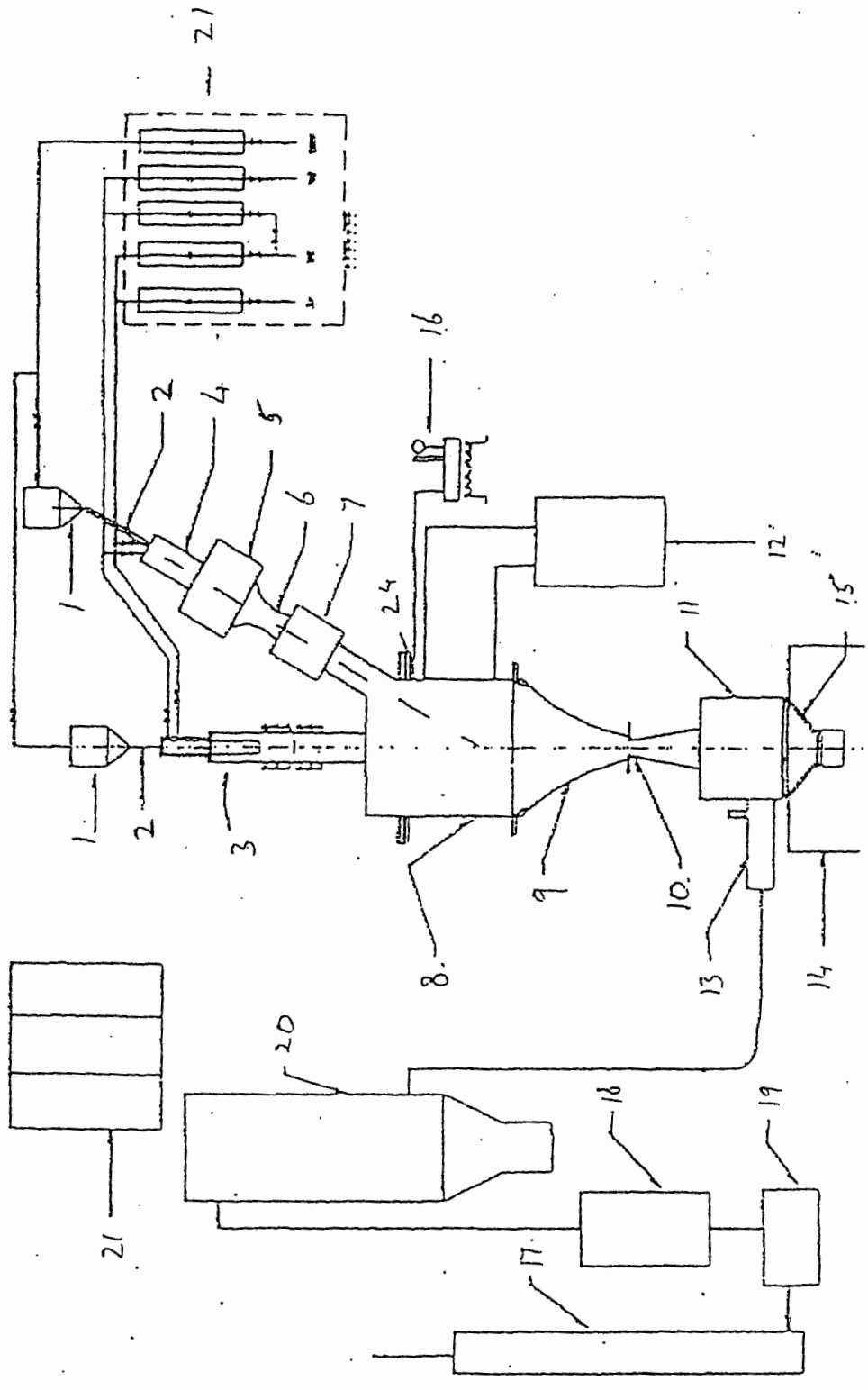

Fig. 1

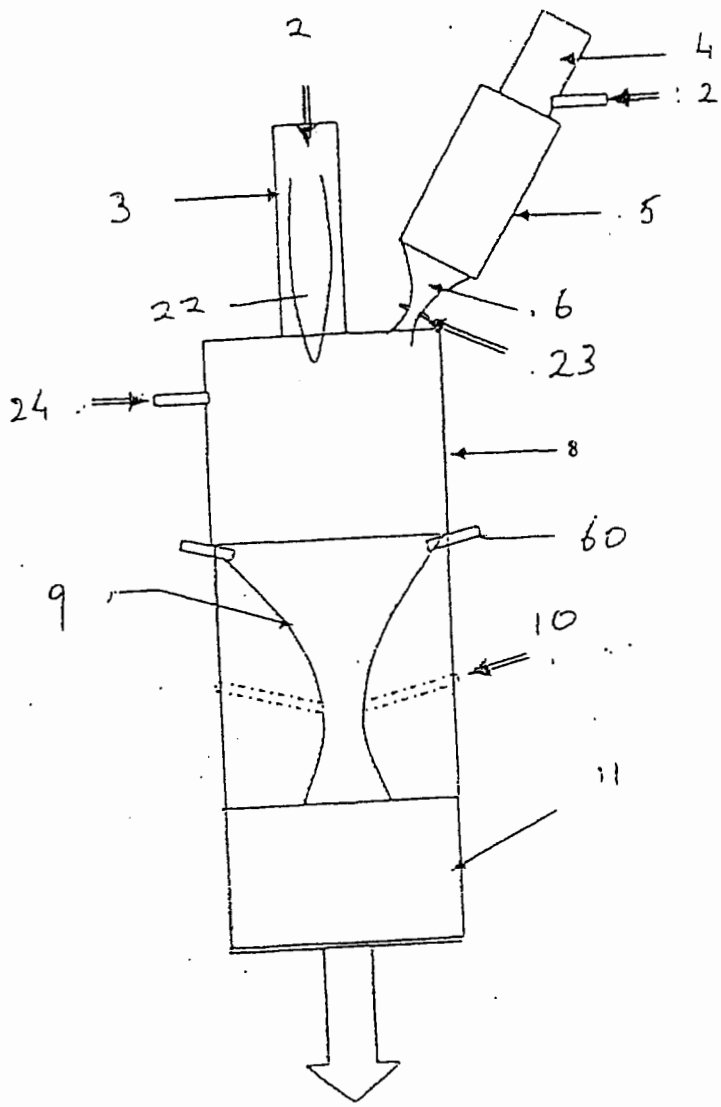

Fig.2

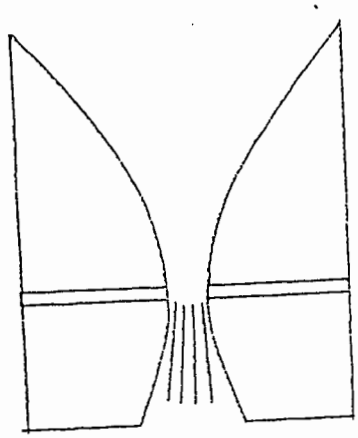

Fig.3
(prior Art)

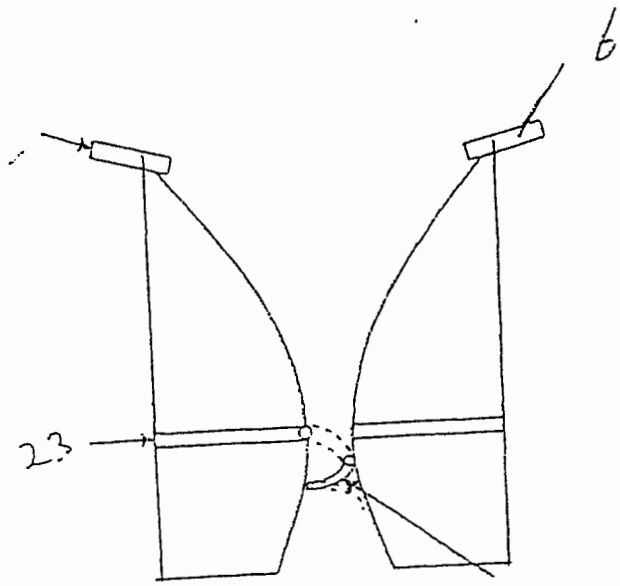

Fig.4

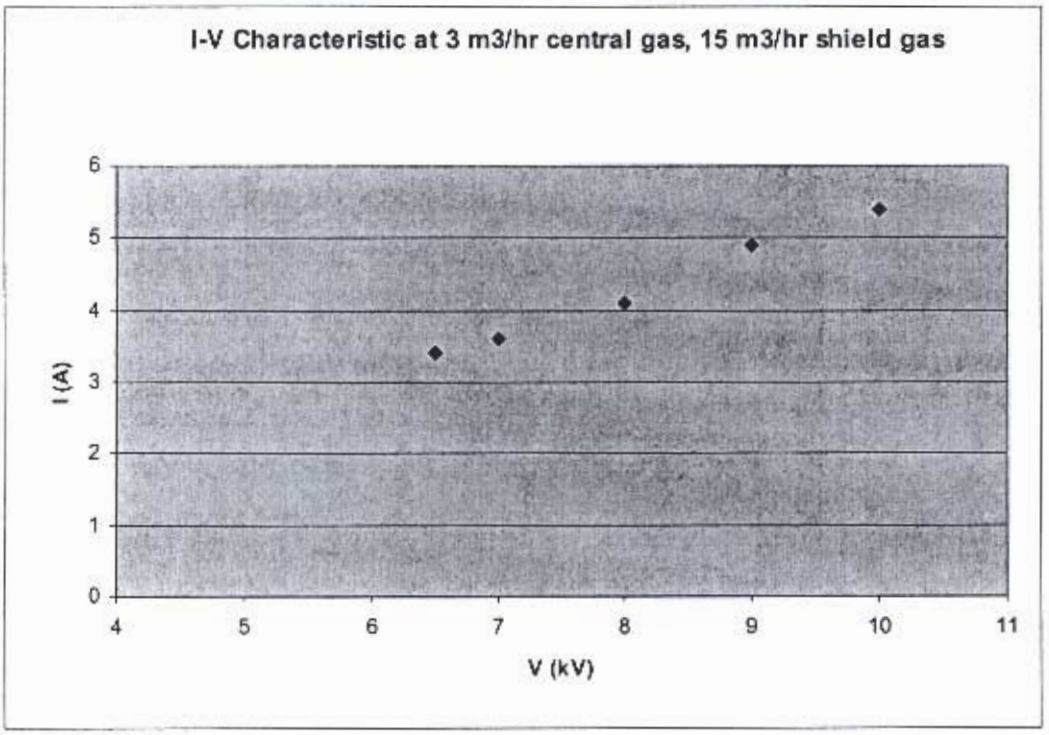
I-V Characteristic at 3 m3/hr central gas, 15 m3/hr shield gas
I (A)
V (kV)
0
1
2
3
4
5
6
4
5
6
7
8
9
10
11

Fig. 5

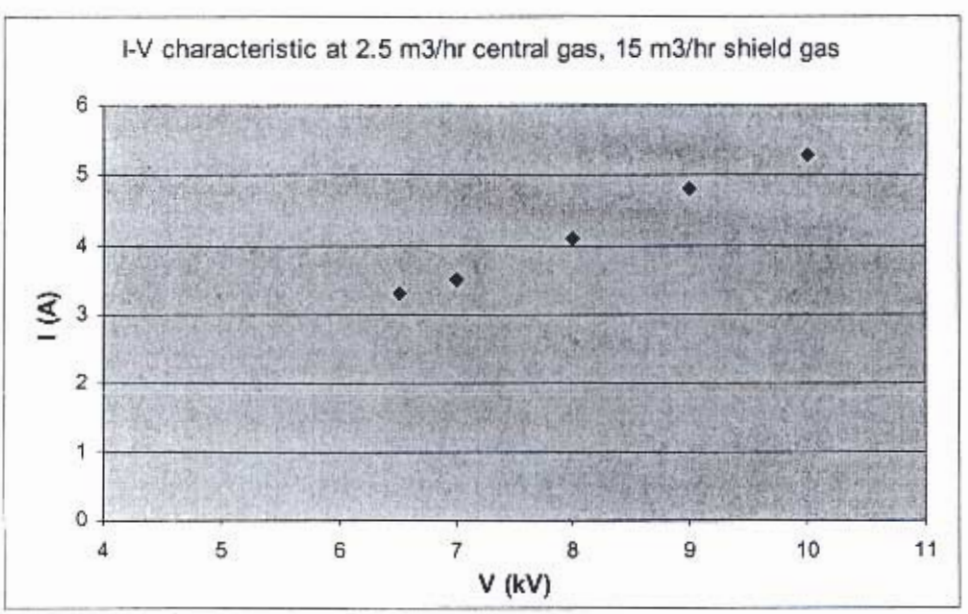
I-V characteristic at 2.5 m3/hr central gas, 15 m3/hr shield gas
I (A)
V (kV)
0
1
2
3
4
5
6
4
5
6
7
8
9
10
11

Fig. 6

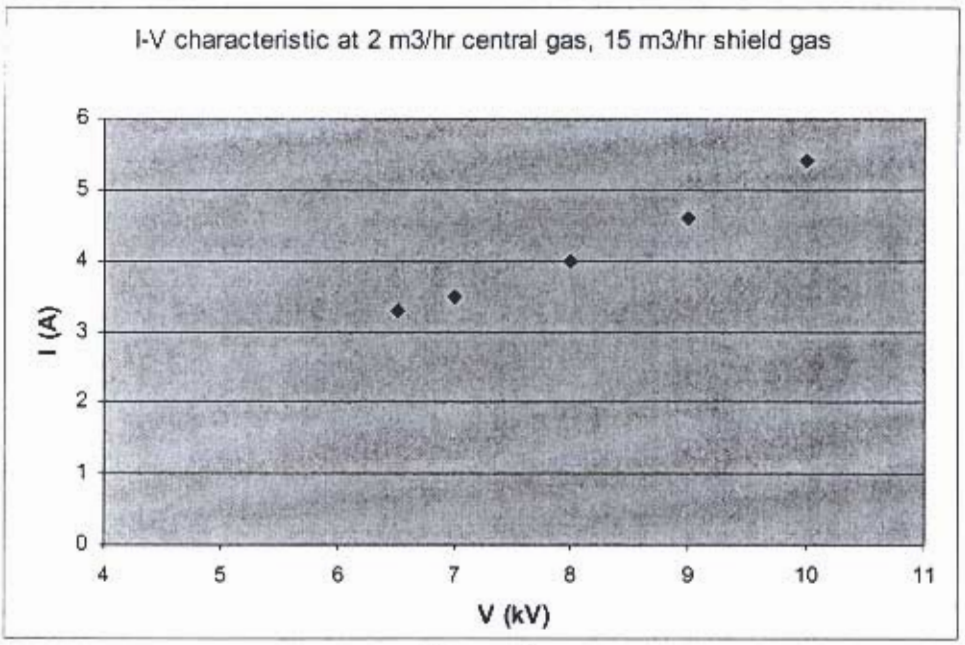
I-V characteristic at 2 m3/hr central gas, 15 m3/hr shield gas
I (A)
V (kV)
0
1
2
3
4
5
6
4
5
6
7
8
9
10
11

Fig. 7



Fig. 7A

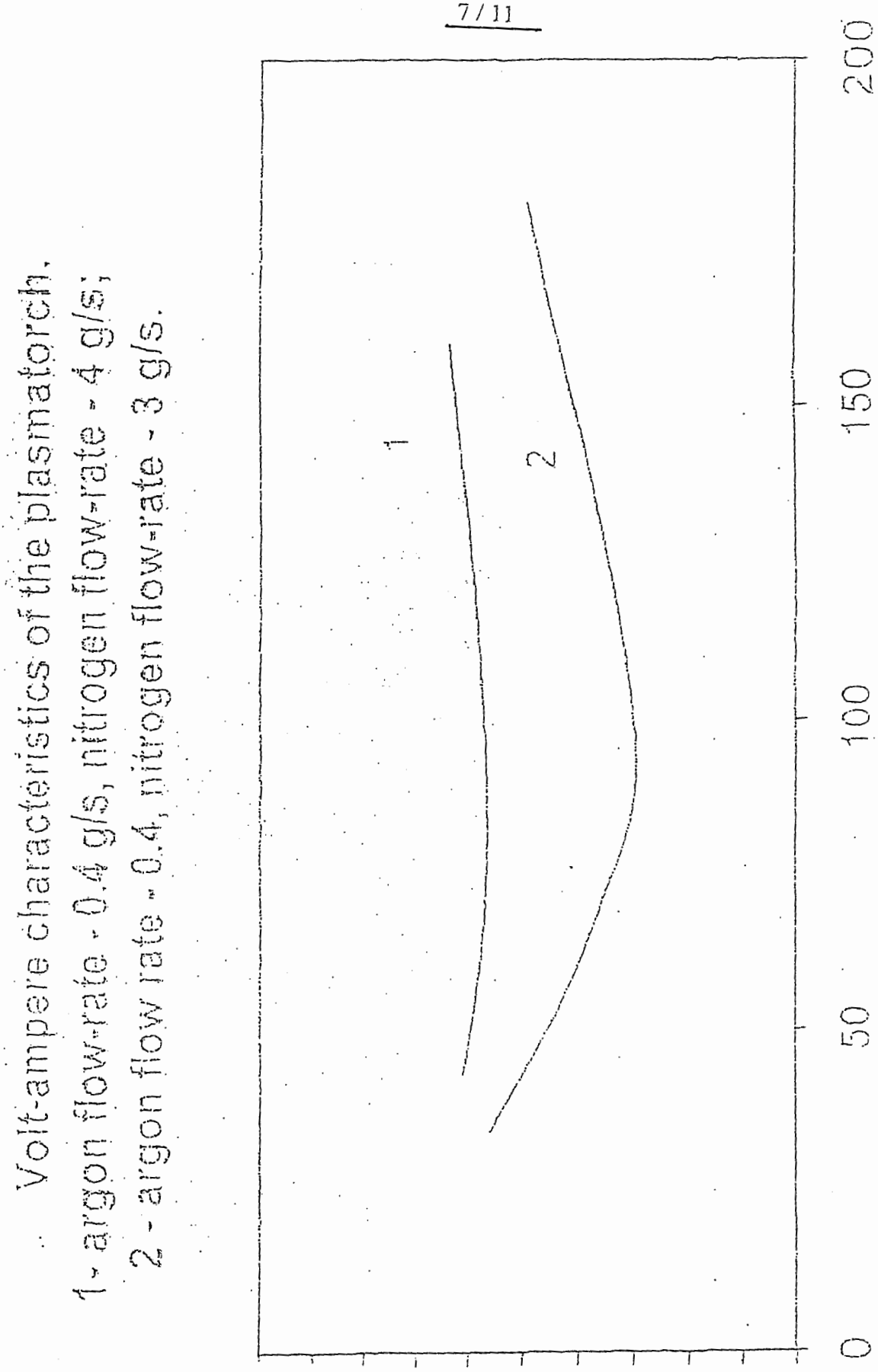
Volt-ampere characteristics of the plasmatorch.
1 - argon flow-rate - 0.4 g/s, nitrogen flow-rate - 4 g/s;
2 - argon flow rate - 0.4, nitrogen flow-rate - 3 g/s.
1
2
0
50
100
150
200

Fig. 8

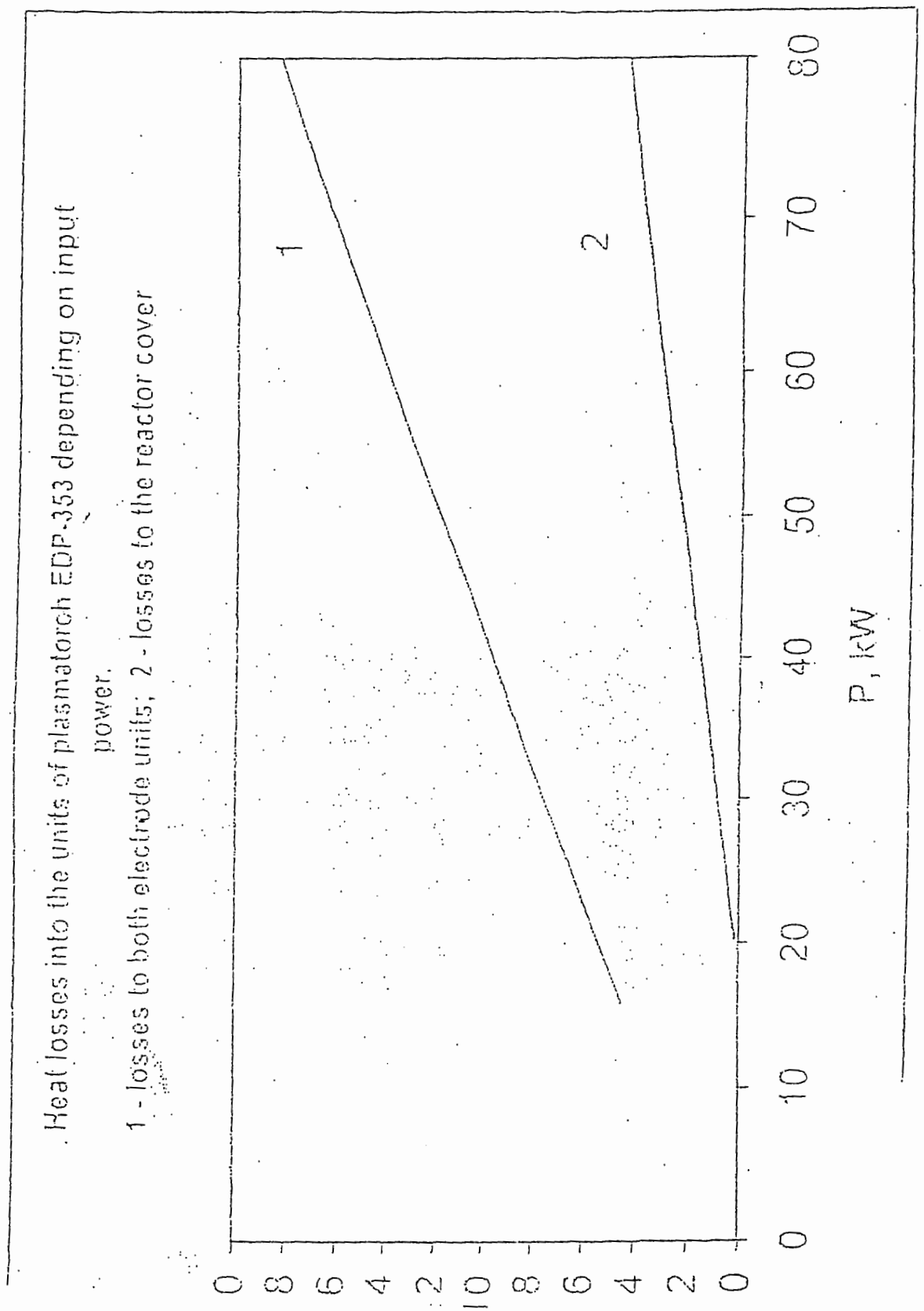
Heat losses into the units of plasmatorch EDP-353 depending on input power.
1 - losses to both electrode units; 2 - losses to the reactor cover
1
2
0
10
20
30
40
50
60
70
80
P, kW
0
2
4
6
8
10
0
2
4
6
8
0

Fig. 9

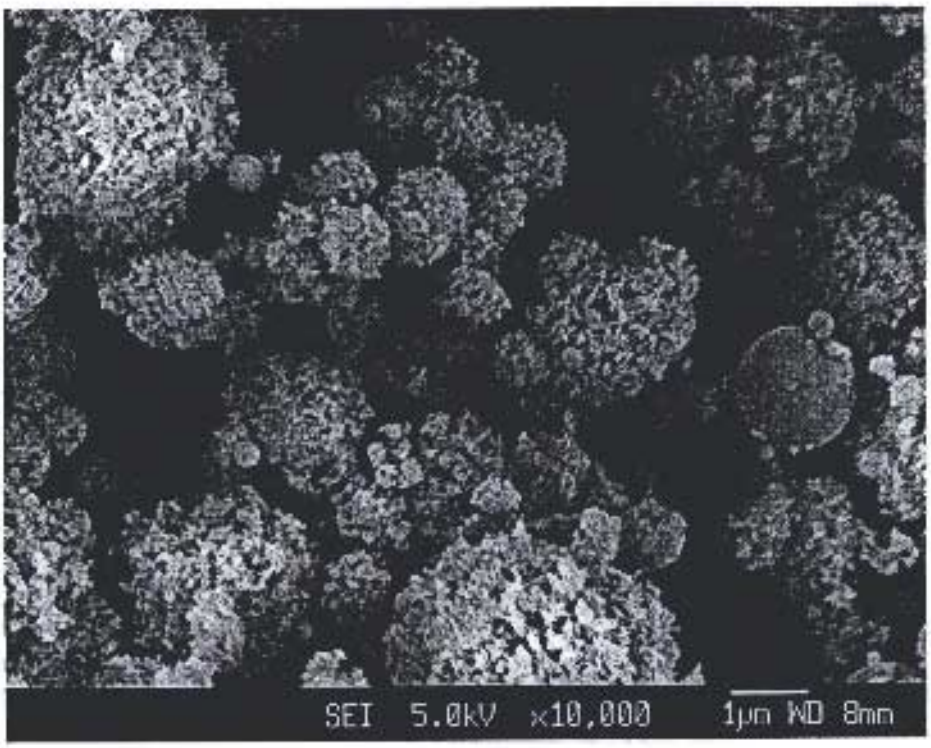

Fig. 10

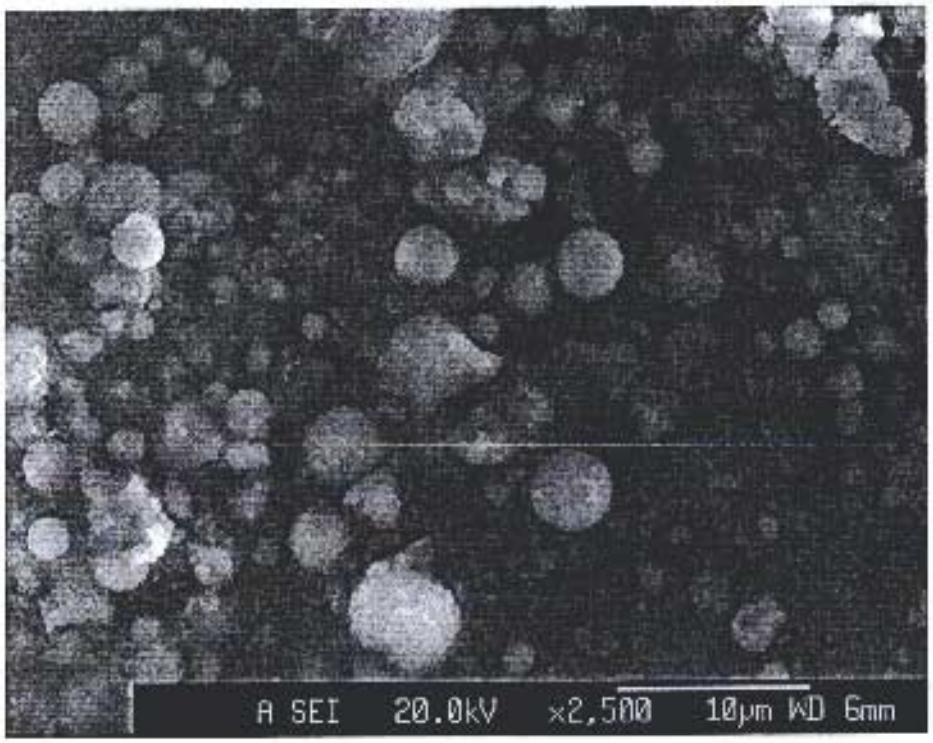

Fig. 11

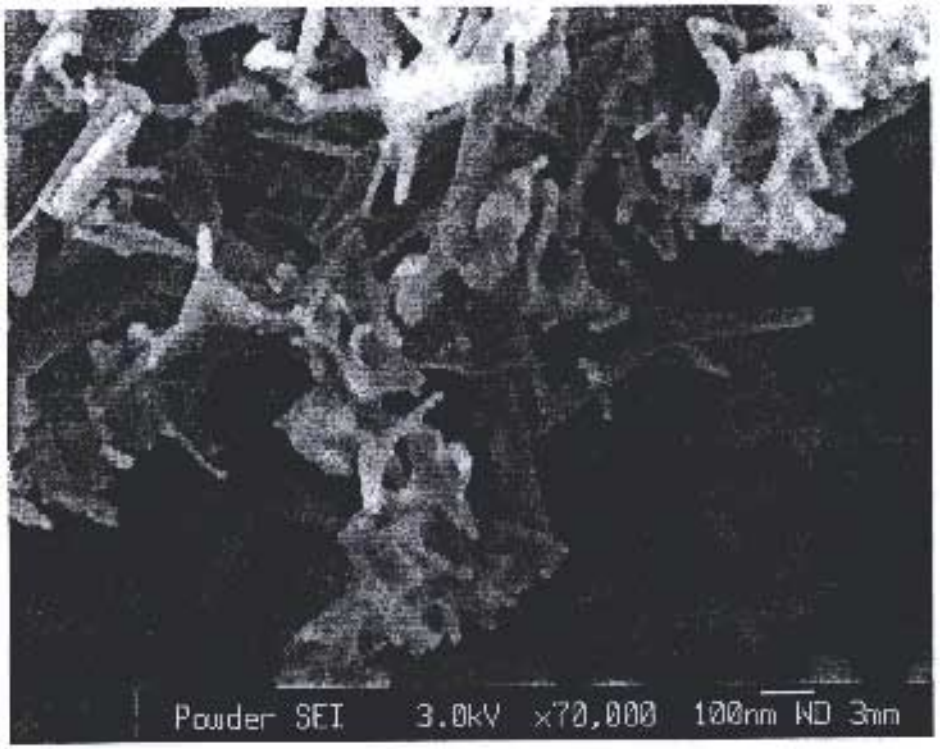

Fig. 12

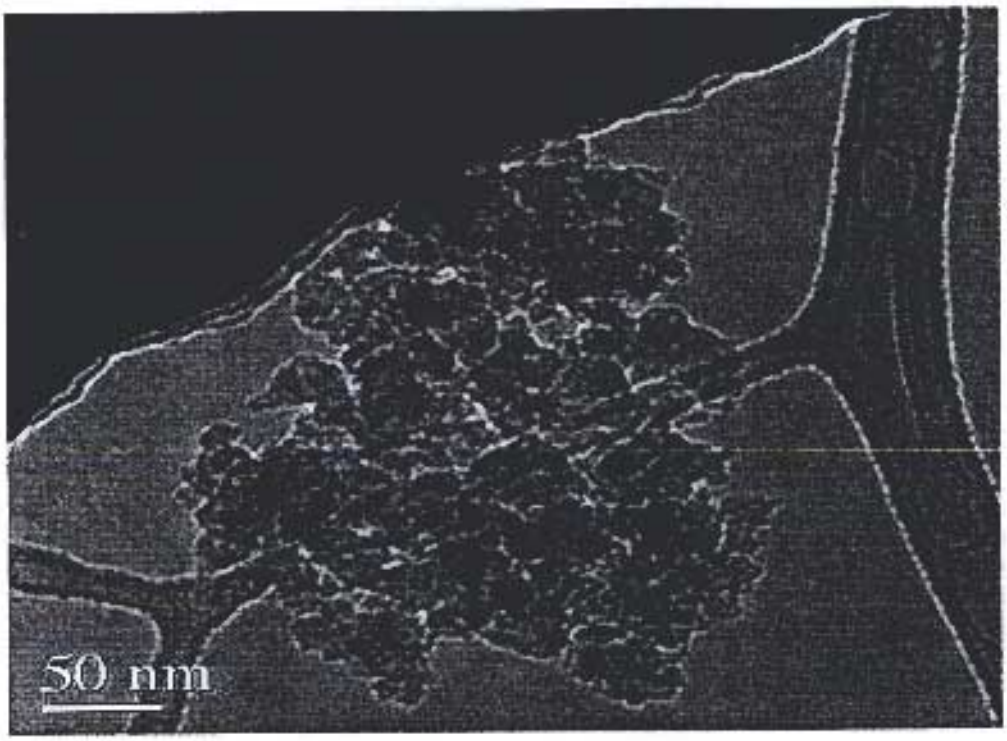

Fig. 13

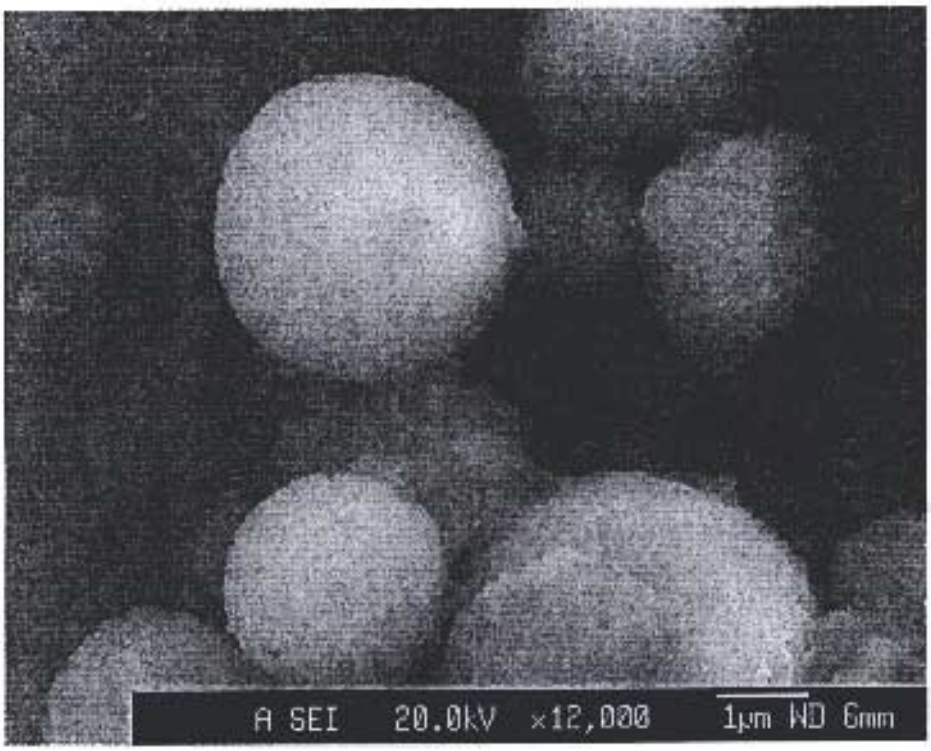

Fig. 14

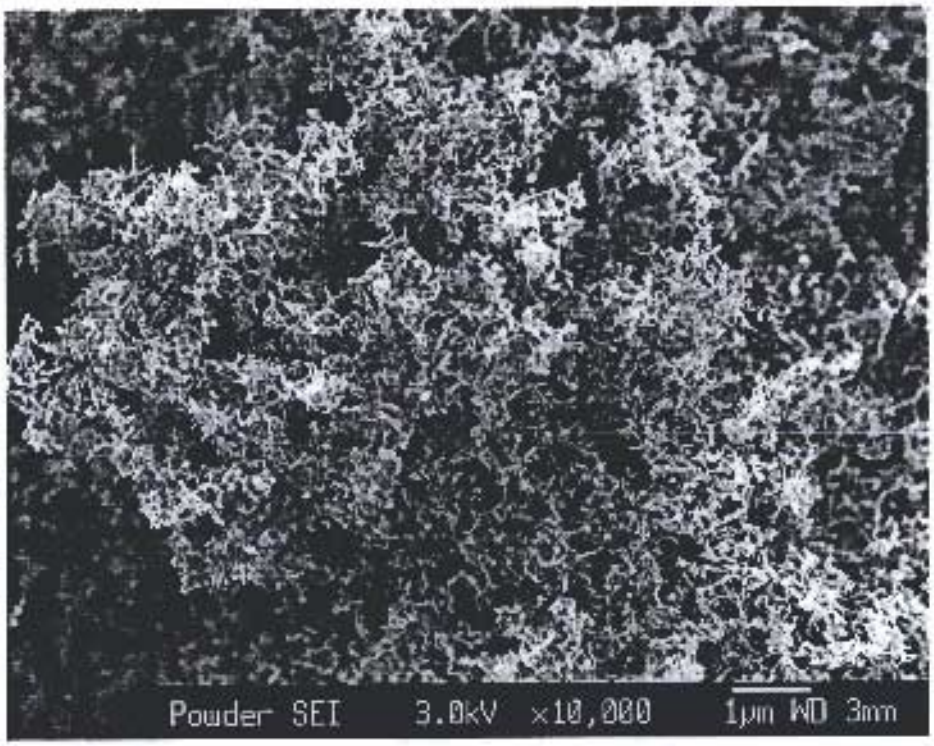

Fig. 15