Fig. 1A

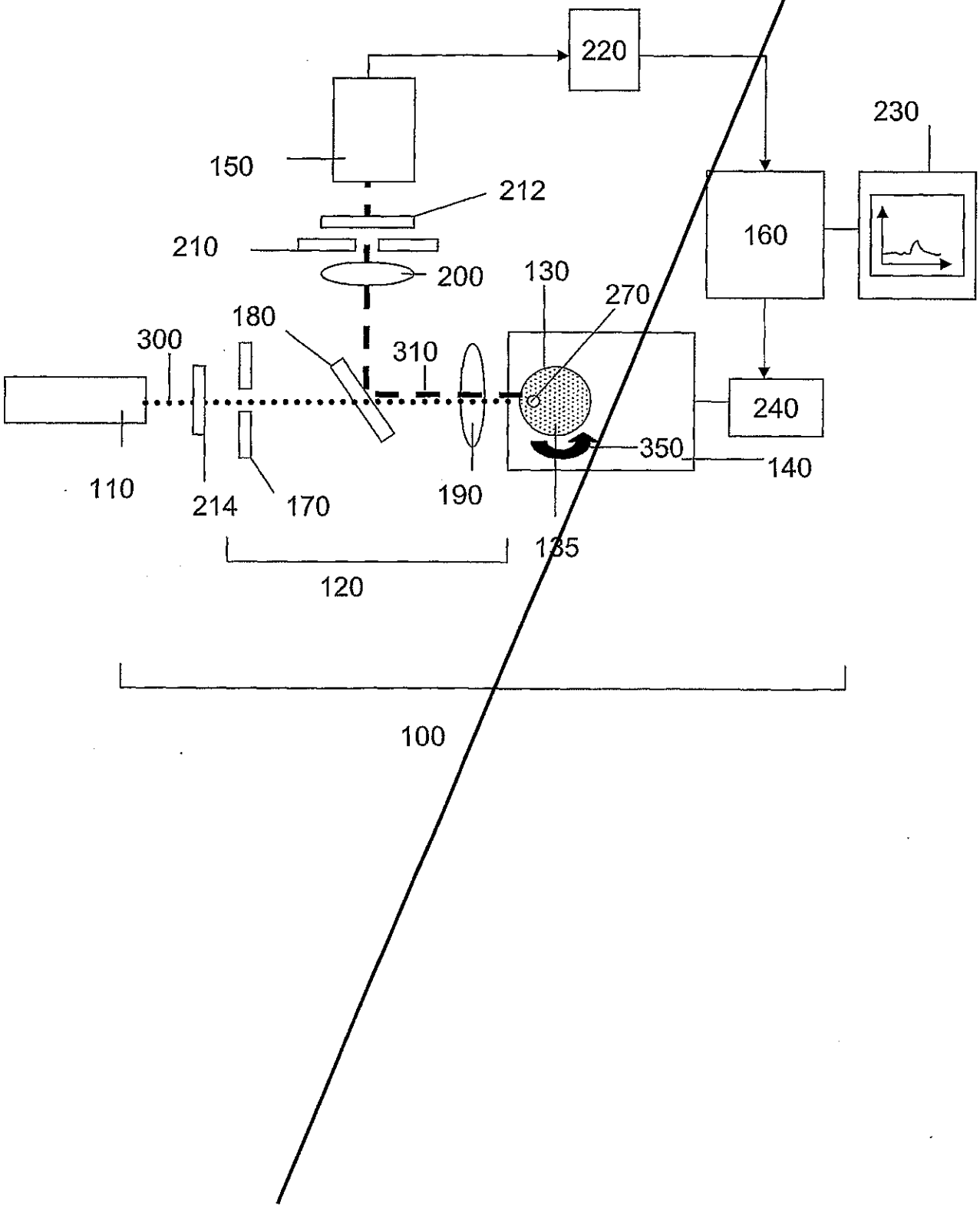

220
230
150
212
210
200
130
270
160
180
300
310
240
350
140
110
214
170
190
135
120
100

Fig. 1B

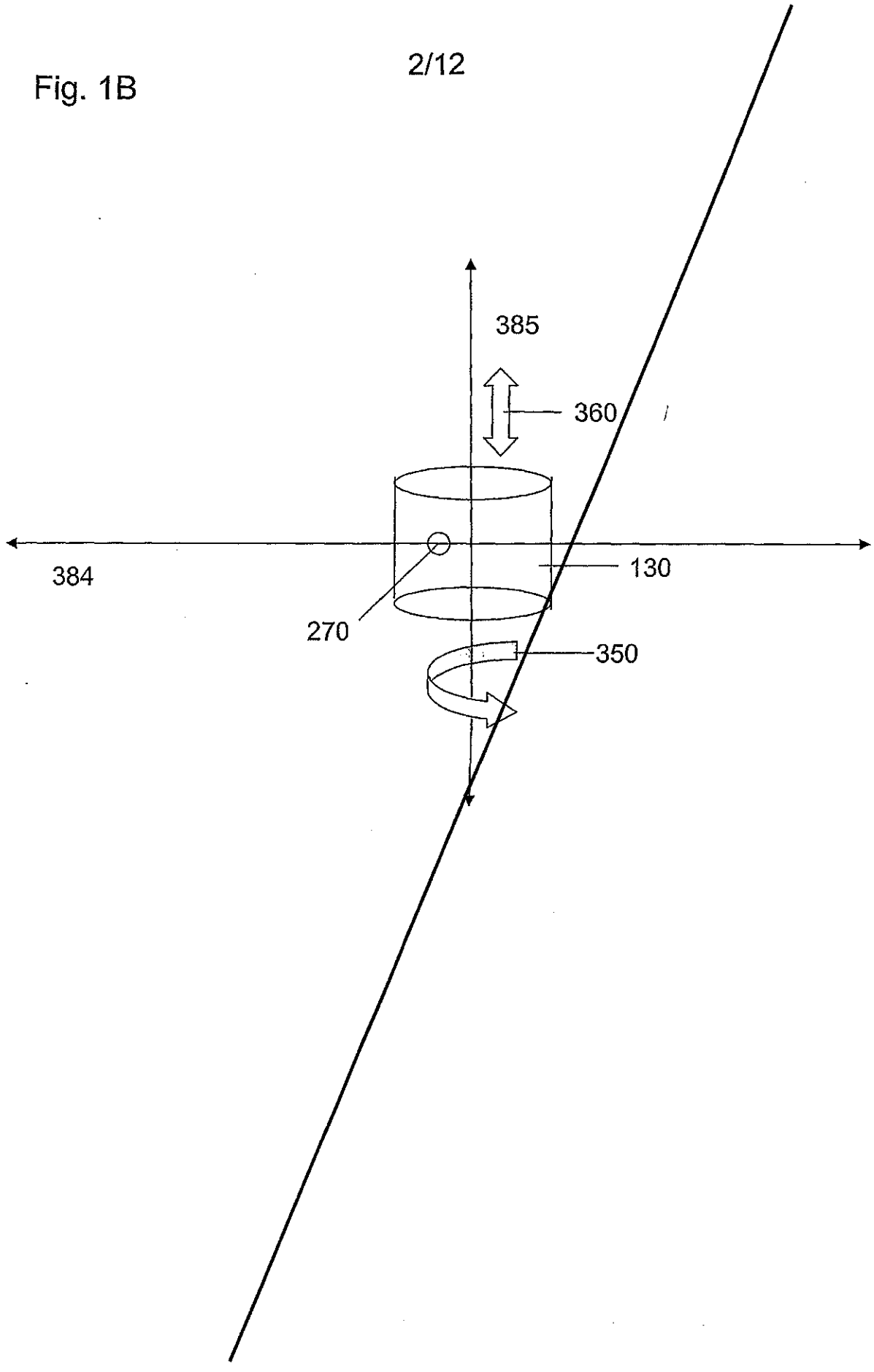


Fig. 2

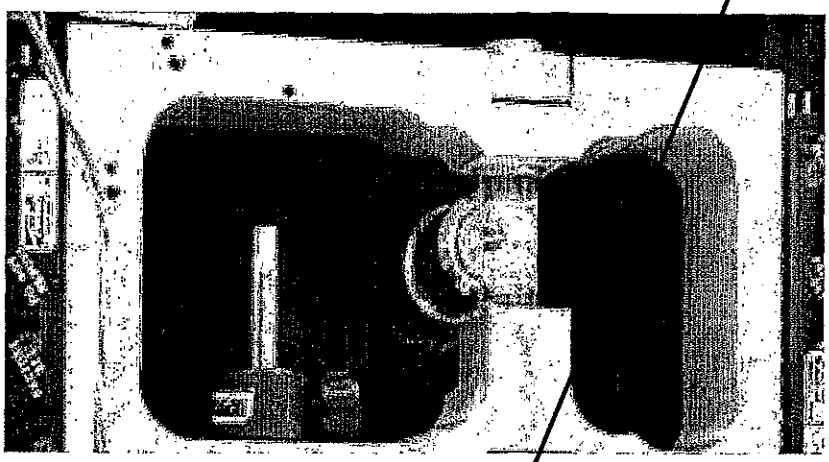


Fig. 3

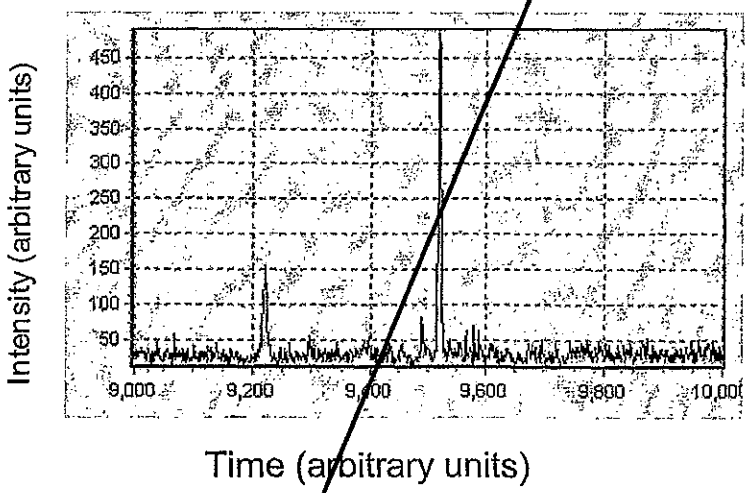

Intensity (arbitrary units)
450
400
350
300
250
200
150
100
50
9,000
9,200
9,400
9,600
9,800
10,000
Time (arbitrary units)

Fig. 4A

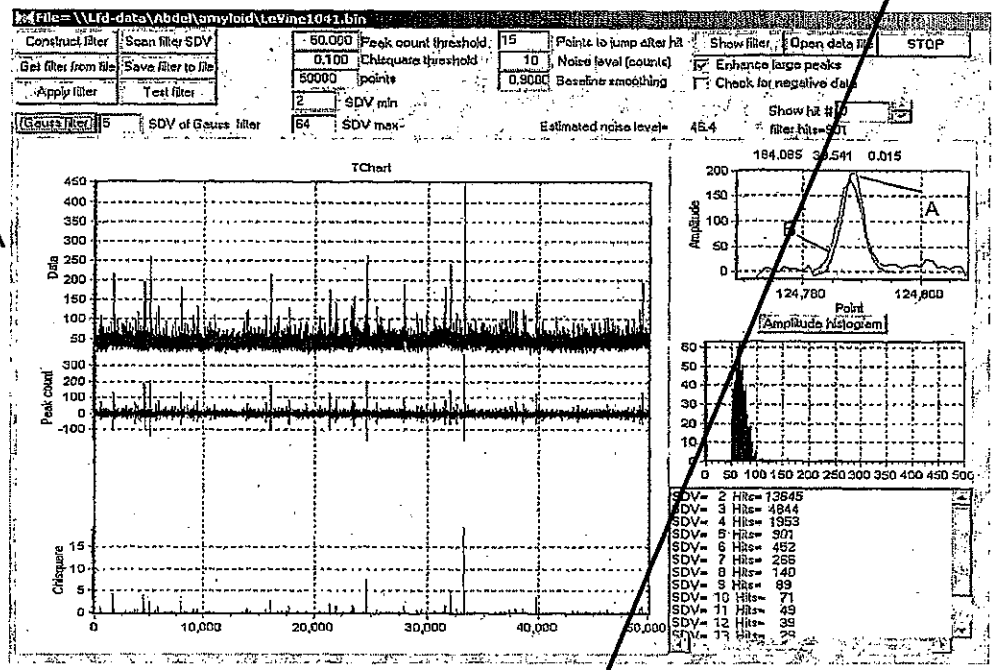


Fig. 4B

Fig. 4C

Fig. 4D

Fig. 5

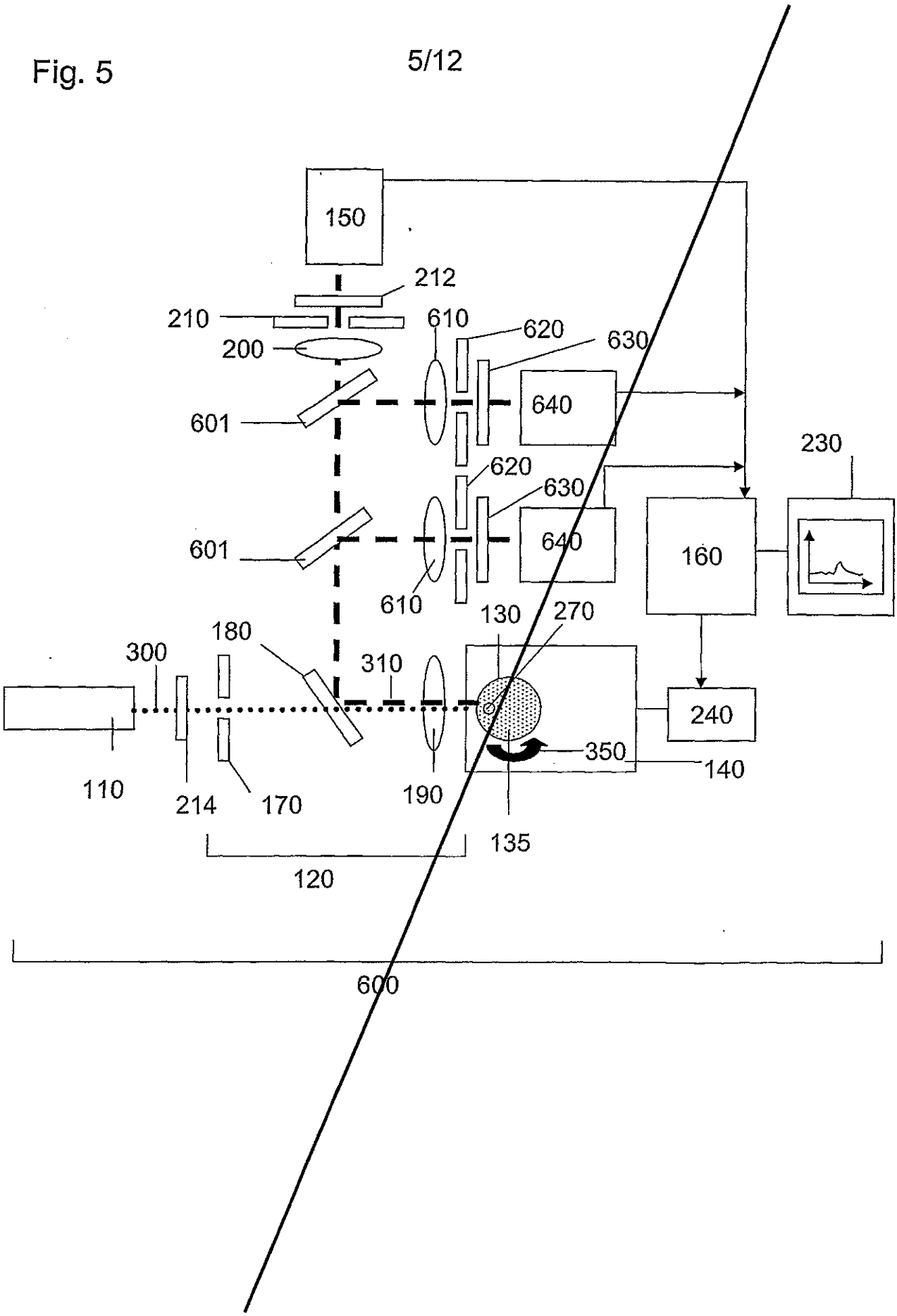

150
212
210
610
620
630
200
640
601
230
620
630
601
640
160
610
130
270
180
300
310
240
350
140
110
214
170
190
135
120
600

Fig. 6

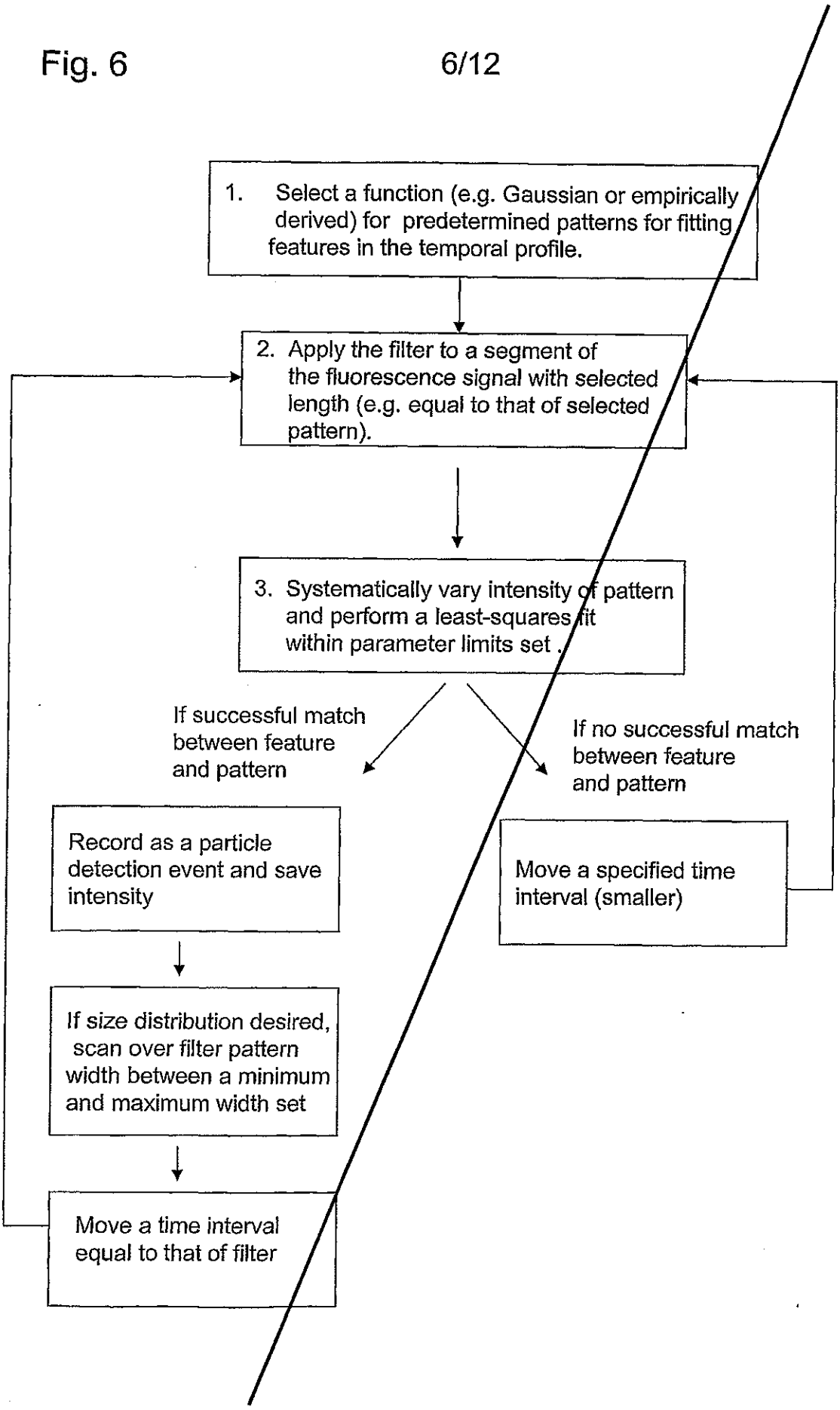

1. Select a function (e.g. Gaussian or empirically derived) for predetermined patterns for fitting features in the temporal profile.
2. Apply the filter to a segment of the fluorescence signal with selected length (e.g. equal to that of selected pattern).
3. Systematically vary intensity of pattern and perform a least-squares fit within parameter limits set .
If successful match between feature and pattern
If no successful match between feature and pattern
Record as a particle detection event and save intensity
Move a specified time interval (smaller)
If size distribution desired, scan over filter pattern width between a minimum and maximum width set
Move a time interval equal to that of filter

Fig. 7

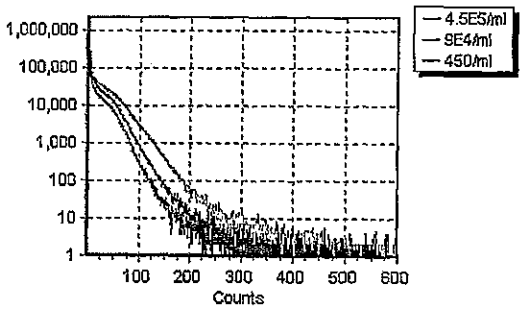

1,000,000
100,000
10,000
1,000
100
10
1
100
200
300
400
500
600
Counts
4.5E5/ml
9E4/ml
450/ml

Fig. 8

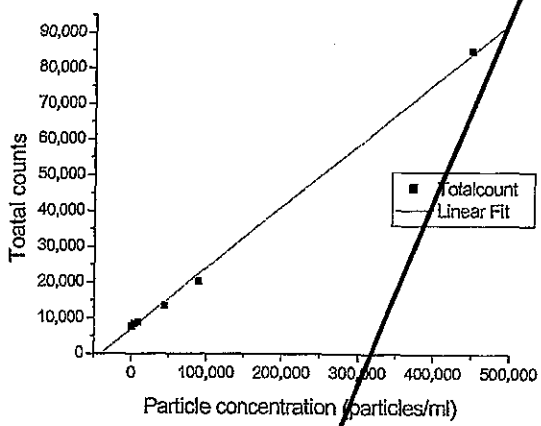

90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Toatal counts
0
100,000
200,000
300,000
400,000
500,000
Particle concentration (particles/ml)
Totalcount
Linear Fit

Fig. 9

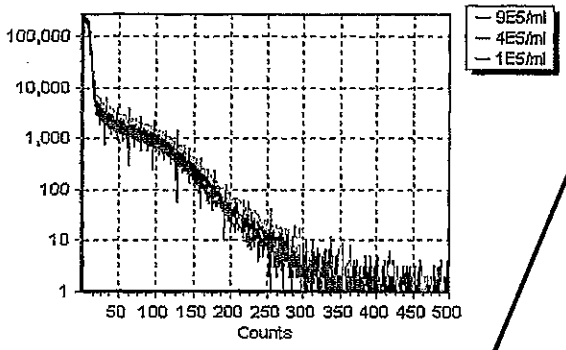

100,000
10,000
1,000
100
10
1
50 100 150 200 250 300 350 400 450 500
Counts
9E5/ml
4E5/ml
1E5/ml

Fig. 10

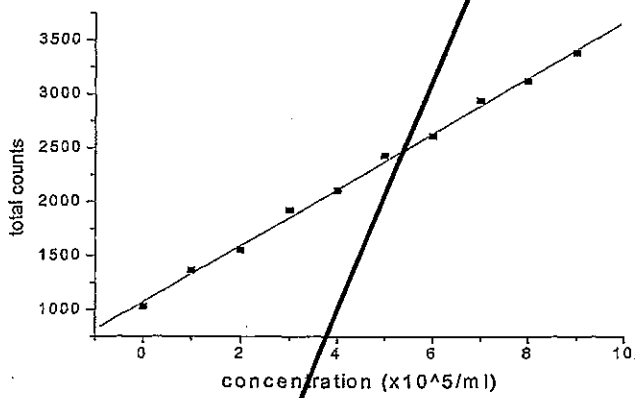

3500
3000
2500
2000
1500
1000
total counts
0 2 4 6 8 10
concentration (x10^5/ml)

Fig. 11

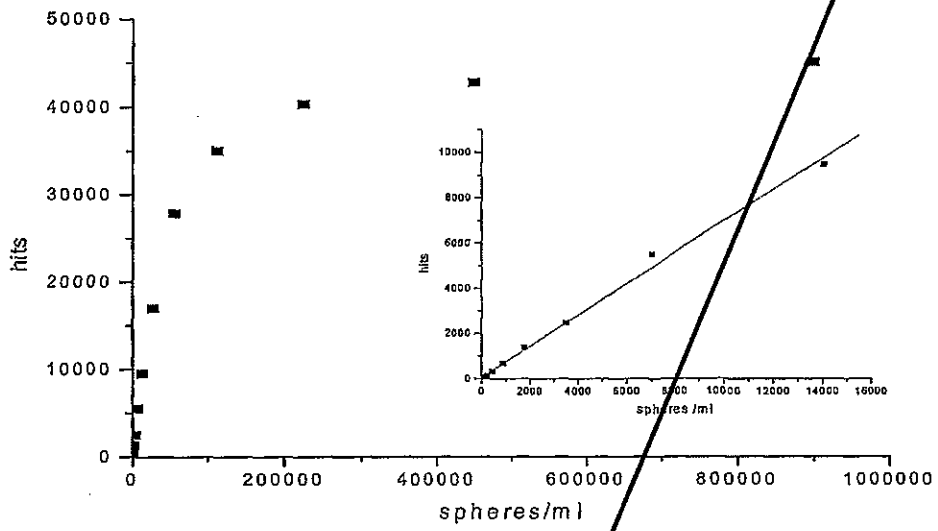

50000
40000
30000
20000
10000
0
hits
0
200000
400000
600000
800000
1000000
spheres/ml
10000
8000
6000
4000
2000
0
hits
0
2000
4000
6000
8000
10000
12000
14000
16000
spheres /ml

Fig. 12

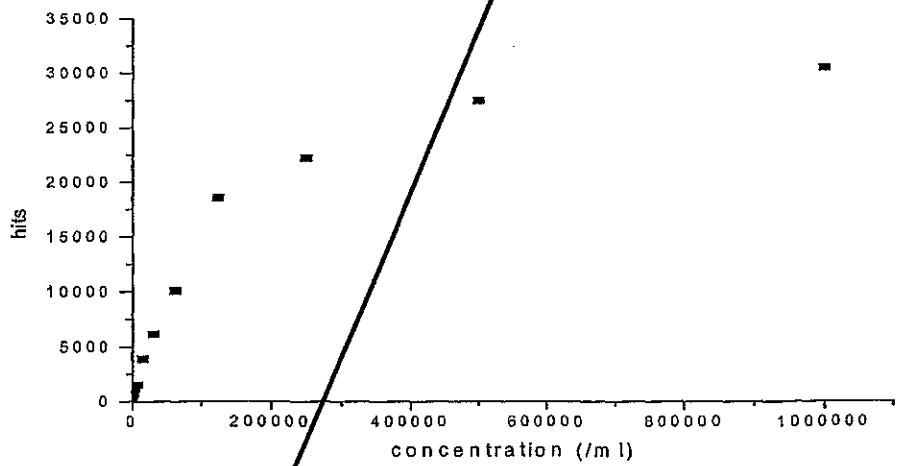

35000
30000
25000
20000
15000
10000
5000
0
hits
0
200000
400000
600000
800000
1000000
concentration (/ml)

Fig. 13

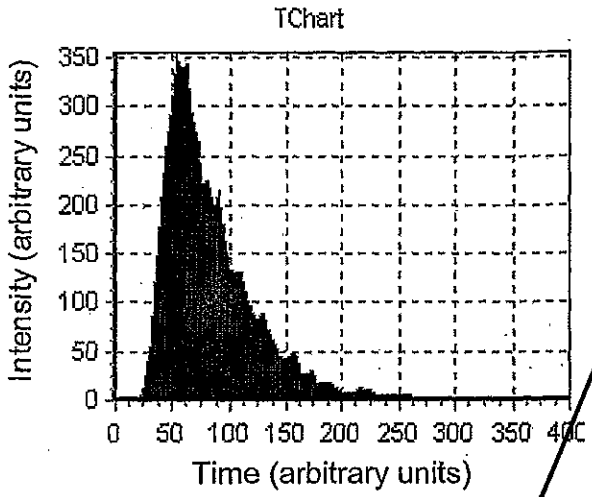


Figure 14A

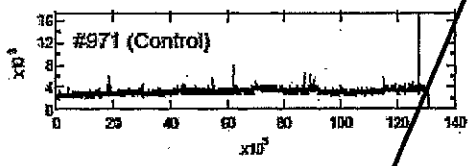


Figure 14B

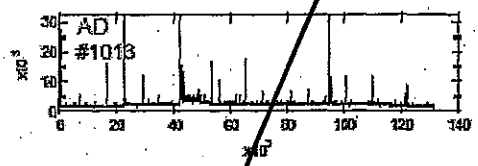


Figure 14C

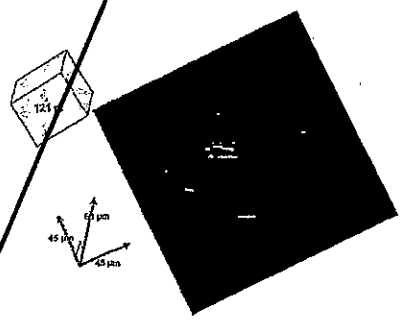


Fig. 15

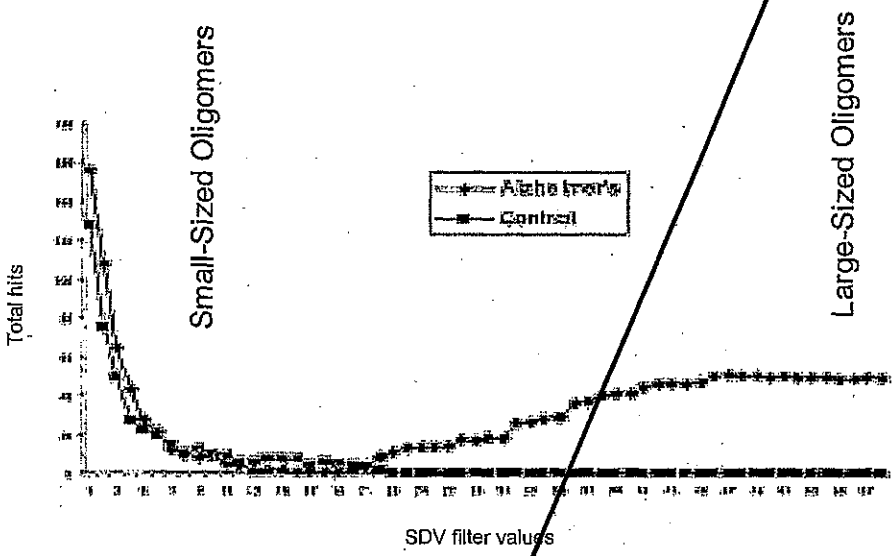

Small-Sized Oligomers
Large-Sized Oligomers
Alzheimer's
Control
Total hits
SDV filter values

Fig. 16A

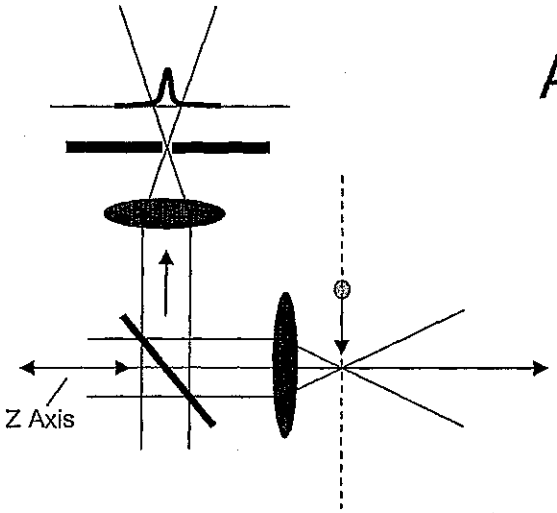
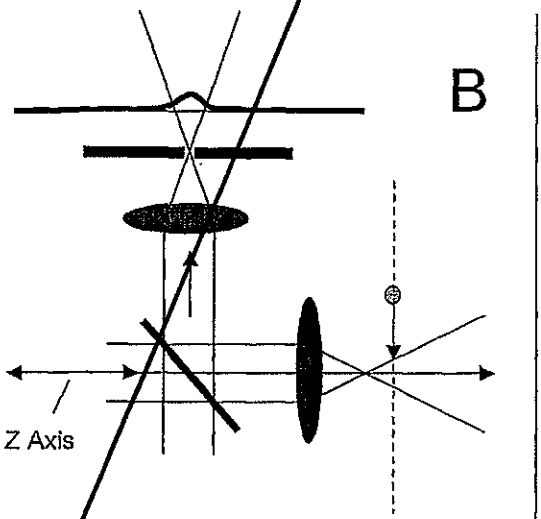


Fig. 16A



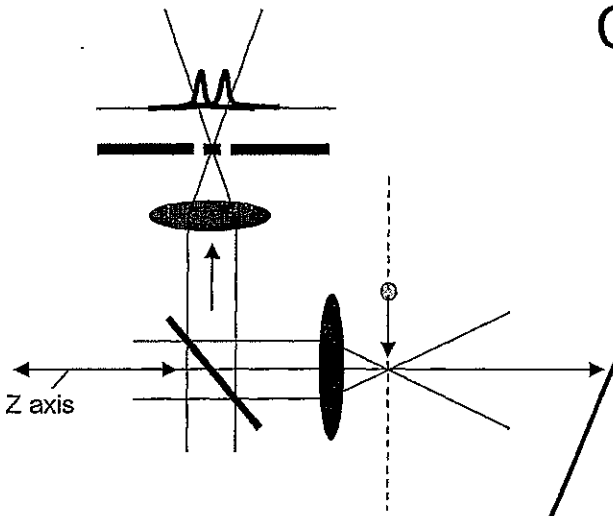


Fig. 16C

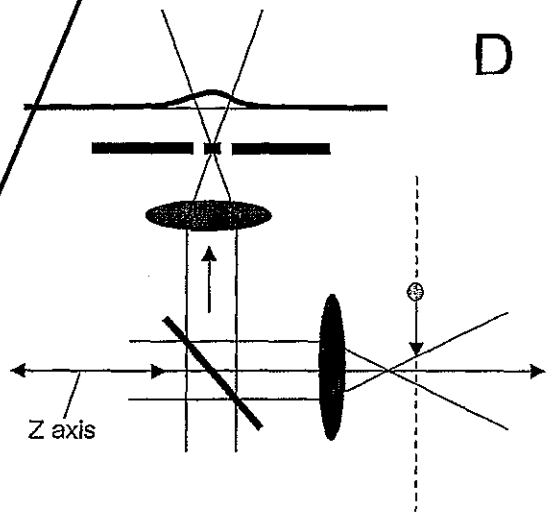


Fig. 16D

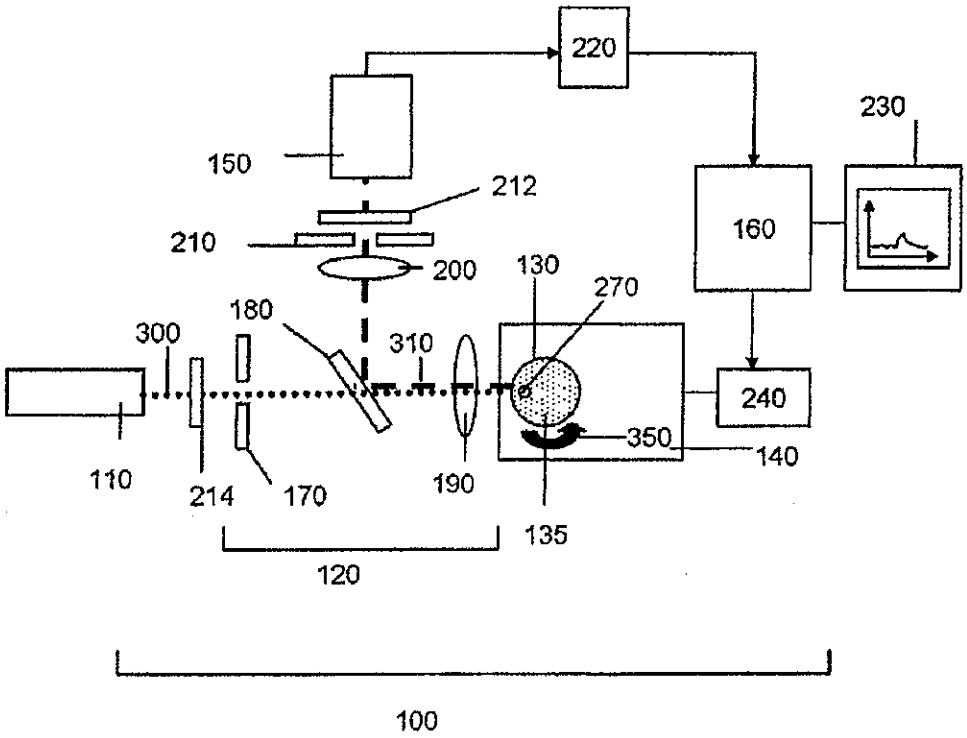

220
230
150
212
210
160
200
130
270
180
300
310
240
350
140
110
214
170
190
135
120
100

Fig. 1A

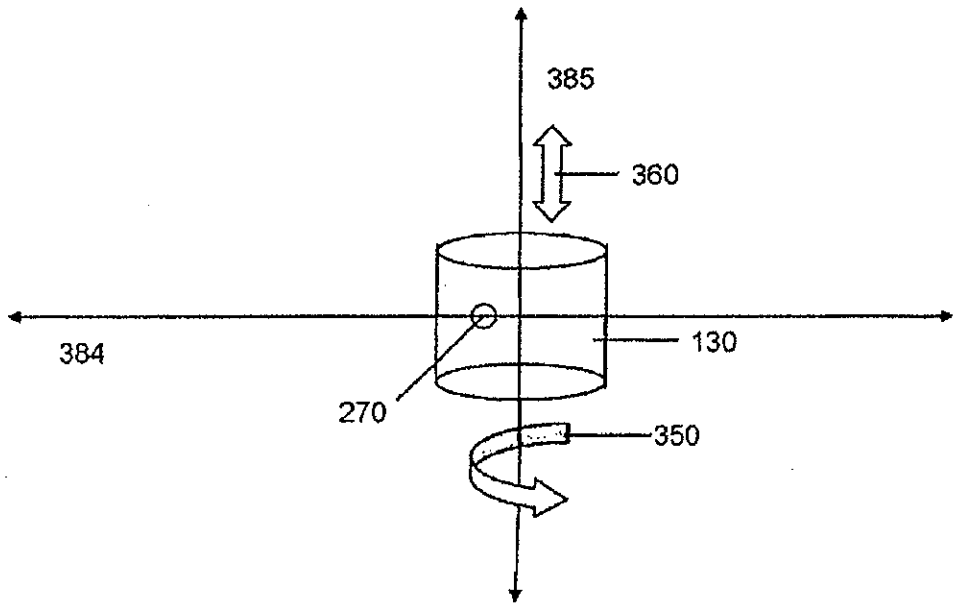


Fig. 1B

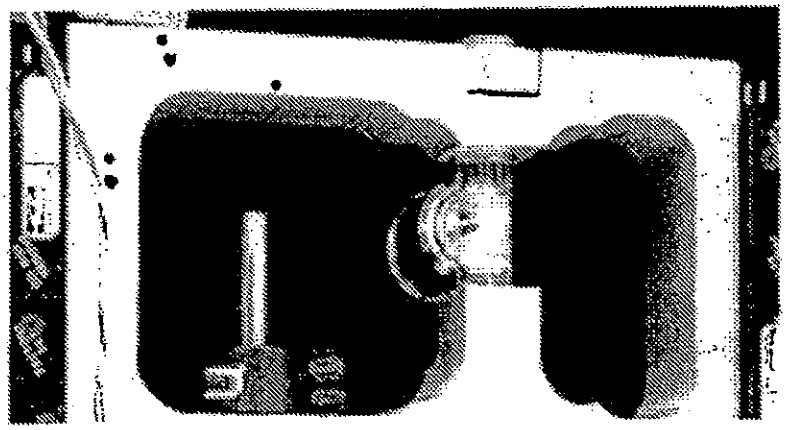


Fig. 2

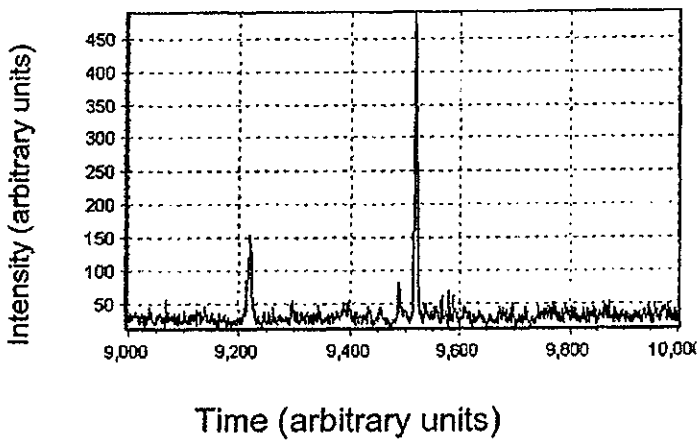

Intensity (arbitrary units)
450
400
350
300
250
200
150
100
50
9,000
9,200
9,400
9,600
9,800
10,000
Time (arbitrary units)

Fig. 3

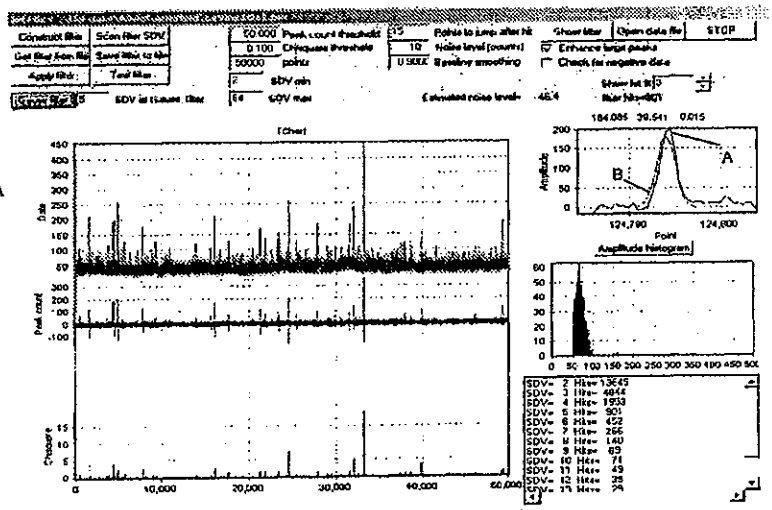


Fig. 4A

Fig. 4B

Fig. 4C

Fig. 4D

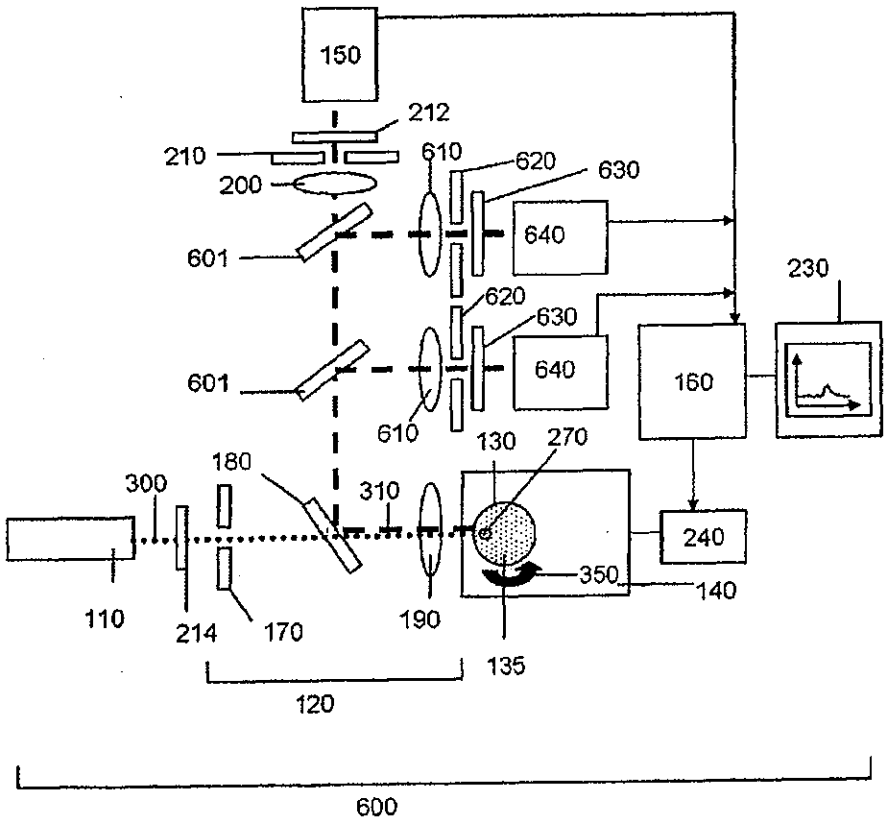

150
212
210
610
620
630
200
640
601
230
620
630
601
640
160
610
130
270
180
300
310
240
350
140
110
214
170
190
135
120
600

Fig. 5

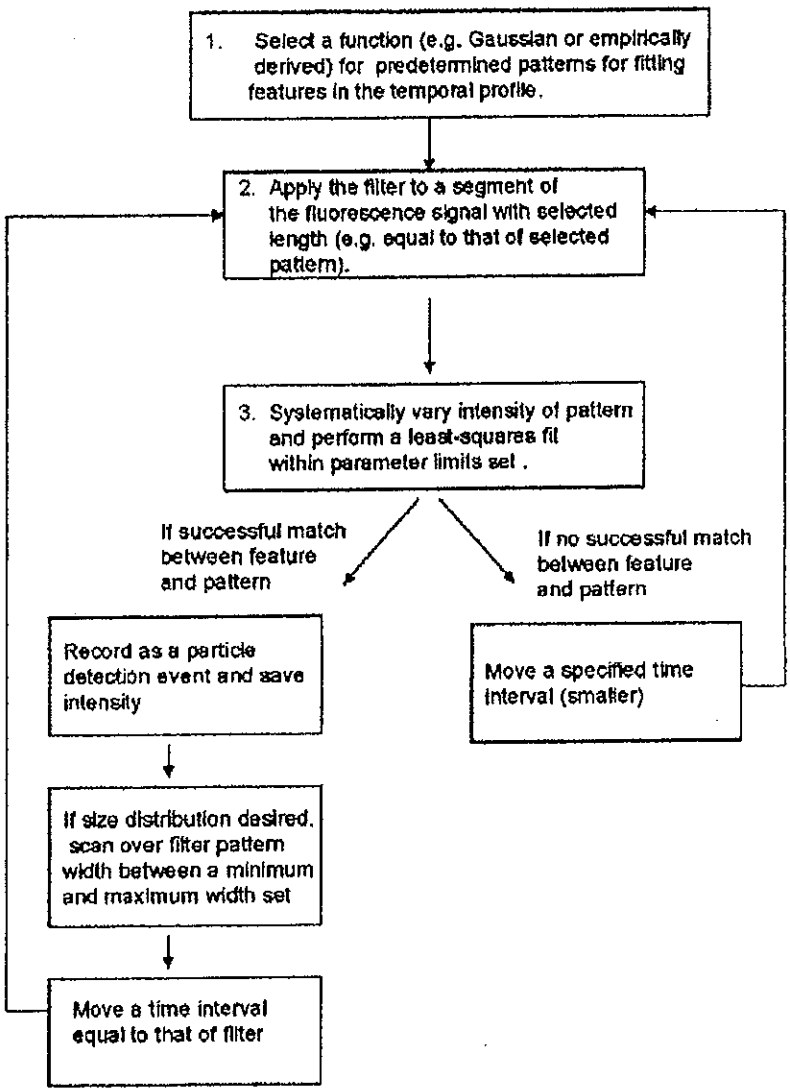

1. Select a function (e.g. Gaussian or empirically derived) for predetermined patterns for fitting features in the temporal profile.
2. Apply the filter to a segment of the fluorescence signal with selected length (e.g. equal to that of selected pattern).
3. Systematically vary intensity of pattern and perform a least-squares fit within parameter limits set .
If successful match between feature and pattern
If no successful match between feature and pattern
Record as a particle detection event and save intensity
Move a specified time interval (smaller)
If size distribution desired, scan over filter pattern width between a minimum and maximum width set
Move a time interval equal to that of filter

Fig. 6

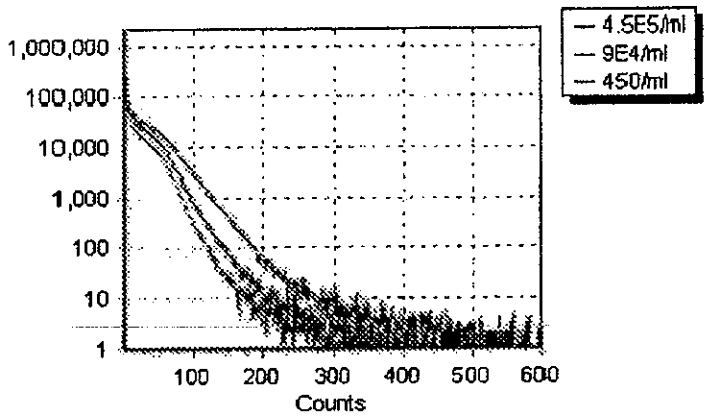

4.5E5/ml
9E4/ml
450/ml
1,000,000
100,000
10,000
1,000
100
10
1
100
200
300
400
500
600
Counts

Fig. 7

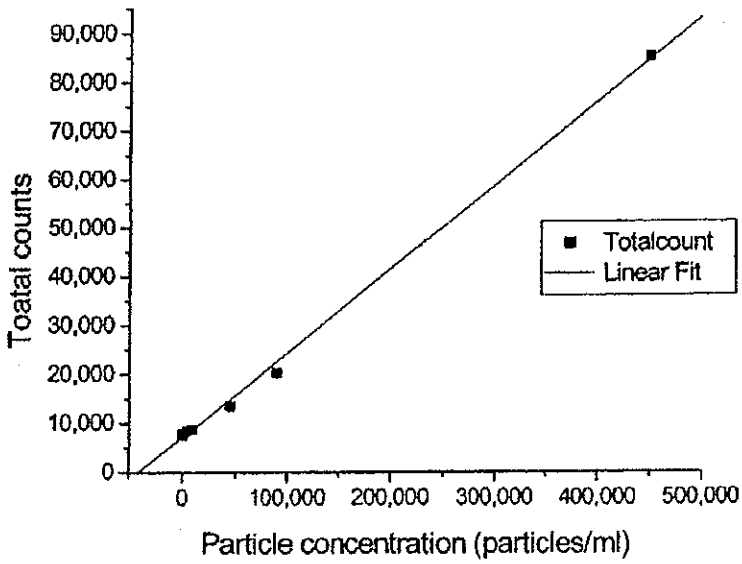

90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
0
Toatal counts
0
100,000
200,000
300,000
400,000
500,000
Particle concentration (particles/ml)
Totalcount
Linear Fit

Fig. 8

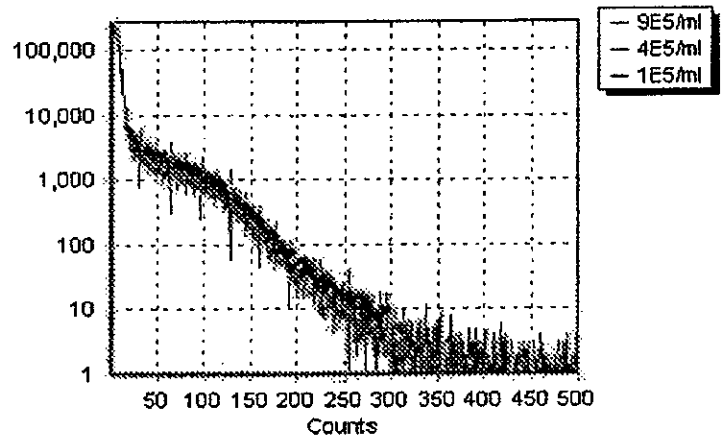

9E5/ml
4E5/ml
1E5/ml
100,000
10,000
1,000
100
10
1
50 100 150 200 250 300 350 400 450 500
Counts

Fig. 9

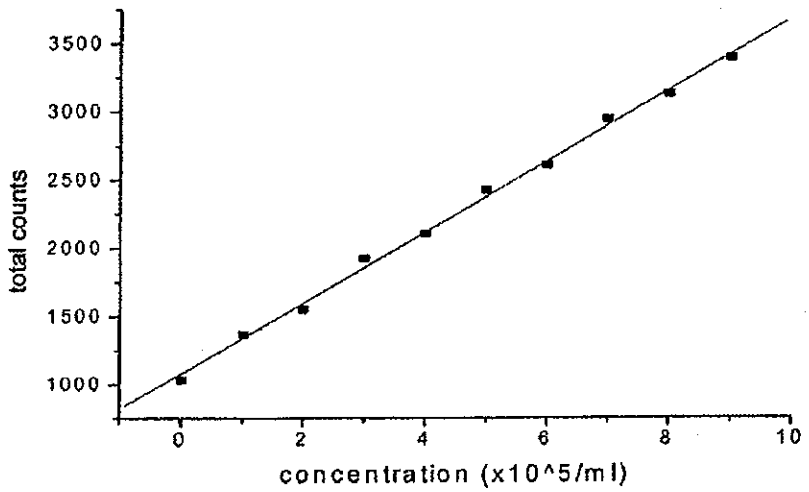

3500
3000
2500
2000
1500
1000
total counts
0
2
4
6
8
10
concentration (x10^5/ml)

Fig. 10

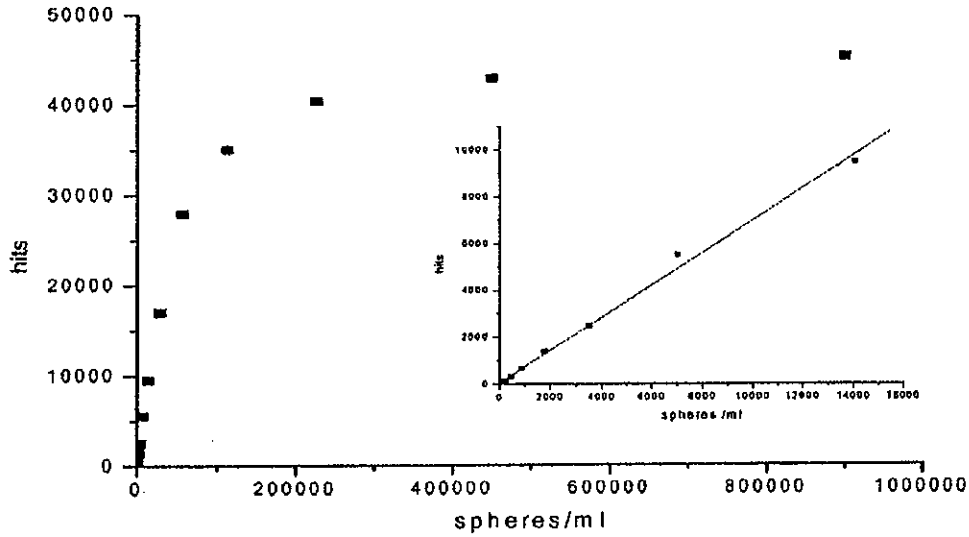

50000
40000
30000
20000
10000
0
hits
0
200000
400000
600000
800000
1000000
spheres/ml

Fig. 11

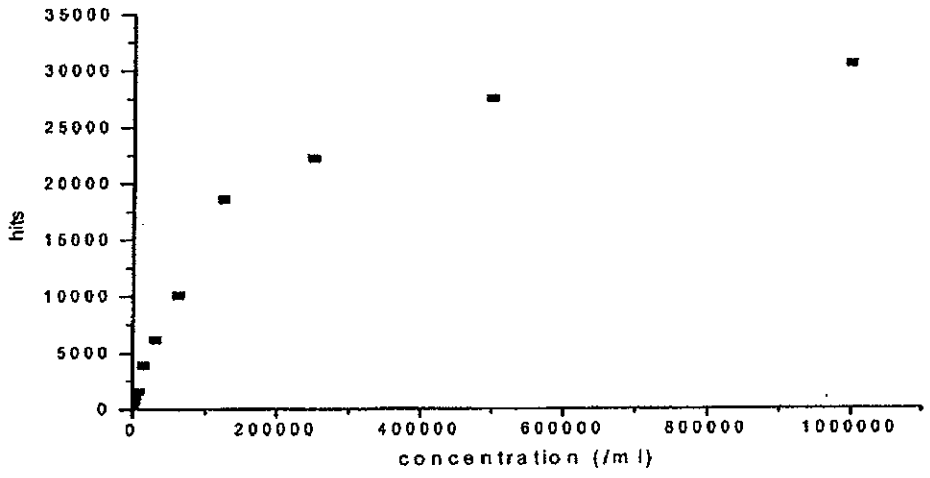

35000
30000
25000
20000
15000
10000
5000
0
hits
0
200000
400000
600000
800000
1000000
concentration (/ml)

Fig. 12

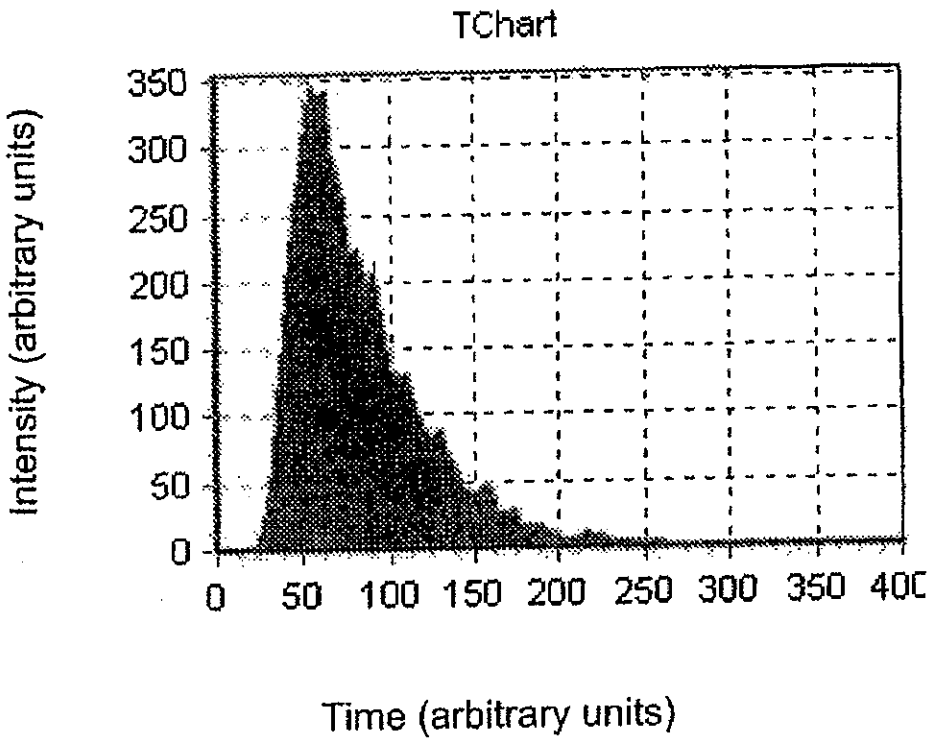

TChart
Intensity (arbitrary units)
350
300
250
200
150
100
50
0
0
50
100
150
200
250
300
350
400
Time (arbitrary units)

Fig. 13

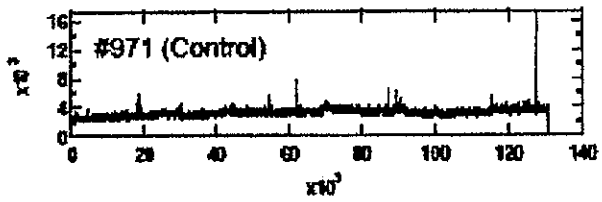


Fig. 14A

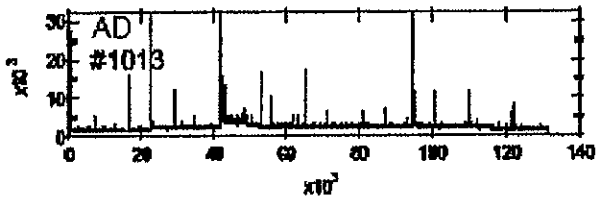


Fig. 14B

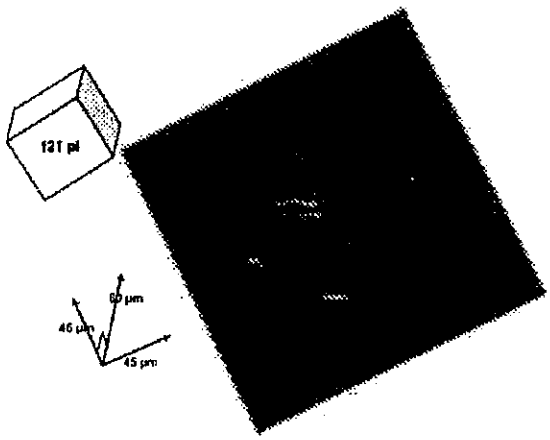


Fig. 14C

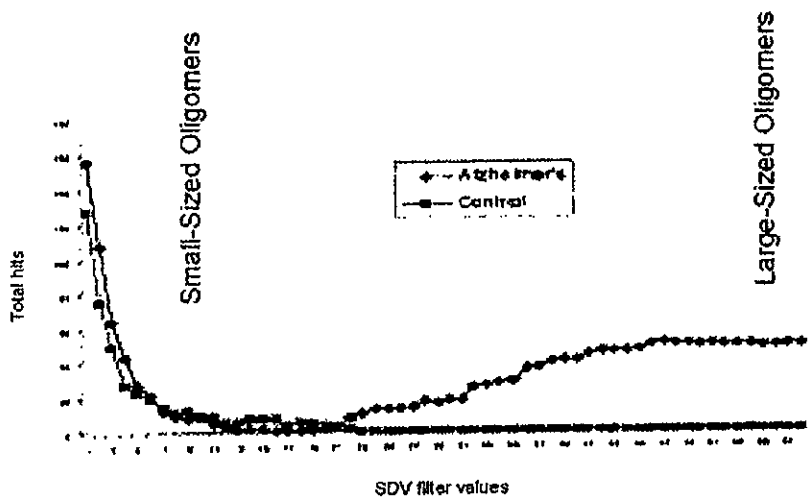

Small-Sized Oligomers
Large-Sized Oligomers
Alzheimer's
Control
Total hits
SDV filter values

Fig. 15

Fig. 16A

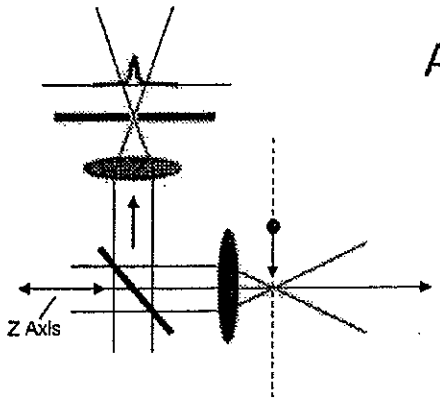
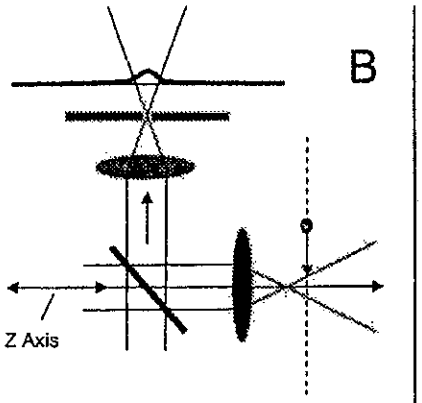


Fig. 16B



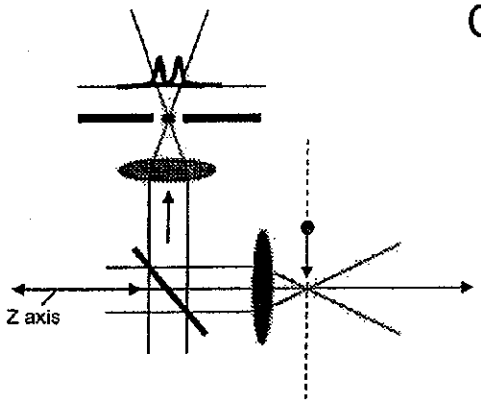


Fig. 16C

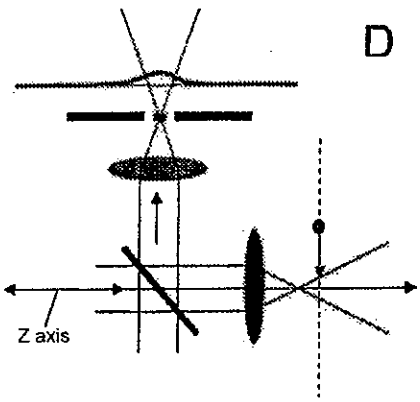


Fig. 16D