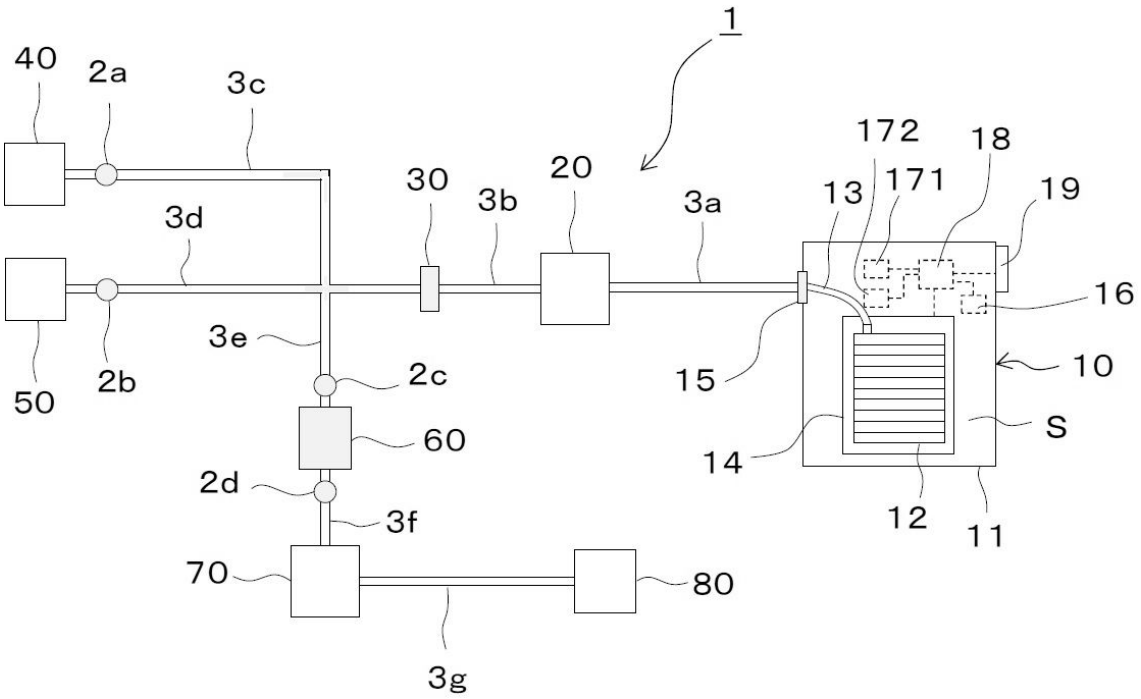
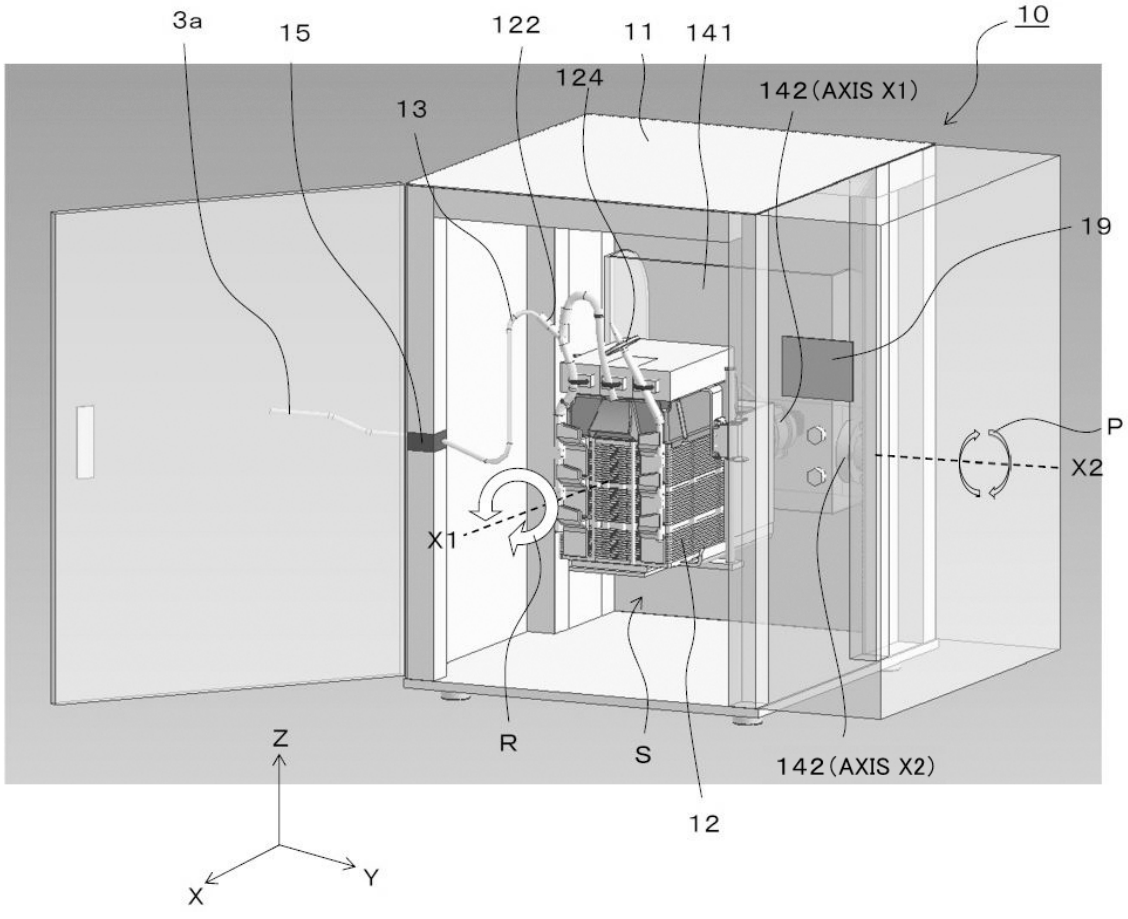
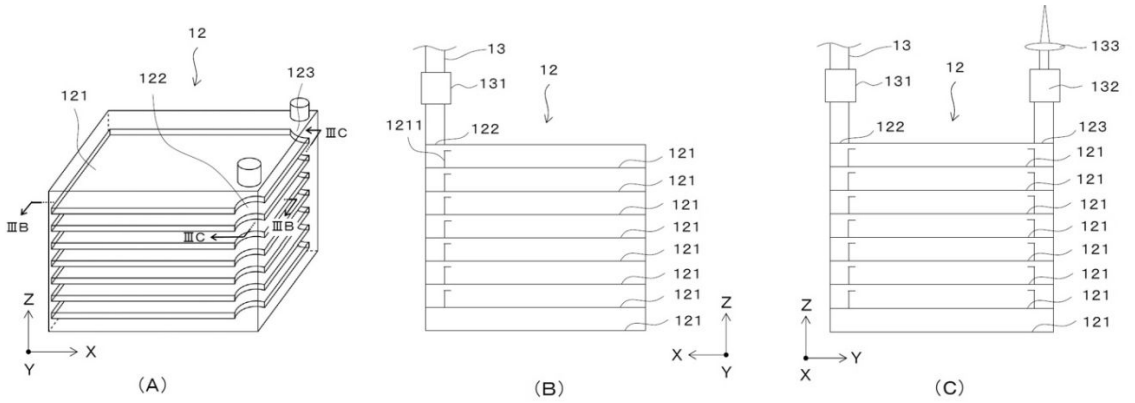
[Fig1]


1
40
2a
3c
30
3b
20
3a
172
18
13
171
19
3d
16
3e
2c
15
10
50
2b
60
S
14
2d
3f
12
11
70
80
3g

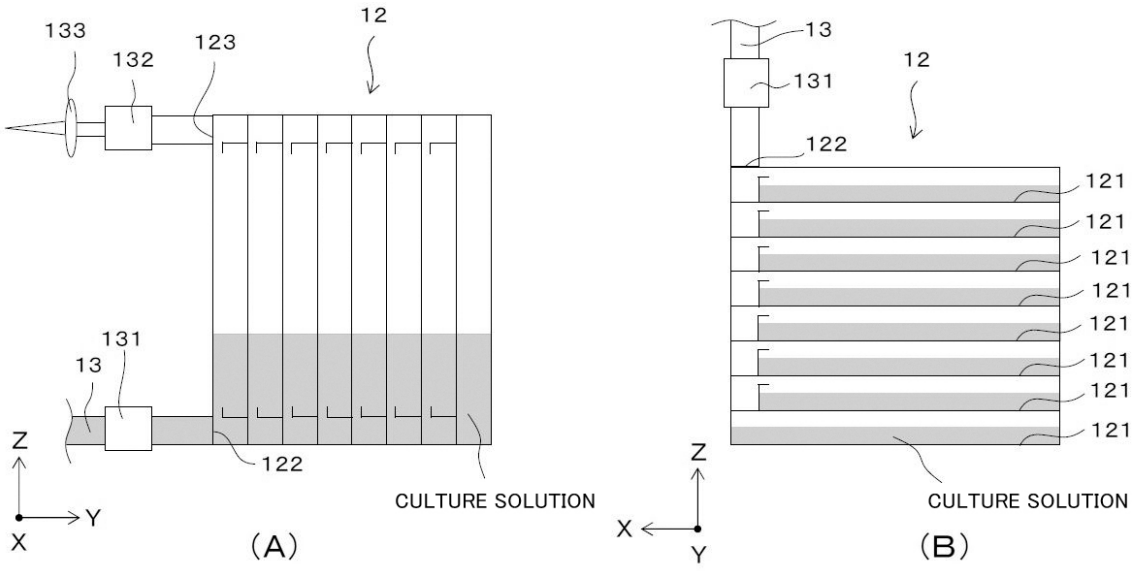
[Fig2]


3a
15
122
11
141
10
124
142(AXIS X1)
13
19
P
X2
X1
R
S
142(AXIS X2)
12
Z
Y
X

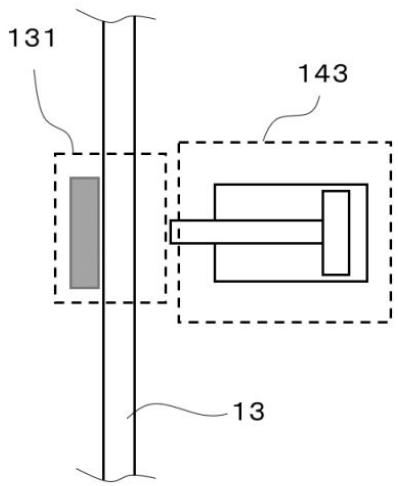
[Fig3]



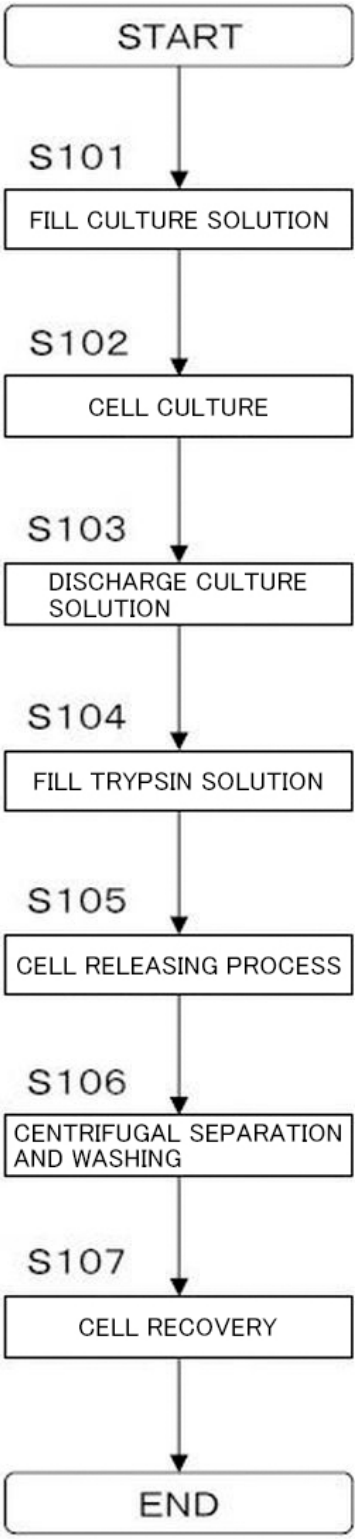

[Fig4]



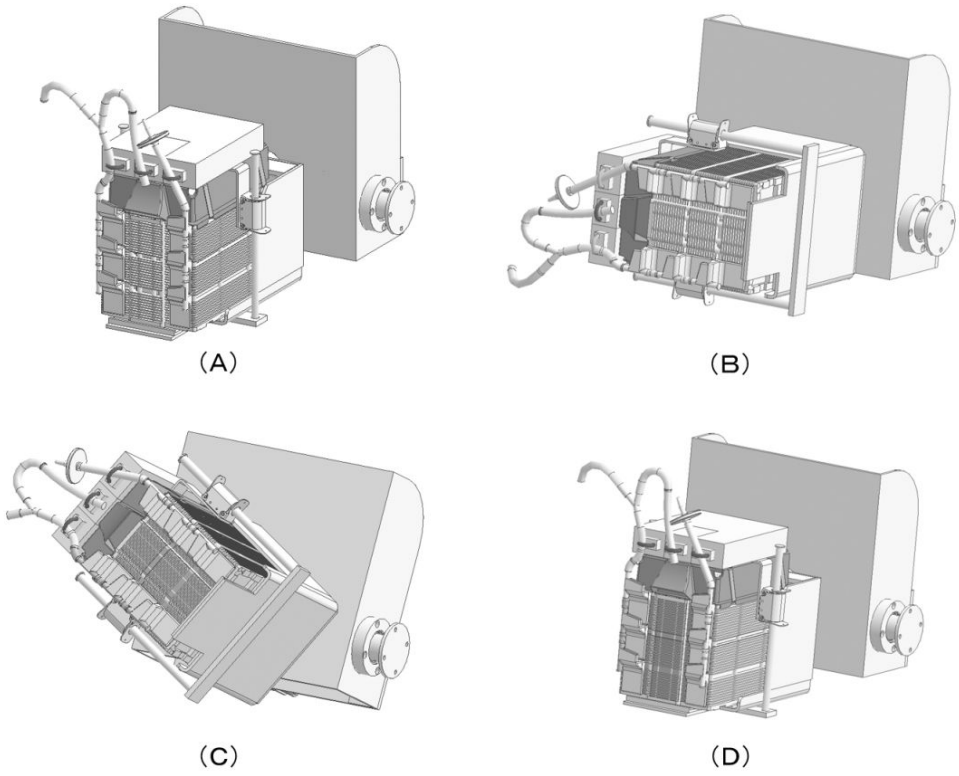

[Fig5]



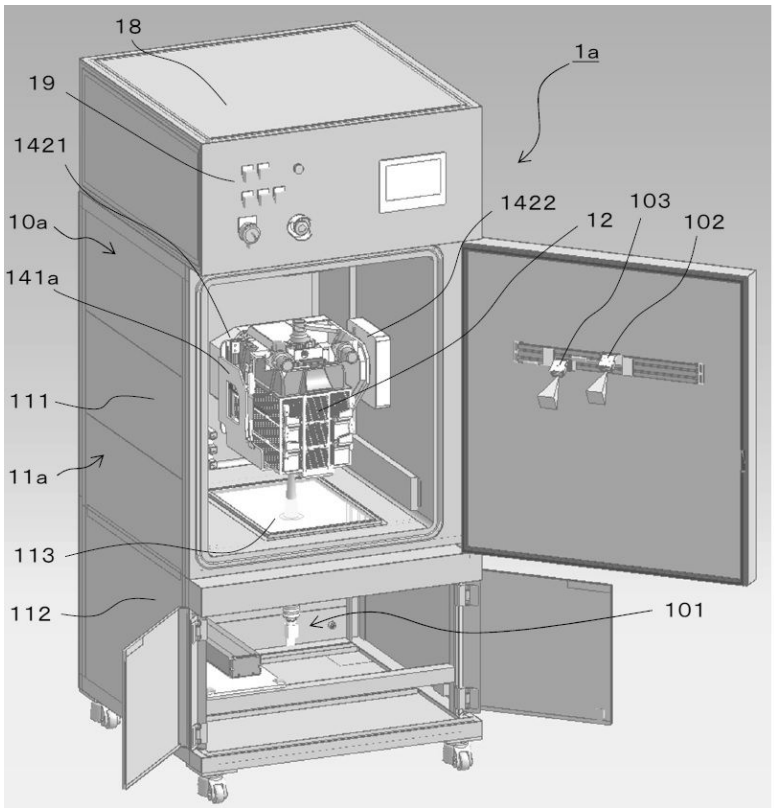
[Fig6]


START
S101
FILL CULTURE SOLUTION
S102
CELL CULTURE
S103
DISCHARGE CULTURE SOLUTION
S104
FILL TRYPSIN SOLUTION
S105
CELL RELEASING PROCESS
S106
CENTRIFUGAL SEPARATION AND WASHING
S107
CELL RECOVERY
END

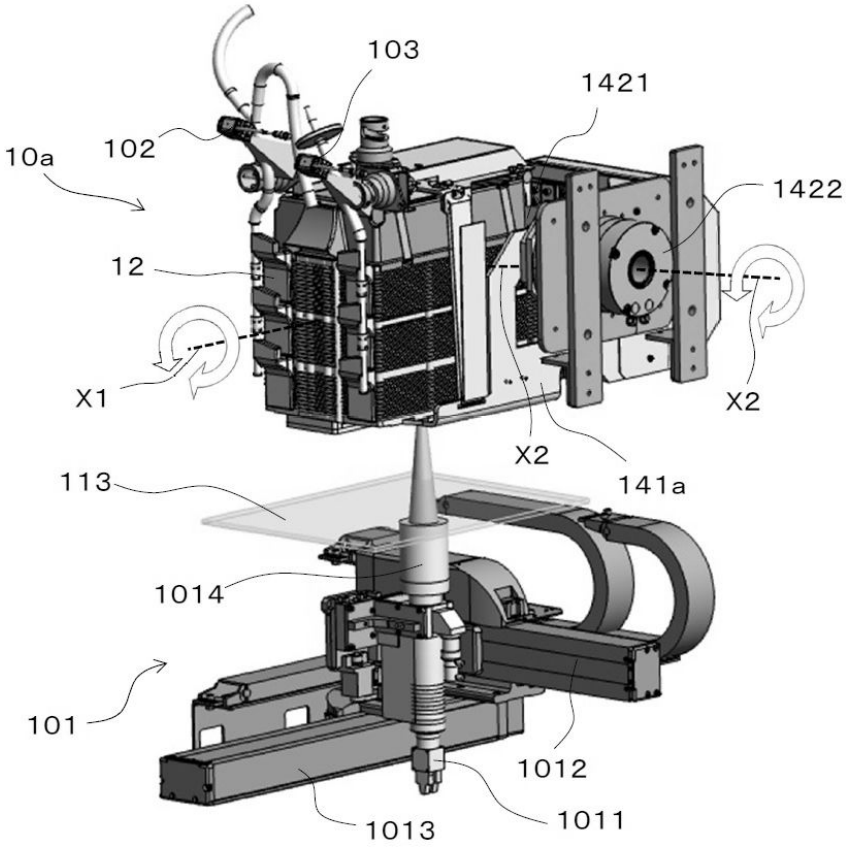
[Fig7]



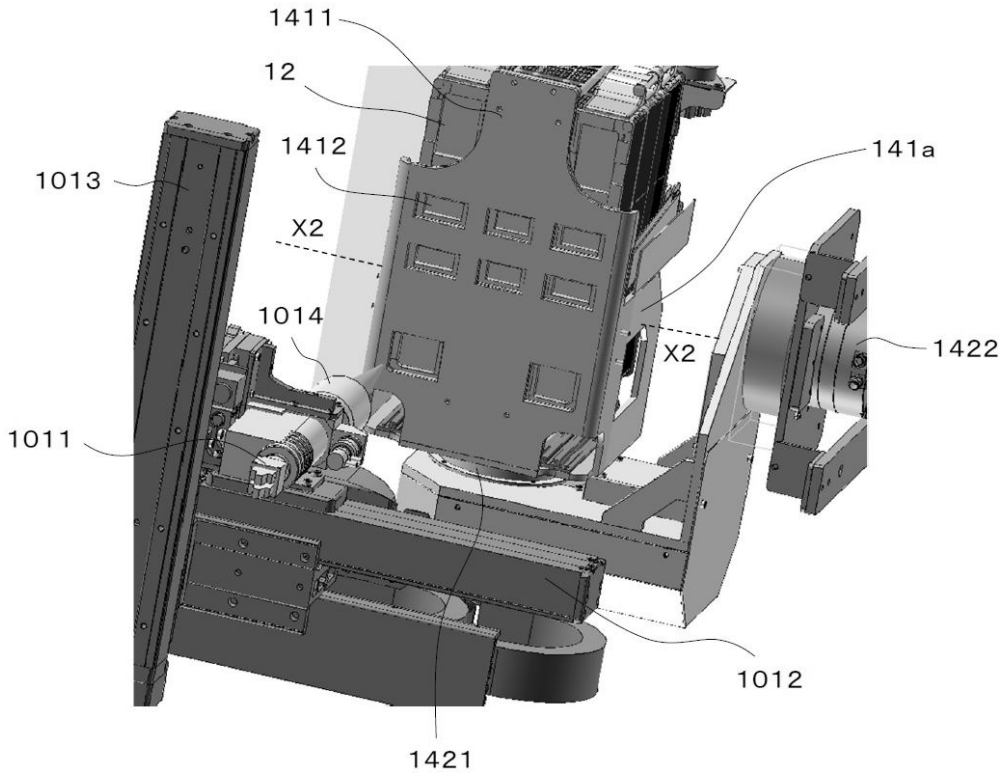

[Fig8]



[Fig9]


103
1421
10a
102
1422
12
X1
X2
X2
141a
113
1014
101
1012
1013
1011

[Fig10]


1411
12
1412
141a
1013
X2
1014
X2
1422
1011
1012
1421