Fig.1.

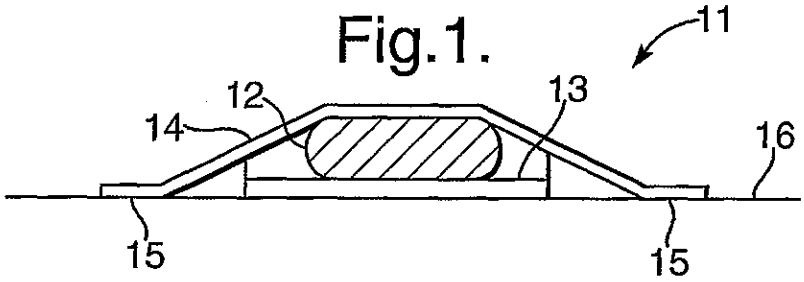


Fig.2a.

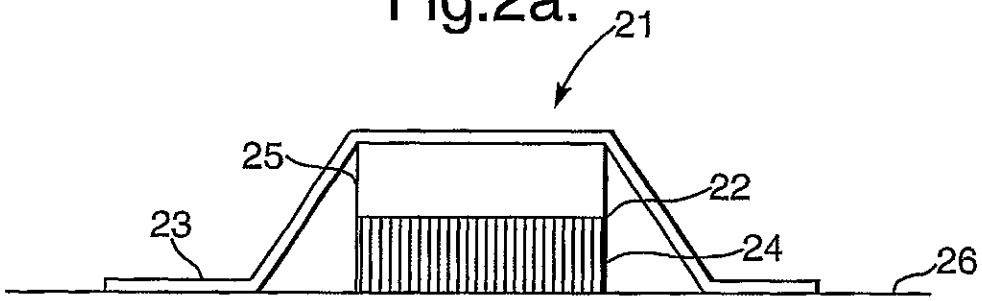


Fig.2b.

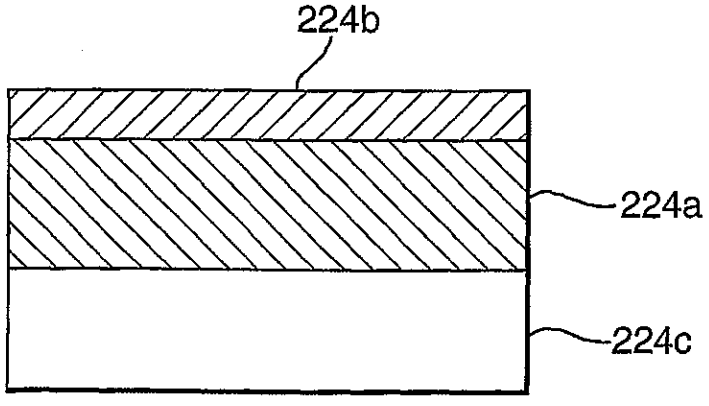


Fig.3.

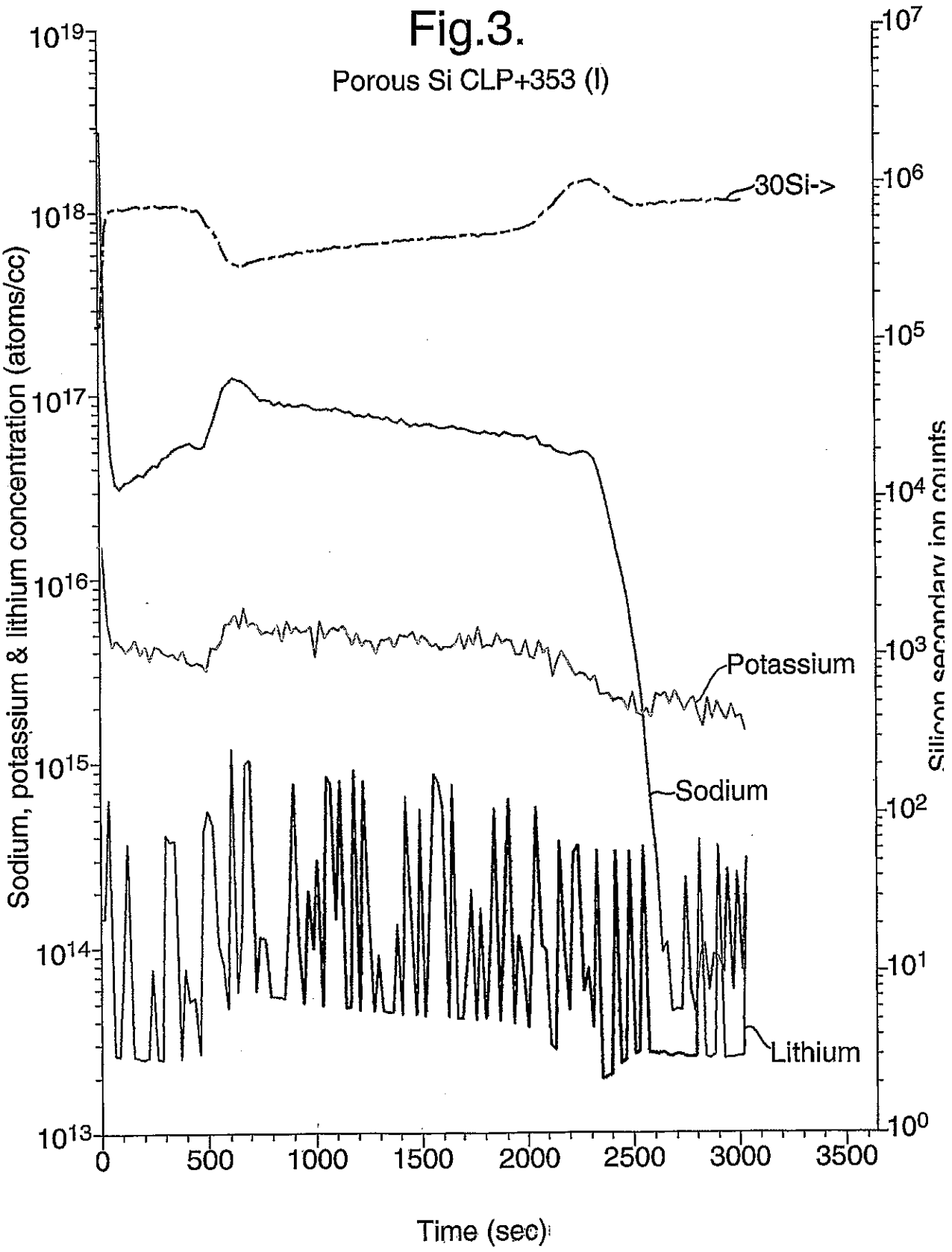

Porous Si CLP+353 (I)
30Si->
Potassium
Sodium
Lithium
Sodium, potassium & lithium concentration (atoms/cc)
Silicon secondary ion counts
Time (sec)
10^{19}
10^{18}
10^{17}
10^{16}
10^{15}
10^{14}
10^{13}
10^{7}
10^{6}
10^{5}
10^{4}
10^{3}
10^{2}
10^{1}
10^{0}
0
500
1000
1500
2000
2500
3000
3500

Fig.4.

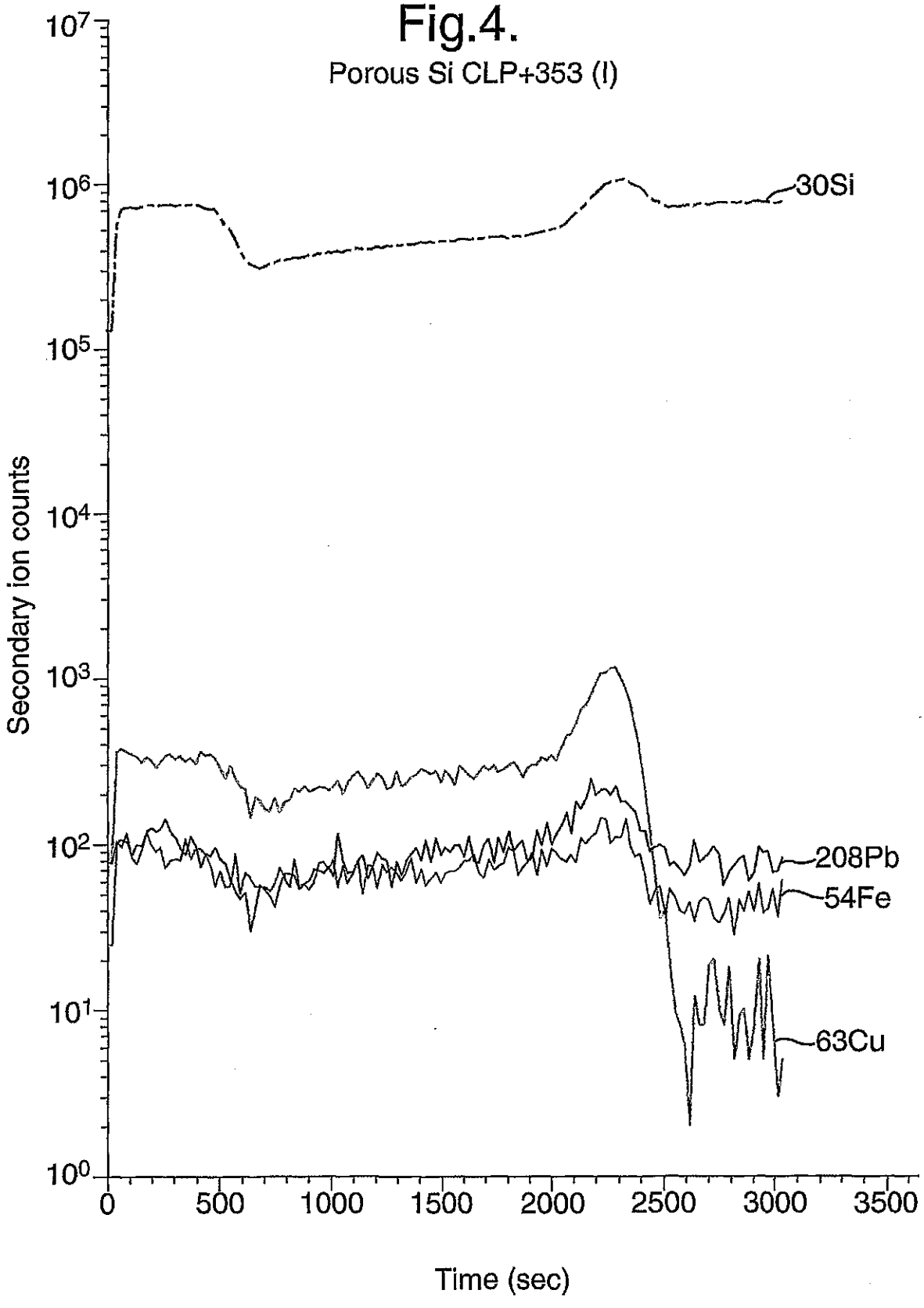

Porous Si CLP+353 (I)
Secondary ion counts
Time (sec)
30Si
208Pb
54Fe
63Cu
10^7
10^6
10^5
10^4
10^3
10^2
10^1
10^0
0
500
1000
1500
2000
2500
3000
3500

Fig.5.

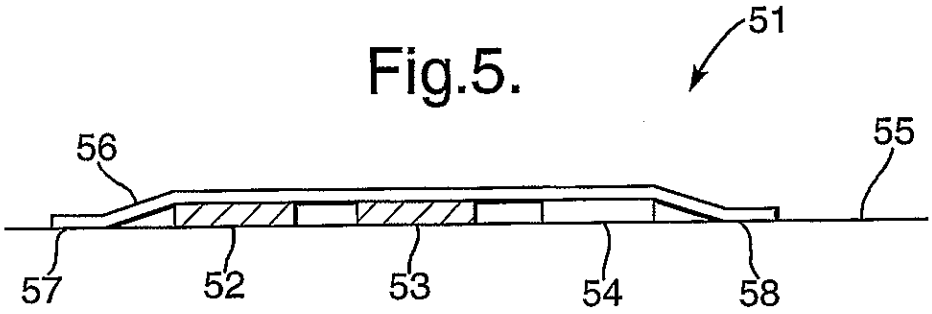


Fig.6.

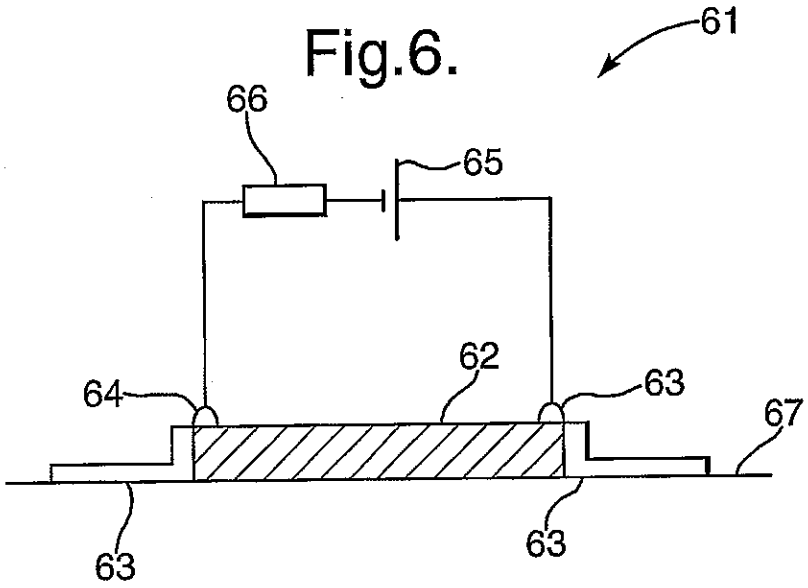


Fig.9.

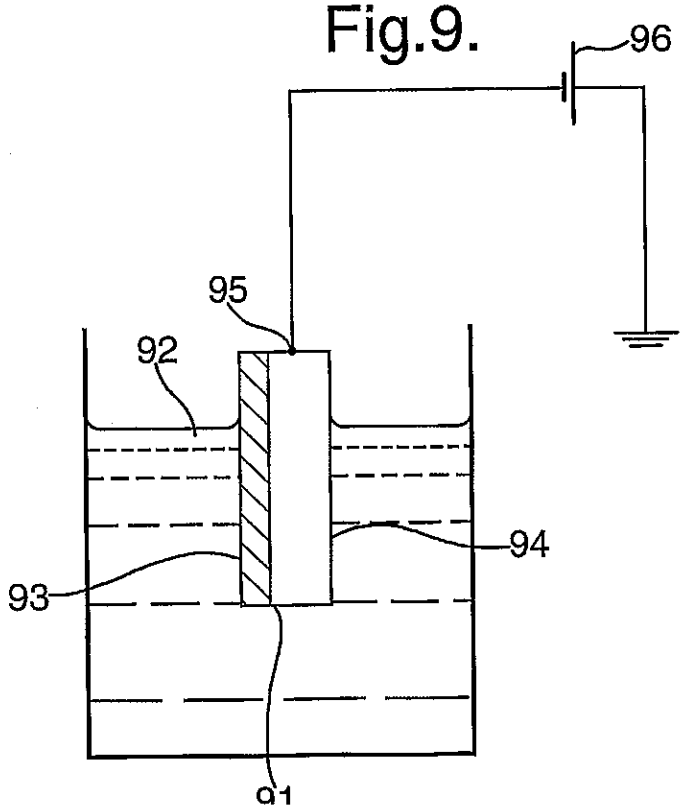


Fig.7a.

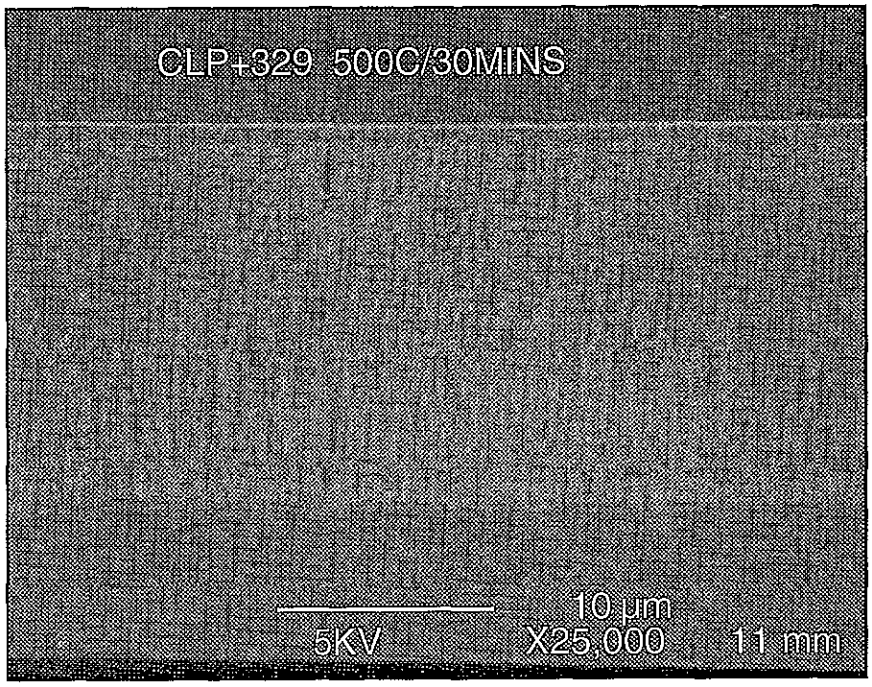

CLP+329 500C/30MINS
10 µm
5KV X25,000 11 mm

Fig.7b.

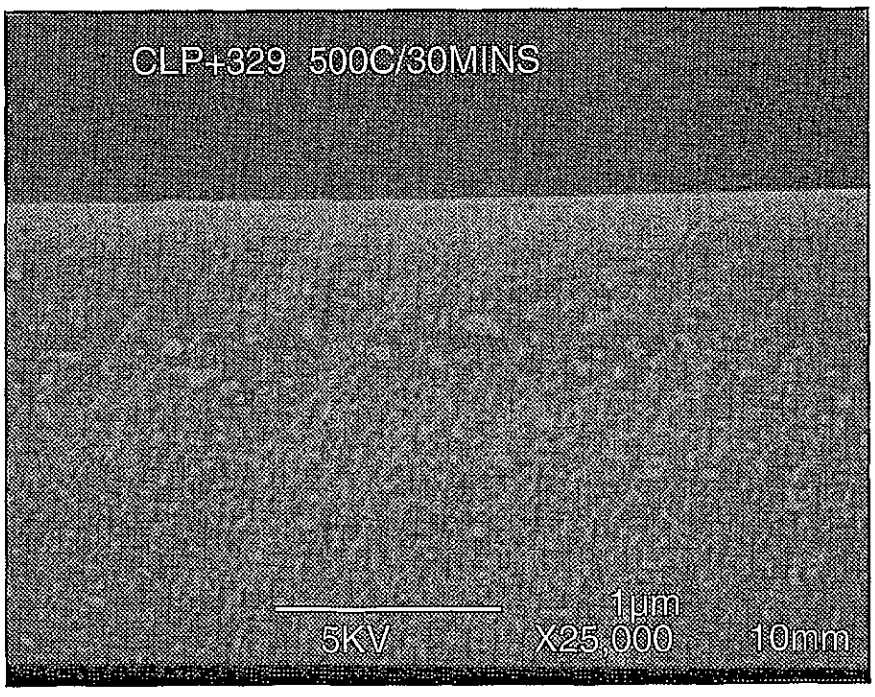

CLP+329 500C/30MINS
1µm
5kV X25,000 10mm

Fig.7c.

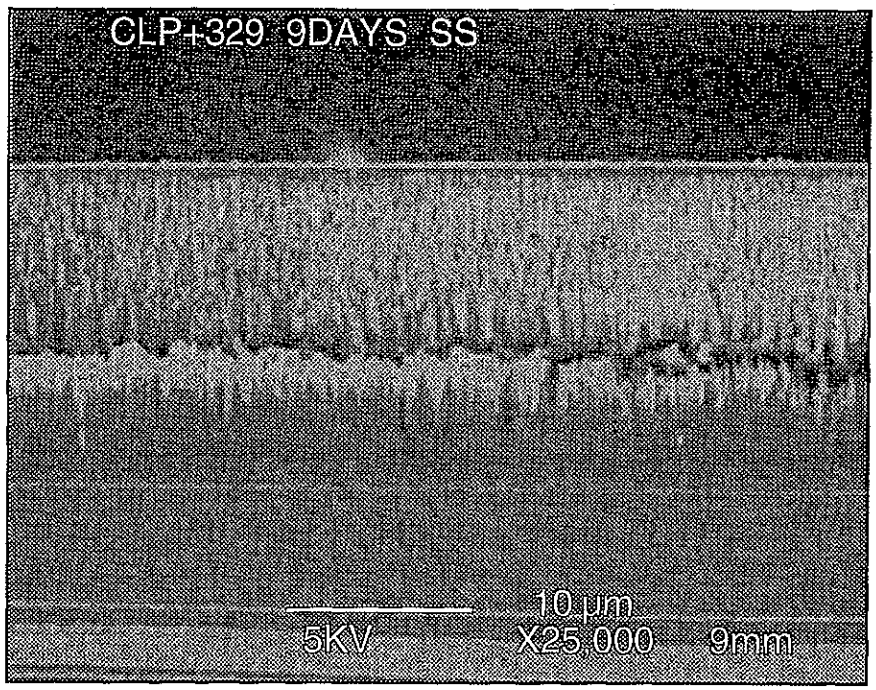

CLP+329 9DAYS SS
5KV
10 µm
X25,000
9mm

Fig.7d.

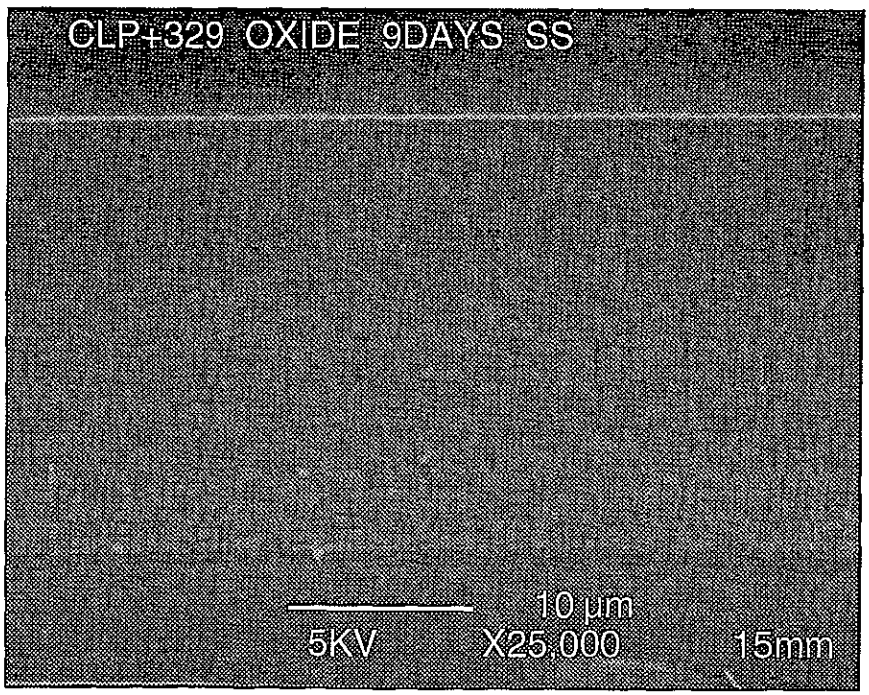

CLP+329 OXIDE 9DAYS SS
5KV
10 µm
X25,000
15mm

Fig.8.

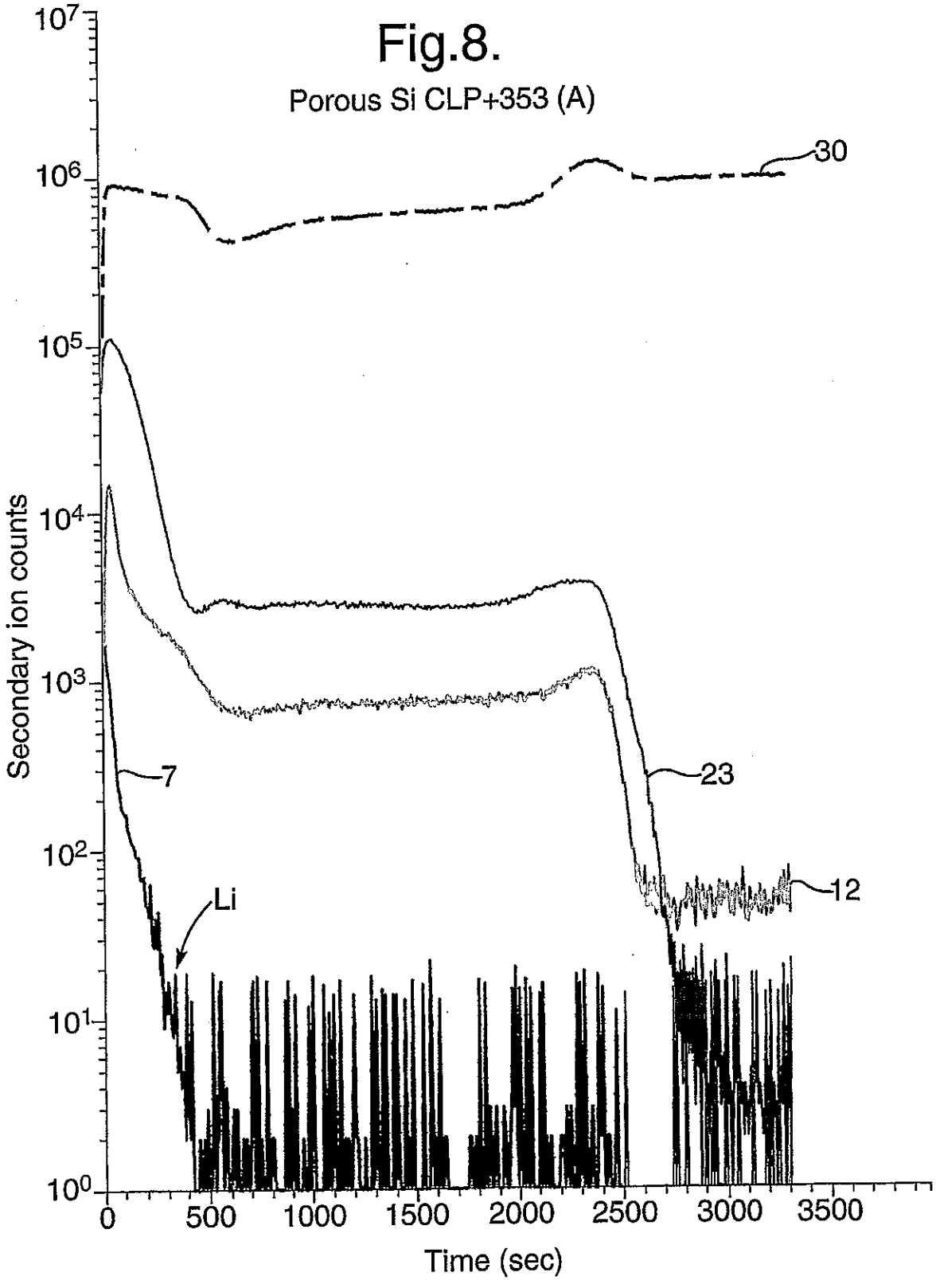

Porous Si CLP+353 (A)
Secondary ion counts
Time (sec)
30
23
12
7
Li
10^7
10^6
10^5
10^4
10^3
10^2
10^1
10^0
0
500
1000
1500
2000
2500
3000
3500

Fig.10.

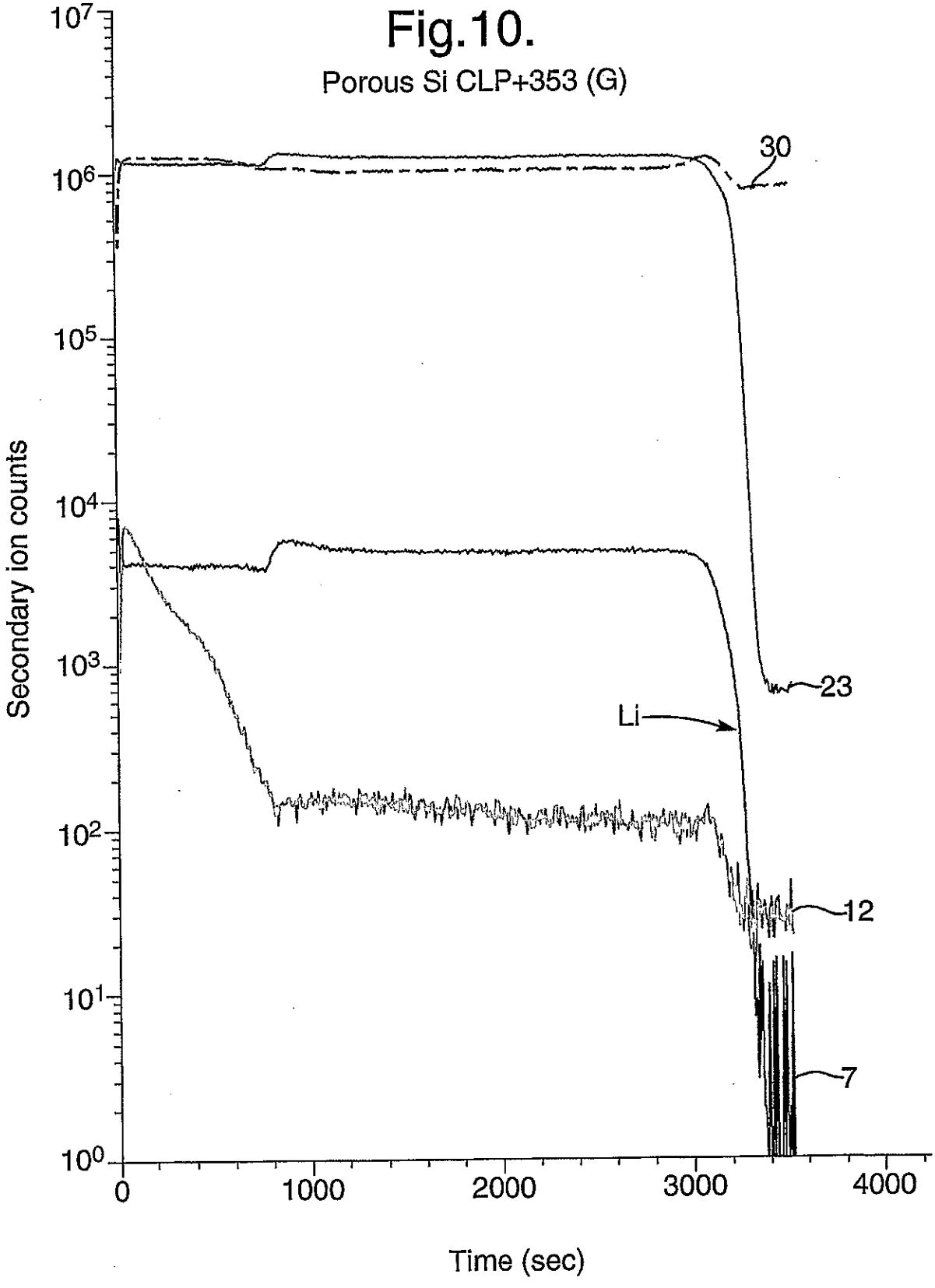

Porous Si CLP+353 (G)
Secondary ion counts
10^7
10^6
10^5
10^4
10^3
10^2
10^1
10^0
0
1000
2000
3000
4000
Time (sec)
30
23
Li
12
7

Fig.11.

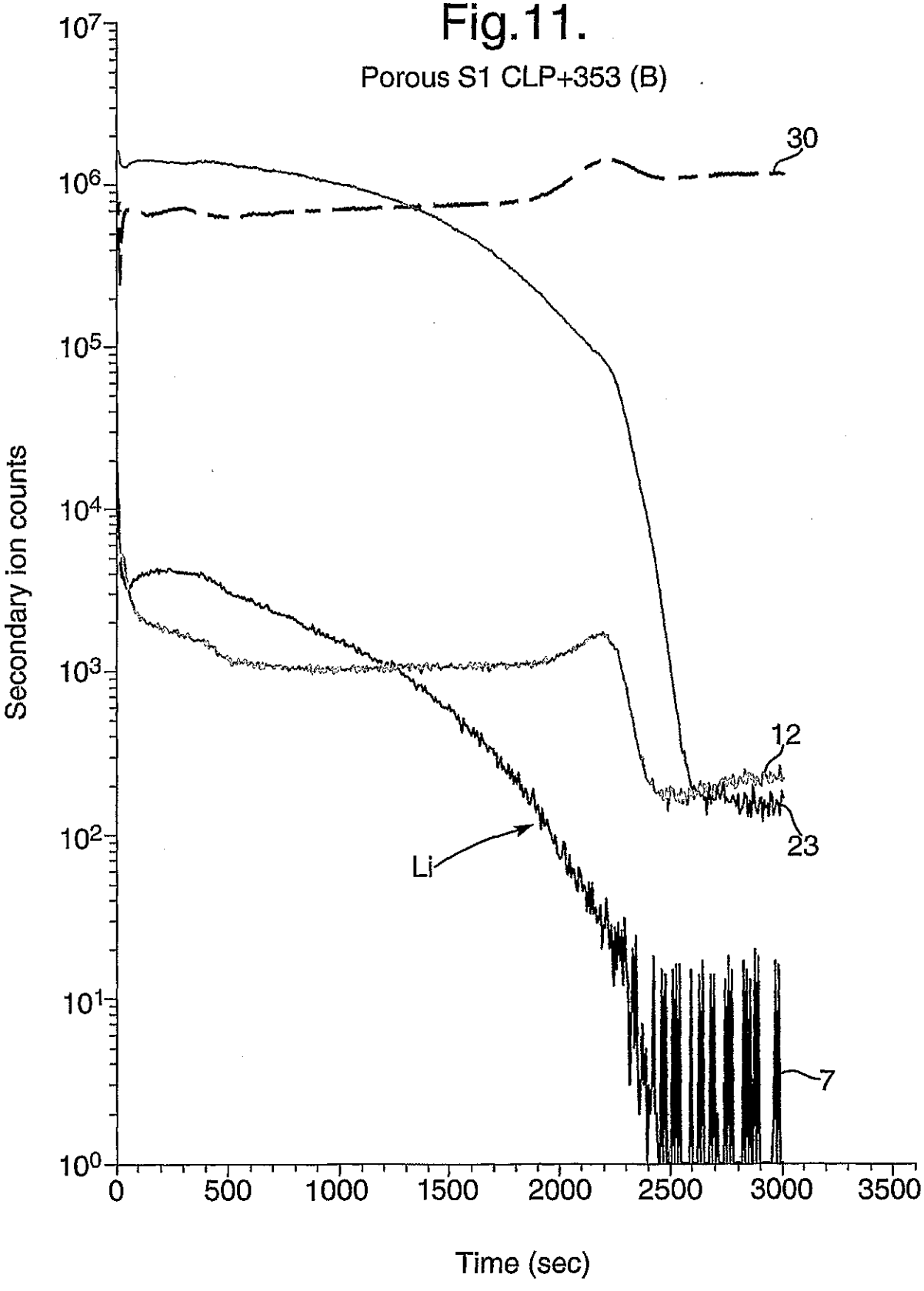

Porous S1 CLP+353 (B)
Secondary ion counts
Time (sec)
30
12
23
Li
7
10^7
10^6
10^5
10^4
10^3
10^2
10^1
10^0
0
500
1000
1500
2000
2500
3000
3500

Fig.12.

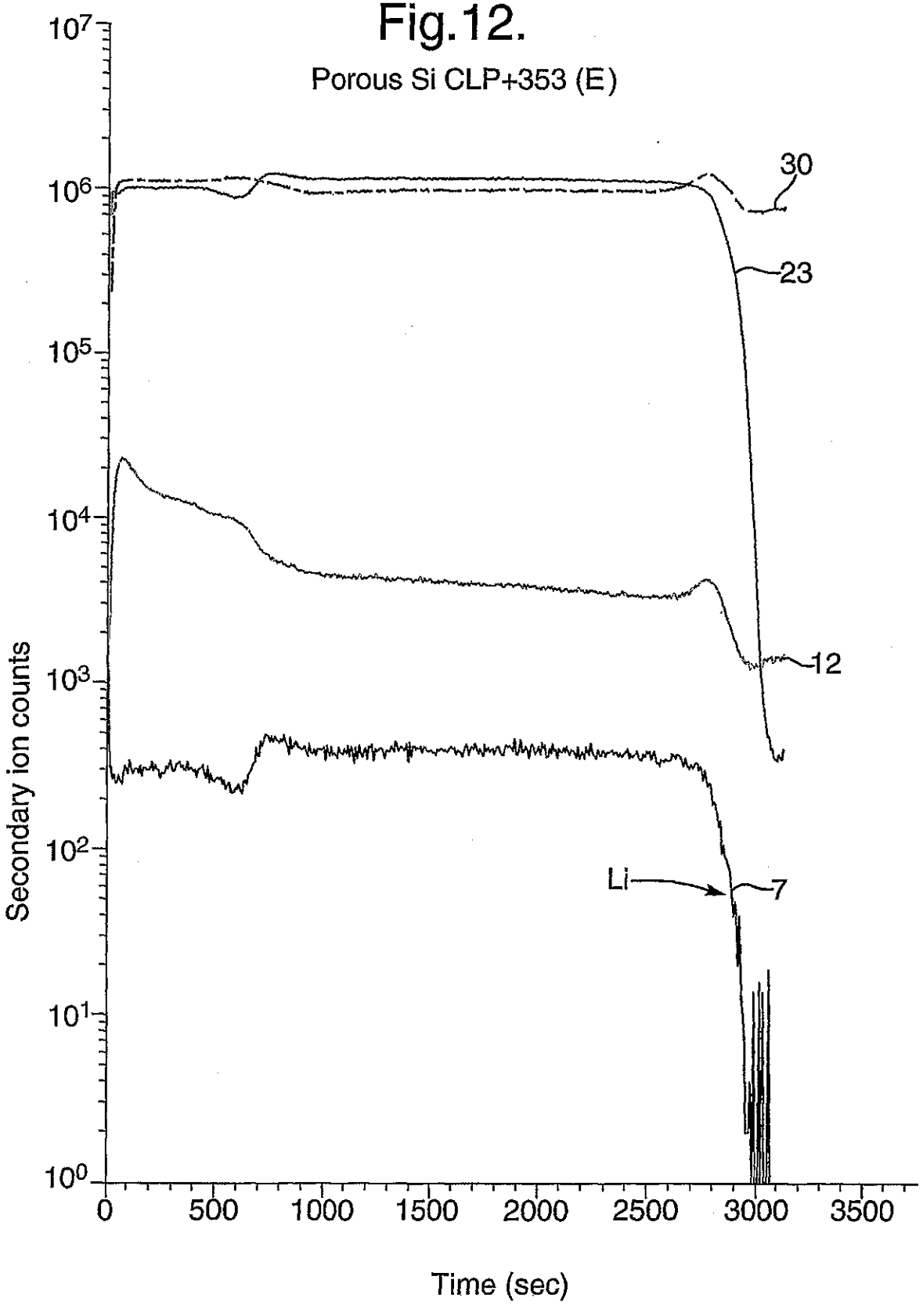

Porous Si CLP+353 (E)
Secondary ion counts
Time (sec)
30
23
12
Li
7
10^7
10^6
10^5
10^4
10^3
10^2
10^1
10^0
0
500
1000
1500
2000
2500
3000
3500

Fig.13.

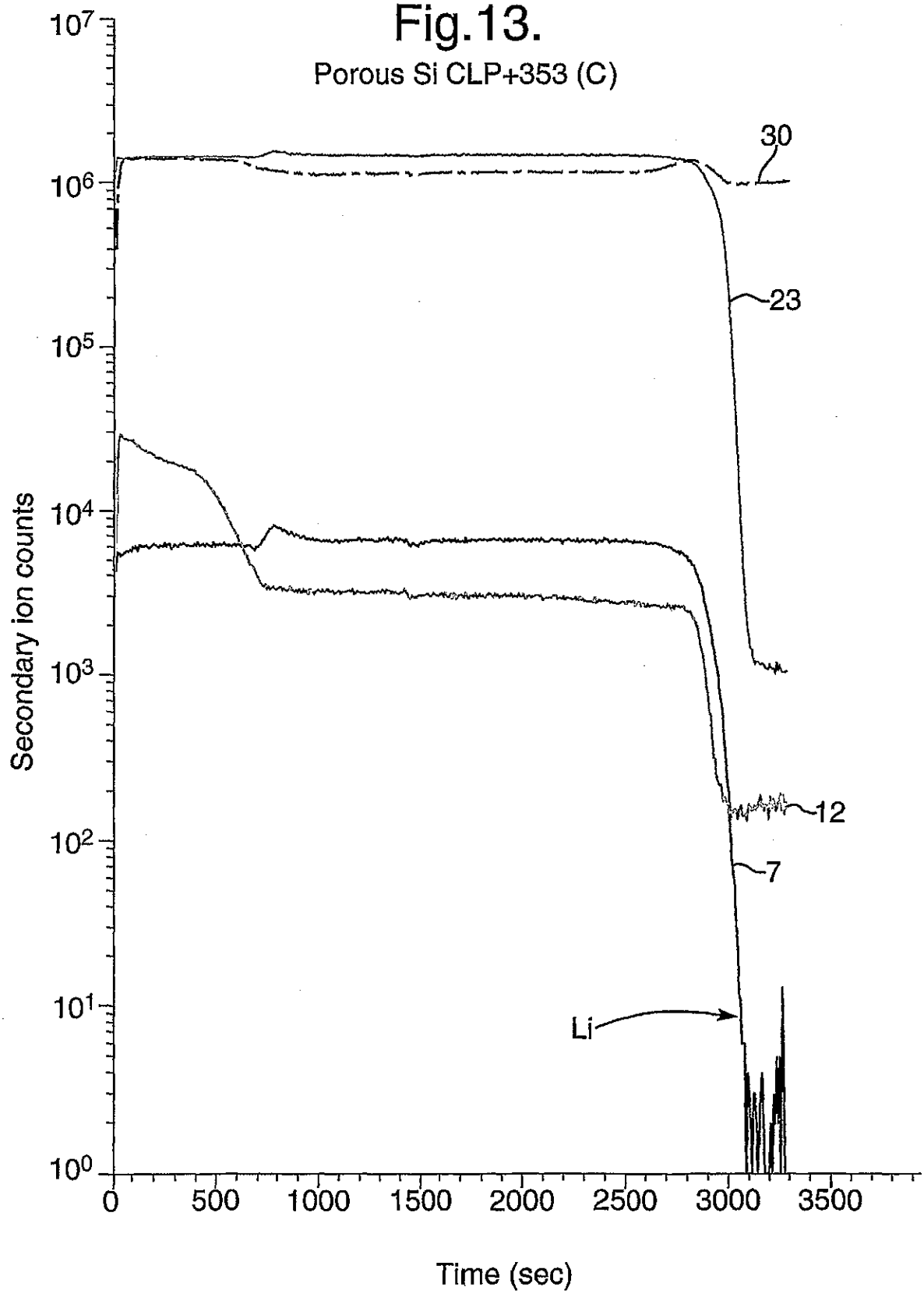
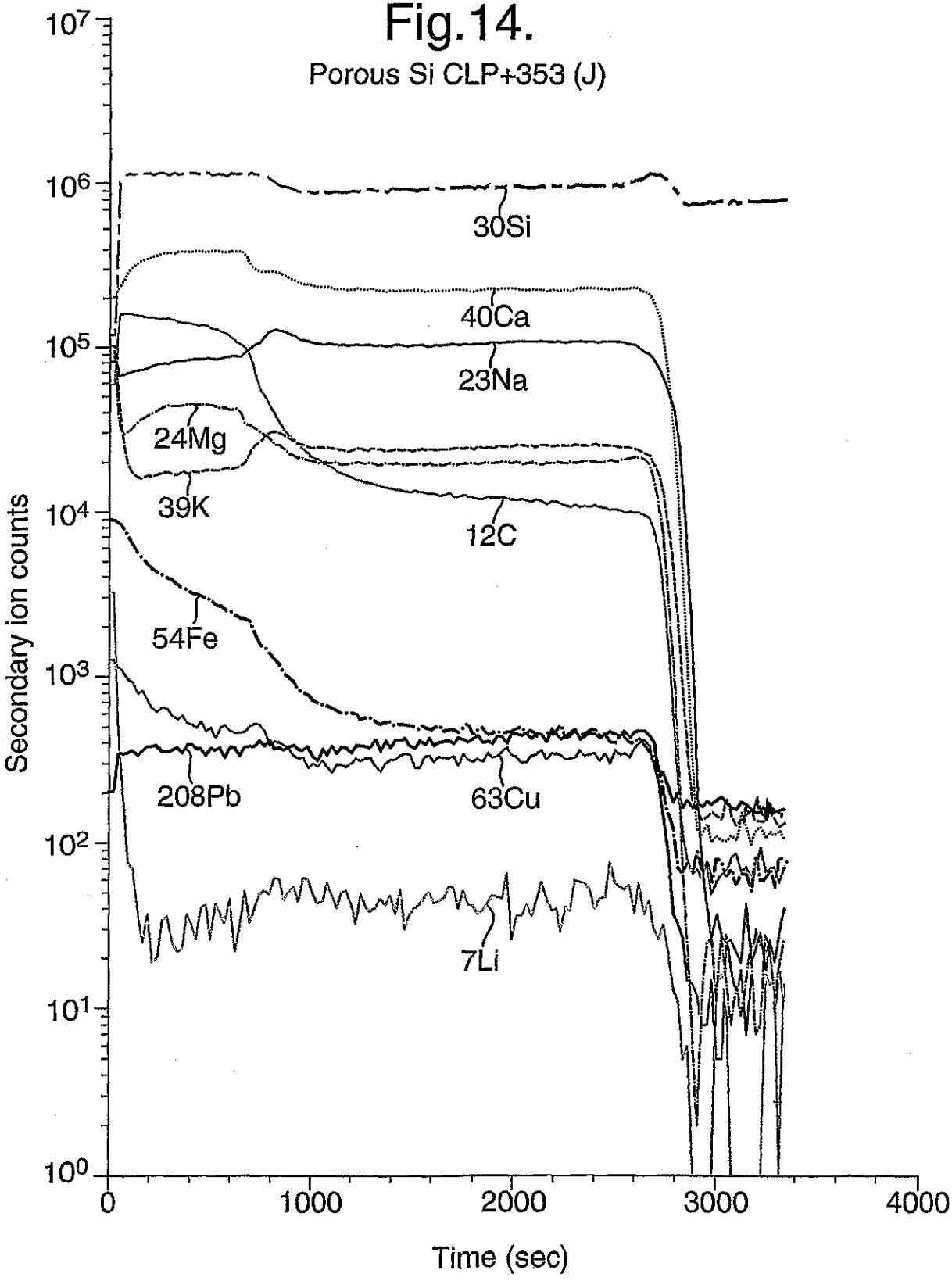

Porous Si CLP+353 (C)
Secondary ion counts
Time (sec)
30
23
12
7
Li
10^7
10^6
10^5
10^4
10^3
10^2
10^1
10^0
0
500
1000
1500
2000
2500
3000
3500

Fig.14.


Porous Si CLP+353 (J)
Secondary ion counts
Time (sec)
30Si
40Ca
23Na
24Mg
39K
12C
54Fe
208Pb
63Cu
7Li
10^7
10^6
10^5
10^4
10^3
10^2
10^1
10^0
0
1000
2000
3000
4000