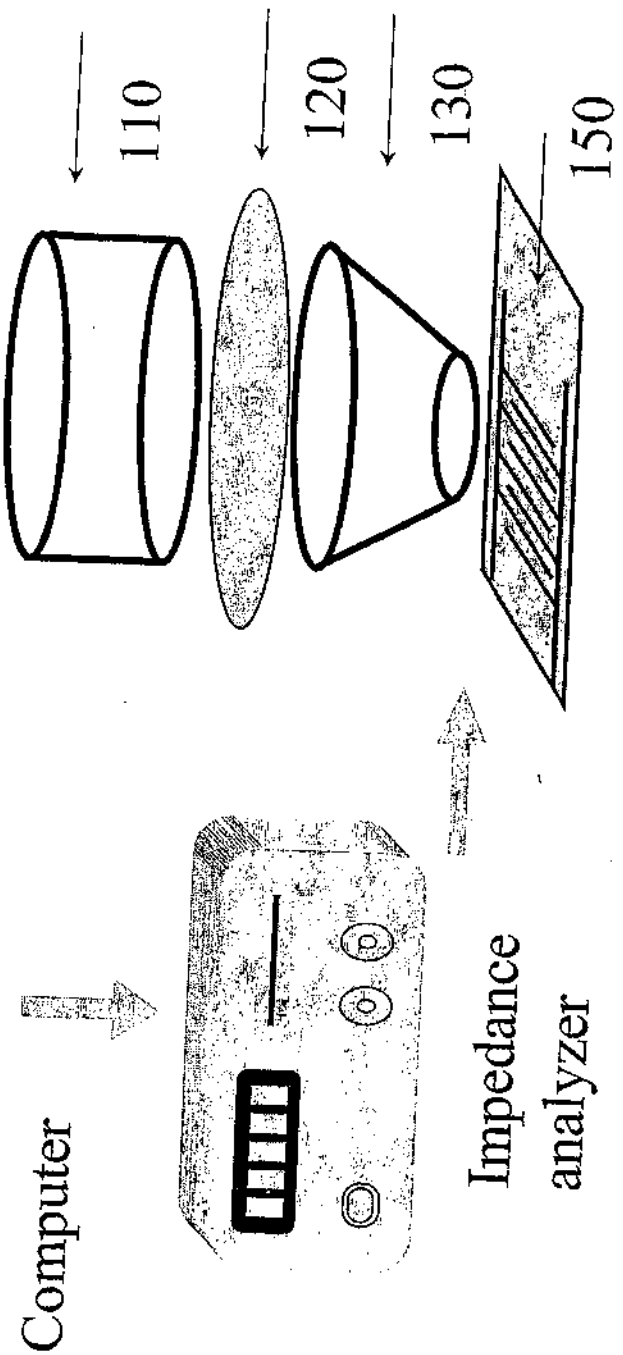


Figure 1

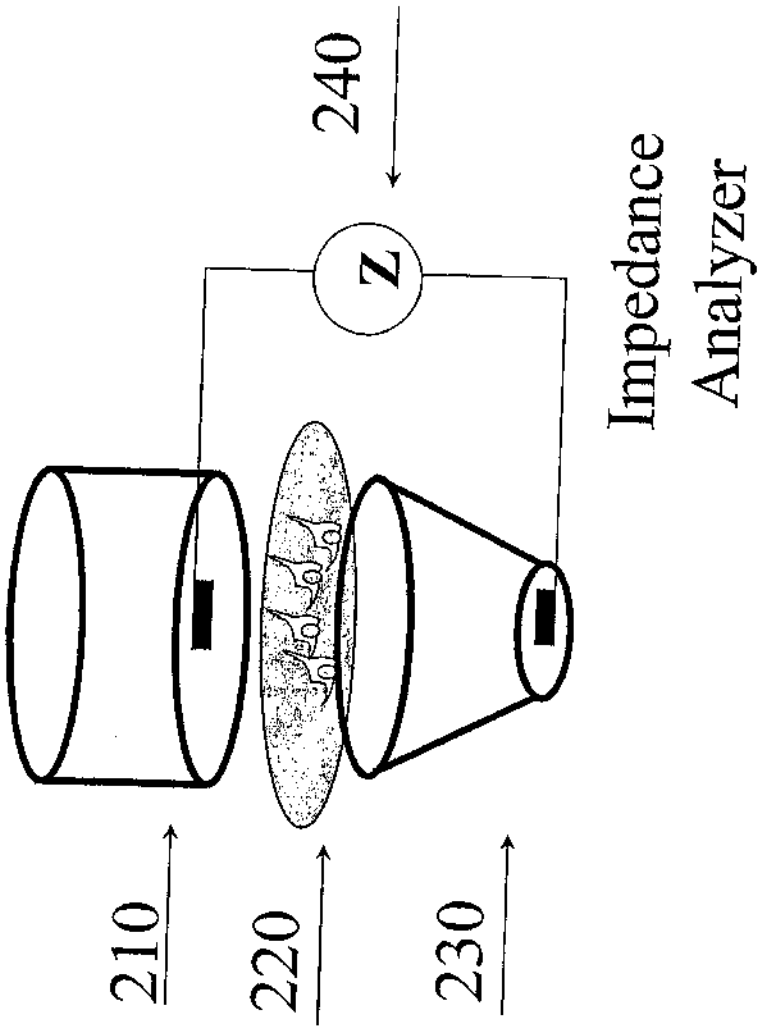


Figure 2

Figure 3A (1)

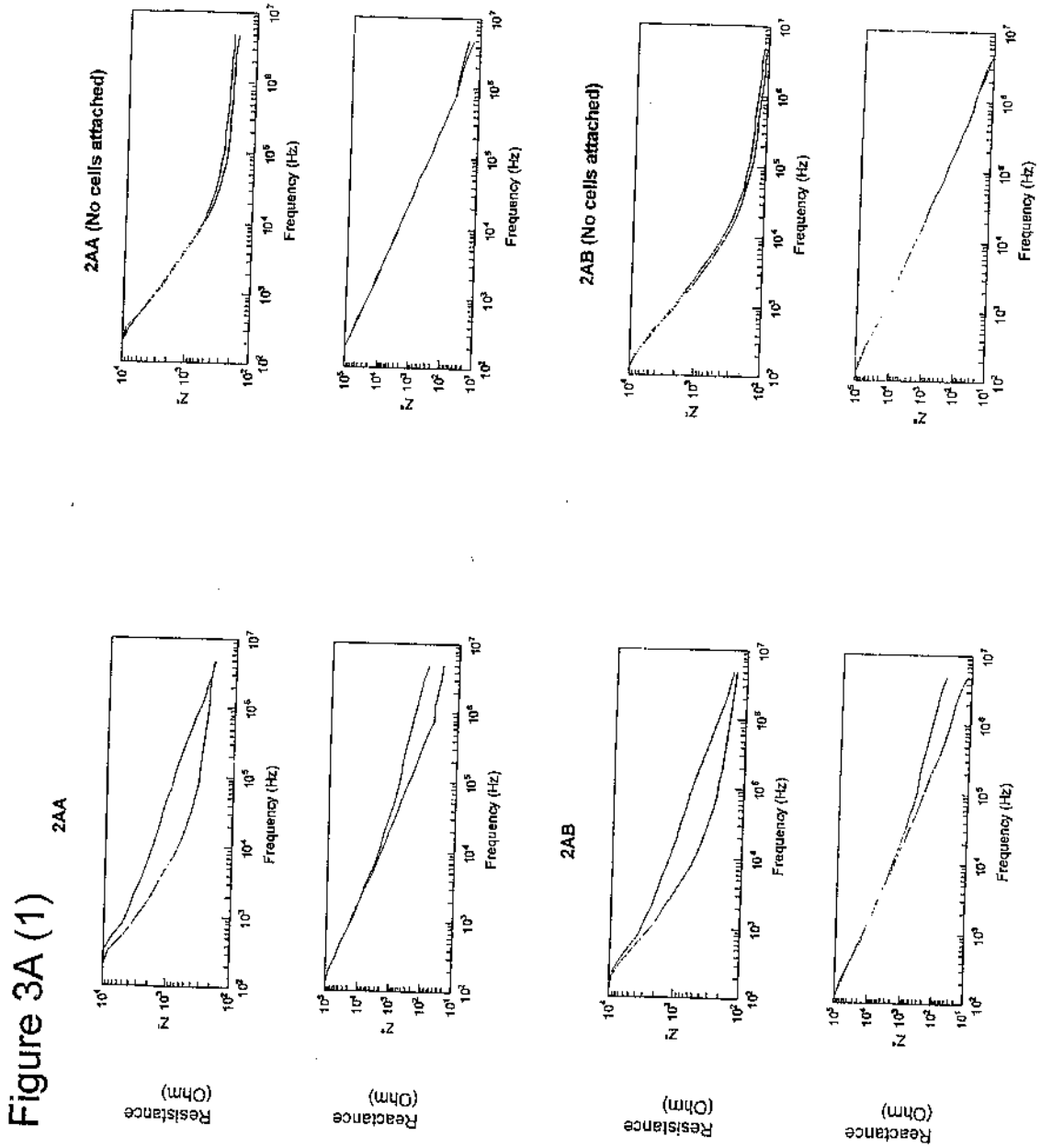

2AA (No cells attached)
2AB (No cells attached)
2AA
2AB
Frequency (Hz)
Resistance (Ohm)
Reactance (Ohm)

Figure 3A (2)

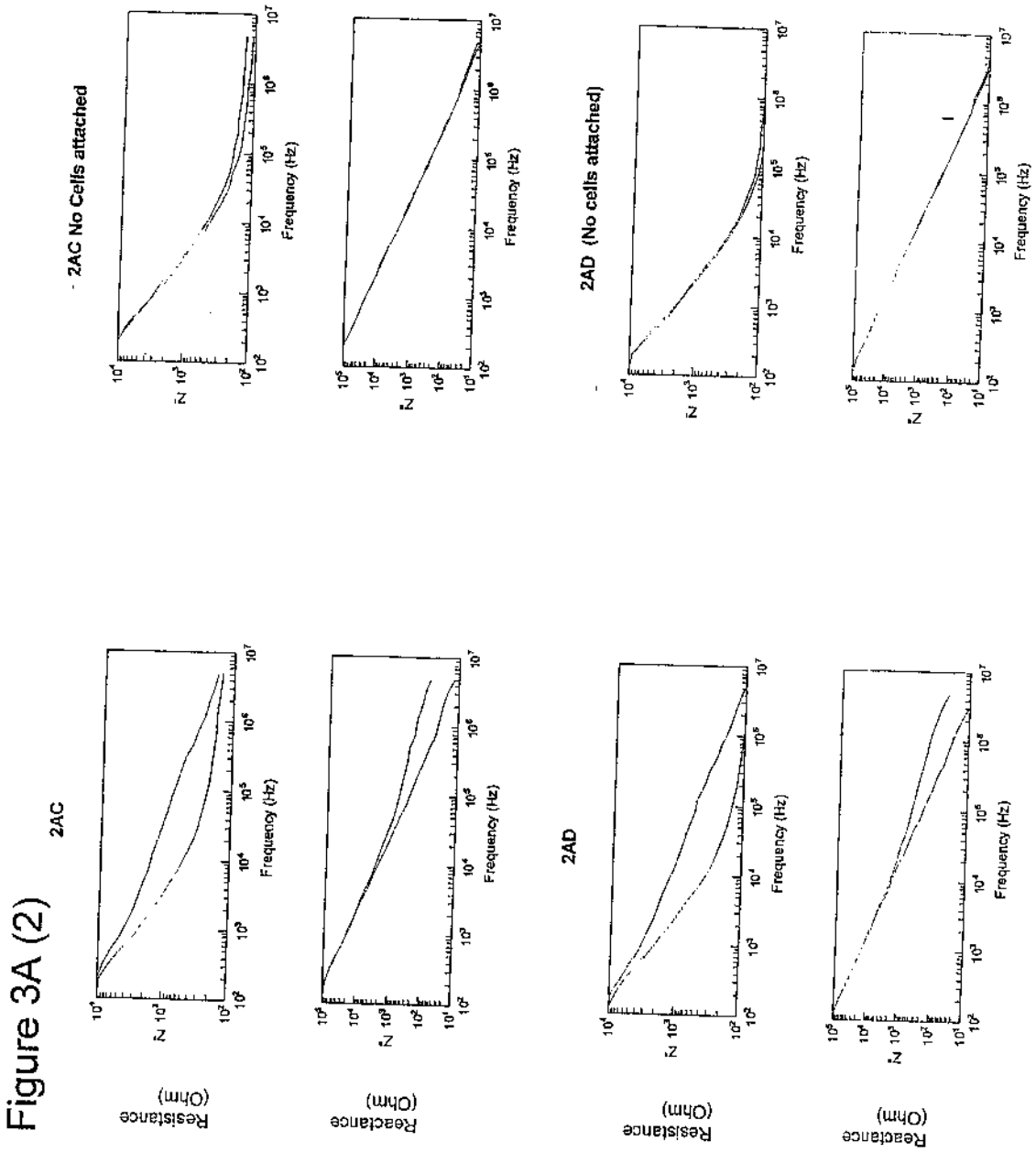

2AC
2AD
2AC No Cells attached
2AD (No cells attached)
Resistance (Ohm)
Reactance (Ohm)
Frequency (Hz)
Z'
Z''

Figure 3A (3)

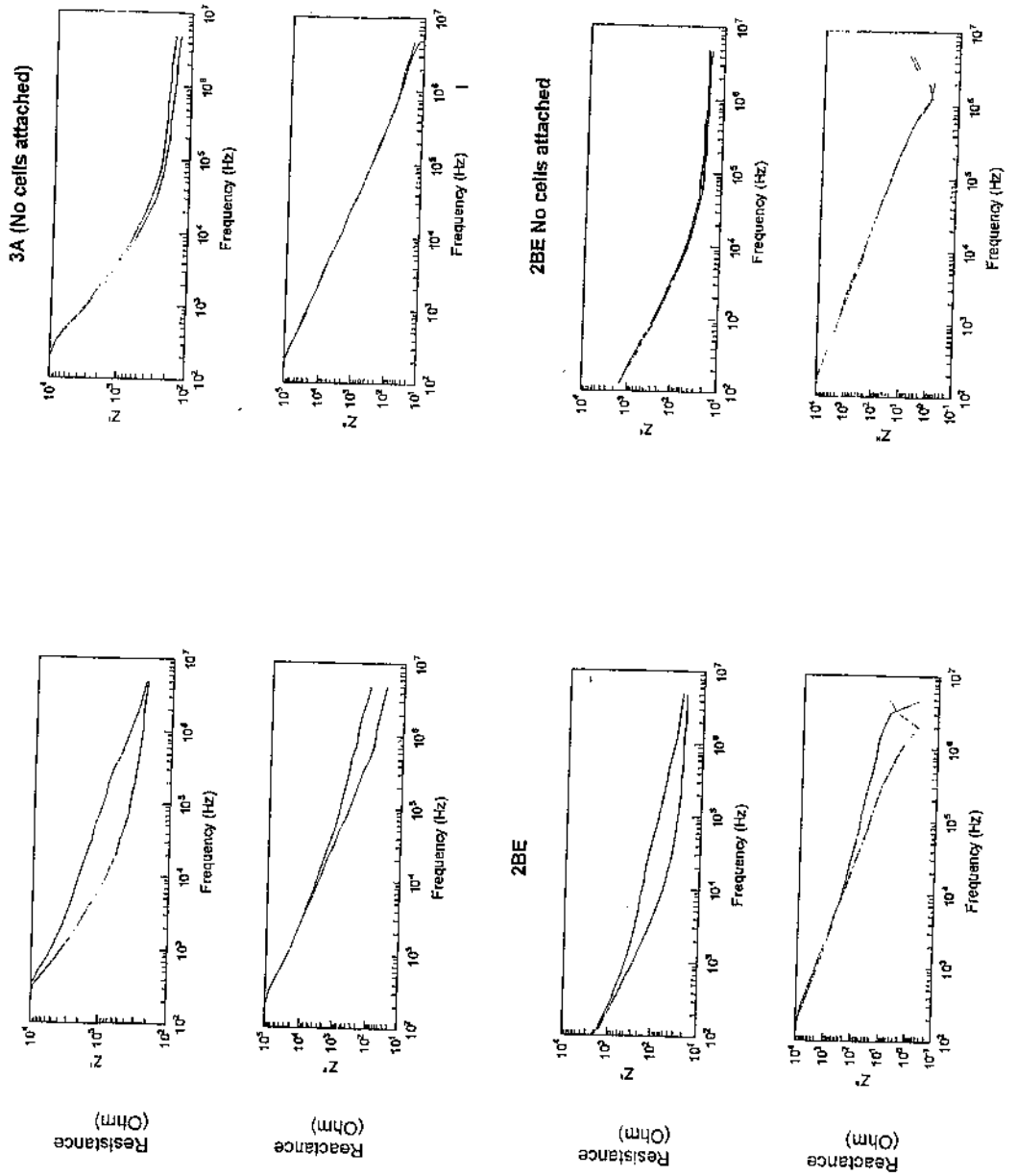
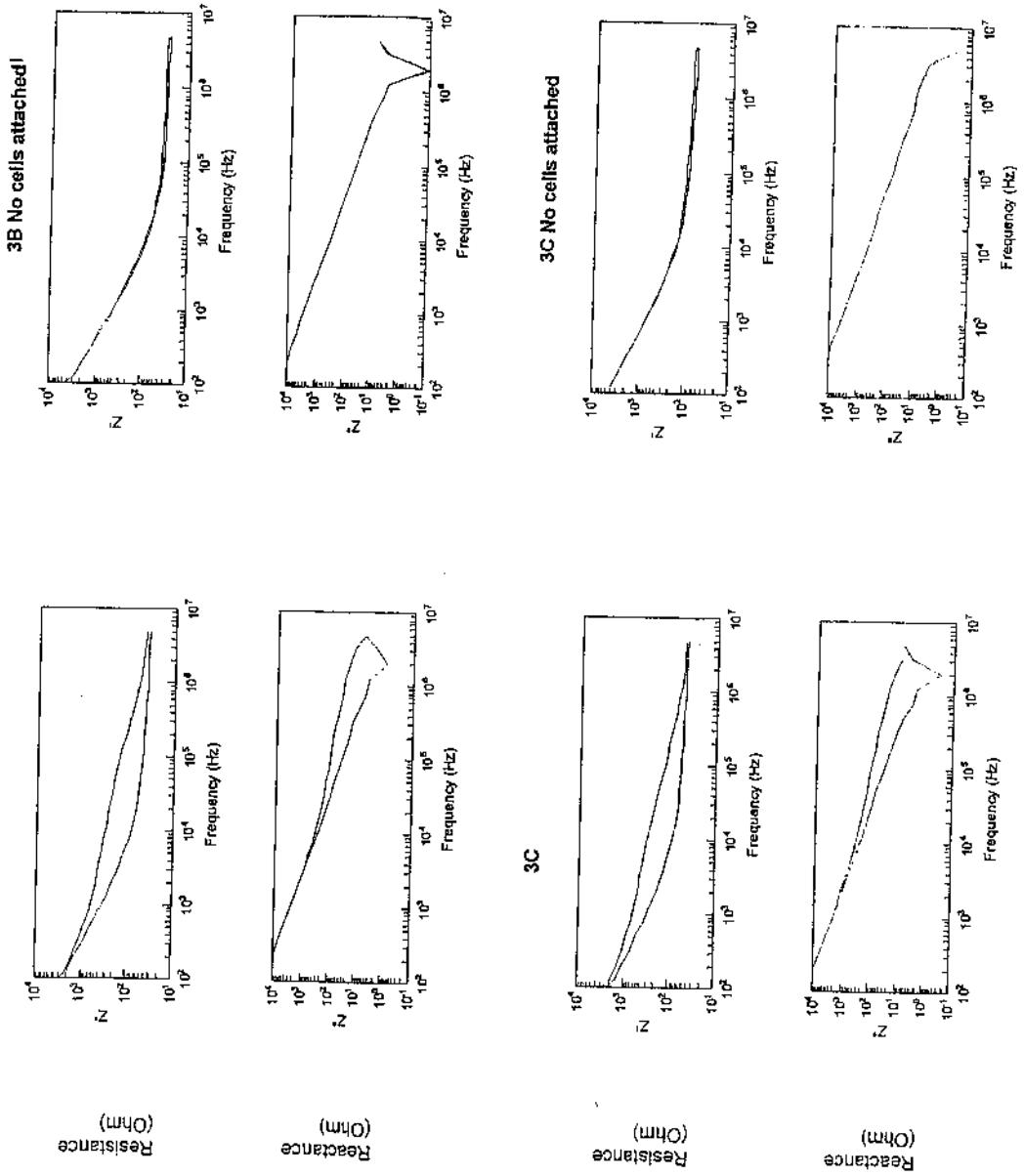

3A (No cells attached)
2BE No cells attached
3A
2BE
Resistance (Ohm)
Reactance (Ohm)
Frequency (Hz)
Z'
Z''

Figure 3A (4)


3B No cells attached
3C No cells attached
3B
3C
Resistance (Ohm)
Reactance (Ohm)
Frequency (Hz)
Z'
Z''

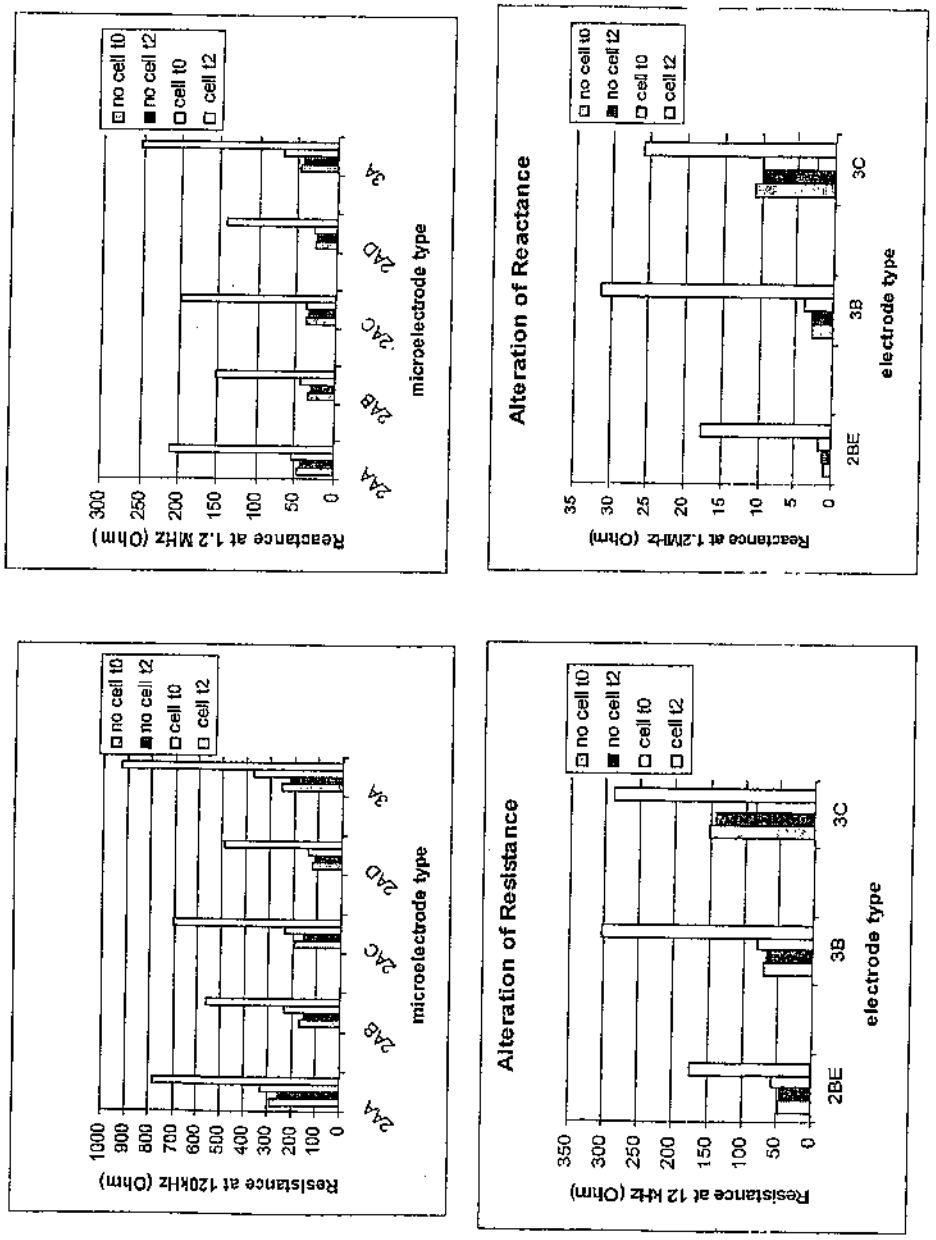

Alteration of Resistance
Alteration of Reactance
Resistance at 120kHz (Ohm)
Reactance at 1.2 MHz (Ohm)
Resistance at 12 kHz (Ohm)
Reactance at 1.2MHz (Ohm)
no cell t0
no cell t2
cell t0
cell t2
microelectrode type
electrode type
2AA
2AB
2AC
2AD
2A
2BE
3B
3C

Figure 3B

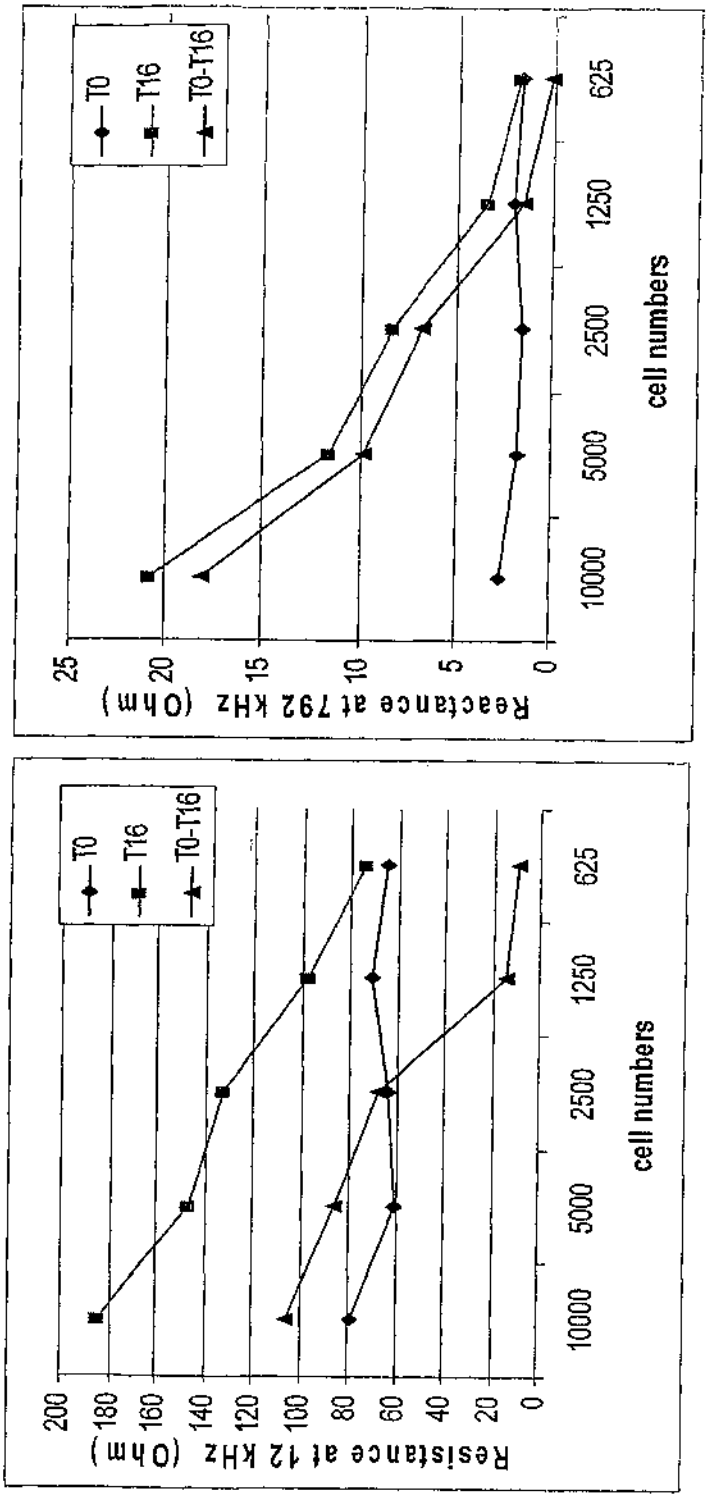

T0
T16
T0-T16
Reactance at 792 kHz (Ohm)
25
20
15
10
5
0
10000
5000
2500
1250
625
cell numbers
T0
T16
T0-T16
Resistance at 12 kHz (Ohm)
200
180
160
140
120
100
80
60
40
20
0
10000
5000
2500
1250
625
cell numbers

Figure 4

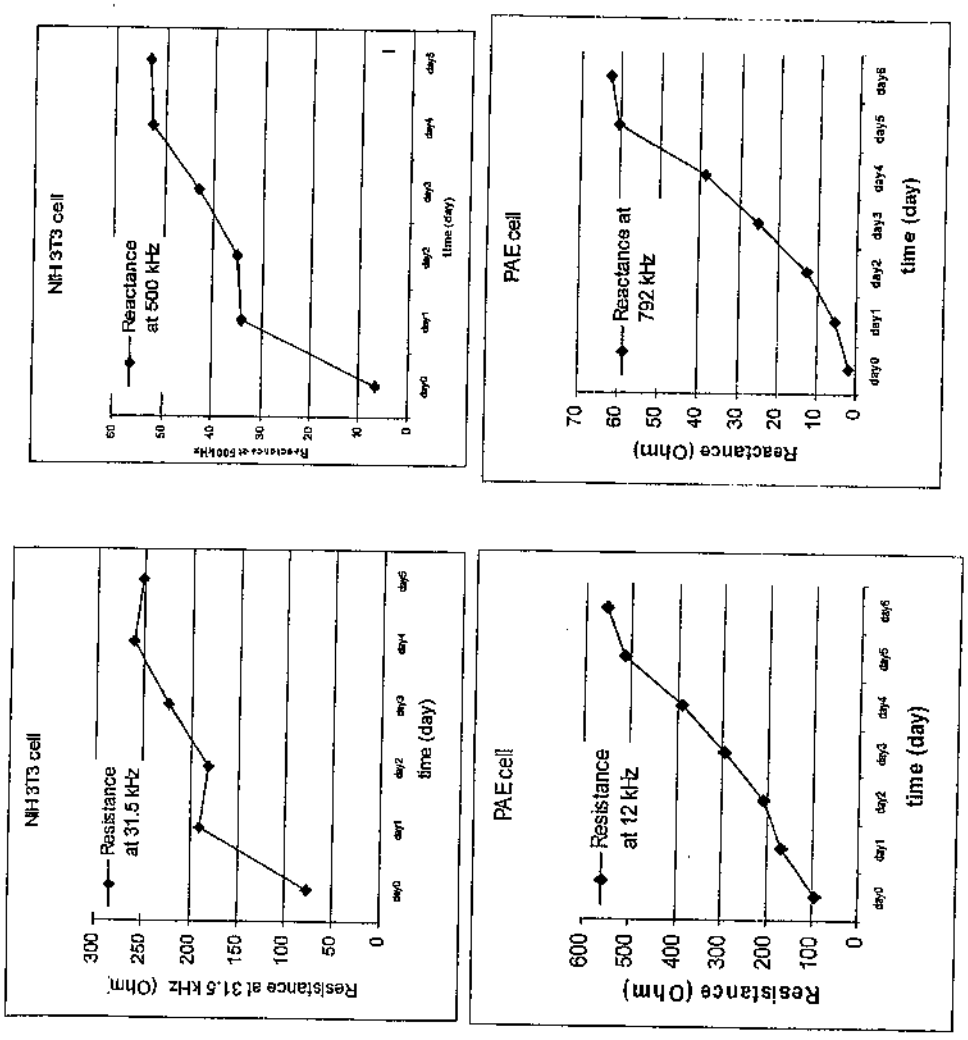

NIH 3T3 and PAE Cell Proliferation
NIH3T3 cell
Resistance at 31.5 kHz
Resistance at 31.5 kHz (Ohm)
time (day)
NIH3T3 cell
Reactance at 500 kHz
PAE cell
Resistance at 12 kHz
Resistance (Ohm)
time (day)
PAE cell
Reactance at 792 kHz
Reactance (Ohm)
time (day)

Figure 5

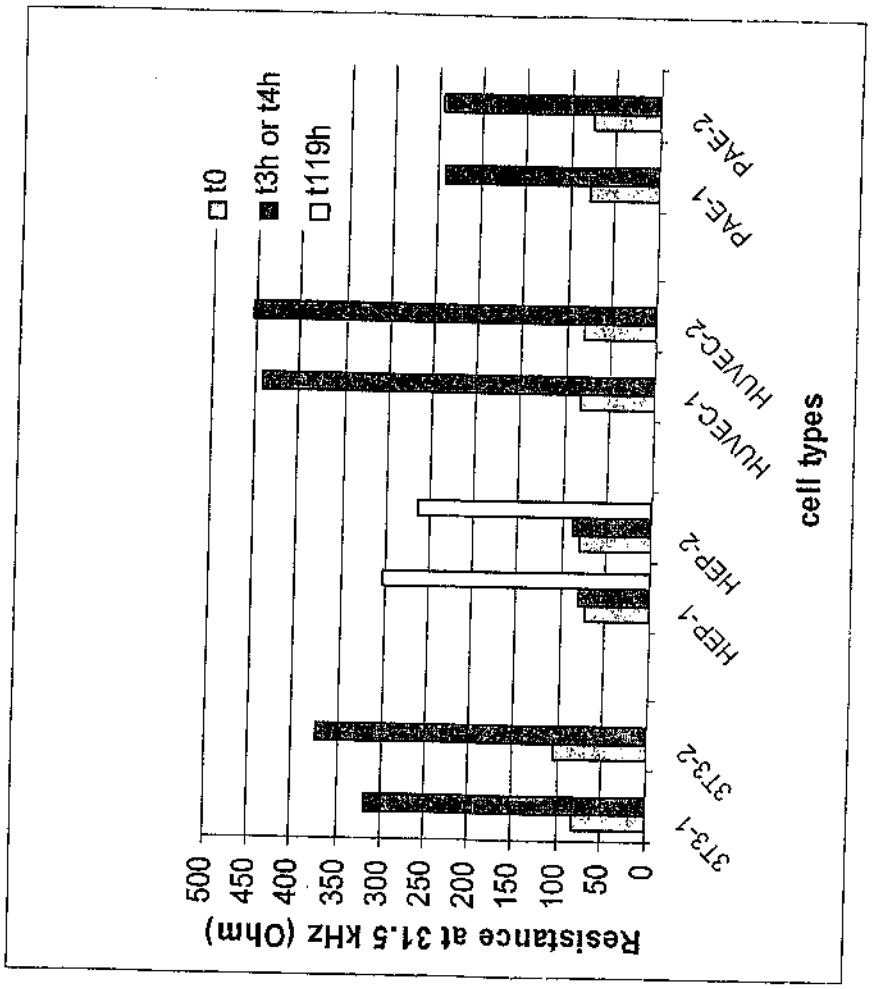

Resistance at 31.5 kHz (Ohm)
500
450
400
350
300
250
200
150
100
50
0
3T3-1
3T3-2
HEP-1
HEP-2
HUVEC-1
HUVEC-2
PAE-1
PAE-2
cell types
t0
t3h or t4h
t119h

Figure 6

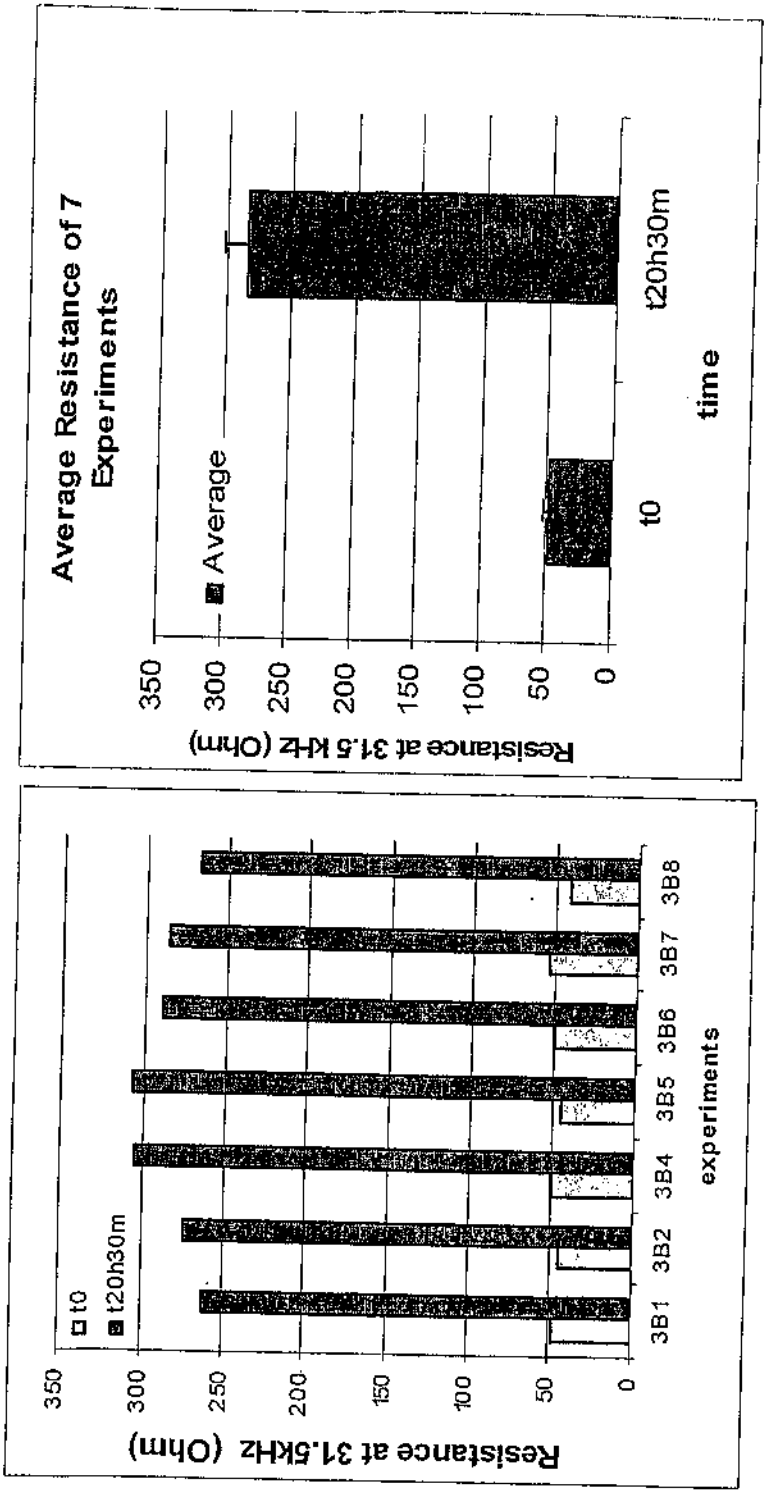
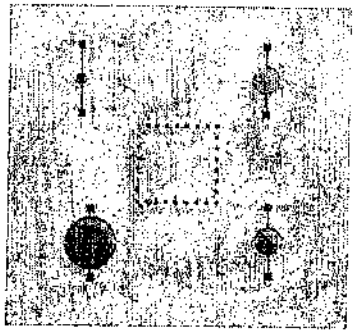

Average Resistance of 7 Experiments
Average
Resistance at 31.5 kHz (Ohm)
350
300
250
200
150
100
50
0
t0
t20h30m
time
Resistance at 31.5KHz (Ohm)
t0
t20h30m
3B1
3B2
3B4
3B5
3B6
3B7
3B8
experiments

Figure 7

Figure 8.



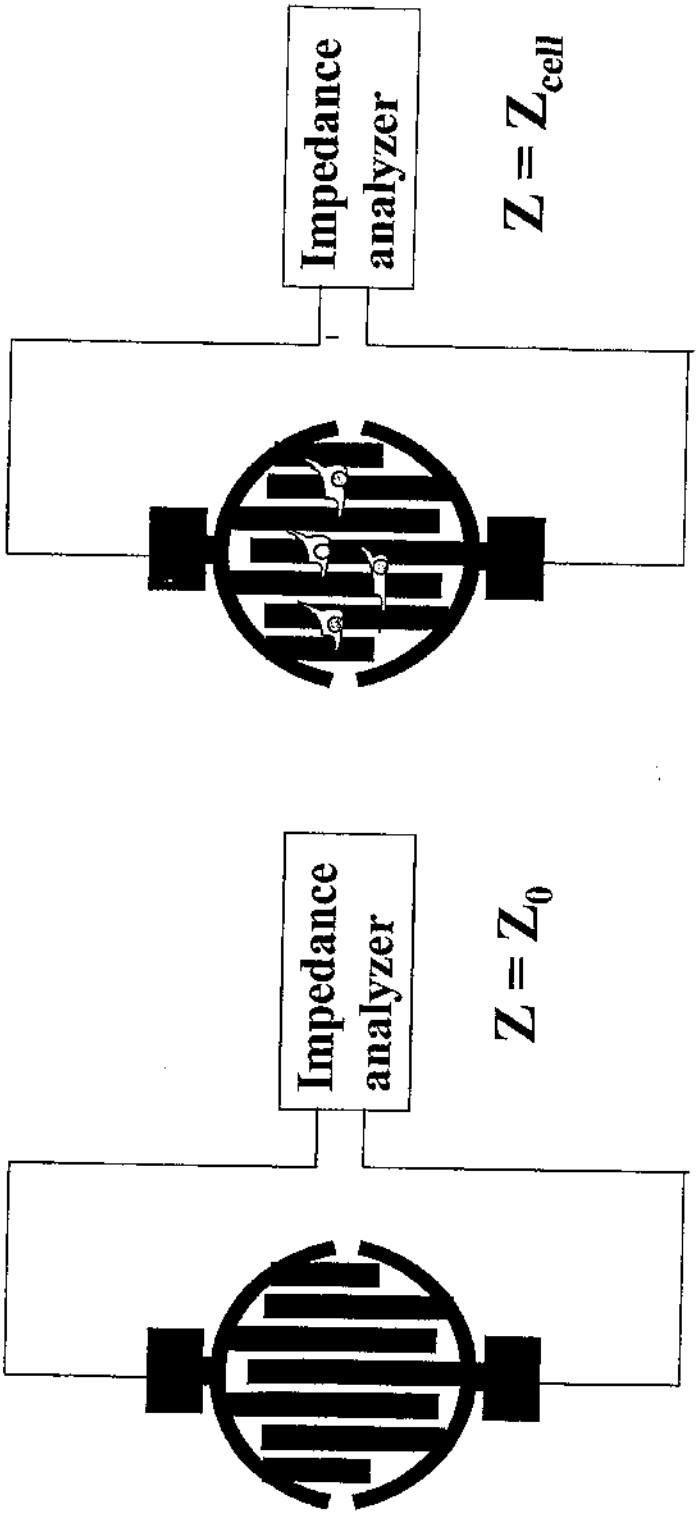


Figure 9

Figure 10.

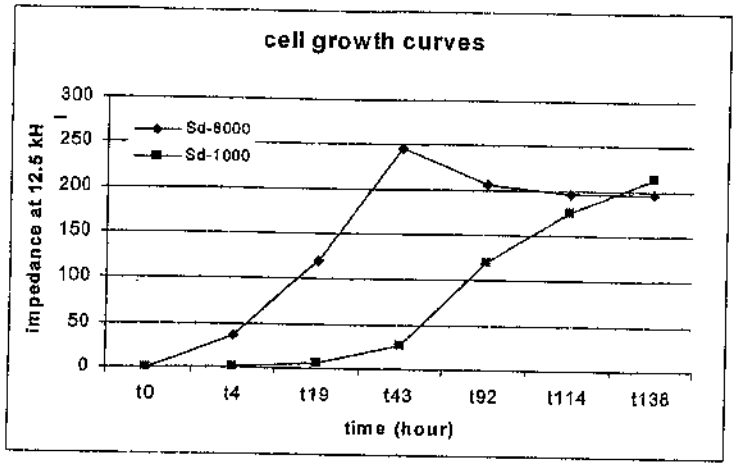


Figure 11.

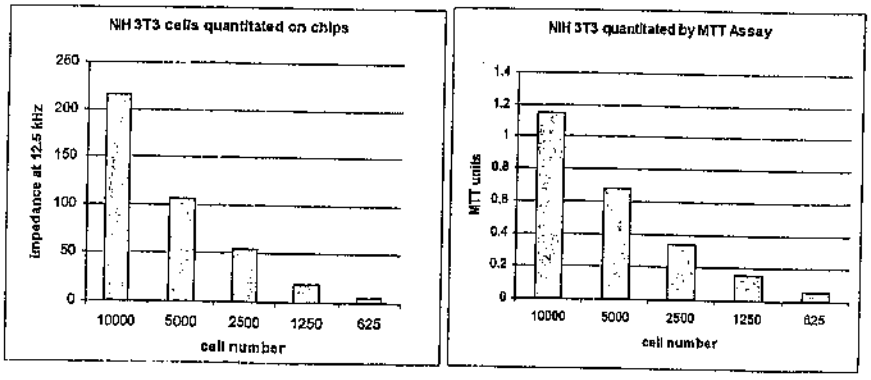


Figure 12.

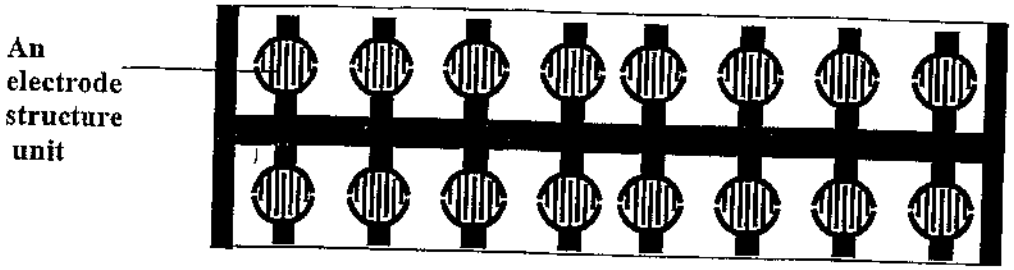


Figure 13.

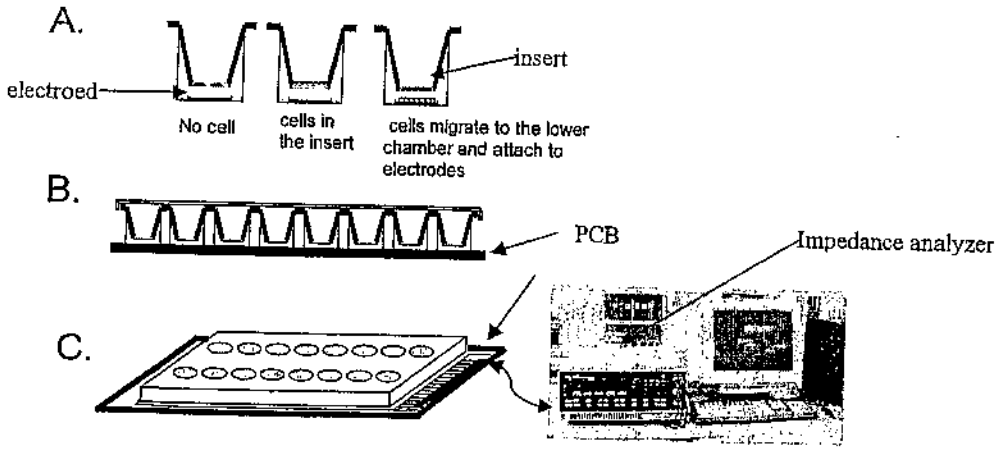
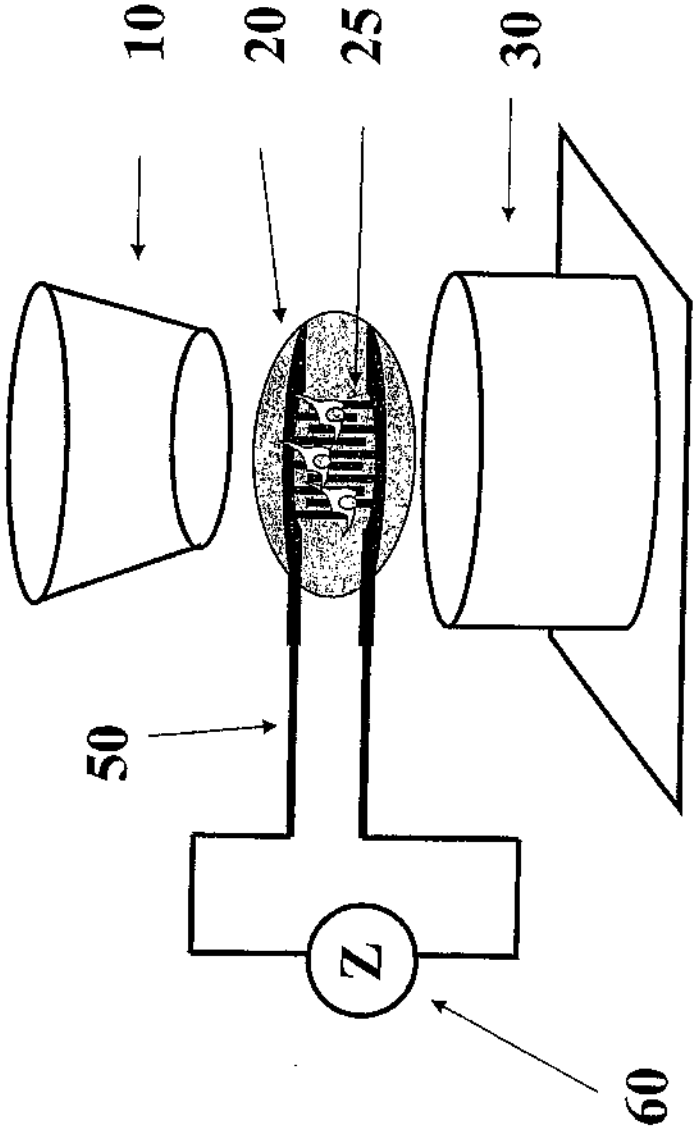


Figure 14



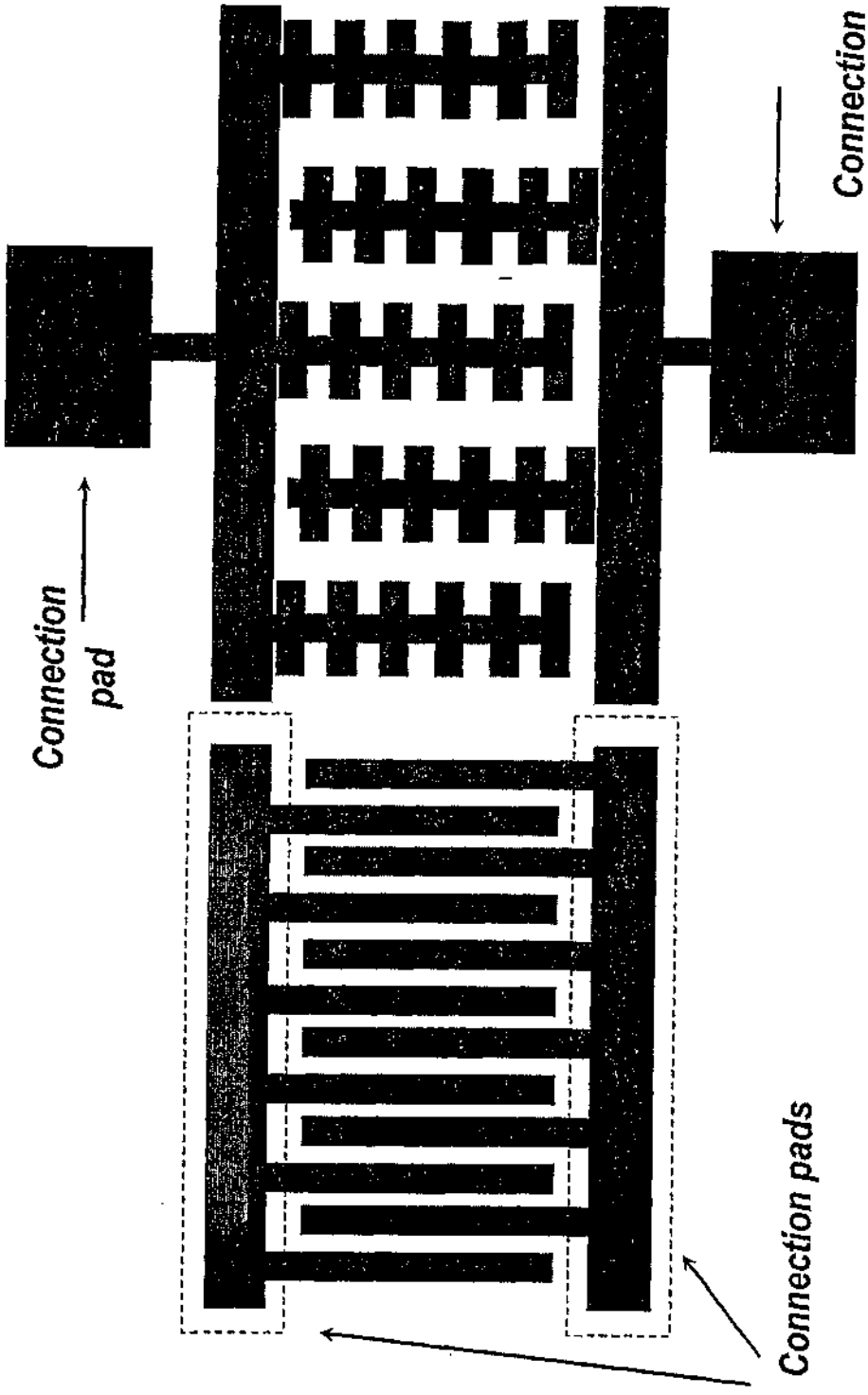


Figure 15 (B)

Figure 15 (A)

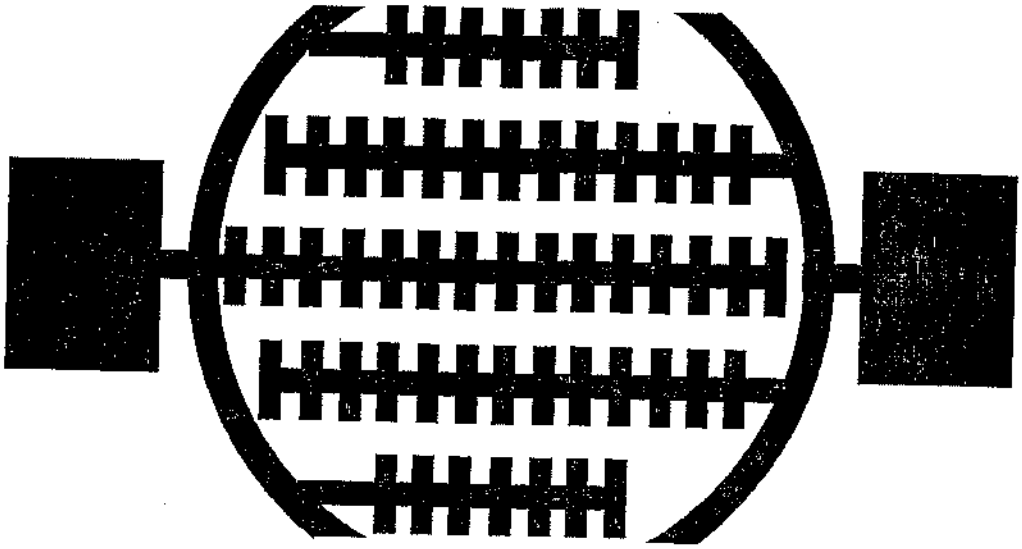


Figure 15(D)

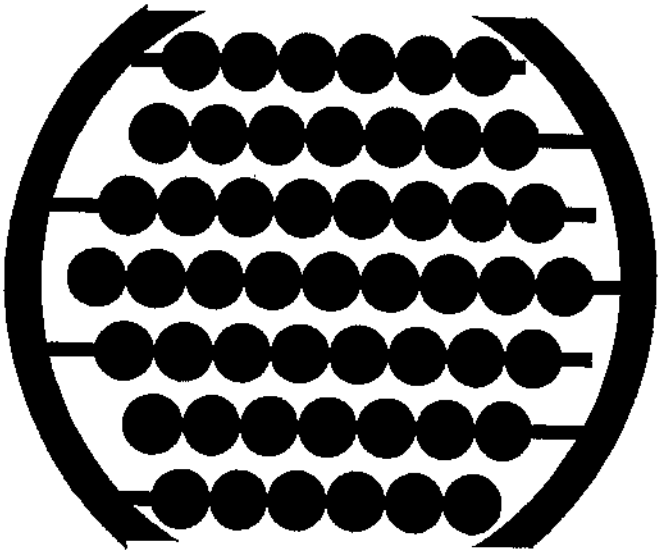


Figure 15(C)

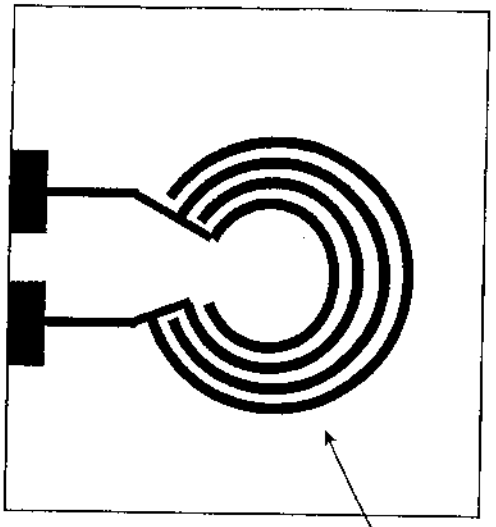


Figure 15(F)

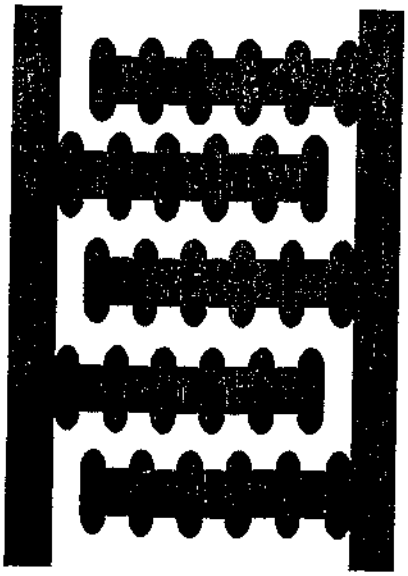
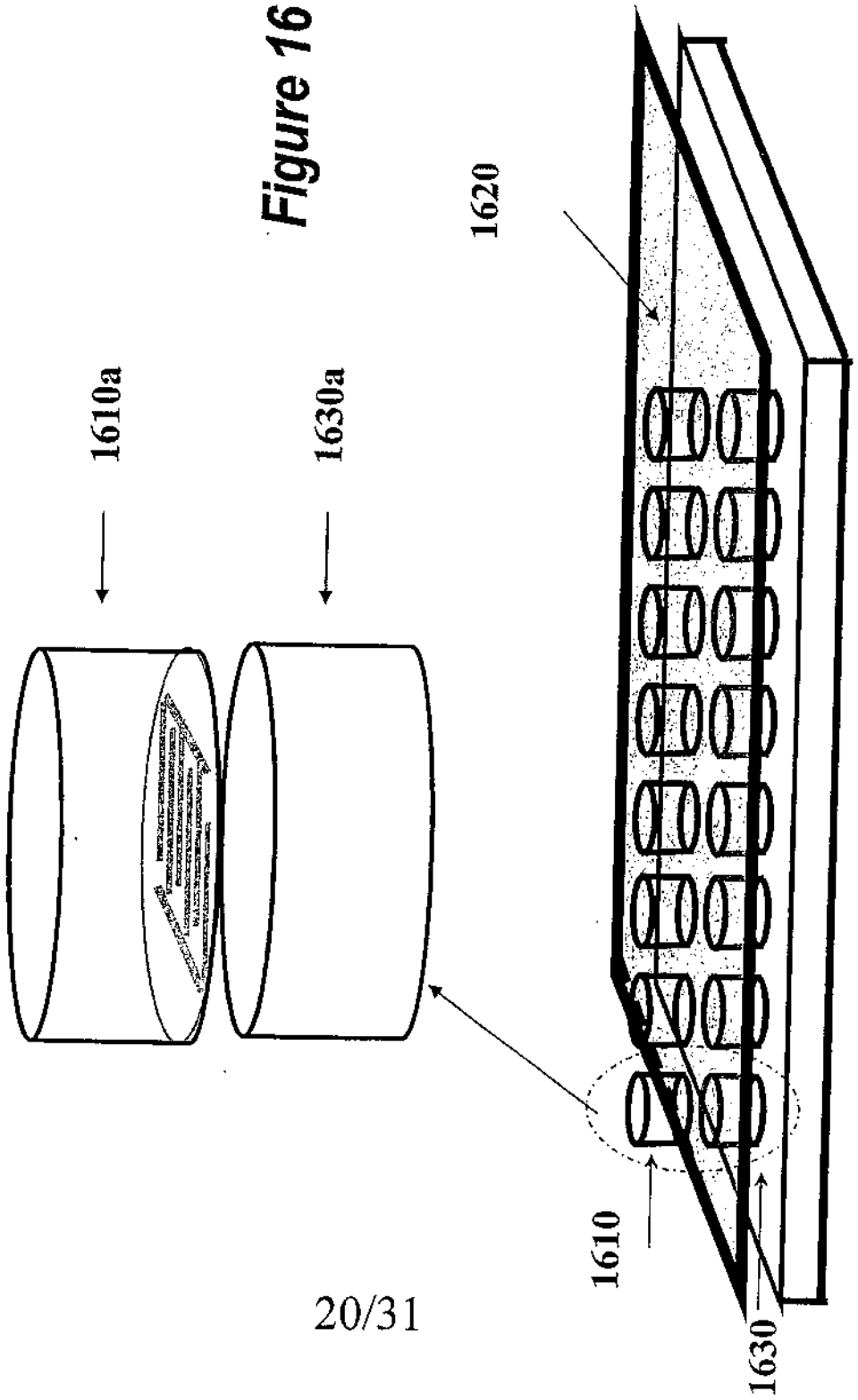


Figure 15(E)

Figure 16



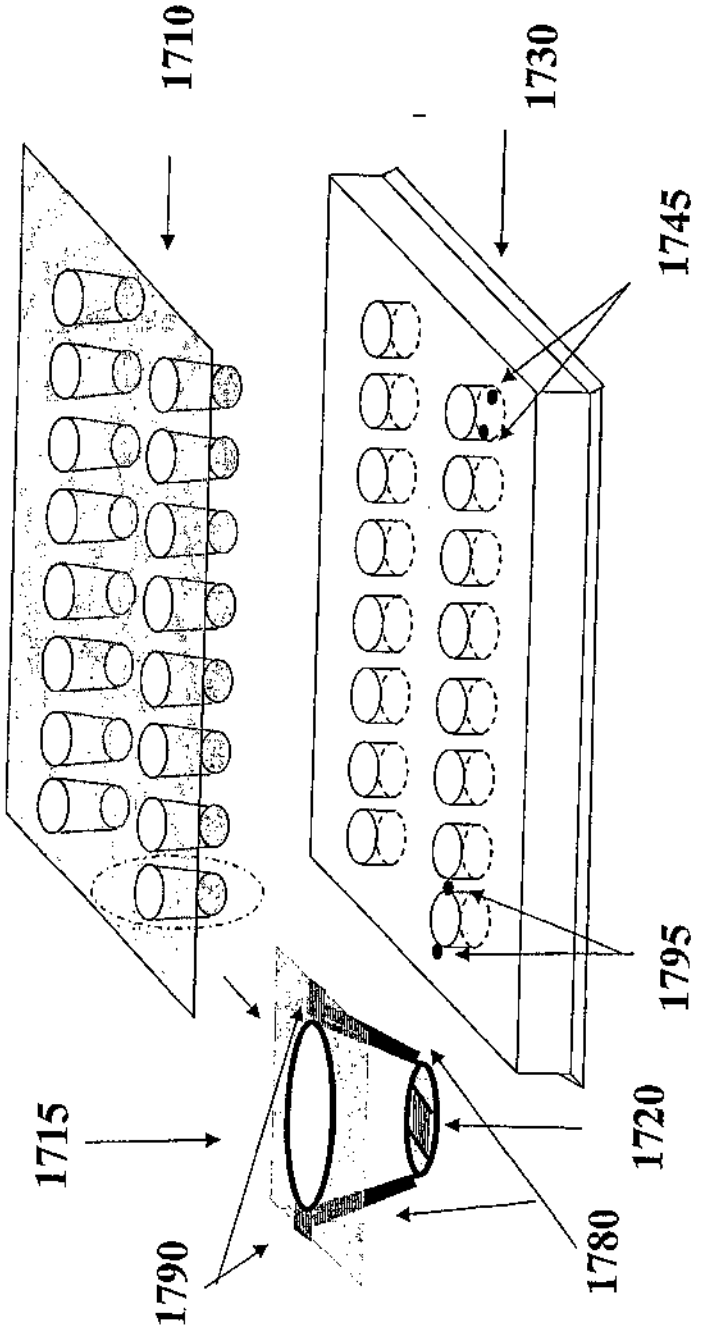


Figure 17

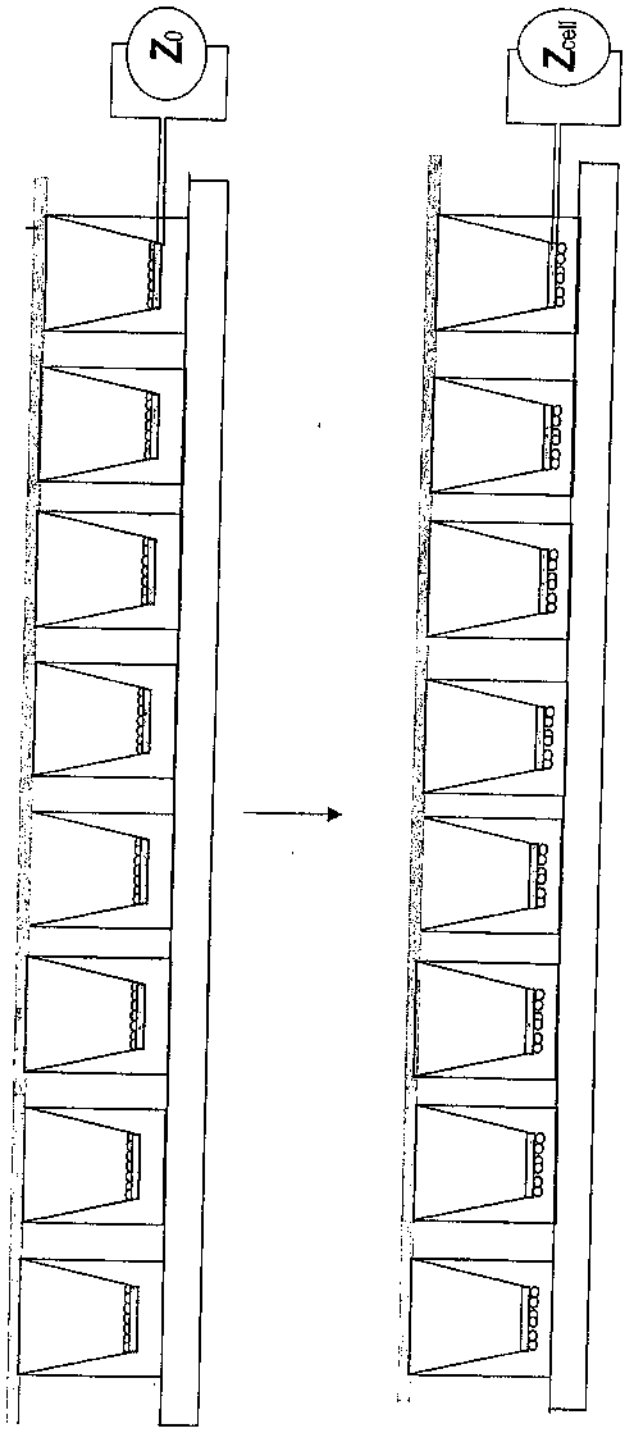


Figure 18

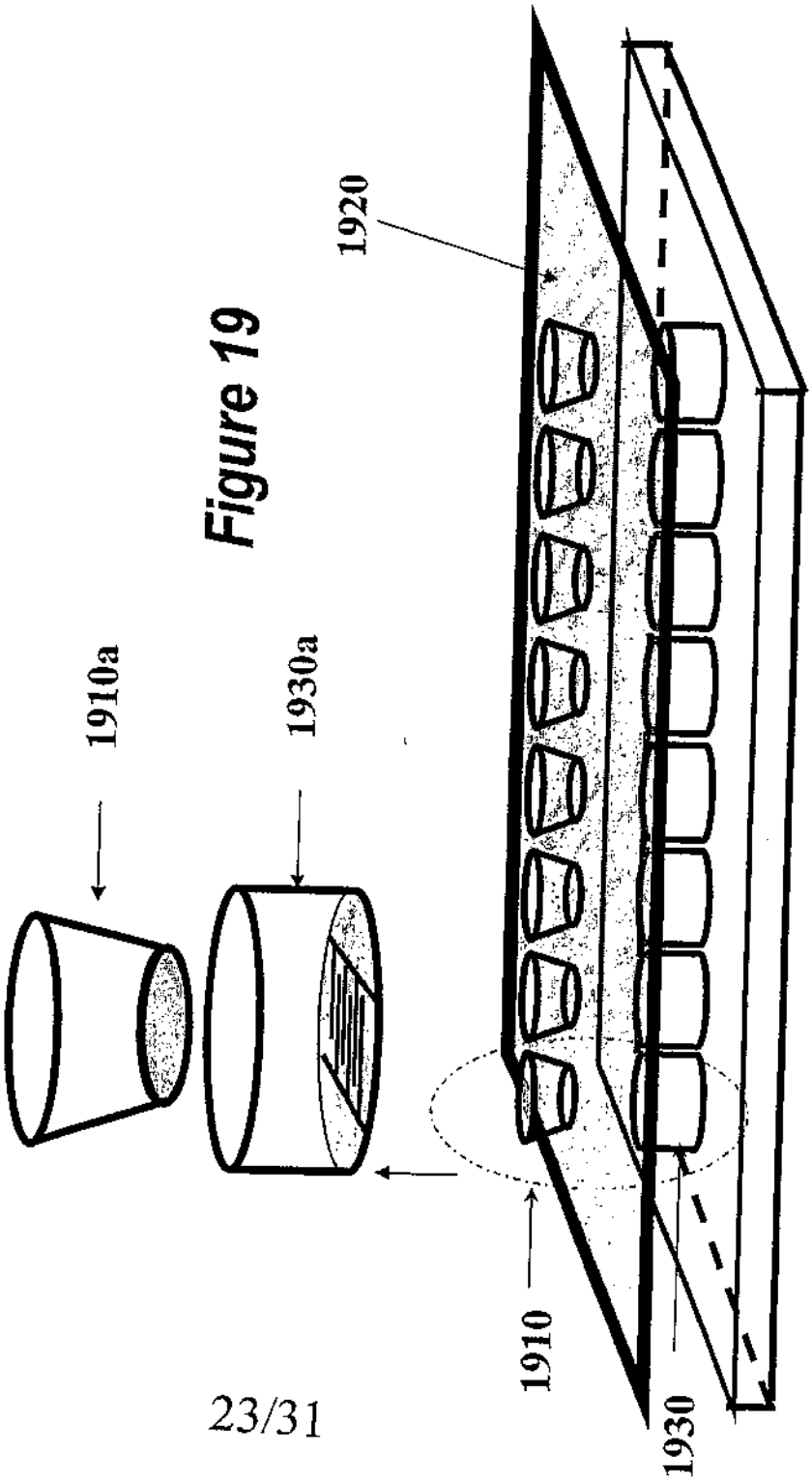


Figure 19

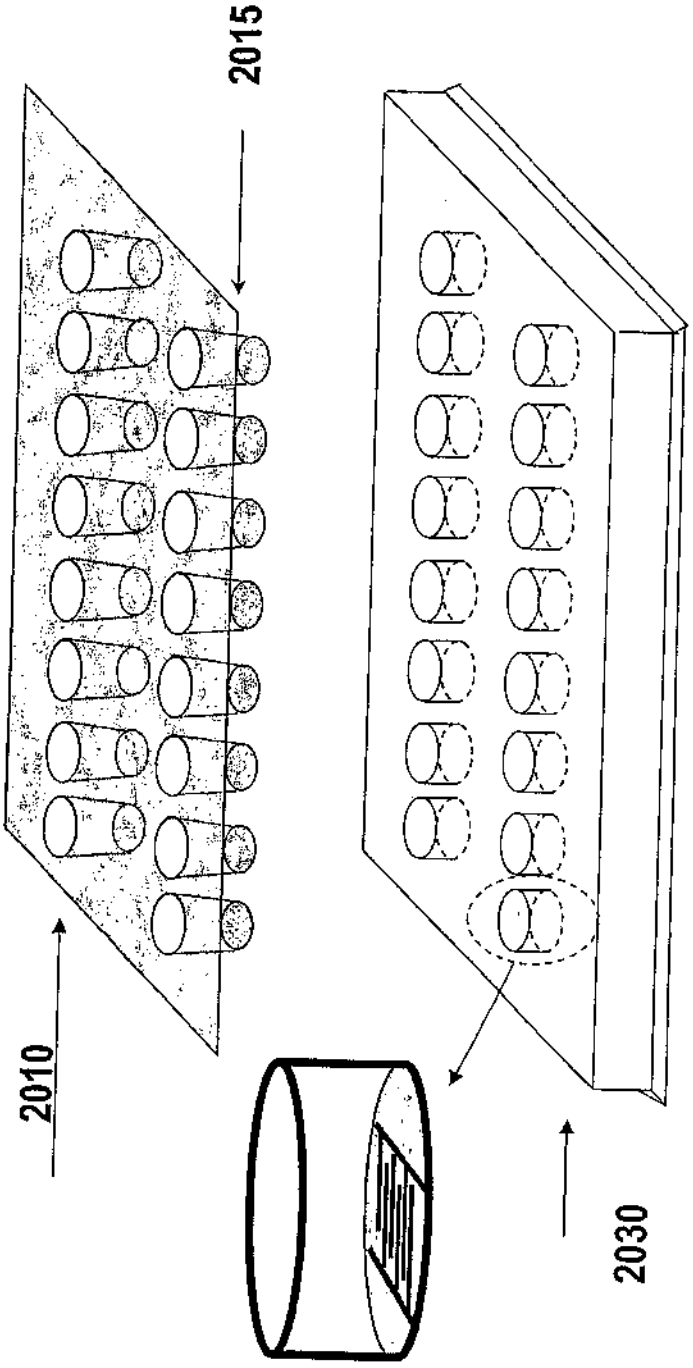


Figure 20

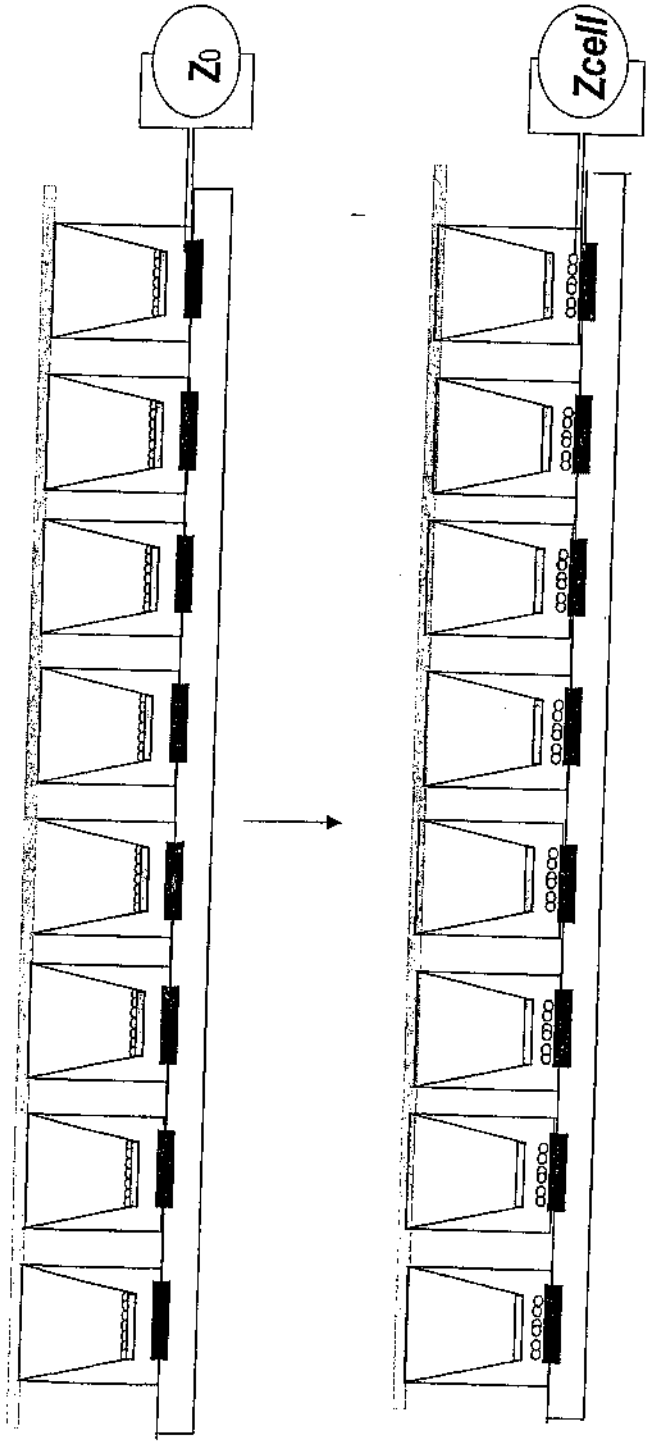


Figure 21

Figure 22.

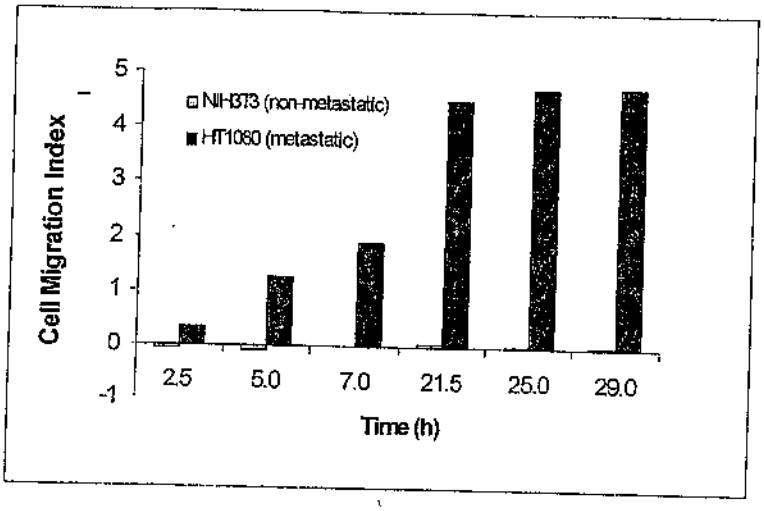
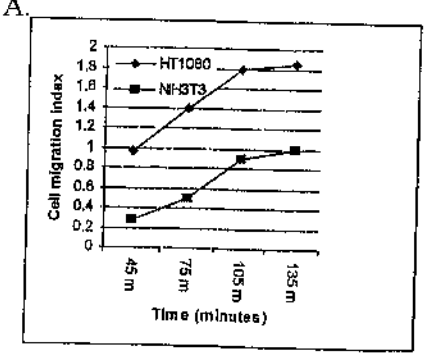


Figure 23.

A.



B.

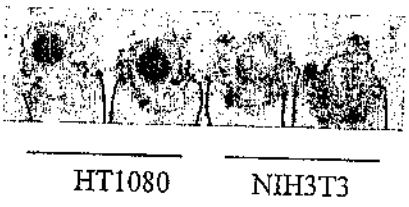
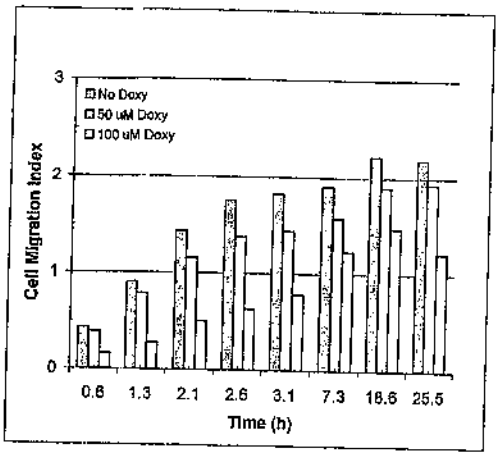


Figure 24.

A.


No Doxy
50 uM Doxy
100 uM Doxy
Cell Migration Index
0
1
2
3
0.6
1.3
2.1
2.6
3.1
7.3
18.6
25.5
Time (h)

B.

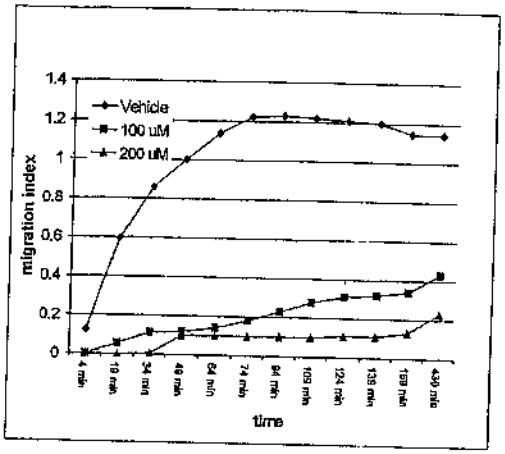

Vehicle
100 uM
200 uM
migration index
0
0.2
0.4
0.6
0.8
1
1.2
1.4
time

Figure 25(A).

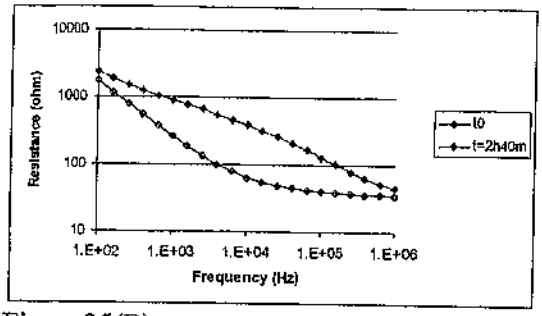


Figure 25(B)

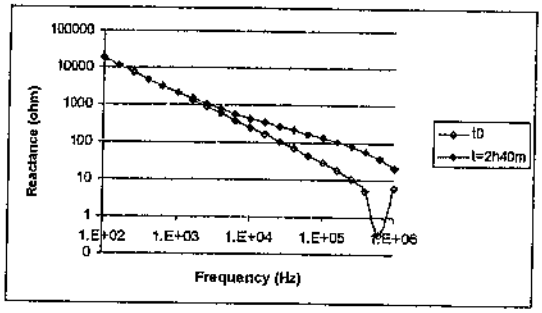


Figure 25(C)

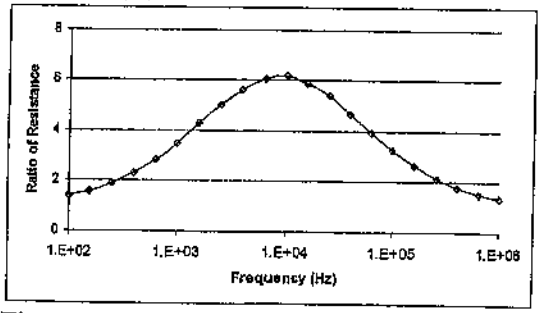


Figure 25(D)

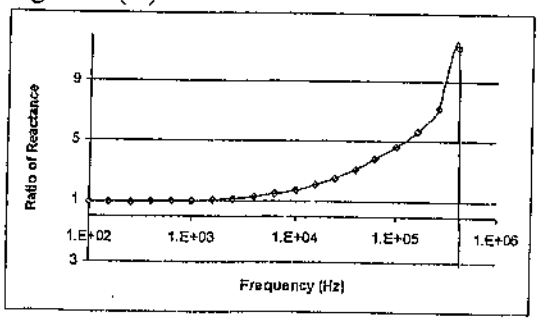


Figure 26(A)

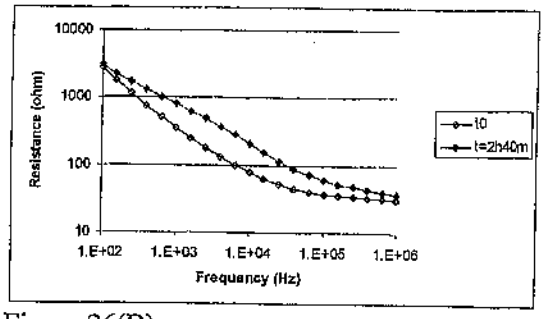


Figure 26(B)

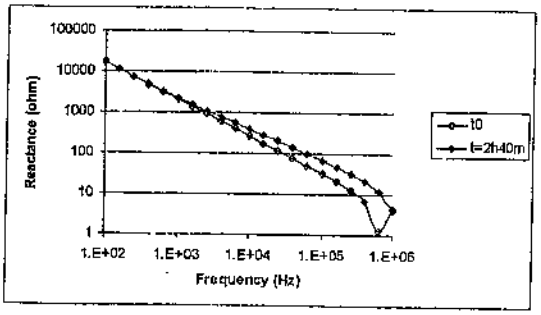


Figure 26(C)

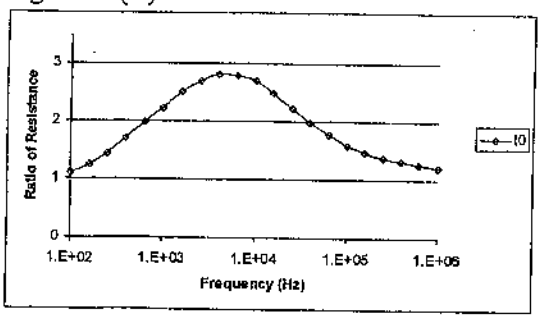


Figure 26(D)

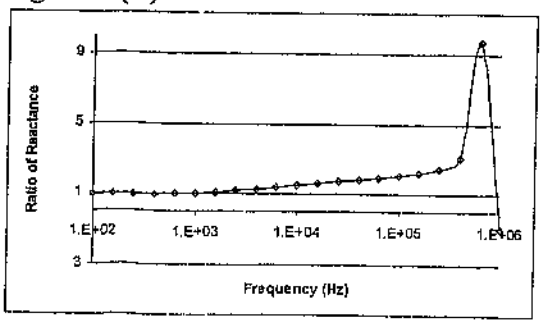


Figure 27(A)

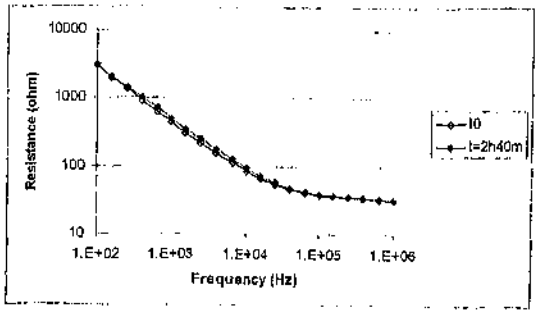


Figure 27(B)

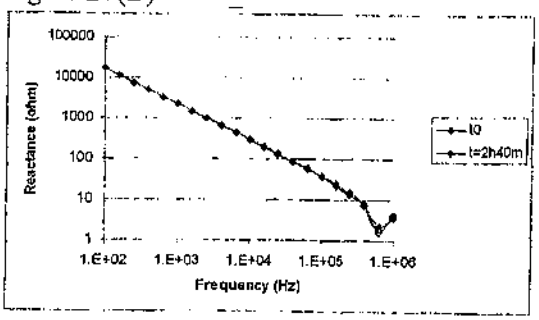


Figure 27(C)

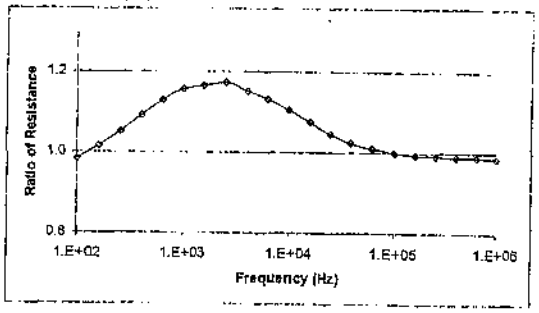


Figure 27(D)

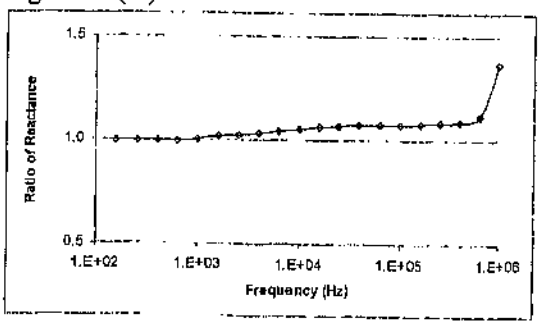


Figure 28(A)

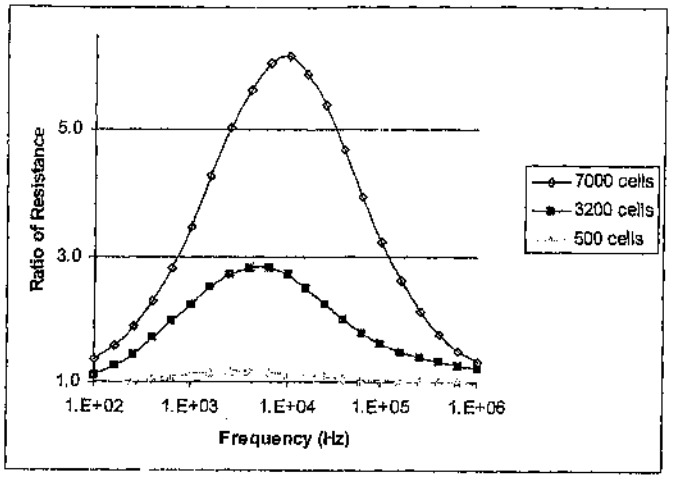


Figure 28(B)

