Fig. 1

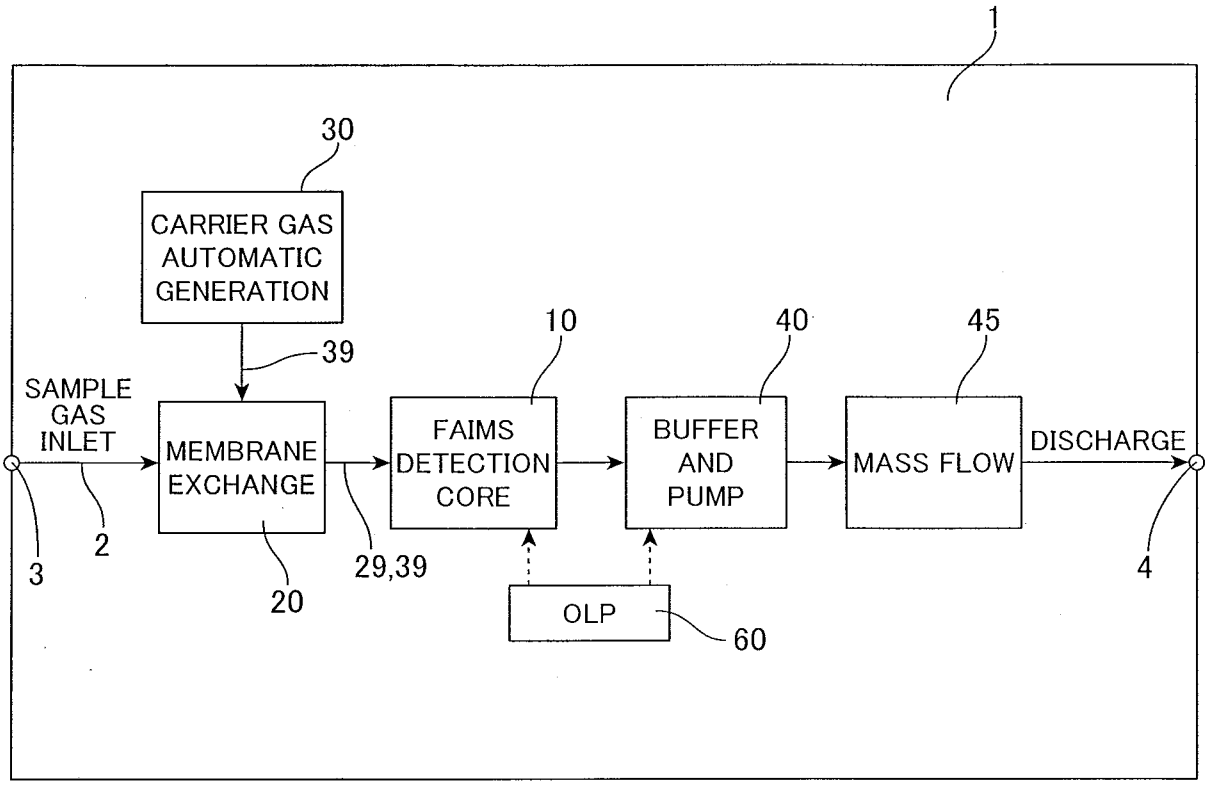

1
30
CARRIER GAS AUTOMATIC GENERATION
39
SAMPLE GAS INLET
MEMBRANE EXCHANGE
FAIMS DETECTION CORE
10
40
BUFFER AND PUMP
45
MASS FLOW
DISCHARGE
3
2
20
29,39
OLP
60
4

Fig. 2

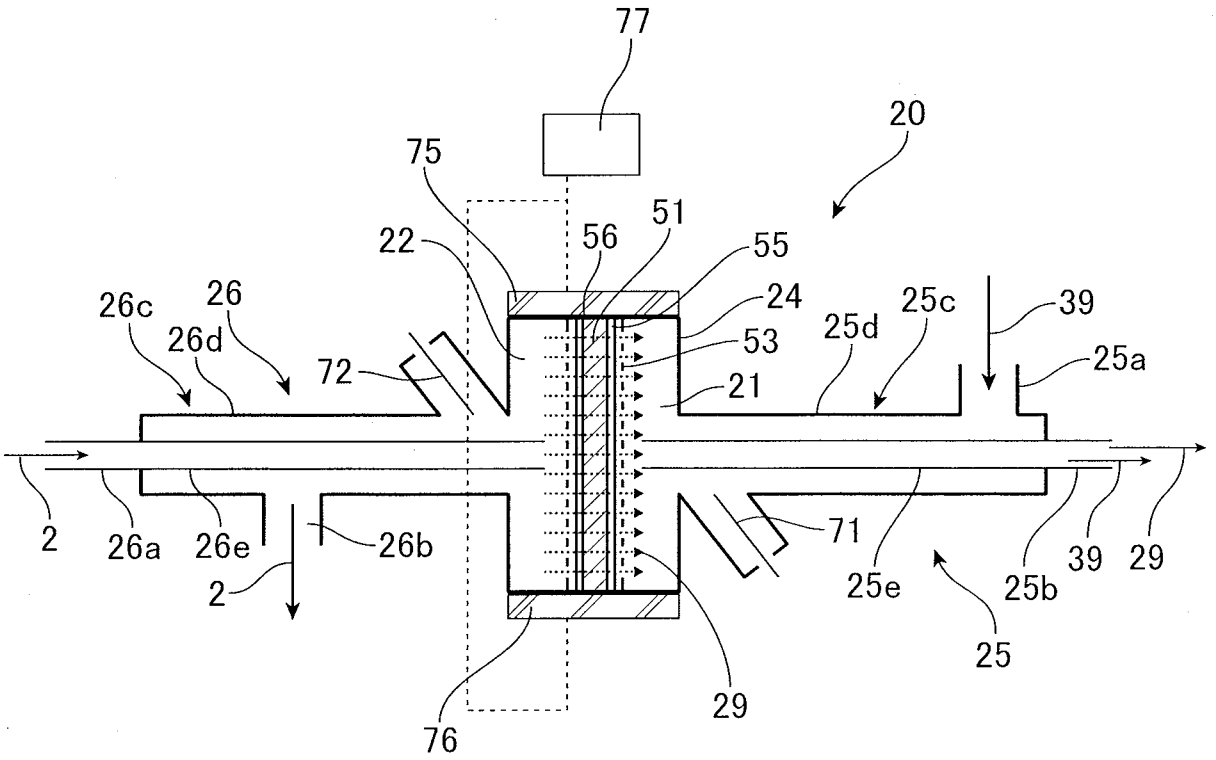

77
20
75
22
56
51
55
24
53
21
26c
26
26d
72
25c
25d
39
25a
2
26a
26e
26b
2
71
25e
25b
39
29
25
76
29

Fig. 3

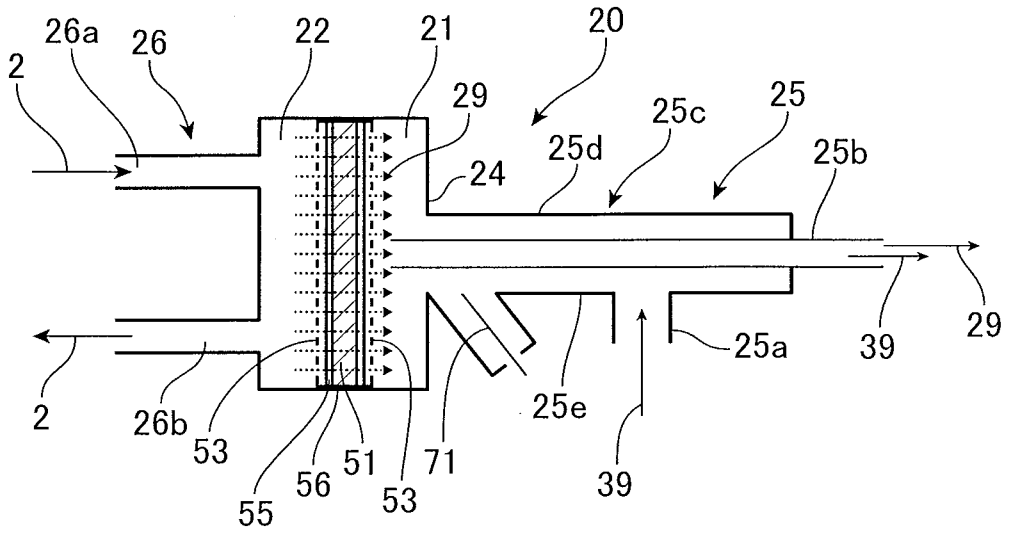

26a
26
22
21
20
2
29
25c
25
25d
25b
24
39
29
25a
2
26b
53
25e
55
56
51
53
71
39

Fig. 4

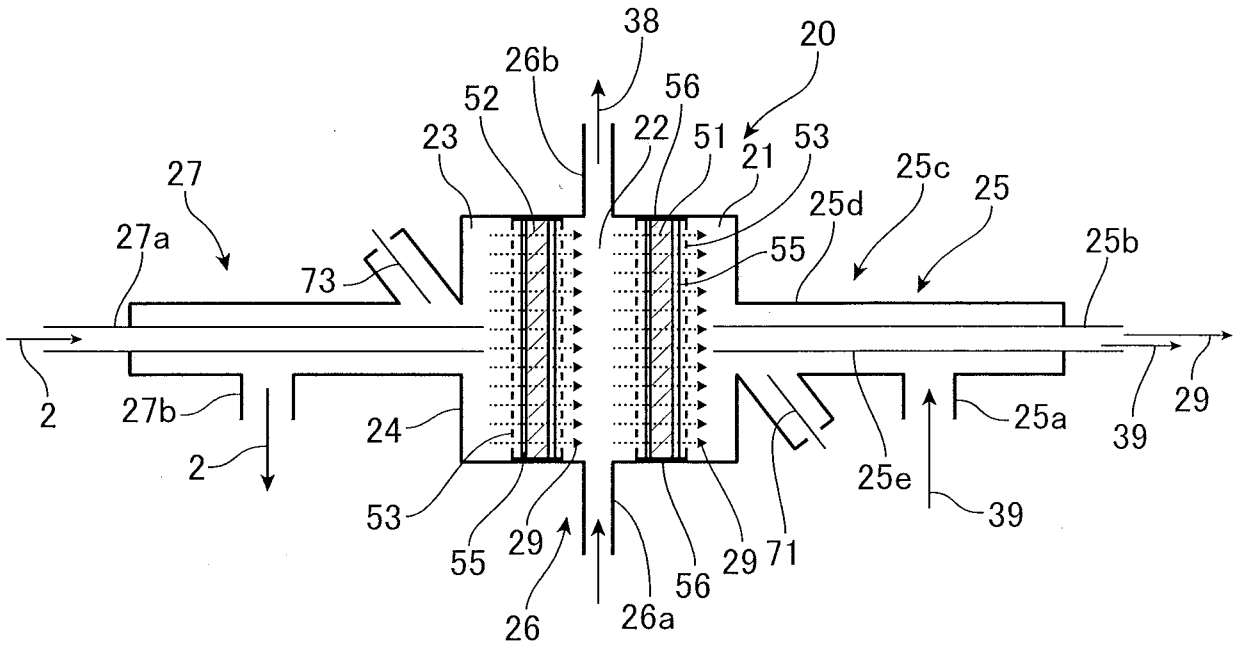
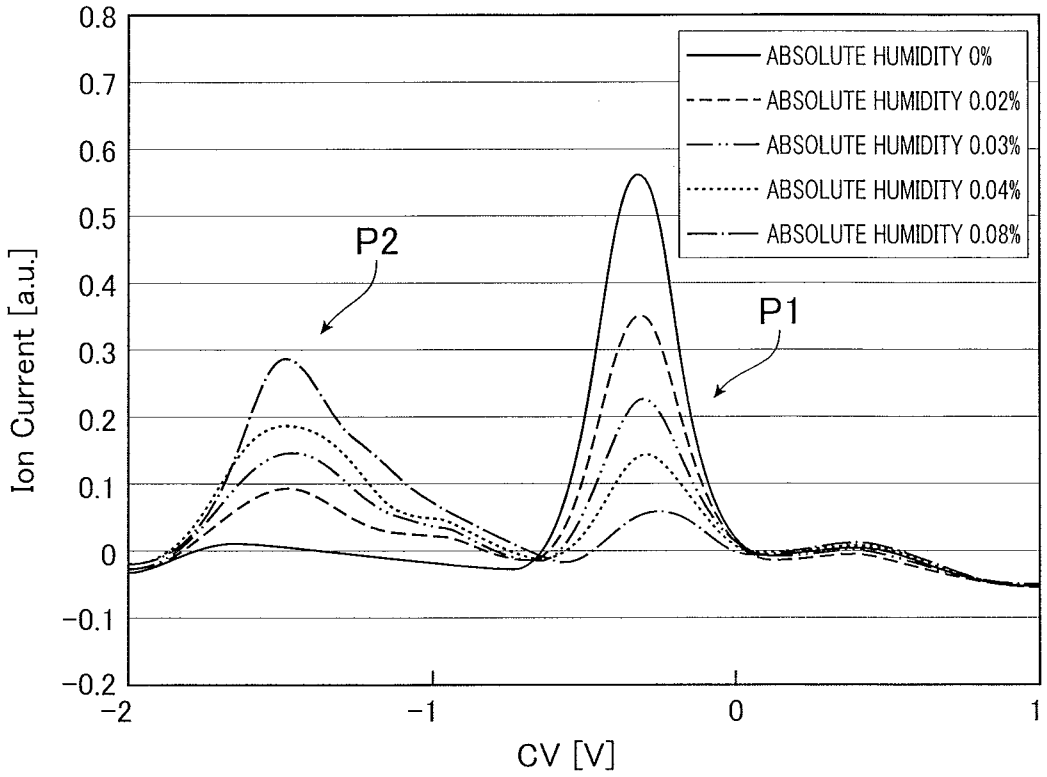

38
20
26b
56
52
22
51
23
53
21
27
25c
25
25d
27a
55
25b
73
2
27b
24
25a
39
29
2
25e
53
39
55
29
29
71
56
26
26a

Fig. 5


0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
−0.1
−0.2
−2
−1
0
1
Ion Current [a.u.]
CV [V]
P1
P2
ABSOLUTE HUMIDITY 0%
ABSOLUTE HUMIDITY 0.02%
ABSOLUTE HUMIDITY 0.03%
ABSOLUTE HUMIDITY 0.04%
ABSOLUTE HUMIDITY 0.08%