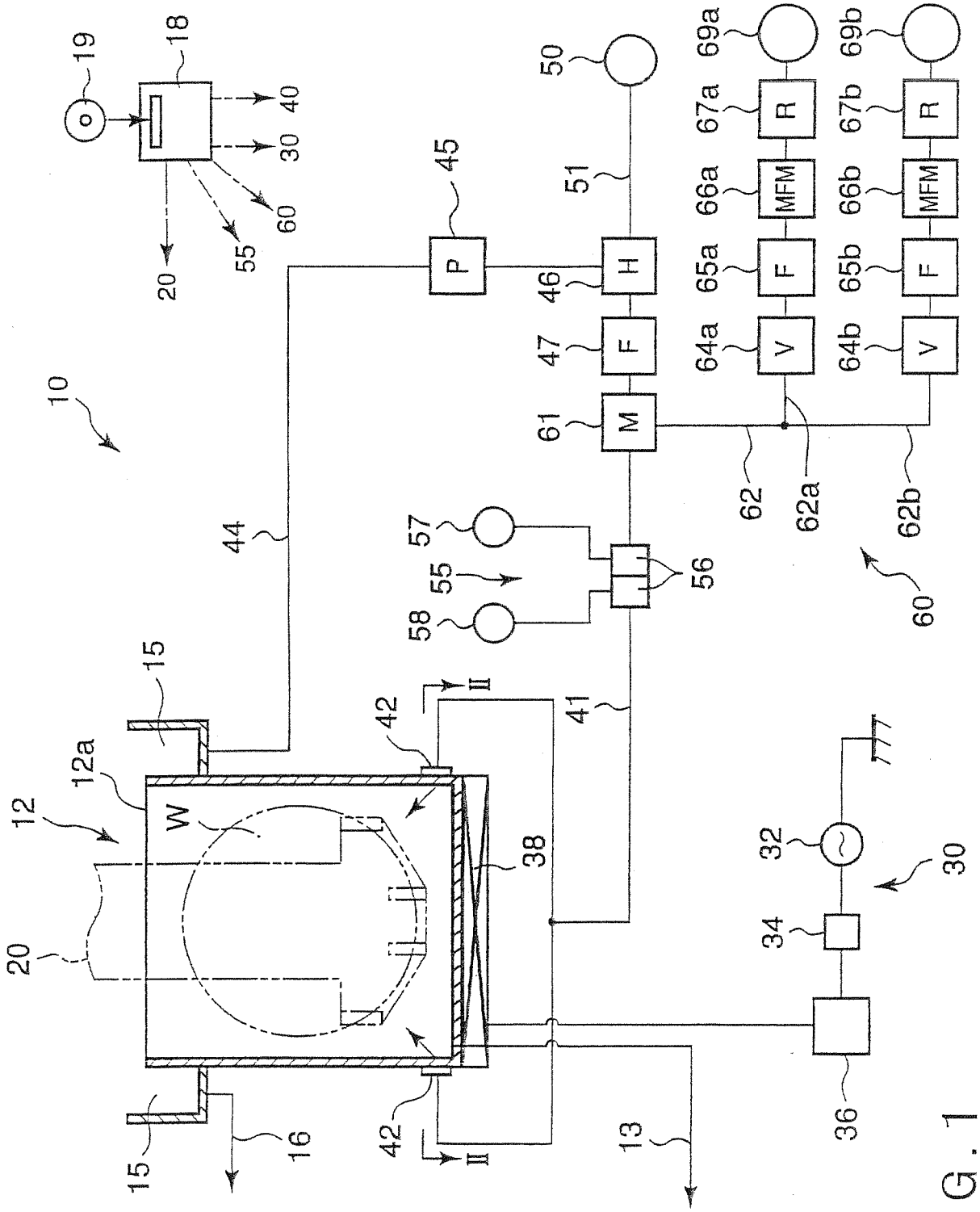

10
12
12a
W
20
15
16
42
II
38
41
13
44
45
P
50
51
H
46
F
47
M
61
57
55
58
56
60
62
62a
62b
64a
64b
V
65a
65b
F
66a
66b
MFM
67a
67b
R
69a
69b
18
19
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30
60
55
20
32
34
36
30
777

FIG. 1

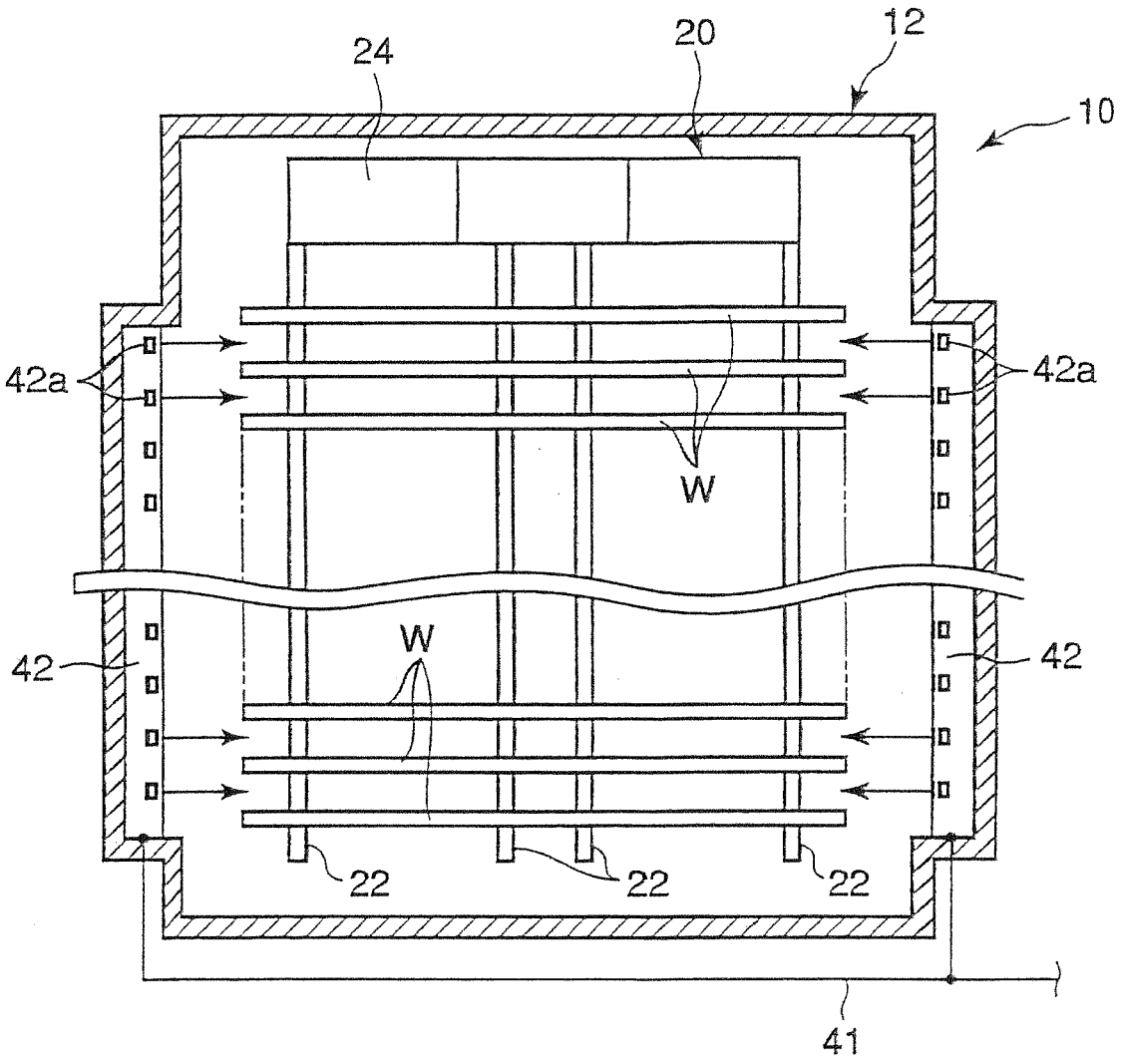


FIG. 2

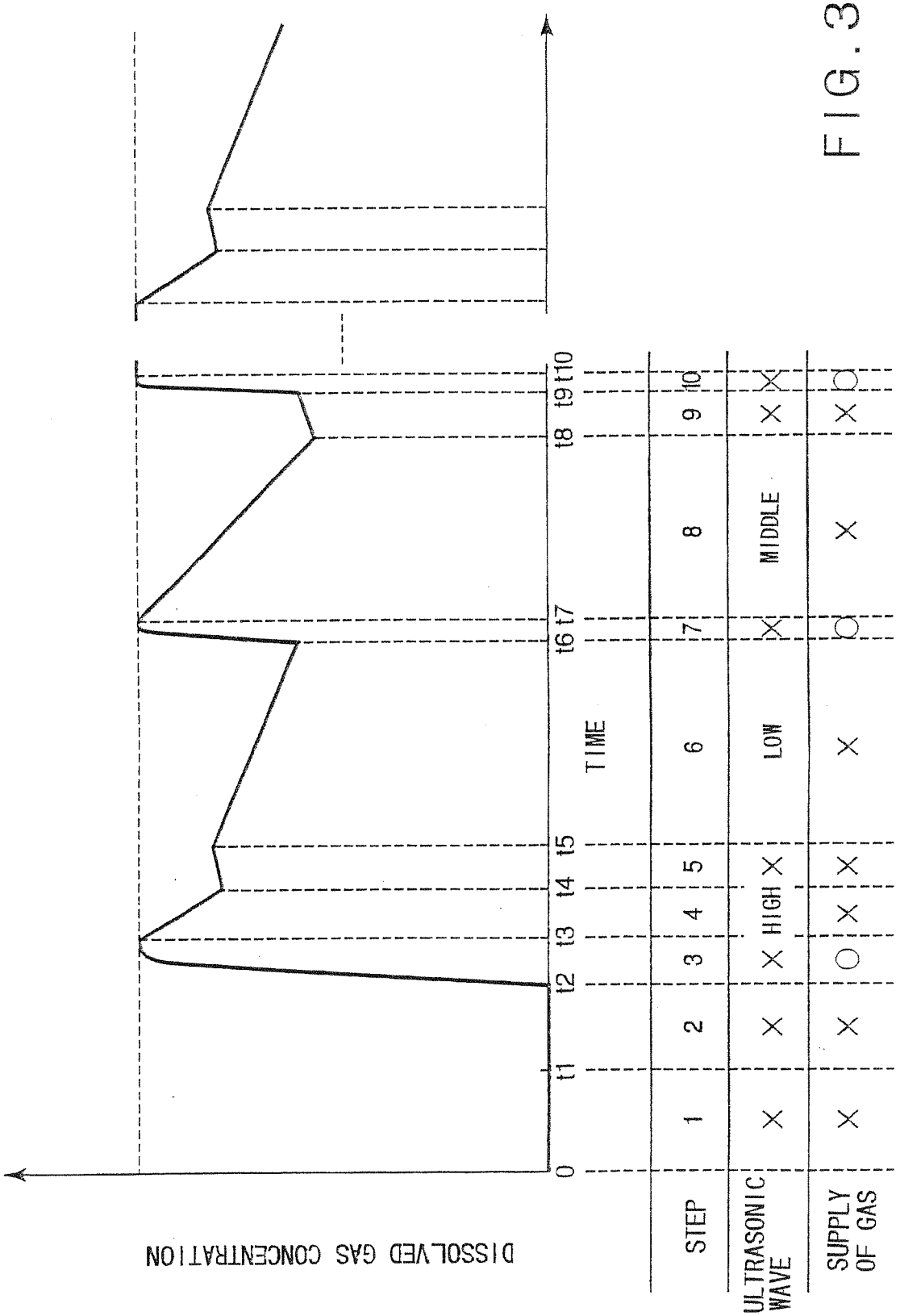

DISSOLVED GAS CONCENTRATION
0
t1
t2
t3
t4
t5
t6
t7
t8
t9
t10
TIME
STEP
1
2
3
4
5
6
7
8
9
10
ULTRASONIC WAVE
X
X
X HIGH
X
LOW
X
MIDDLE
X
SUPPLY OF GAS
X
X
O
X
X
X
O
X
O

FIG. 3

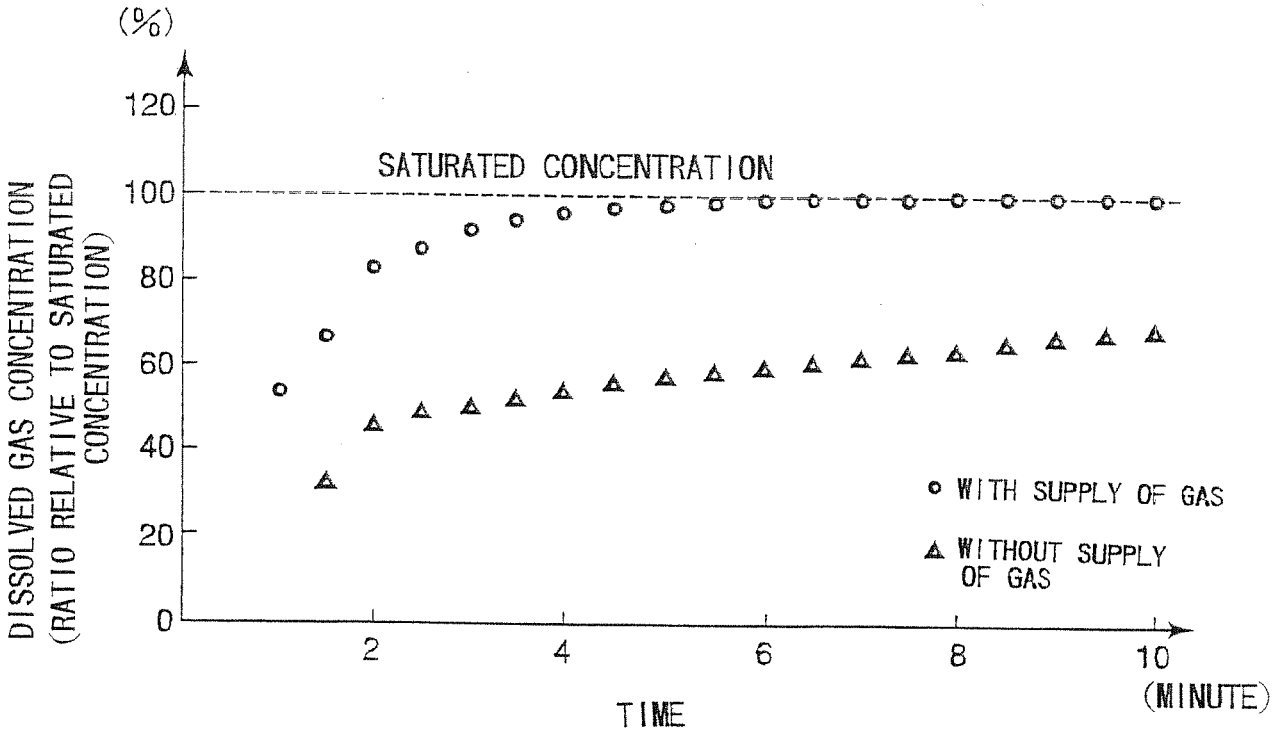

(%)
120
100
80
60
40
20
0
SATURATED CONCENTRATION
DISSOLVED GAS CONCENTRATION (RATIO RELATIVE TO SATURATED CONCENTRATION)
WITH SUPPLY OF GAS
WITHOUT SUPPLY OF GAS
2
4
6
8
10
(MINUTE)
TIME

FIG. 4

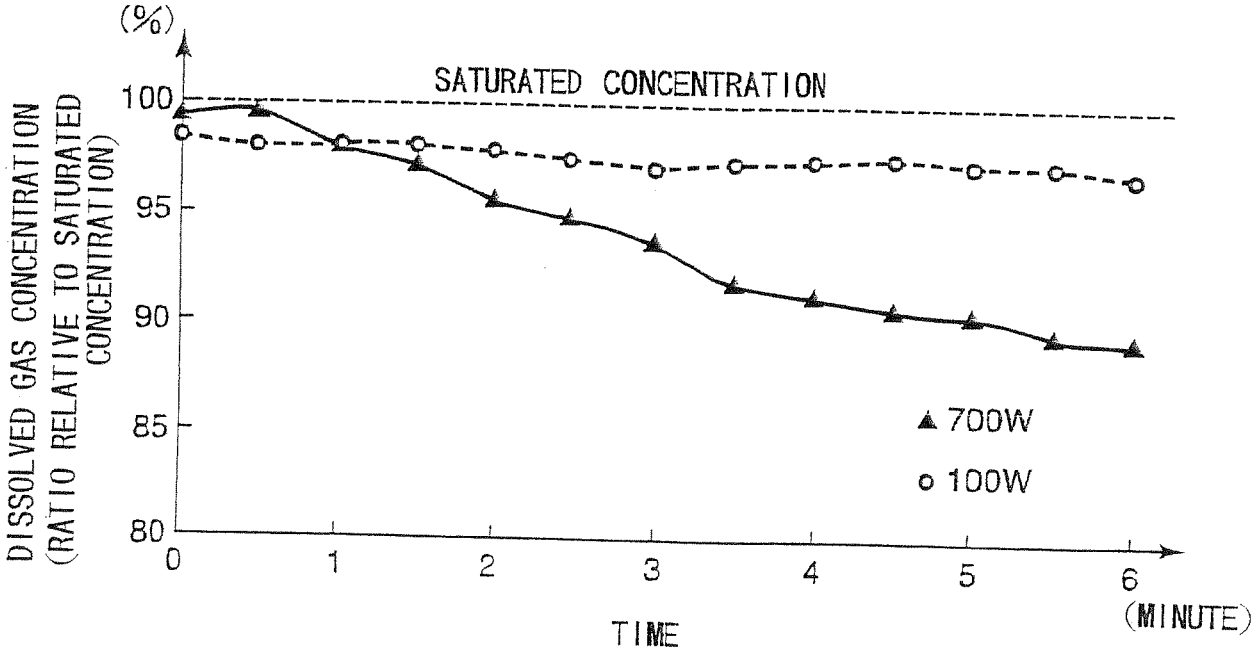

(%)
100
95
90
85
80
SATURATED CONCENTRATION
DISSOLVED GAS CONCENTRATION (RATIO RELATIVE TO SATURATED CONCENTRATION)
700W
100W
0
1
2
3
4
5
6
(MINUTE)
TIME

FIG. 5

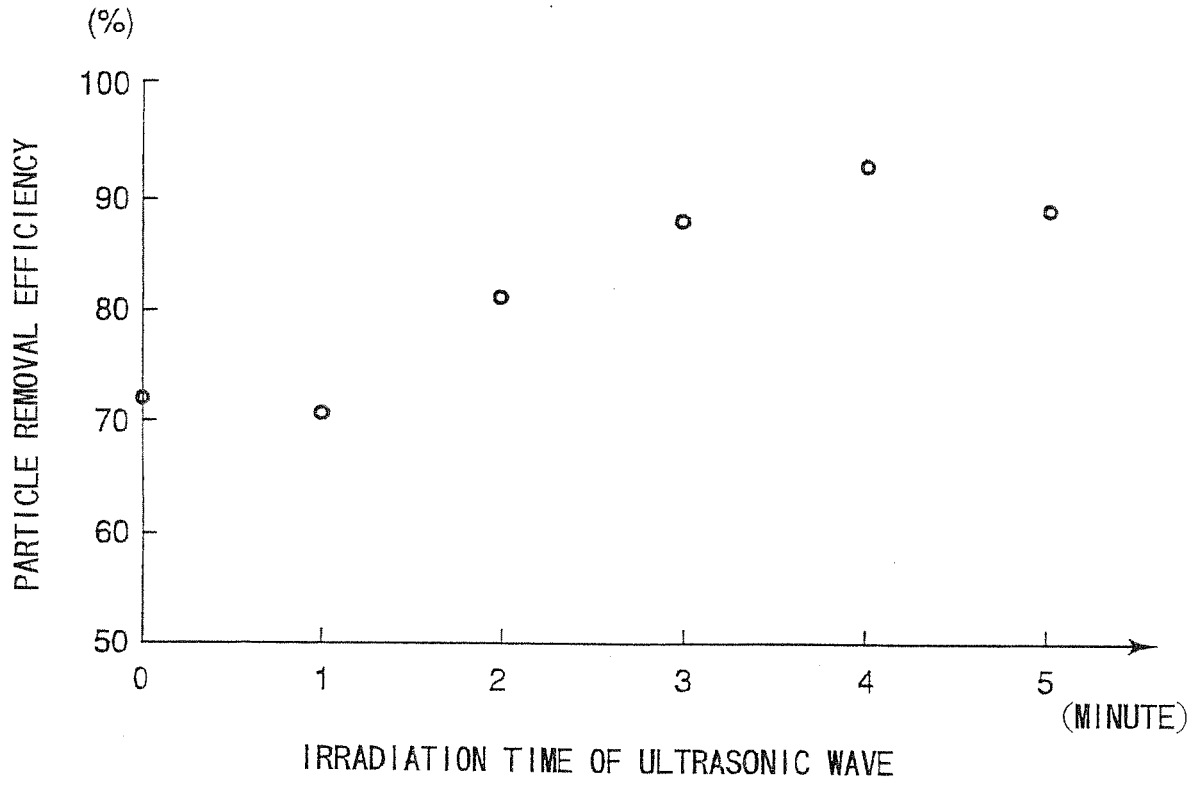

(%)
100
90
80
70
60
50
PARTICLE REMOVAL EFFICIENCY
0
1
2
3
4
5
(MINUTE)
IRRADIATION TIME OF ULTRASONIC WAVE

FIG. 6

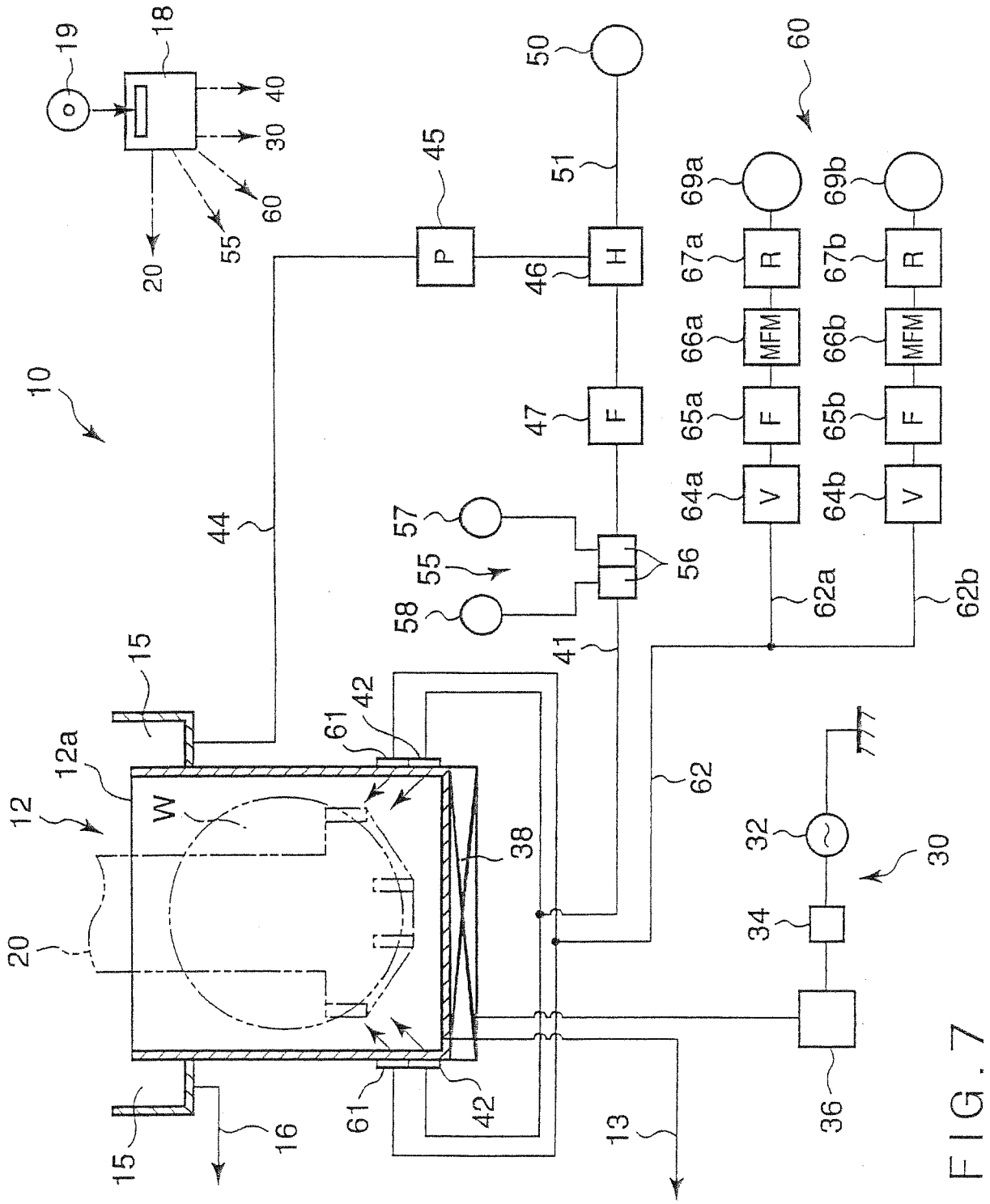

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62b
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F
60
69a
69b
67a
67b
R
R
66a
66b
MFM
MFM
65a
65b
F
F
64a
64b
V
V
18
19
40
30
60
55
20
32
30
34
36
777

FIG. 7

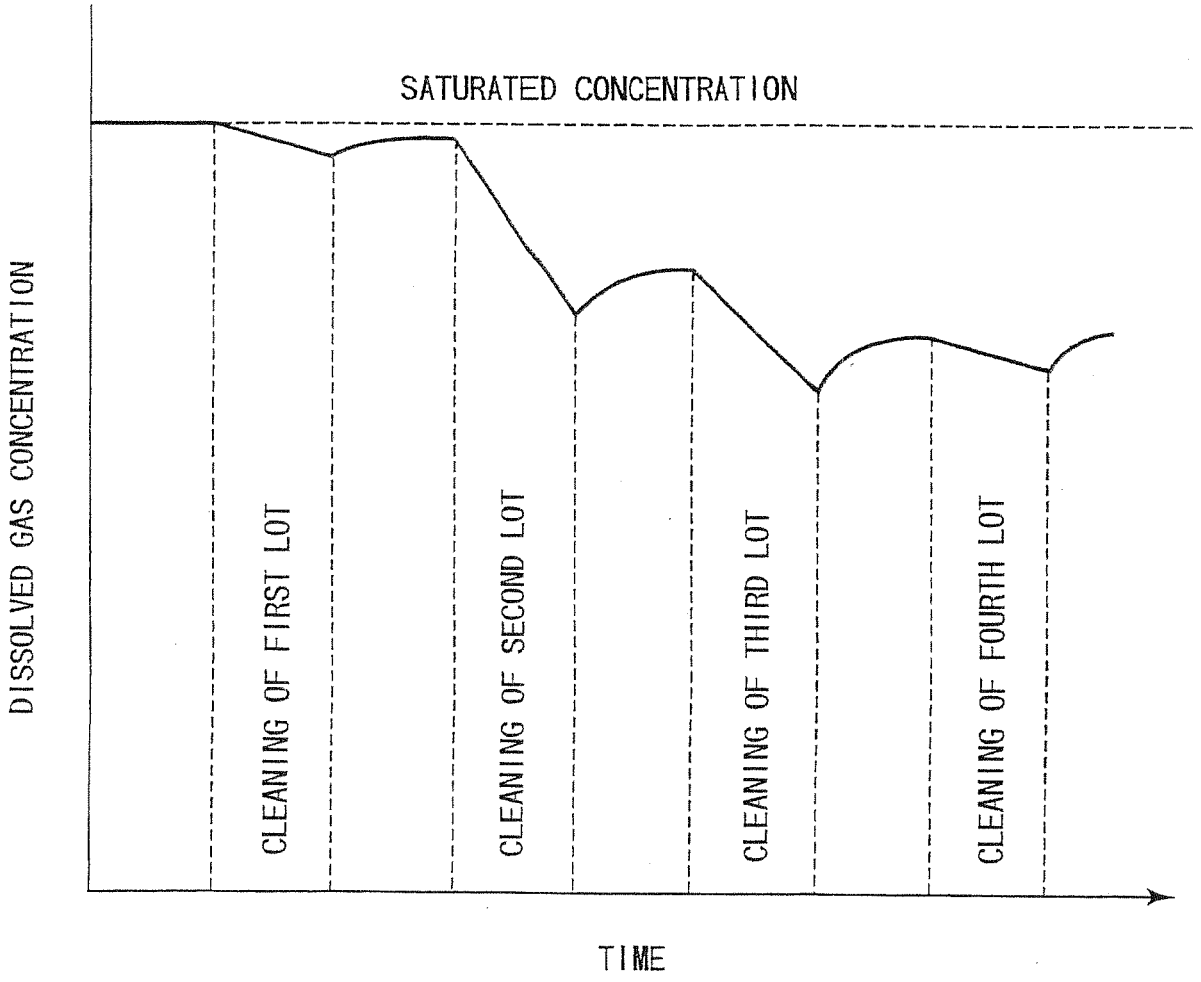

SATURATED CONCENTRATION
DISSOLVED GAS CONCENTRATION
CLEANING OF FIRST LOT
CLEANING OF SECOND LOT
CLEANING OF THIRD LOT
CLEANING OF FOURTH LOT
TIME

FIG. 8