

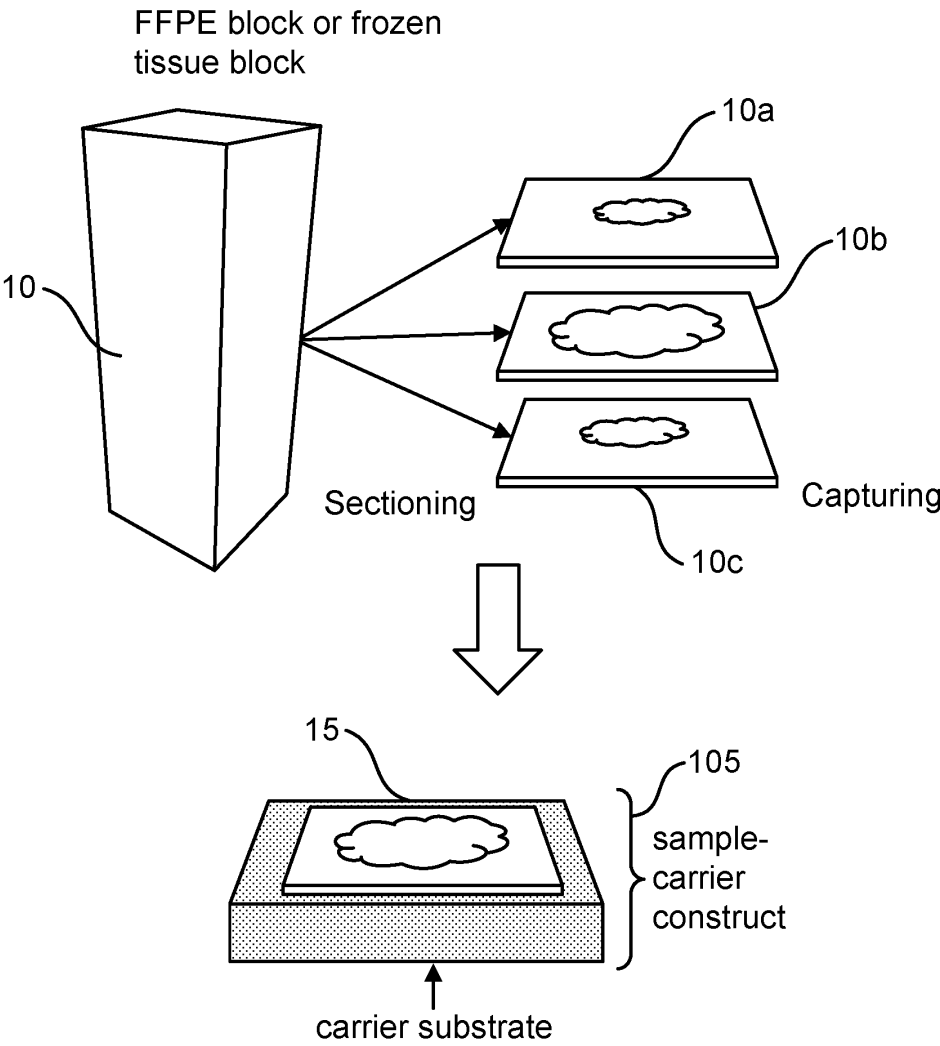


FIG. 1

2/23

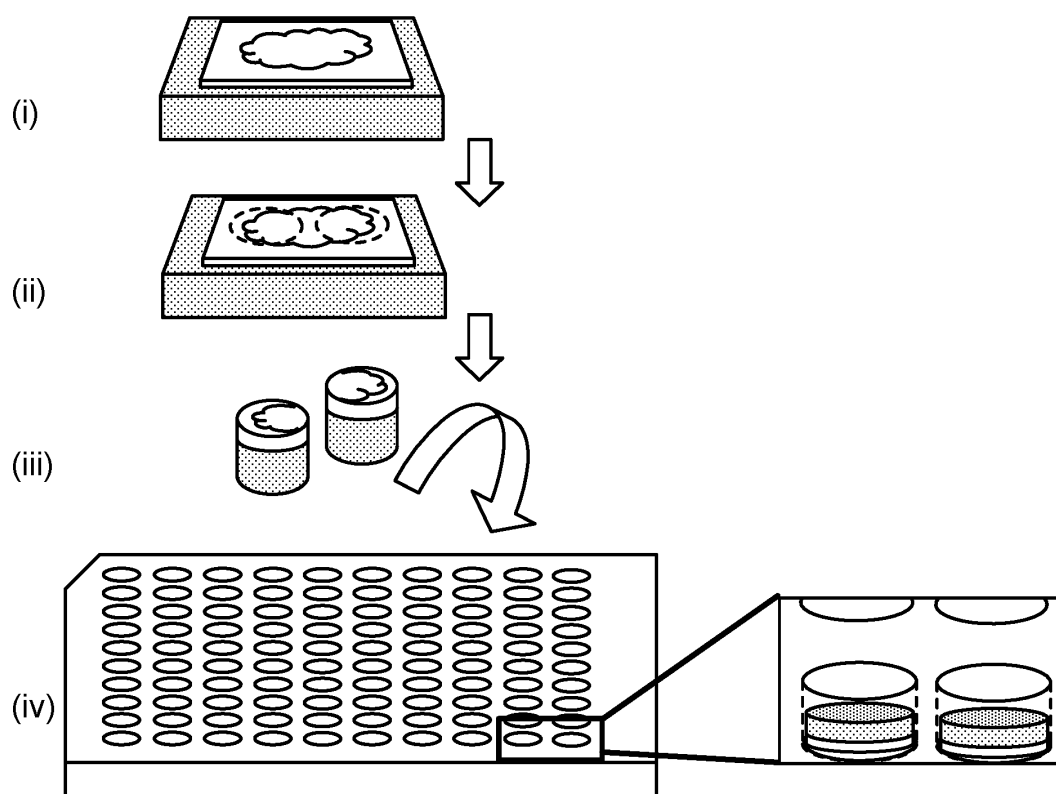


FIG. 2A

3/23

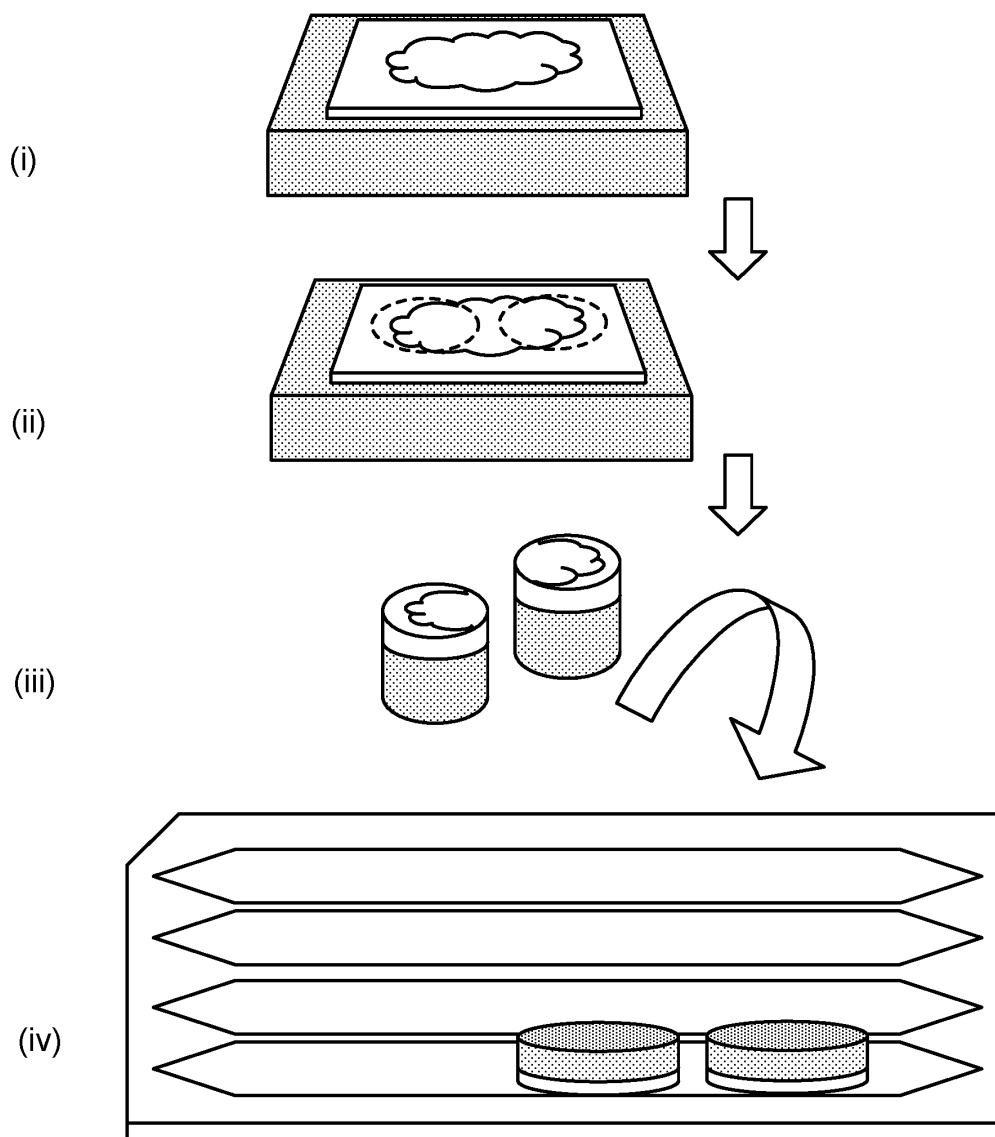


FIG. 2B

4/23

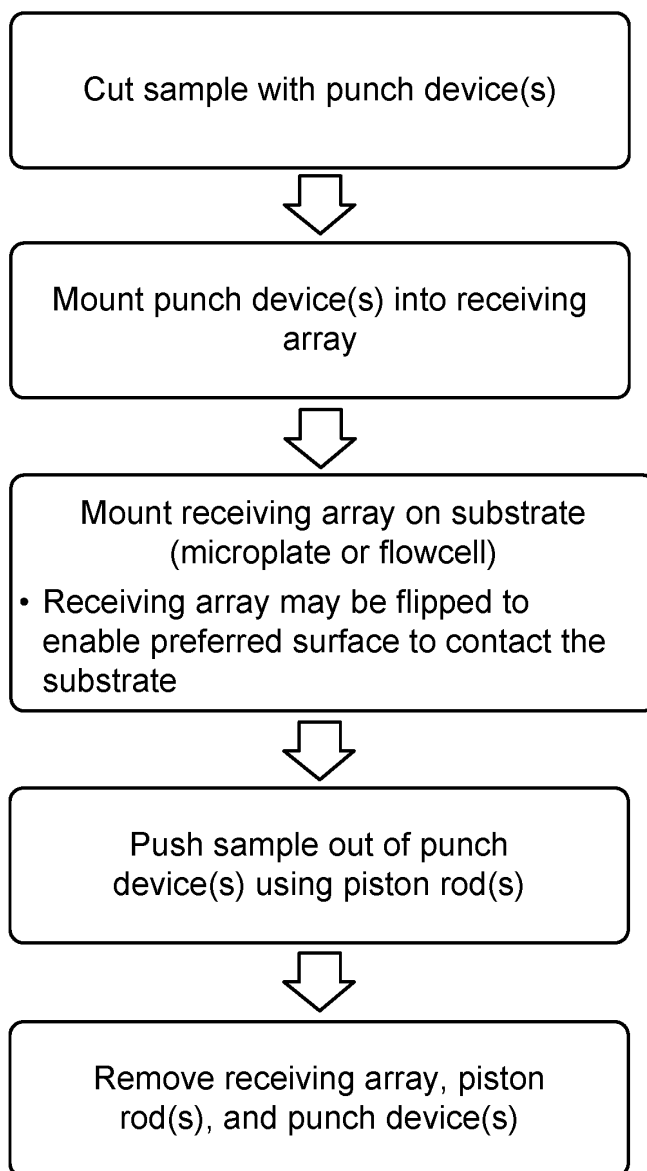


FIG. 3

5/23

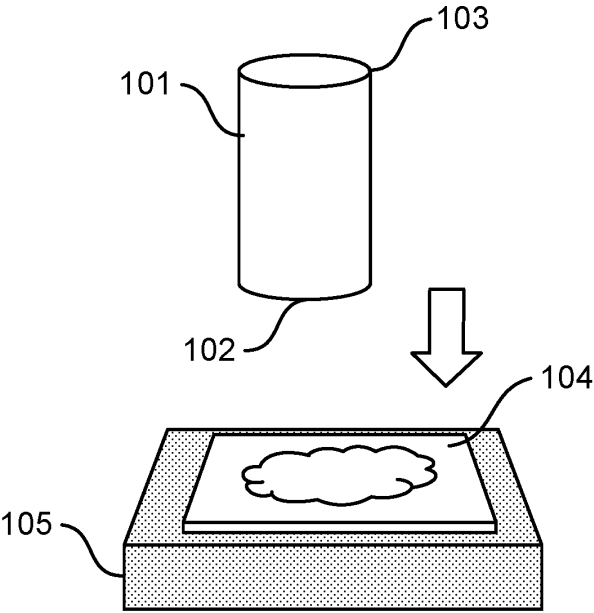


FIG. 4A

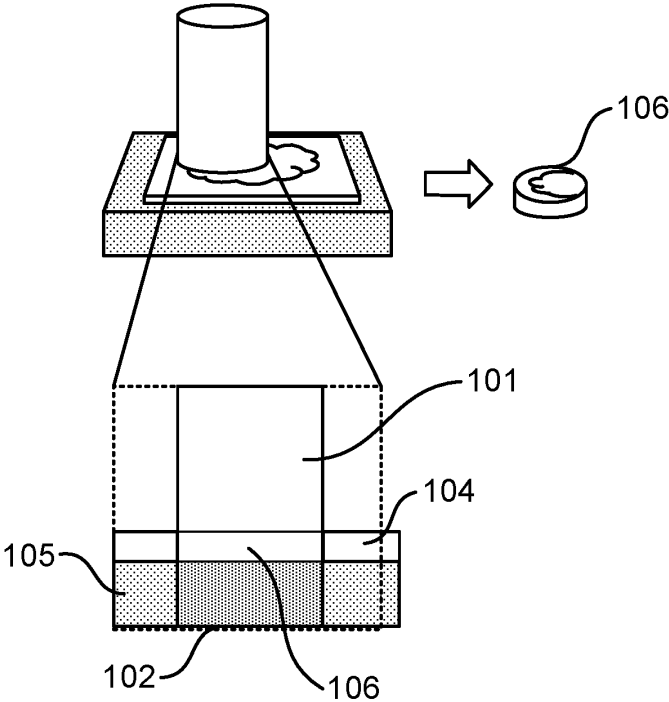


FIG. 4B

6/23

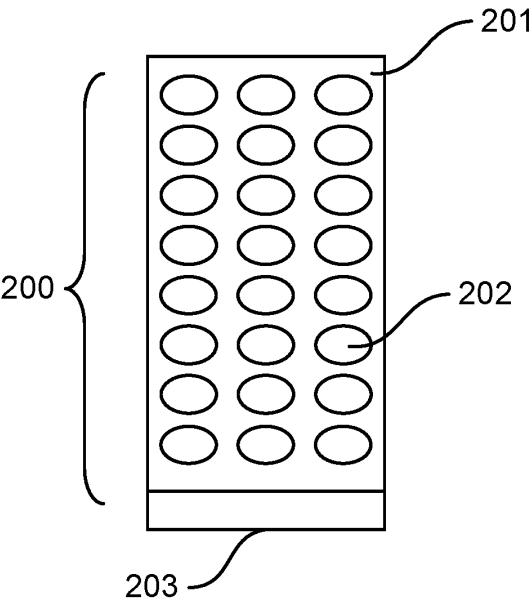


FIG. 5A

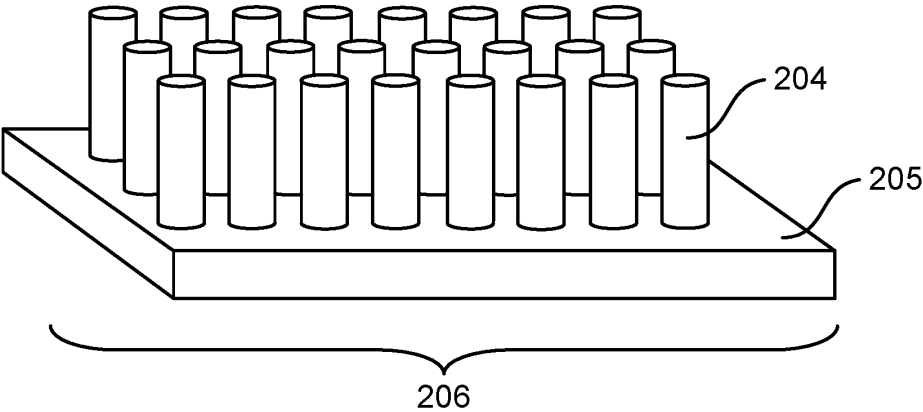


FIG. 5B

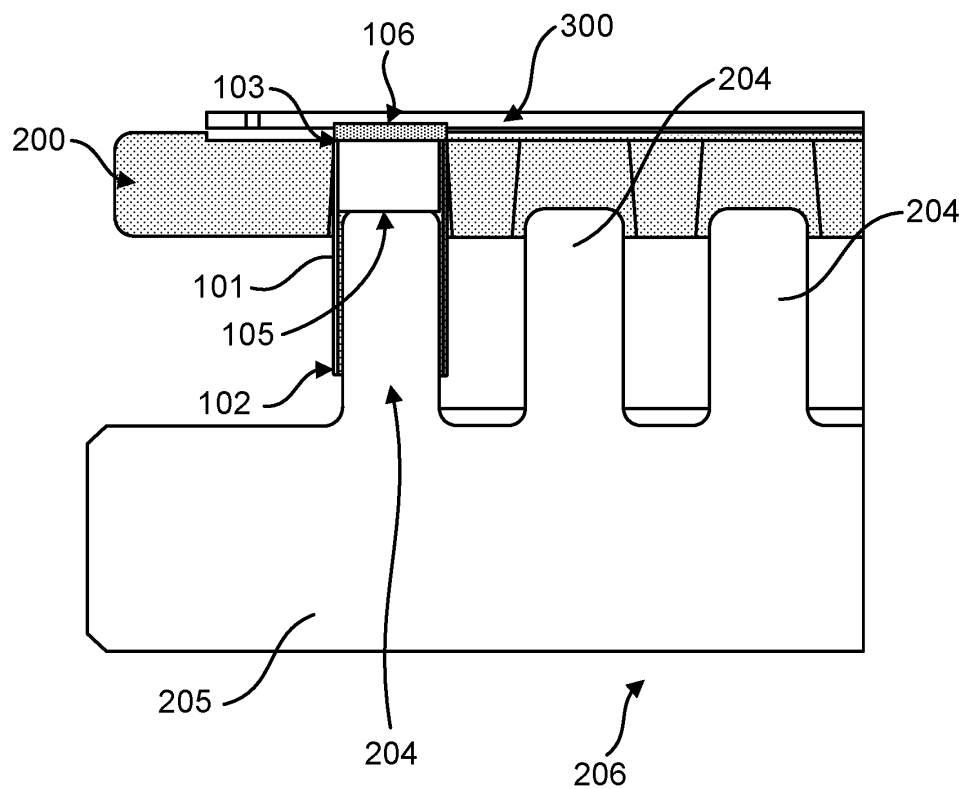


FIG. 5C

8/23

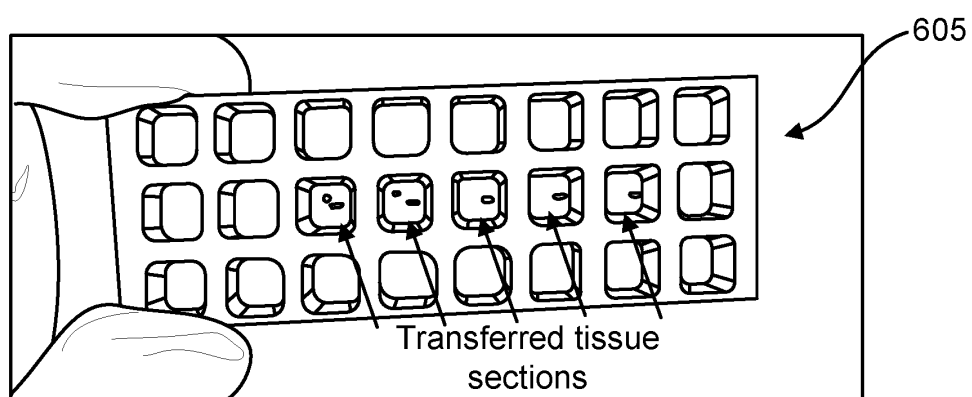


FIG. 6

9/23

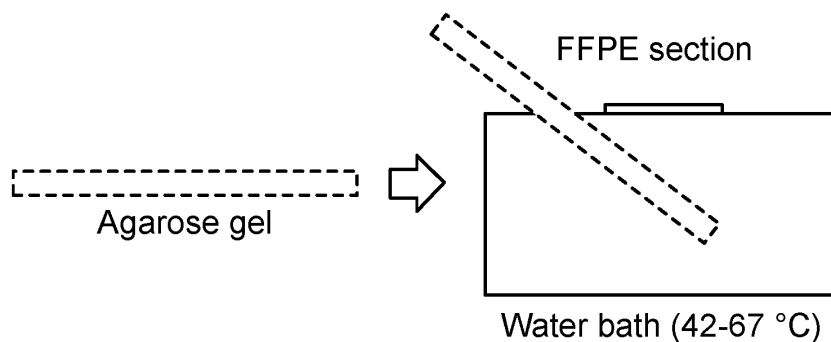


FIG. 7A

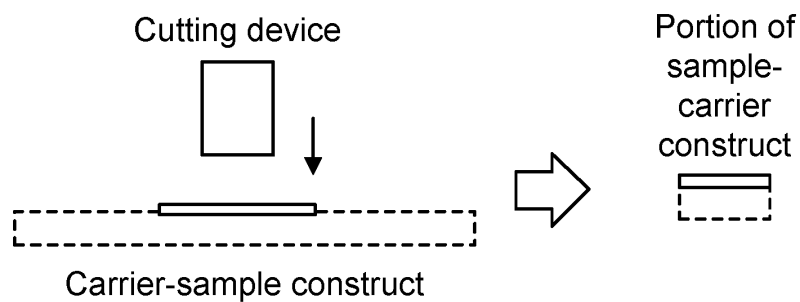


FIG. 7B

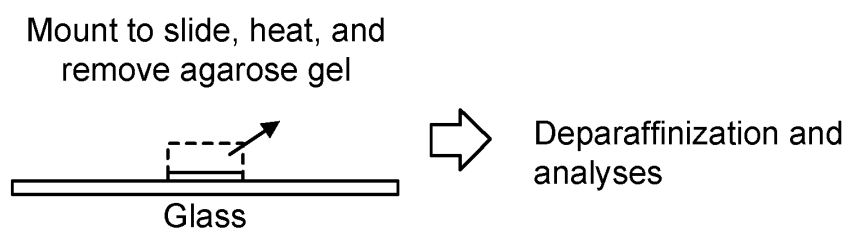


FIG. 7C

10/23

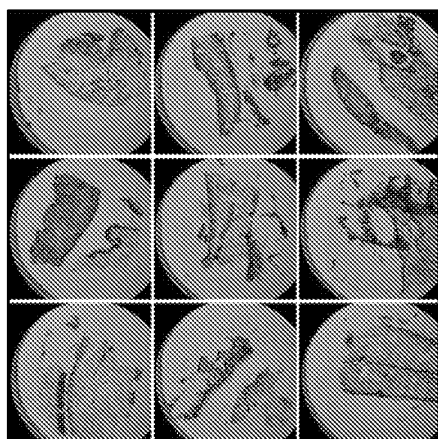


FIG. 8A

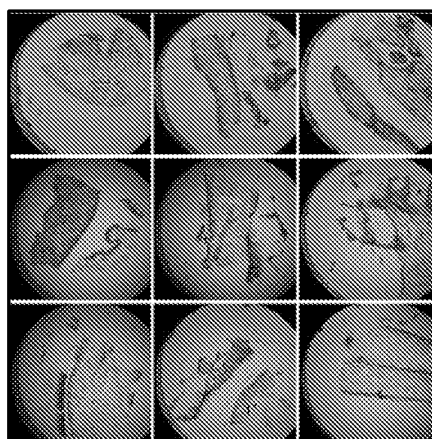


FIG. 8B

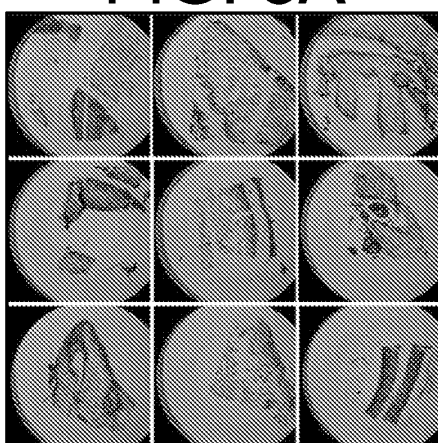


FIG. 8C

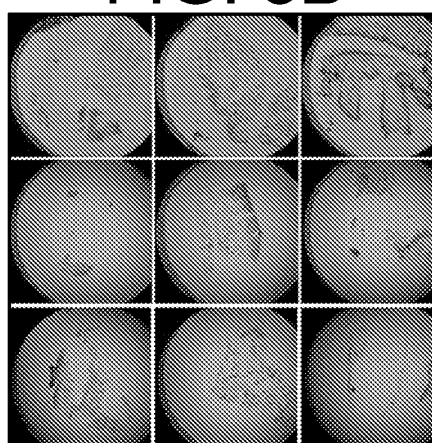


FIG. 8D



FIG. 8E

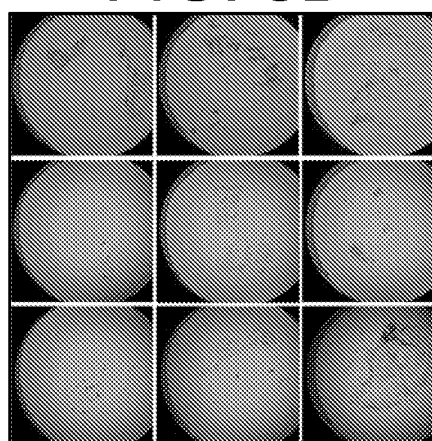


FIG. 8F

11/23

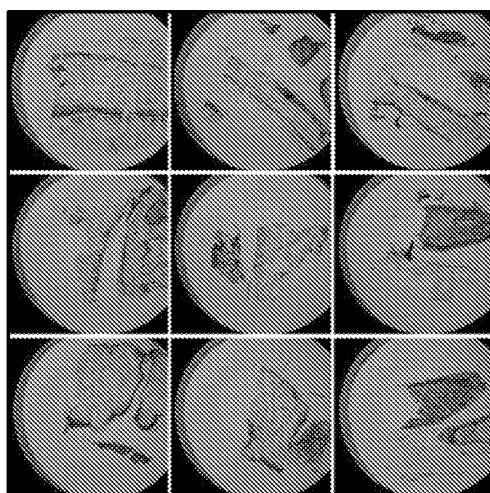


FIG. 8G

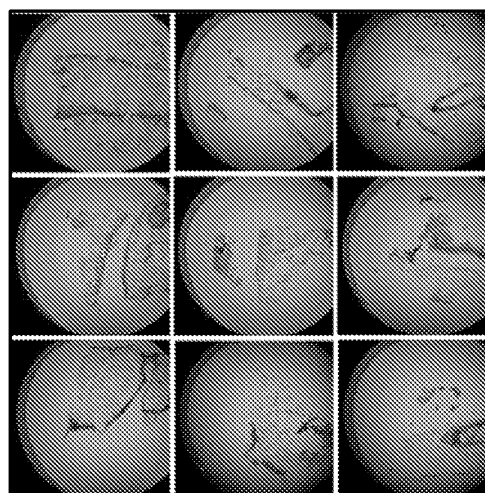


FIG. 8H

12/23

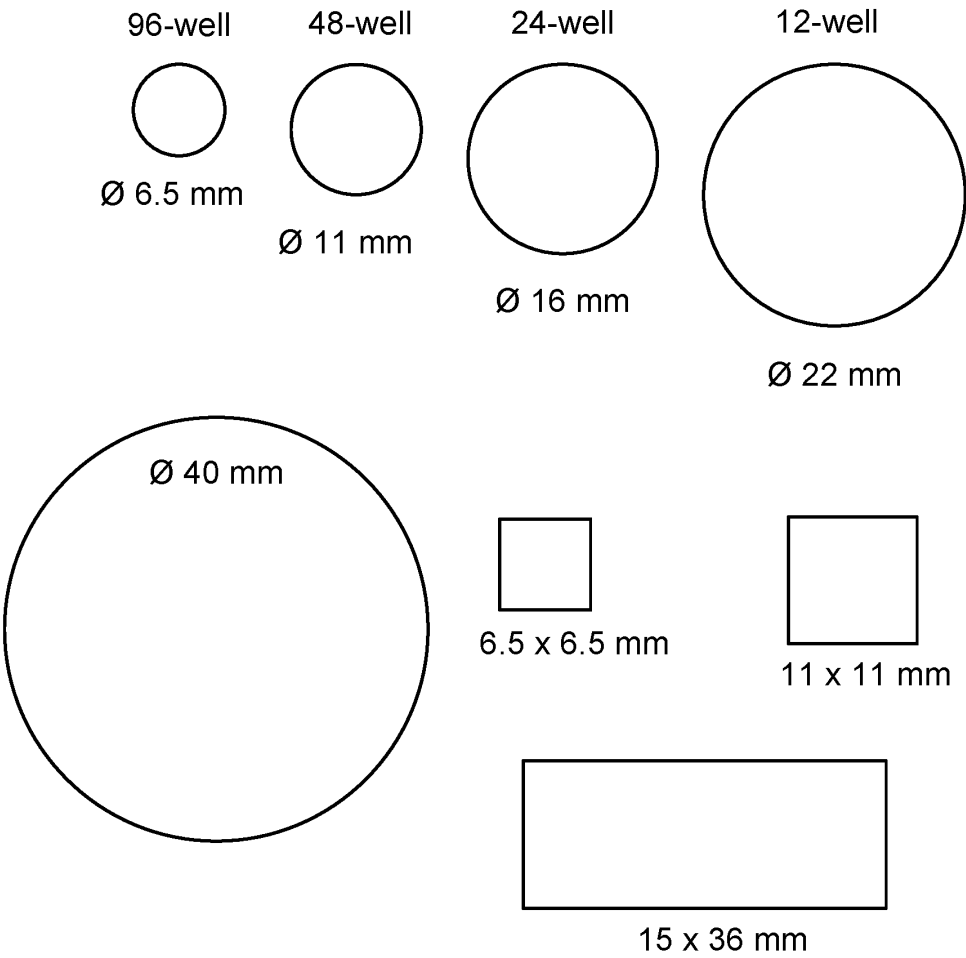


FIG. 9A

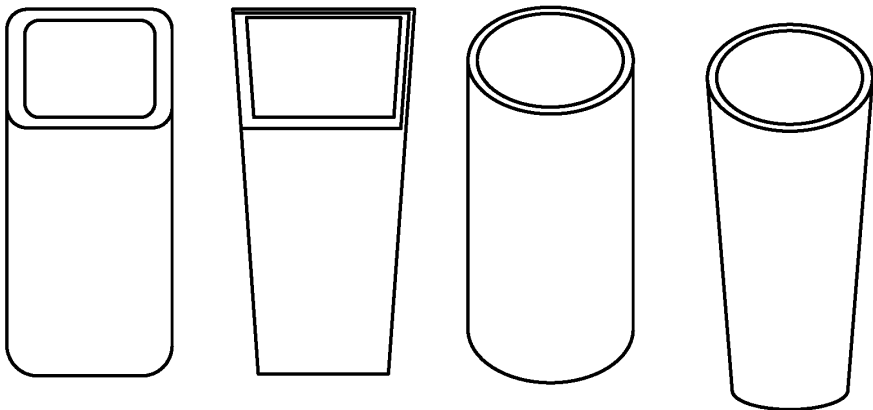


FIG. 9B

13/23

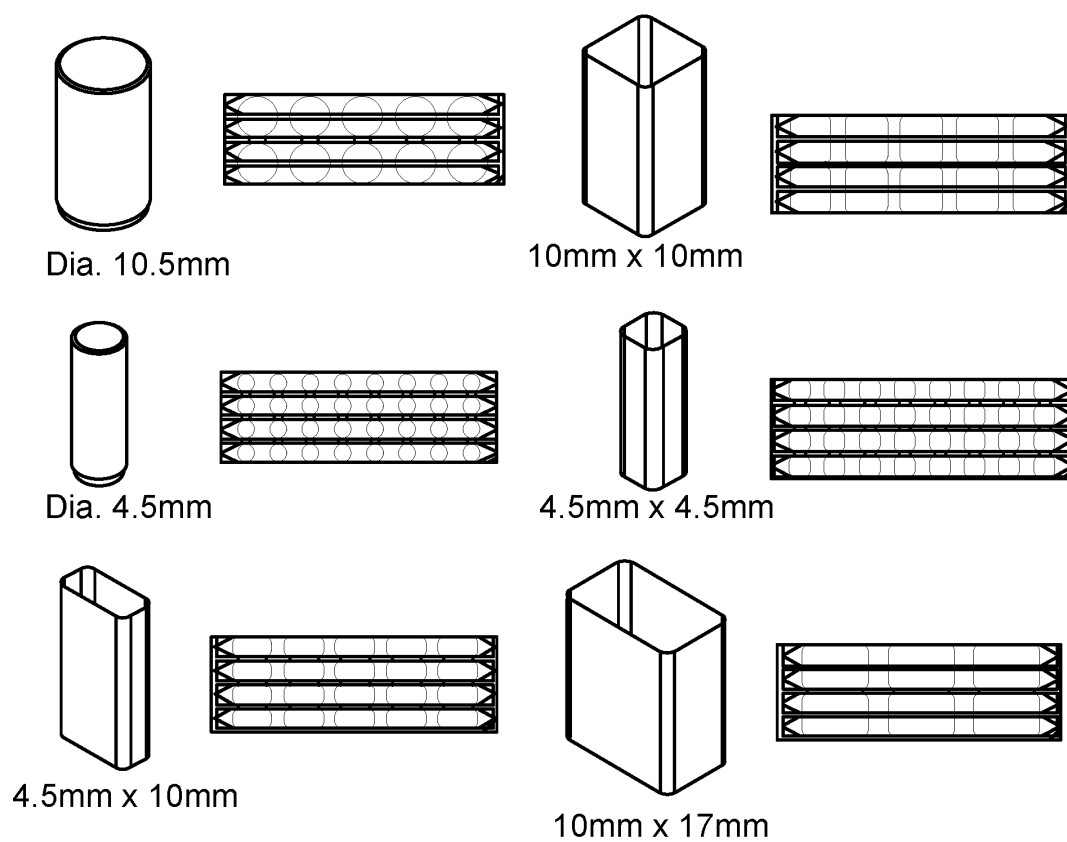


FIG. 9C

14/23

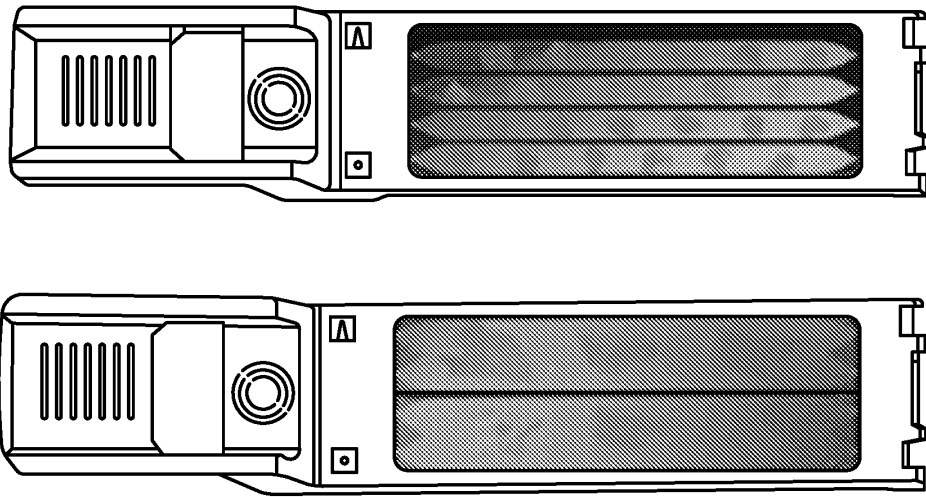


FIG. 9D

15/23

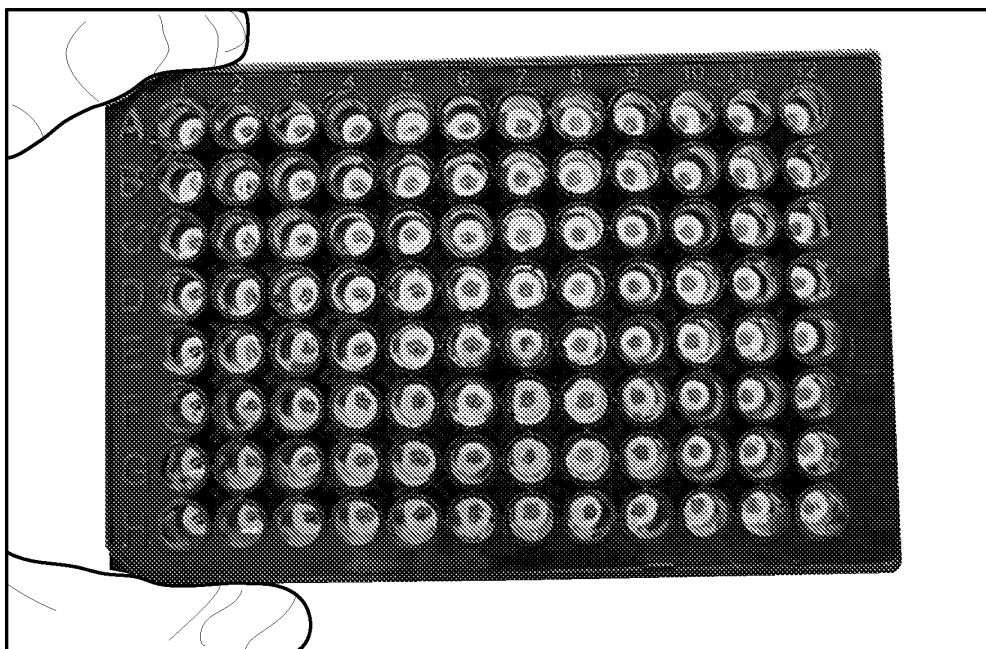
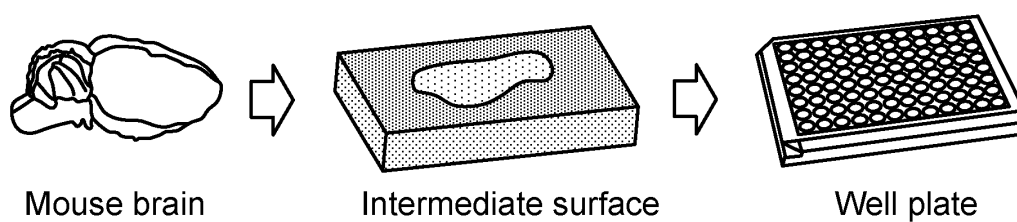


FIG. 10A

16/23

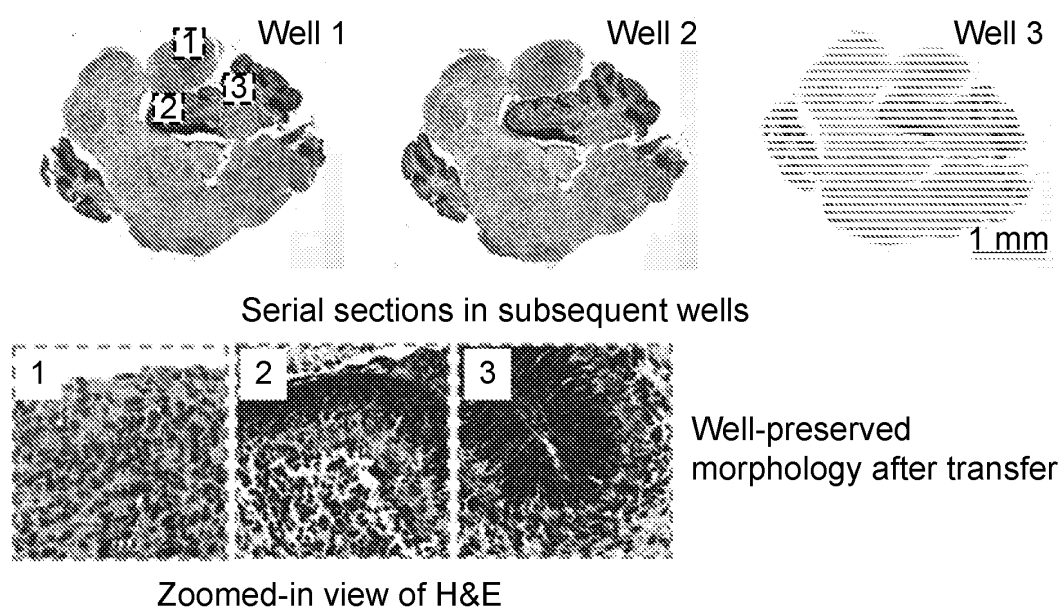
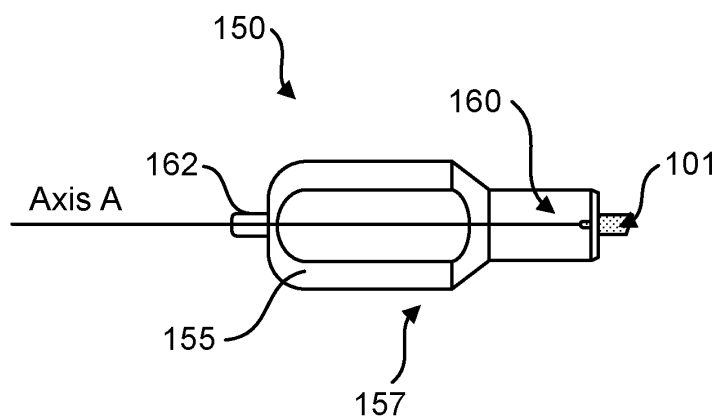
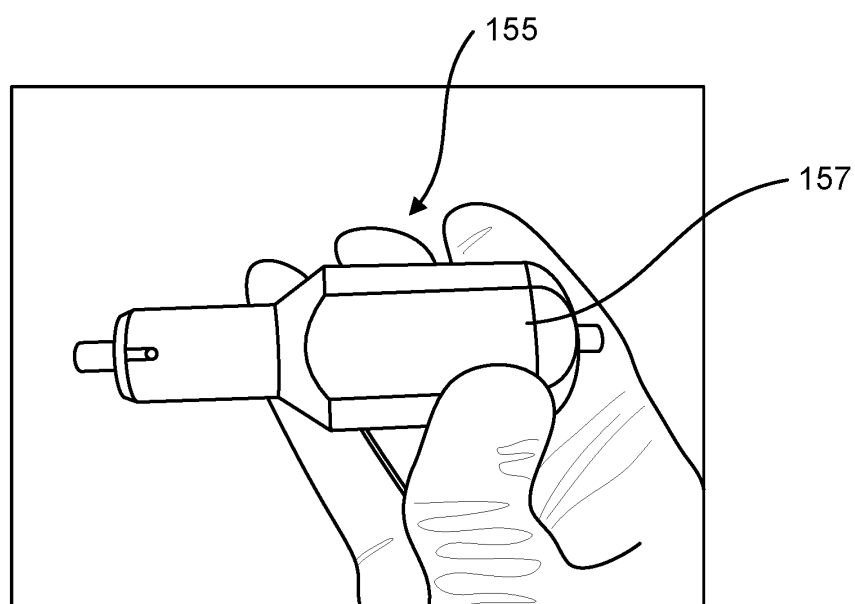


FIG. 10B

17/23

**FIG. 11****FIG. 12**

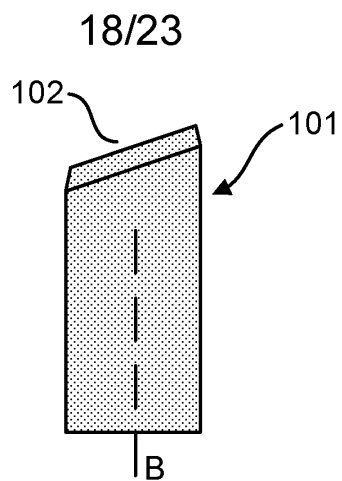


FIG. 13

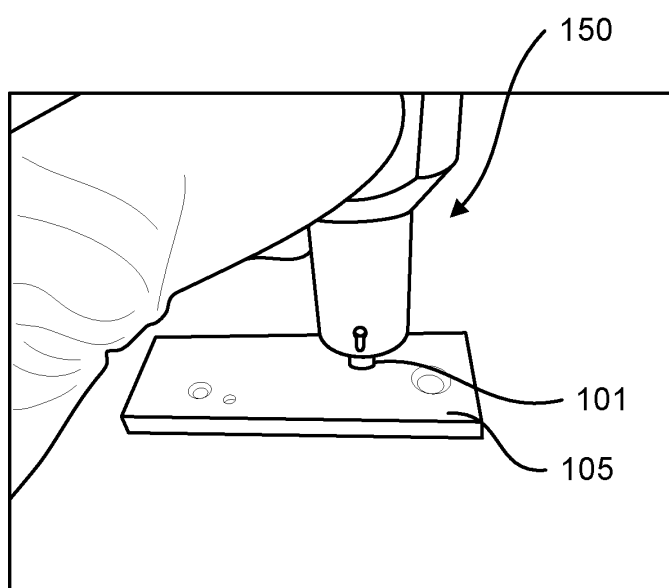


FIG. 14

19/23

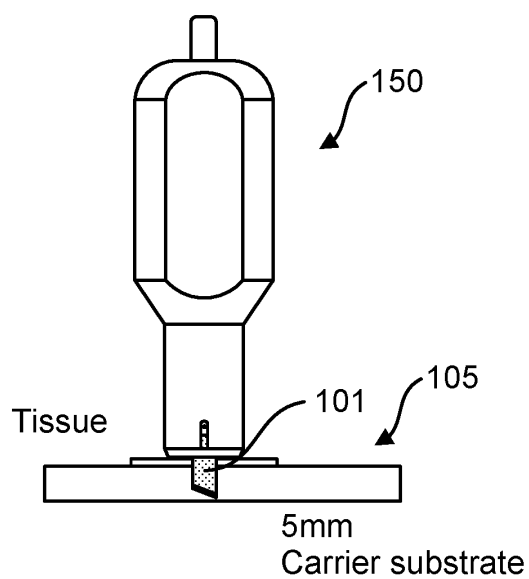


FIG. 15

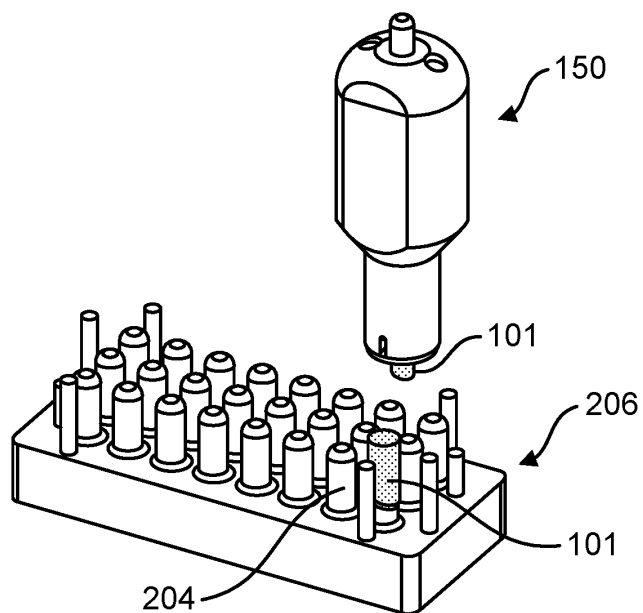
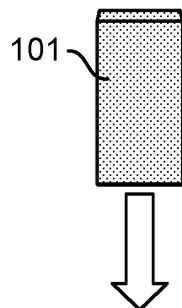


FIG. 16

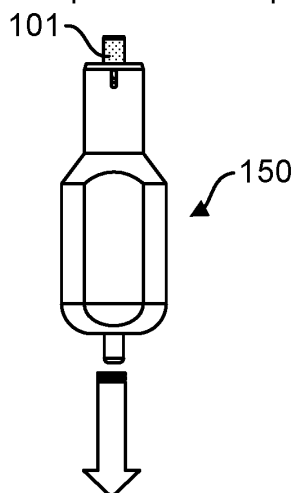
20/23

Step 1

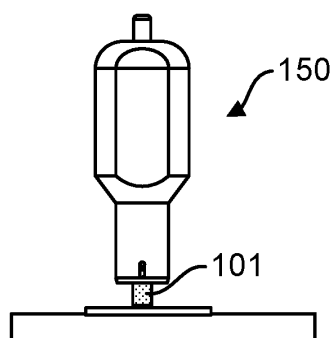
Collect punch device

Step 2

Place punch on the punch tool

Step 3

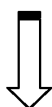
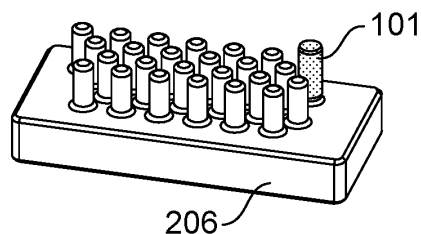
Orient punch tool on the desired location of the tissue sample and cut the tissue and carrier substrate so a portion of the tissue and carrier are loaded in the punch device

**FIG. 17A**

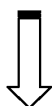
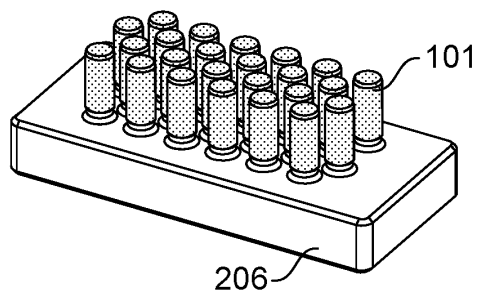
21/23

Step 4

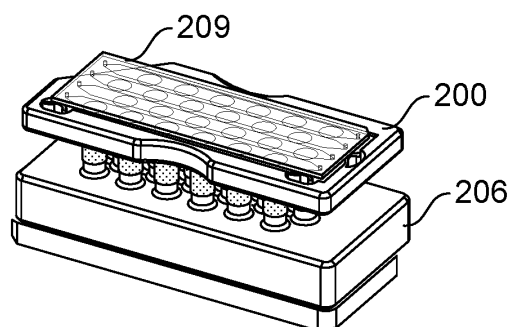
Eject loaded punch device on piston array and repeat

Step 5

Place all the loaded punch devices on the piston array

Step 6

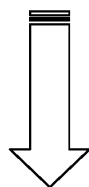
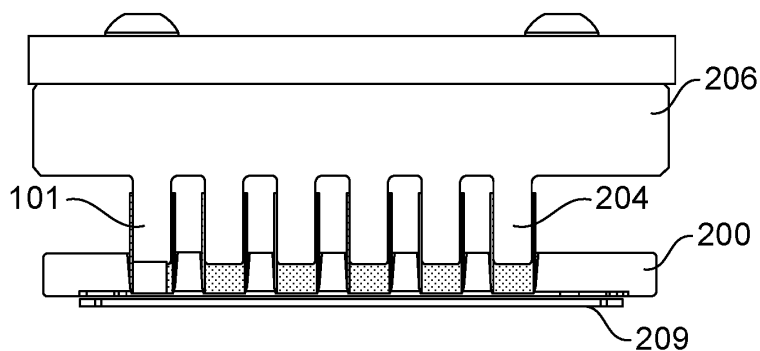
Align a glass slide affixed to a receiving array with the piston array and allow the pistons to push the carrier substrate

**FIG. 17B**

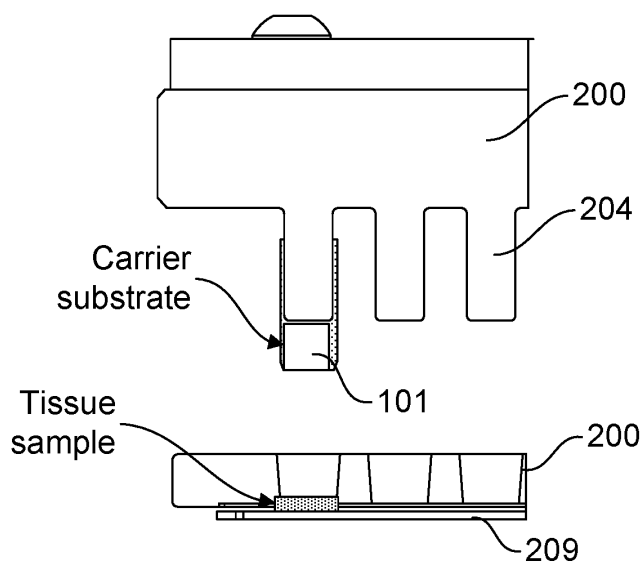
22/23

Step 7

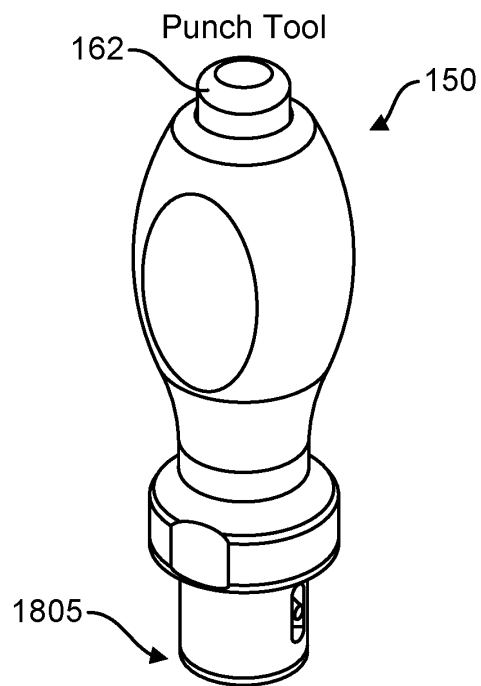
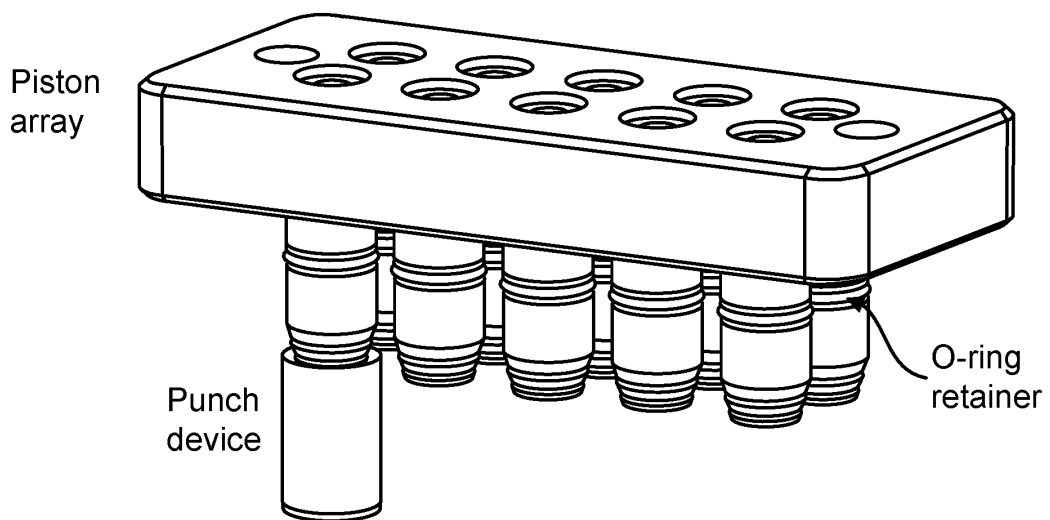
Rotate the assembly 180° and heat (e.g., heat to 60°C)

Step 8

Remove piston array, the cutter, and carrier substrate will stick to the piston, leaving the tissue on the glass slide

**FIG. 17C**

23/23

**FIG. 18****FIG. 19**