Fig. 1

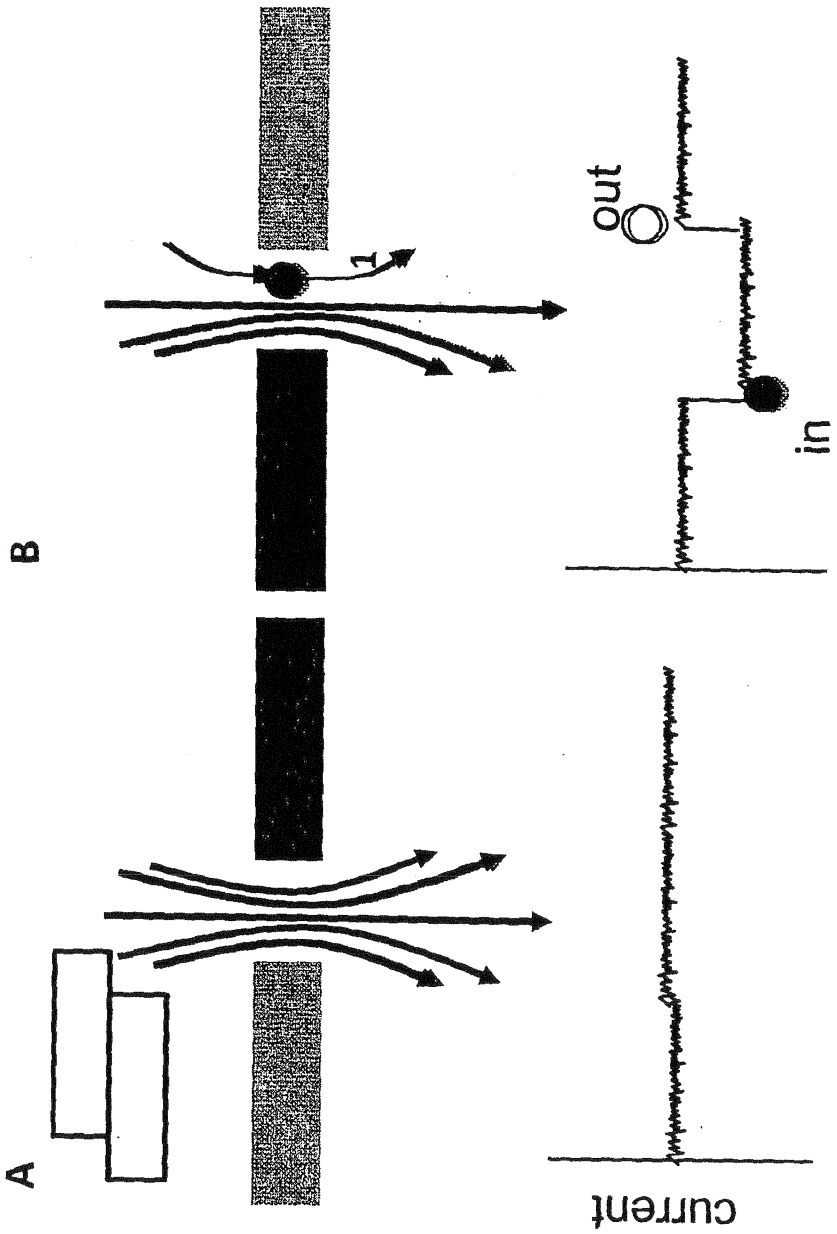


Fig. 2

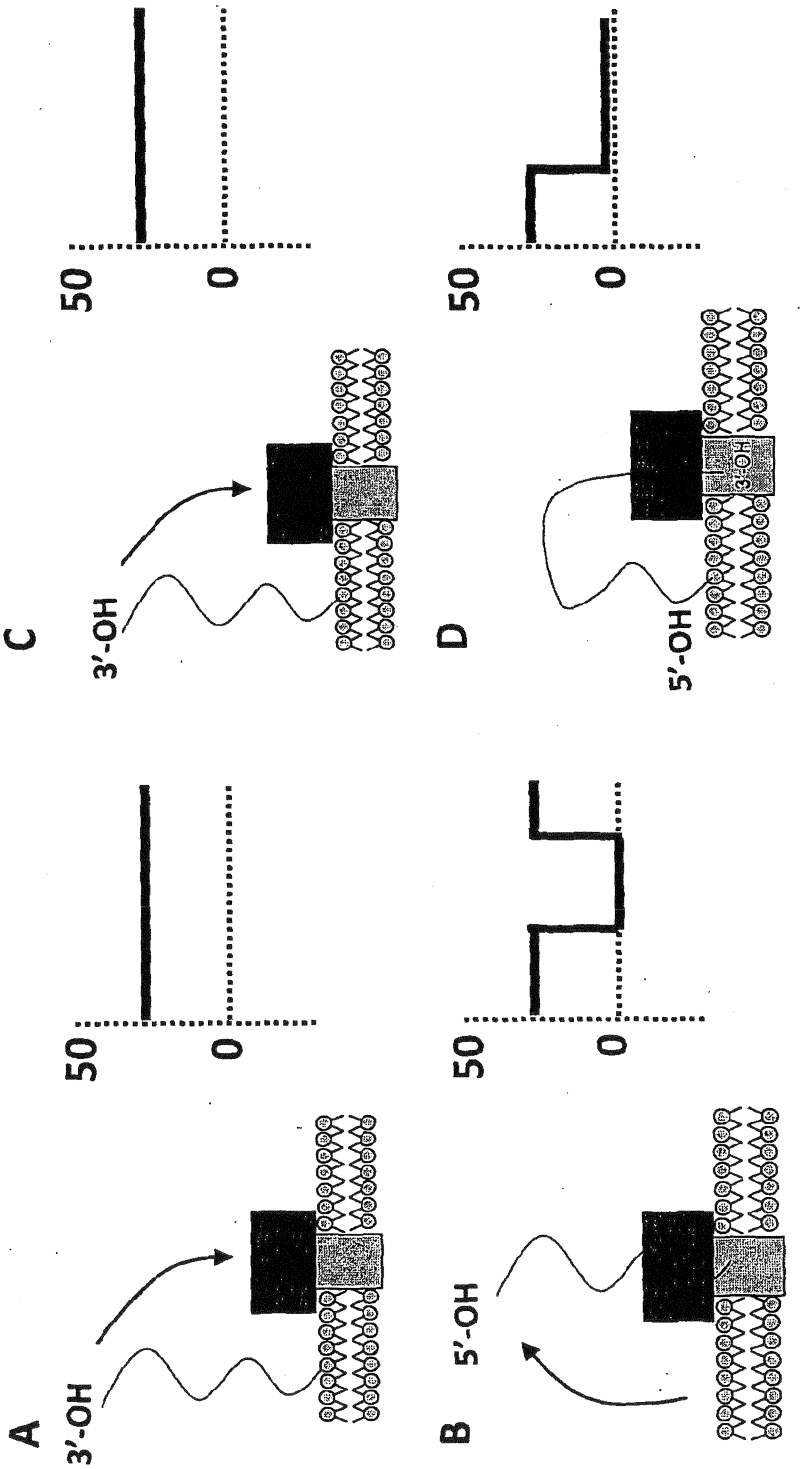


Fig. 3

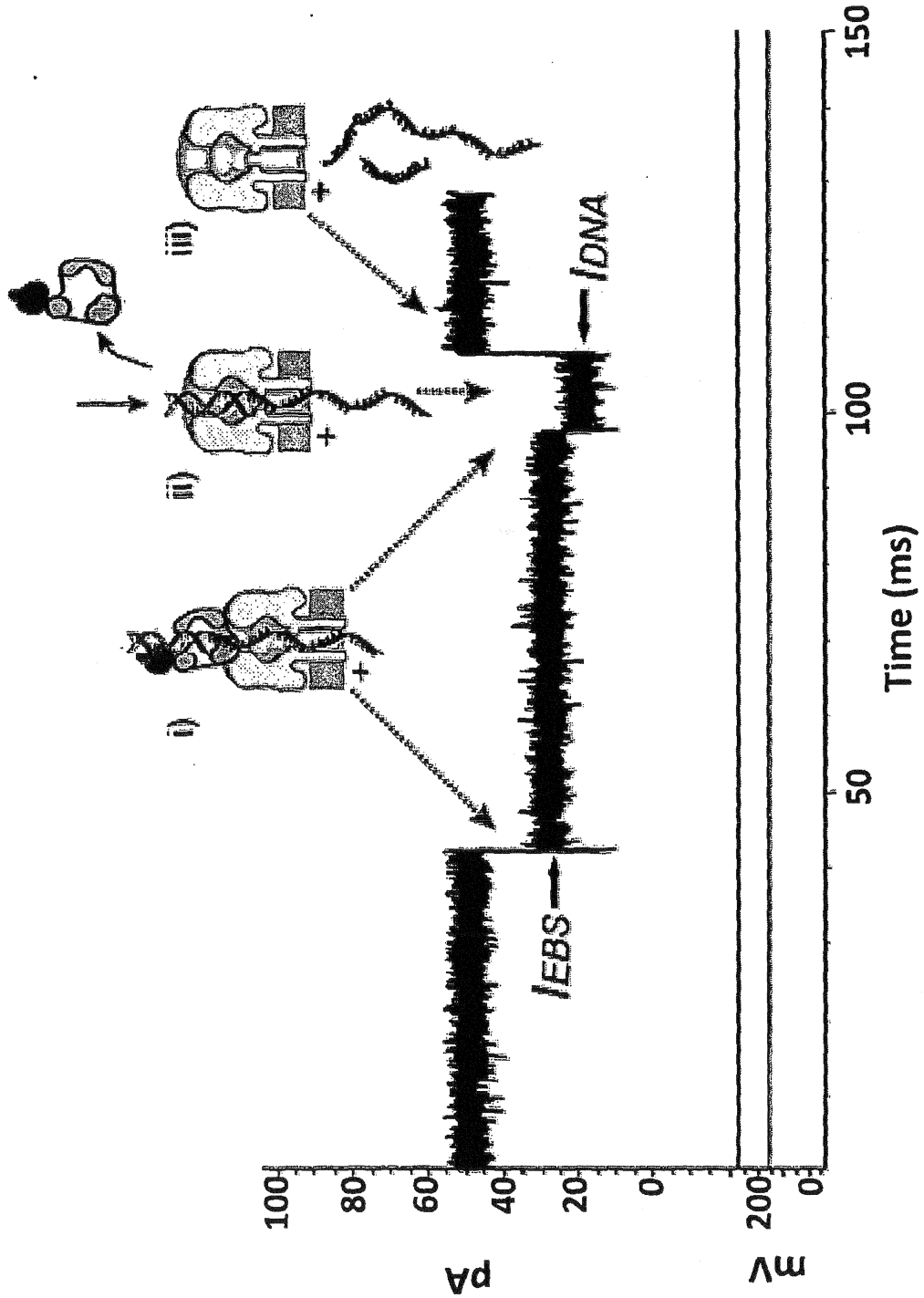


Fig. 4

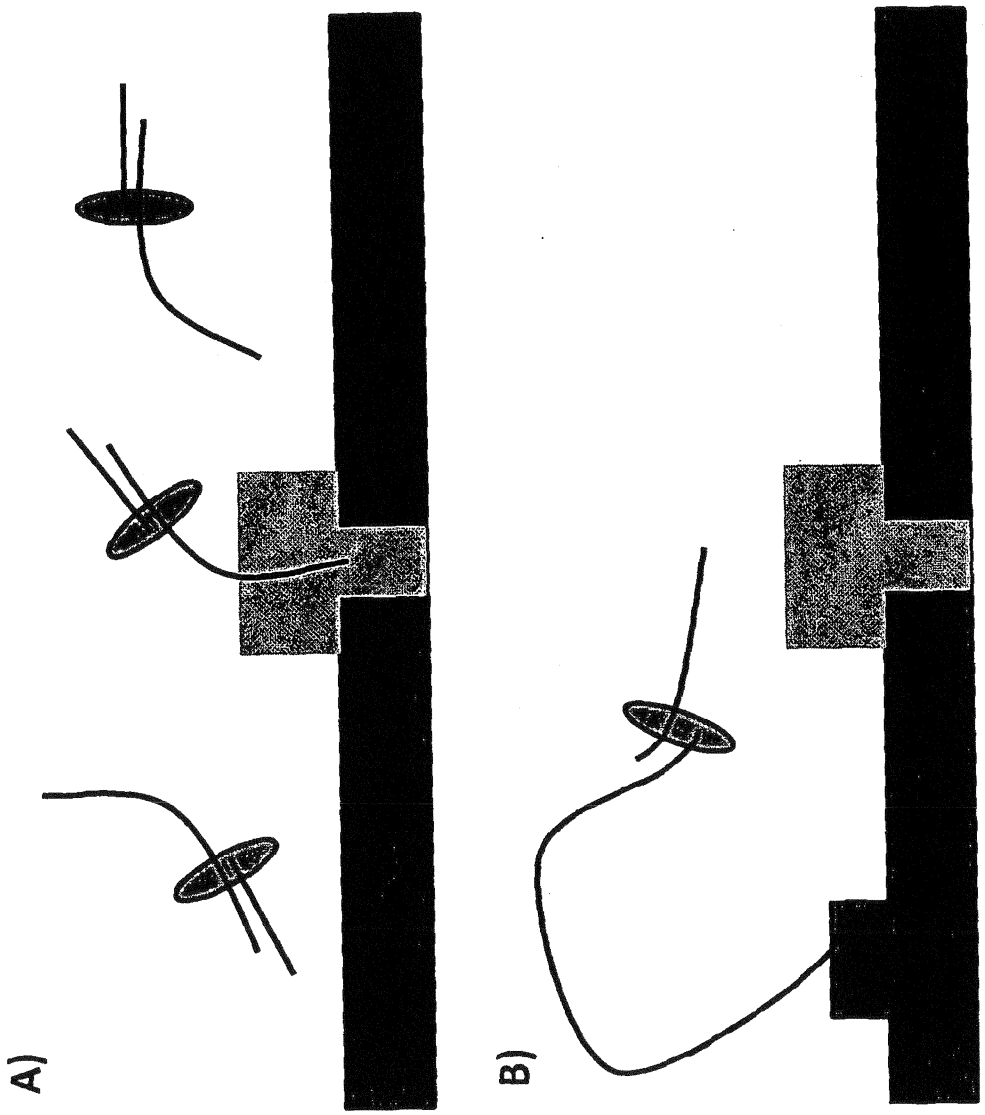


Fig. 5

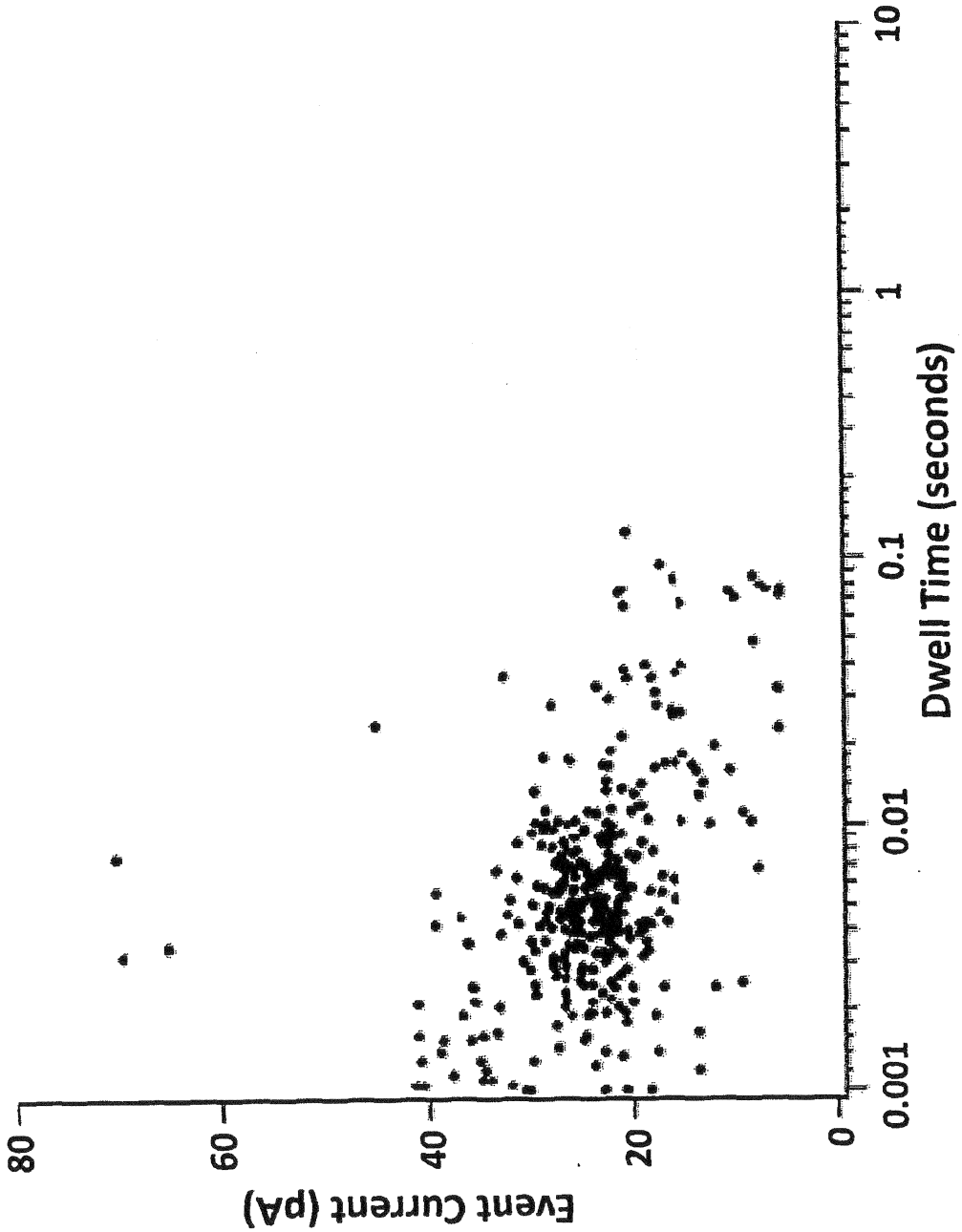

Event Current (pA)
80
60
40
20
0
0.001
0.01
0.1
1
10
Dwell Time (seconds)

Fig. 6

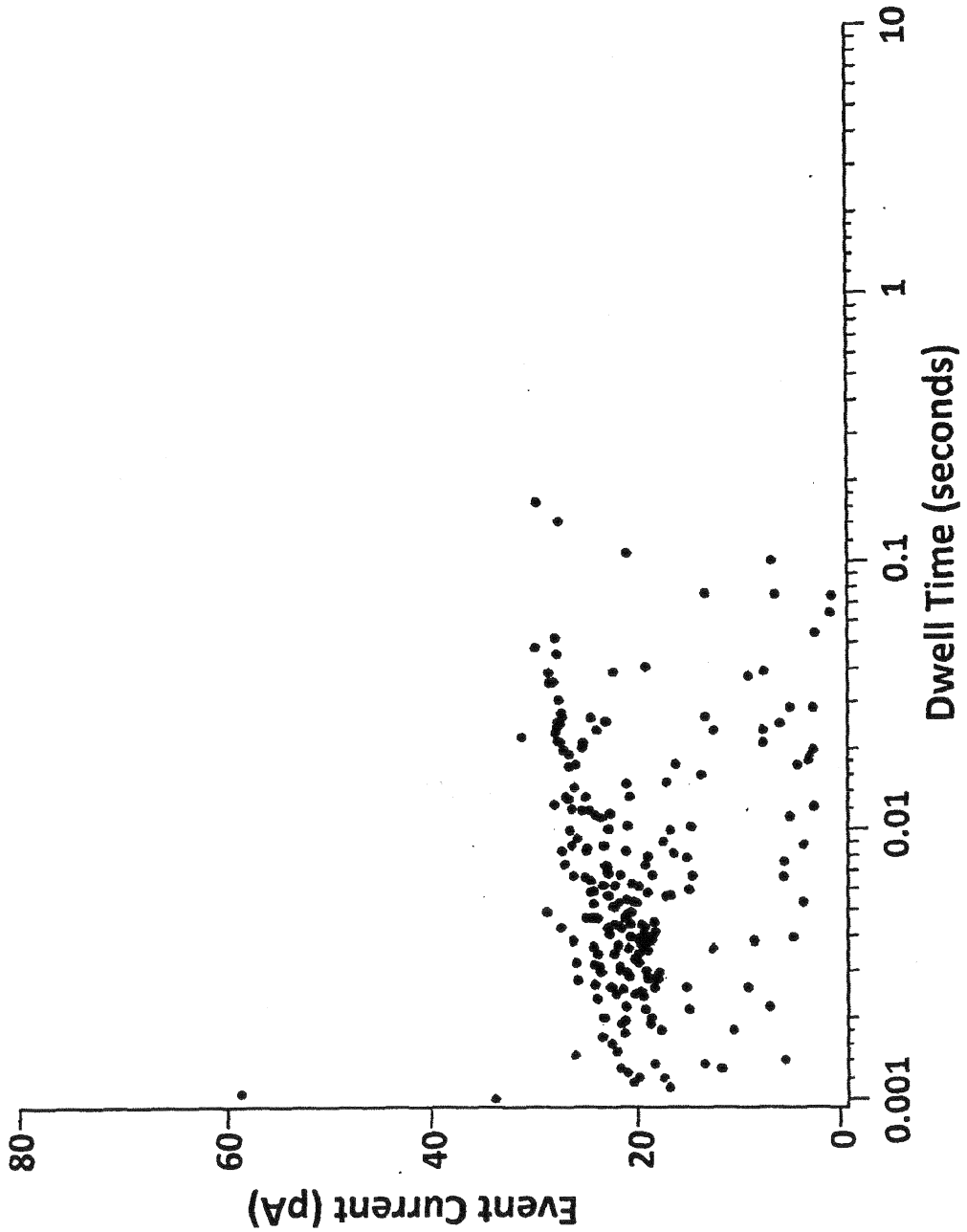

Event Current (pA)
80
60
40
20
0
0.001
0.01
0.1
1
10
Dwell Time (seconds)

Fig. 7

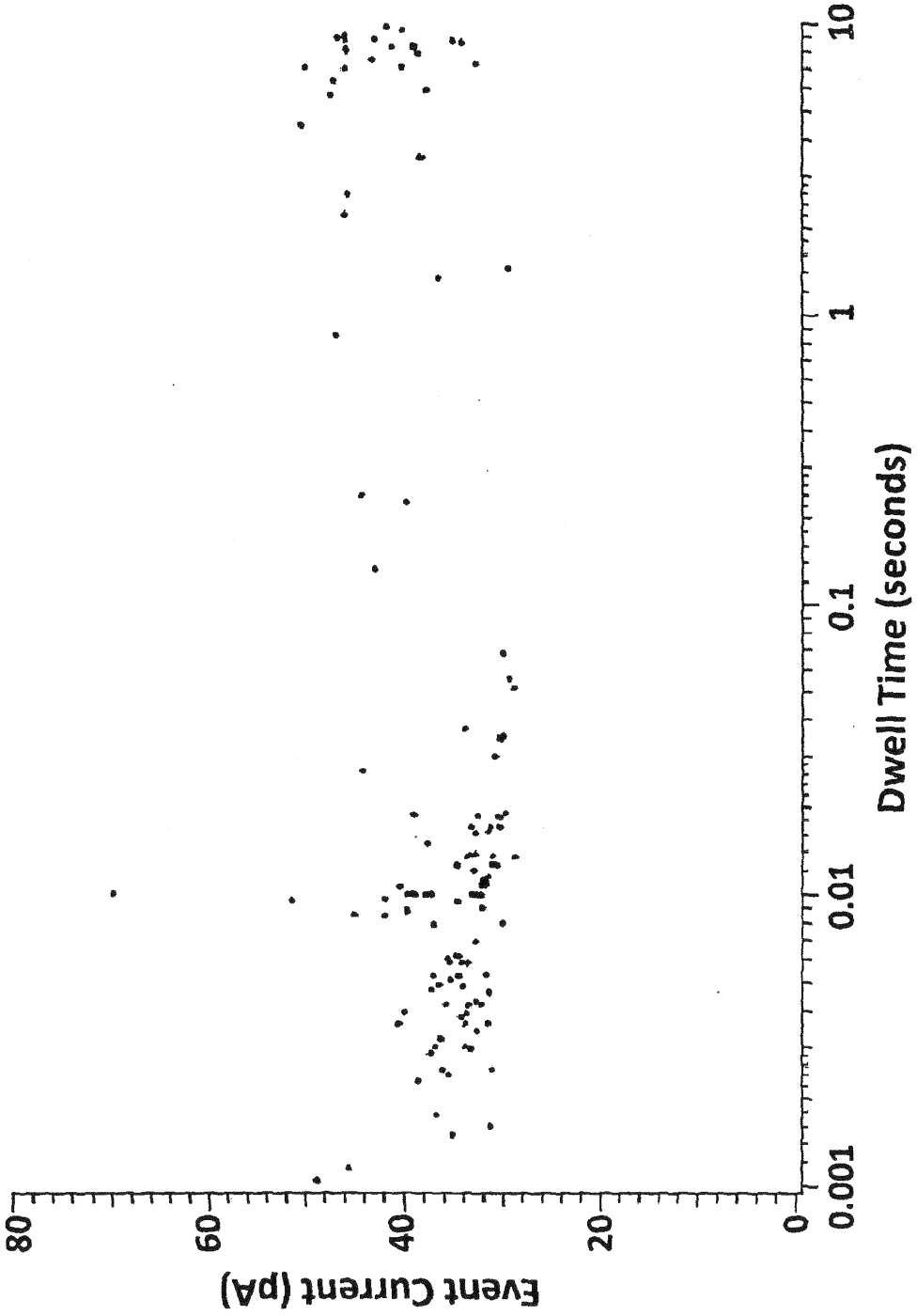

Event Current (pA)
0
20
40
60
80
0.001
0.01
0.1
1
10
Dwell Time (seconds)

Fig. 8

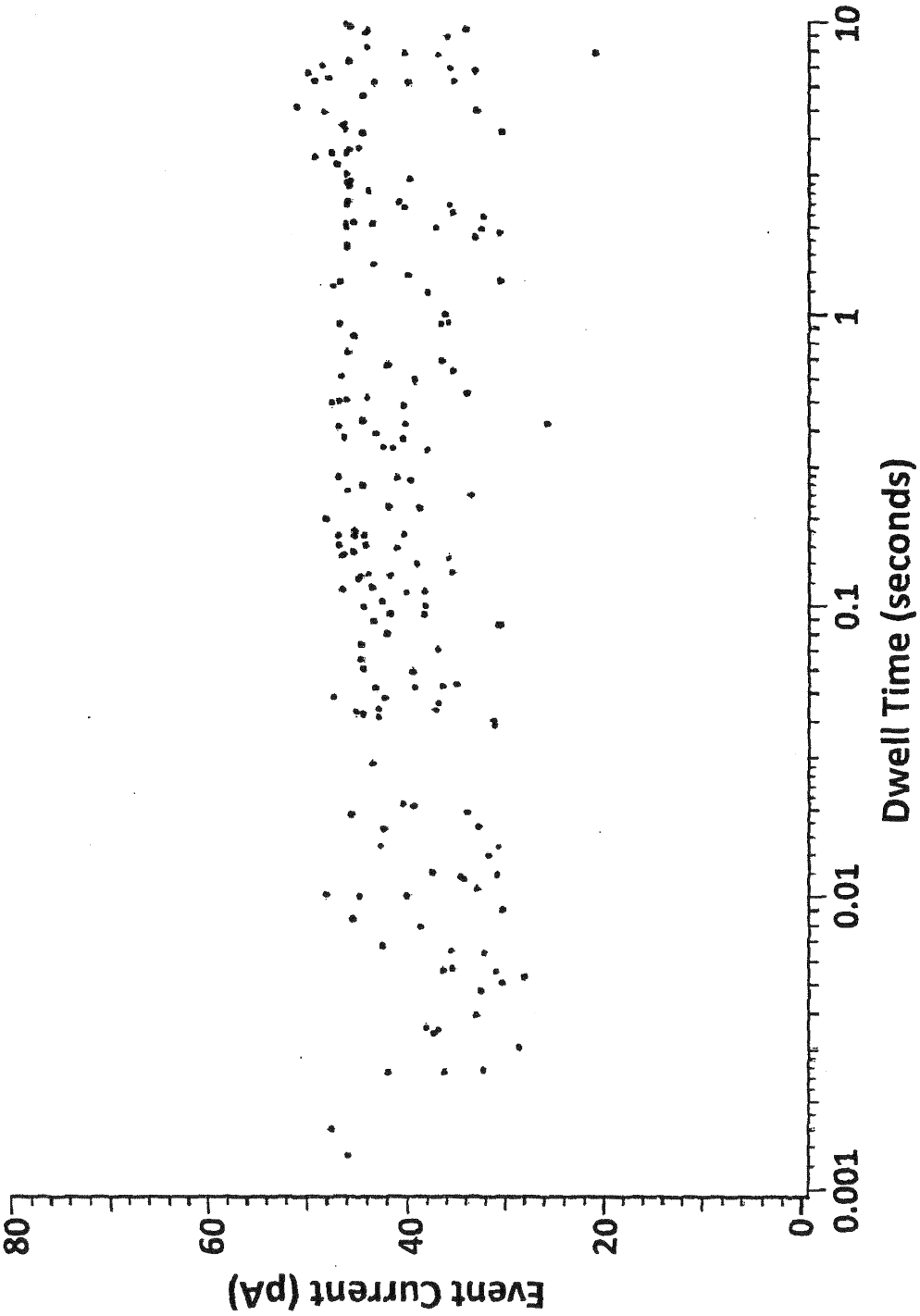

Event Current (pA)
80
60
40
20
0
0.001
0.01
0.1
1
10
Dwell Time (seconds)

Fig. 9

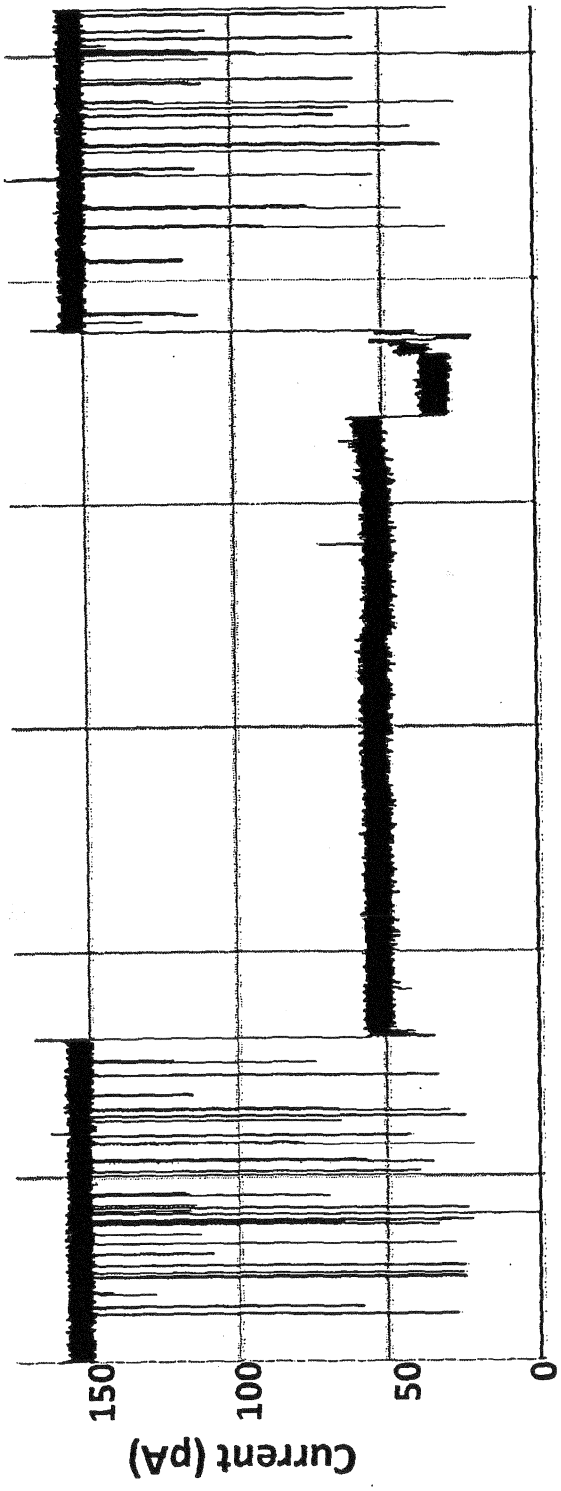


Fig. 10

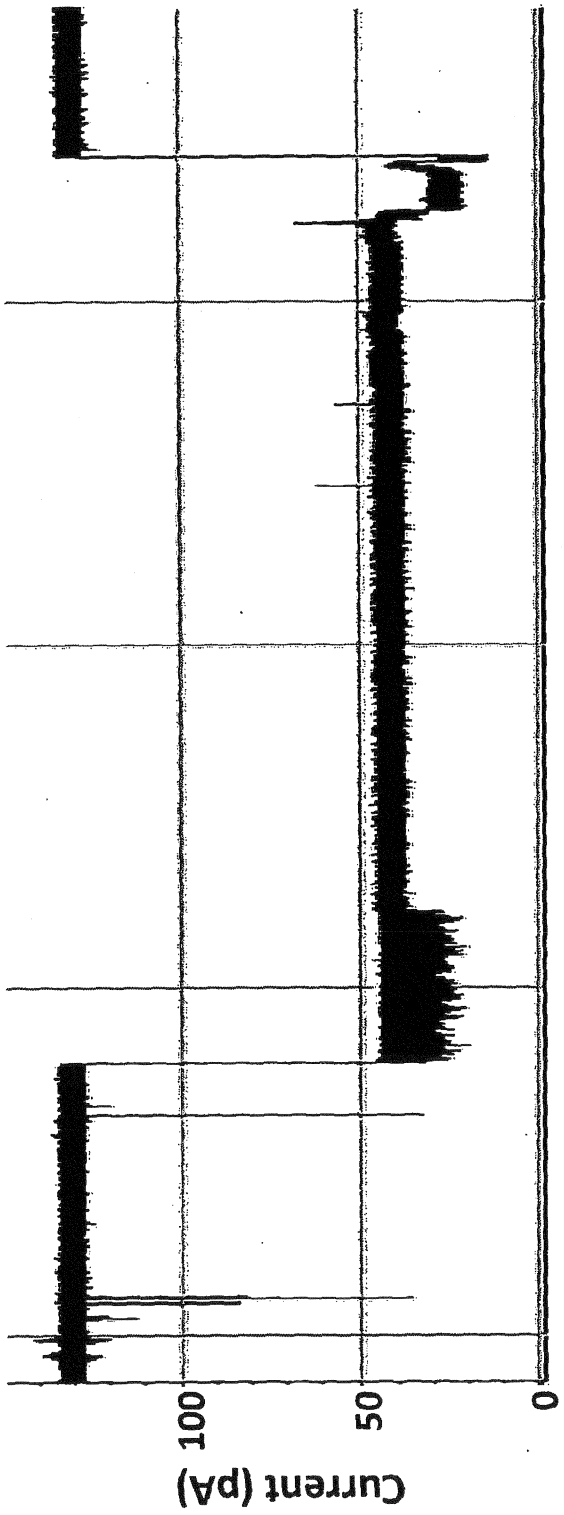


Fig. 11a

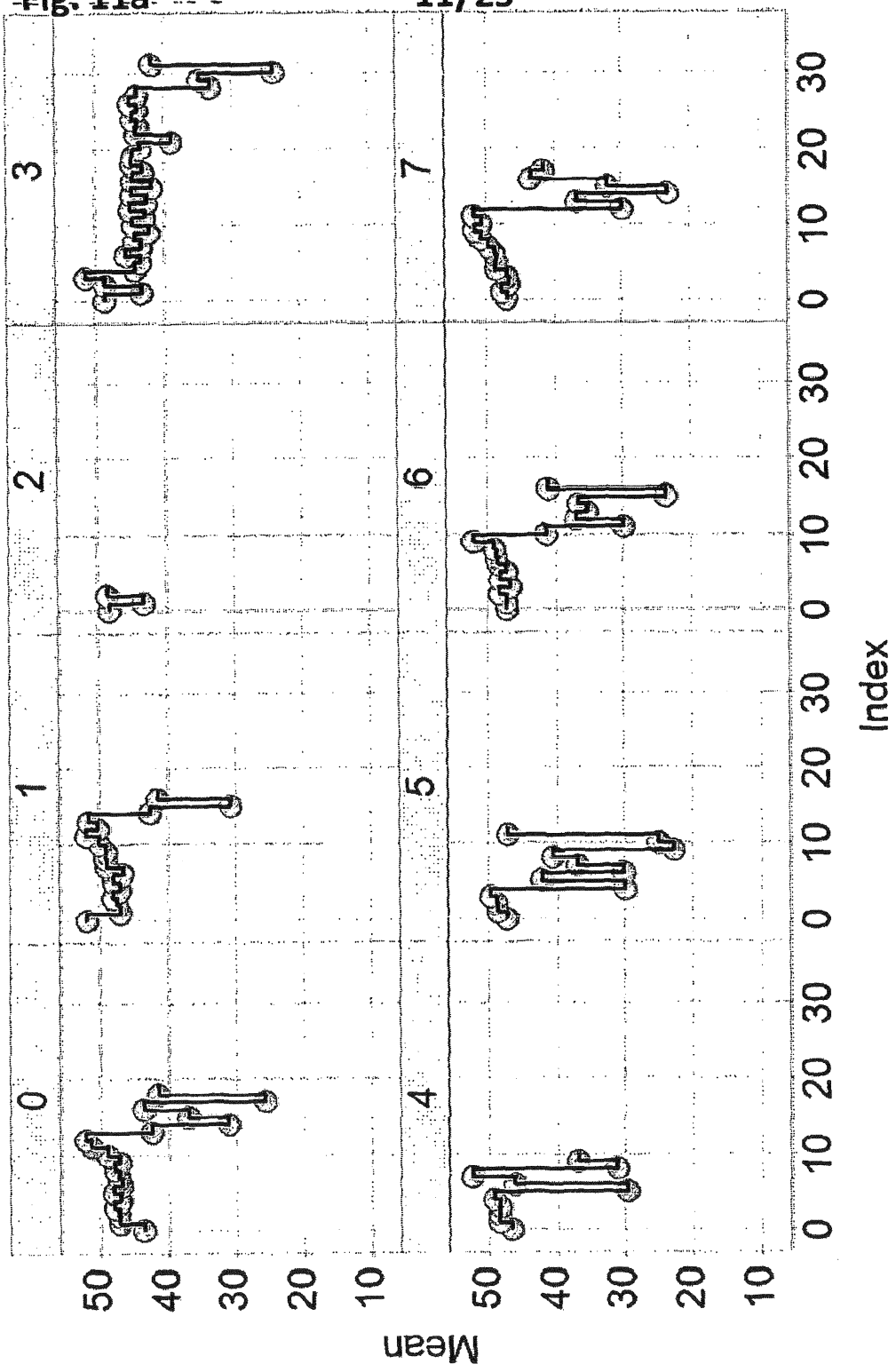


Fig. 11b

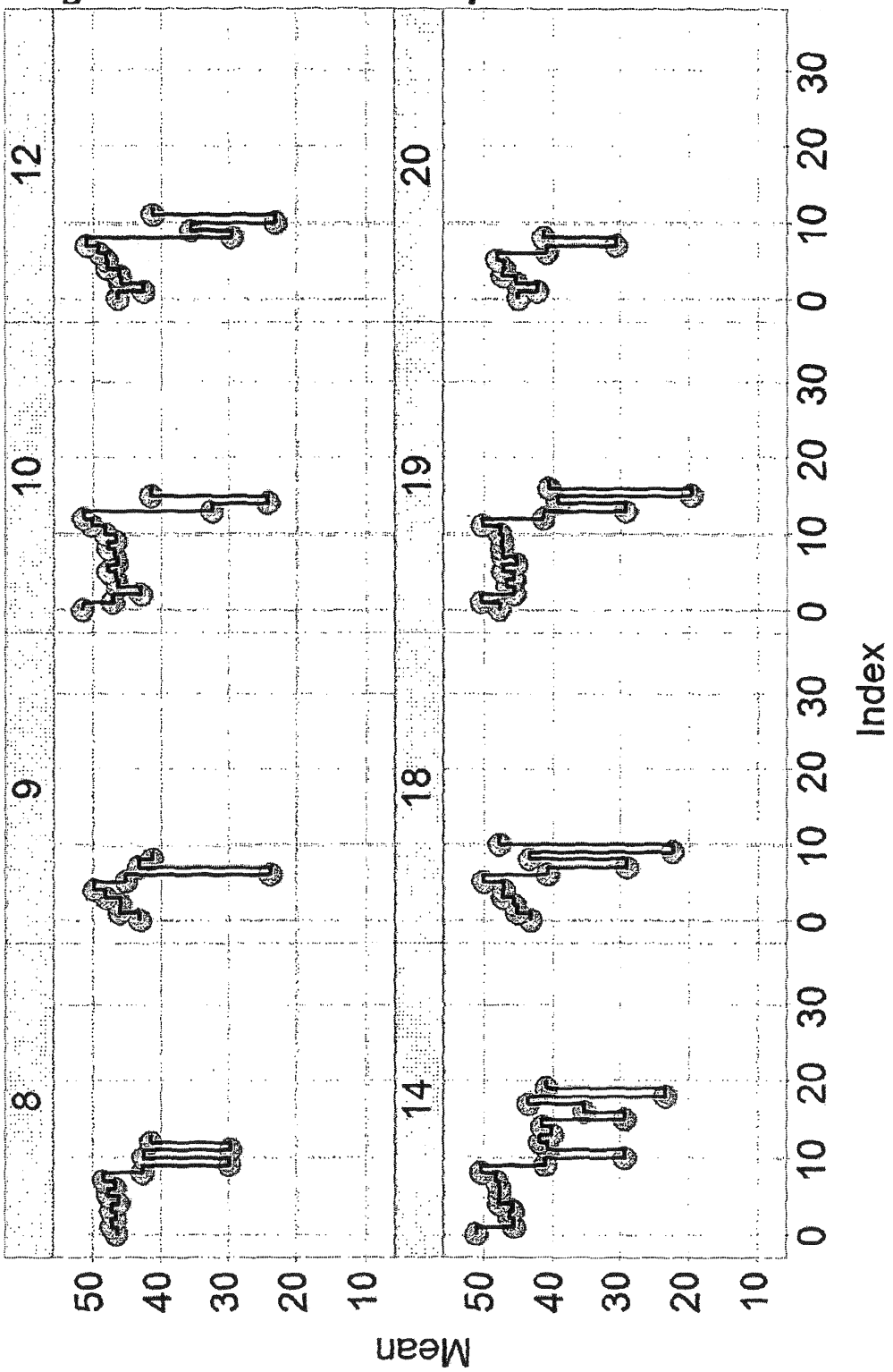


Fig. 12a

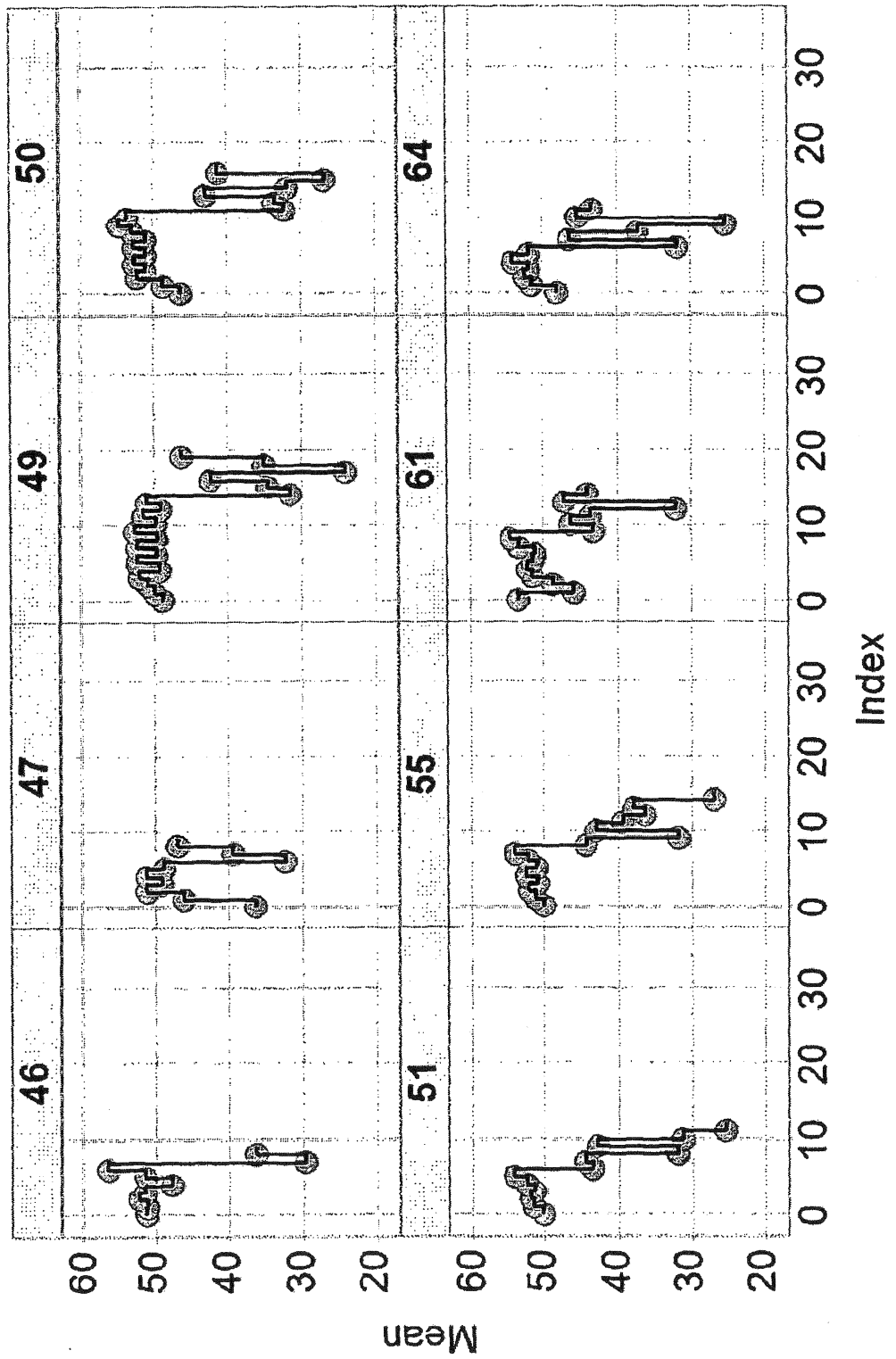


Fig. 12b

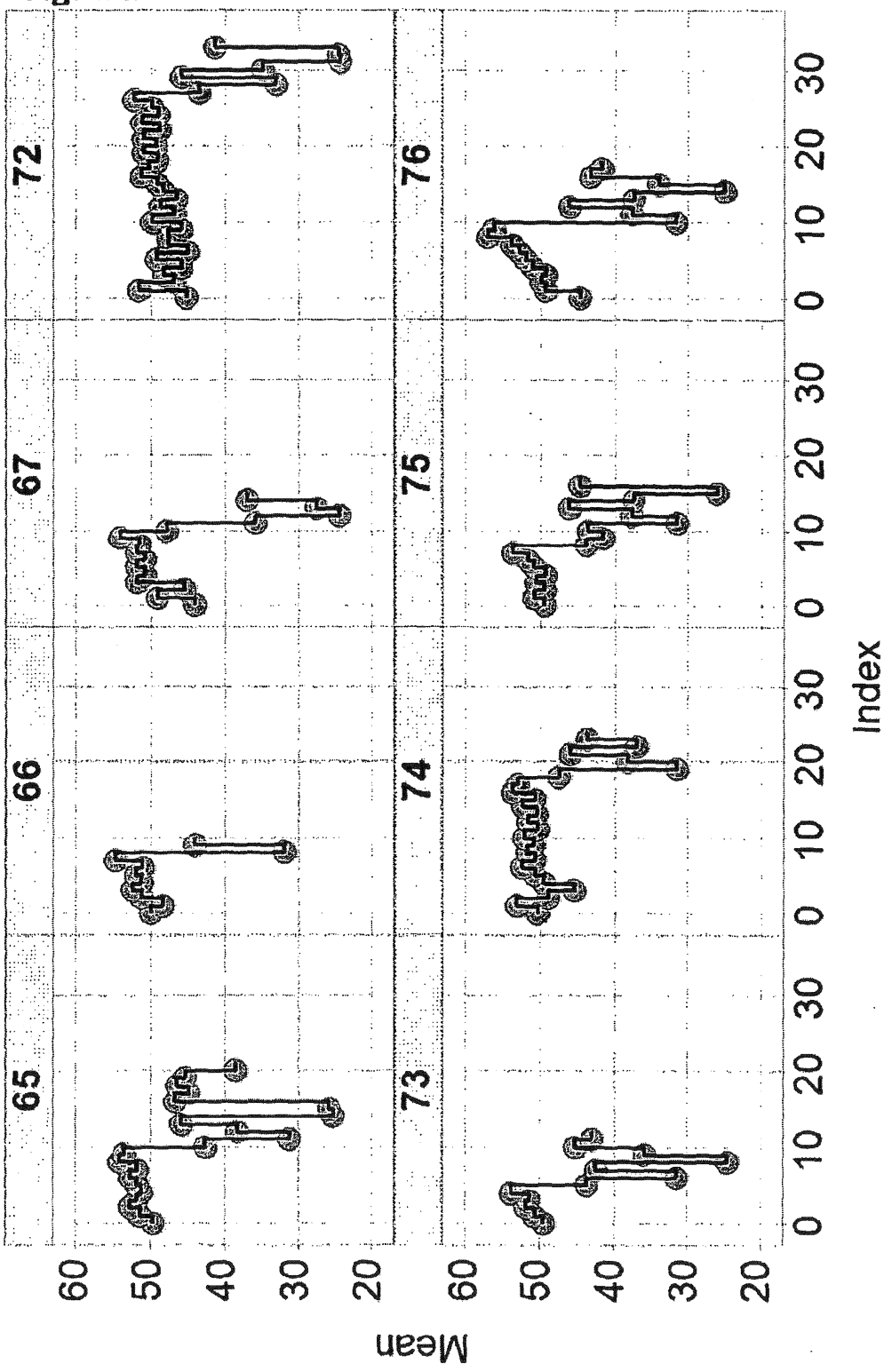


Fig. 13

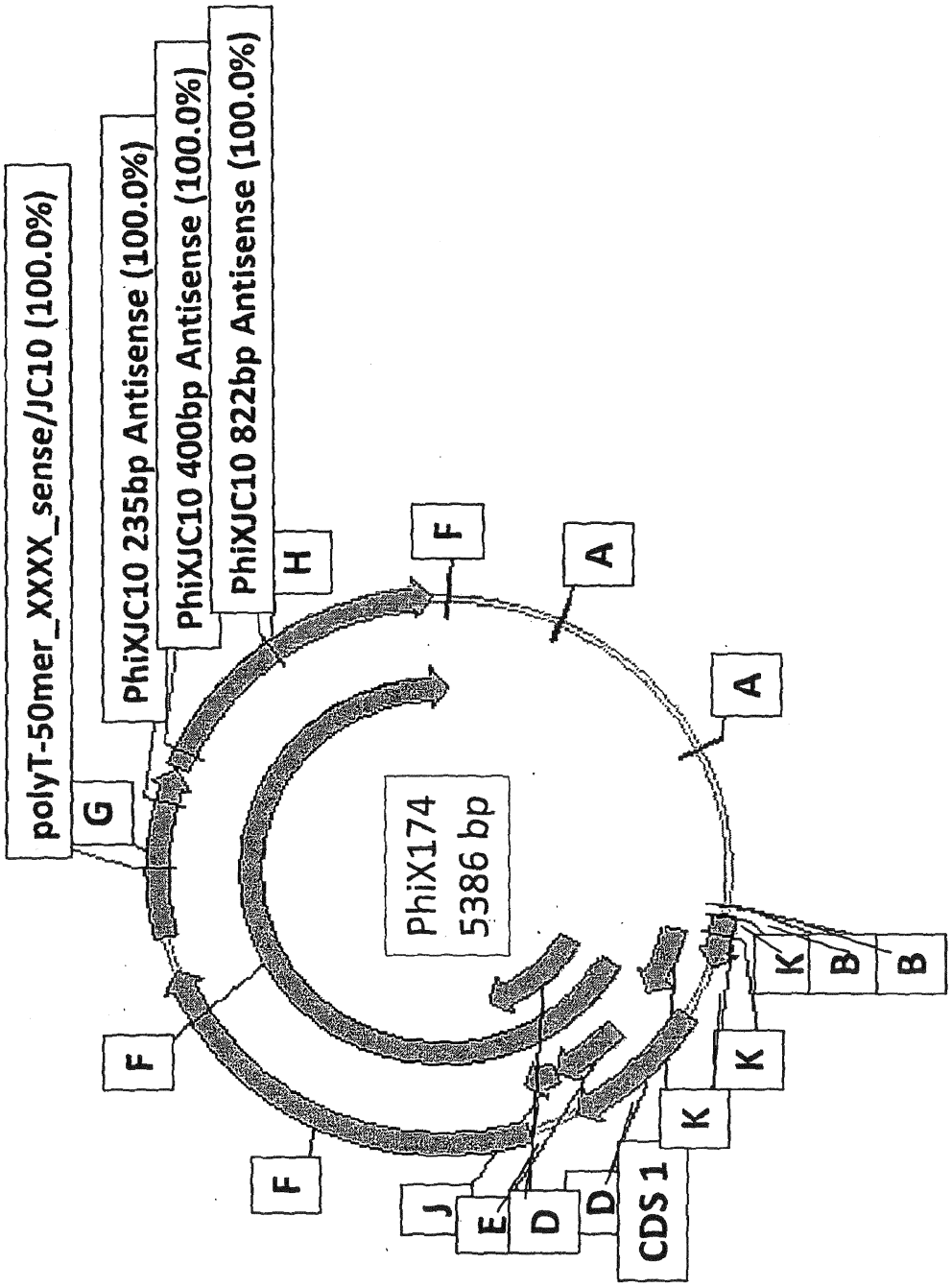

polyT-50mer_XXXX_sense/JC10 (100.0%)
PhiXJC10 235bp Antisense (100.0%)
PhiXJC10 400bp Antisense (100.0%)
PhiXJC10 822bp Antisense (100.0%)
PhiX174
5386 bp
G
H
F
A
A
K
B
B
K
K
CDS 1
D
D
E
J
F
F

Fig. 14

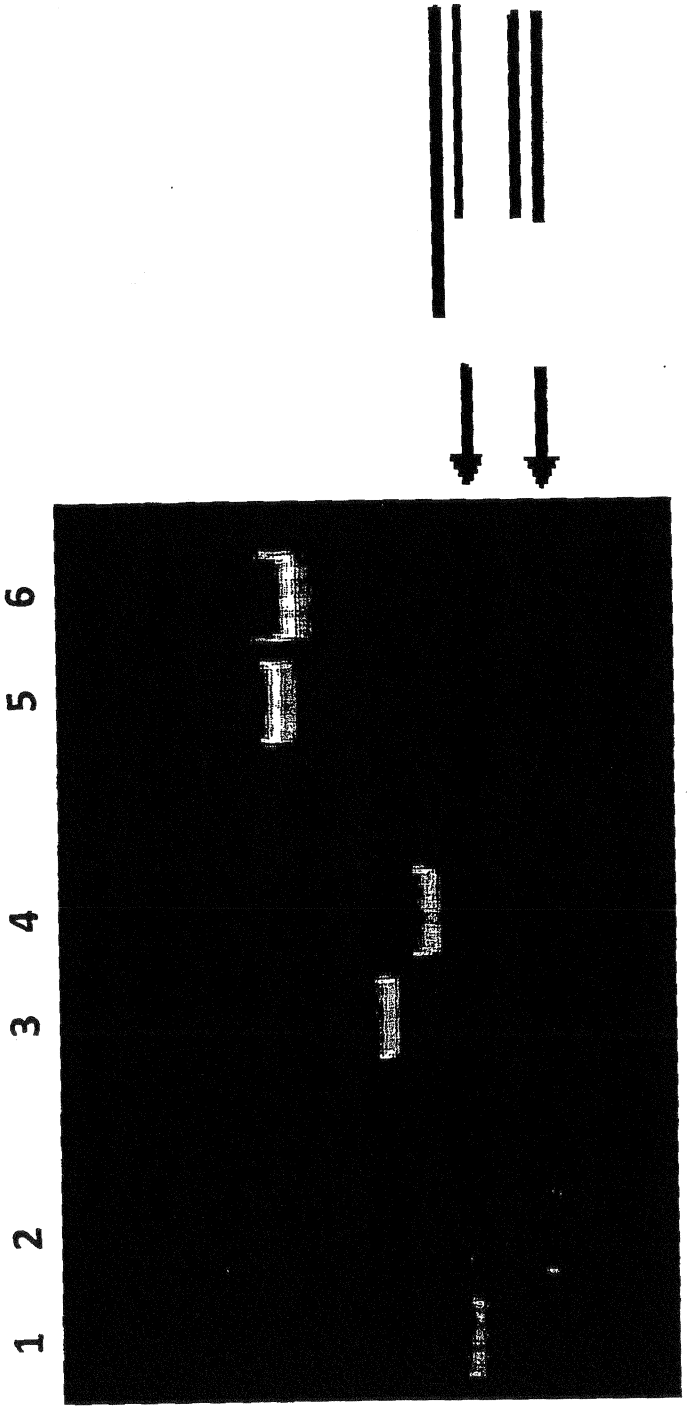


Fig. 15

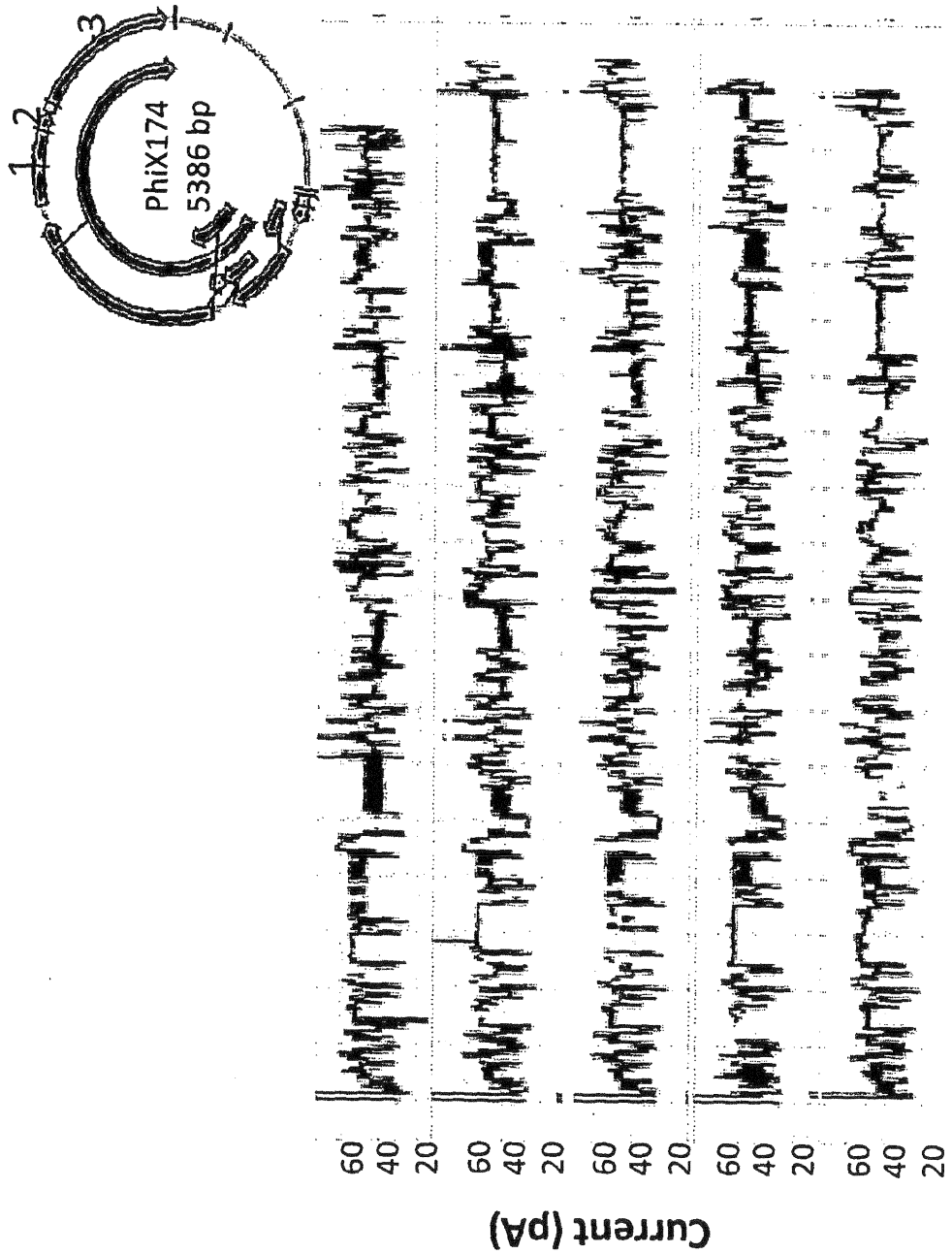


Fig. 16

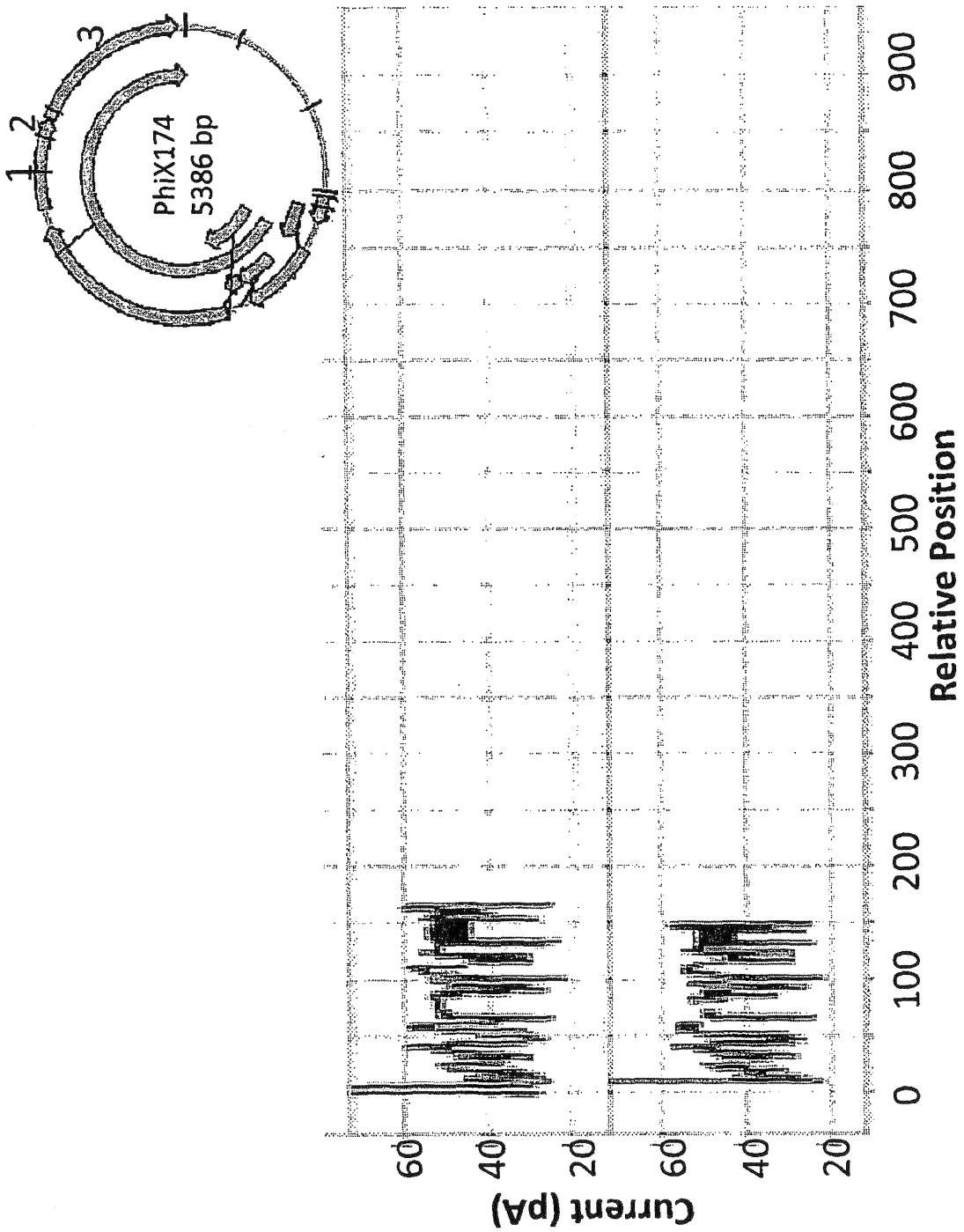

1
2
3
PhiX174
5386 bp
Current (pA)
60
40
20
60
40
20
0
100
200
300
400
500
600
700
800
900
Relative Position

Fig. 17

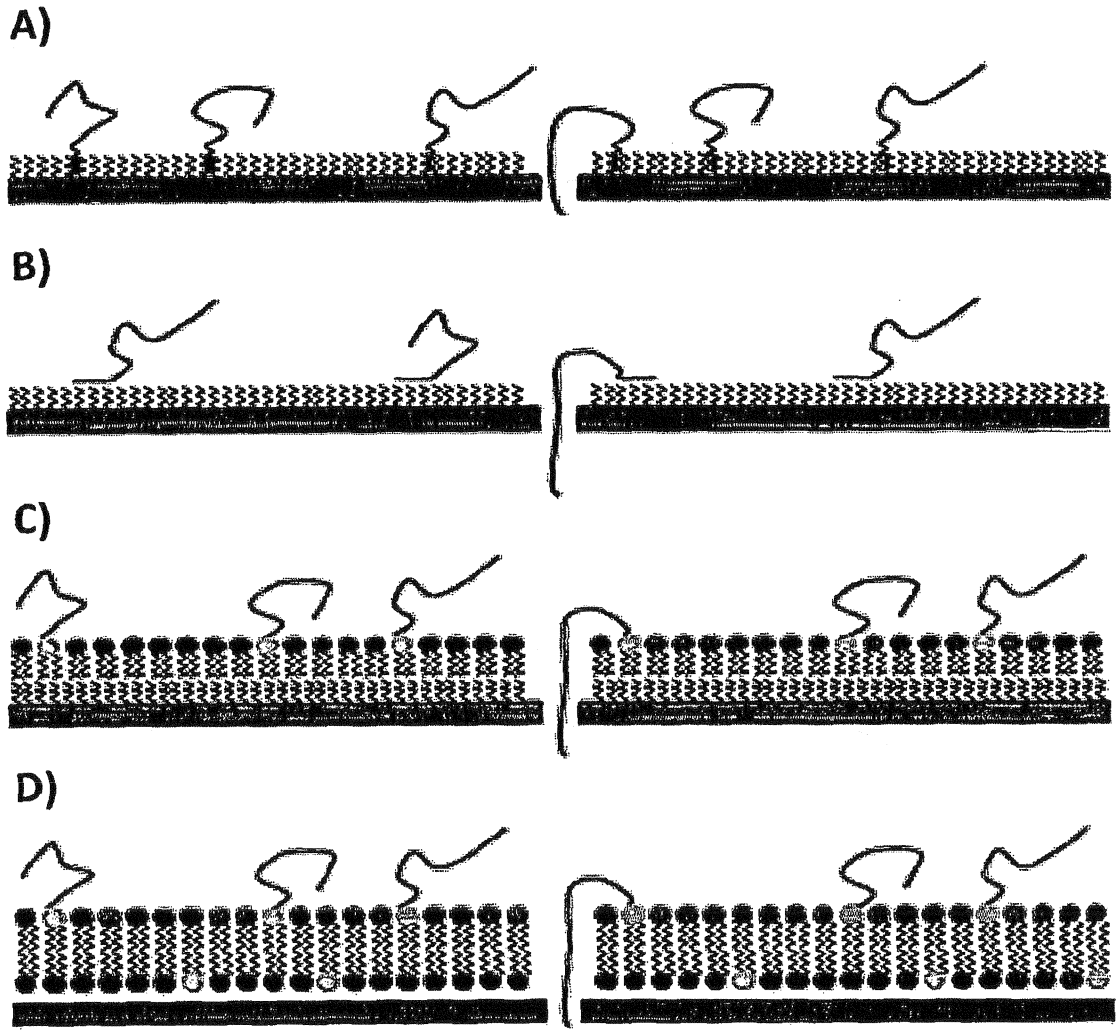


Fig. 18

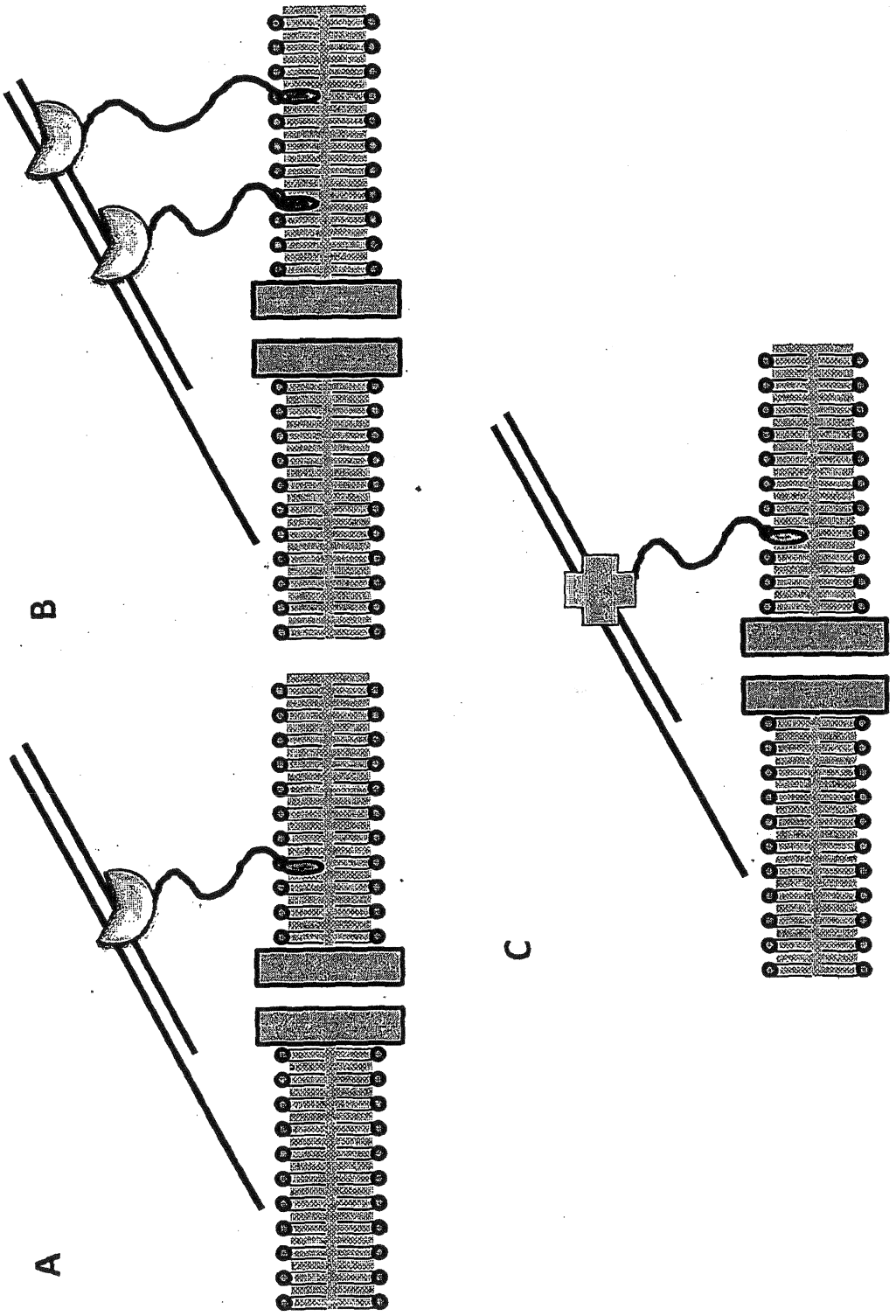


Fig. 19

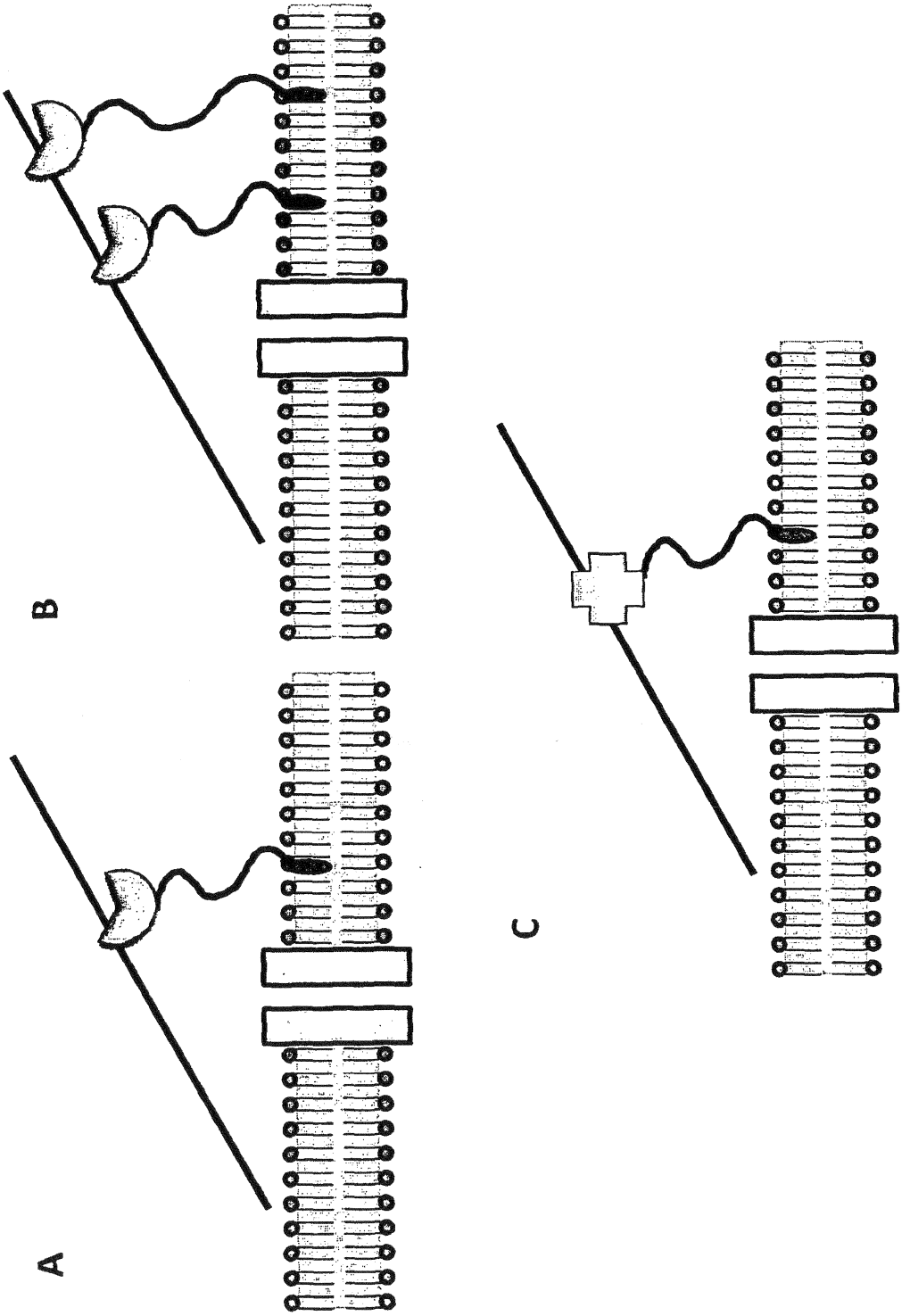


Fig. 20

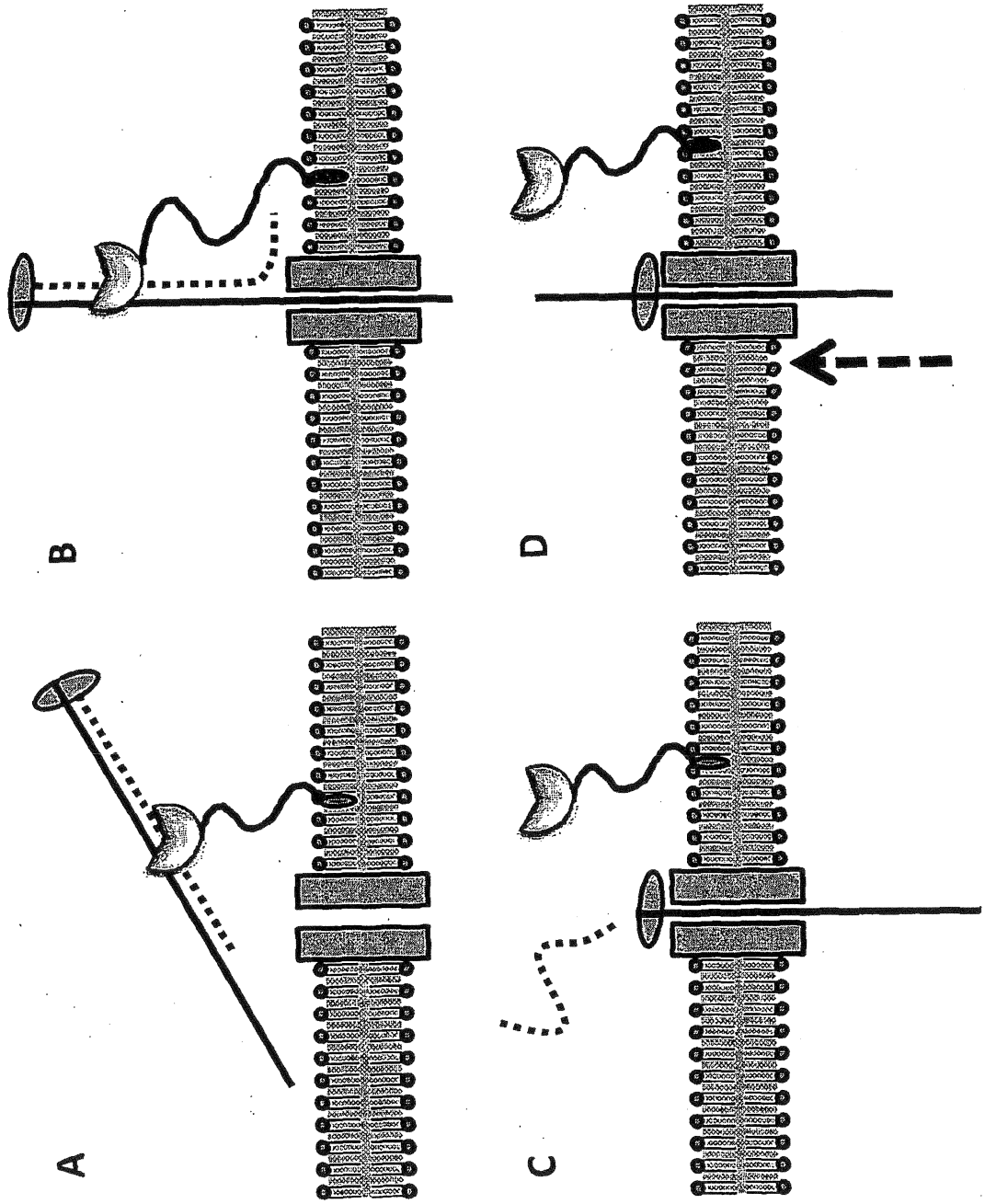


Fig. 21

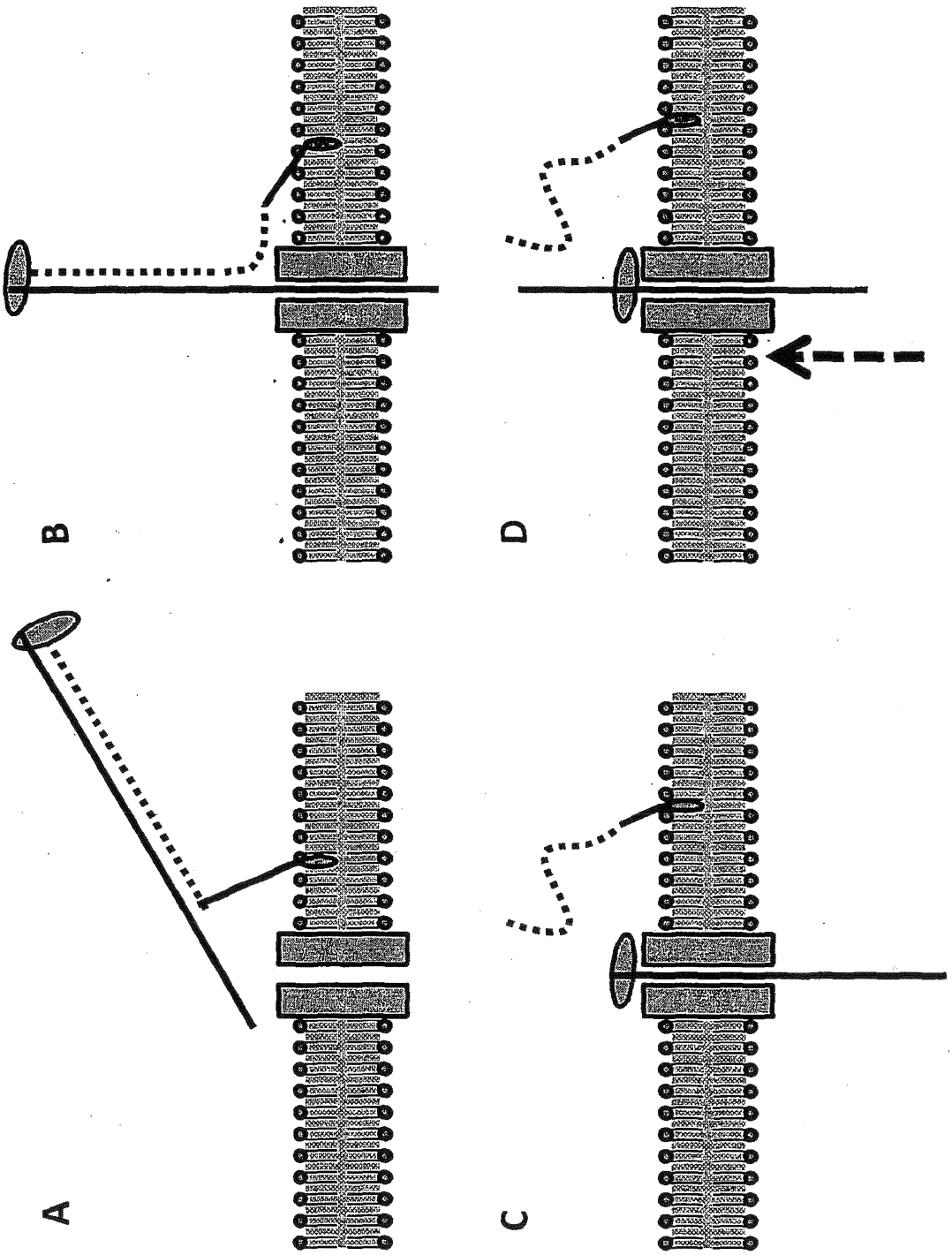


Fig. 22

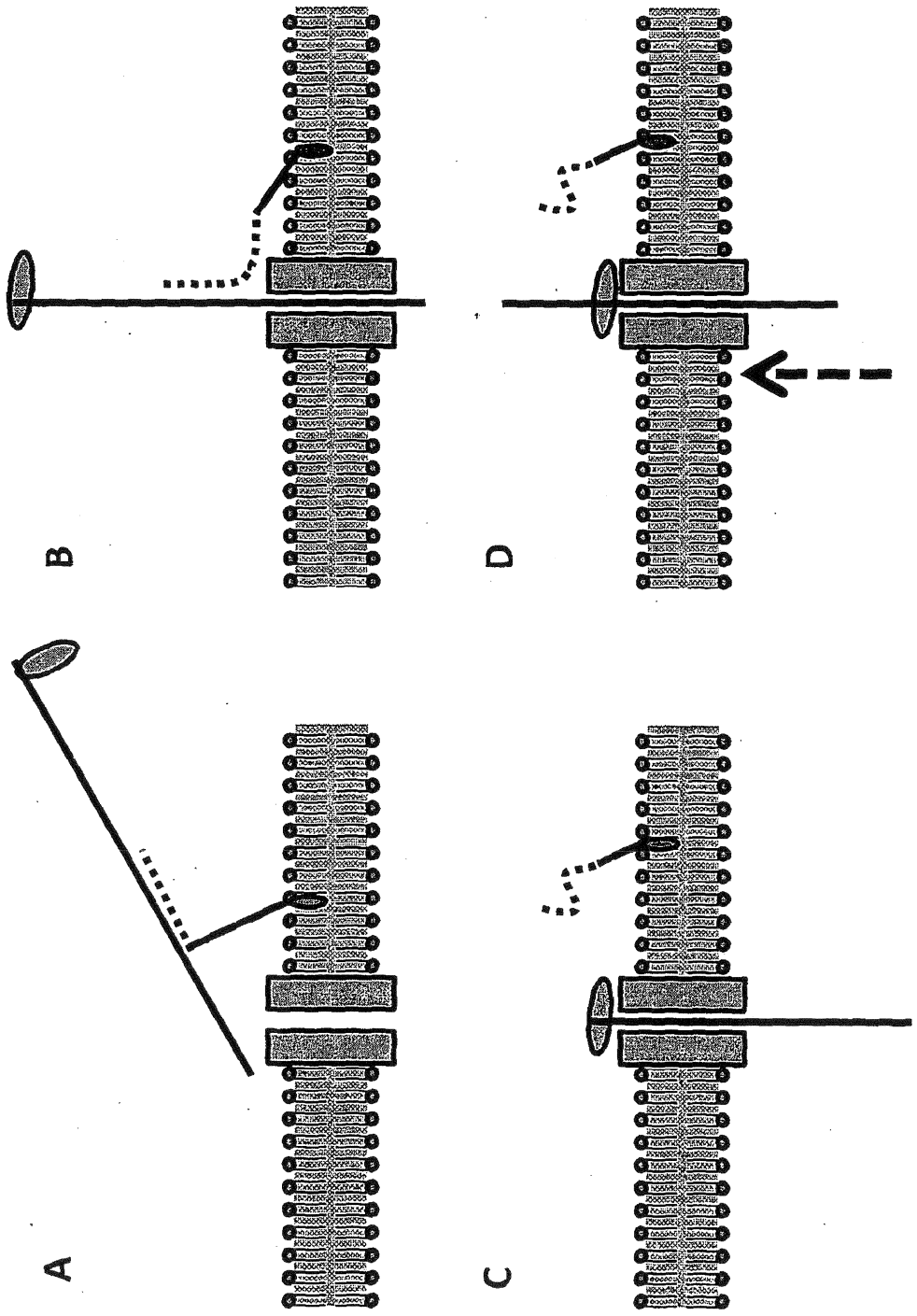
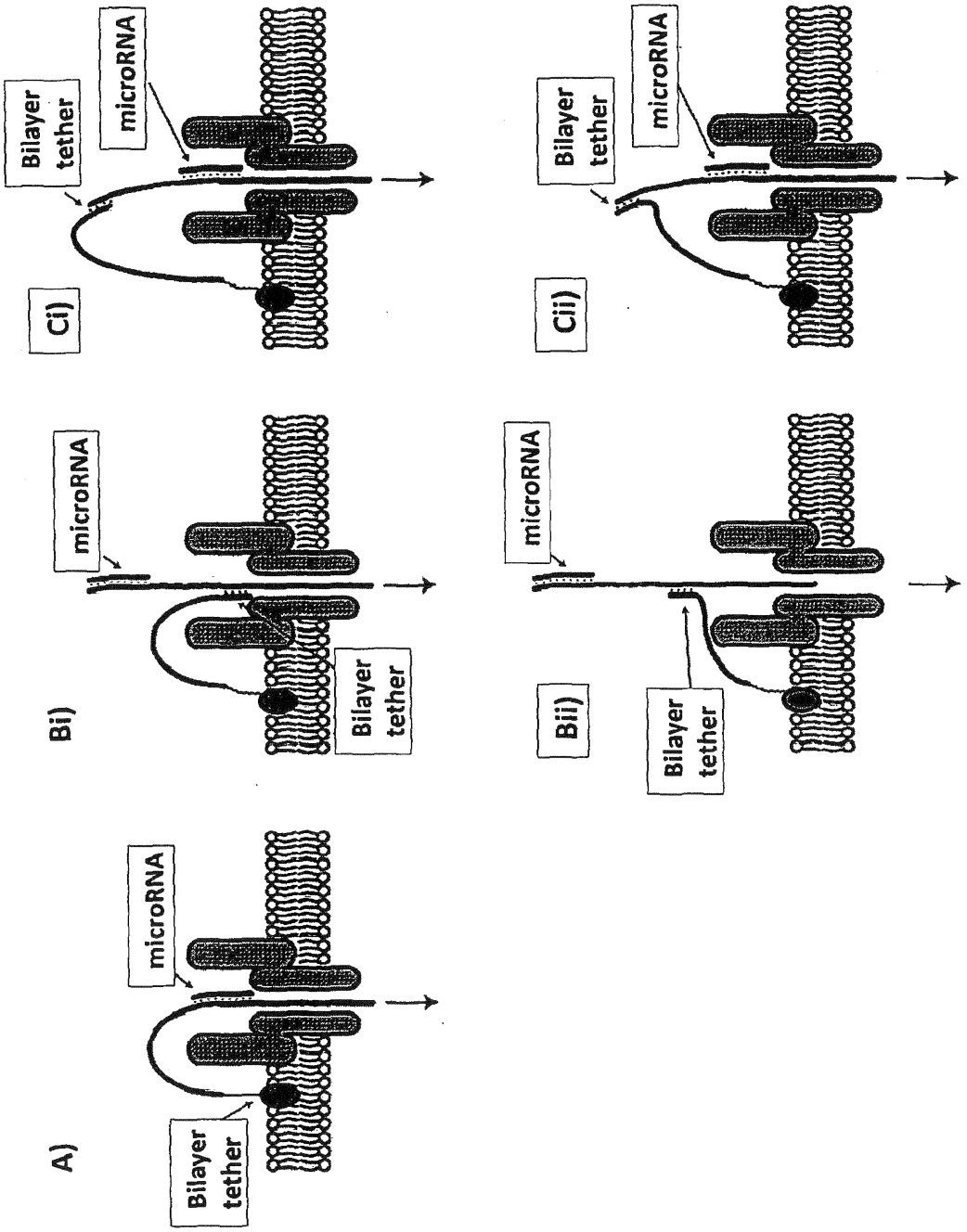


Fig. 23


A)
microRNA
Bilayer tether
Bi)
microRNA
Bilayer tether
Bii)
microRNA
Bilayer tether
Ci)
Bilayer tether
microRNA
Cii)
Bilayer tether
microRNA