FIG.1

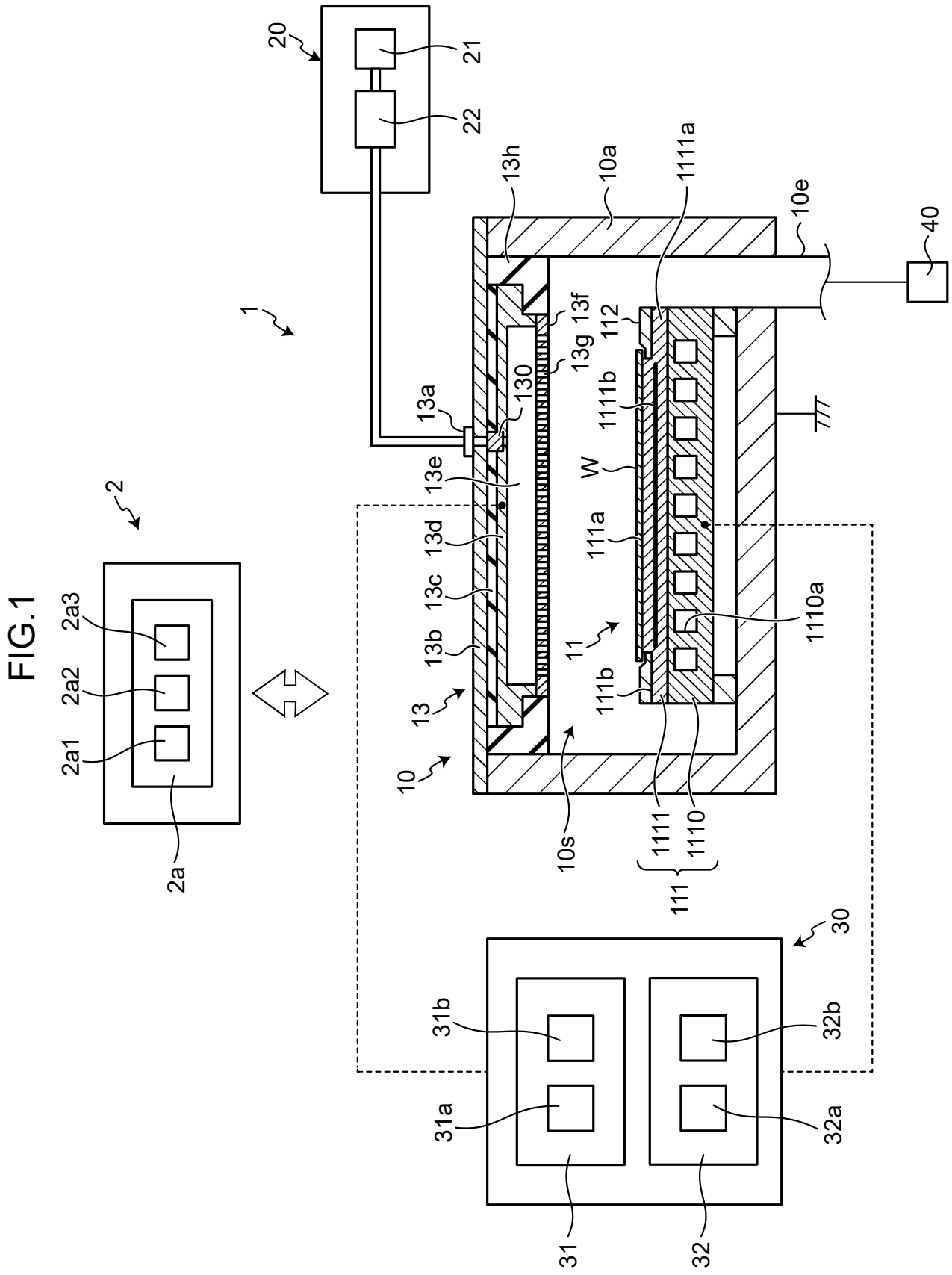

1
2
2a
2a1
2a2
2a3
10
11
13
13a
13b
13c
13d
13e
13f
13g
13h
20
21
22
30
31
31a
31b
32
32a
32b
40
111
1110
1110a
1111
1111a
1111b
112
130
10a
10e
10s
111a
111b
W

FIG.2

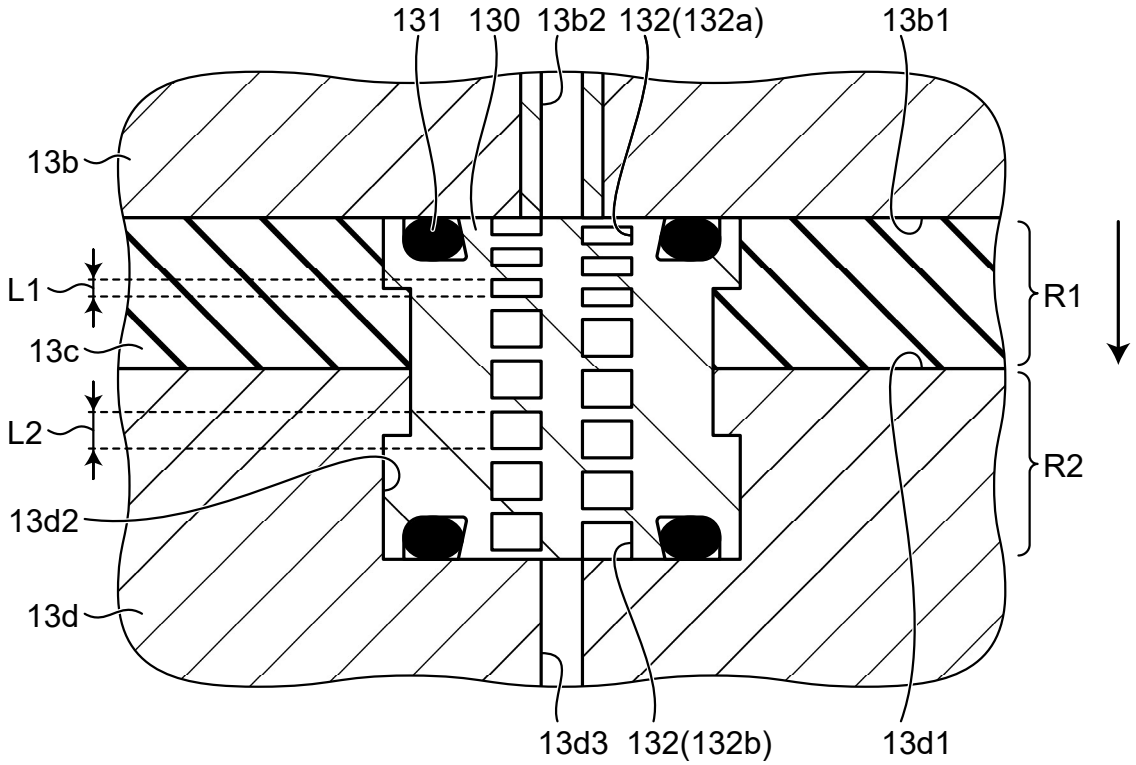

131
130
13b2
132(132a)
13b1
13b
L1
13c
L2
13d2
13d
R1
R2
13d3
132(132b)
13d1

FIG.3

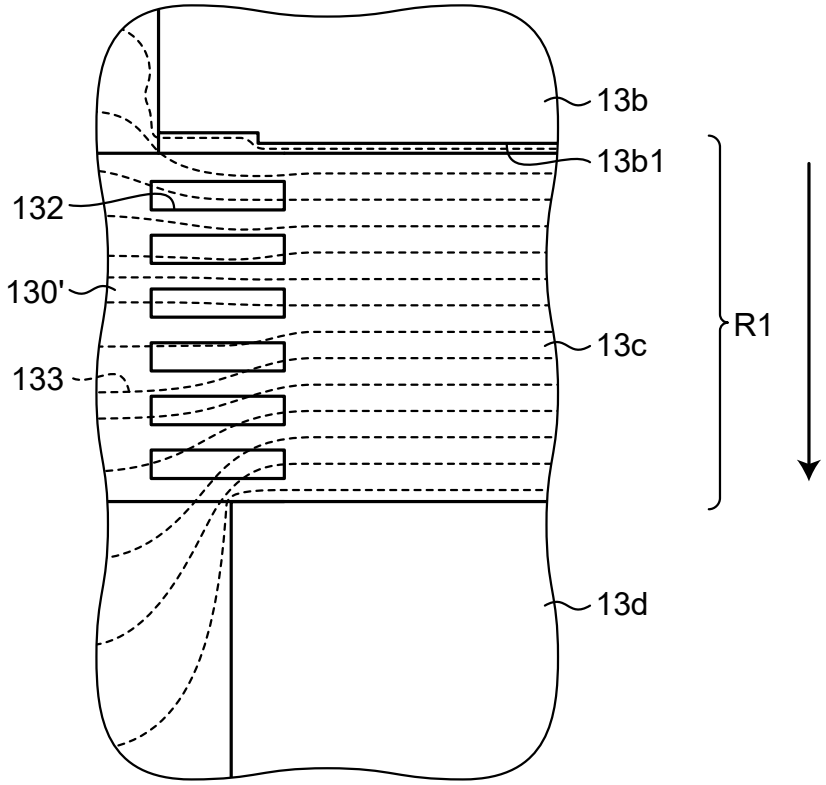

13b
13b1
132
130'
133
13c
13d
R1

FIG.4

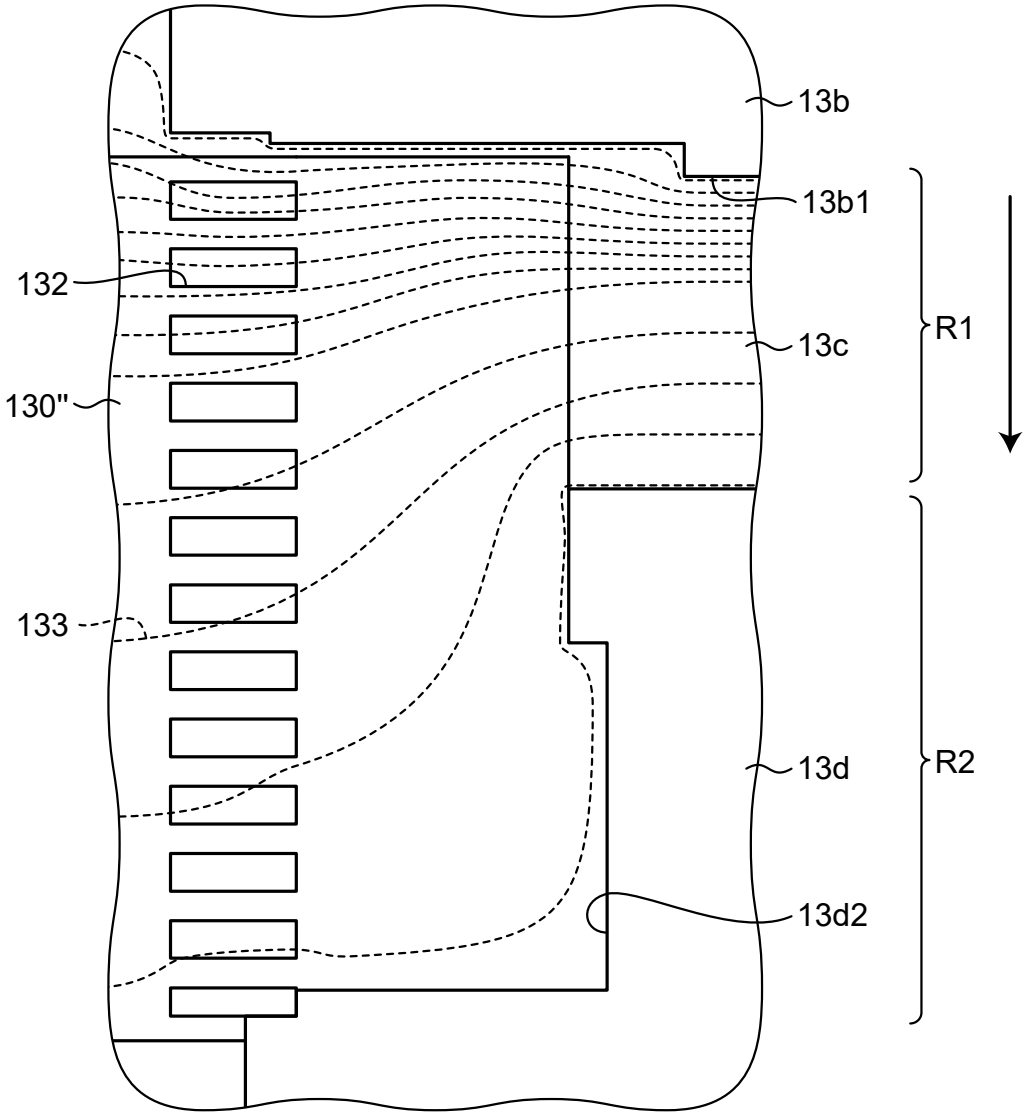


FIG.5

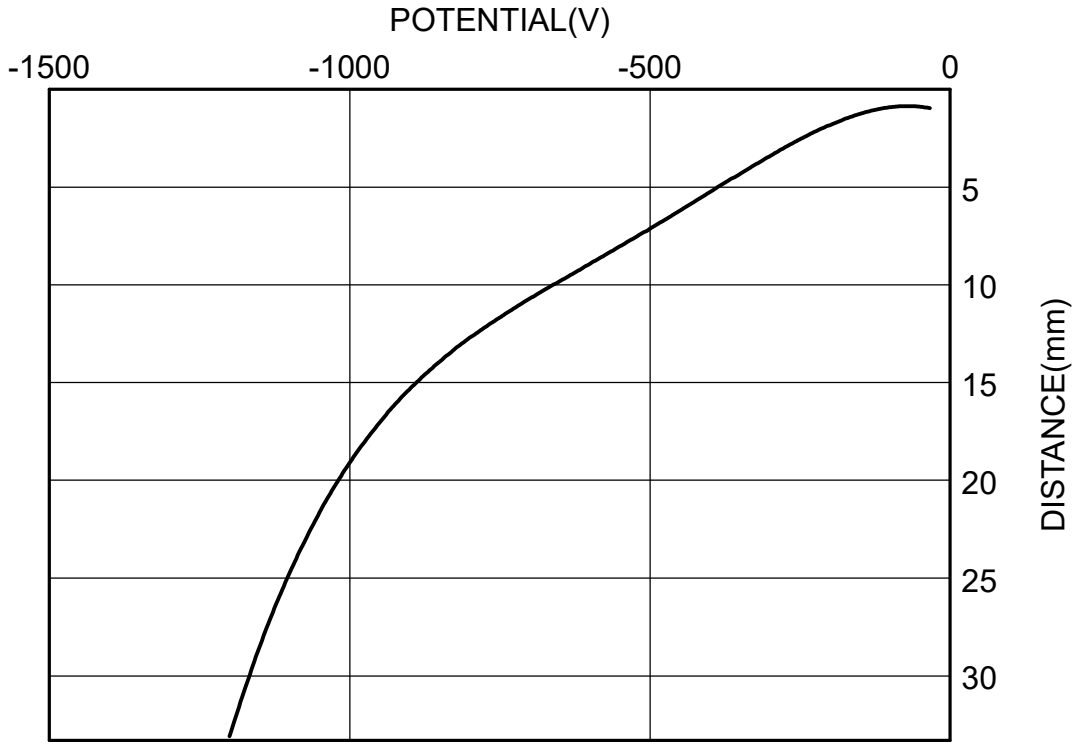

POTENTIAL(V)
-1500
-1000
-500
0
5
10
15
20
25
30
DISTANCE(mm)

FIG.6

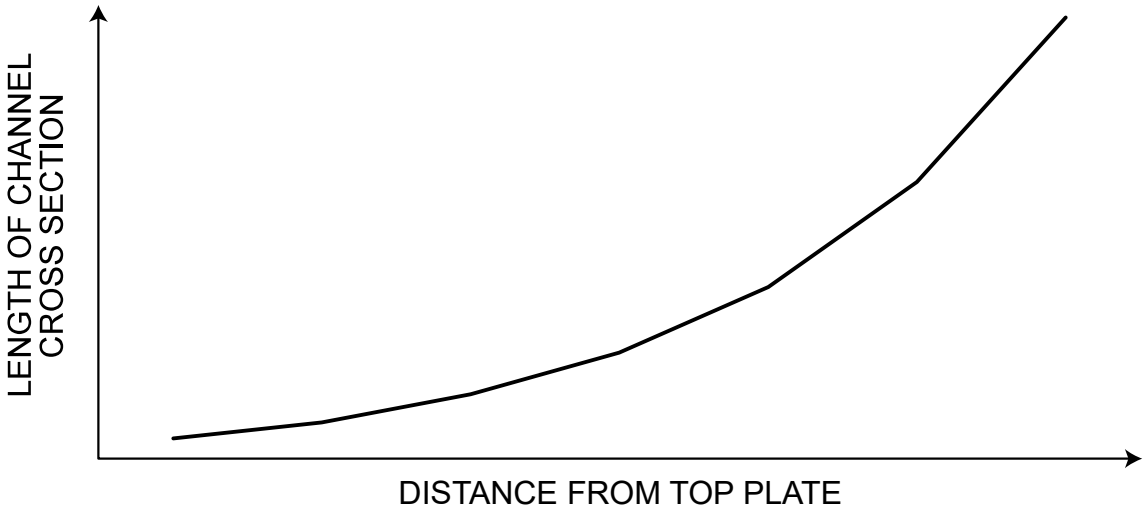

LENGTH OF CHANNEL CROSS SECTION
DISTANCE FROM TOP PLATE

FIG.7

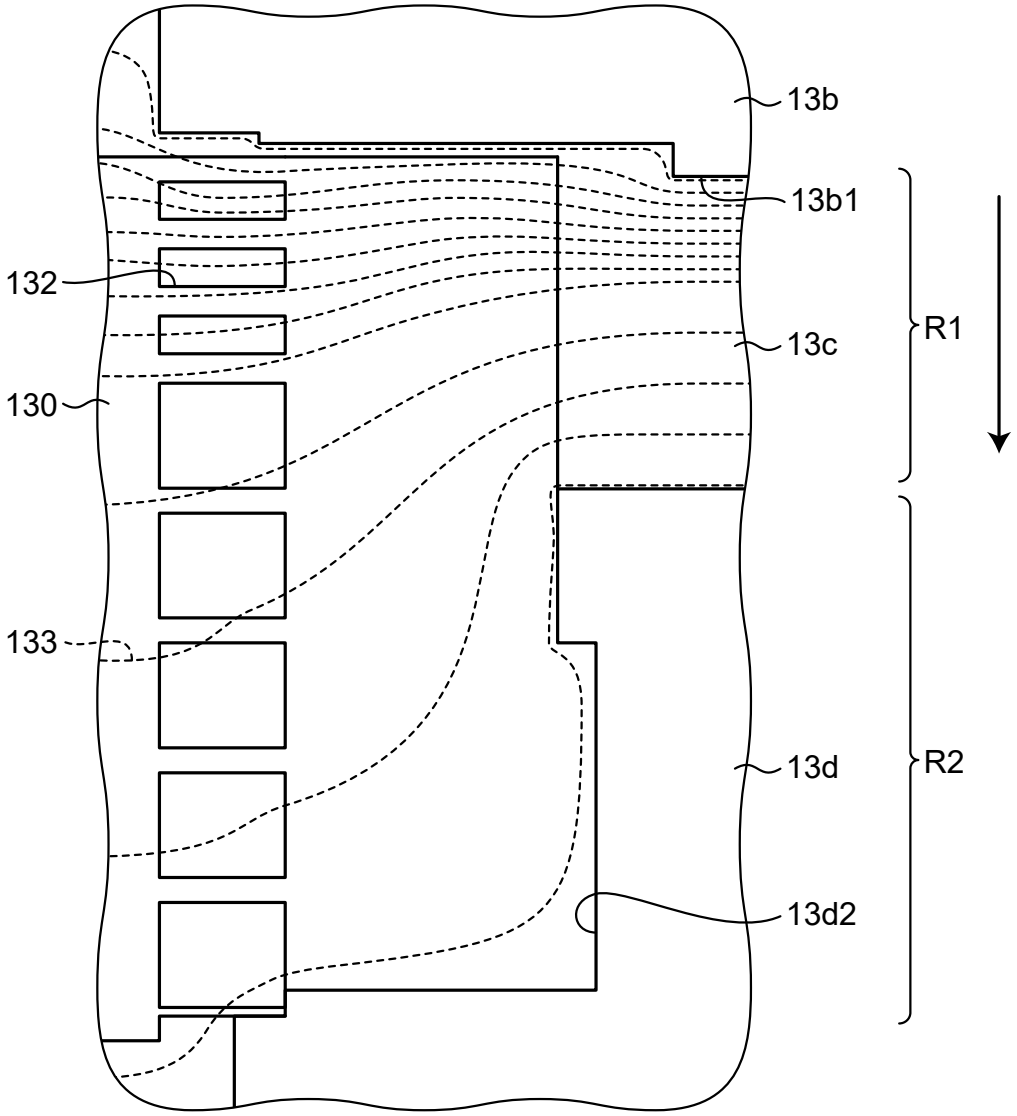


FIG.8

		FIRST REFERENCE EXAMPLE	SECOND REFERENCE EXAMPLE	EMBODIMENT
LENGTH OF CHANNEL CROSS SECTION	MIN	1mm	1.6mm	1.6mm
	MAX	1mm	1.6mm	4.0mm
MAX VOLTAGE APPLIED TO CHANNEL		148V	144.3V	144.3V
CONDUCTANCE		7.09E-04m^3/s	1.39E-03m^3/s	5.39E-03m^3/s
STARTUP TIME		-	1.41s	1.04s

FIG.9

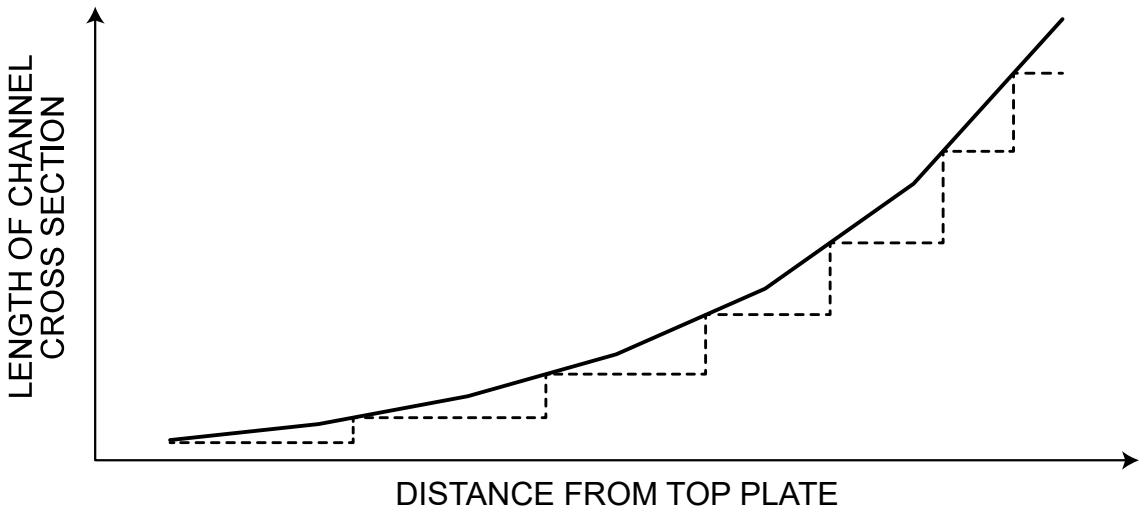


FIG.10

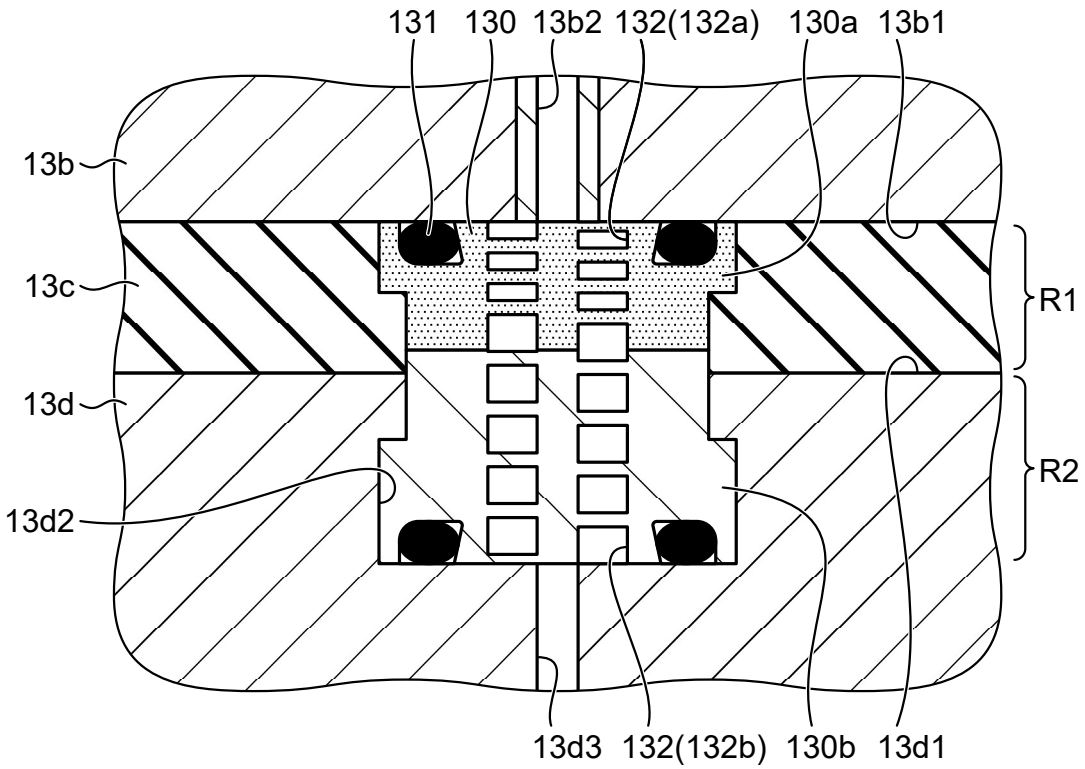
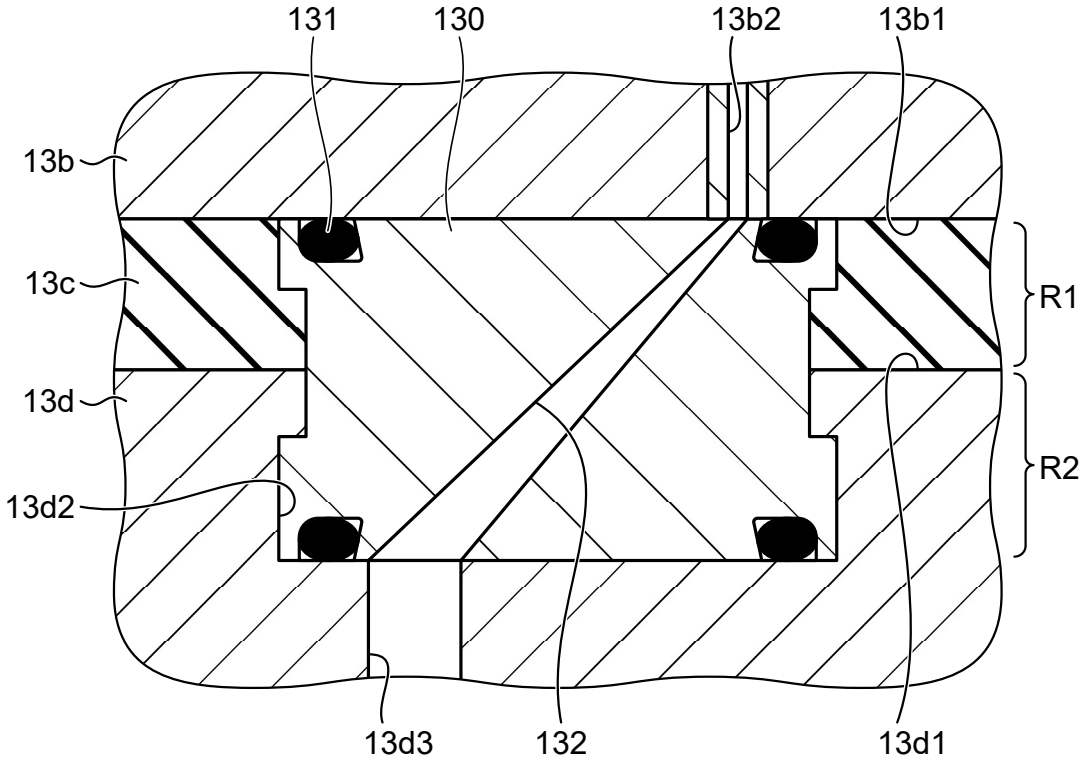

131
130
13b2
132(132a)
130a
13b1
13b
13c
13d
13d2
R1
R2
13d3
132(132b)
130b
13d1

FIG.11


131
130
13b2
13b1
13b
13c
13d
13d2
R1
R2
13d3
132
13d1