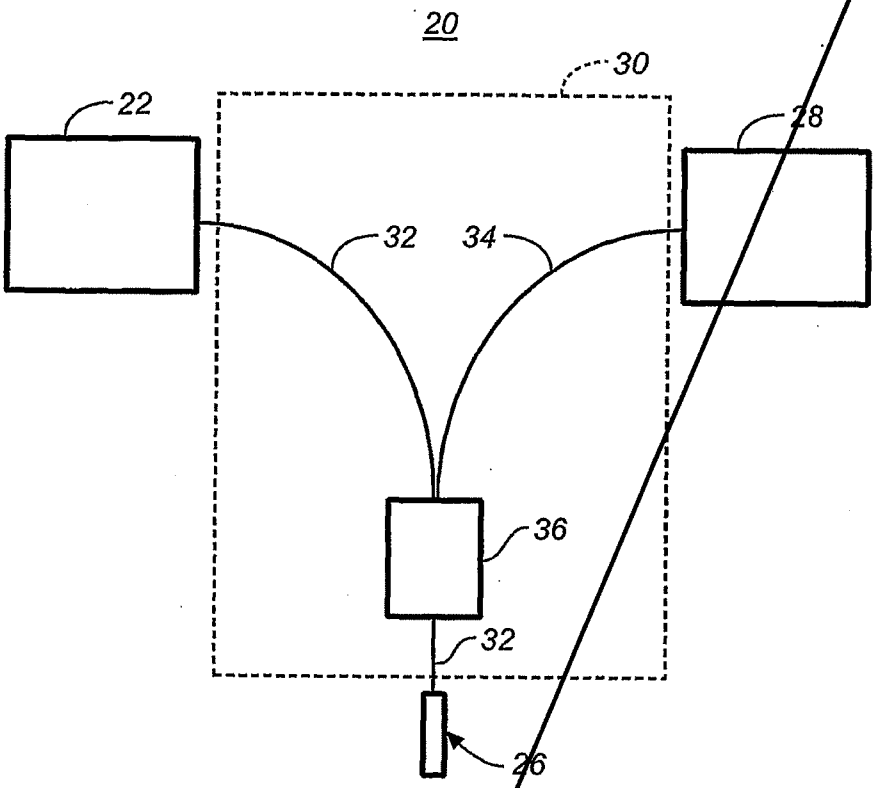


FIG. 1

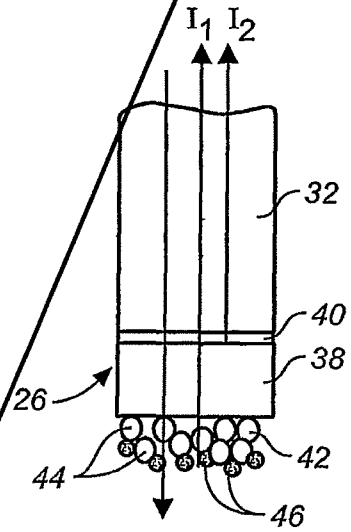


FIG. 2

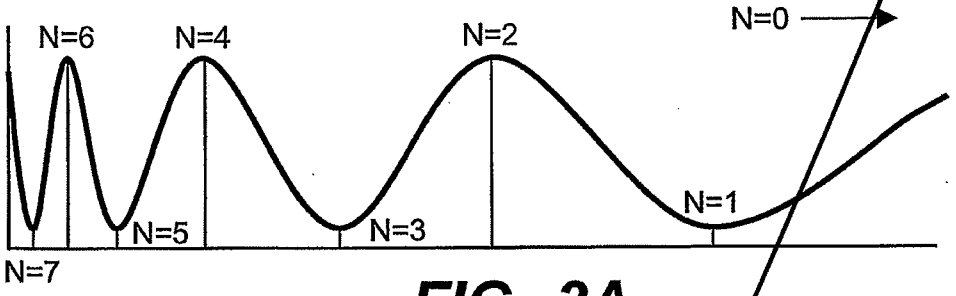


FIG. _3A

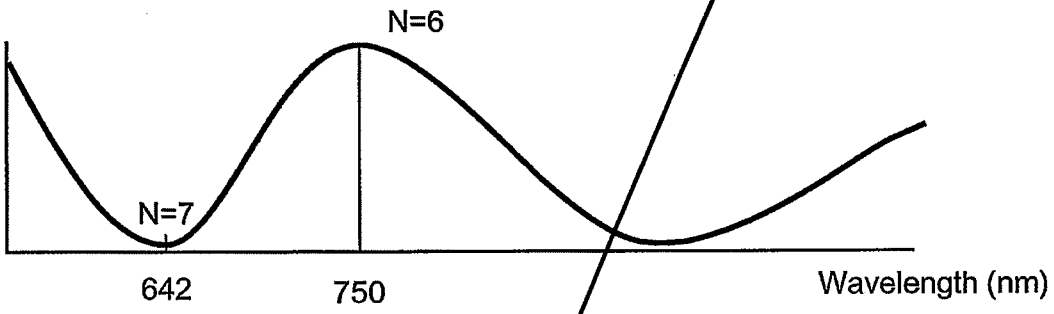


FIG. _3B

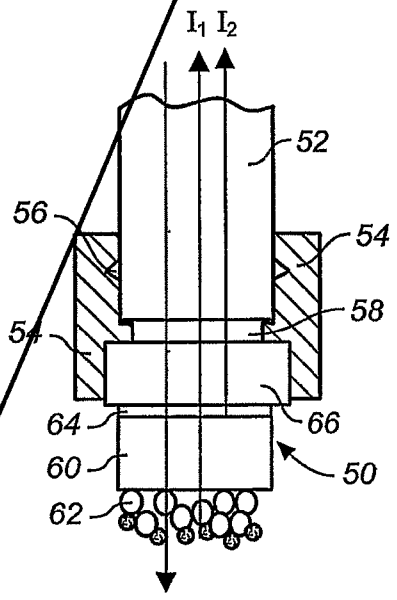


FIG. _4

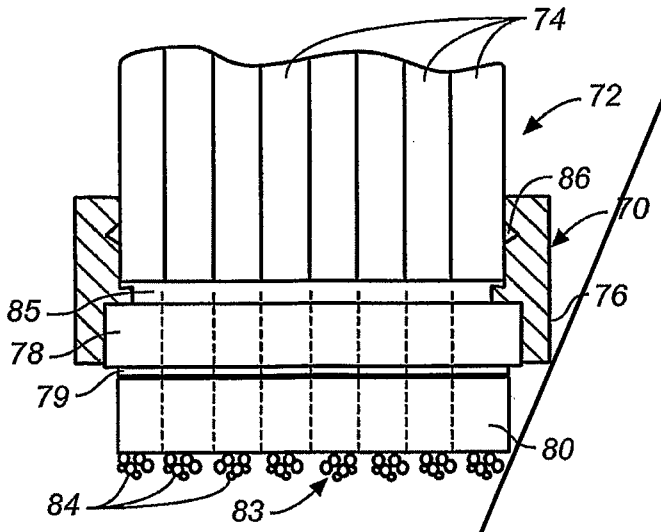

74
72
86
70
76
85
78
79
80
84
83

FIG. _5

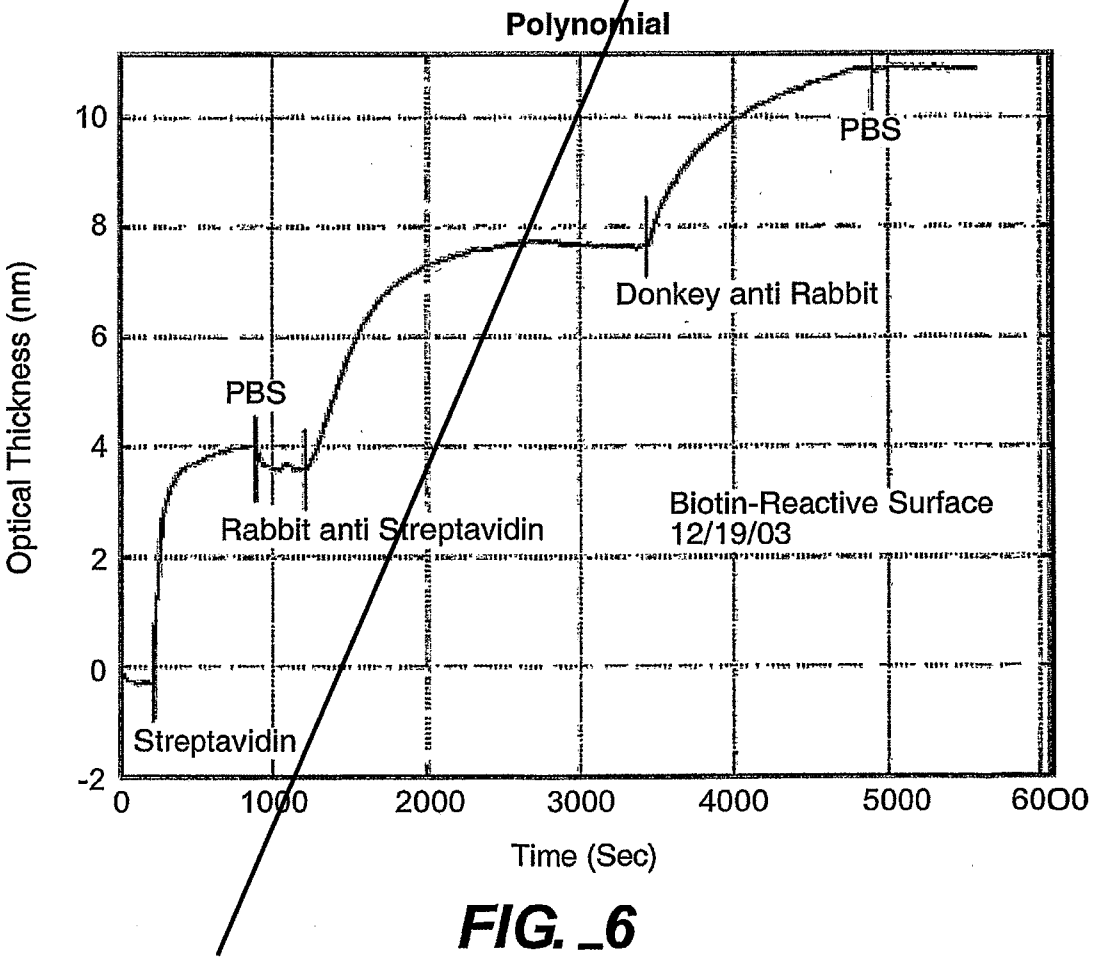

Polynomial
Optical Thickness (nm)
10
8
6
4
2
0
-2
0
1000
2000
3000
4000
5000
6000
Time (Sec)
PBS
Donkey anti Rabbit
PBS
Rabbit anti Streptavidin
Biotin-Reactive Surface
12/19/03
Streptavidin

FIG. _6

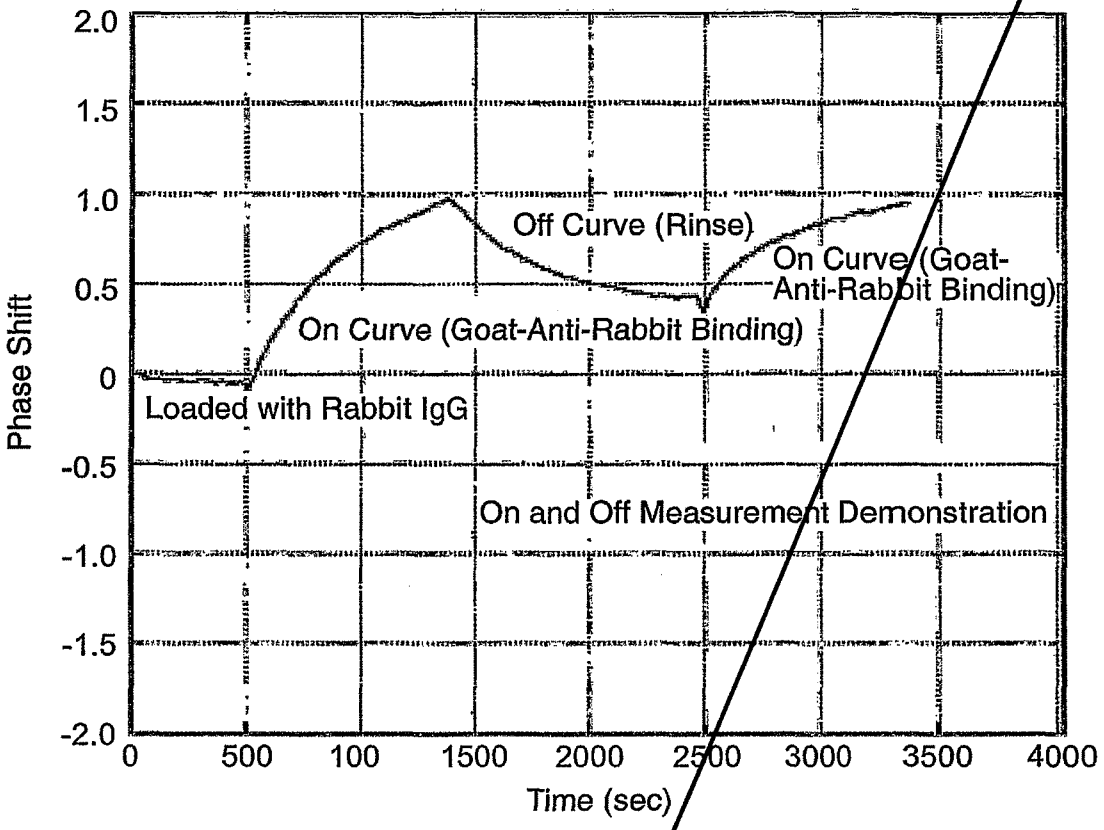

Phase Shift
2.0
1.5
1.0
0.5
0
-0.5
-1.0
-1.5
-2.0
0
500
100
1500
2000
2500
3000
3500
4000
Time (sec)
Off Curve (Rinse)
On Curve (Goat-Anti-Rabbit Binding)
On Curve (Goat-Anti-Rabbit Binding)
Loaded with Rabbit IgG
On and Off Measurement Demonstration

FIG. _7

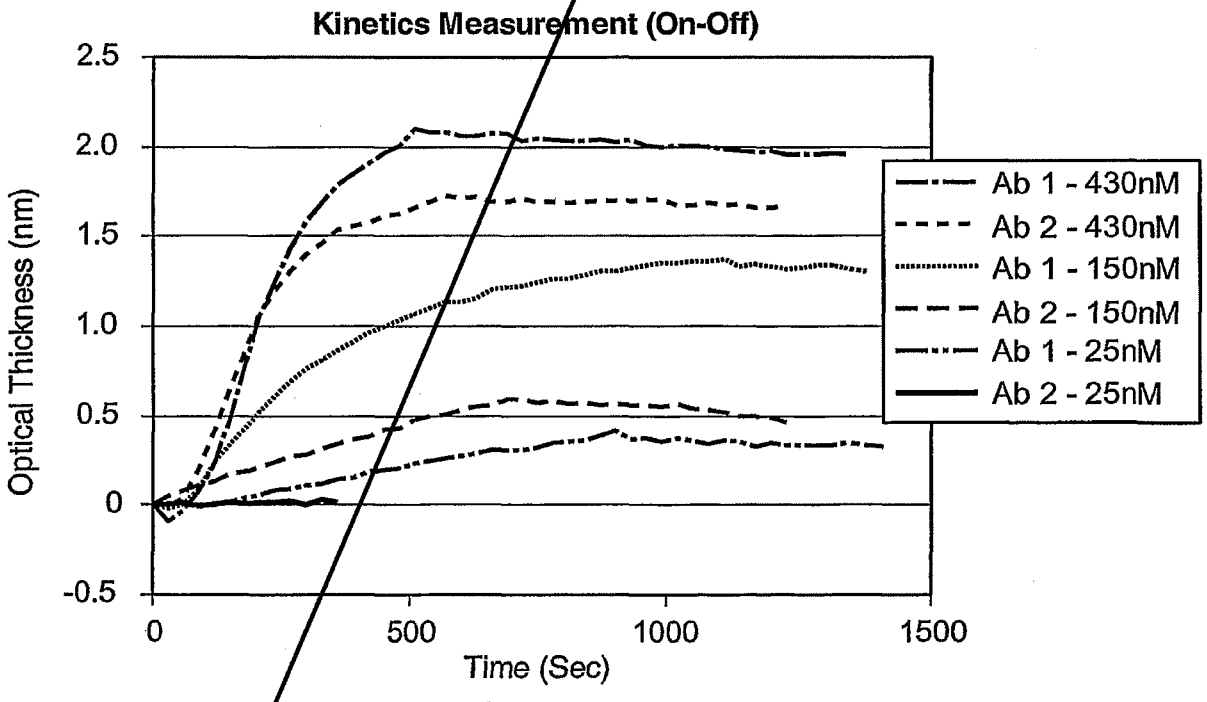

Kinetics Measurement (On-Off)
Optical Thickness (nm)
2.5
2.0
1.5
1.0
0.5
0
-0.5
0
500
1000
1500
Time (Sec)
Ab 1 - 430nM
Ab 2 - 430nM
Ab 1 - 150nM
Ab 2 - 150nM
Ab 1 - 25nM
Ab 2 - 25nM

FIG. _8

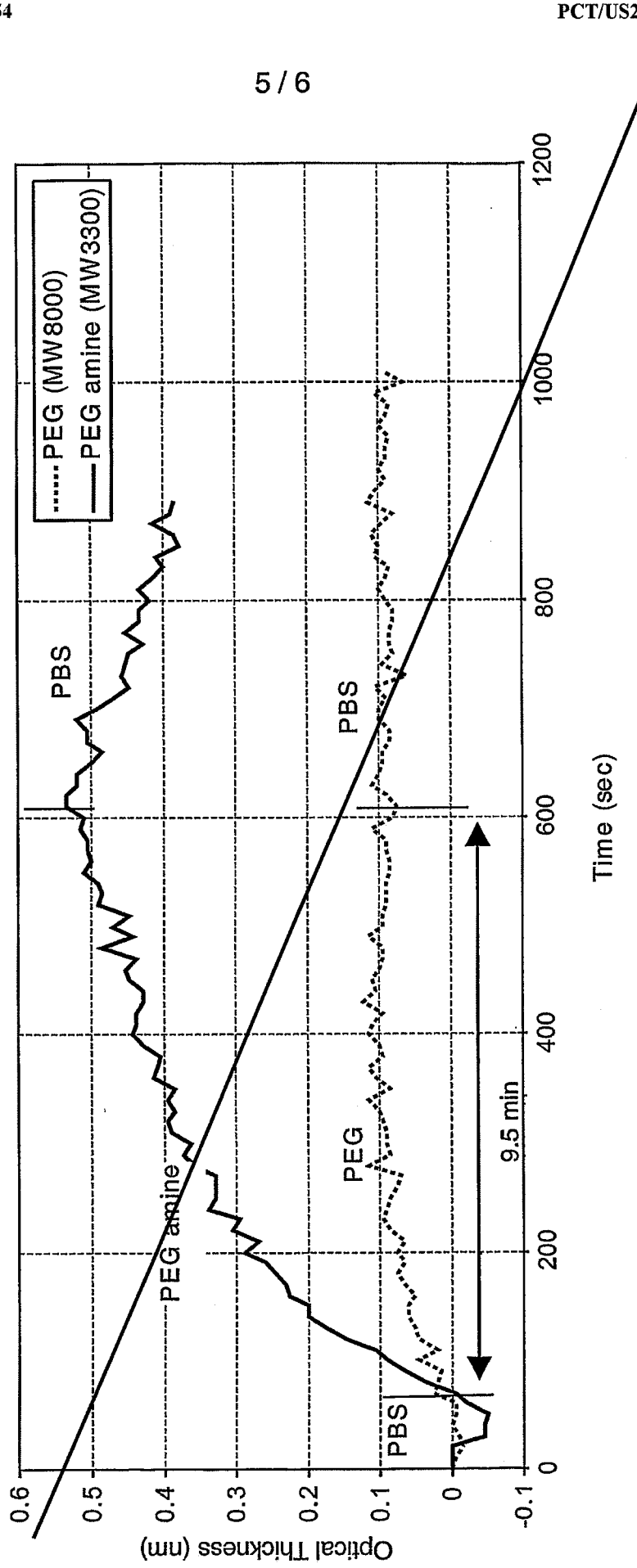

PEG (MW8000)
PEG amine (MW3300)
PBS
PBS
PEG amine
PEG
PBS
9.5 min
Optical Thickness (nm)
Time (sec)
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
0
200
400
600
800
1000
1200

FIG._9

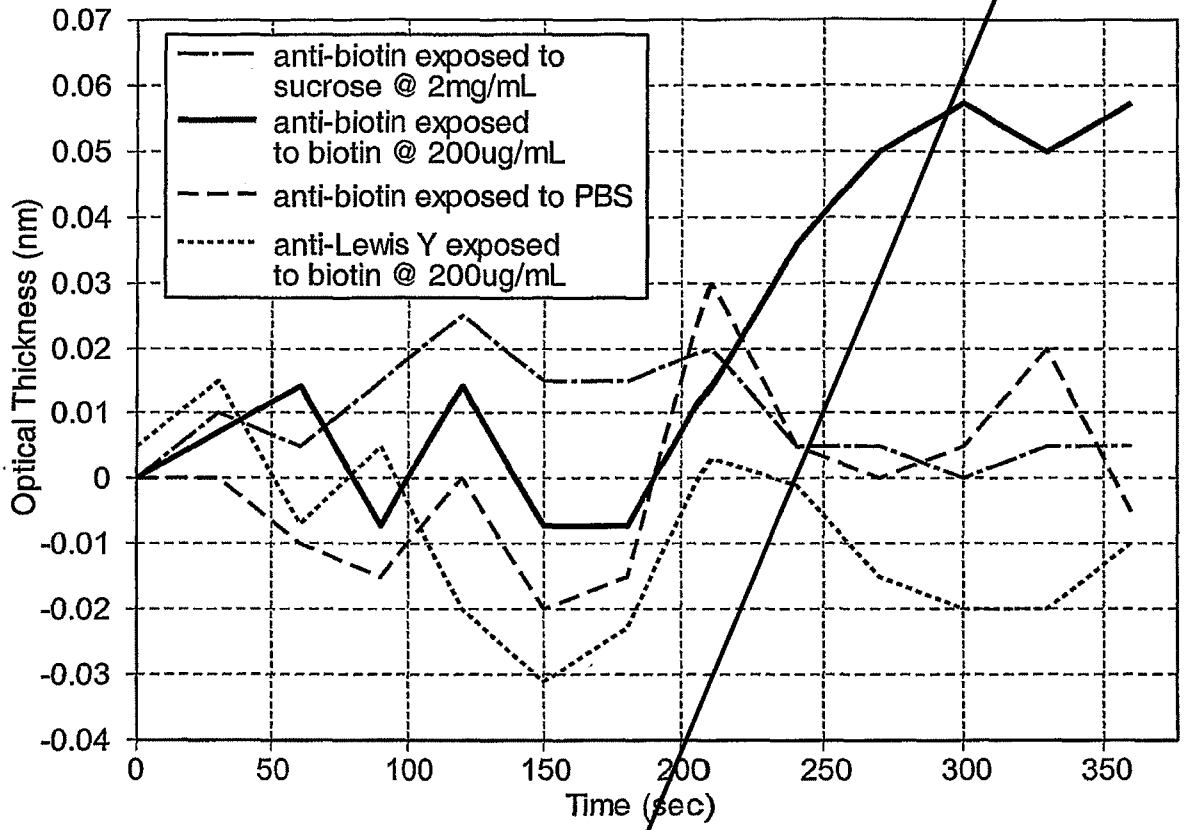

anti-biotin exposed to sucrose @ 2mg/mL
anti-biotin exposed to biotin @ 200ug/mL
anti-biotin exposed to PBS
anti-Lewis Y exposed to biotin @ 200ug/mL
Optical Thickness (nm)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.01
-0.02
-0.03
-0.04
0
50
100
150
200
250
300
350
Time (sec)

FIG_10

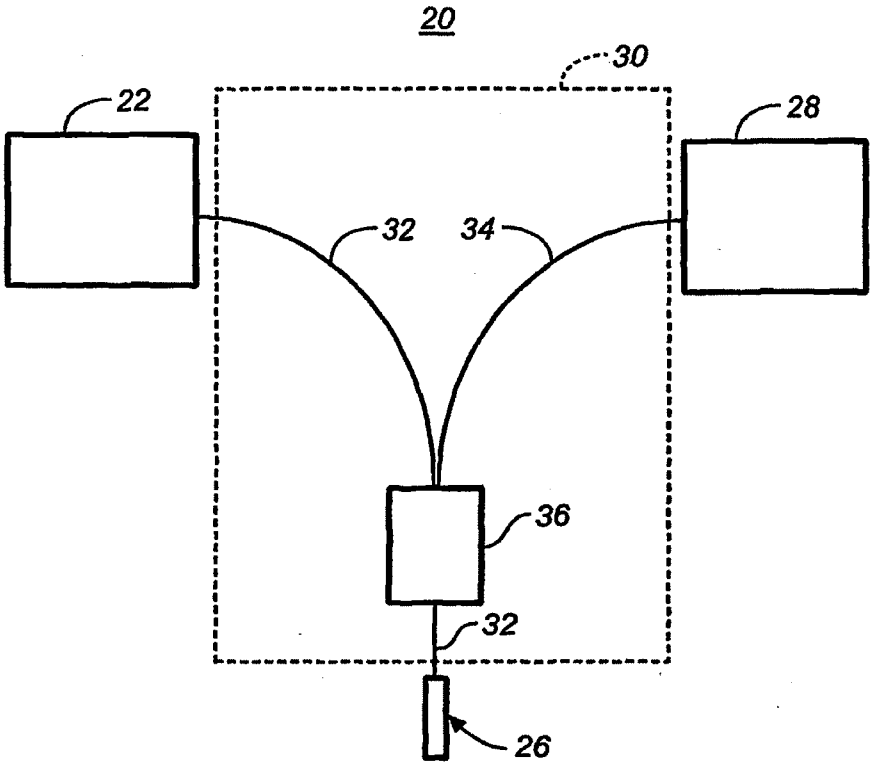


FIG._1

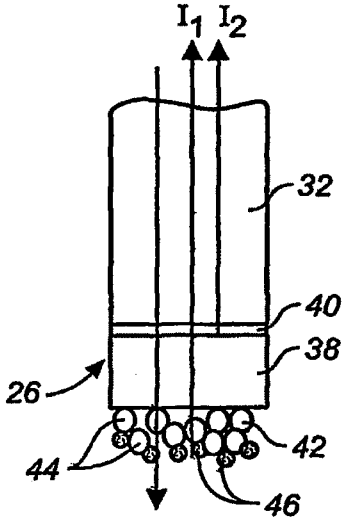


FIG._2

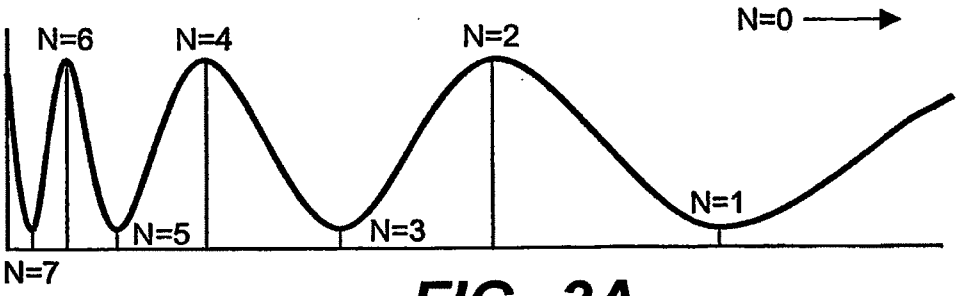


FIG._3A

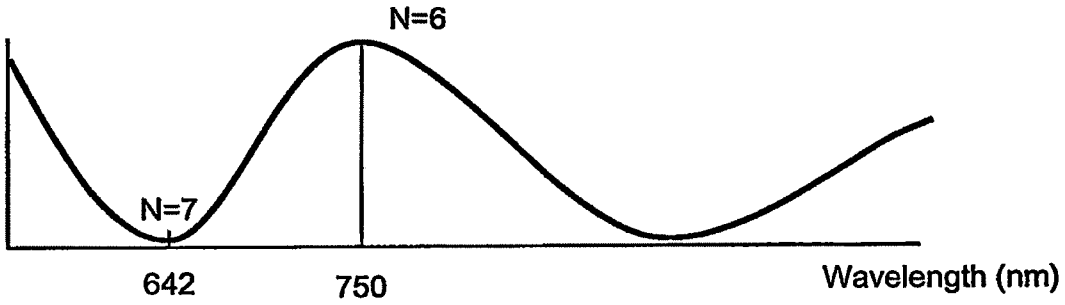


FIG._3B

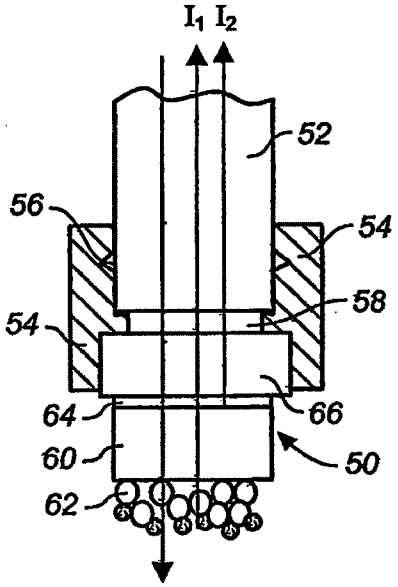


FIG._4

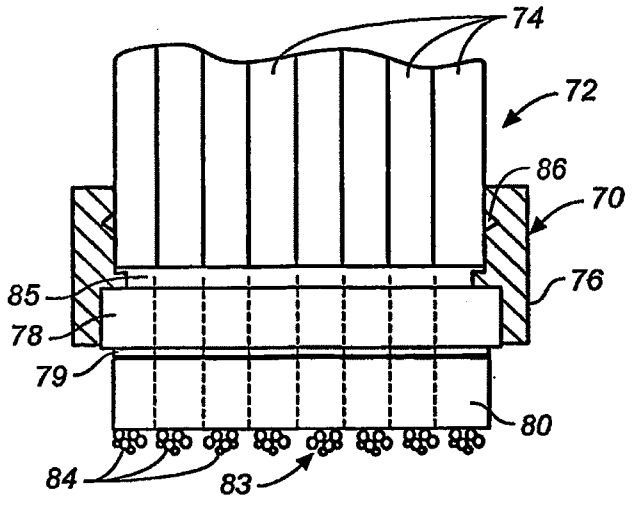

74
72
86
70
76
85
78
79
80
84
83

FIG._5

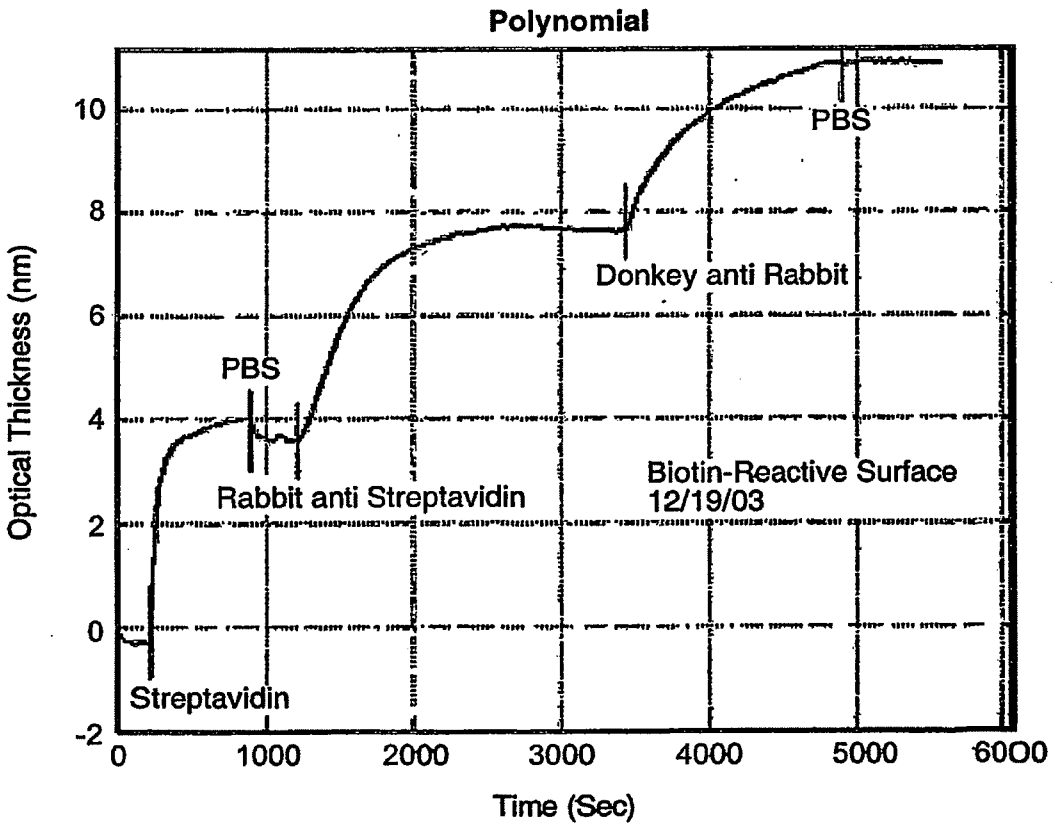

Polynomial
Optical Thickness (nm)
10
8
6
4
2
0
-2
0
1000
2000
3000
4000
5000
6000
Time (Sec)
PBS
Rabbit anti Streptavidin
Donkey anti Rabbit
PBS
Biotin-Reactive Surface
12/19/03
Streptavidin

FIG._6

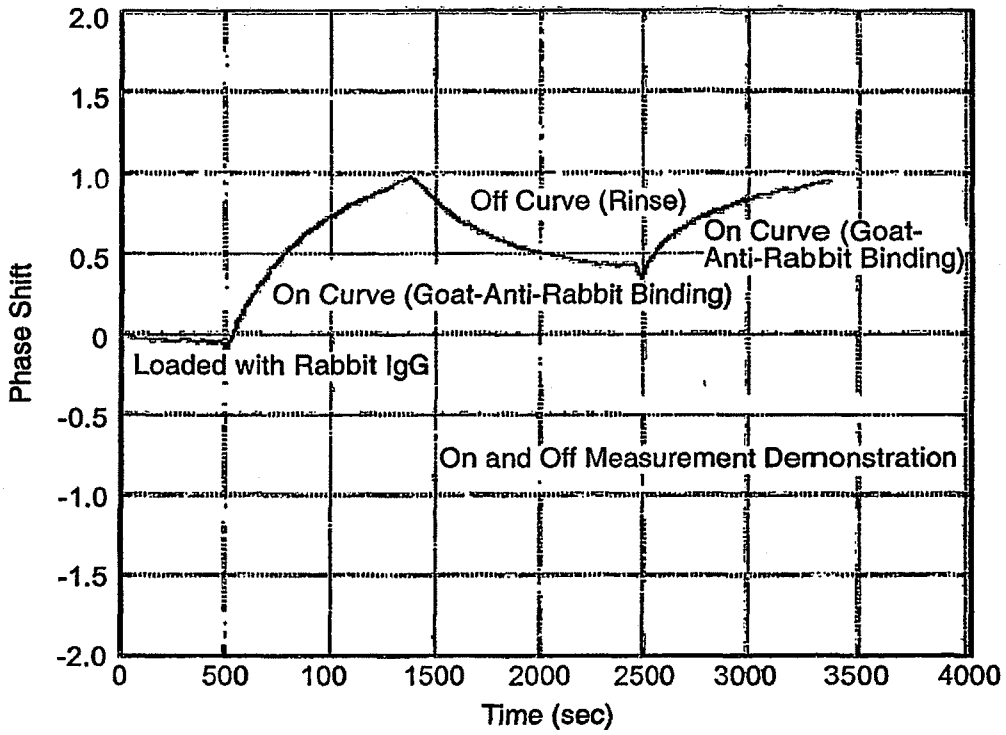

2.0
1.5
1.0
0.5
0
-0.5
-1.0
-1.5
-2.0
Phase Shift
0
500
100
1500
2000
2500
3000
3500
4000
Time (sec)
Off Curve (Rinse)
On Curve (Goat-Anti-Rabbit Binding)
On Curve (Goat-Anti-Rabbit Binding)
Loaded with Rabbit IgG
On and Off Measurement Demonstration

FIG. _7

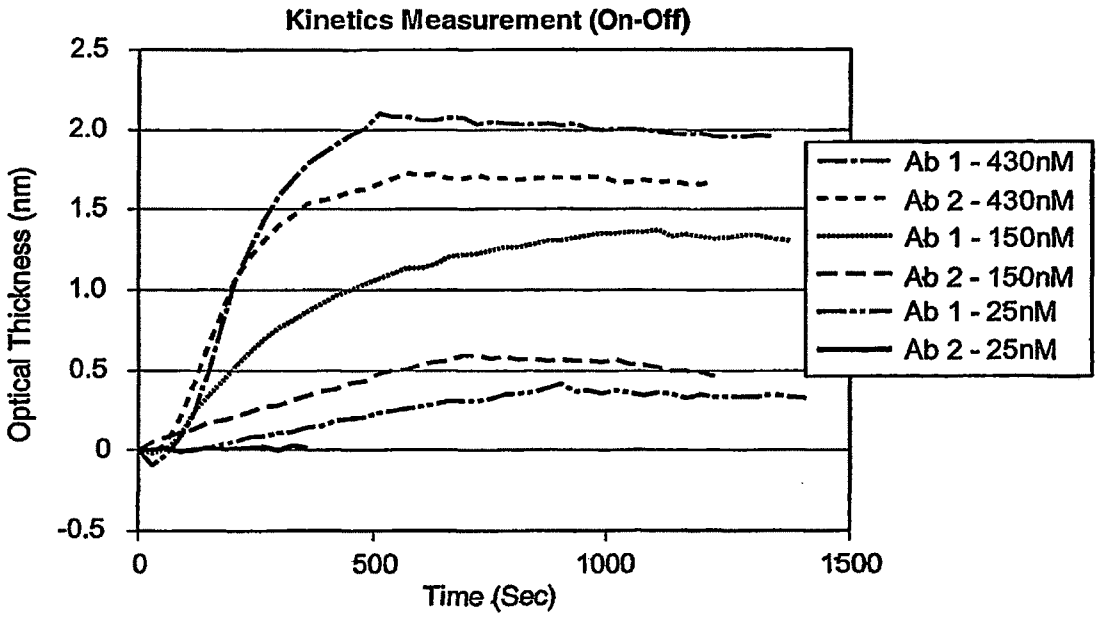

Kinetics Measurement (On-Off)
2.5
2.0
1.5
1.0
0.5
0
-0.5
Optical Thickness (nm)
0
500
1000
1500
Time (Sec)
Ab 1 - 430nM
Ab 2 - 430nM
Ab 1 - 150nM
Ab 2 - 150nM
Ab 1 - 25nM
Ab 2 - 25nM

FIG. _8

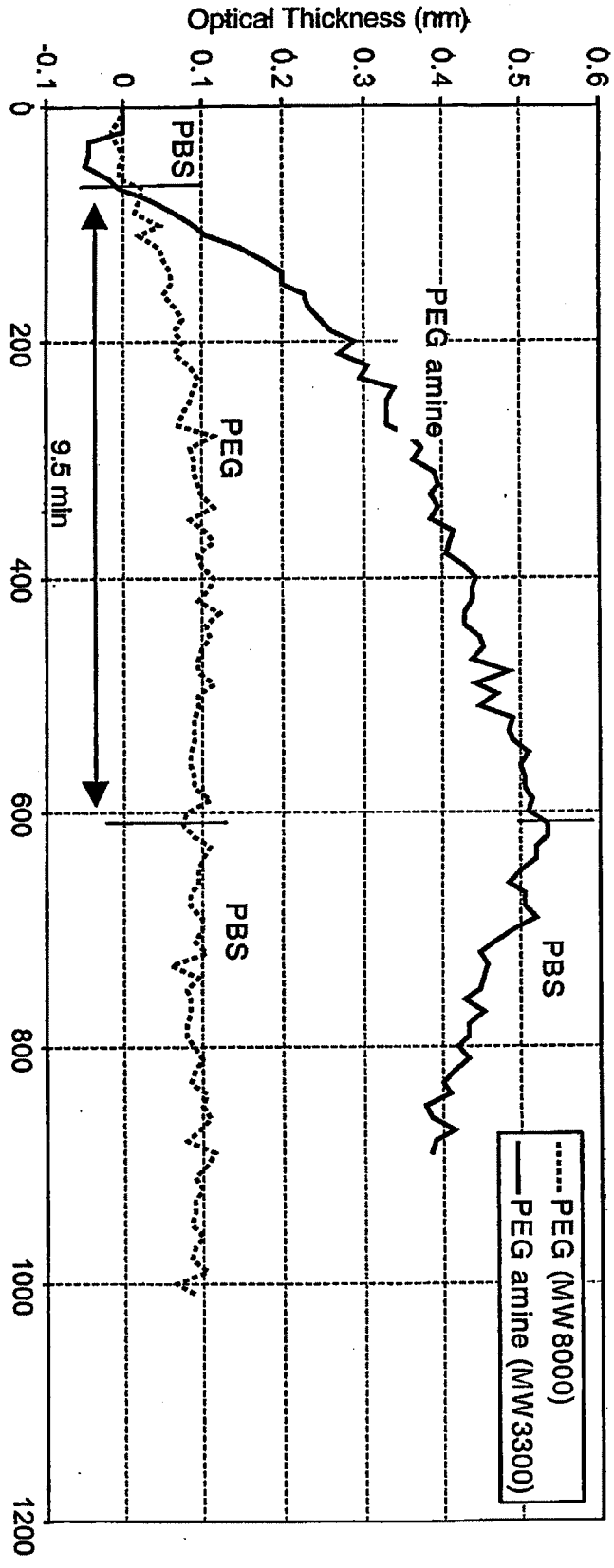

Optical Thickness (nm)
-0.1
0
0.1
0.2
0.3
0.4
0.5
0.6
0
200
400
600
800
1000
1200
Time (sec)
PBS
PEG amine
PEG
PBS
9.5 min
PEG (MW8000)
PEG amine (MW3300)

FIG._9

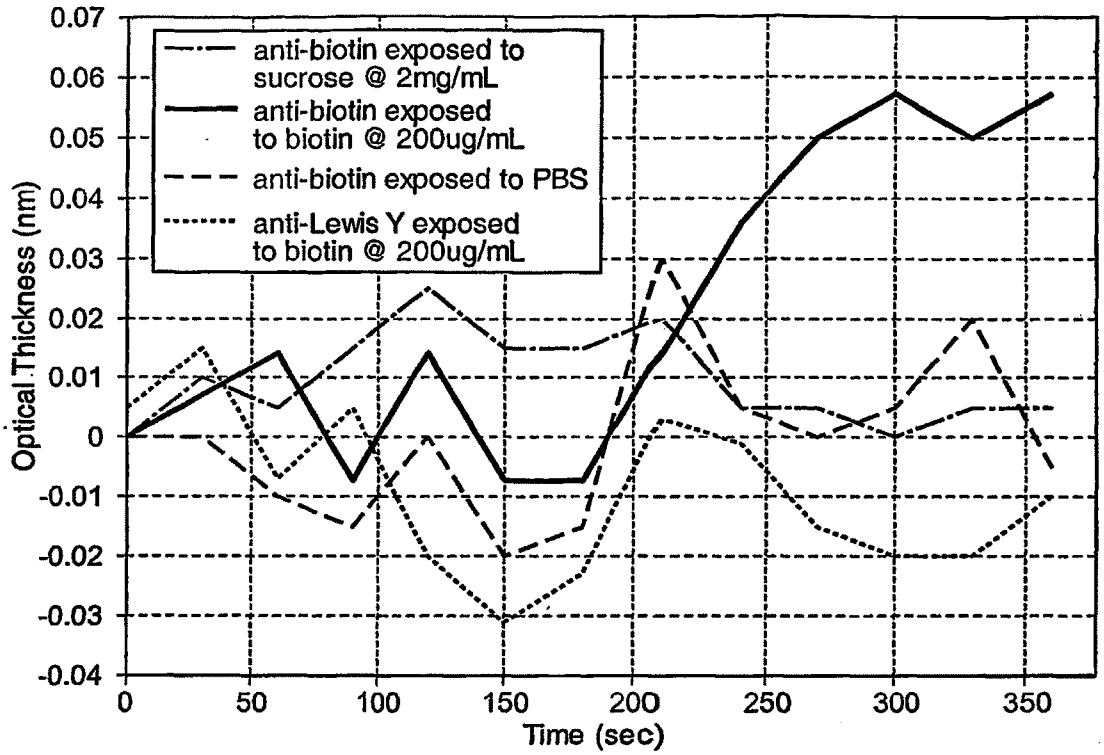

anti-biotin exposed to sucrose @ 2mg/mL
anti-biotin exposed to biotin @ 200ug/mL
anti-biotin exposed to PBS
anti-Lewis Y exposed to biotin @ 200ug/mL
Optical Thickness (nm)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
-0.01
-0.02
-0.03
-0.04
0
50
100
150
200
250
300
350
Time (sec)

FIG. 10