

FIG. 1

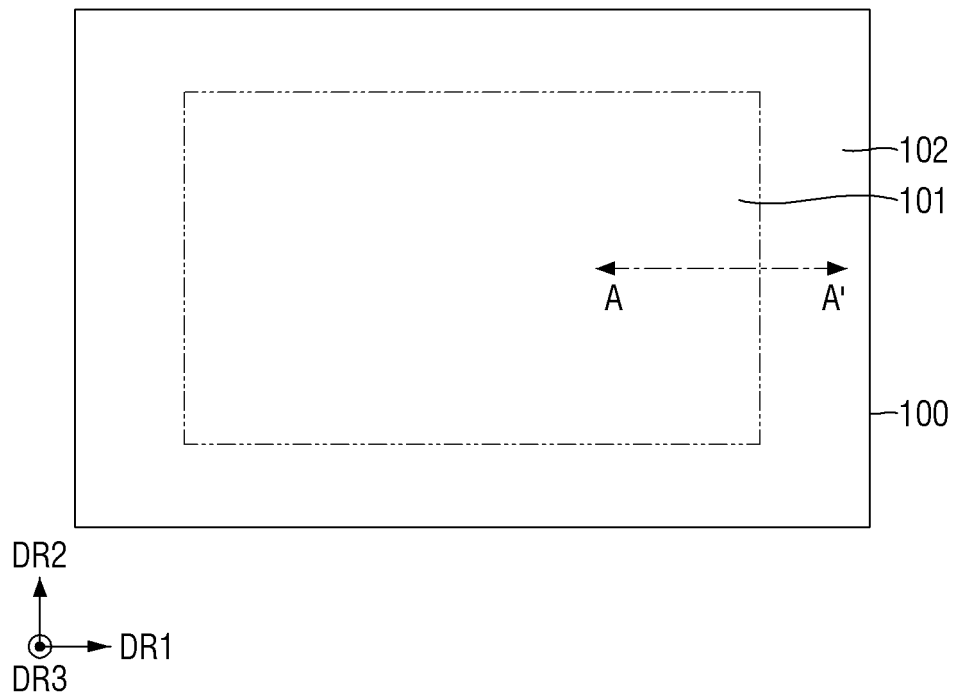


FIG. 2

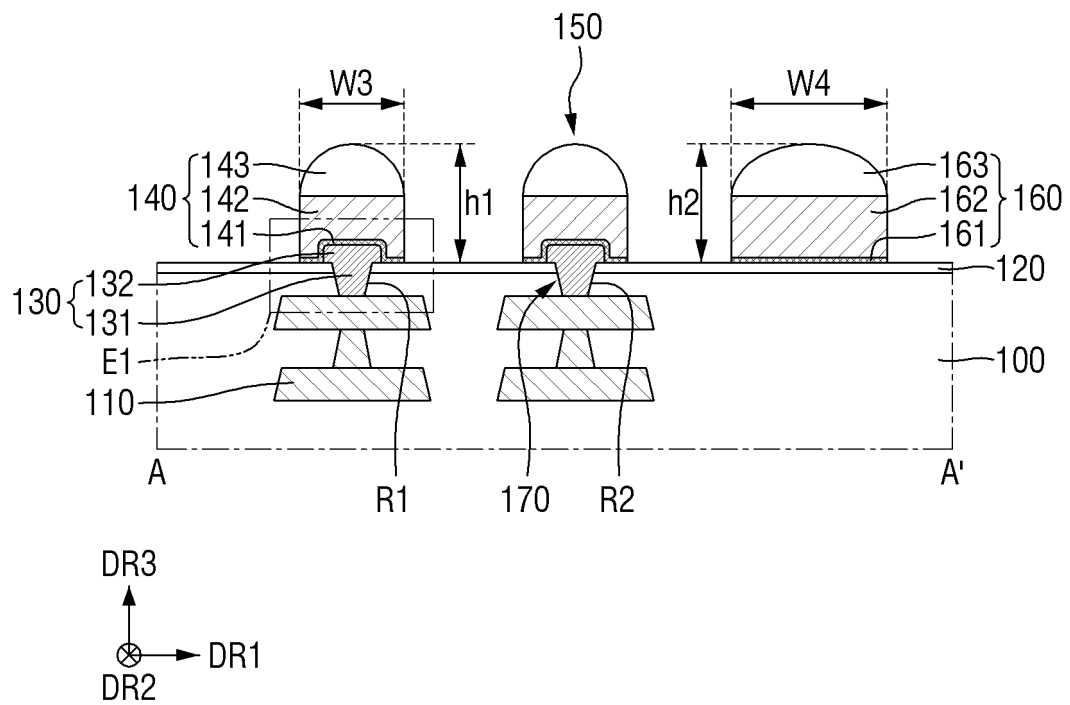


FIG. 3

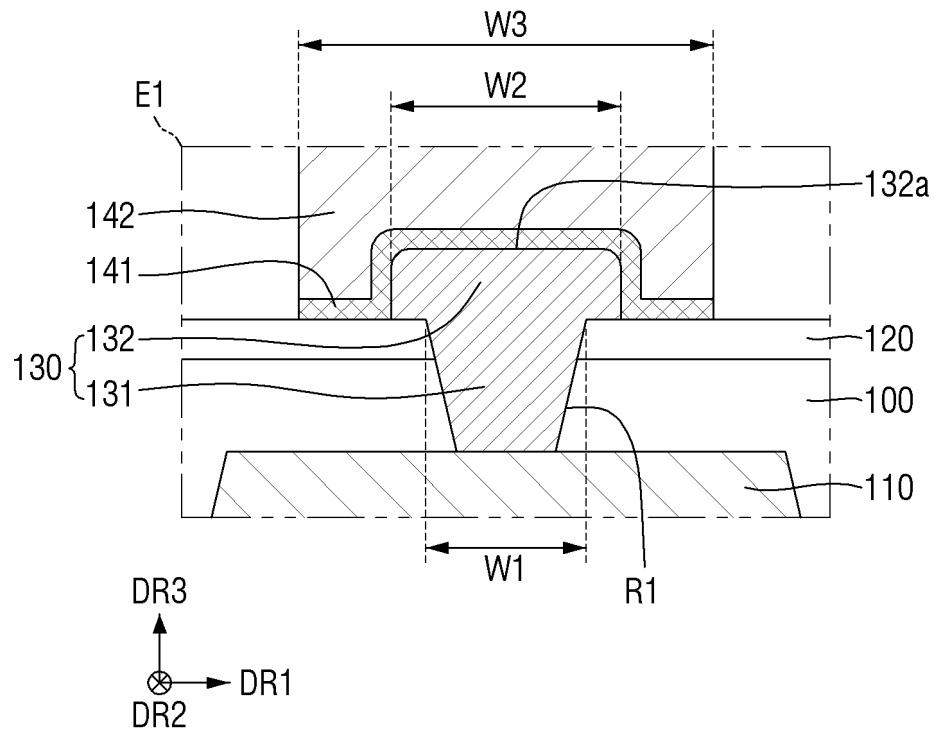


FIG. 4

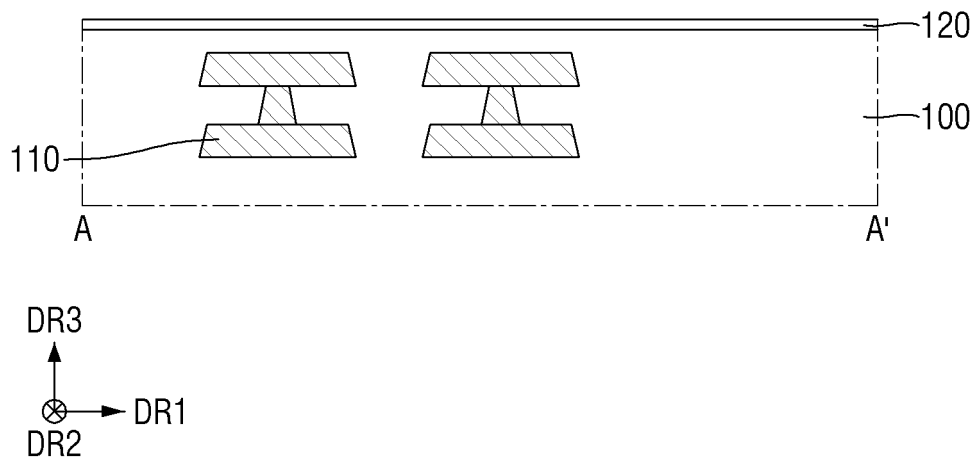


FIG. 5

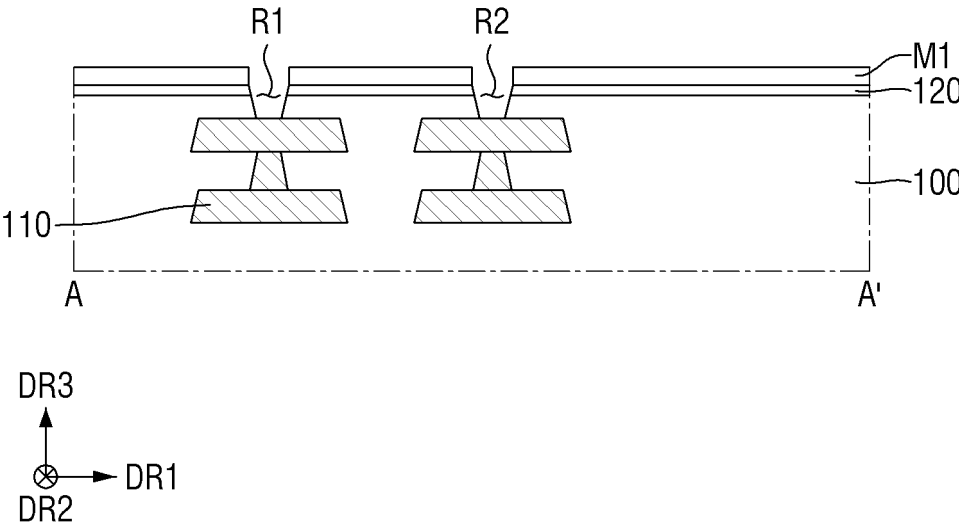


FIG. 6

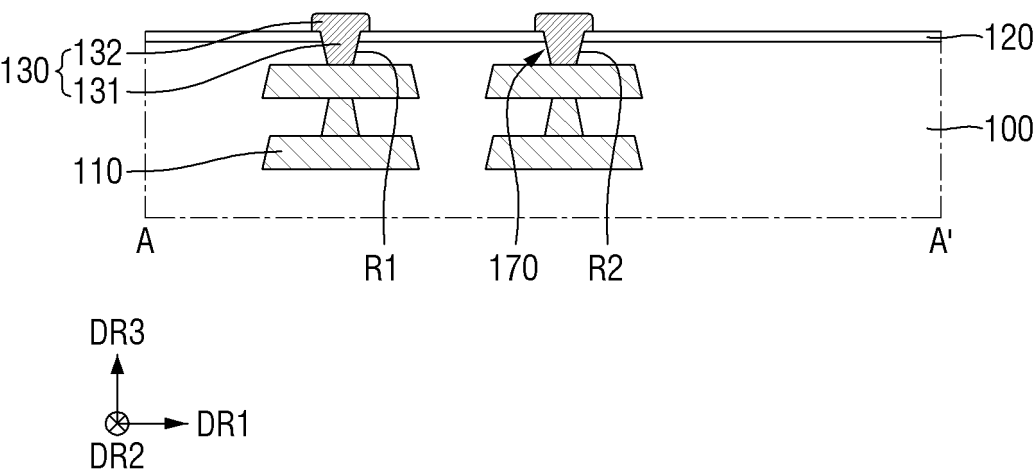


FIG. 7

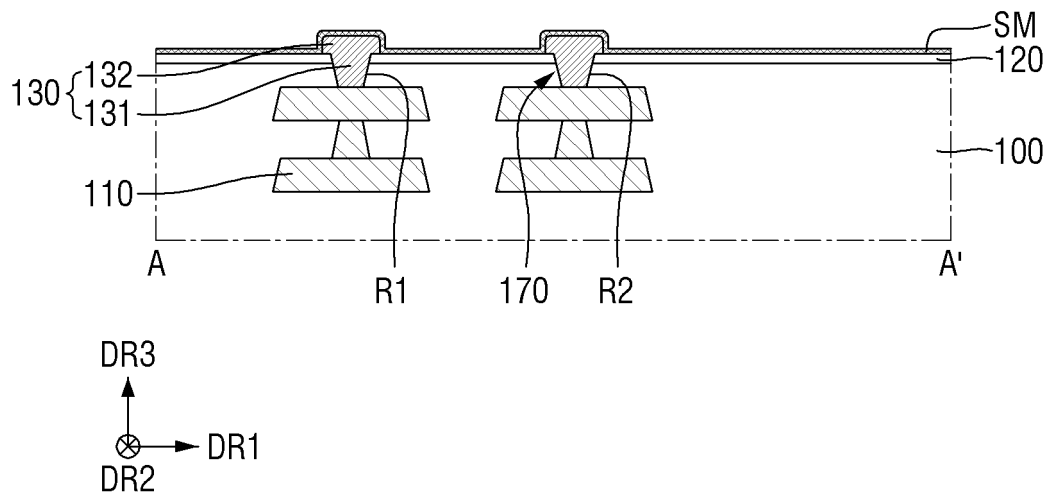


FIG. 8

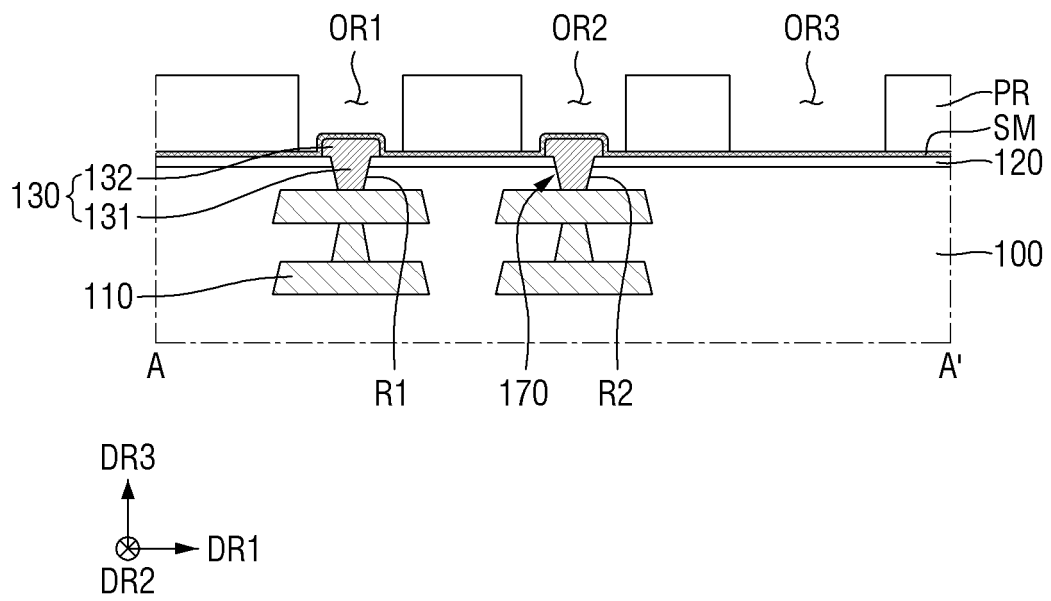


FIG. 9

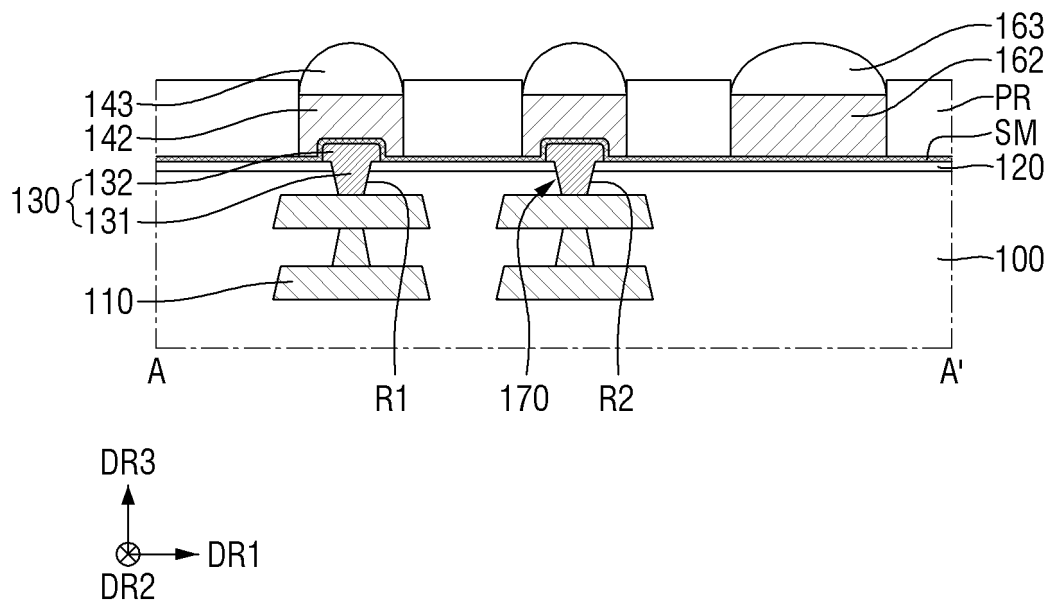


FIG. 10

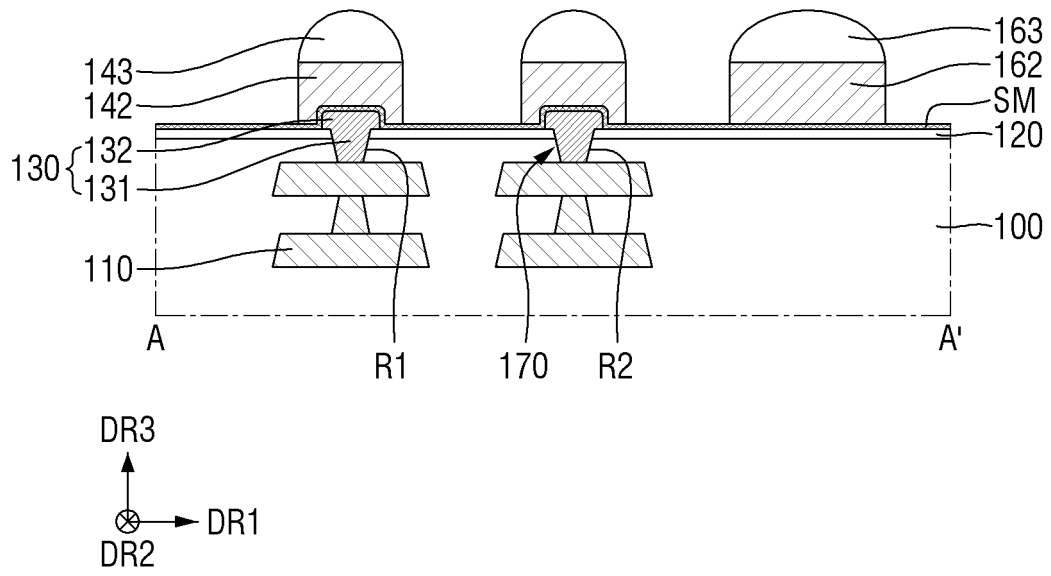


FIG. 11

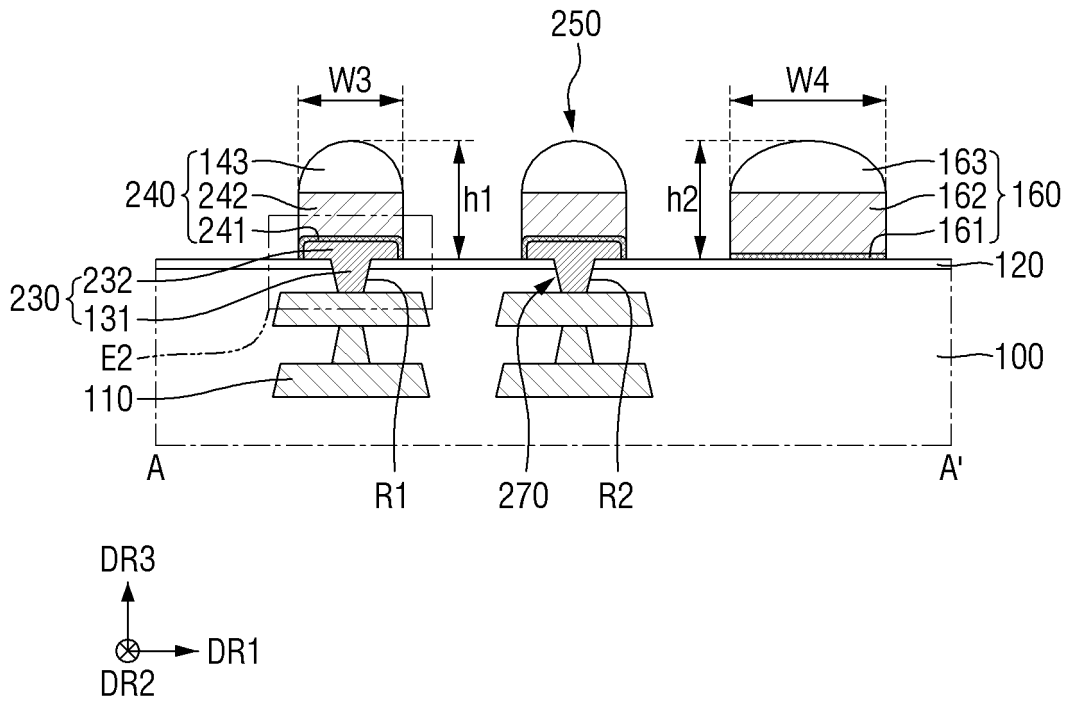


FIG. 12

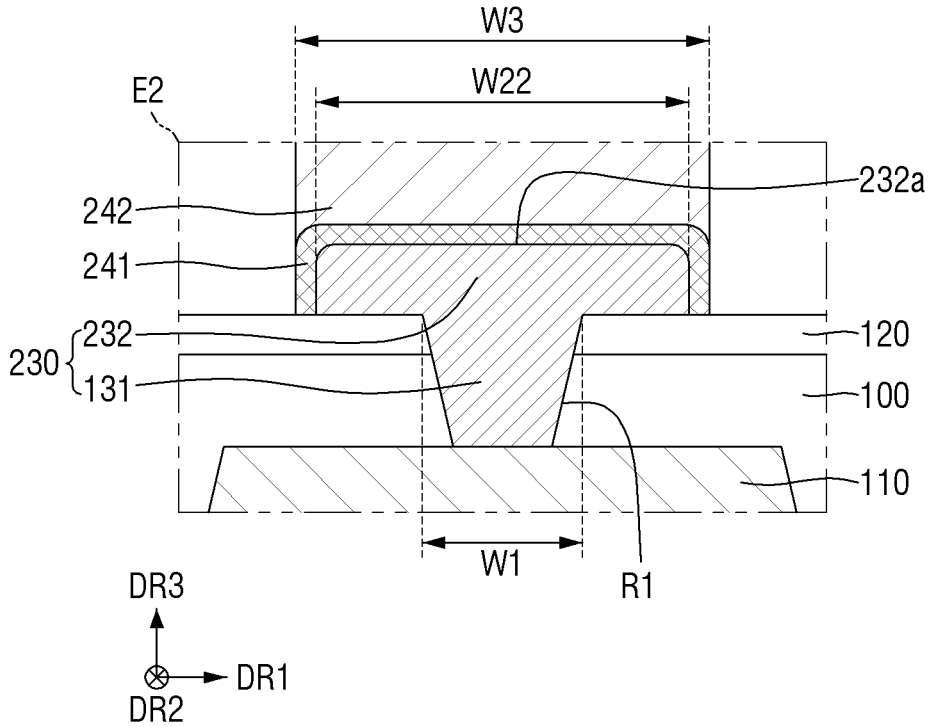


FIG. 13

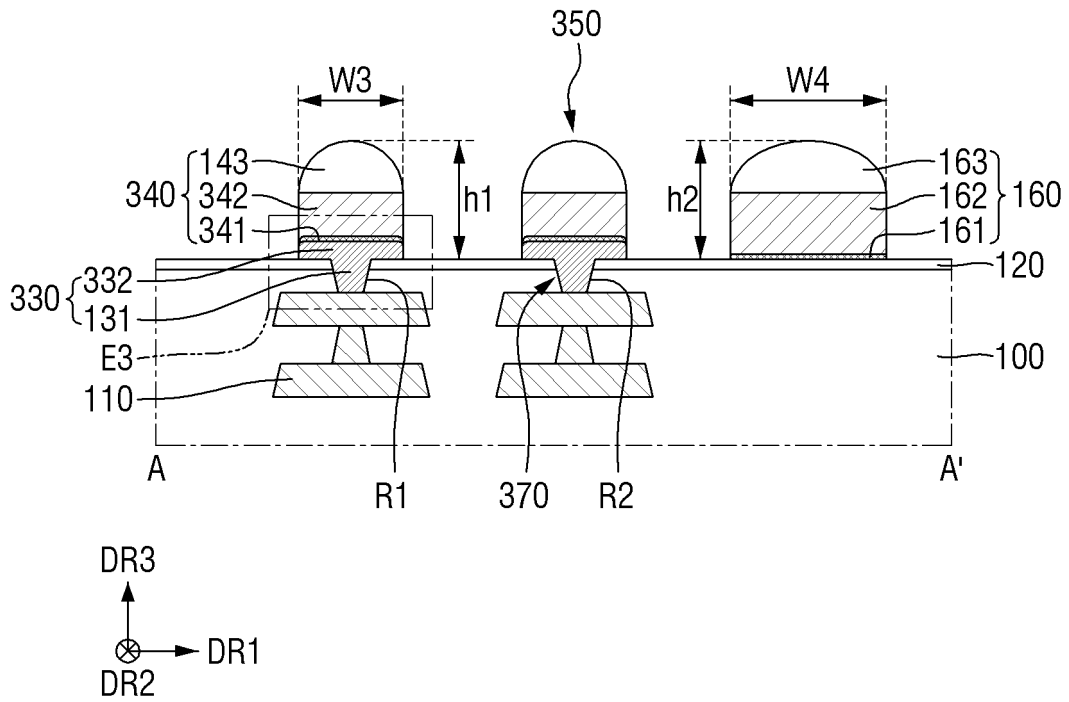


FIG. 14

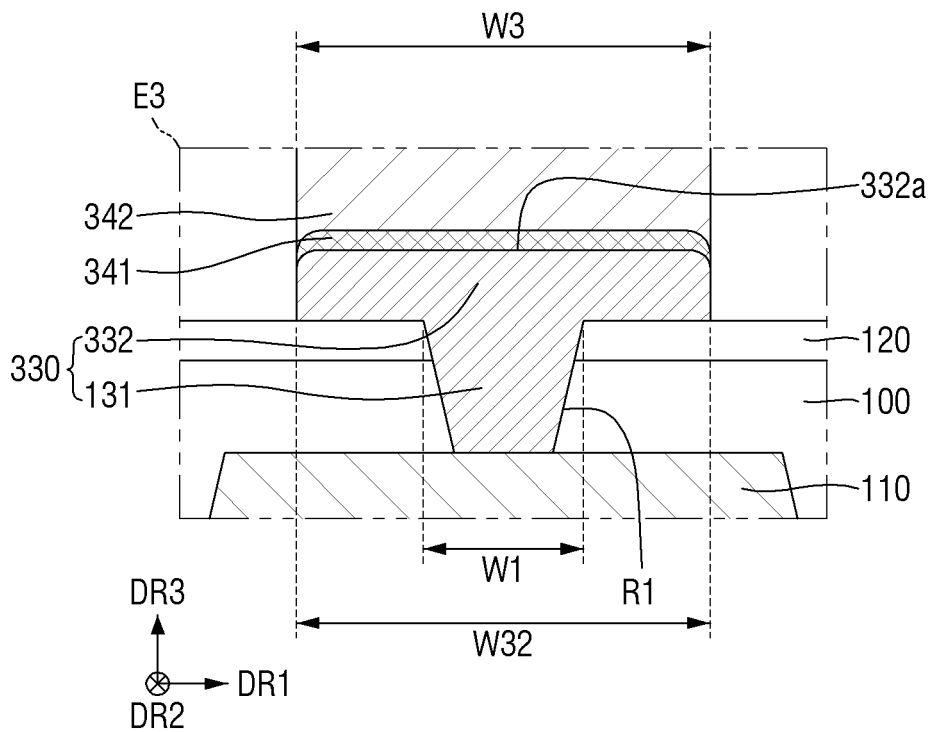


FIG. 15

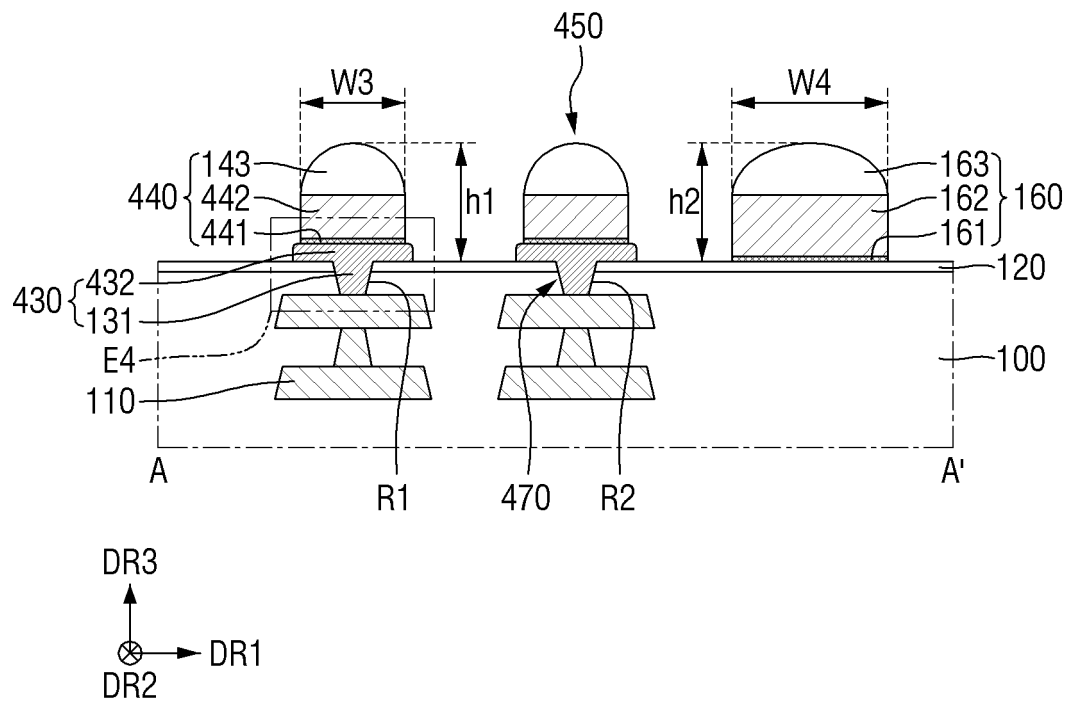


FIG. 16

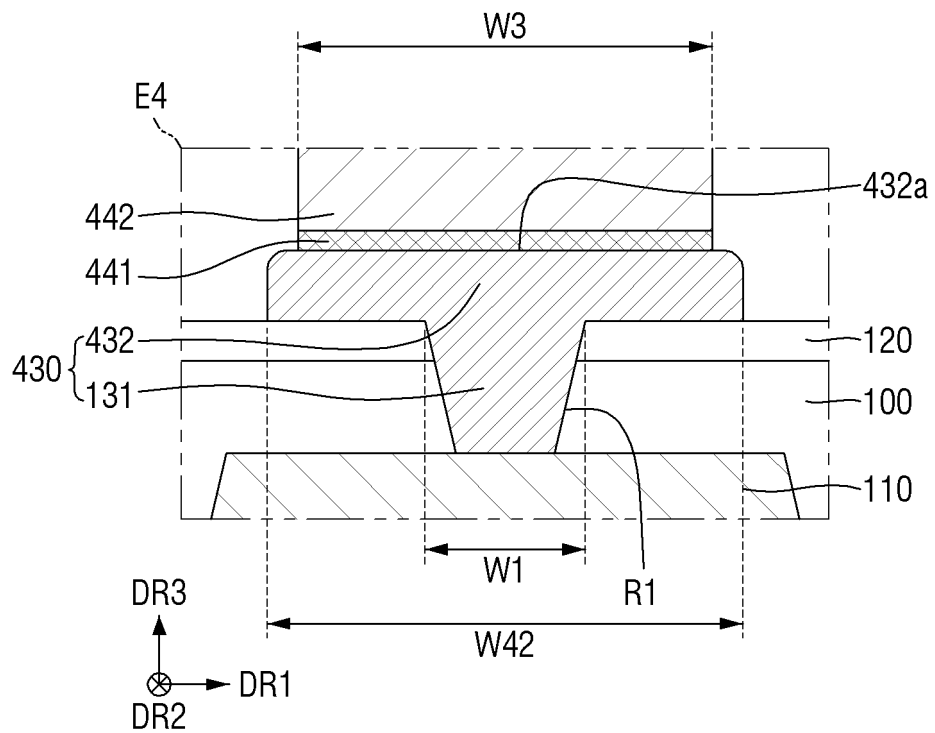


FIG. 17

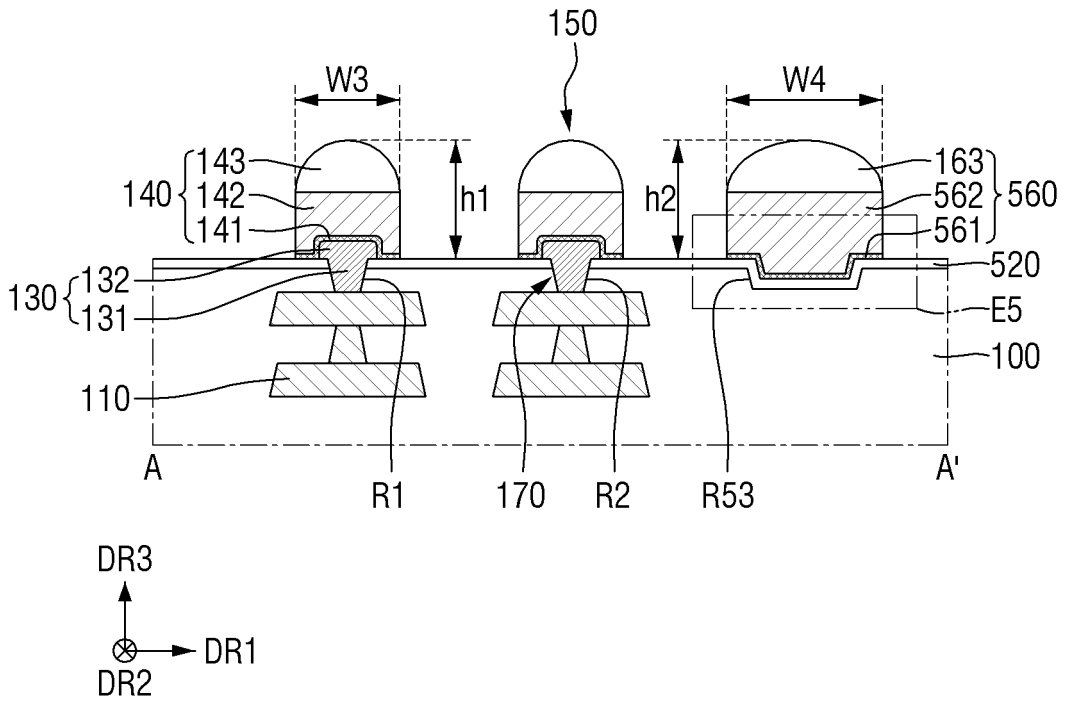


FIG. 18

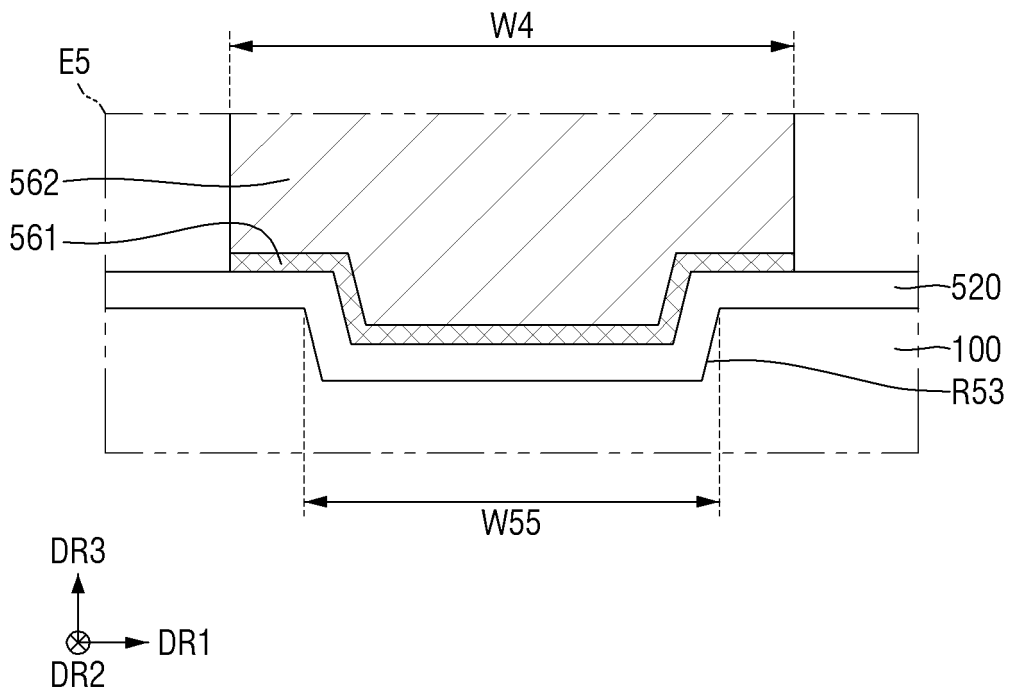


FIG. 19

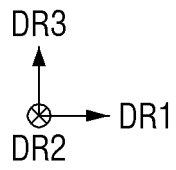
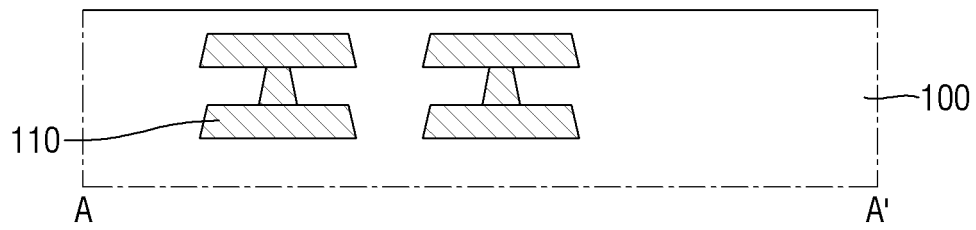


FIG. 20

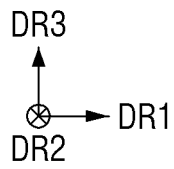
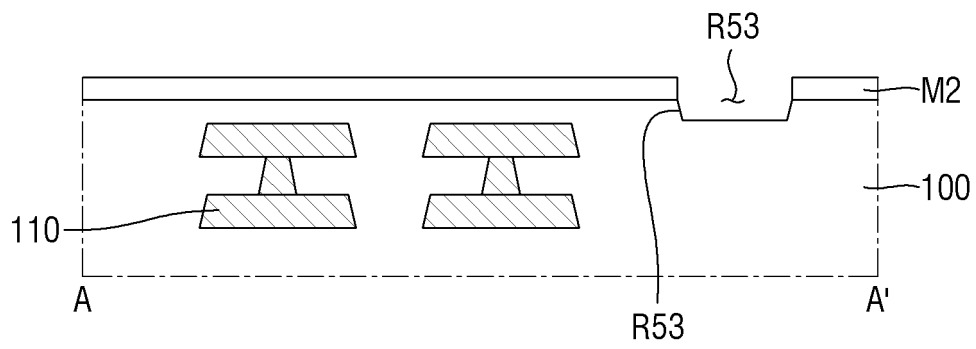


FIG. 21

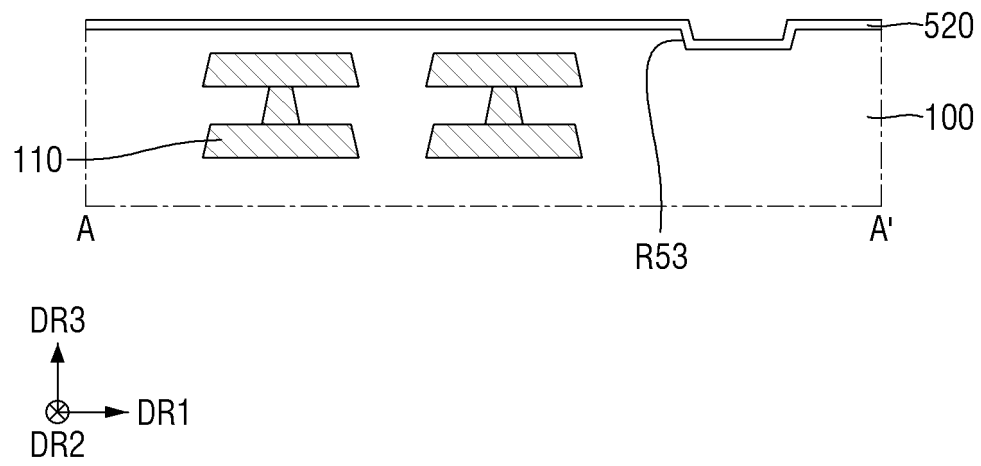


FIG. 22

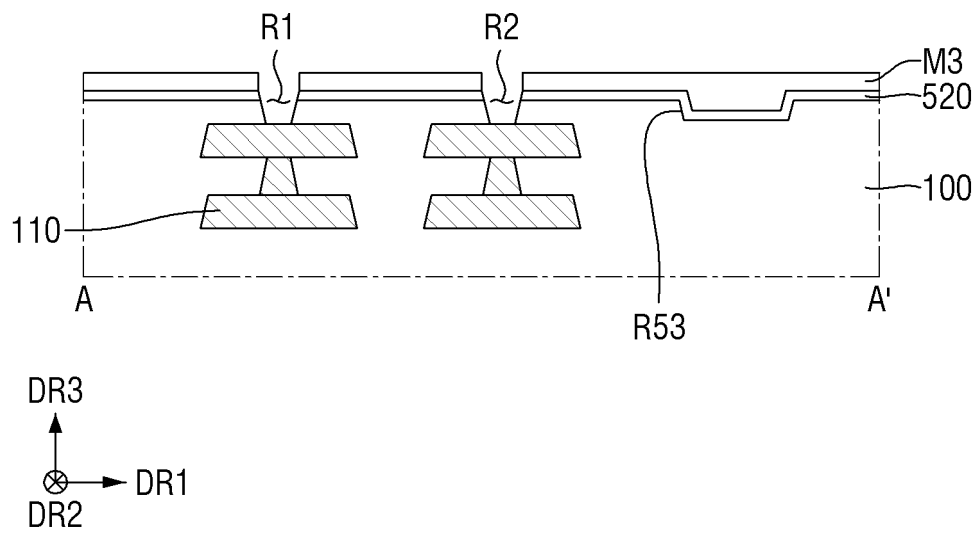


FIG. 23

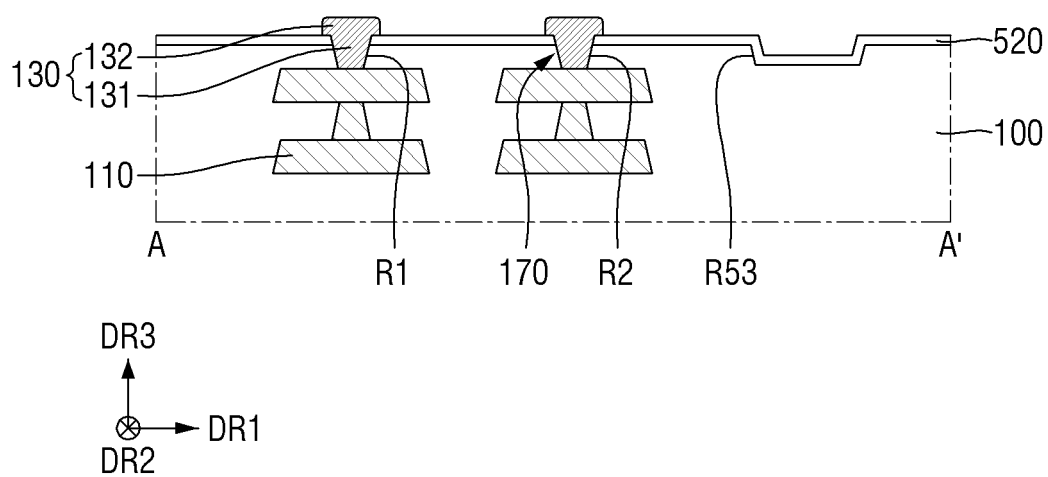
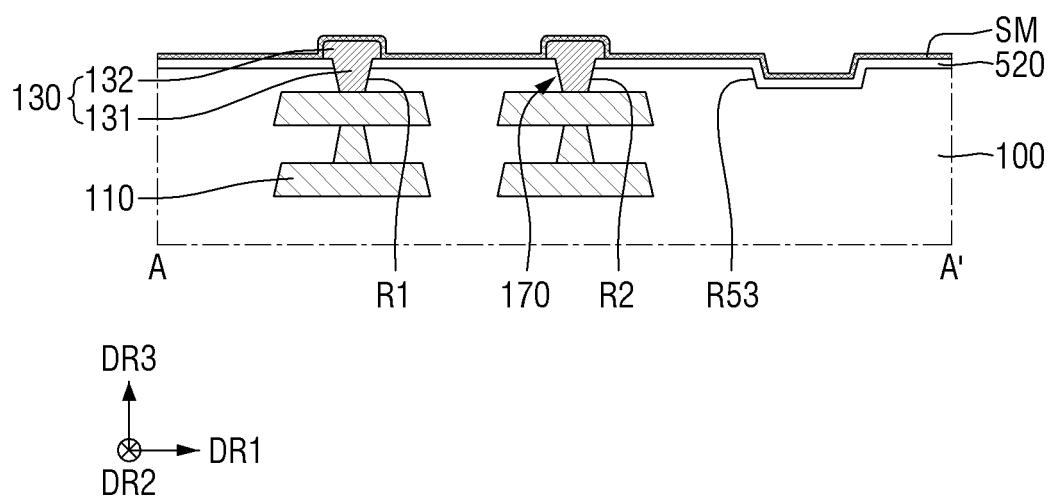


FIG. 24



This cross-sectional view shows the device structure along line A-A'. It features a substrate 100 with a series of layers: a bottom layer 110, a middle layer 130 (comprising sub-layers 131 and 132), and a top layer 520. On the top layer 520, there are three openings labeled OR1, OR2, and OR53. These openings are filled with a material 170. The openings OR1 and OR2 are aligned with the middle layer 130, while OR53 is aligned with the bottom layer 110. The top layer 520 has a thickness that varies across the device, being thicker over OR1 and OR2 and thinner over OR53. A coordinate system is shown at the bottom left, with DR1 pointing right, DR2 pointing down, and DR3 pointing up.

143
142
130 { 132
131
110
A
R1
170
R2
R53
A'
100
163
562
PR
SM
520

DR3
↑
⊗ DR1
DR2

FIG. 27

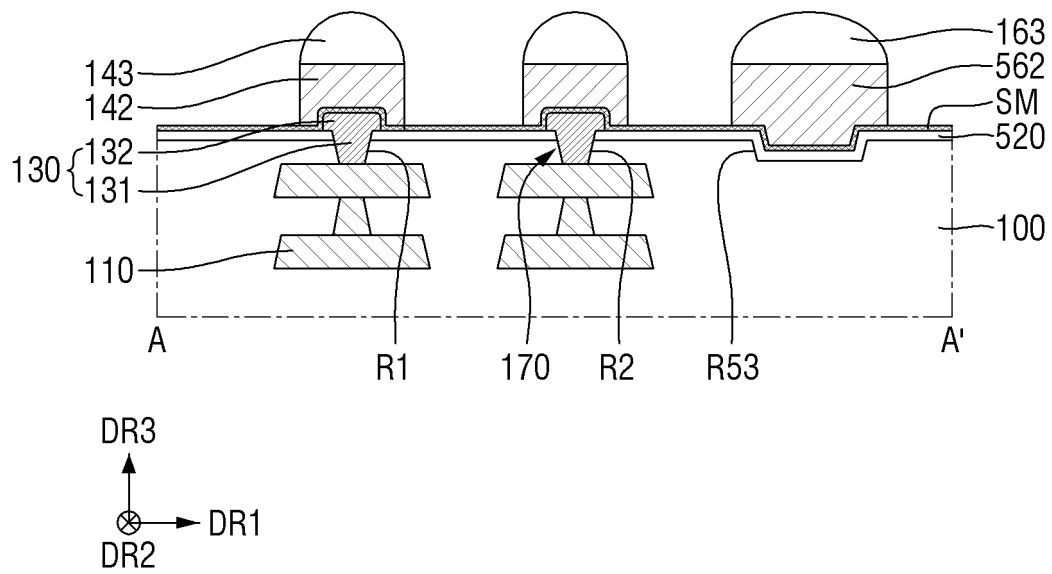


FIG. 28

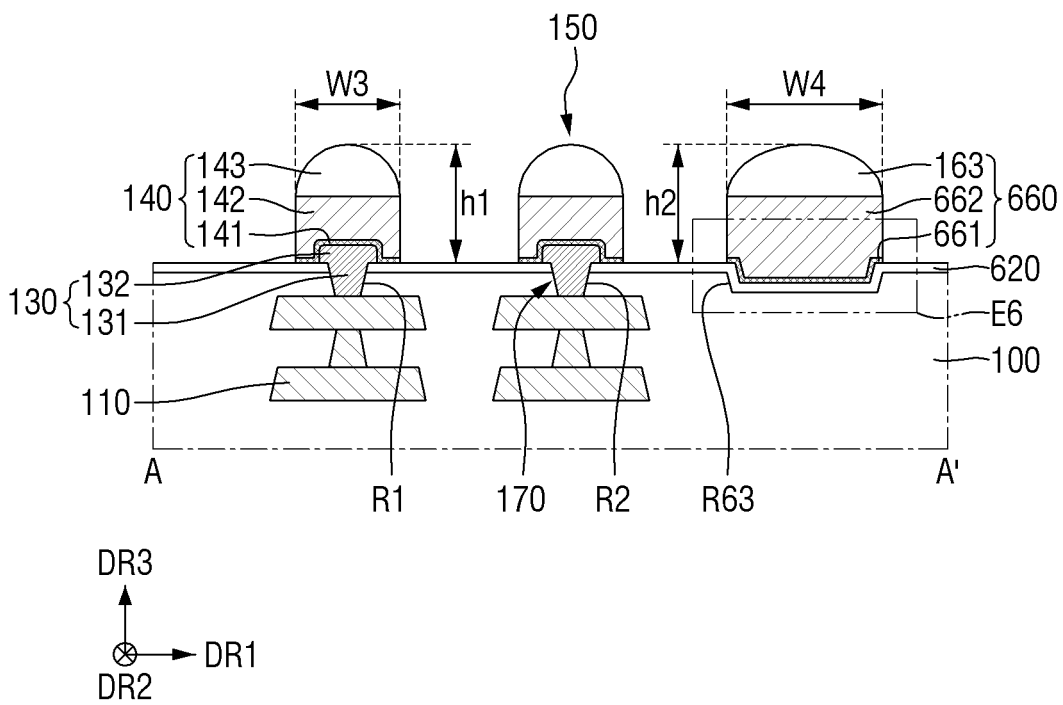


FIG. 29

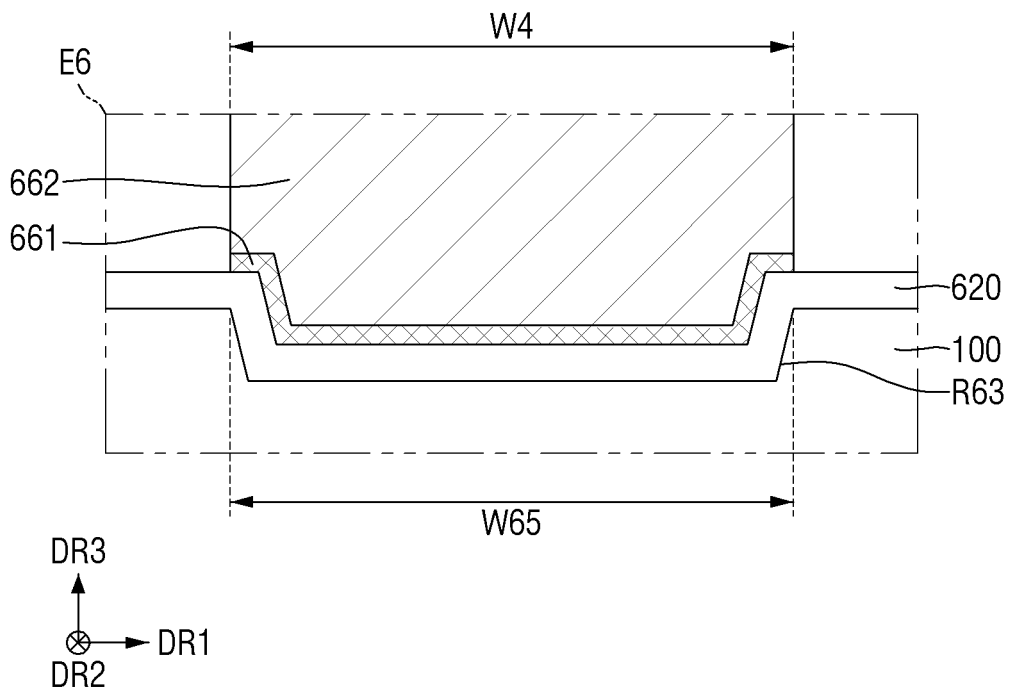


FIG. 30

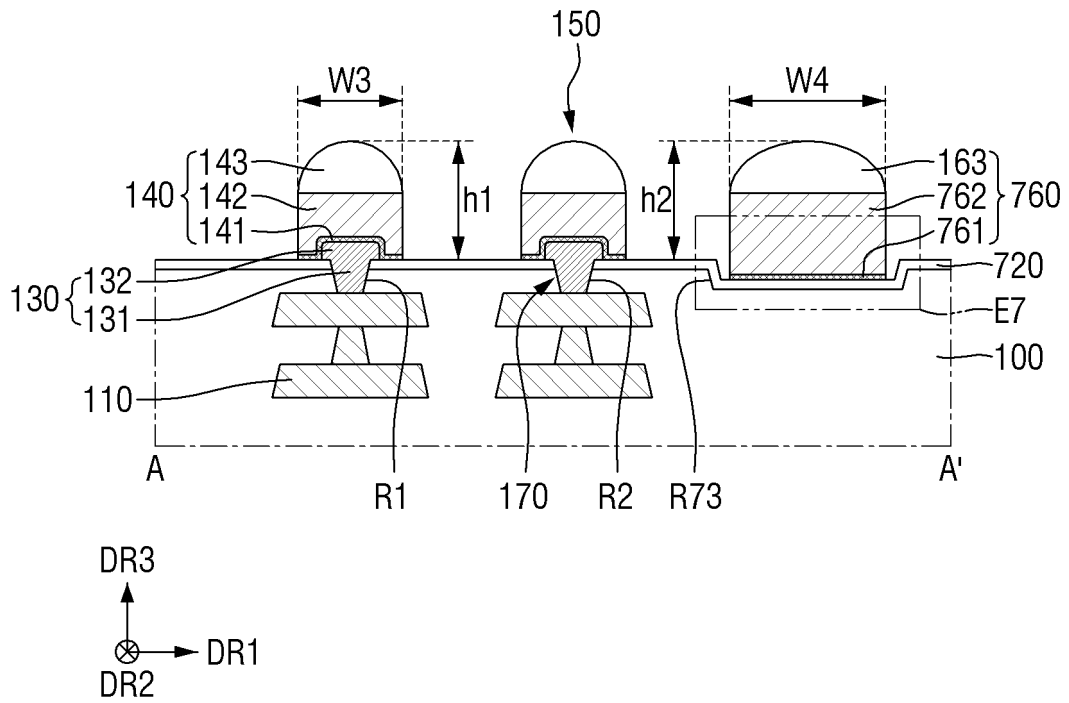


FIG. 31

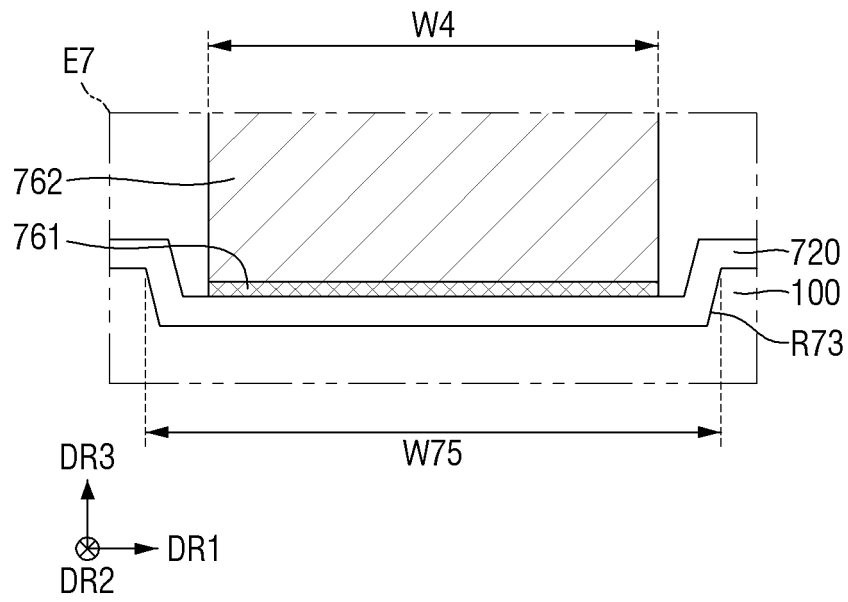
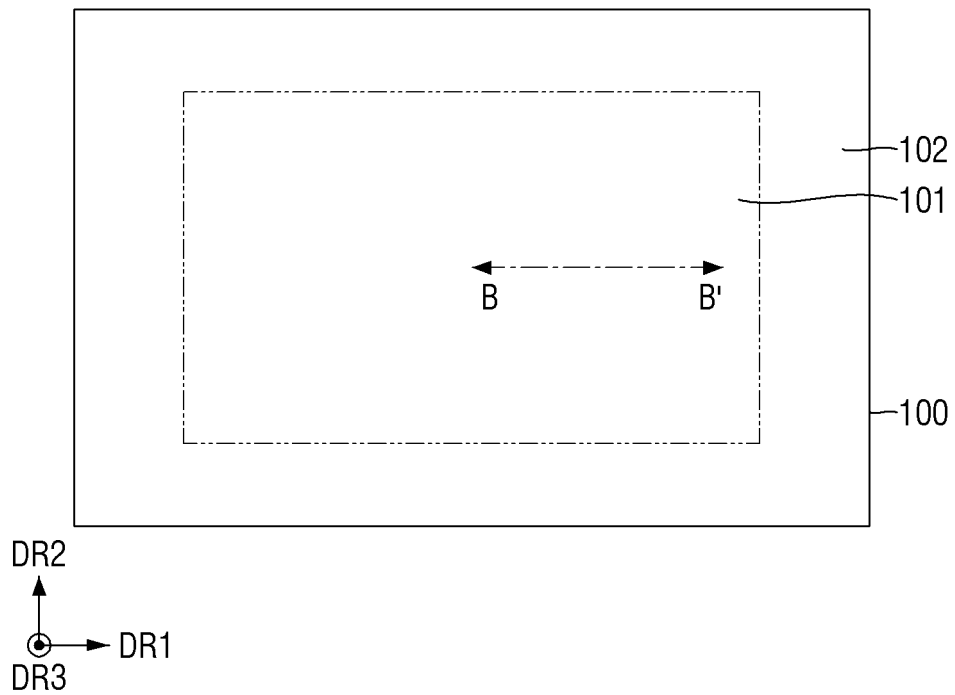


FIG. 32



This cross-sectional view shows the device structure along line B-B'. It features a substrate 100 with a top layer 120. On the left, a stack of layers 110, 130 (comprising 131 and 132), and 140 (comprising 141, 142, and 143) is shown. The width of the top layer 143 is labeled W3, and its height is h1. A contact region R1 is indicated. In the center, a region 860 is defined by layers 861, 862, and 863, with a height h2. On the right, a contact region R2 is shown, with a width W4 and a height h2. A layer 850 is positioned above R2. A coordinate system at the bottom left shows DR1 pointing right, DR2 pointing out of the page (indicated by a circle with a cross), and DR3 pointing up.