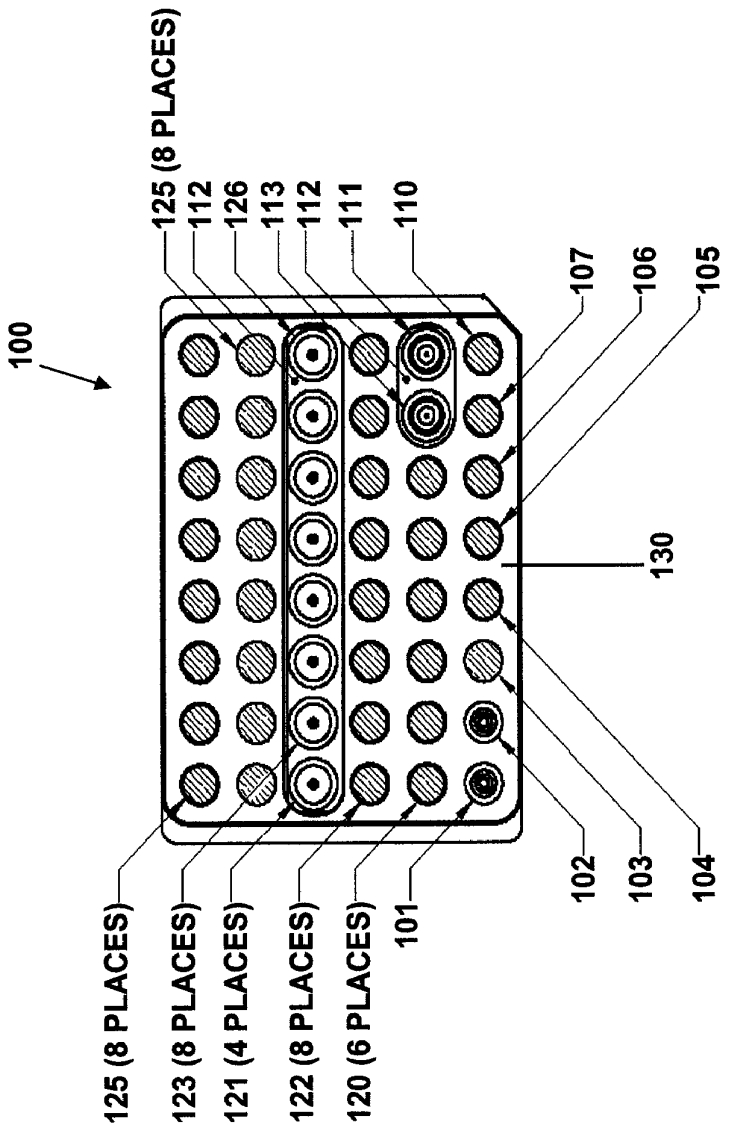

100
125 (8 PLACES)
112
126
113
112
111
110
107
106
105
130
102
103
104
125 (8 PLACES)
123 (8 PLACES)
121 (4 PLACES)
122 (8 PLACES)
120 (6 PLACES)
101

FIGURE 1

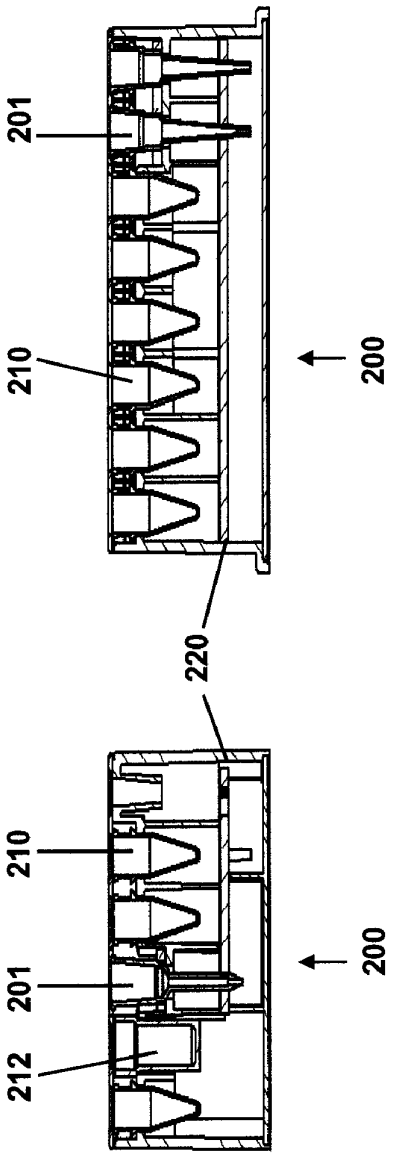


FIGURE 2

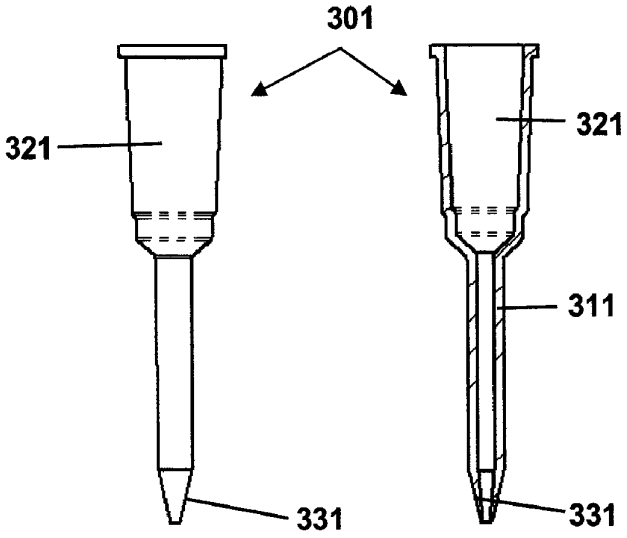


FIGURE 3A

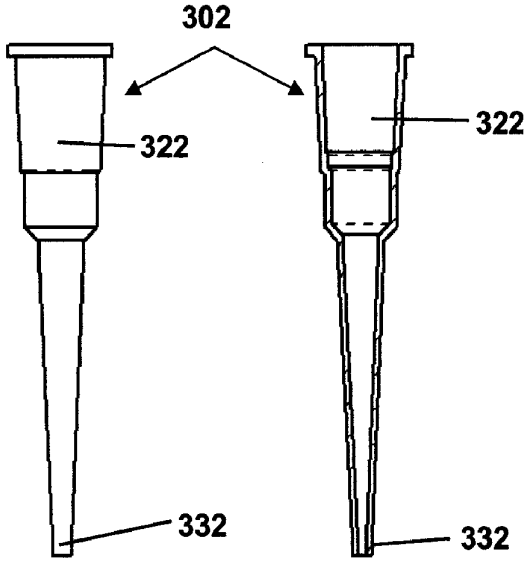


FIGURE 3B

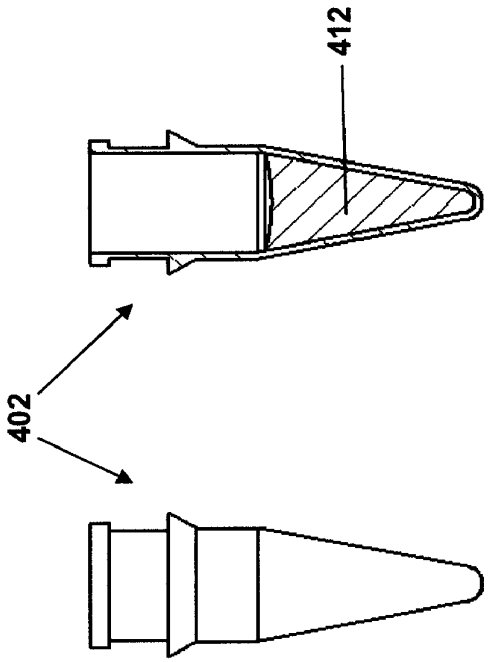


FIGURE 4B

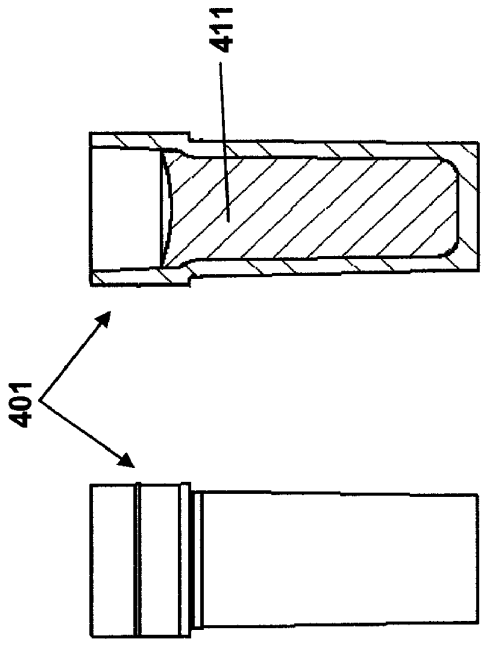


FIGURE 4A

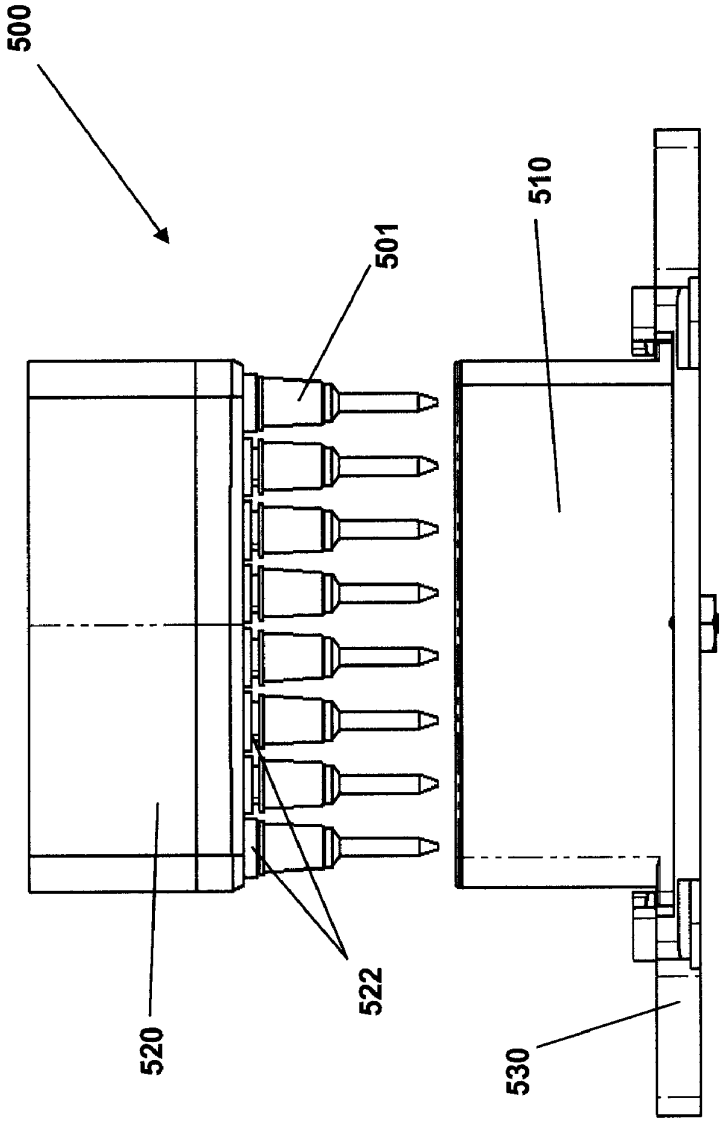


FIGURE 5

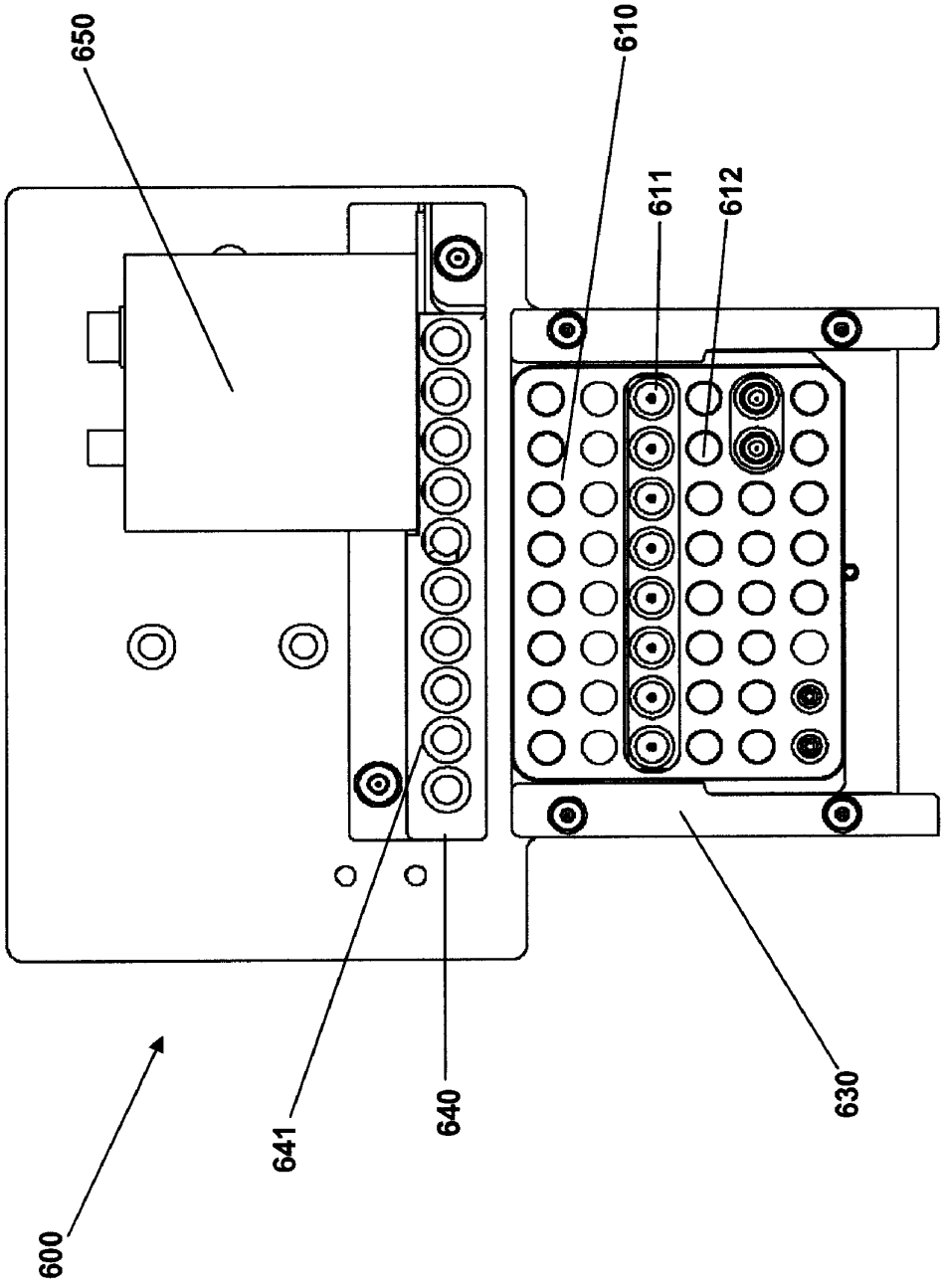


FIGURE 6

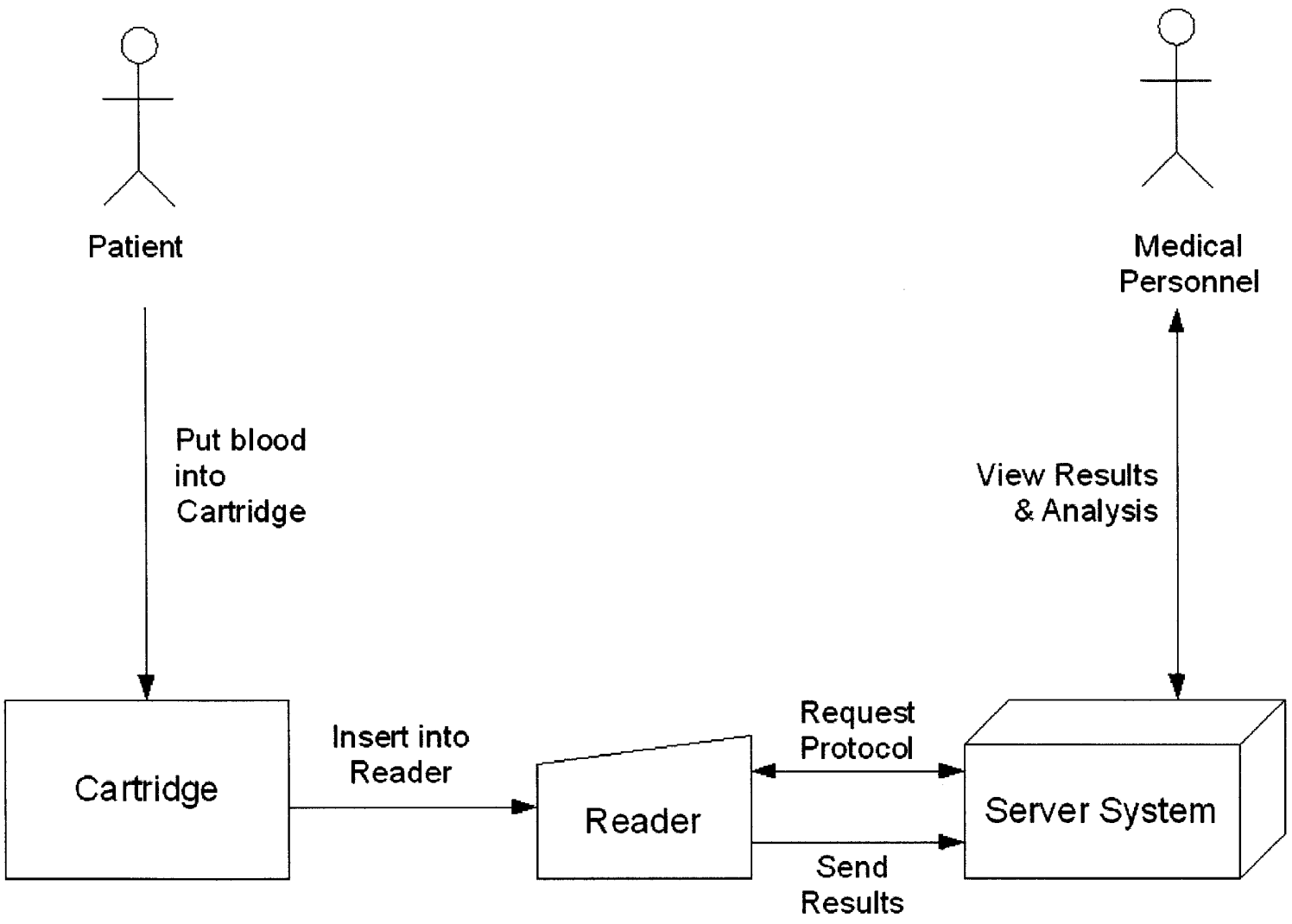

Patient
Medical Personnel
Put blood into Cartridge
View Results & Analysis
Cartridge
Insert into Reader
Reader
Request Protocol
Server System
Send Results

FIGURE 7

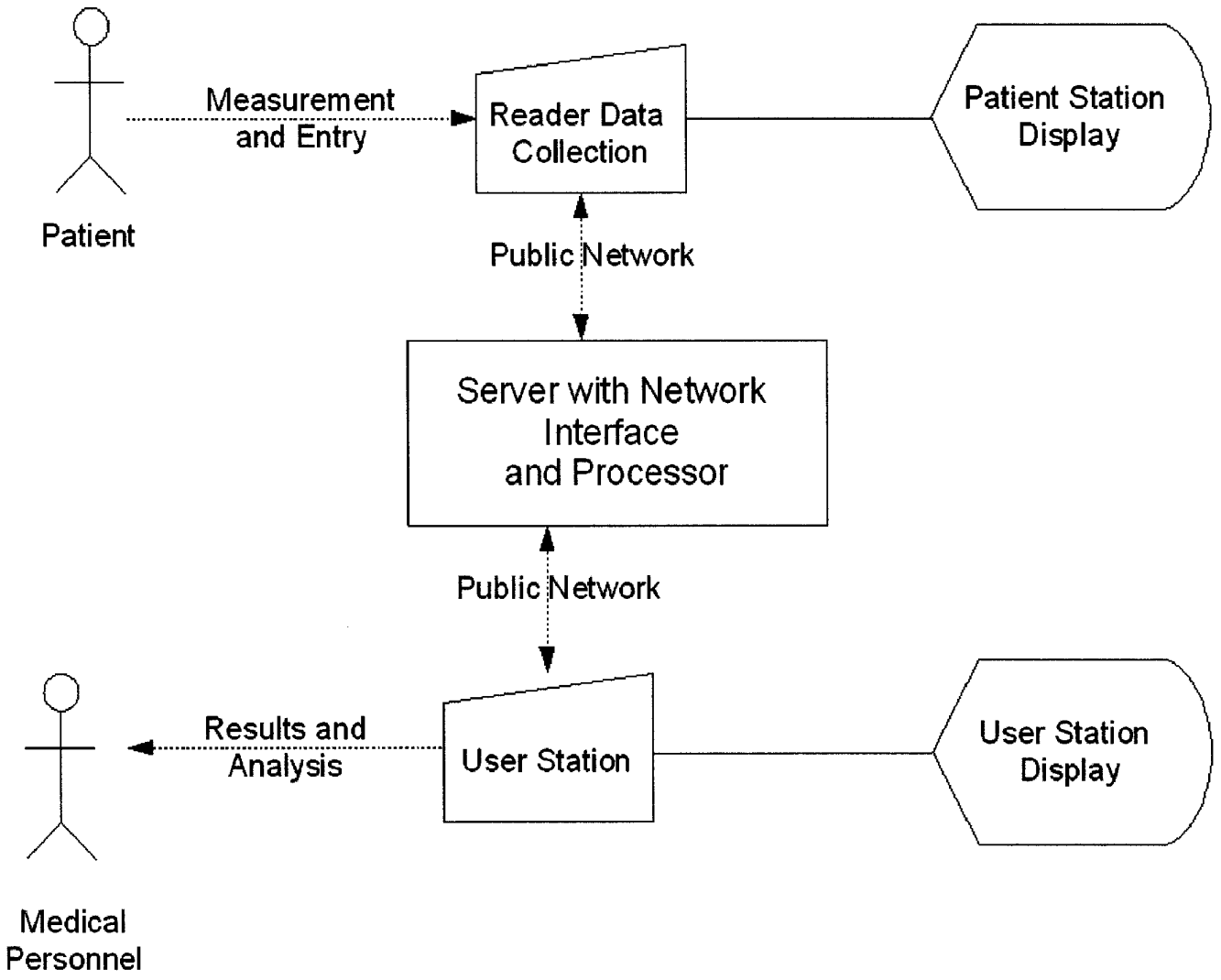

Patient
Measurement and Entry
Reader Data Collection
Patient Station Display
Public Network
Server with Network Interface and Processor
Public Network
Medical Personnel
Results and Analysis
User Station
User Station Display

FIGURE 8

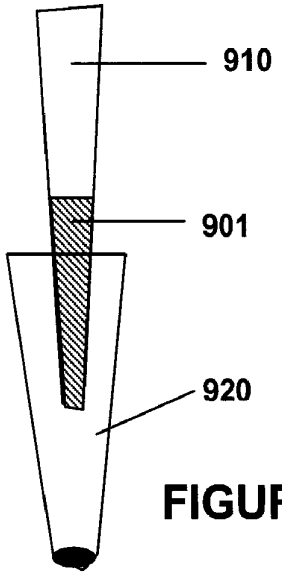


FIGURE 9A

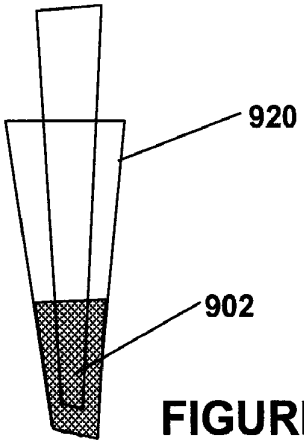


FIGURE 9B

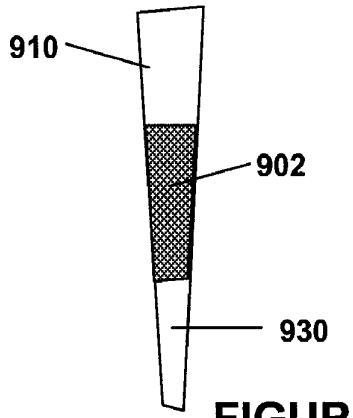


FIGURE 9C

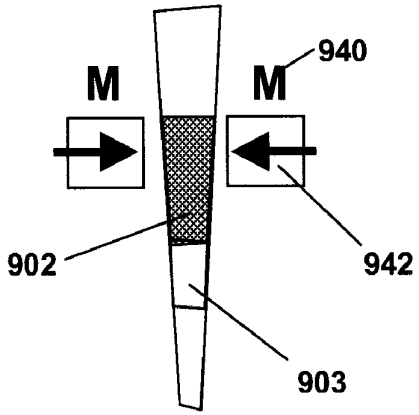


FIGURE 9D

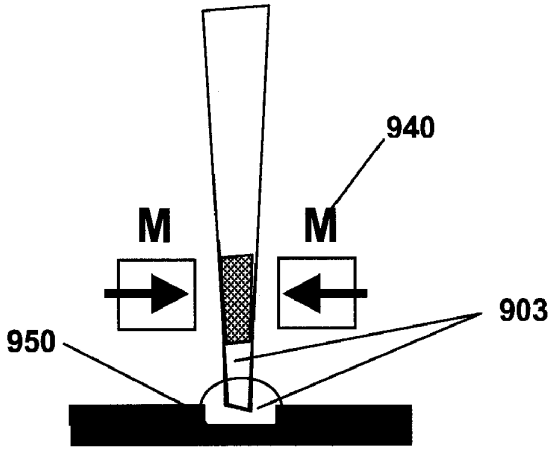


FIGURE 9E

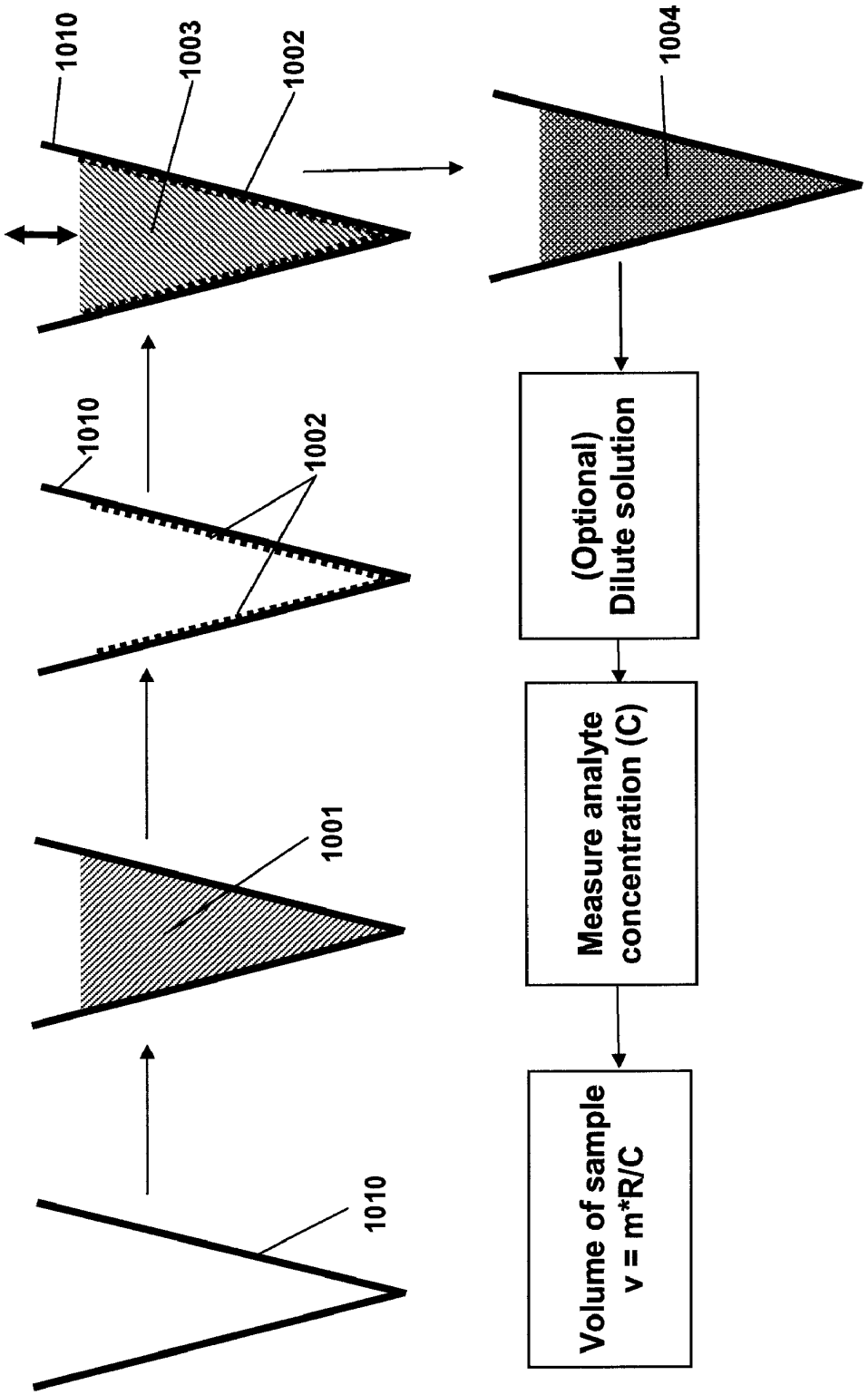

1010
1003
1002
1004
1010
1002
1001
1010
(Optional)
Dilute solution
Measure analyte
concentration (C)
Volume of sample
v = m*R/C

FIGURE 10

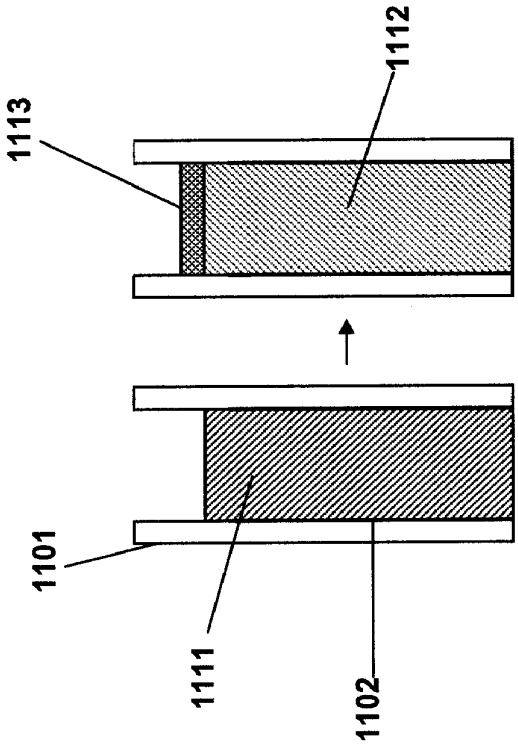


FIGURE 11

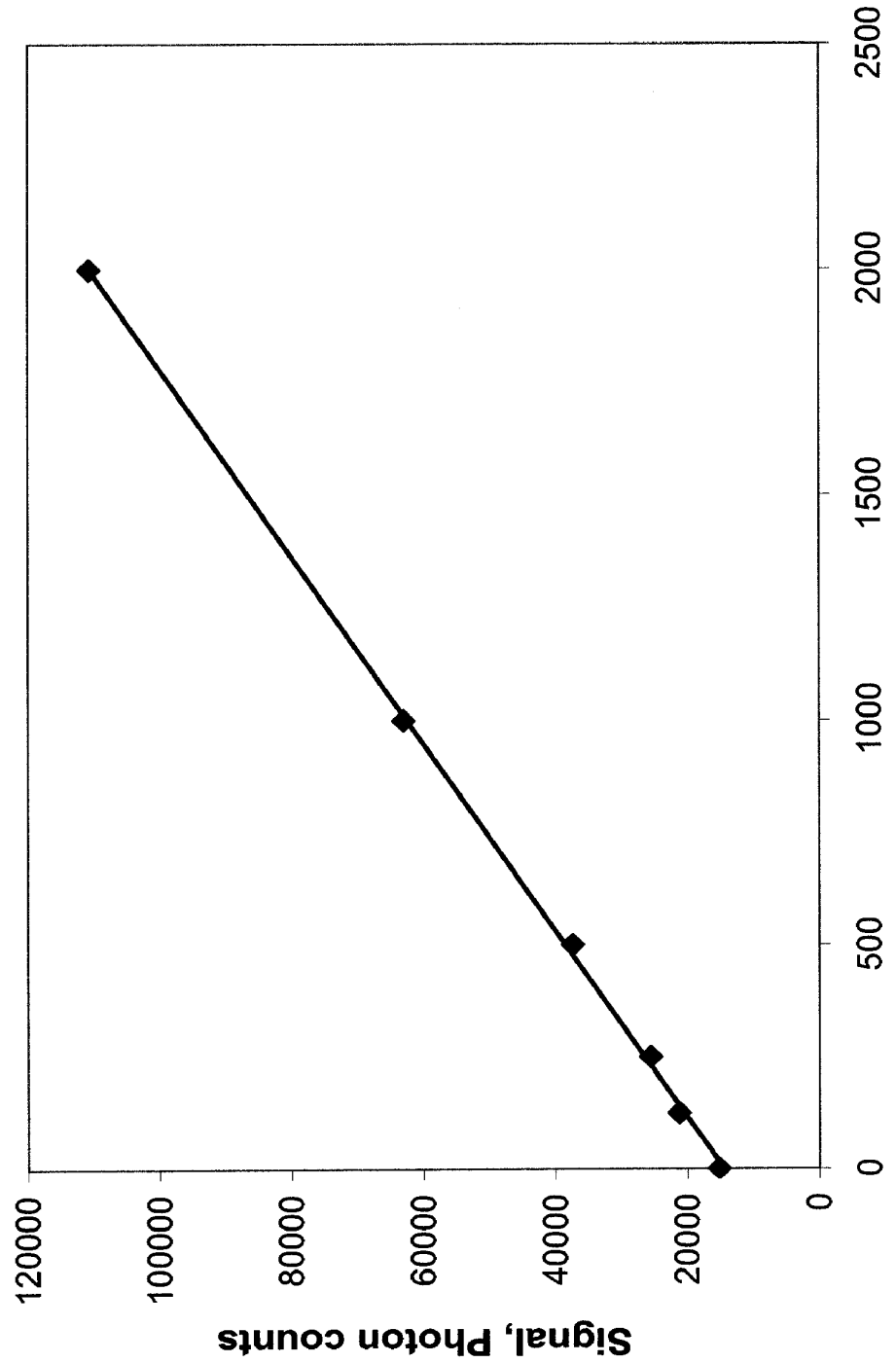

Signal, Photon counts
120000
100000
80000
60000
40000
20000
0
0
500
1000
1500
2000
2500
VEGFR2, pg/mL

FIGURE 12

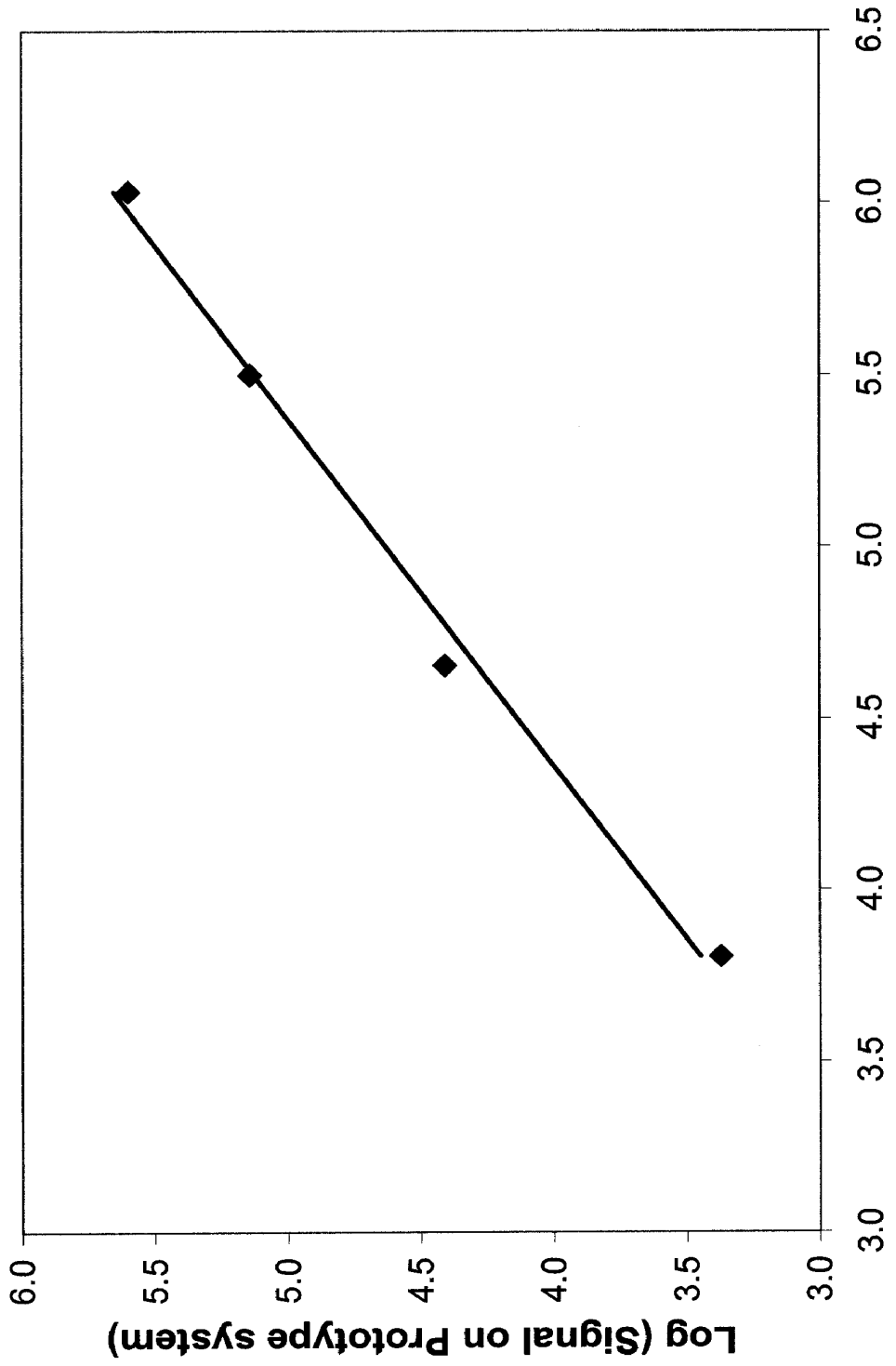

Log (Signal on Prototype system)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
Log (Signal on M5 instrument)

FIGURE 13

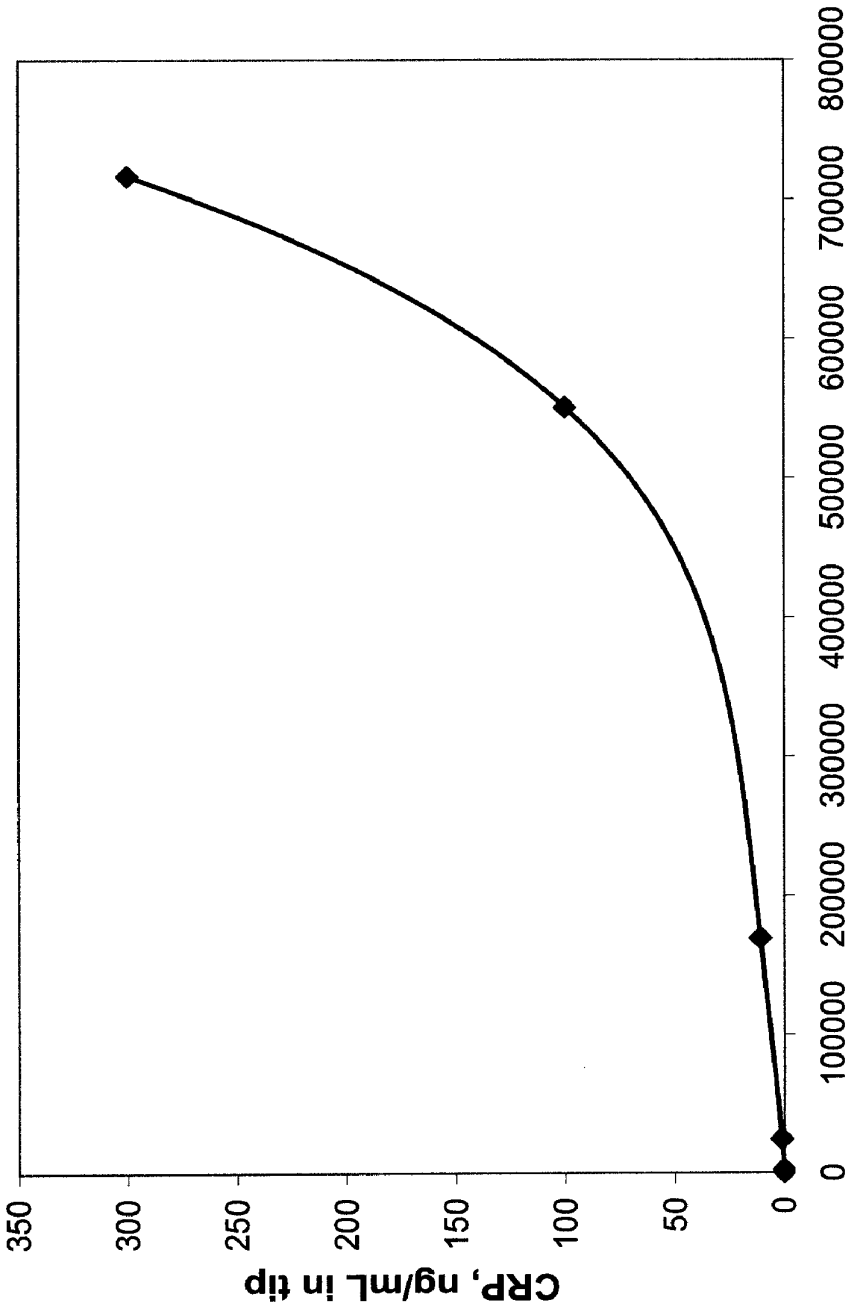

CRP, ng/mL in tip
350
300
250
200
150
100
50
0
0
100000
200000
300000
400000
500000
600000
700000
800000
Signal, photon counts

FIGURE 14

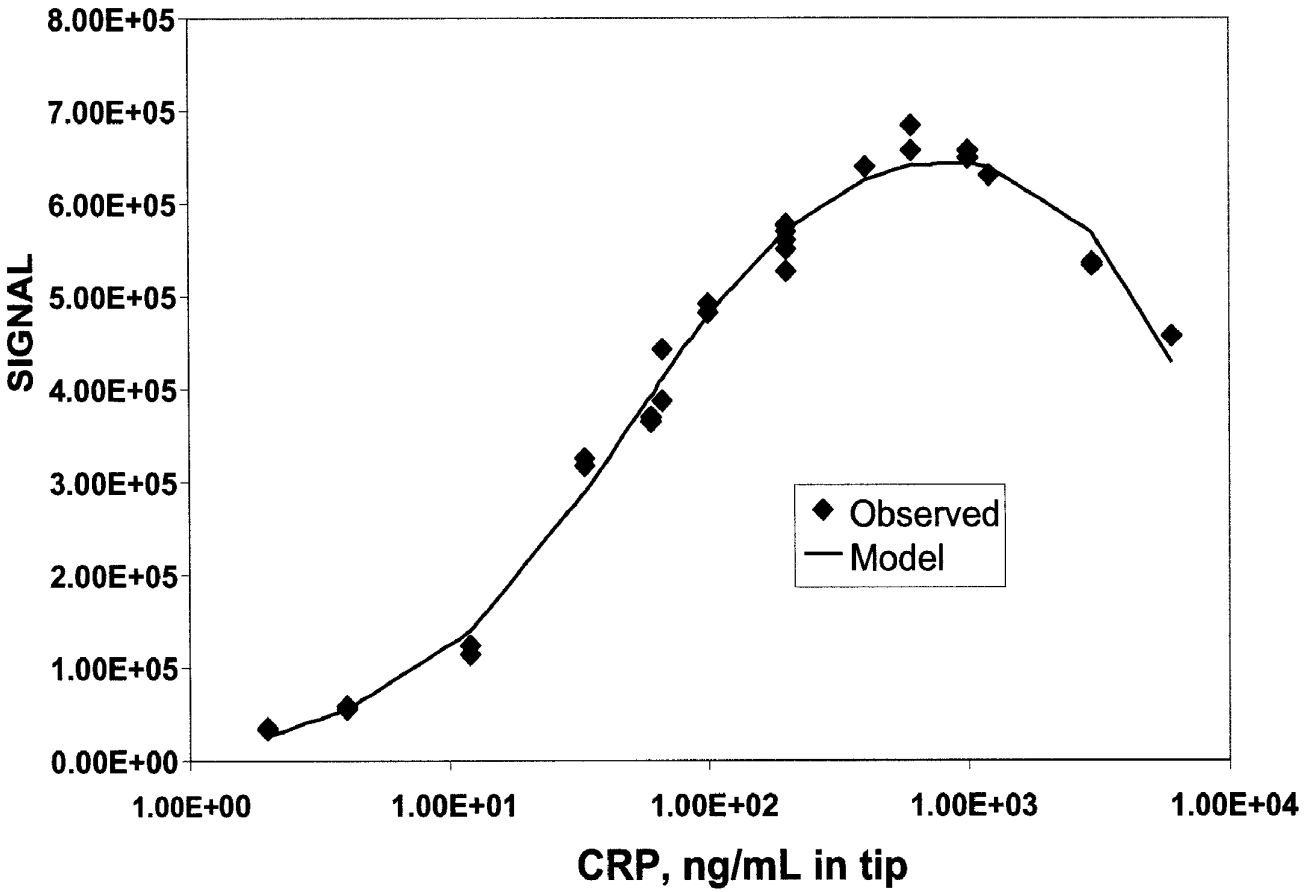

8.00E+05
7.00E+05
6.00E+05
5.00E+05
4.00E+05
3.00E+05
2.00E+05
1.00E+05
0.00E+00
SIGNAL
1.00E+00
1.00E+01
1.00E+02
1.00E+03
1.00E+04
CRP, ng/mL in tip
Observed
Model

FIGURE 15

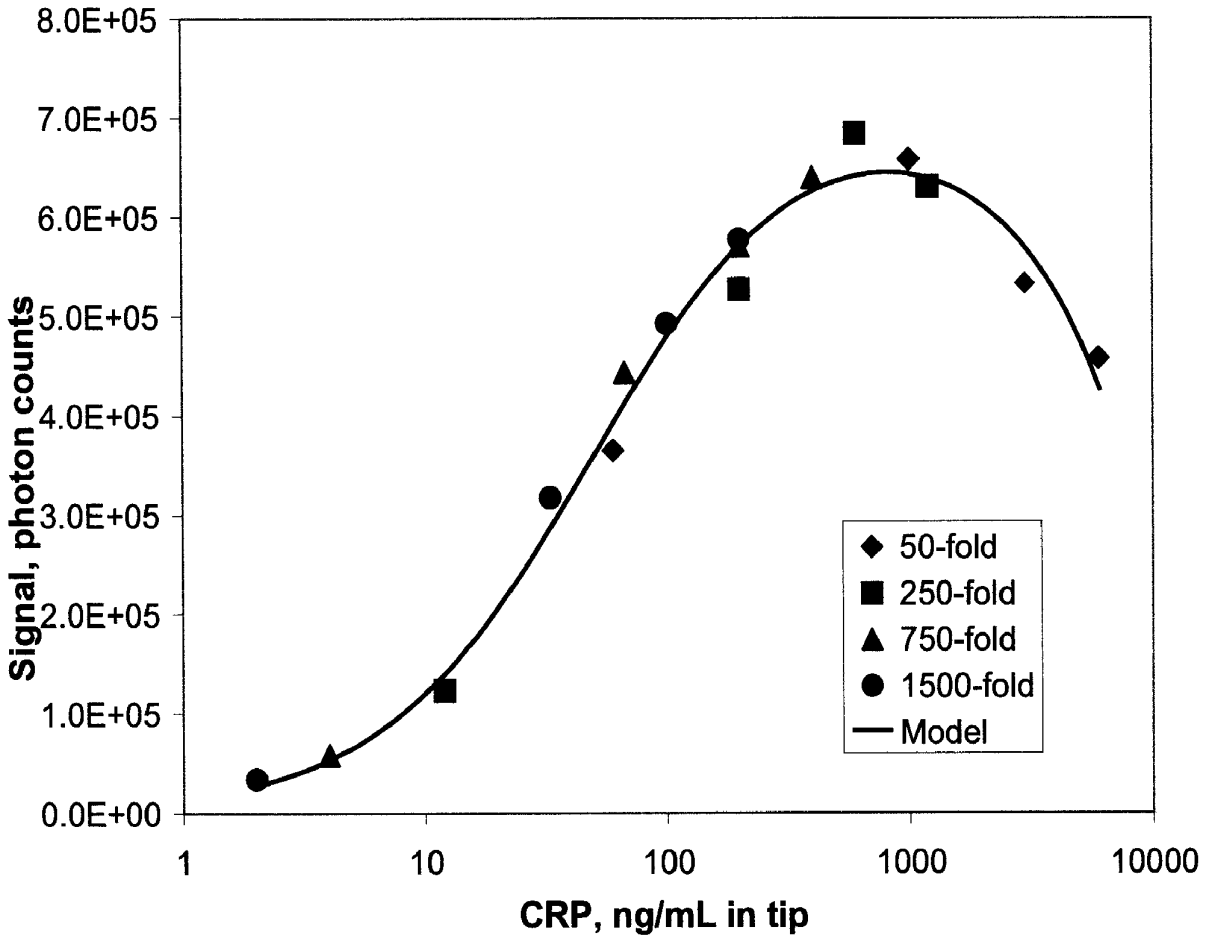

8.0E+05
7.0E+05
6.0E+05
5.0E+05
4.0E+05
3.0E+05
2.0E+05
1.0E+05
0.0E+00
Signal, photon counts
1
10
100
1000
10000
CRP, ng/mL in tip
50-fold
250-fold
750-fold
1500-fold
Model

FIGURE 16

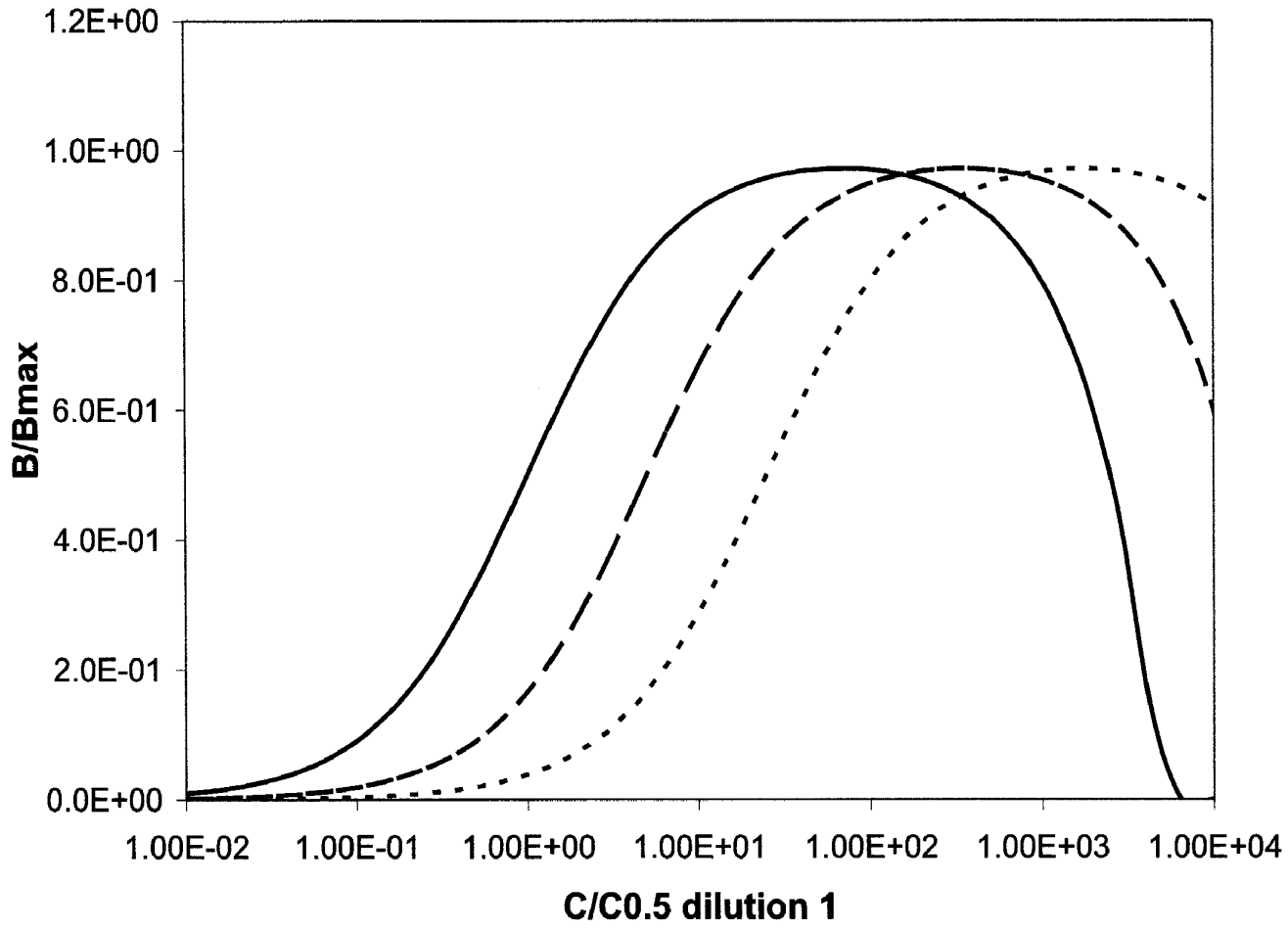

1.2E+00
1.0E+00
8.0E-01
6.0E-01
4.0E-01
2.0E-01
0.0E+00
B/Bmax
1.00E-02
1.00E-01
1.00E+00
1.00E+01
1.00E+02
1.00E+03
1.00E+04
C/C0.5 dilution 1

FIGURE 17

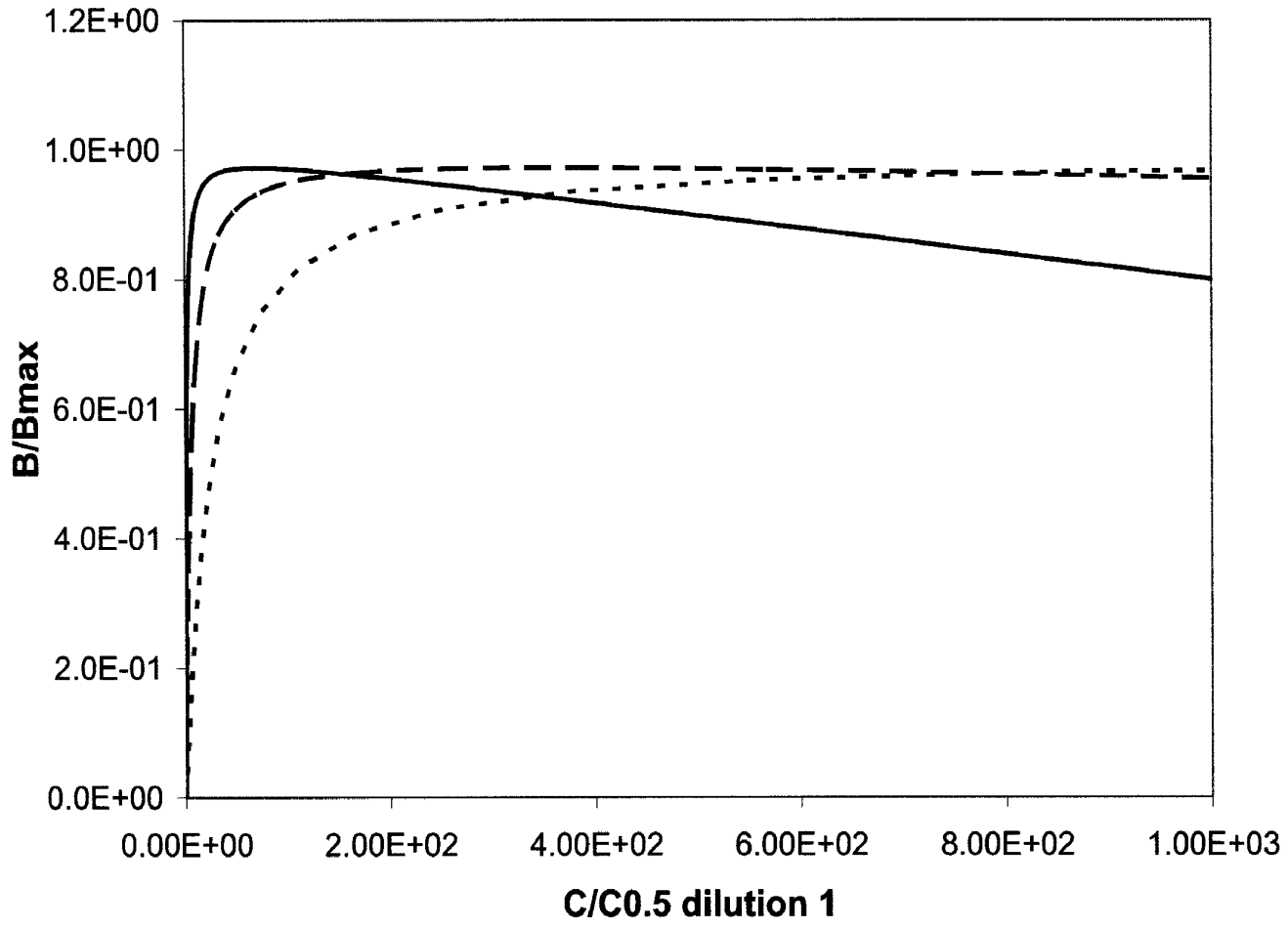

1.2E+00
1.0E+00
8.0E-01
6.0E-01
4.0E-01
2.0E-01
0.0E+00
B/Bmax
0.00E+00
2.00E+02
4.00E+02
6.00E+02
8.00E+02
1.00E+03
C/C0.5 dilution 1

FIGURE 18

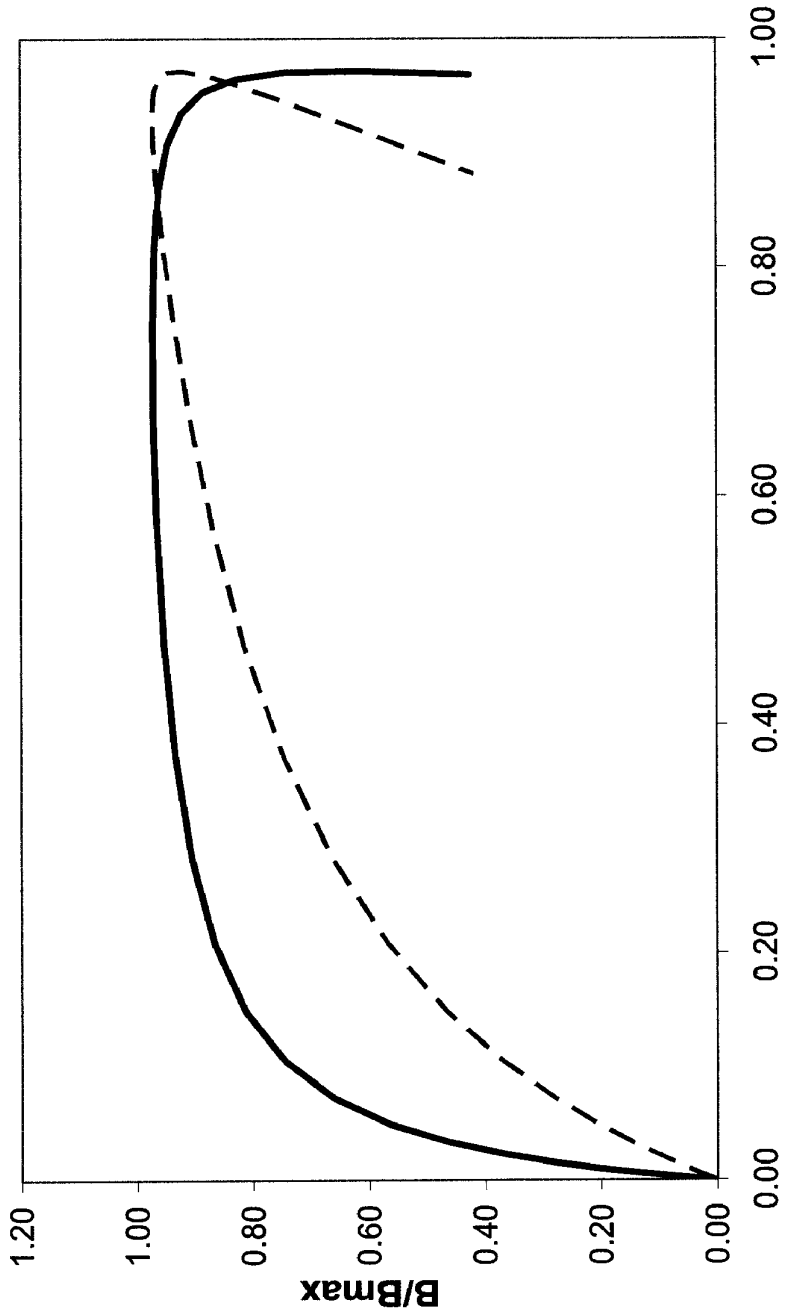

B/Bmax
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0.00
0.20
0.40
0.60
0.80
1.00
B/Bmax Diln 3

FIGURE 19

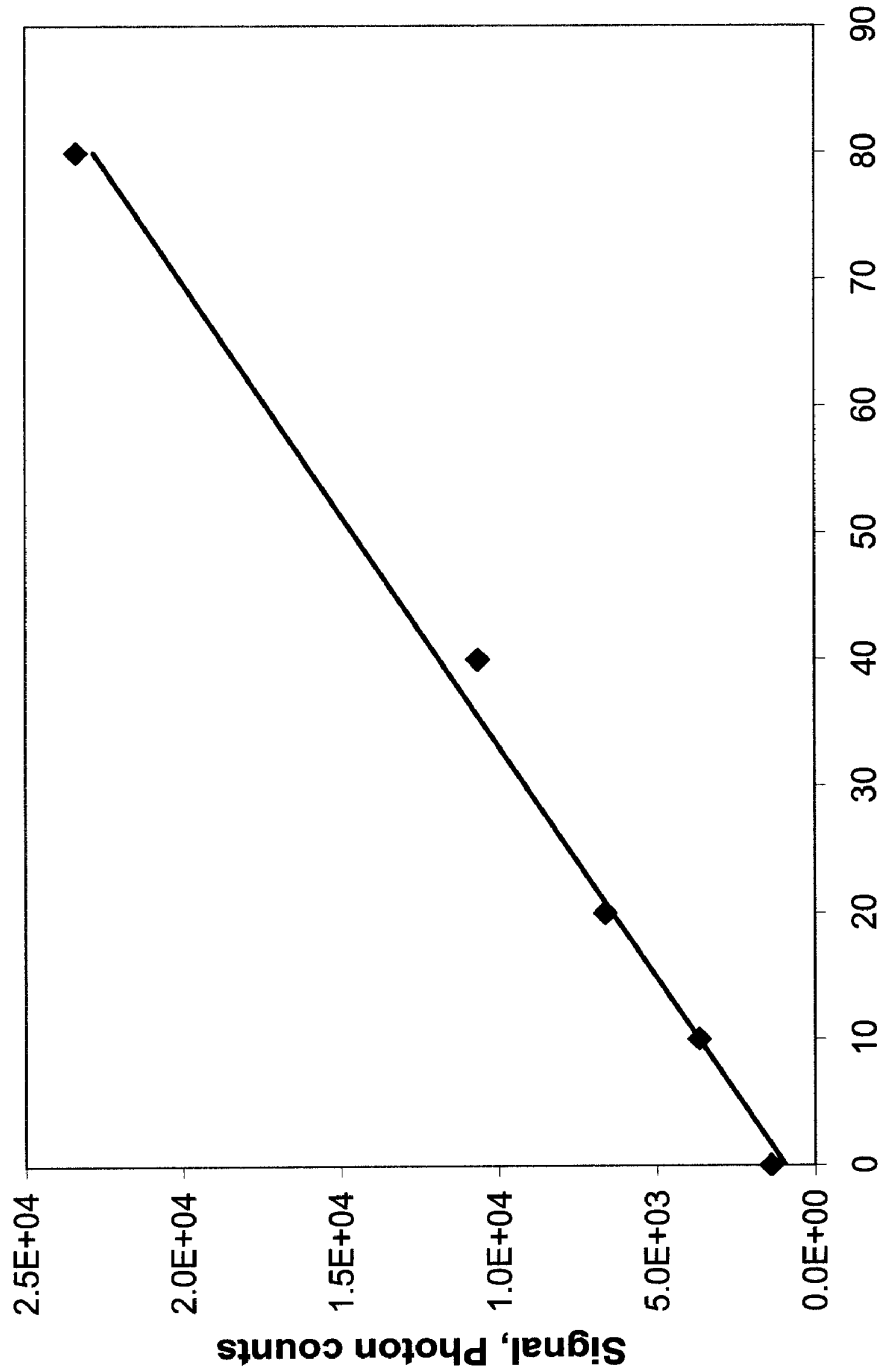

Signal, Photon counts
2.5E+04
2.0E+04
1.5E+04
1.0E+04
5.0E+03
0.0E+00
0
10
20
30
40
50
60
70
80
90
Fluorescein-labeled BSA

FIGURE 20

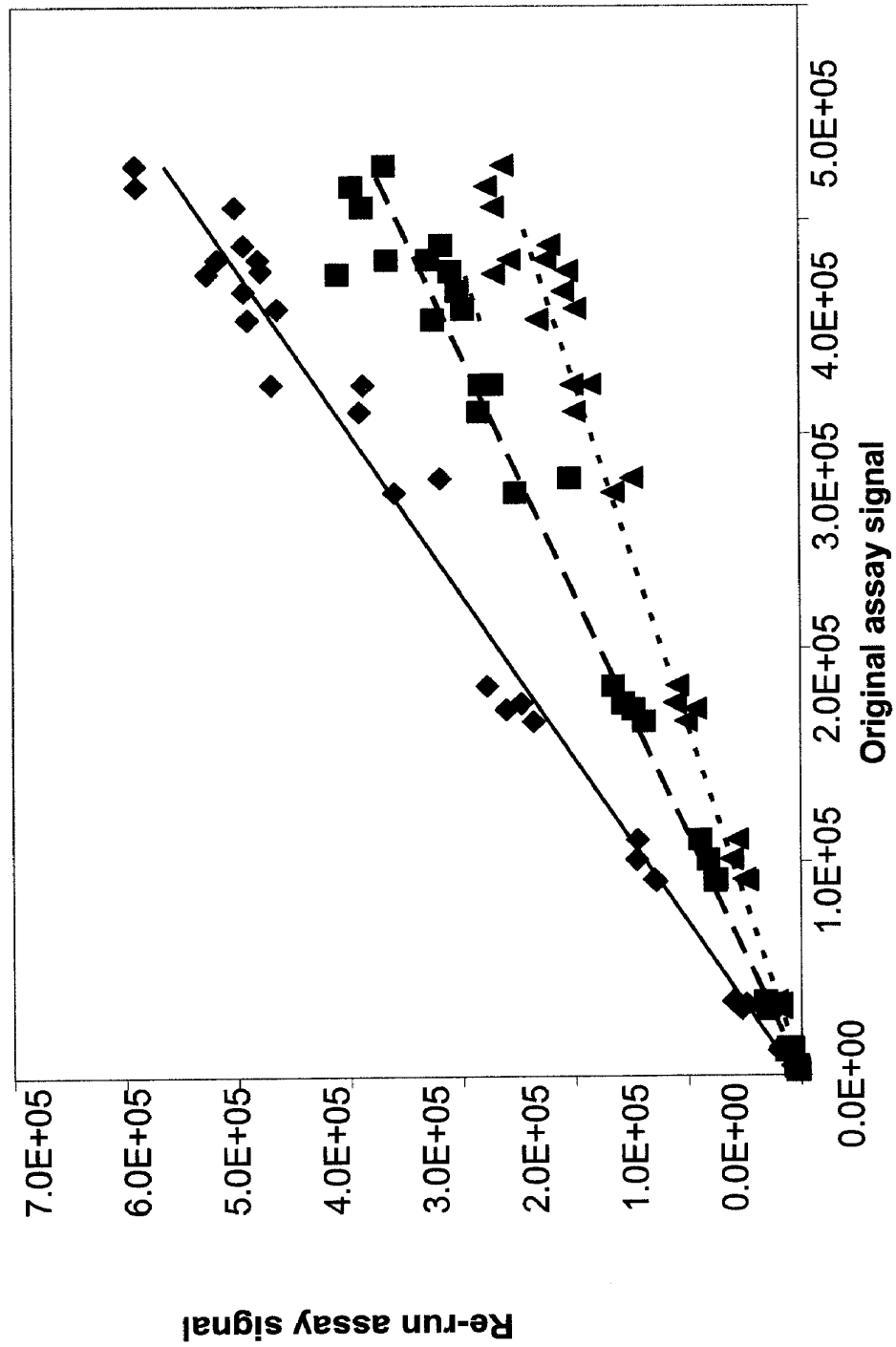

Re-run assay signal
7.0E+05
6.0E+05
5.0E+05
4.0E+05
3.0E+05
2.0E+05
1.0E+05
0.0E+00
0.0E+00
1.0E+05
2.0E+05
3.0E+05
4.0E+05
5.0E+05
Original assay signal

FIGURE 21