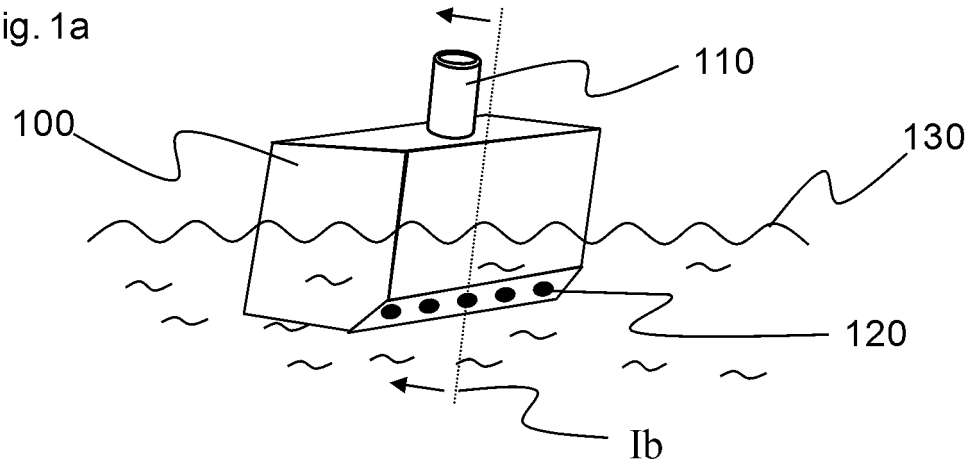
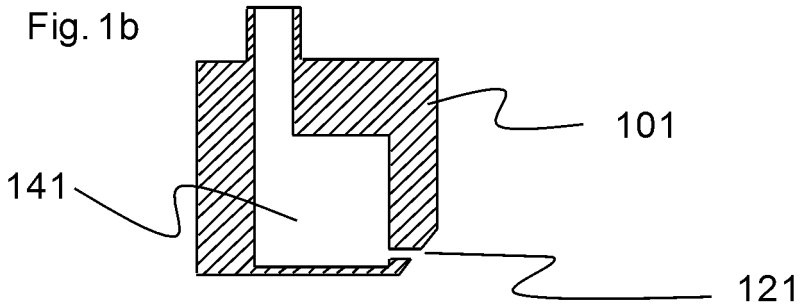
[Fig. ]

Fig. 1a



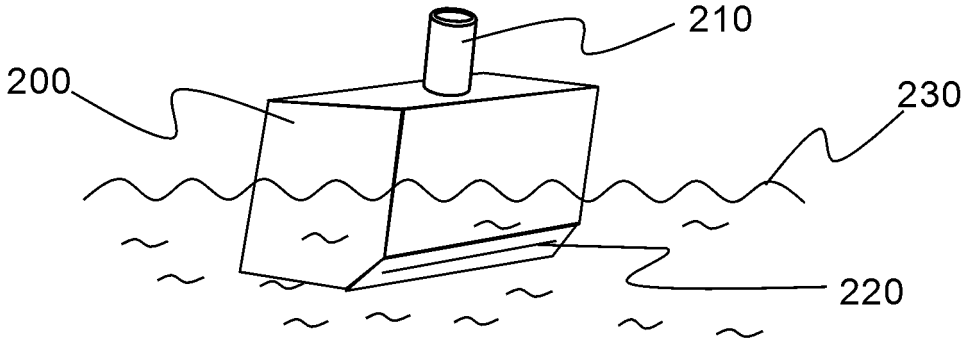

[Fig. ]

Fig. 1b



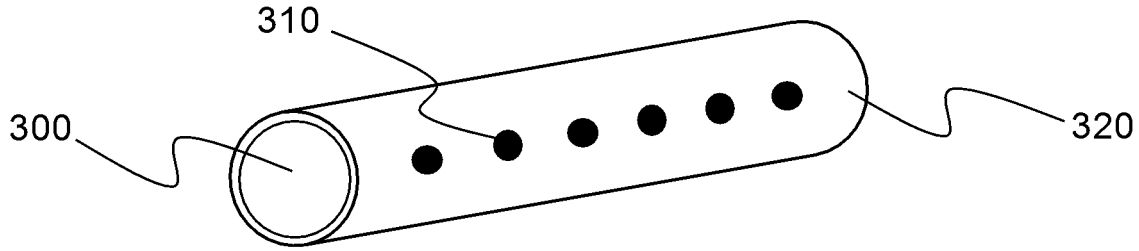

[Fig. ]

Fig. 2



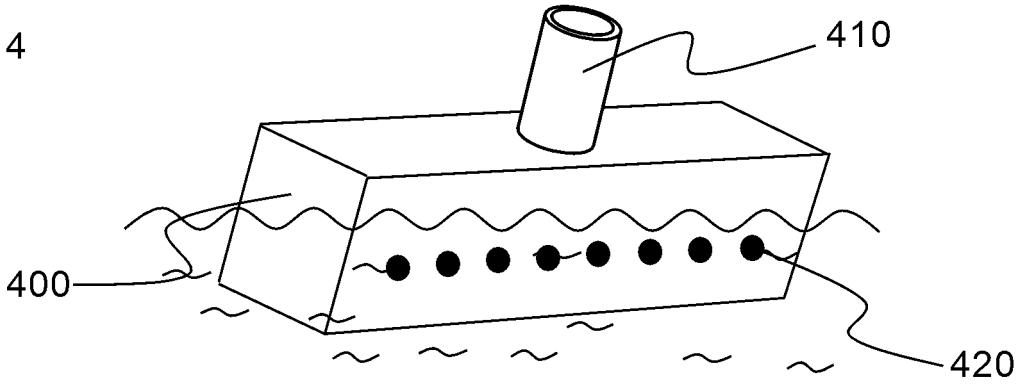

[Fig. ]

Fig. 3



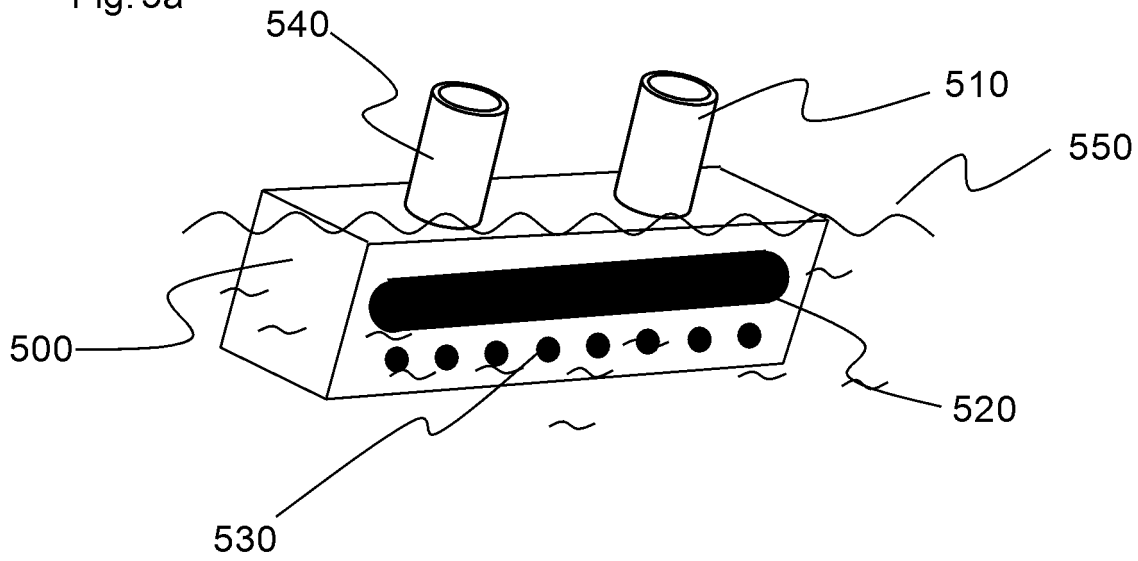
[Fig. ]

Fig. 4



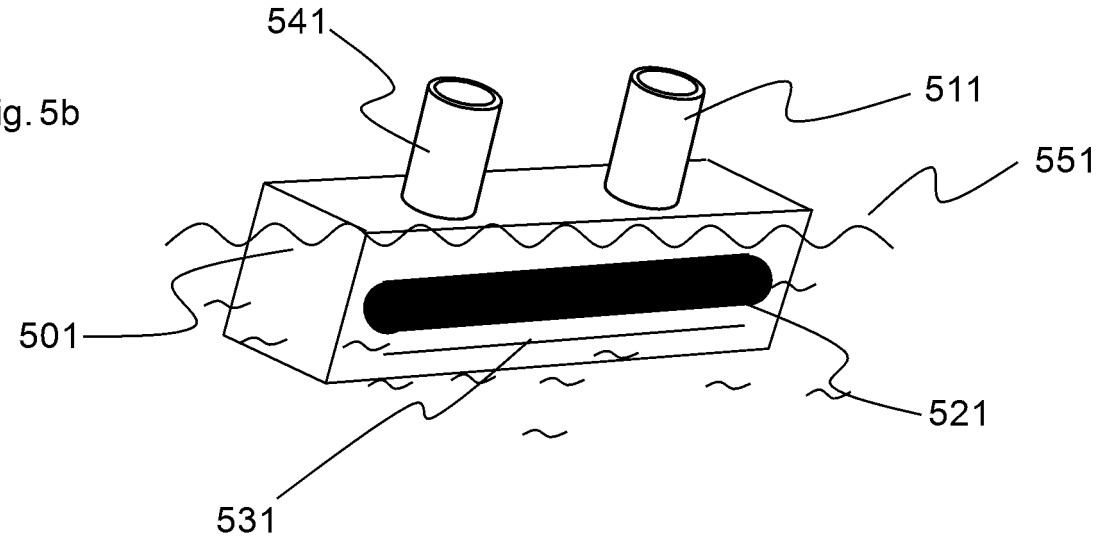

[Fig. ]

Fig. 5a



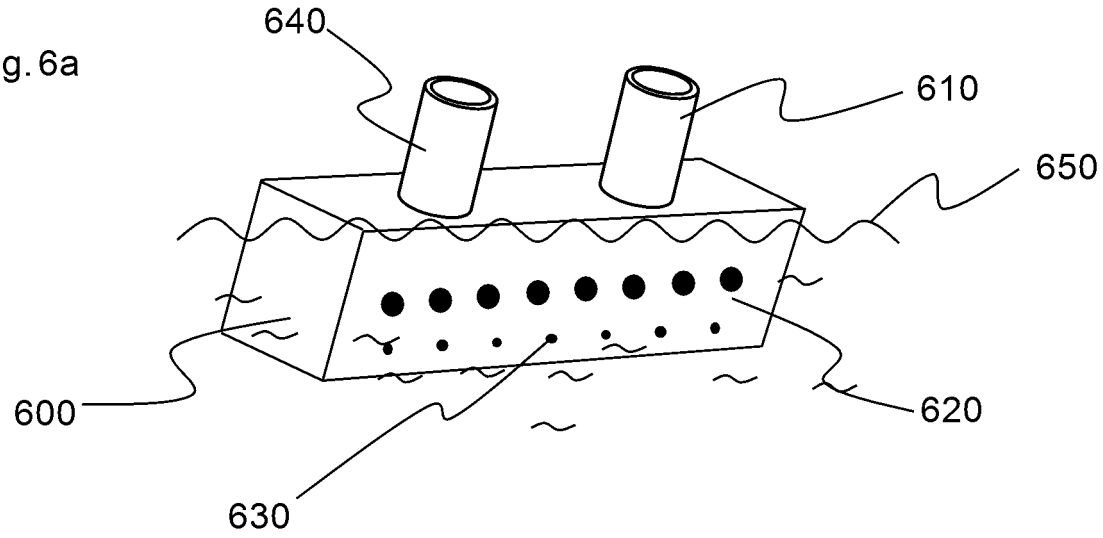

[Fig. ]

Fig. 5b



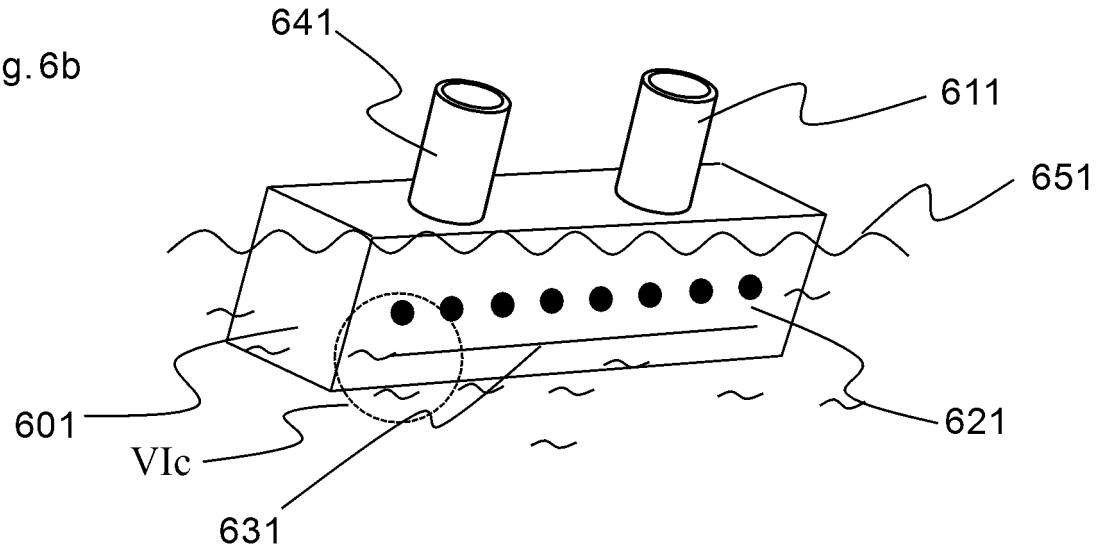
[Fig. ]

Fig. 6a



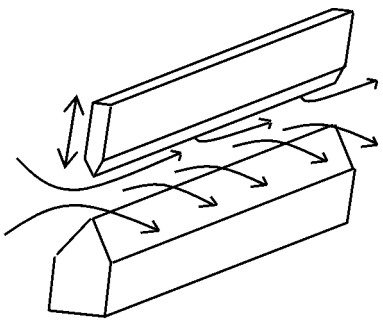

[Fig. ]

Fig. 6b



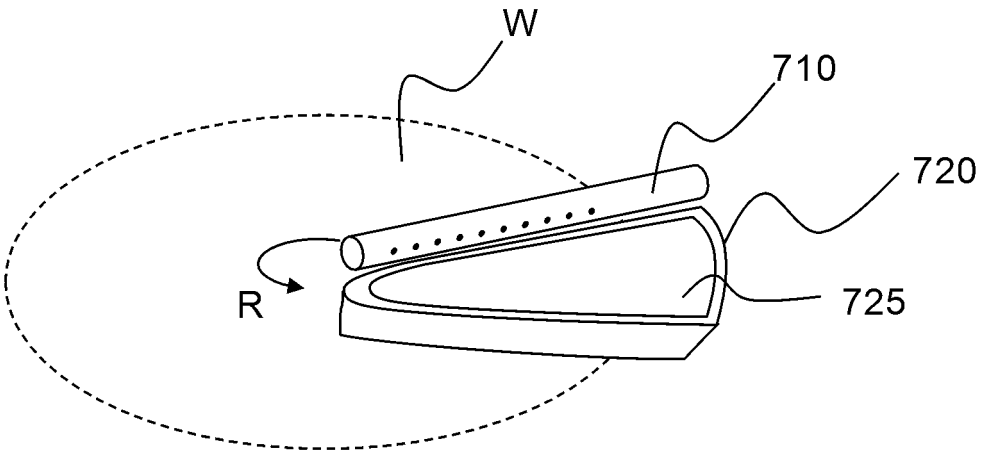

[Fig. ]

Fig. 6c



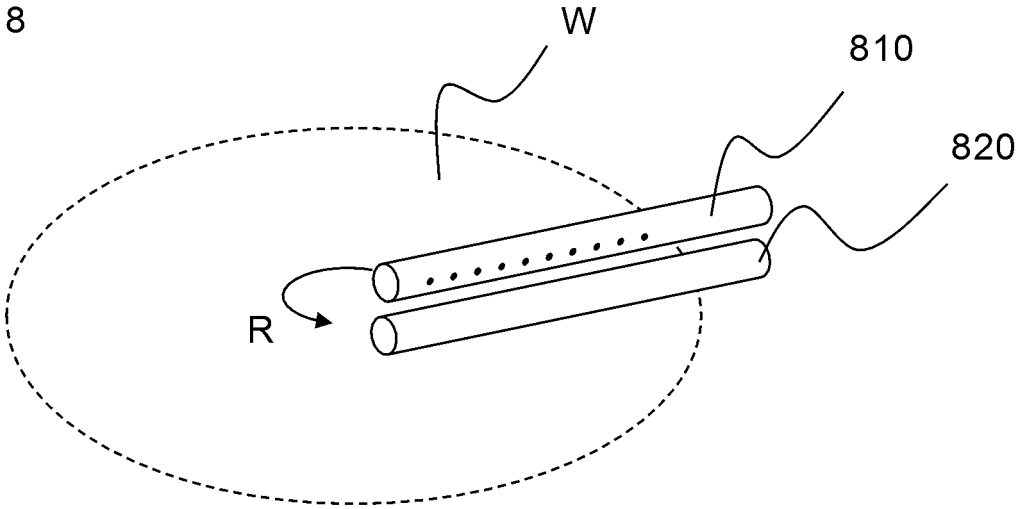
[Fig. ]

Fig. 7



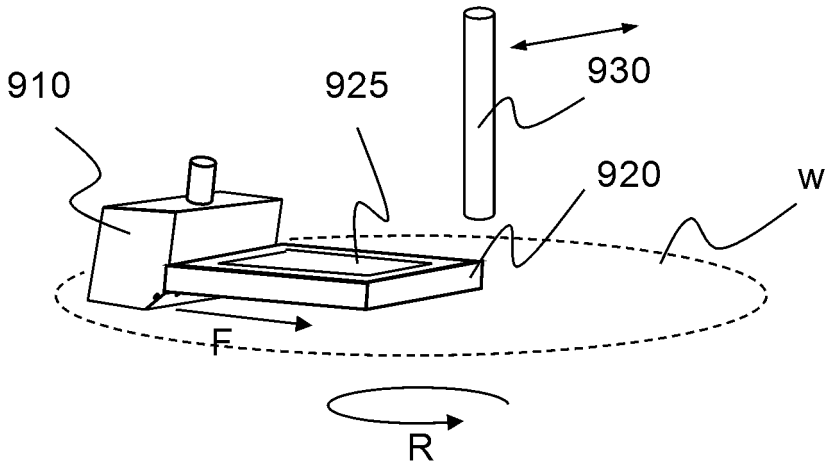

[Fig. ]

Fig. 8



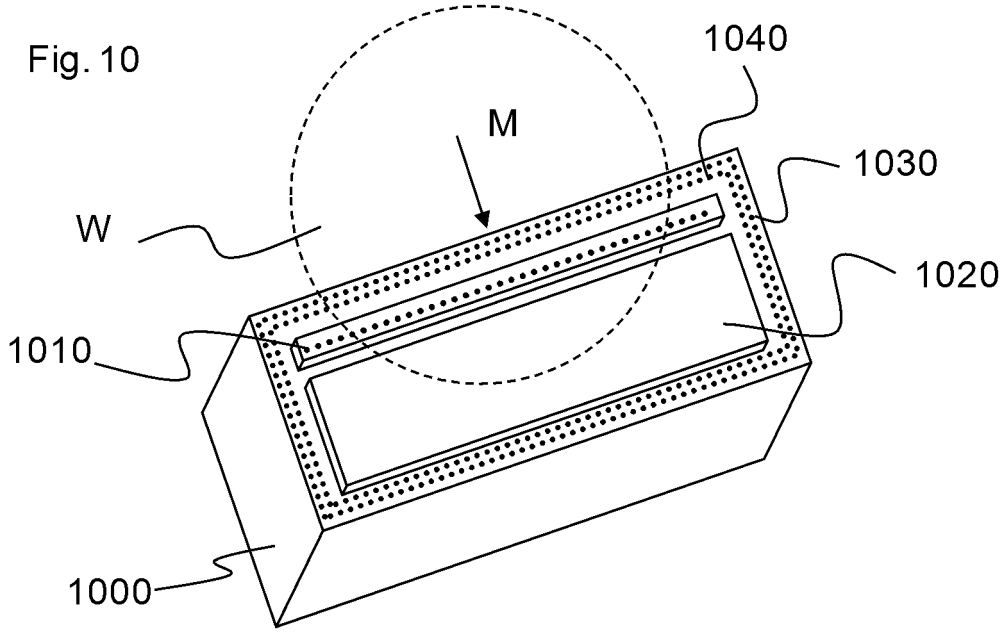

[Fig. ]

Fig. 9



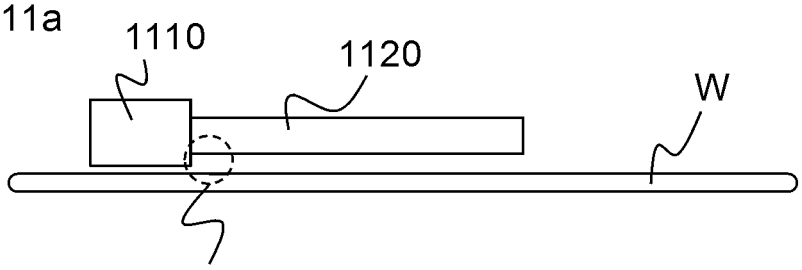
[Fig. ]

Fig. 10



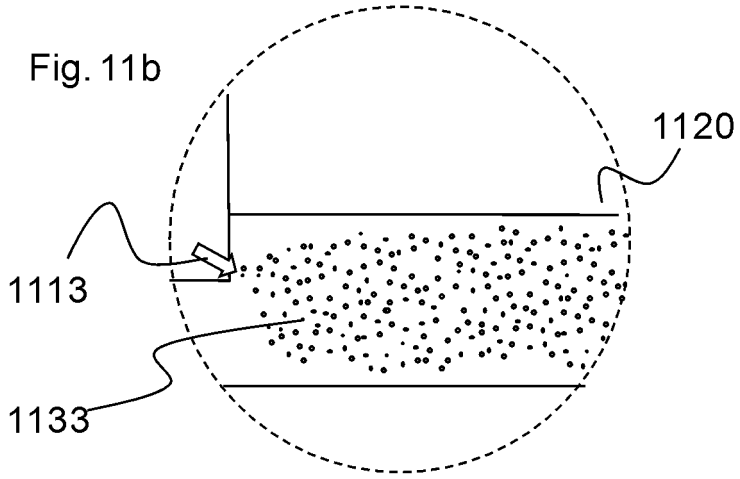

[Fig. ]

Fig. 11a



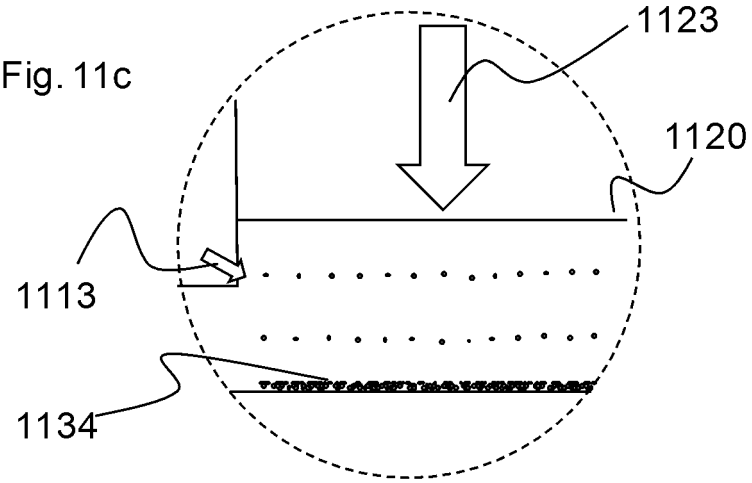

[Fig. ]

Fig. 11b



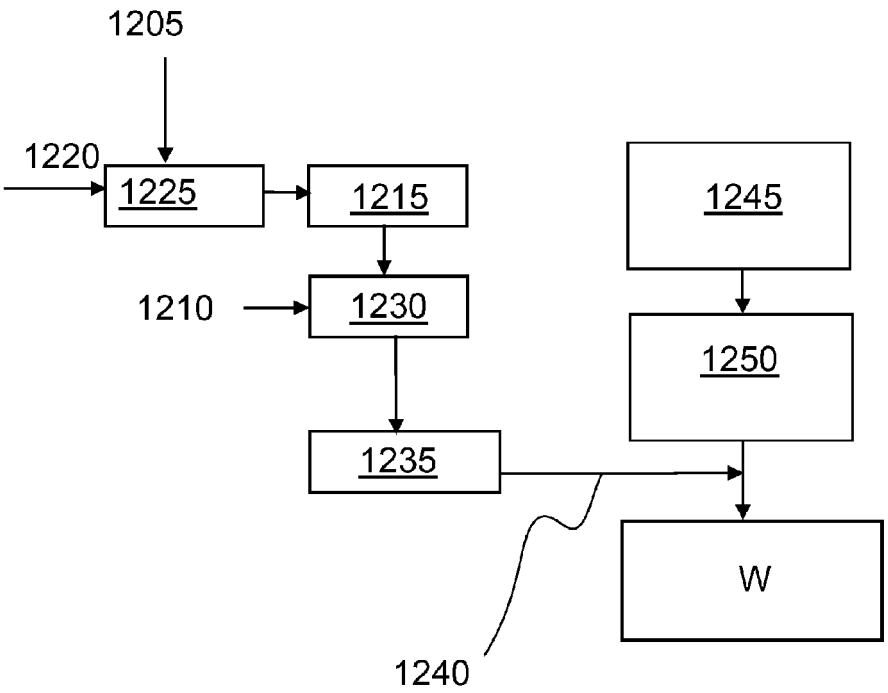
[Fig. ]

Fig. 11c

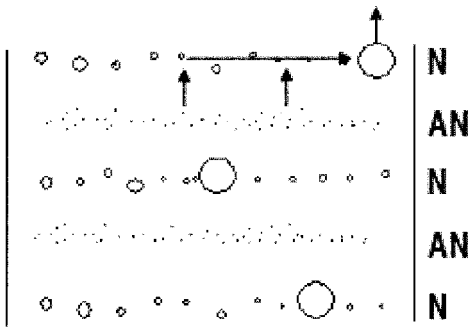



[Fig. ]

Fig. 12



[Fig. ]
Fig. 13a




*Coalescence* & Buoyancy
(small bubbles feed larger bubbles)

[Fig. ]
Fig. 13b



[Fig. ]

Fig. 14

| Transducer | BubbleMachine | Voltage | Cleaningnumber |
|---|---|---|---|
| 1a | no | 64 | -4 |
| | no | 124 | -5 |
| | yes | 32 | -4 |
| | yes | 64 | 1 |
| | yes | 124 | 14 |
| 1c | no | 64 | 0 |
| | no | 124 | 1 |
| | yes | 32 | -1 |
| | yes | 64 | 5 |
| | yes | 124 | 2 |
| 1d | no | 64 | -1 |
| | no | 124 | -3 |
| | yes | 32 | -3 |
| | yes | 64 | 0 |
| | yes | 124 | 6 |
| GR1 | no | 35 | 0 |
| | no | 70 | 12 |
| | yes | 20 | -3 |
| | yes | 35 | 3 |
| | yes | 70 | 19 |
| GR1b | no | 32 | 3 |
| | no | 63 | 14 |
| | no | 124 | 8 |
| | yes | 32 | 6 |
| | yes | 63 | 16 |
| | yes | 124 | 15 |
| towelcleaned | | | 14 |

[Fig. ]

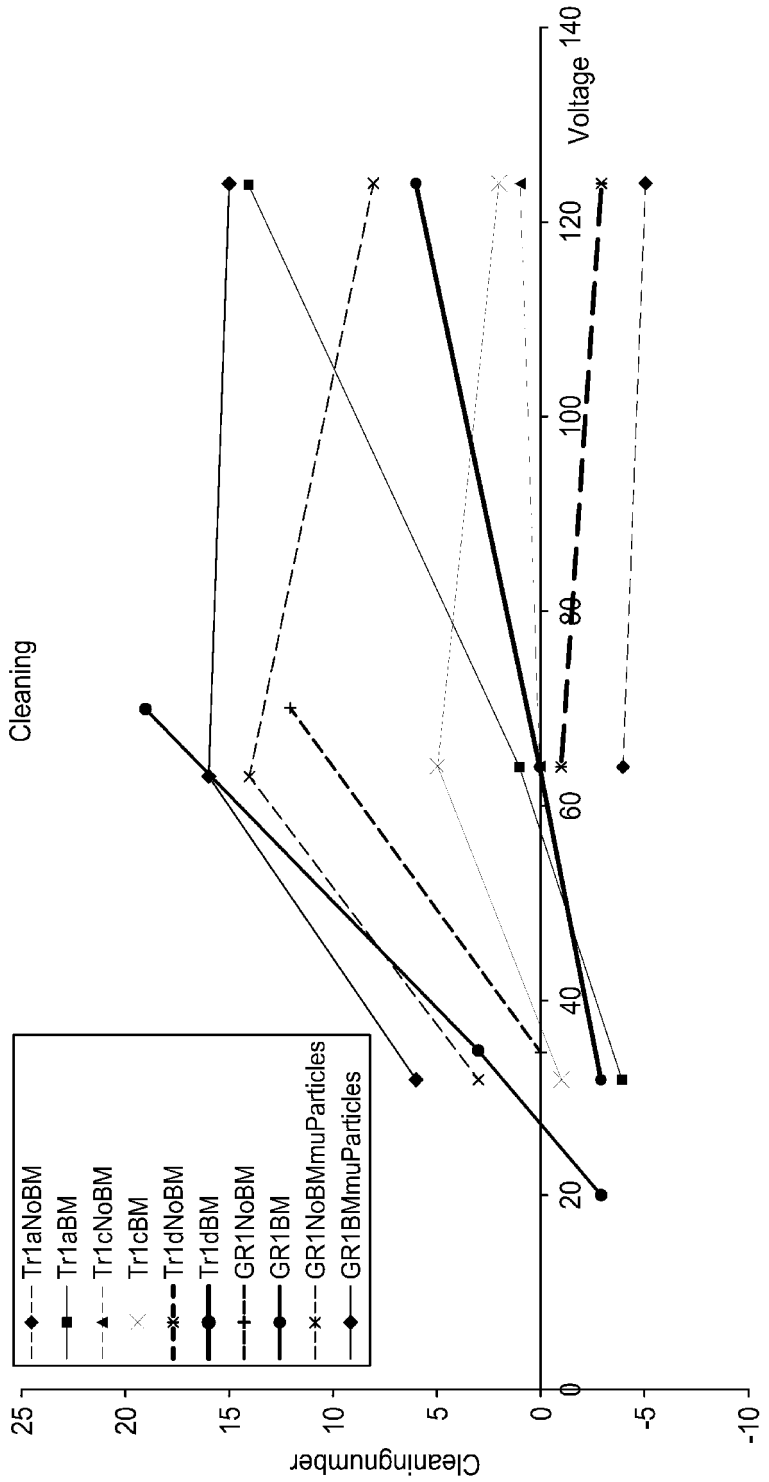

Cleaning
Cleaningnumber
Voltage
25
20
15
10
5
0
-5
-10
0
20
40
60
80
100
120
140
Tr1aNoBM
Tr1aBM
Tr1cNoBM
Tr1cBM
Tr1dNoBM
Tr1dBM
GR1NoBM
GR1BM
GR1NoBMmuParticles
GR1BMmuParticles

FIG. 15

[Fig. ]

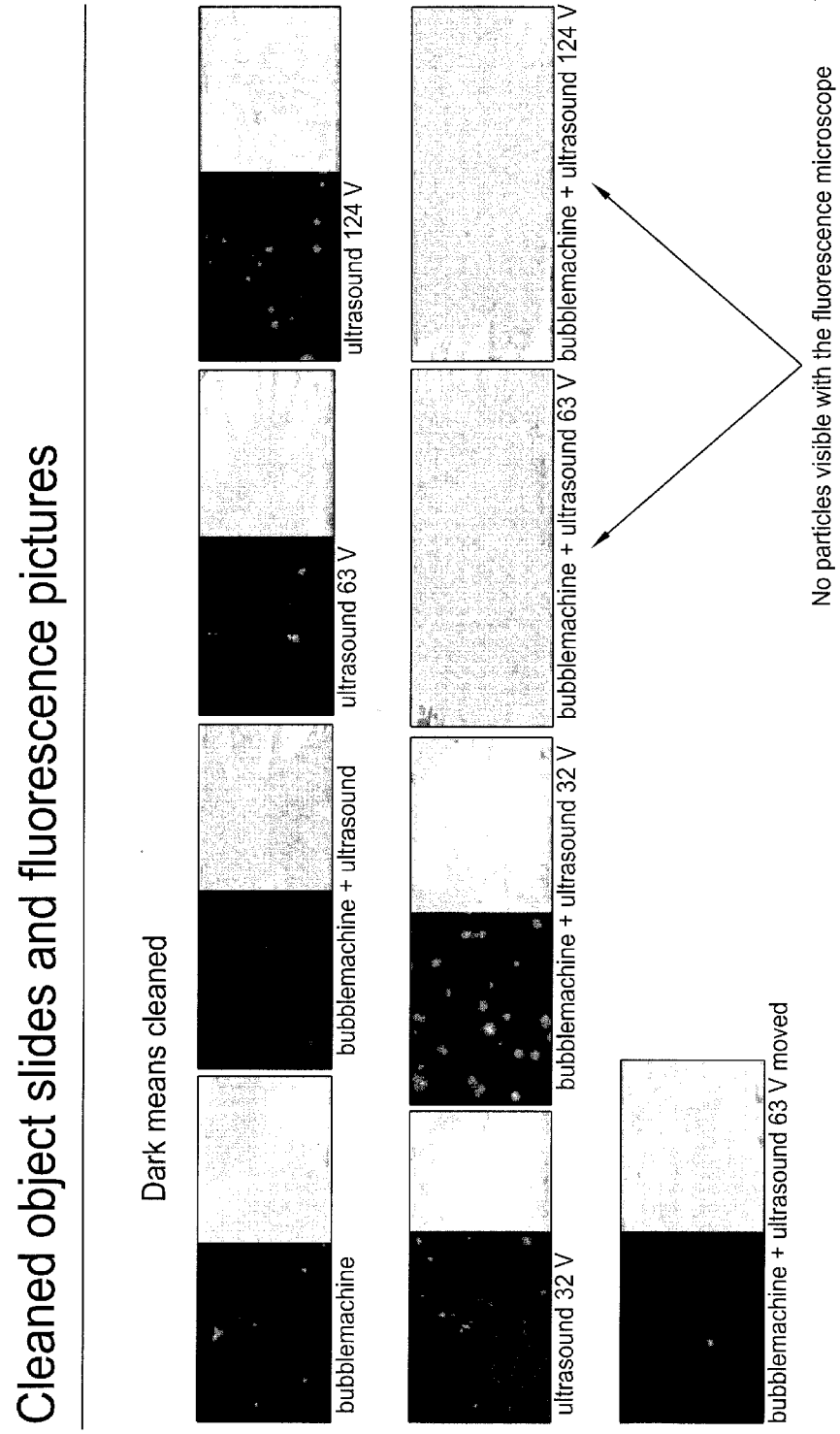

Cleaned object slides and fluorescence pictures
Dark means cleaned
bubblemachine
bubblemachine + ultrasound
ultrasound 63 V
ultrasound 124 V
ultrasound 32 V
bubblemachine + ultrasound 32 V
bubblemachine + ultrasound 63 V
bubblemachine + ultrasound 124 V
bubblemachine + ultrasound 63 V moved
No particles visible with the fluorescence microscope

FIG. 16