Fig. 1A

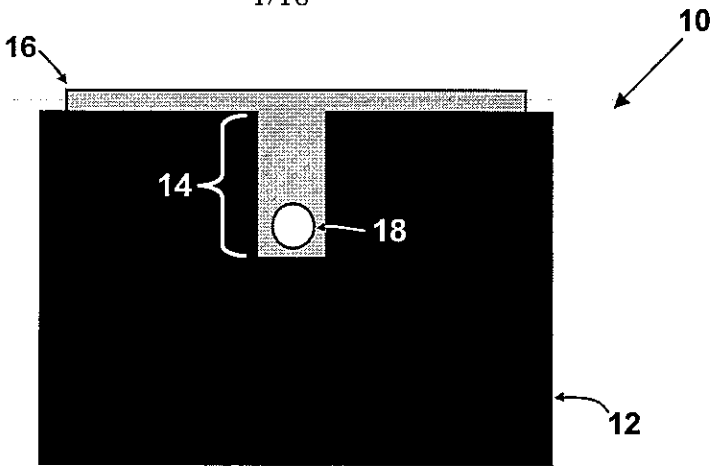


Fig. 1B

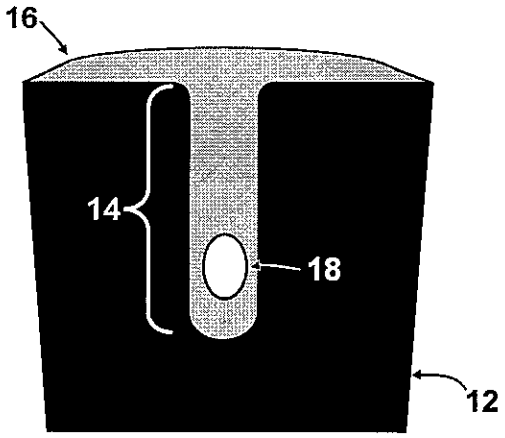


Fig. 1C

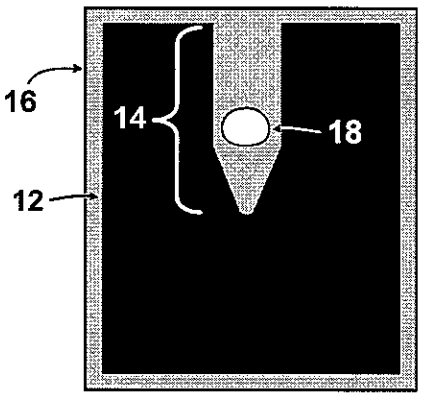


Fig. 1D

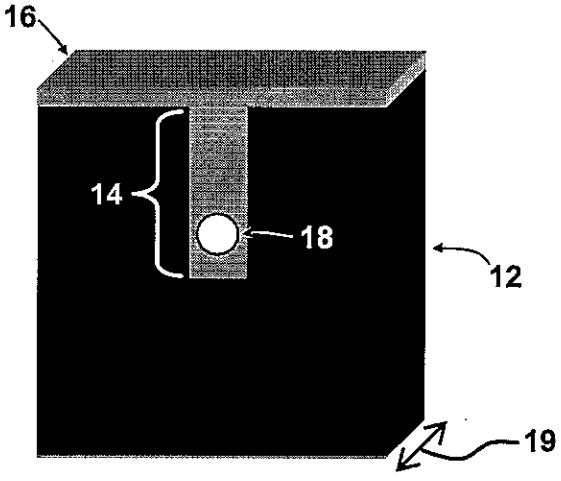
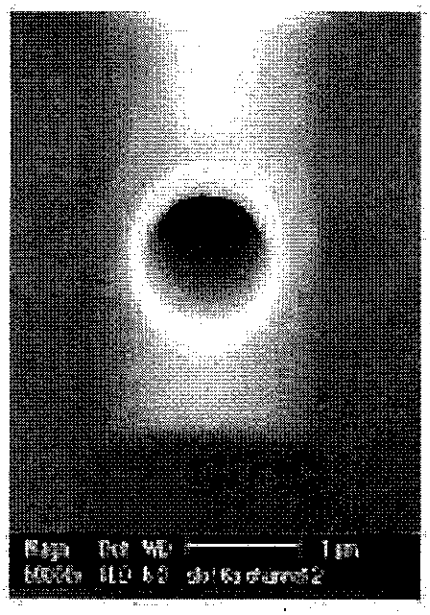


Fig. 1E



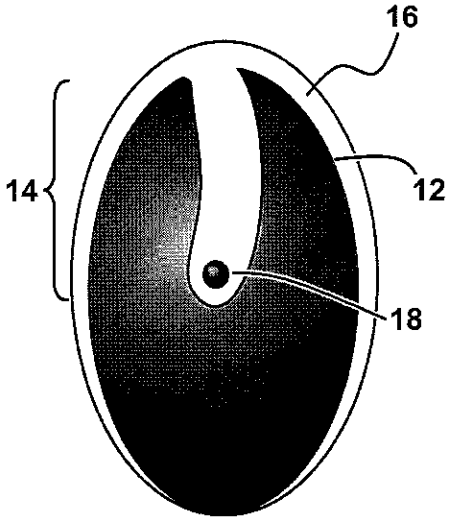


Fig. 1F

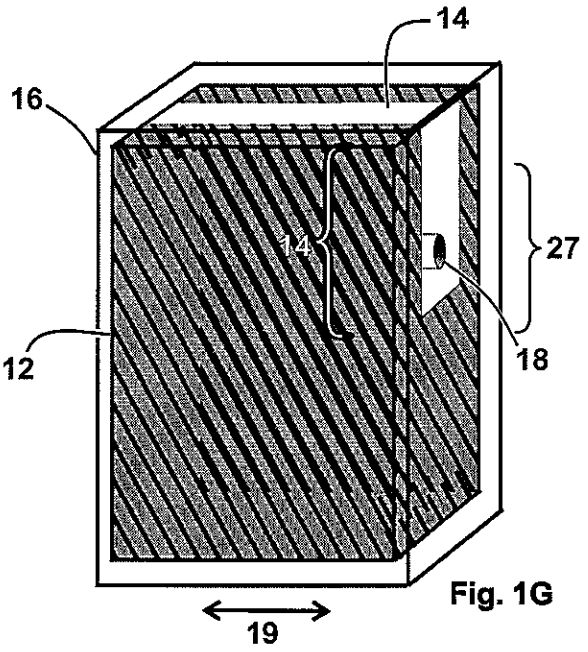


Fig. 1G

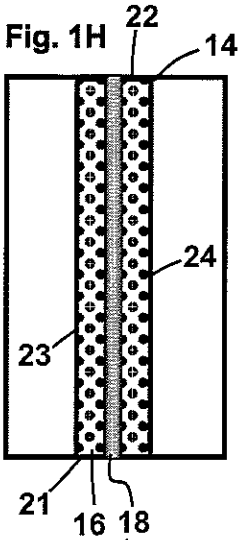


Fig. 1H

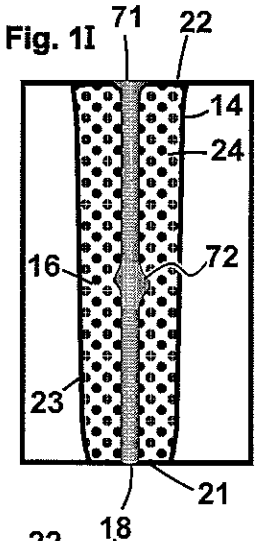


Fig. 1I

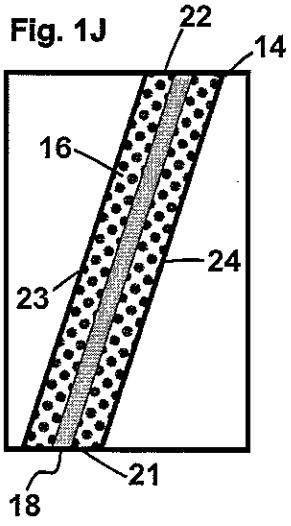


Fig. 1J

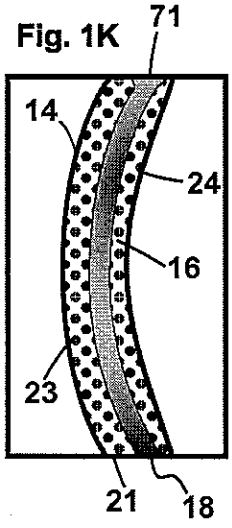


Fig. 1K

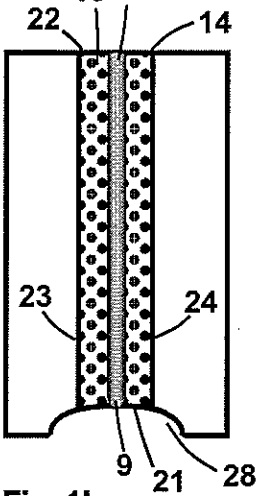


Fig. 1L

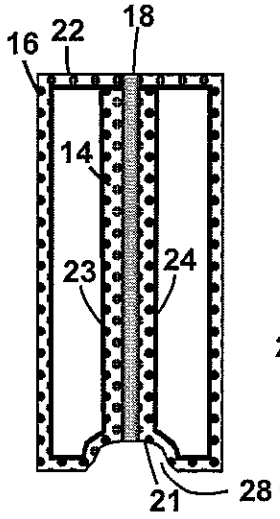


Fig. 1M

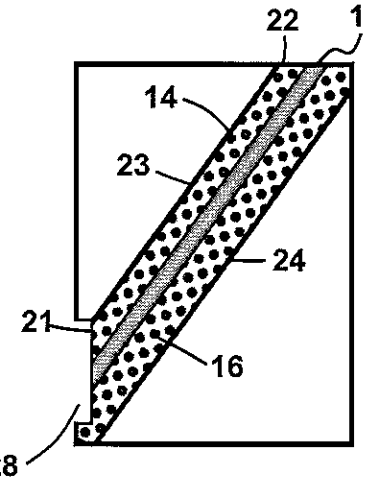


Fig. 1N

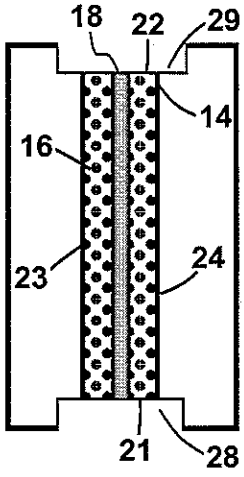
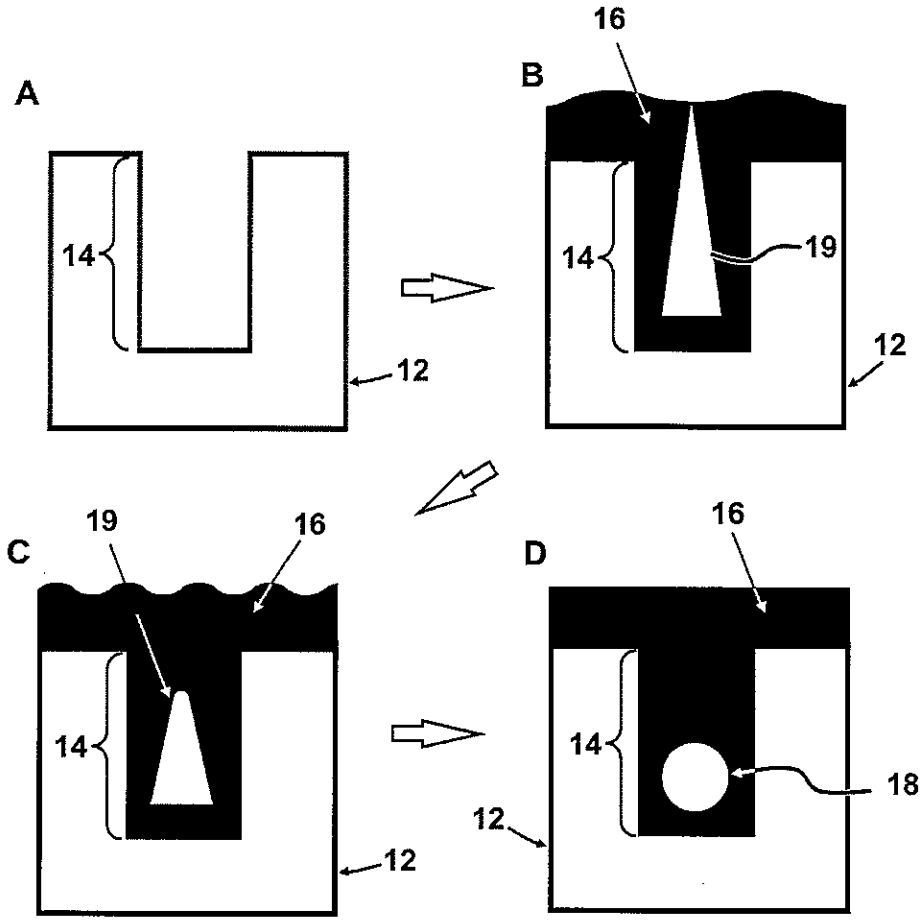


Fig. 1O



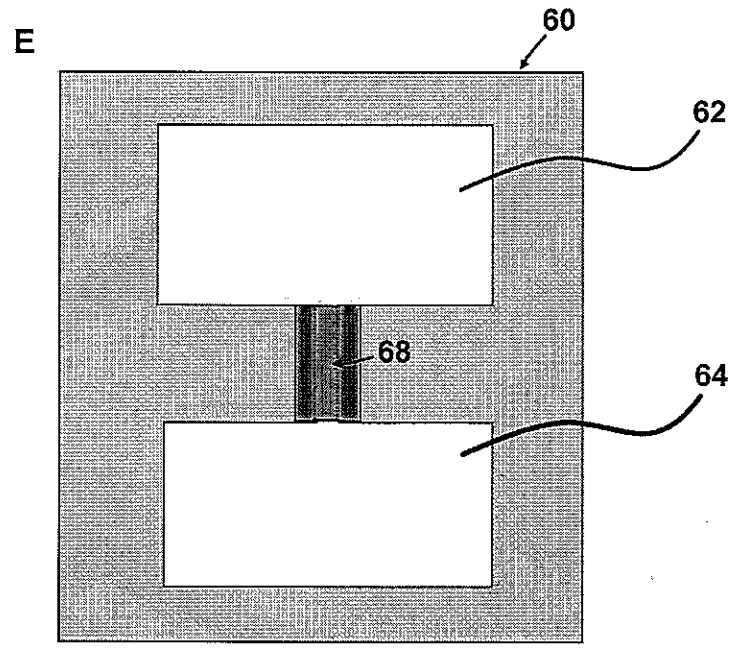


Fig. 2

Fig. 3A

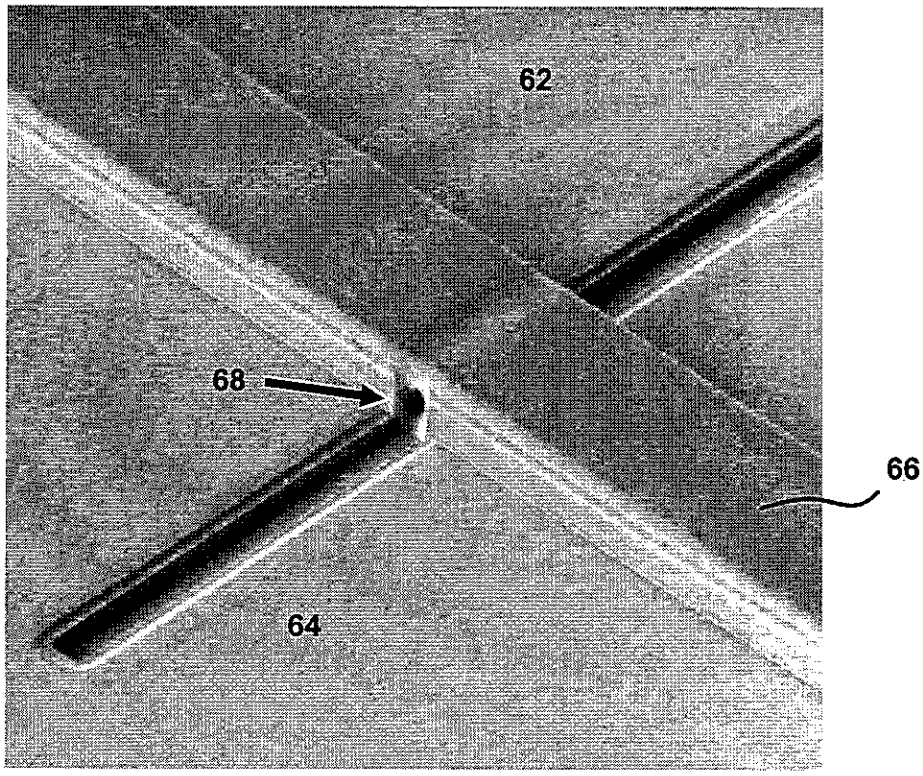


Fig. 3B

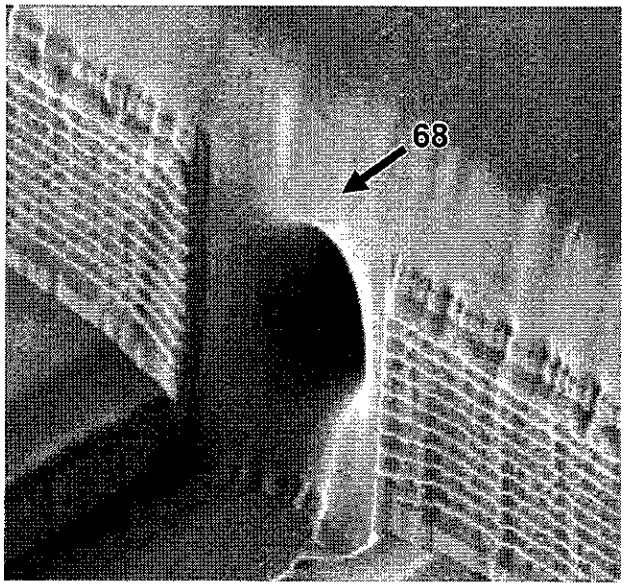


Fig. 3C

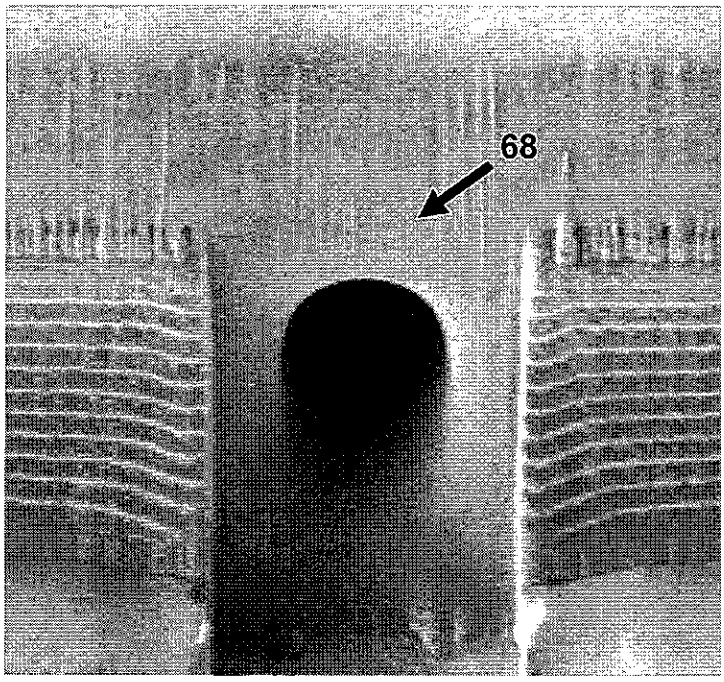


Fig. 3D

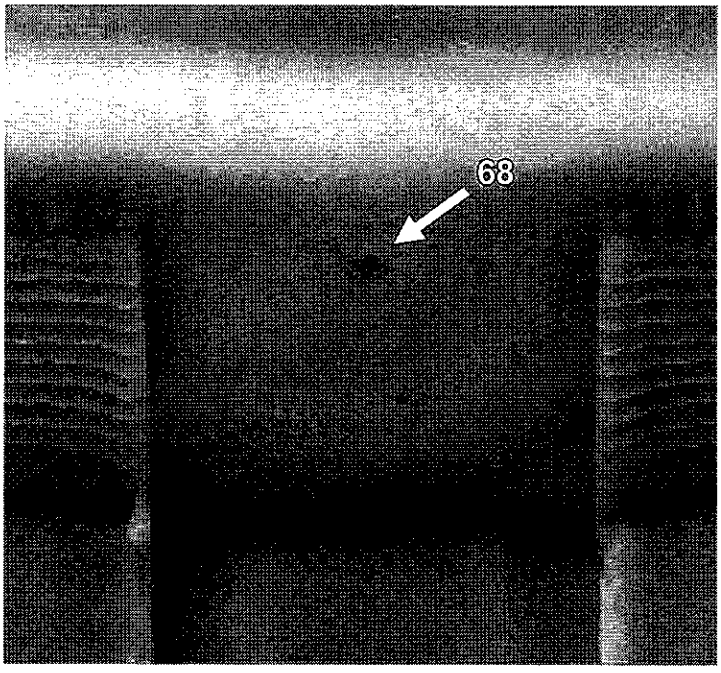


Fig. 4

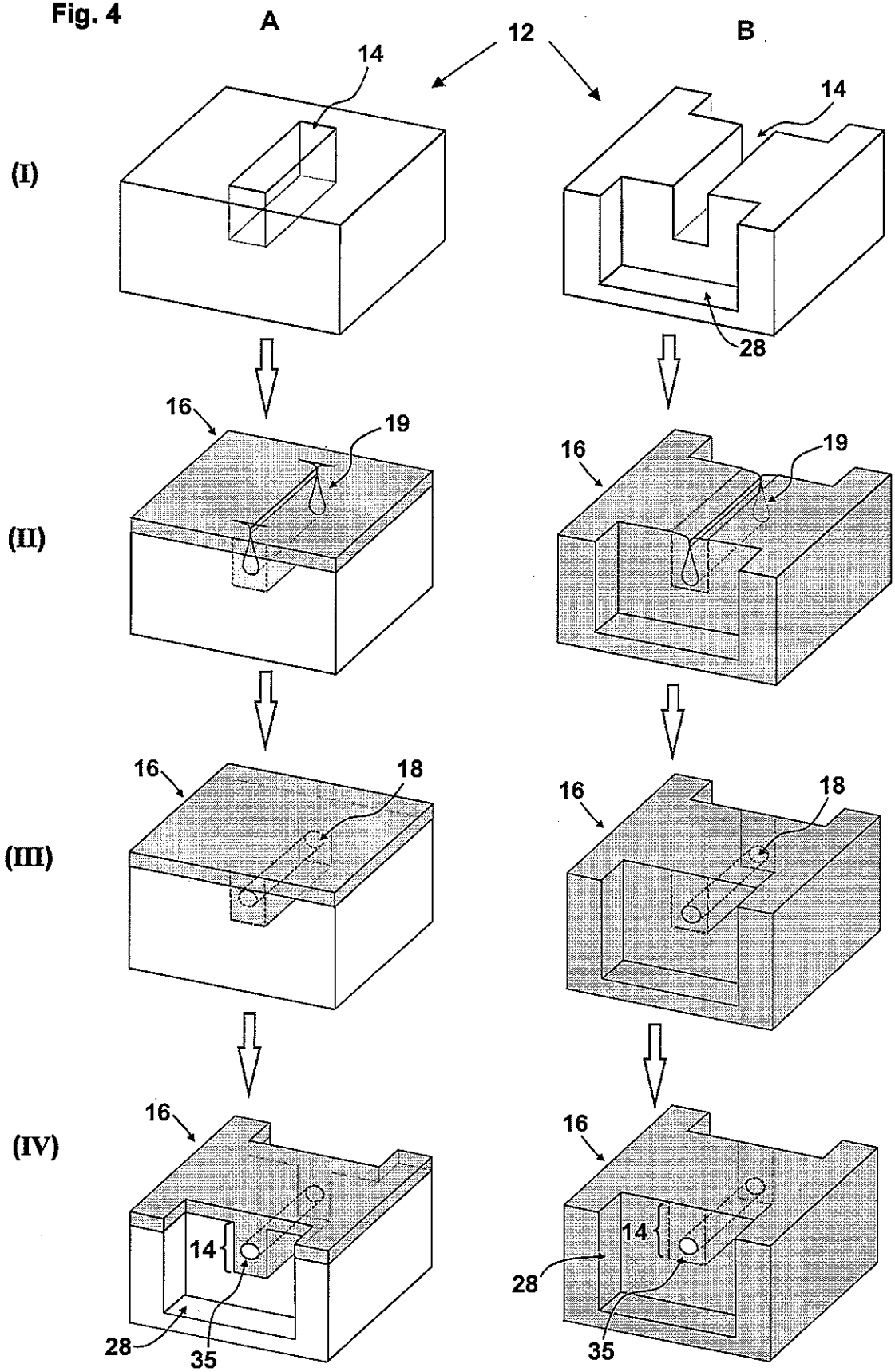

A
12
B
(I)
14
14
28
(II)
16
19
16
19
(III)
16
18
16
18
(IV)
16
14
28
35
16
14
28
35

Fig. 5A

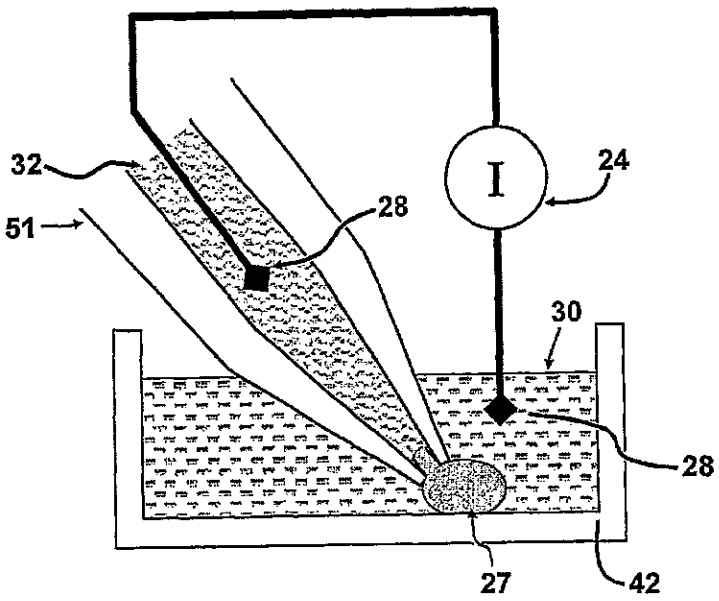


Fig. 5B

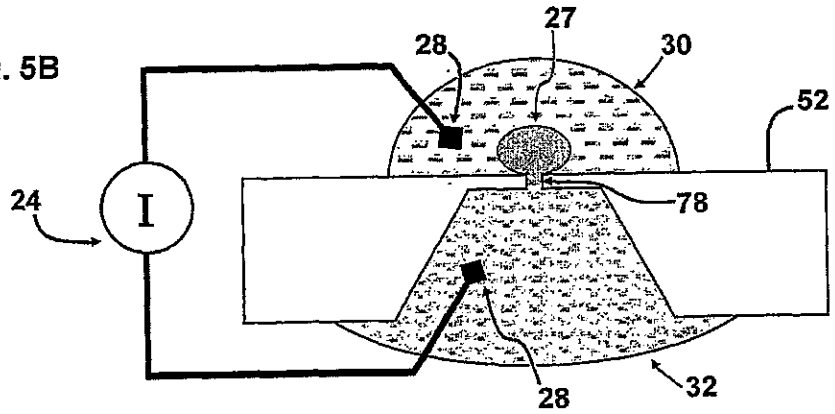
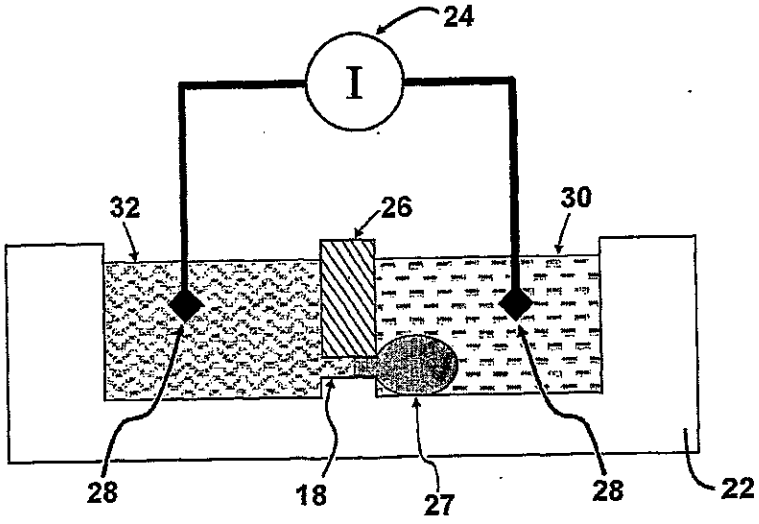


Fig. 5C



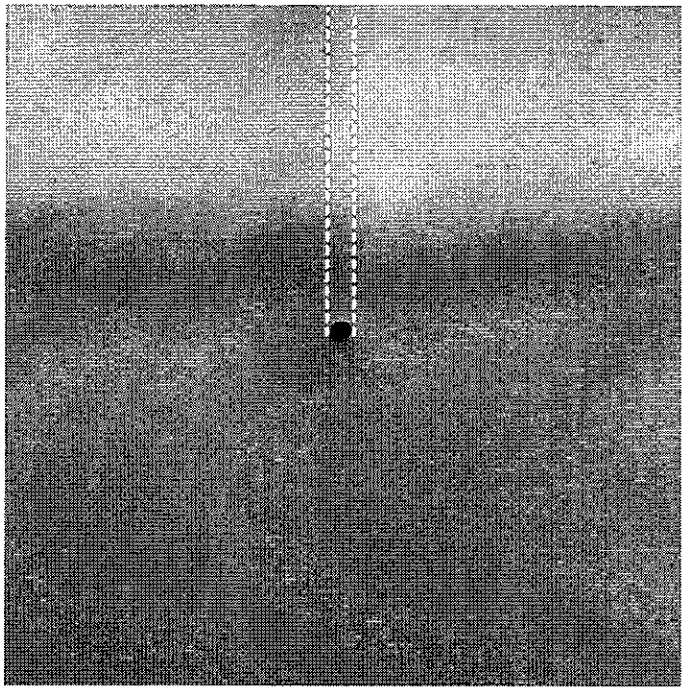


Fig. 6A

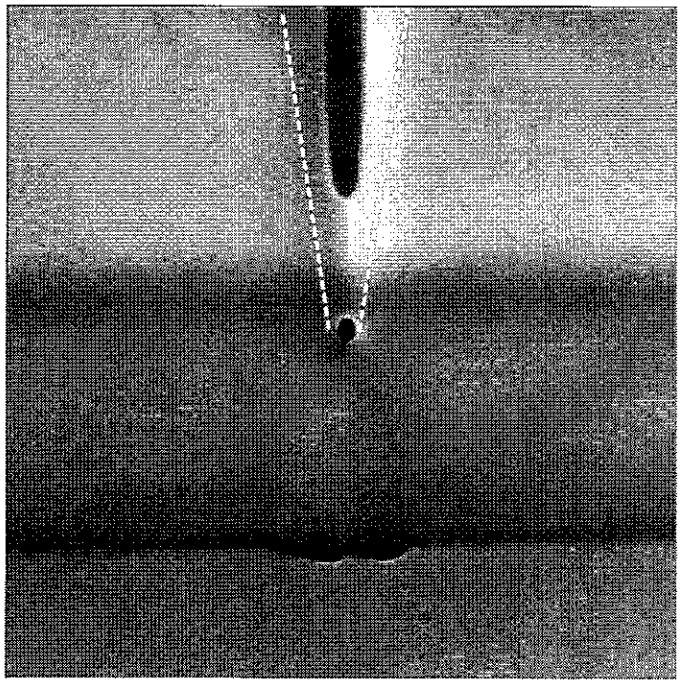
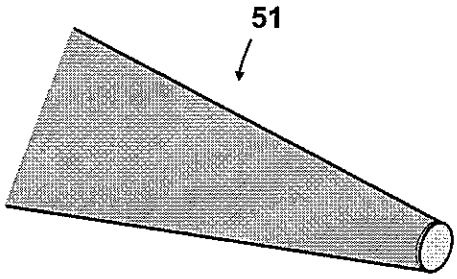


Fig. 6B

Fig. 7A



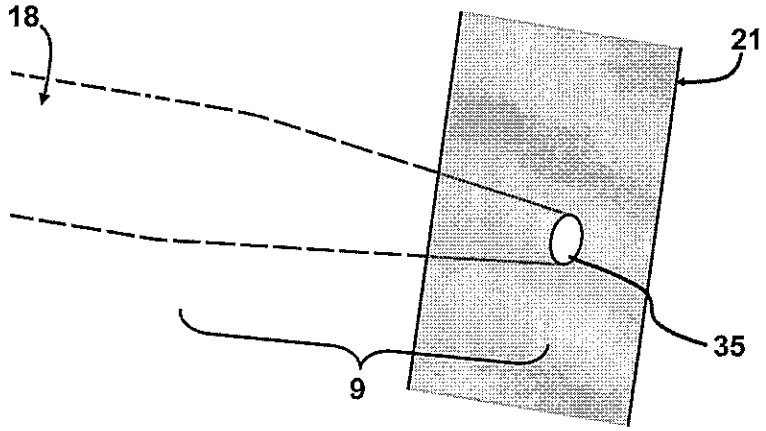


Fig. 7B

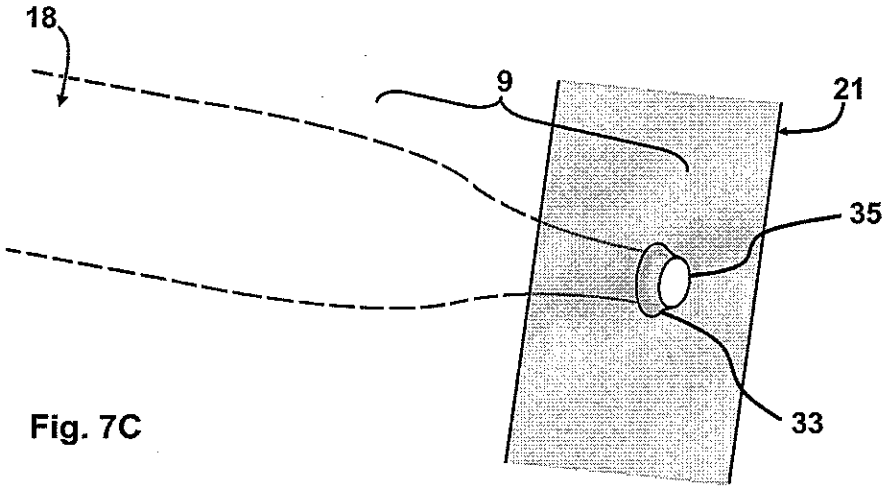


Fig. 7C

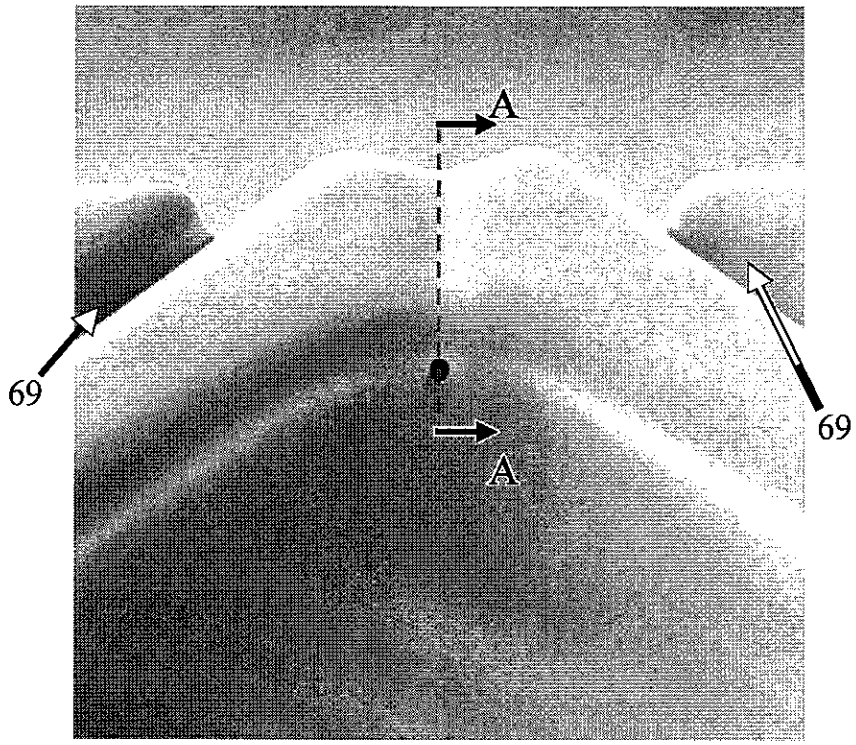


Fig. 8A

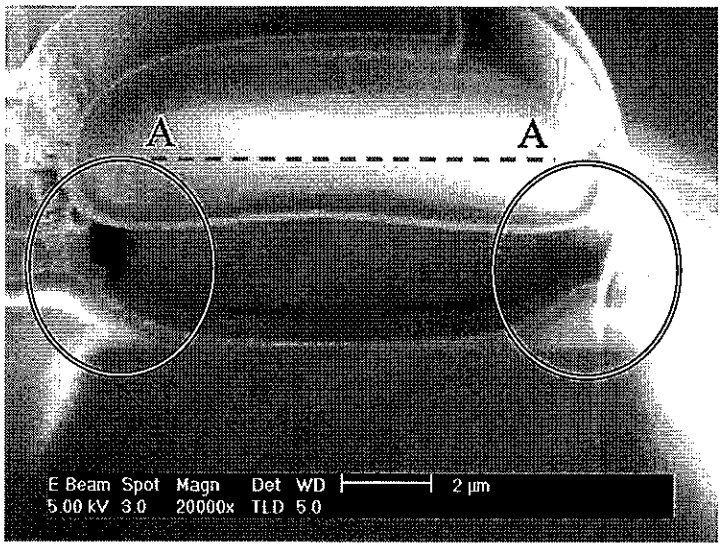
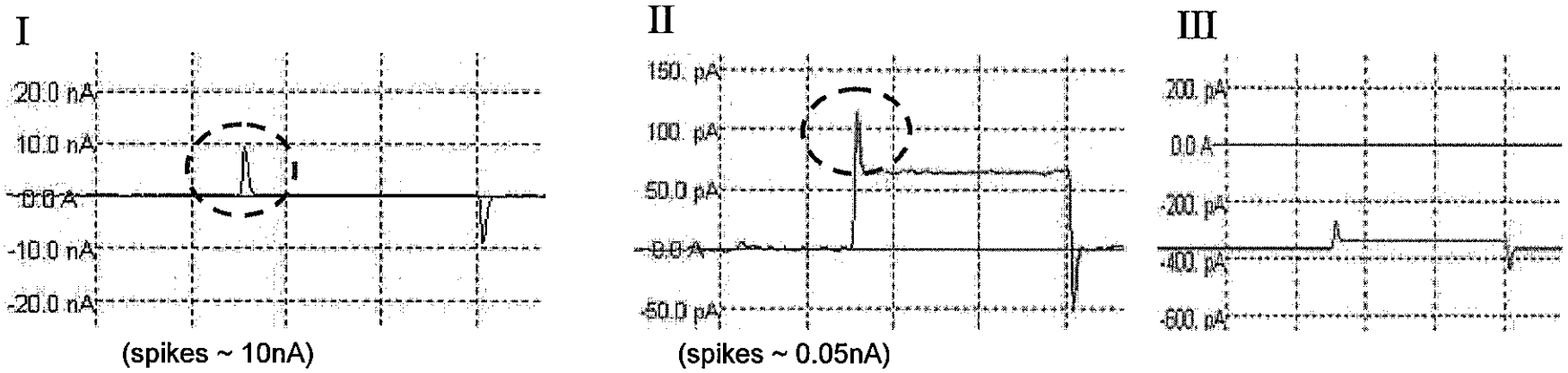


Fig. 8B


I
20.0 nA
10.0 nA
0.0 A
-10.0 nA
-20.0 nA
(spikes ~ 10nA)
II
150. pA
100. pA
50.0 pA
0.0 A
-50.0 pA
(spikes ~ 0.05nA)
III
200. pA
0.0 A
-200. pA
-400. pA
-600. pA

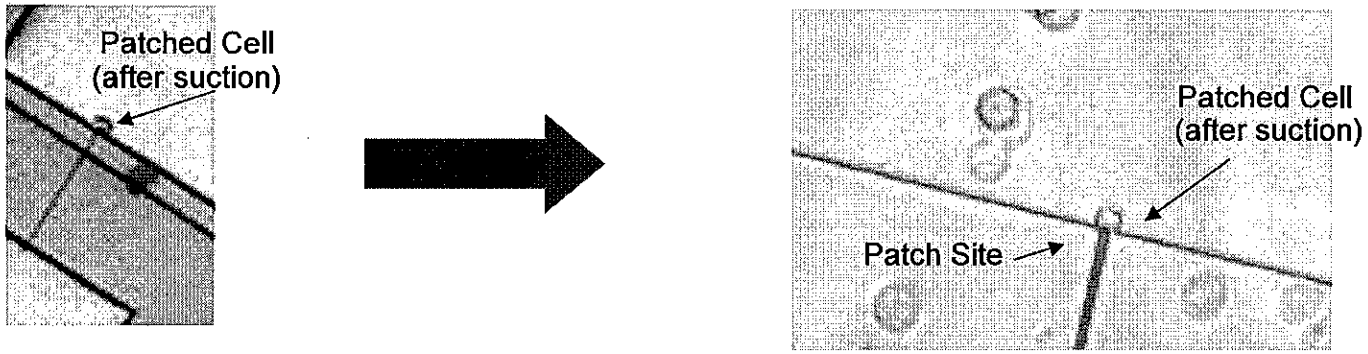

Patched Cell
(after suction)
Patched Cell
(after suction)
Patch Site

Fig. 9A

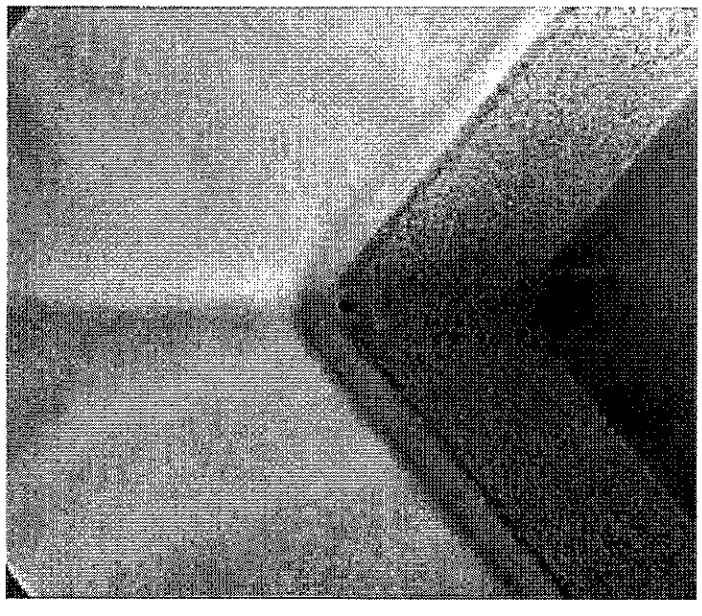


Fig. 9B

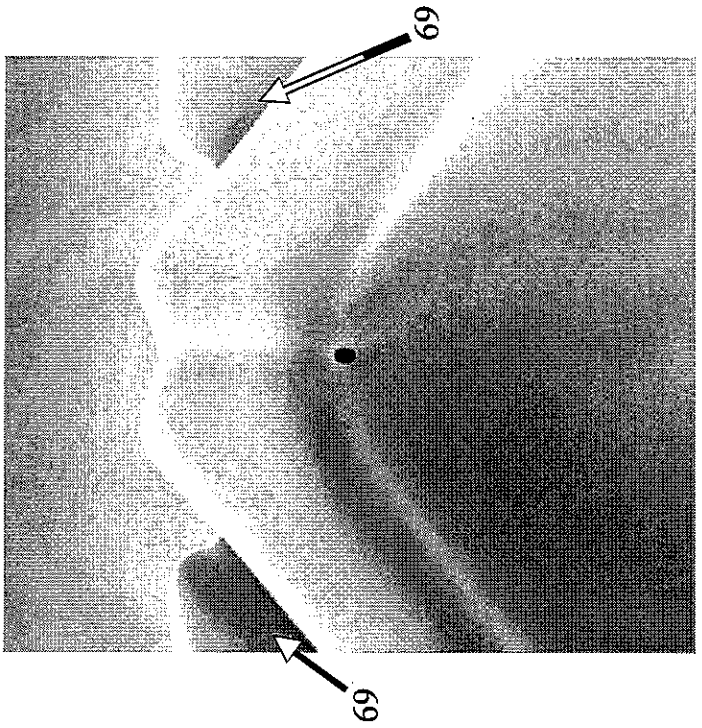


Fig. 9C

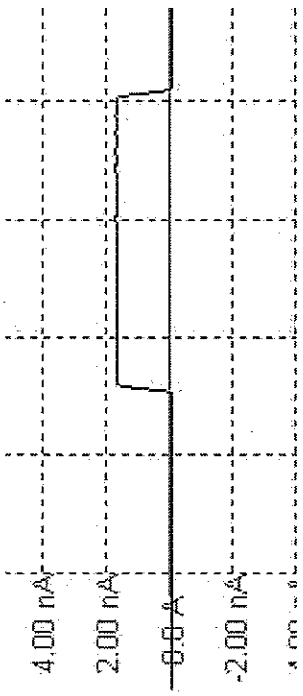


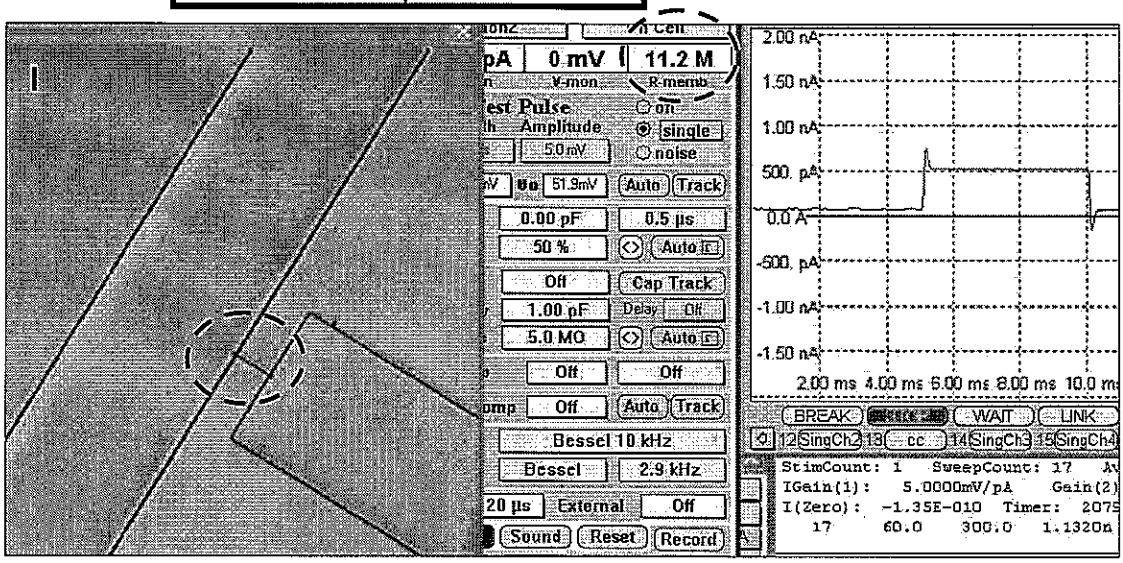
Fig. 10A

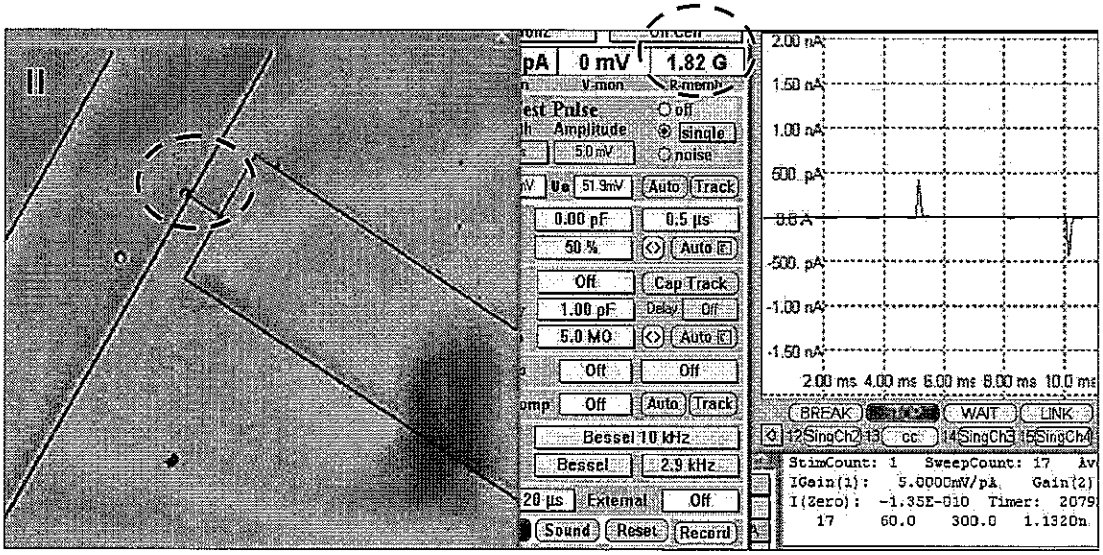
Length (µm)	10	20	50	
R open (MΩ)	2.6 ± 0.4	11 ± 2.2	20 ± 1.8	27 ± 1.4
R seal (MΩ)	59 ± 22	116 ± 64	155 ± 45	233 ± 120
No. of recordings	4	11	4	5

Fig. 10B

Resistance (after cell capture)	Frequency
>1G ohms	4
100M - 1G	4
<100M	1

% of Gigaseal = **4/9 ~ 45%**





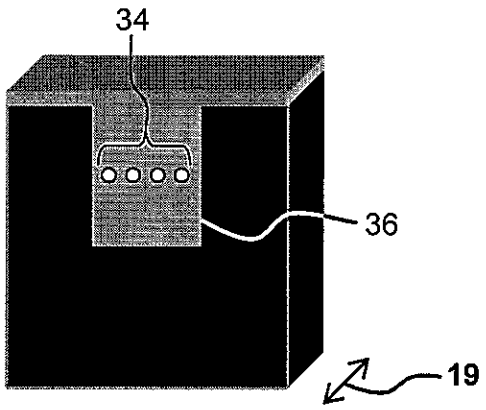
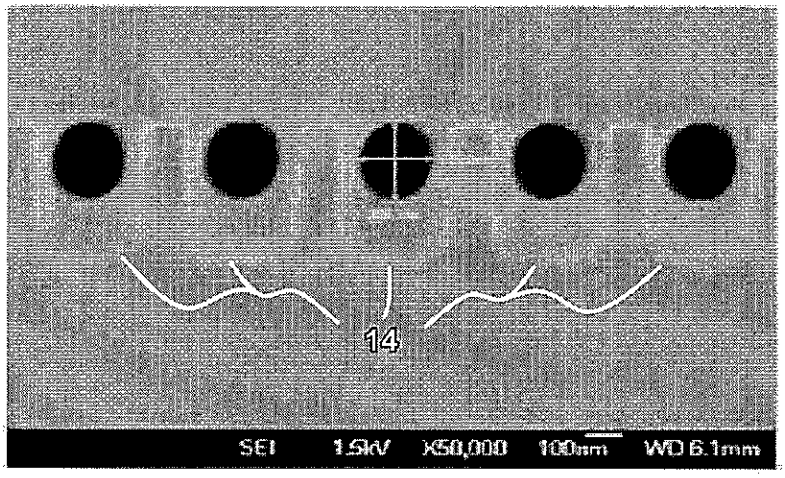


Fig. 11A

Fig. 11B



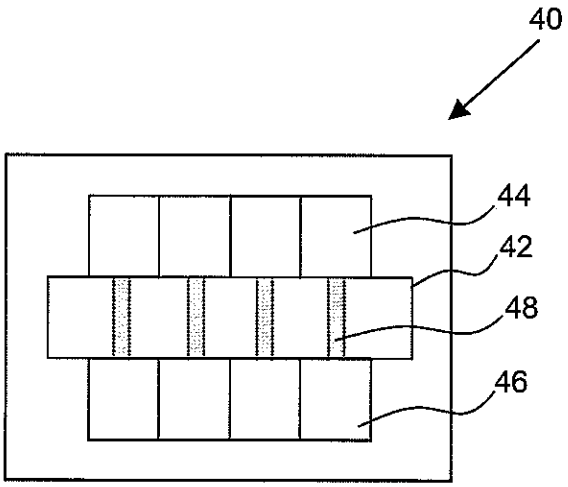


Fig. 12A

Fig. 12B

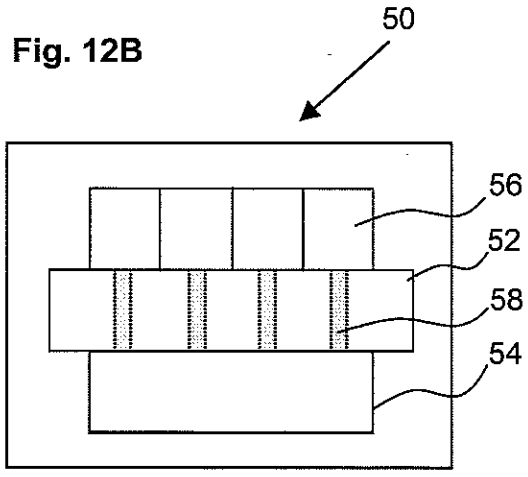


Fig. 13C

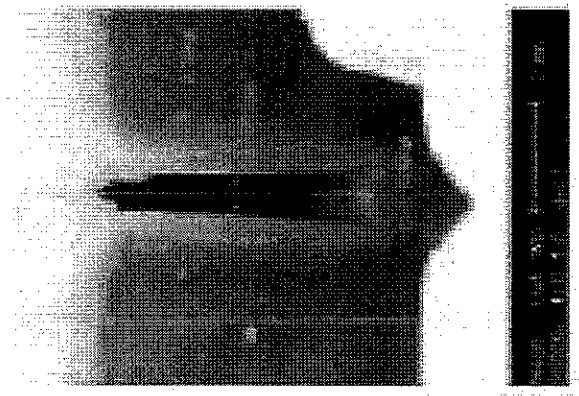


Fig. 13B

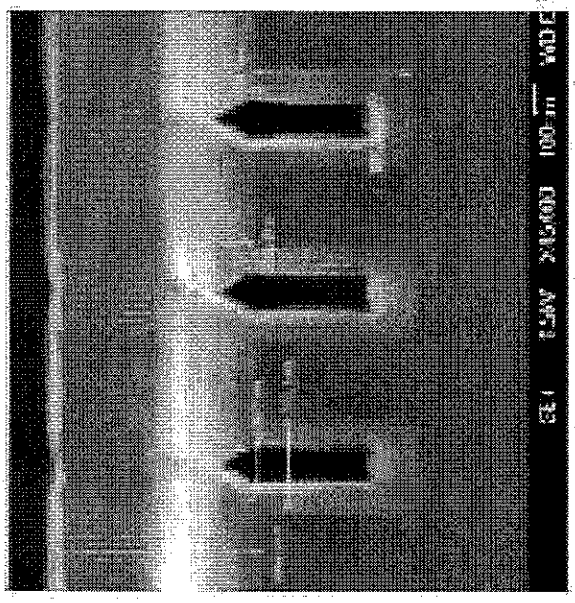
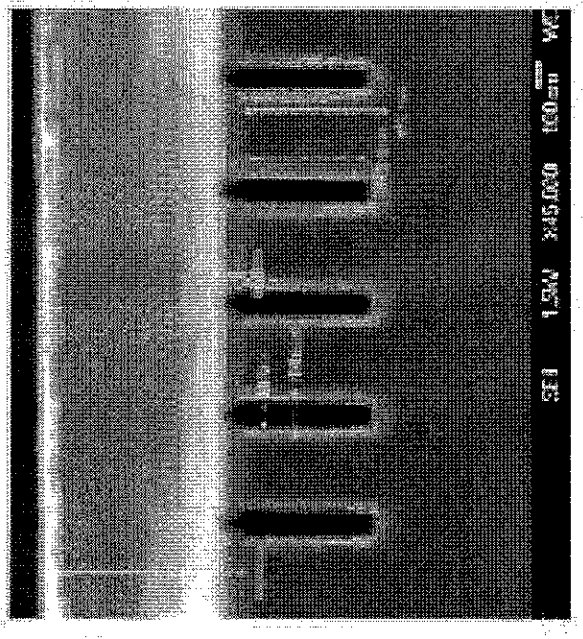


Fig. 13A



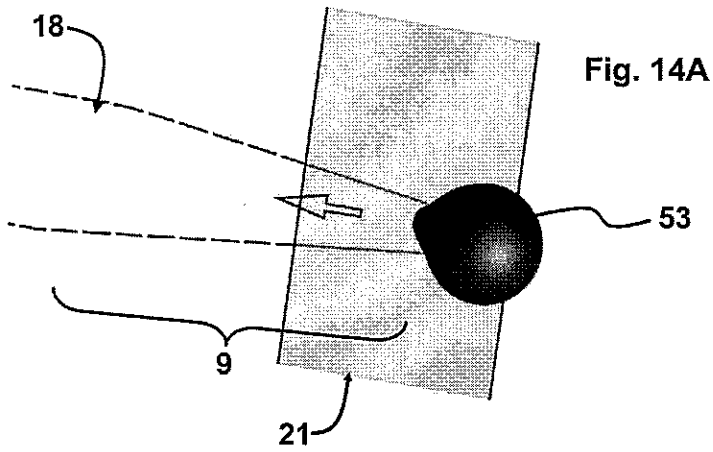


Fig. 14A

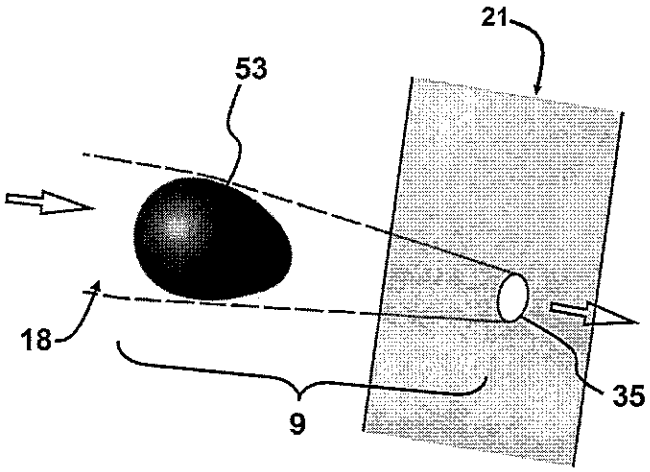


Fig. 14B

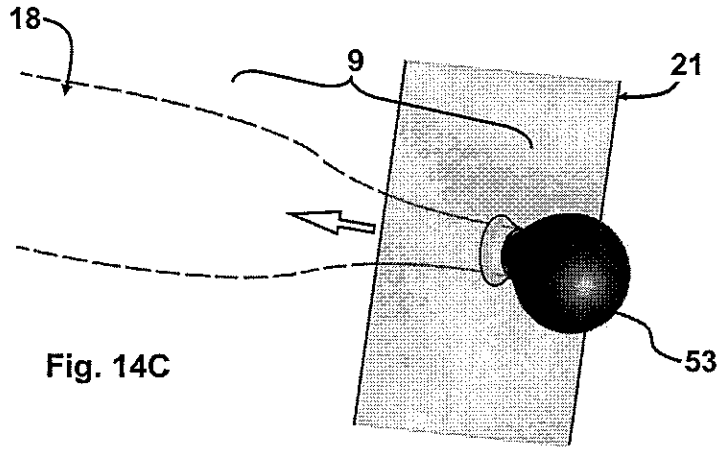


Fig. 14C

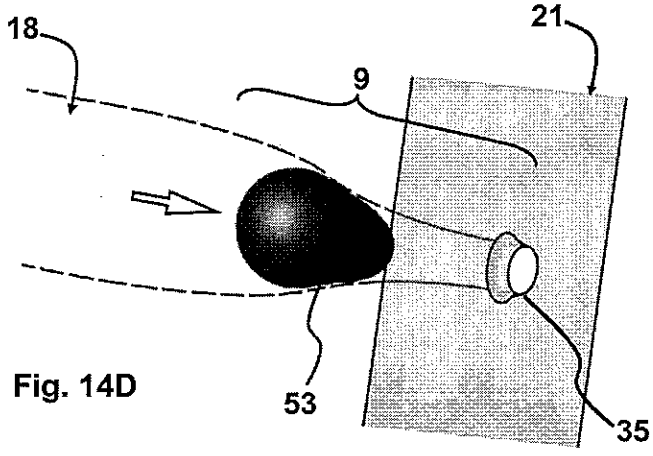


Fig. 14D

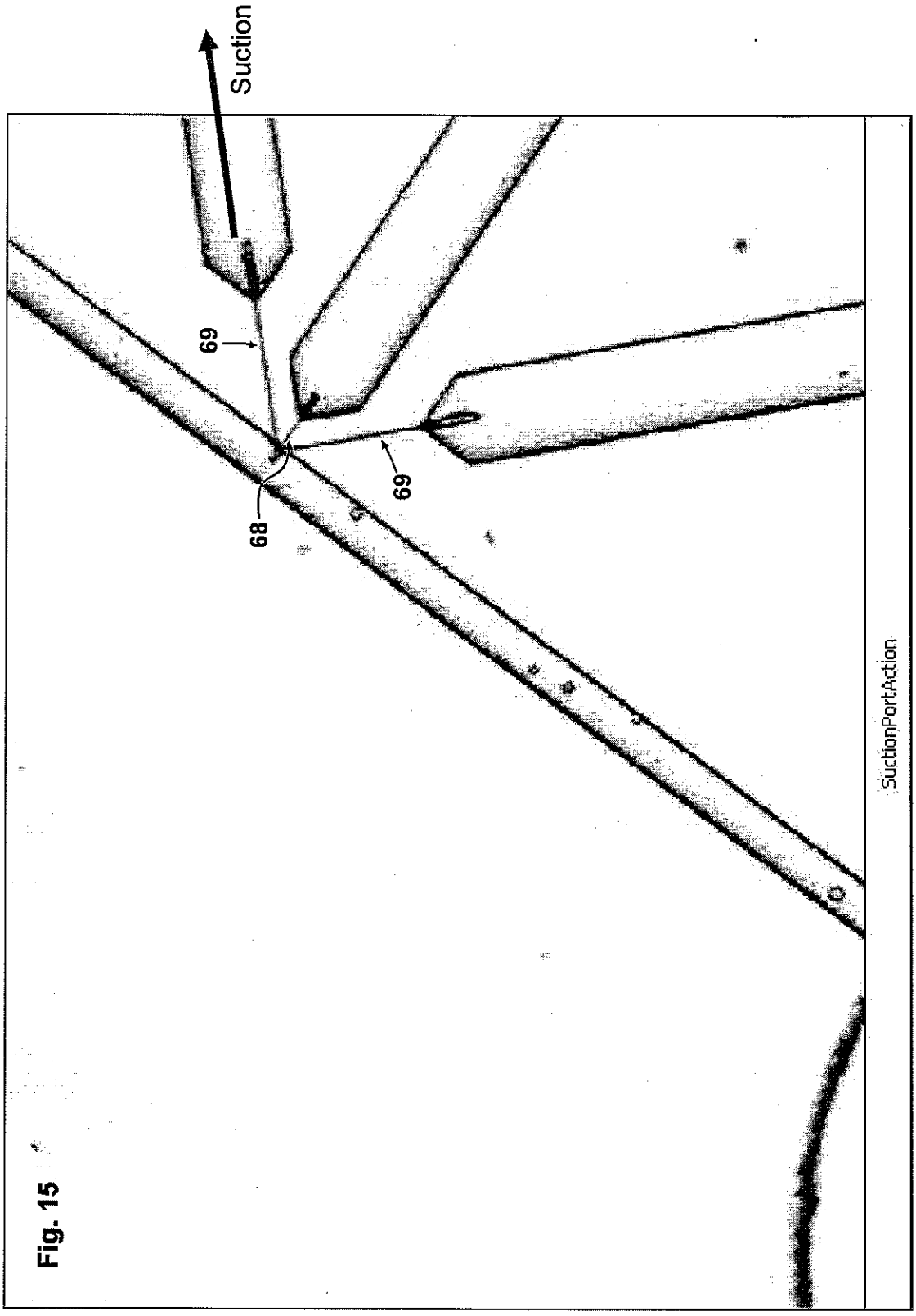


Fig. 15

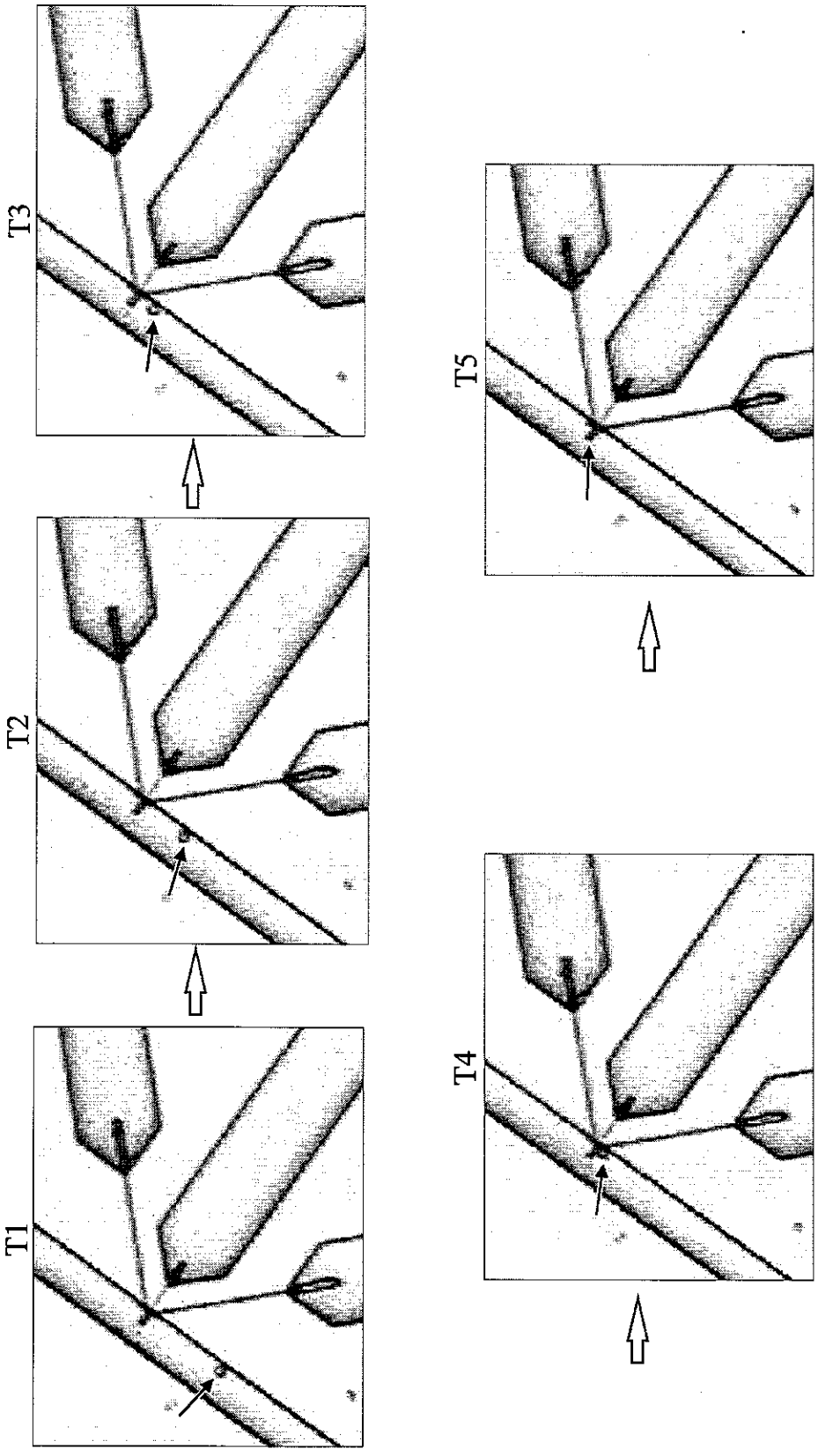


Fig. 16