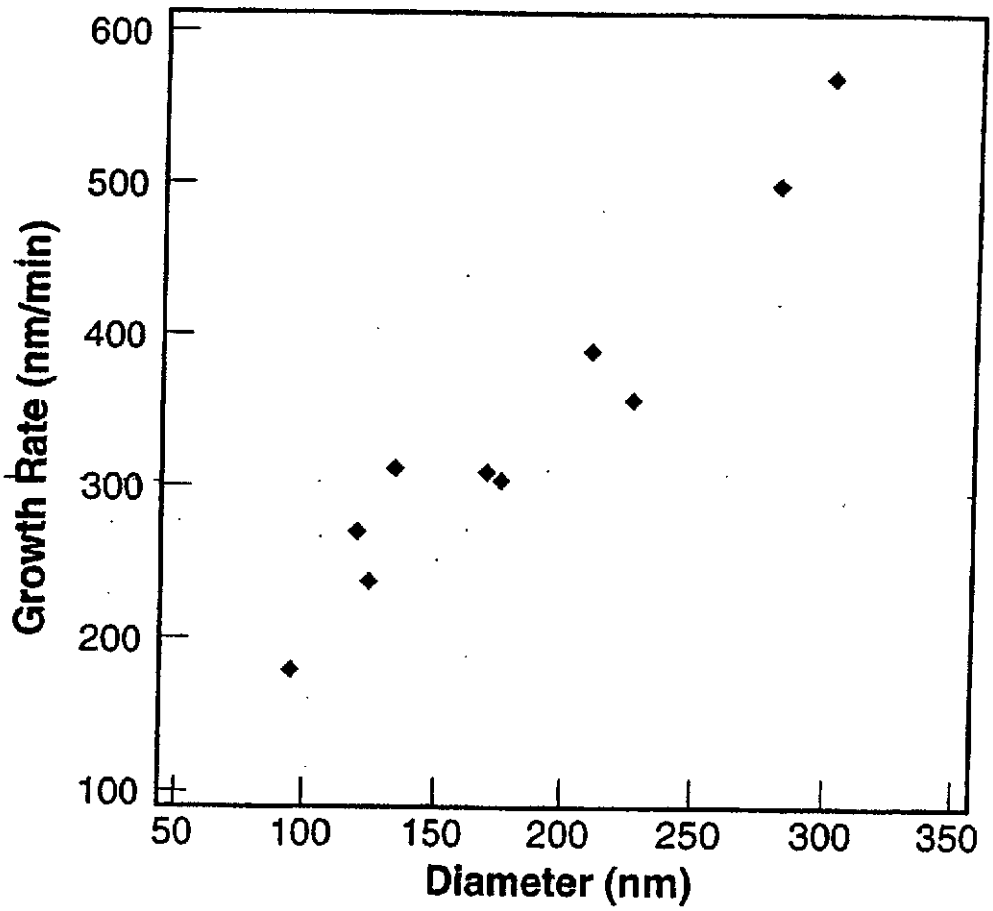

600
500
400
300
200
100
Growth Rate (nm/min)
50
100
150
200
250
300
350
Diameter (nm)

FIG. 28

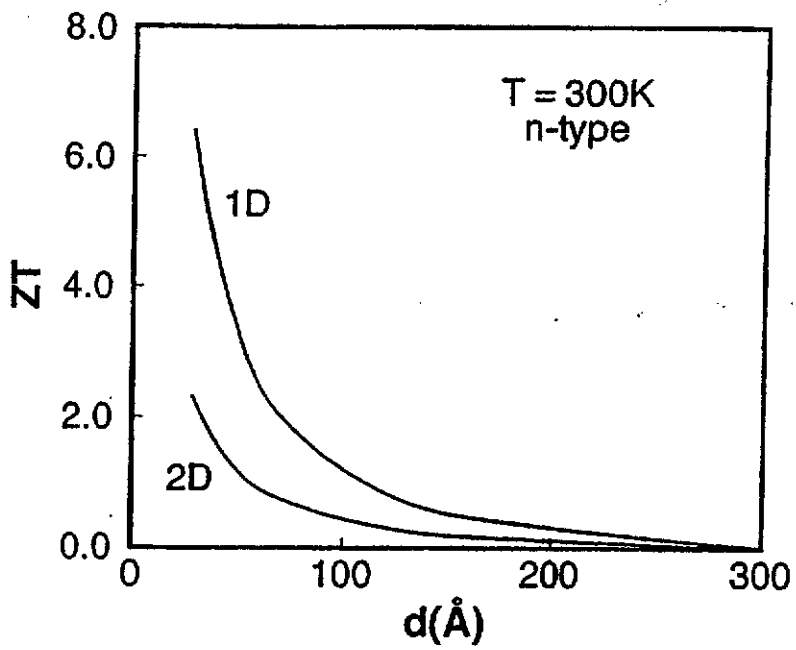


FIG. 29

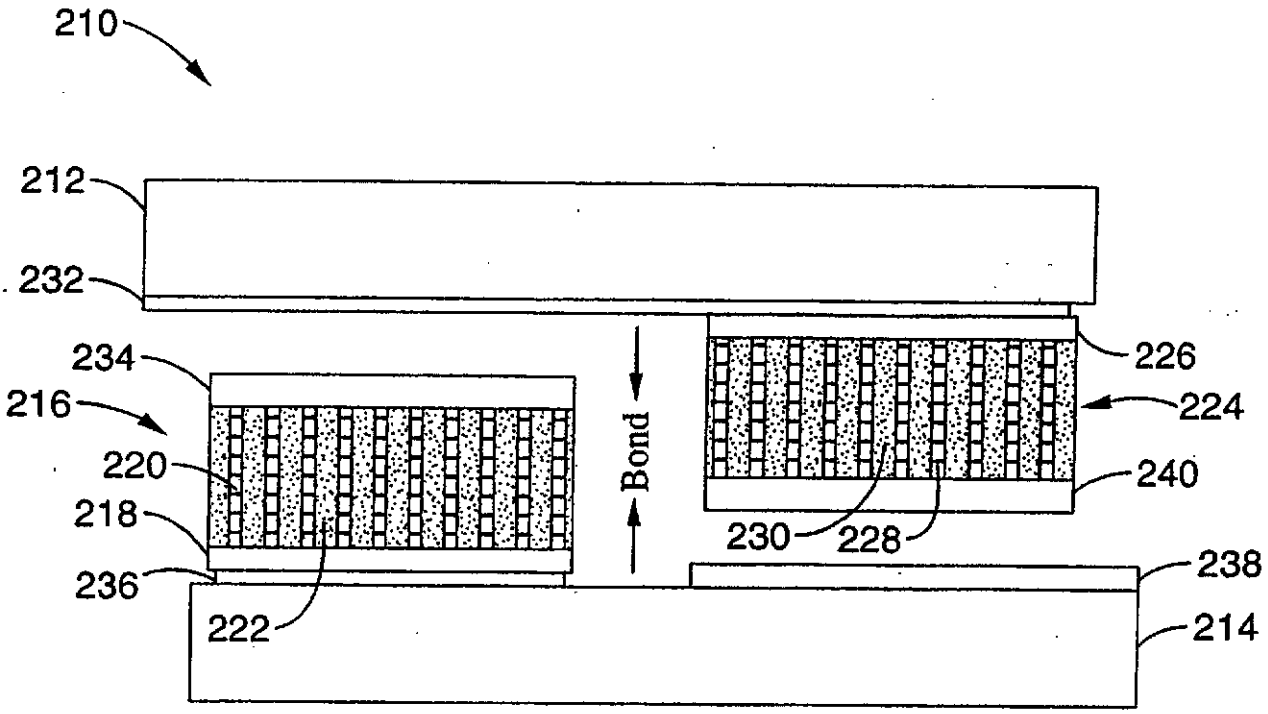

210
212
232
234
216
220
218
236
222
Bond
226
224
240
230
228
238
214

FIG. 30

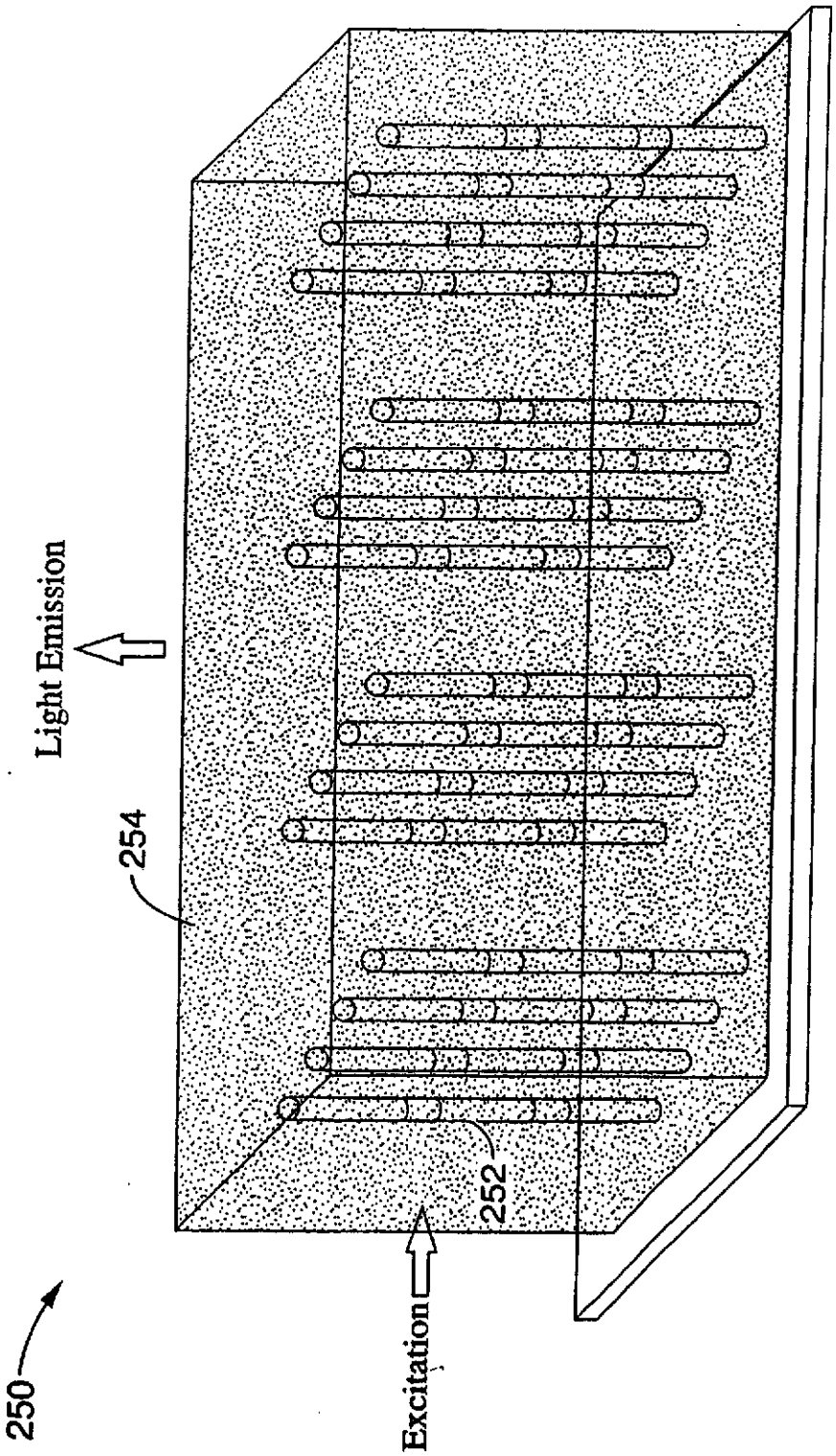


FIG. 31

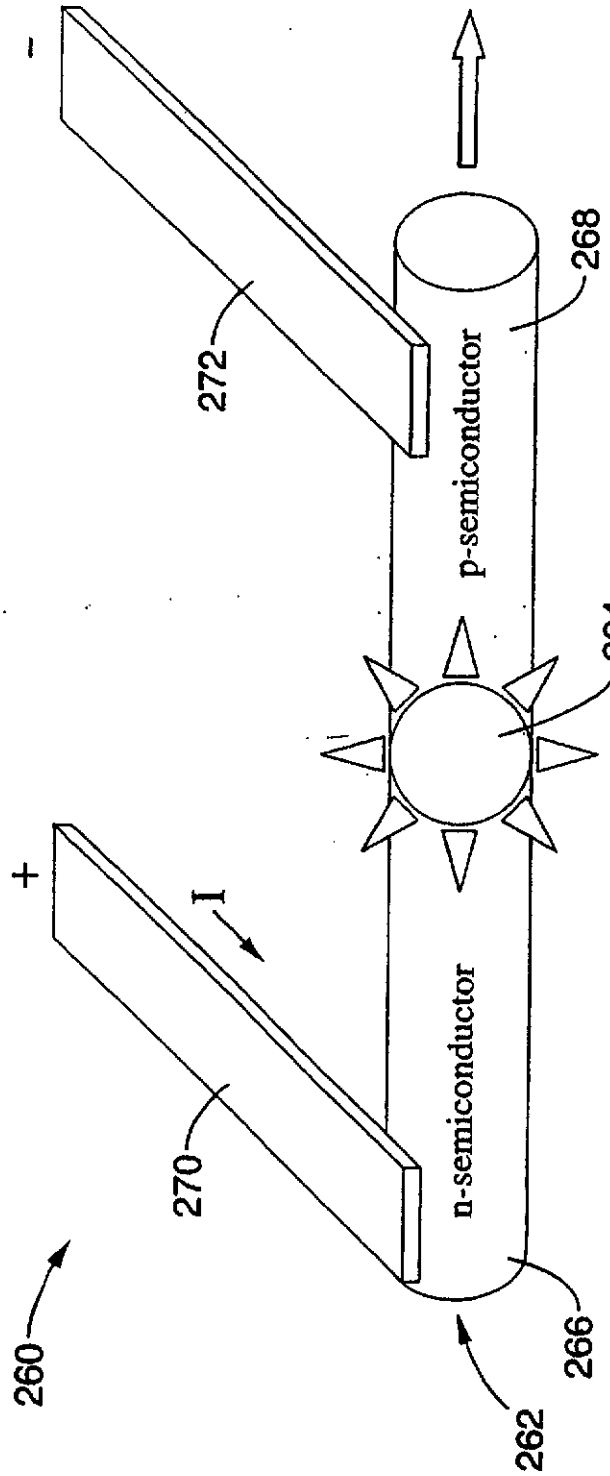

-
272
268
p-semiconductor
264
+
I
270
n-semiconductor
260
266
262

FIG. 32

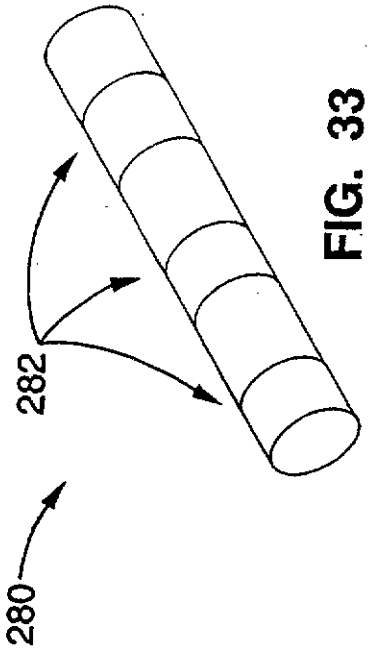

282
280

FIG. 33

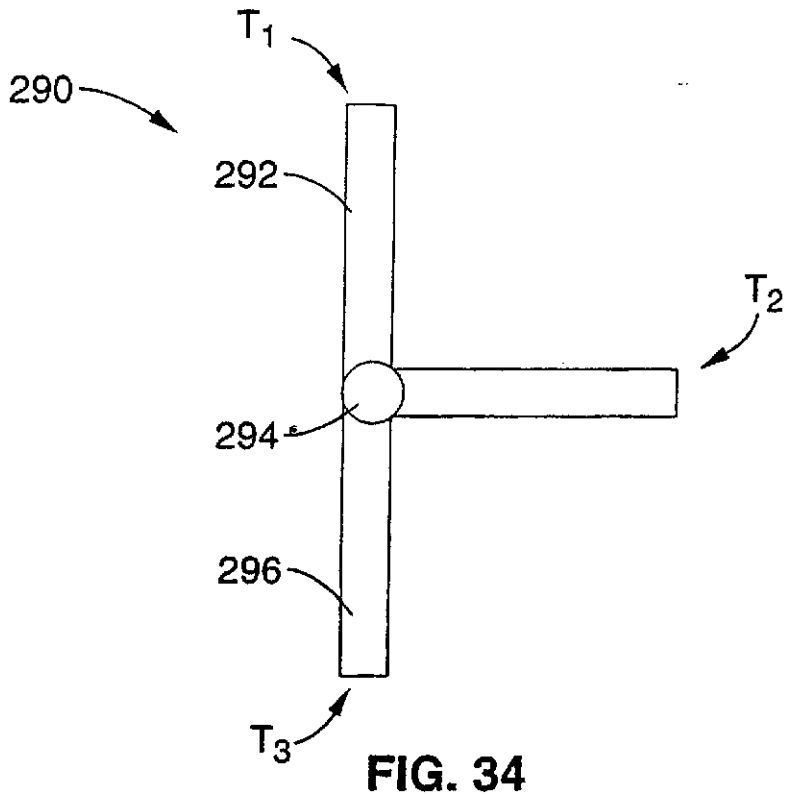


FIG. 34

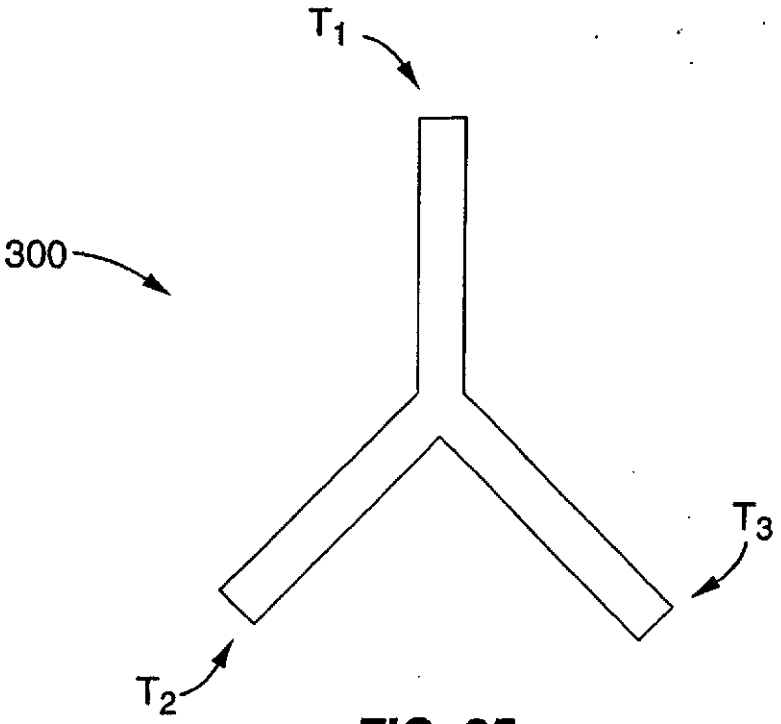


FIG. 35

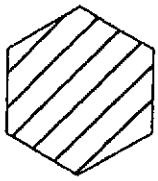


FIG. 37

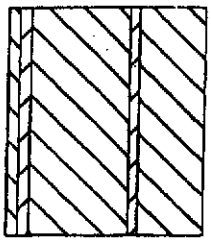


FIG. 39

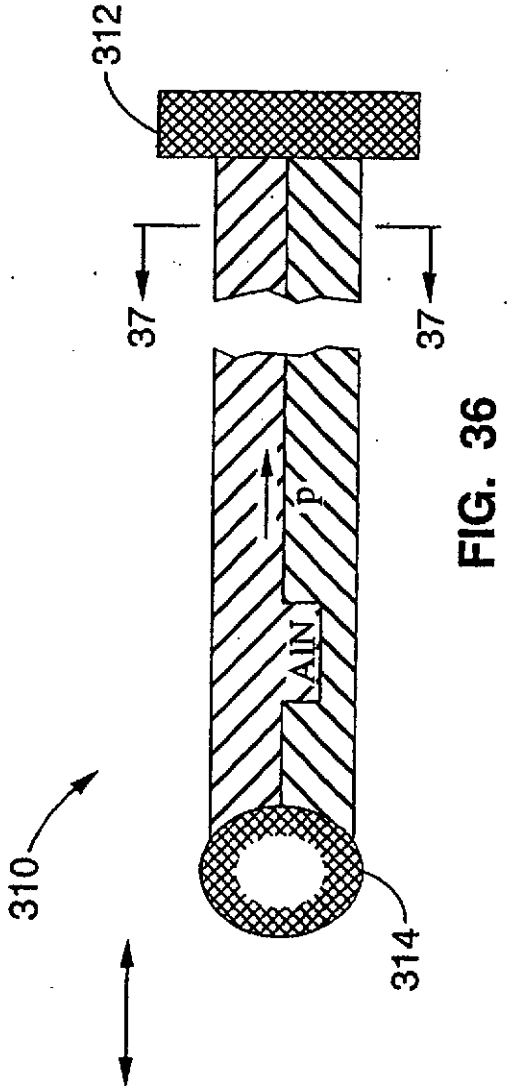


FIG. 36

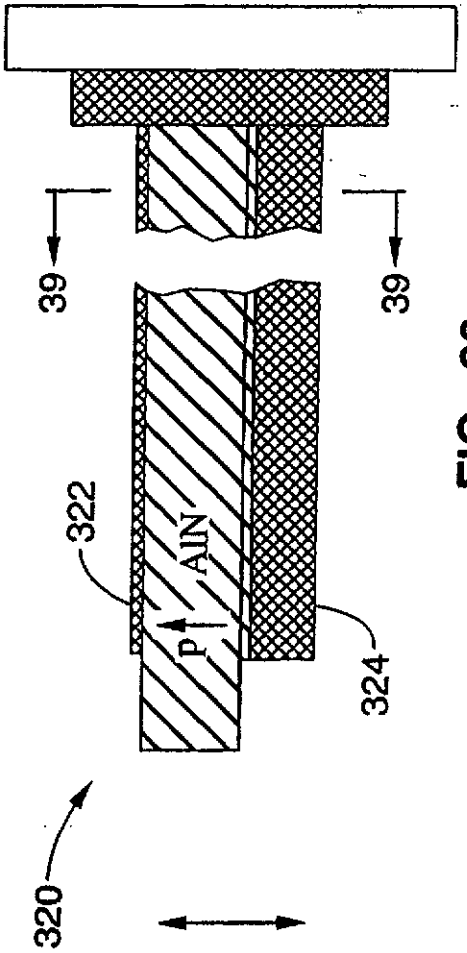


FIG. 38

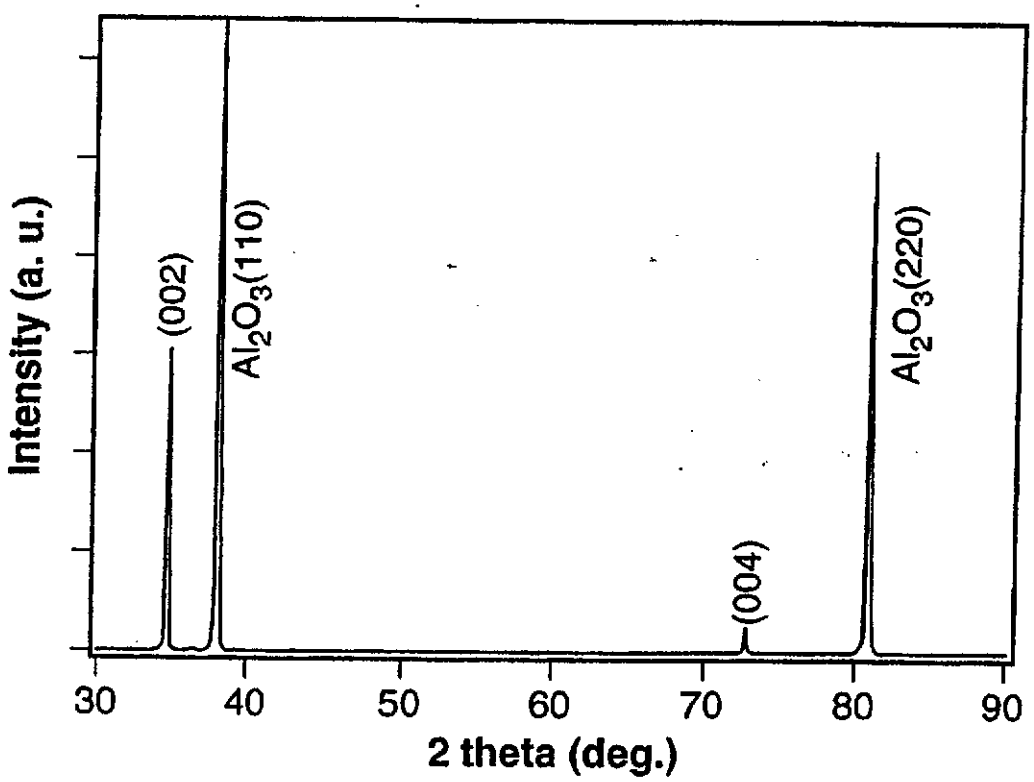

Intensity (a. u.)
(002)
Al_2O_3(110)
(004)
Al_2O_3(220)
30
40
50
60
70
80
90
2 theta (deg.)

FIG. 40

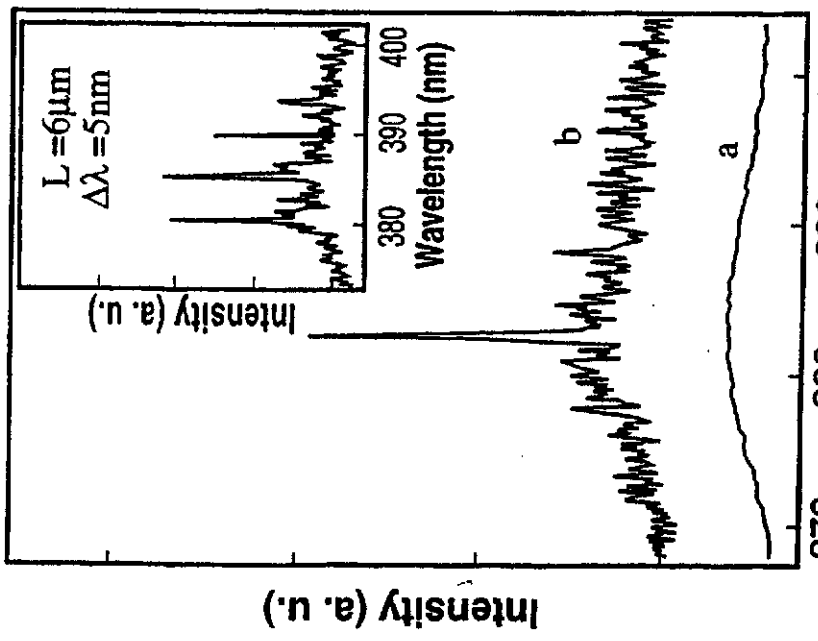


FIG. 41

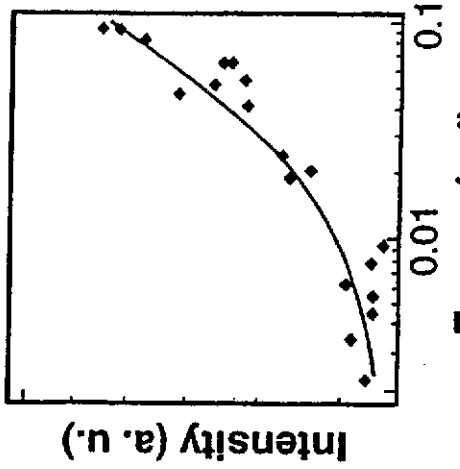


FIG. 42

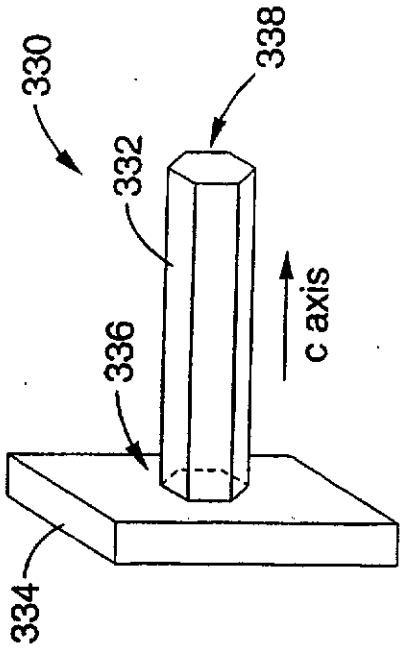


FIG. 43

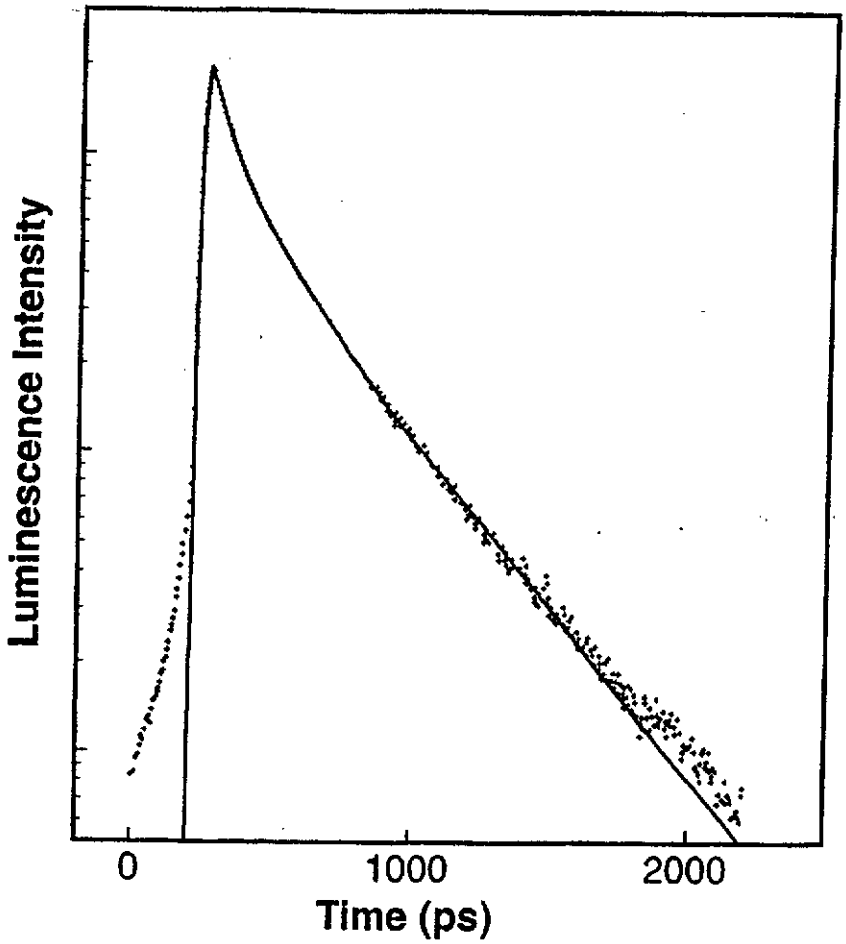


FIG. 44