

FIG. 1

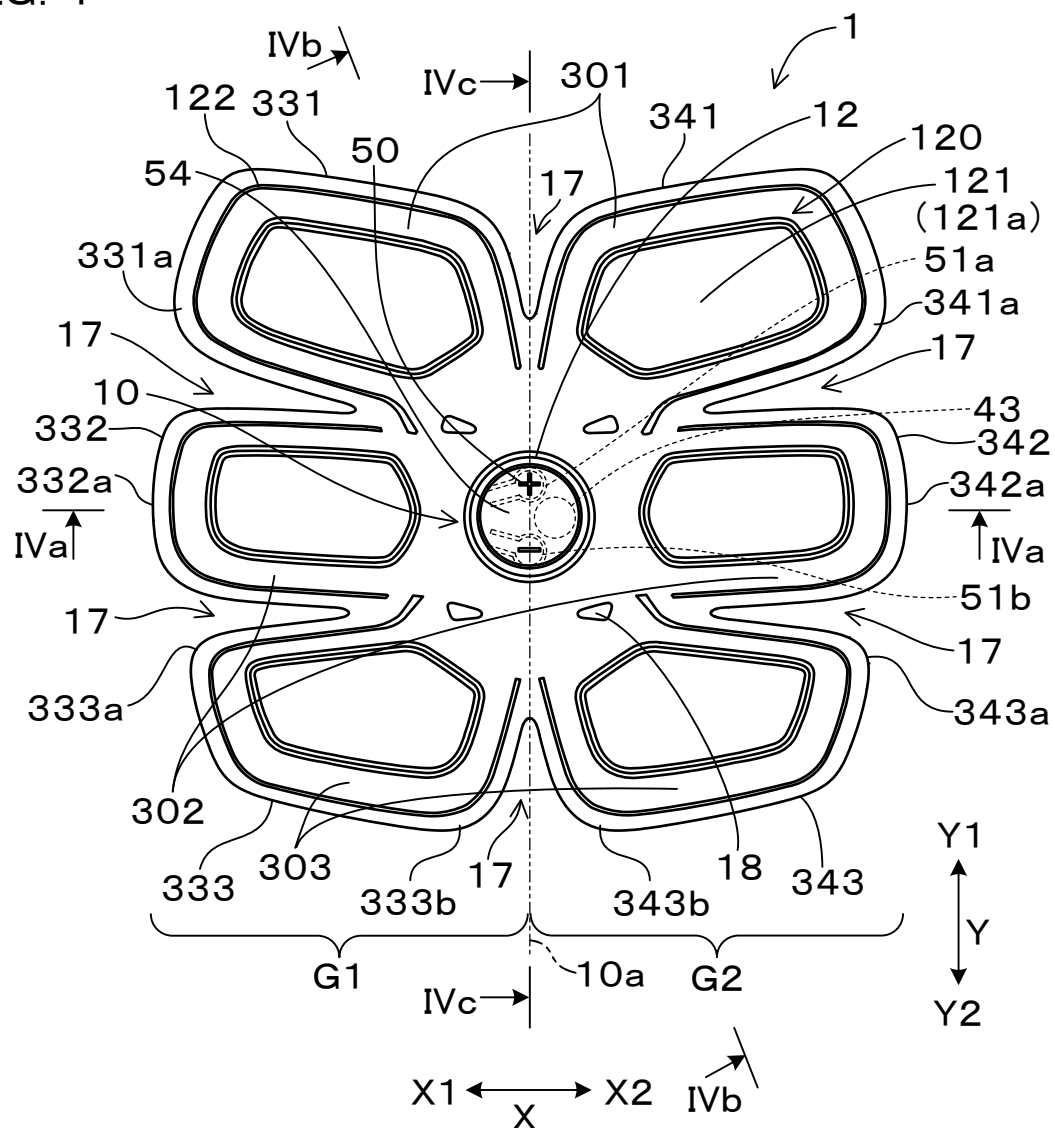


FIG. 2

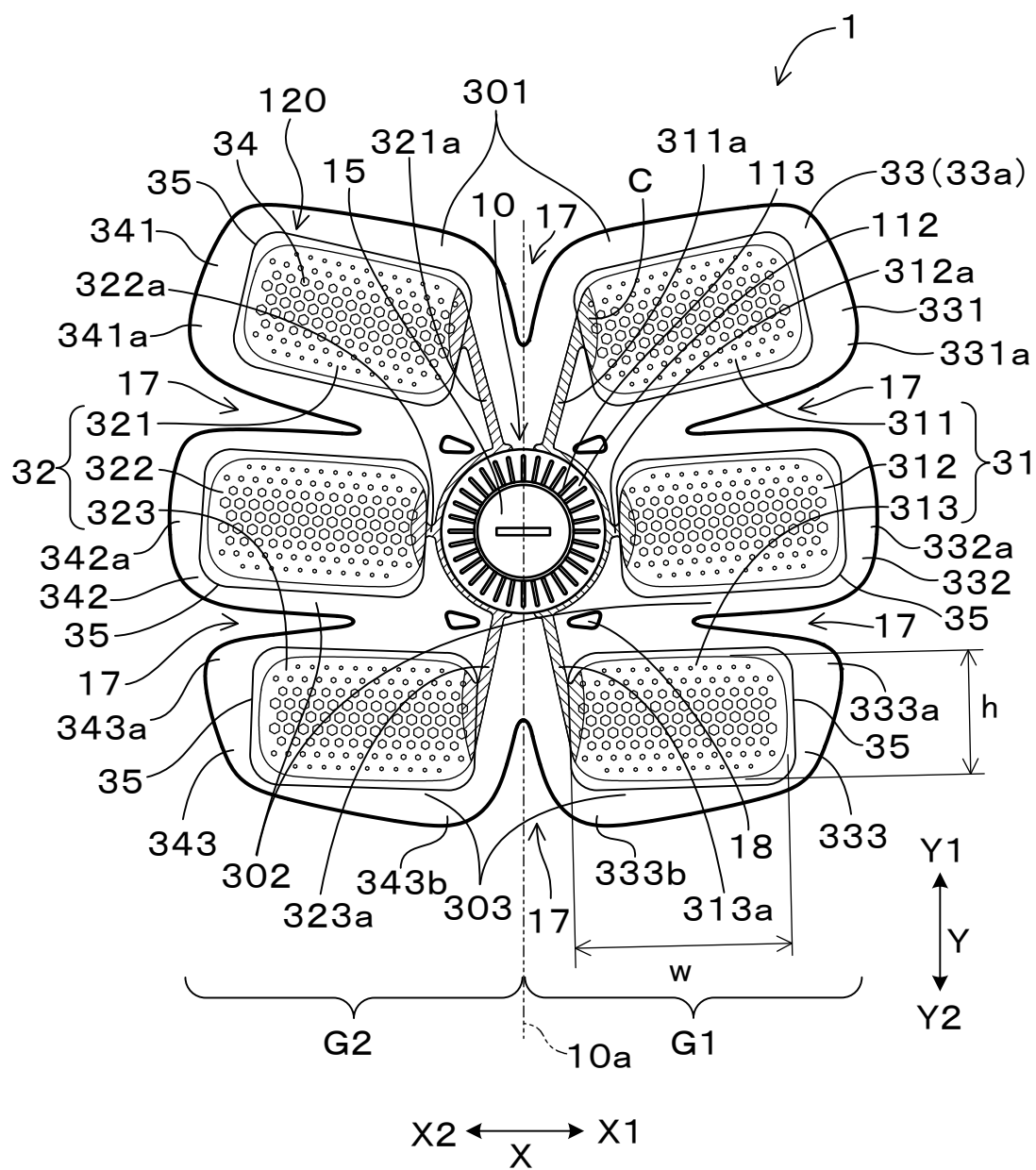


Figure 4a is a cross-sectional view of a semiconductor device 10(1). The device is built on a substrate 101. A central layer 21(20) is positioned above the substrate. Above this layer is a stack of layers including 15, 16, and 14. The device is surrounded by a complex structure of layers and spacers, including 12, 12a, 12b, 13, 41(40), 42, 43(430), 54(50), 111a, 111b, 112a, 112b, 11, 112, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100. The device is shown in a cross-section along the X1-X2 plane, with the Z-axis indicating the vertical direction.

FIG. 5

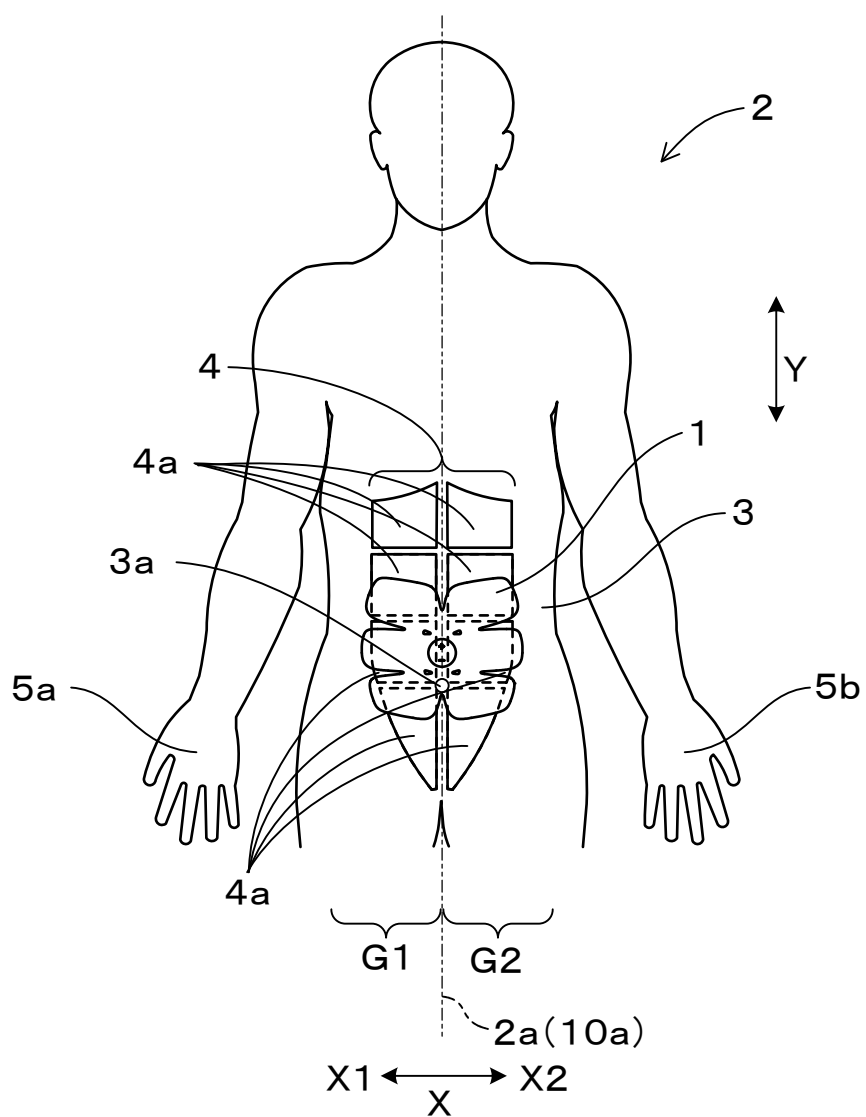


FIG. 6

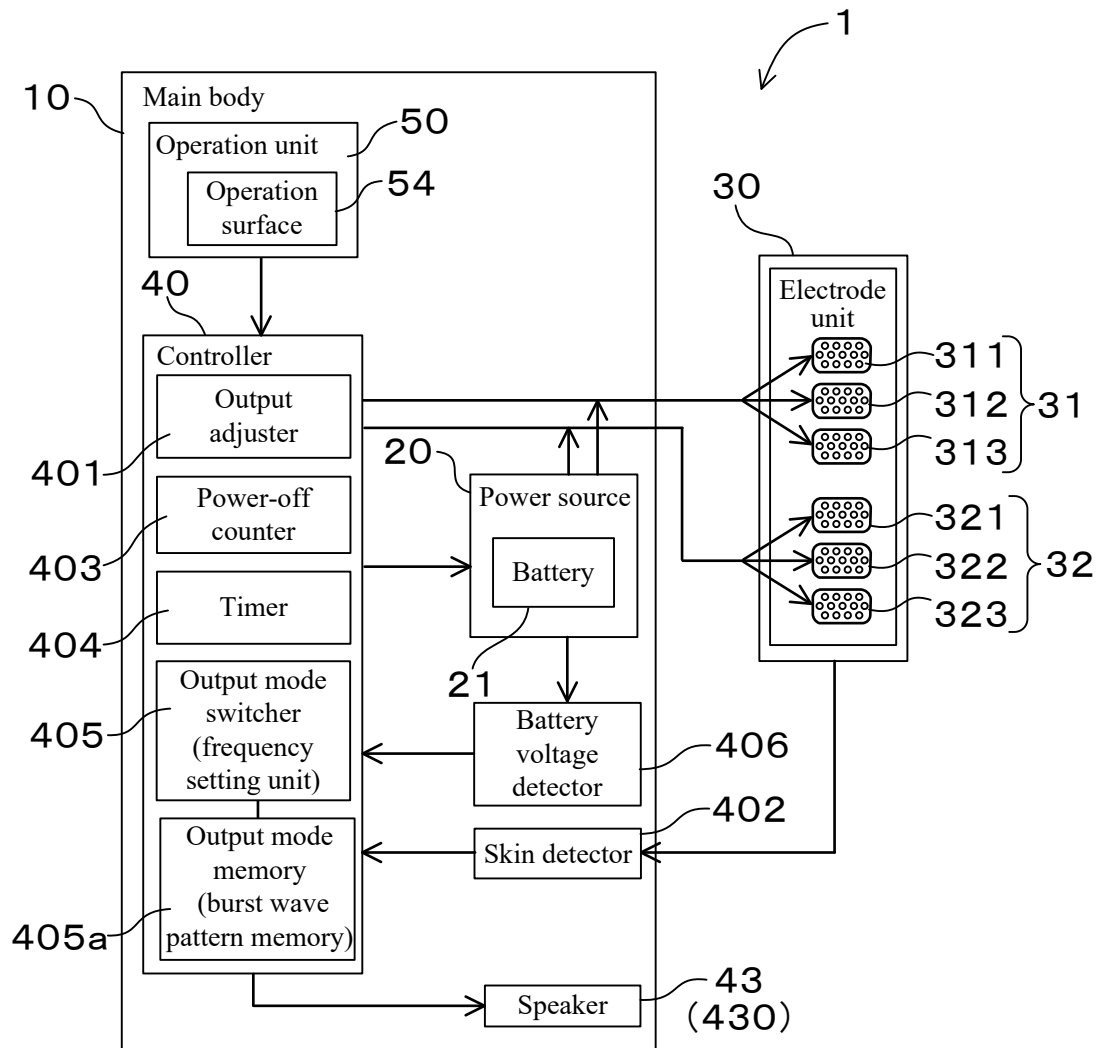


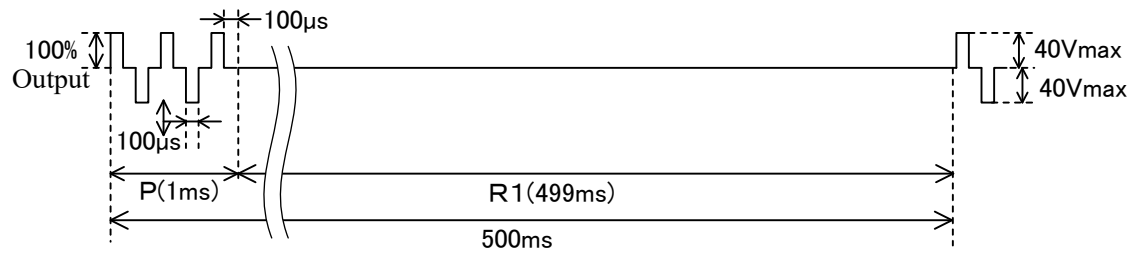
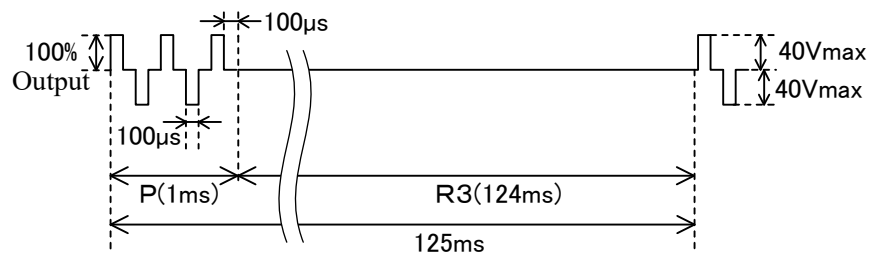
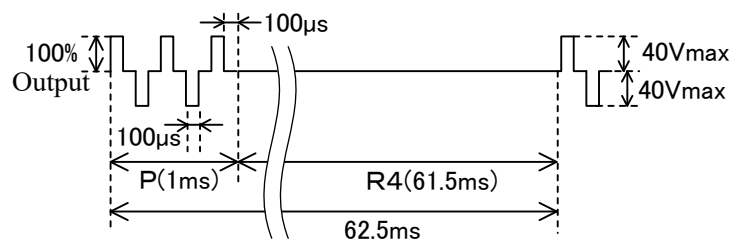
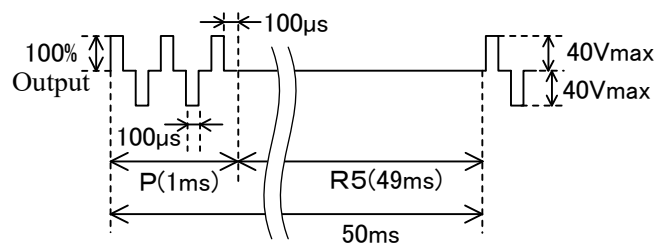
FIG. 7a Basic waveform B1 (2 Hz)**FIG. 7b** Basic waveform B2 (4 Hz)**FIG. 7c** Basic waveform B3 (8 Hz)**FIG. 7d** Basic waveform B4 (16 Hz)**FIG. 7e** Basic waveform B5 (20 Hz)

FIG. 8

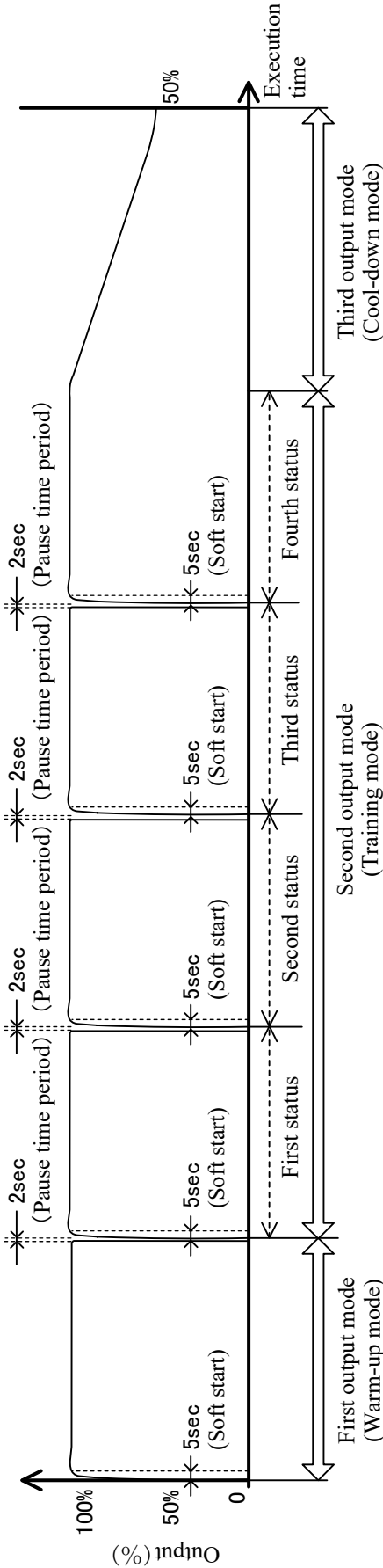


FIG. 9

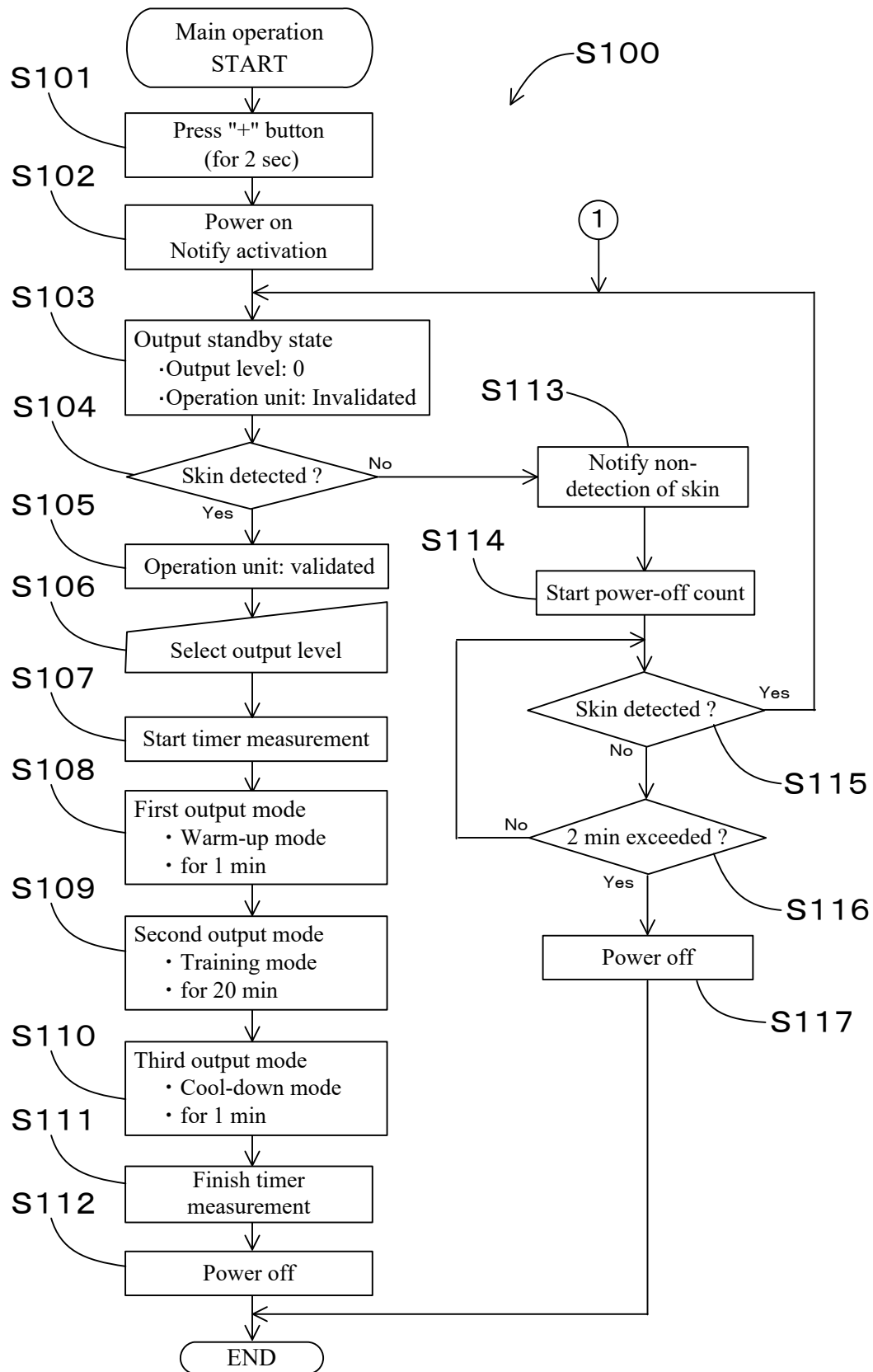


FIG. 10

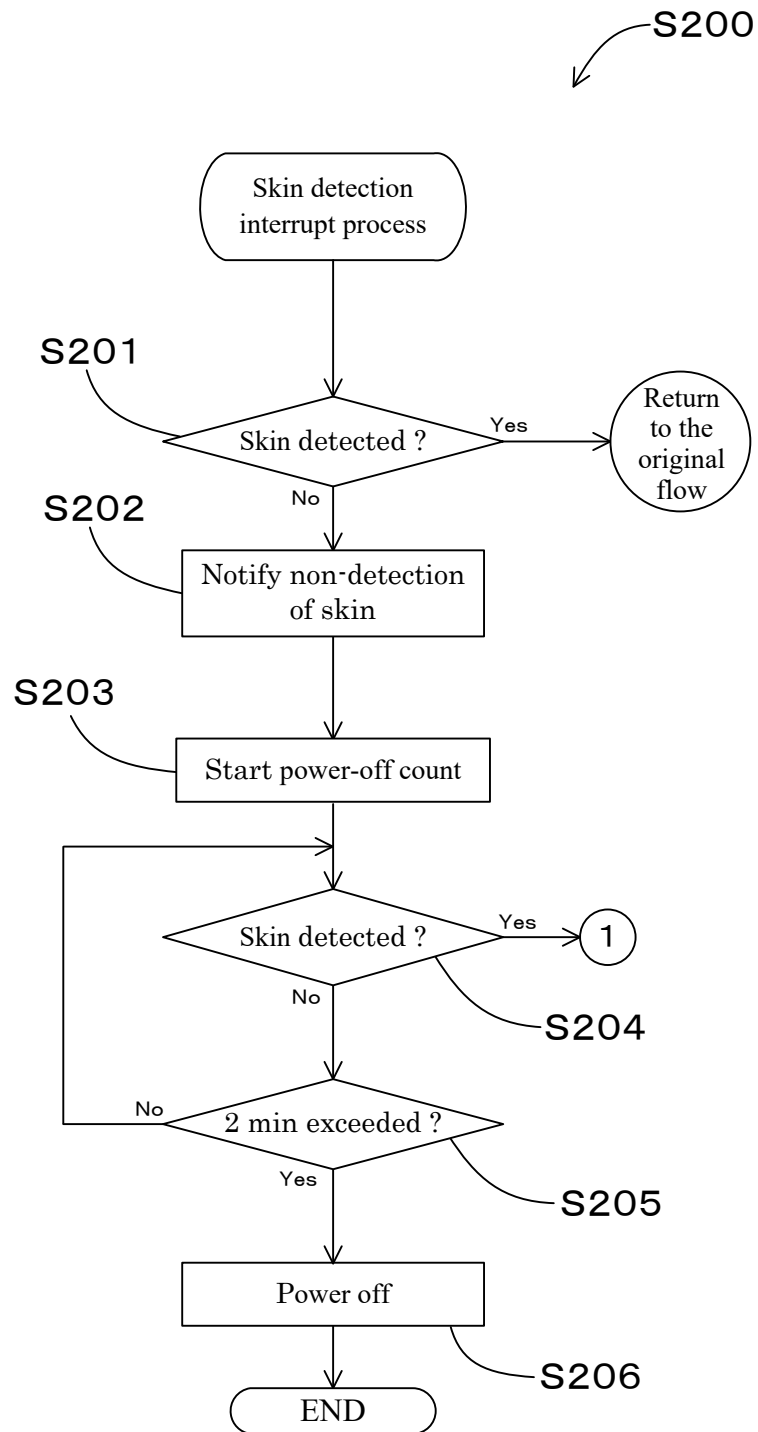
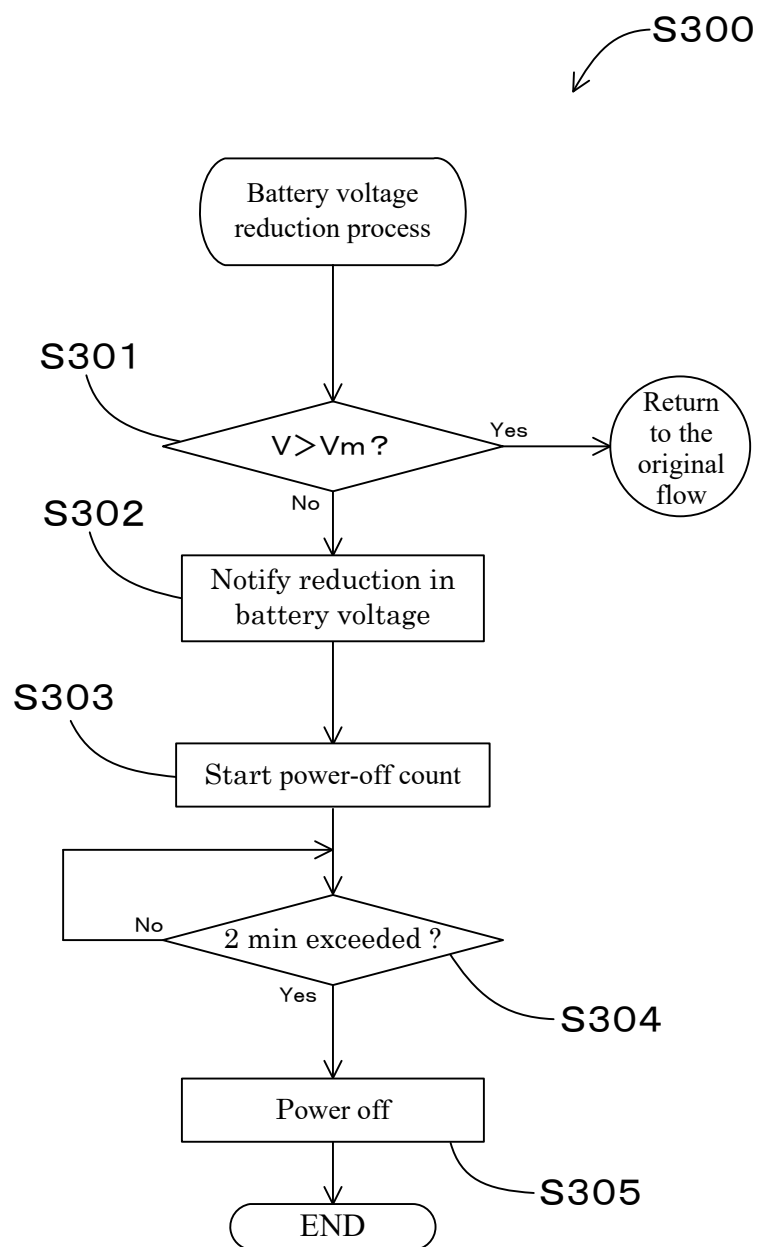


FIG. 11

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FIG. 12

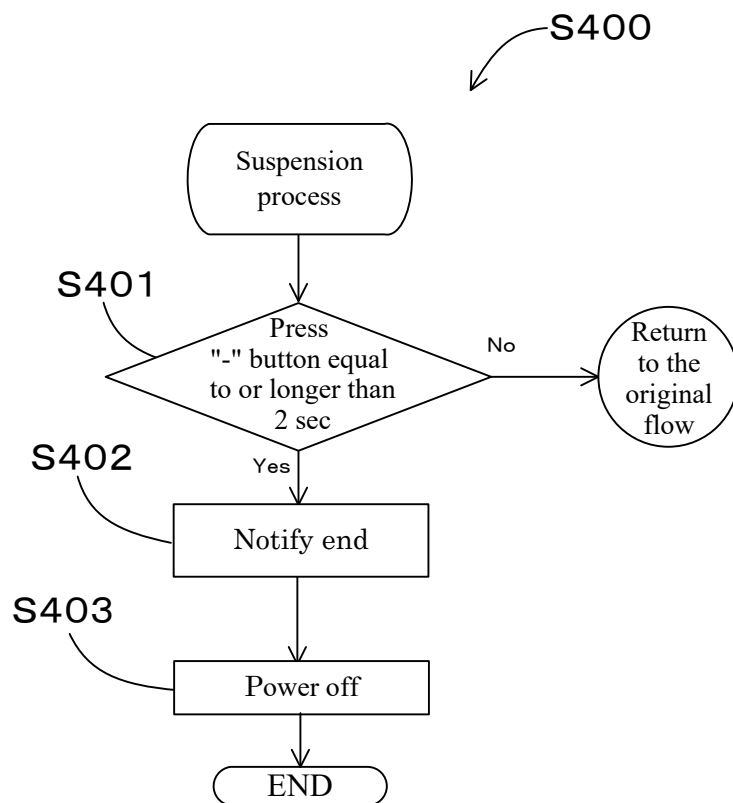


FIG. 13a First burst wave (2 Hz)

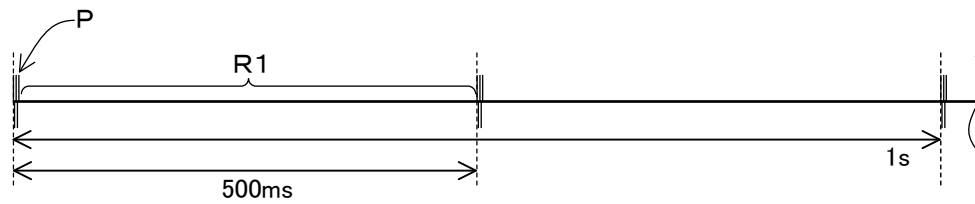


FIG. 13b Second burst wave (4 Hz)

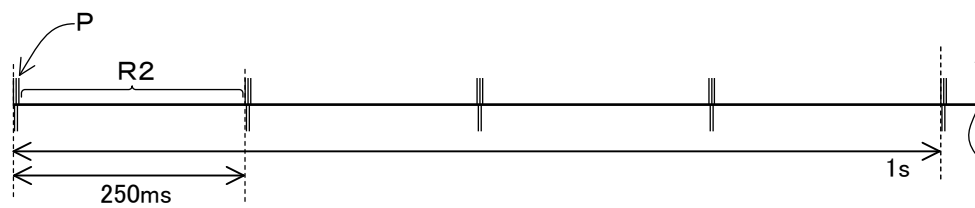


FIG. 13c Third burst wave (8 Hz)

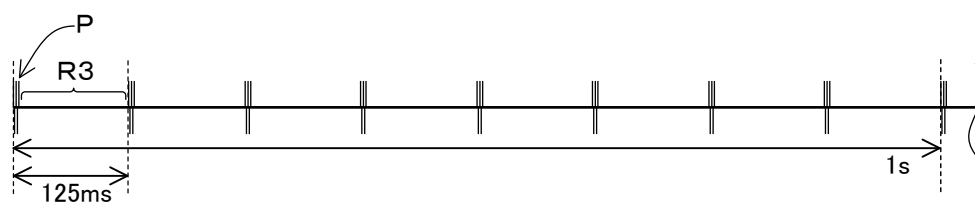


FIG. 13d Fourth burst wave (16 Hz)

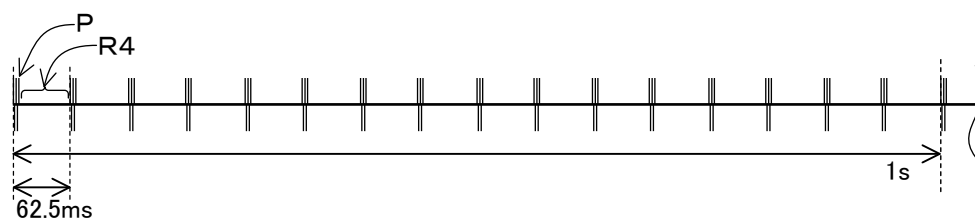


FIG. 13e Fifth burst wave (20 Hz)

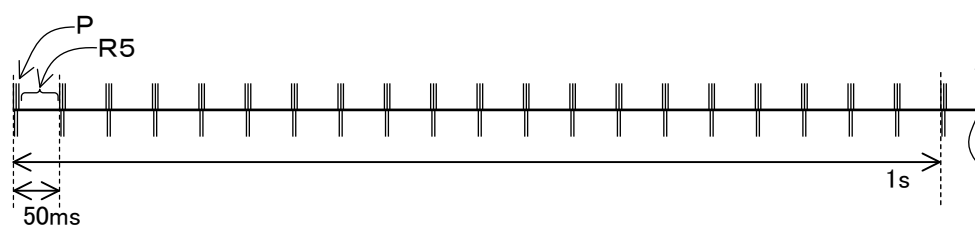


FIG. 15

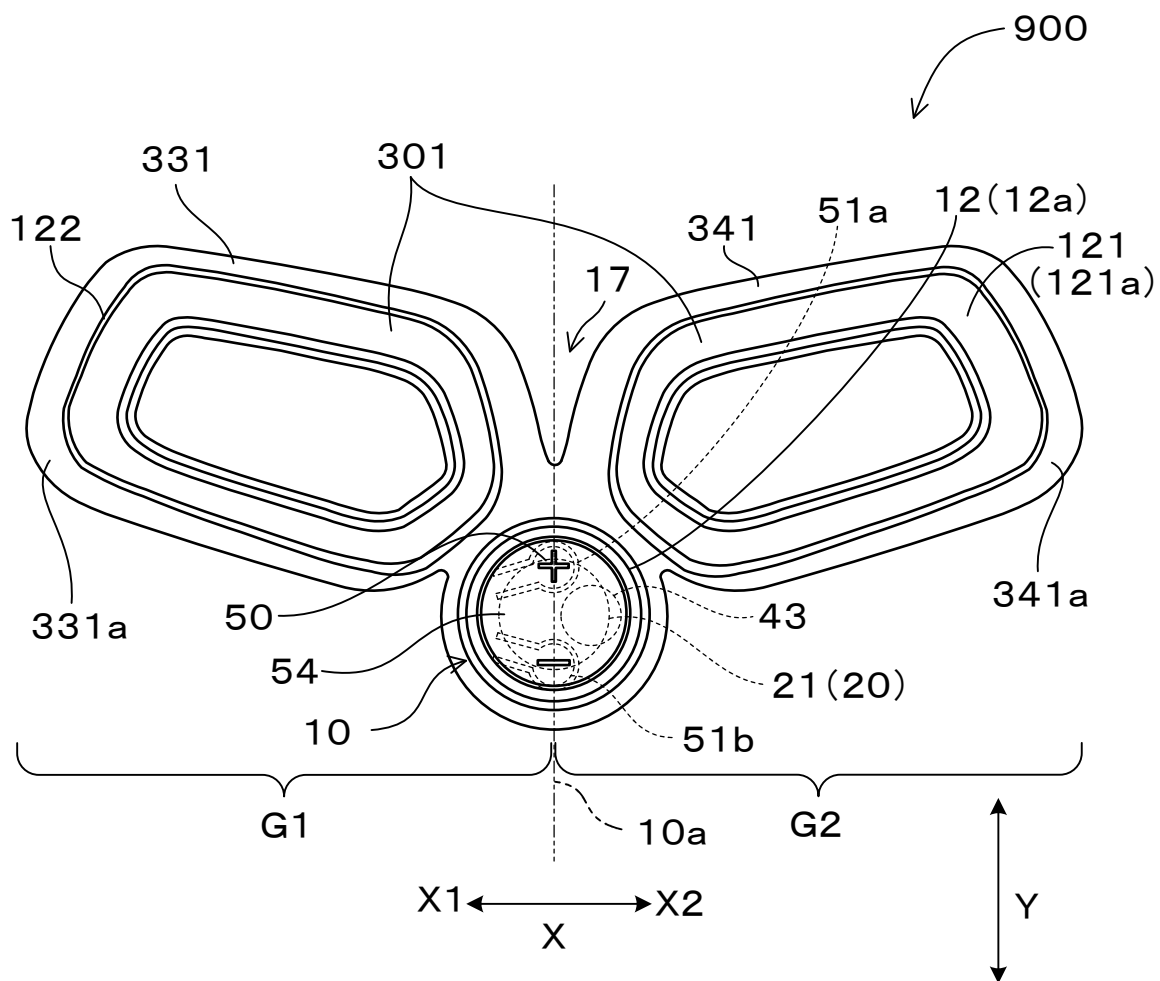


FIG. 16

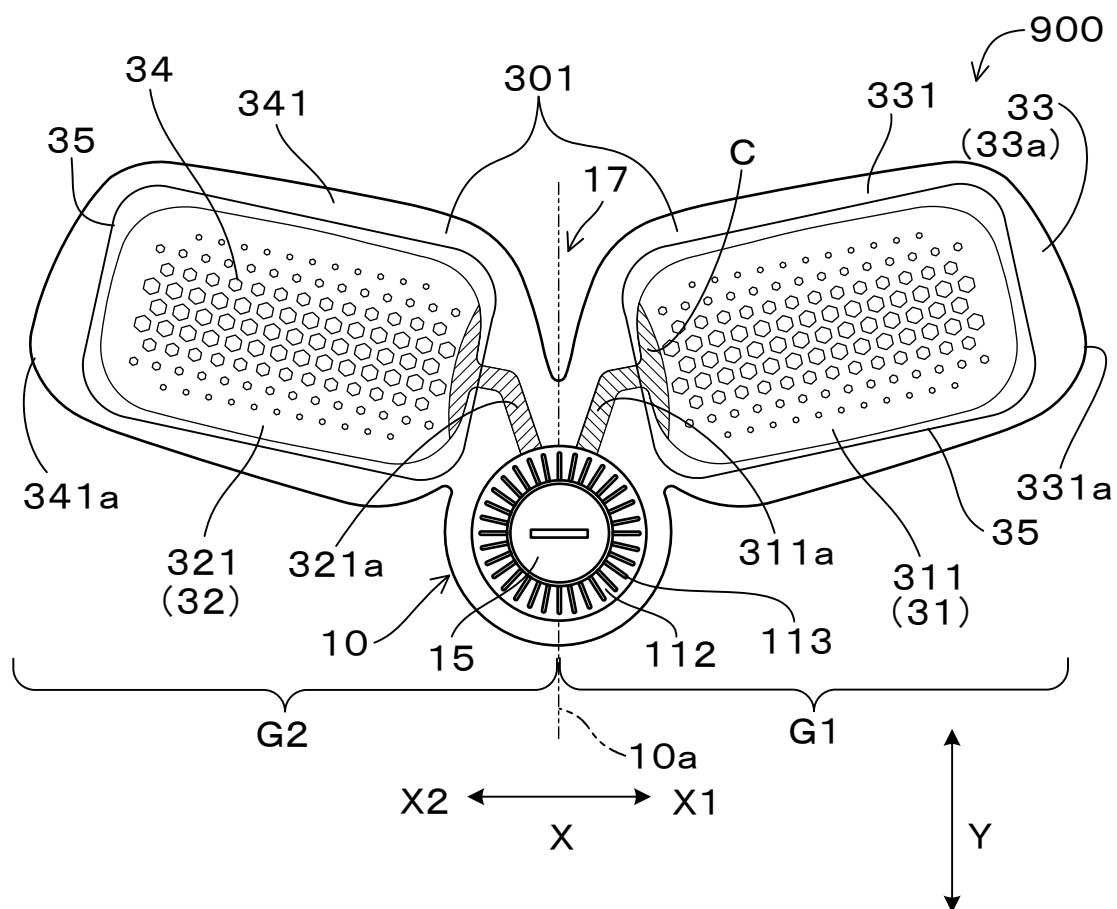


FIG. 18a

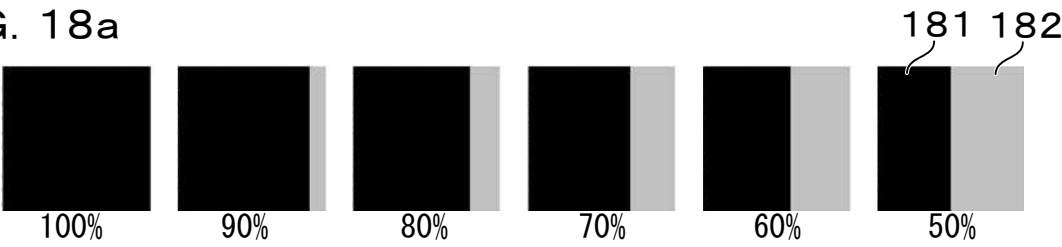


FIG. 18b

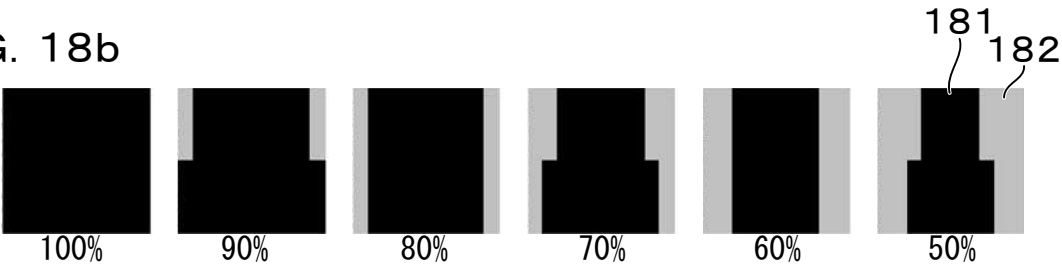


FIG. 18c

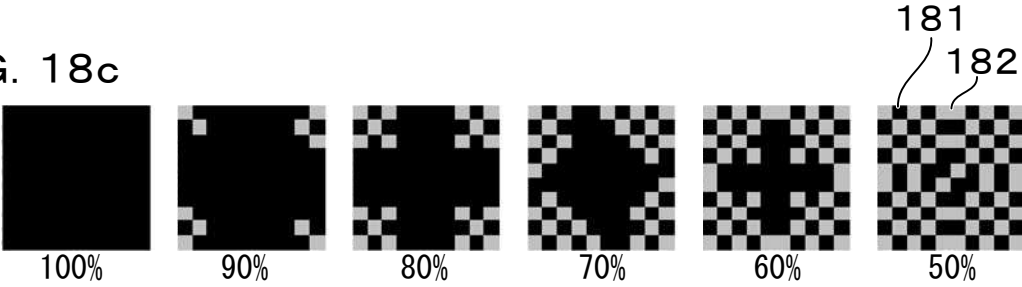


FIG. 18d

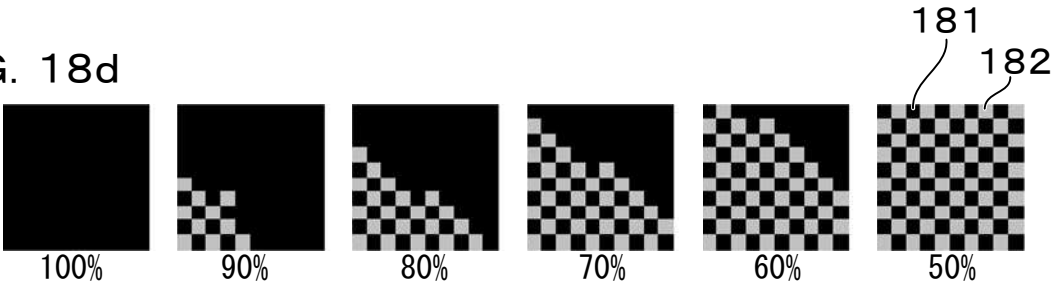


FIG. 18e

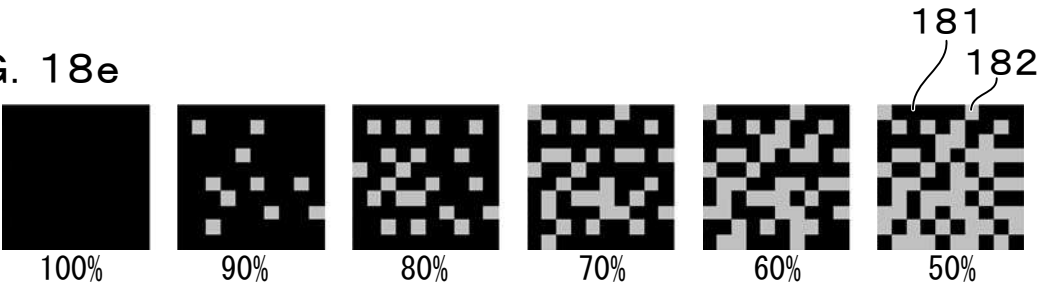


FIG. 20

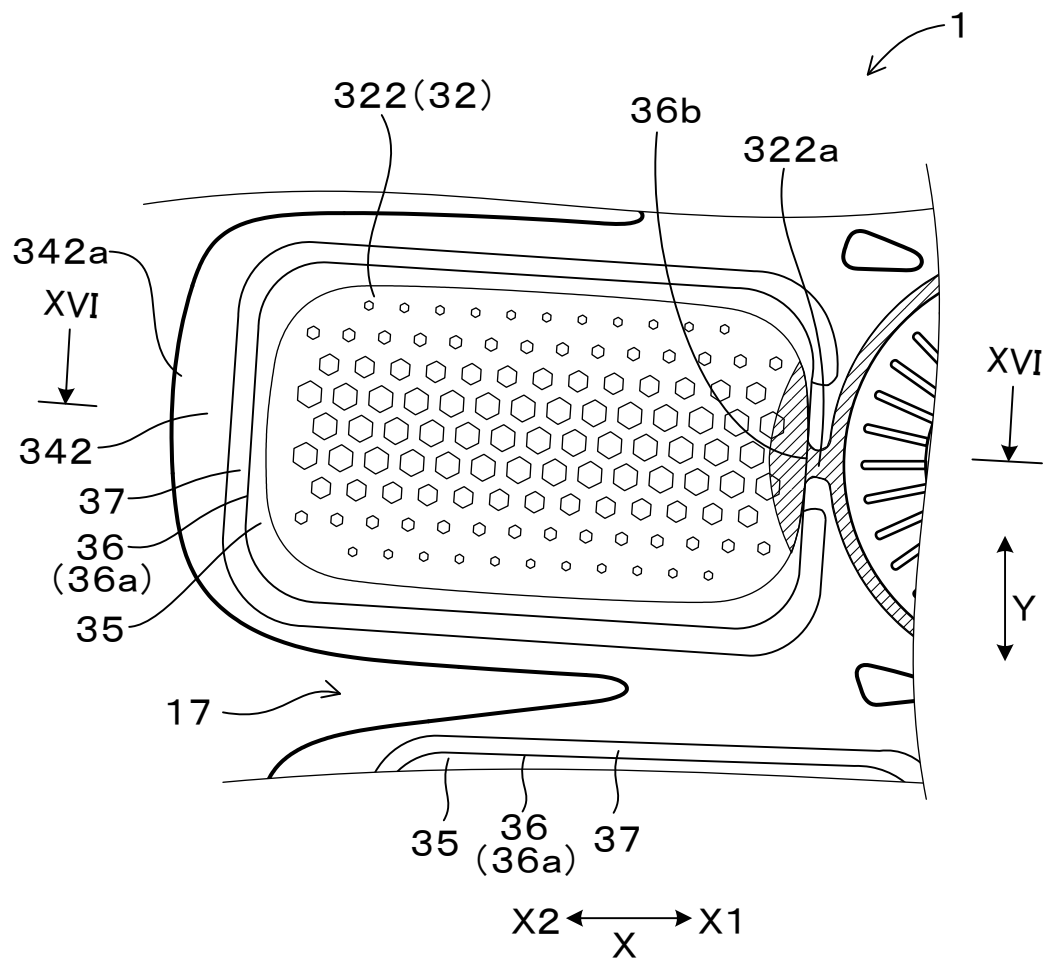


FIG. 21

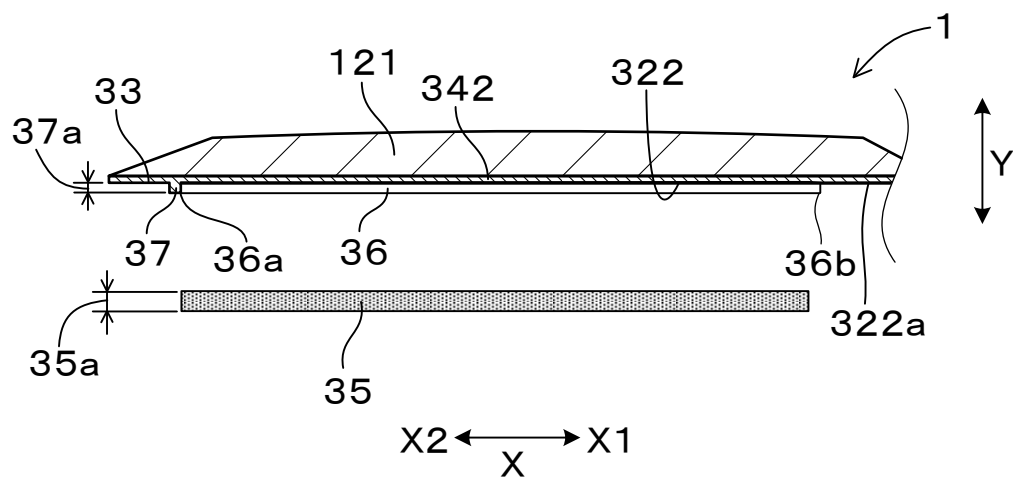


FIG. 23

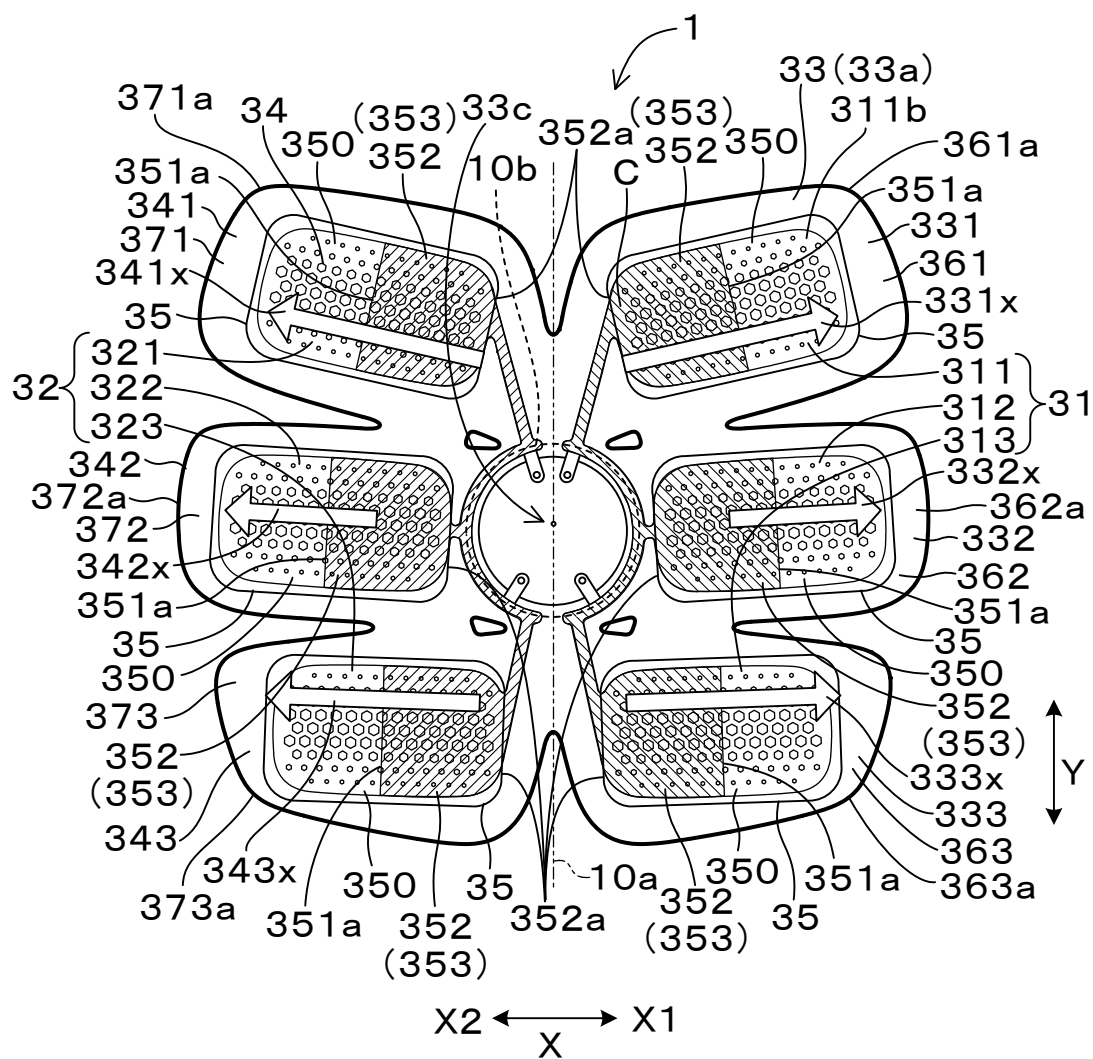


FIG. 24

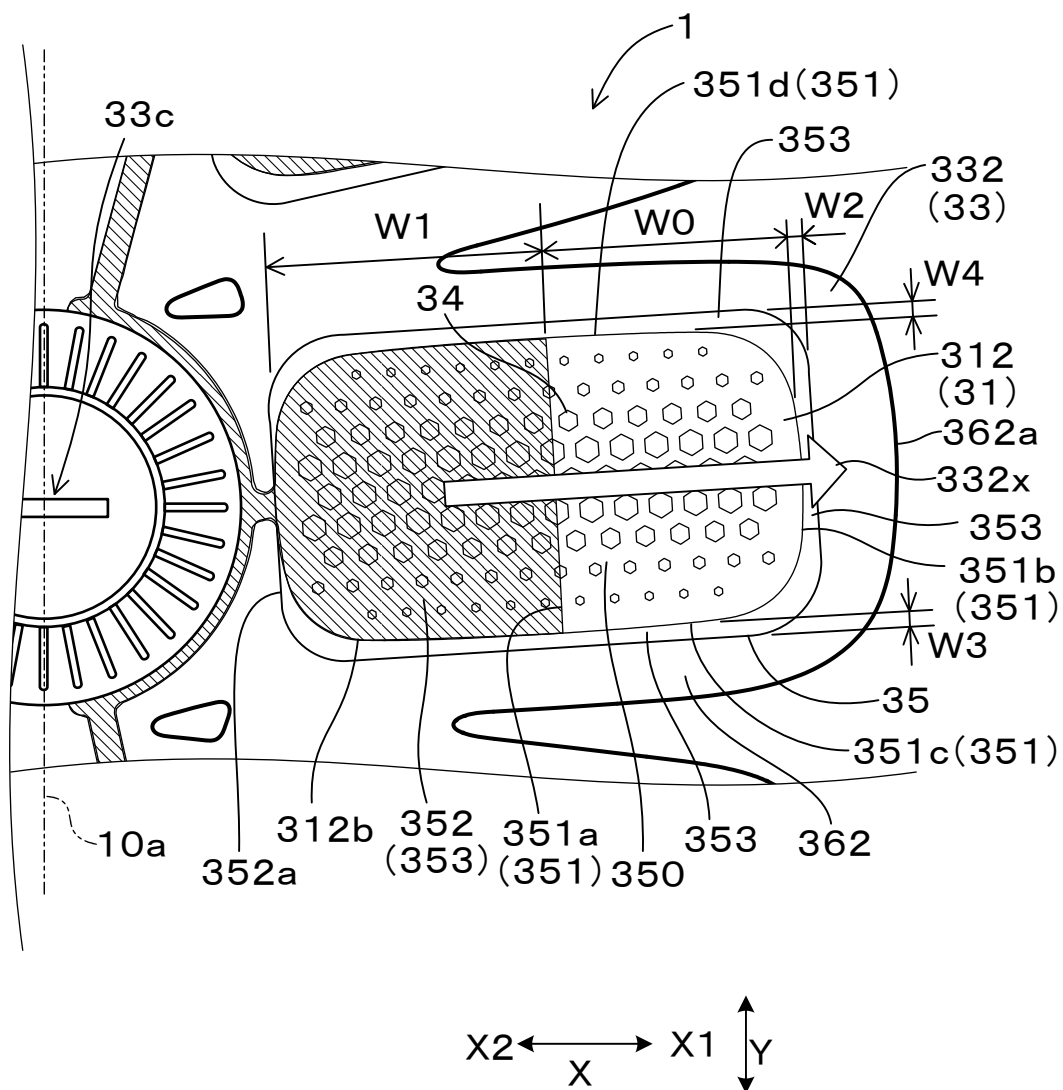


FIG. 25a

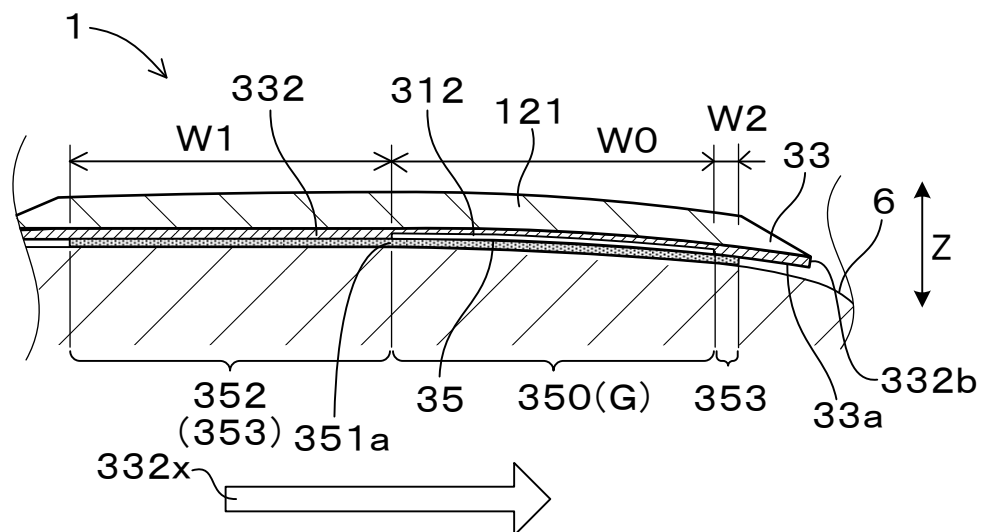


FIG. 25b

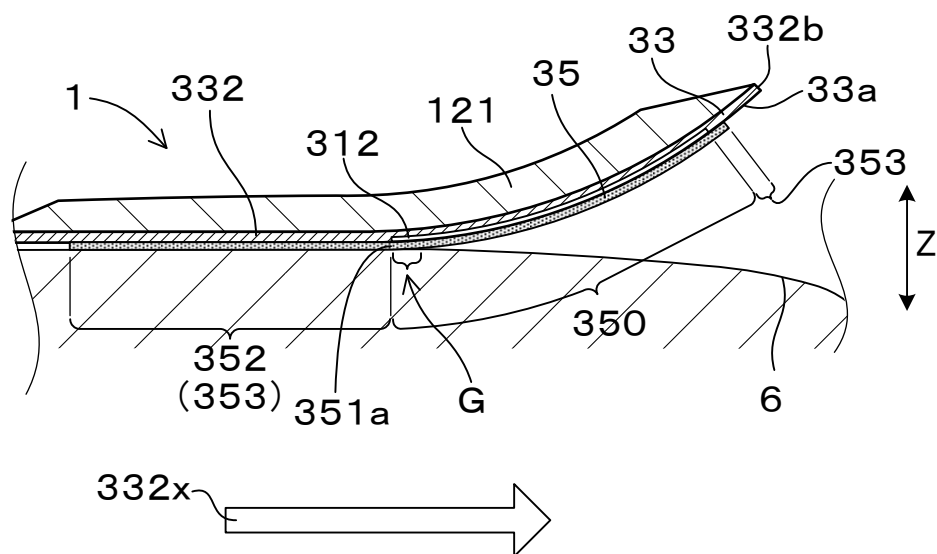


FIG. 26

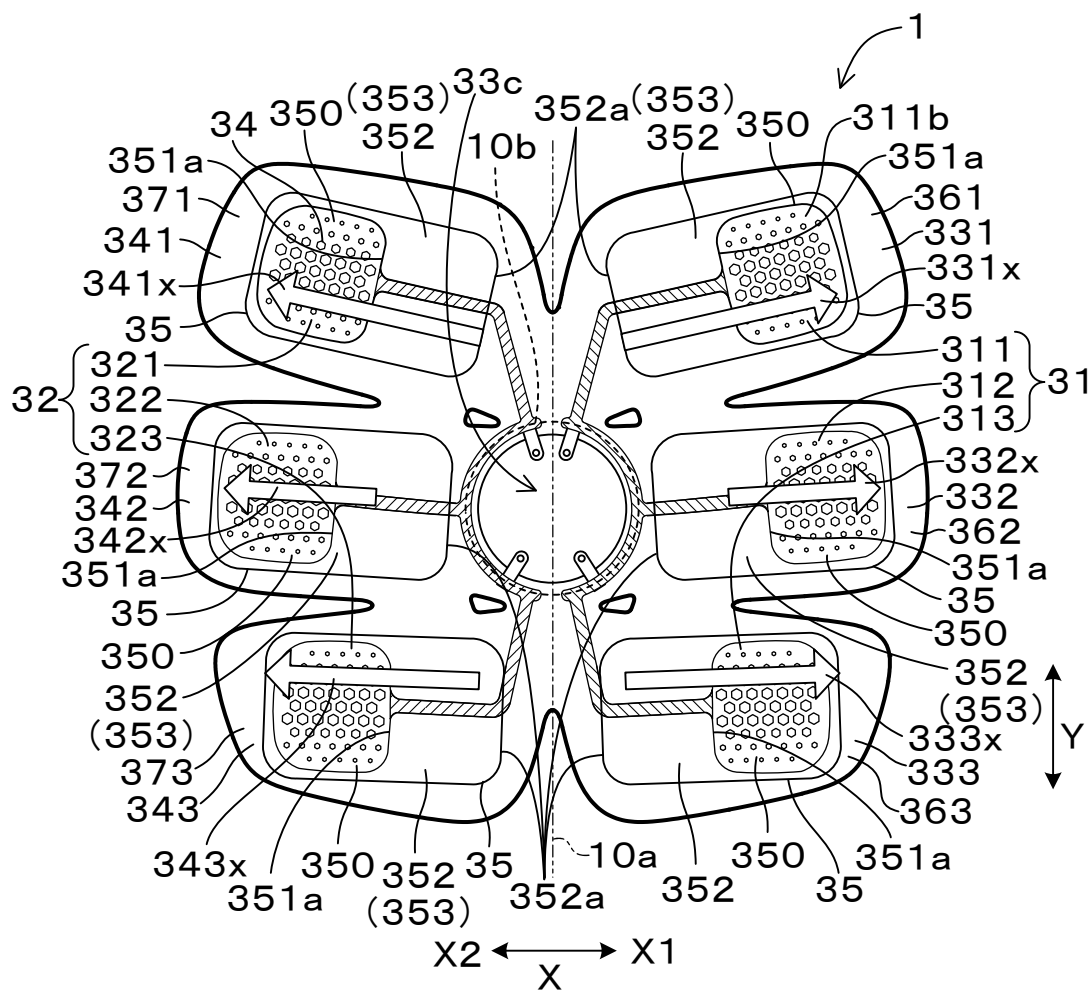


FIG. 27

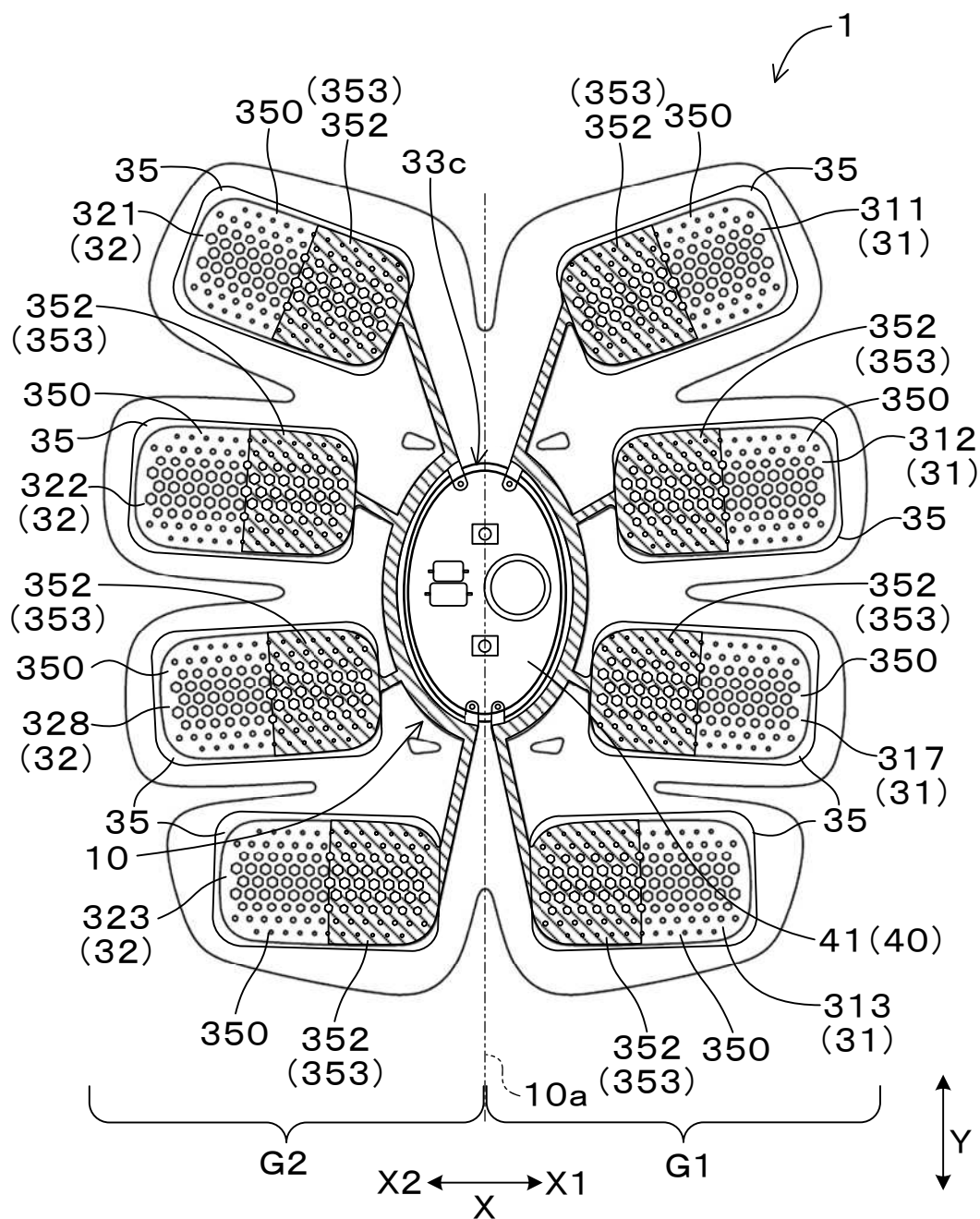


FIG. 28

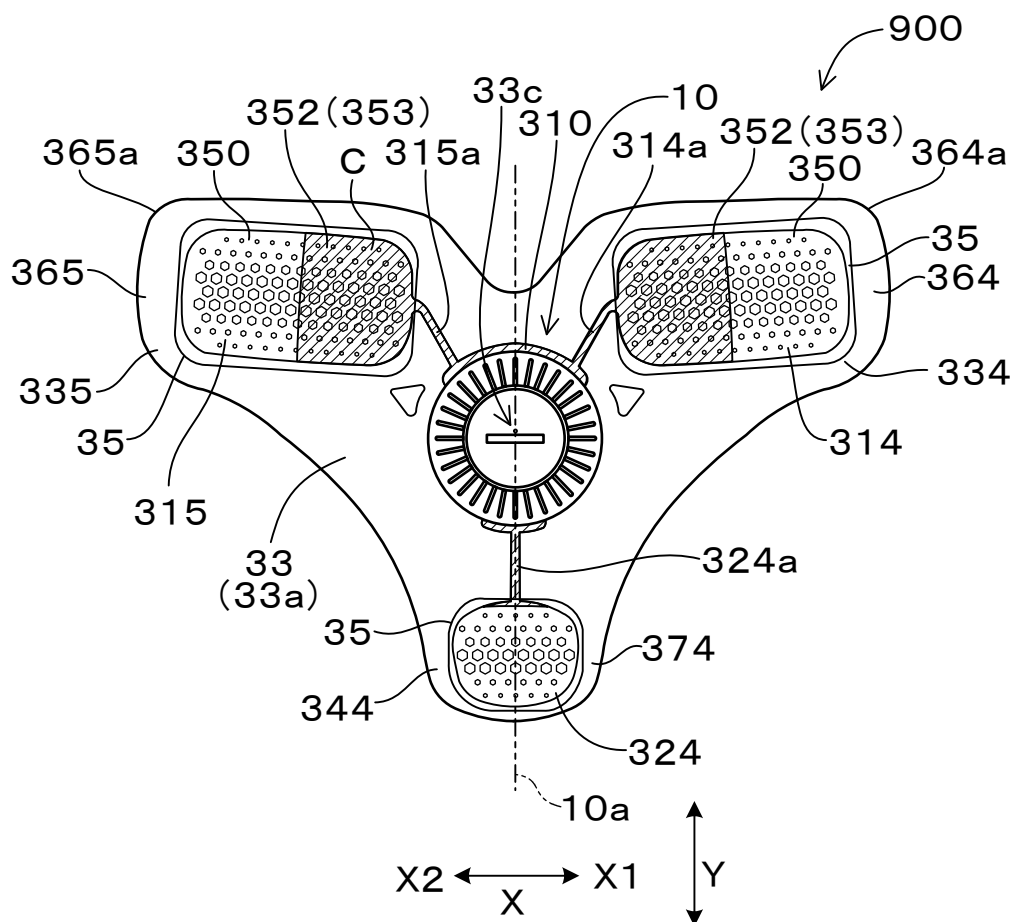


FIG. 29

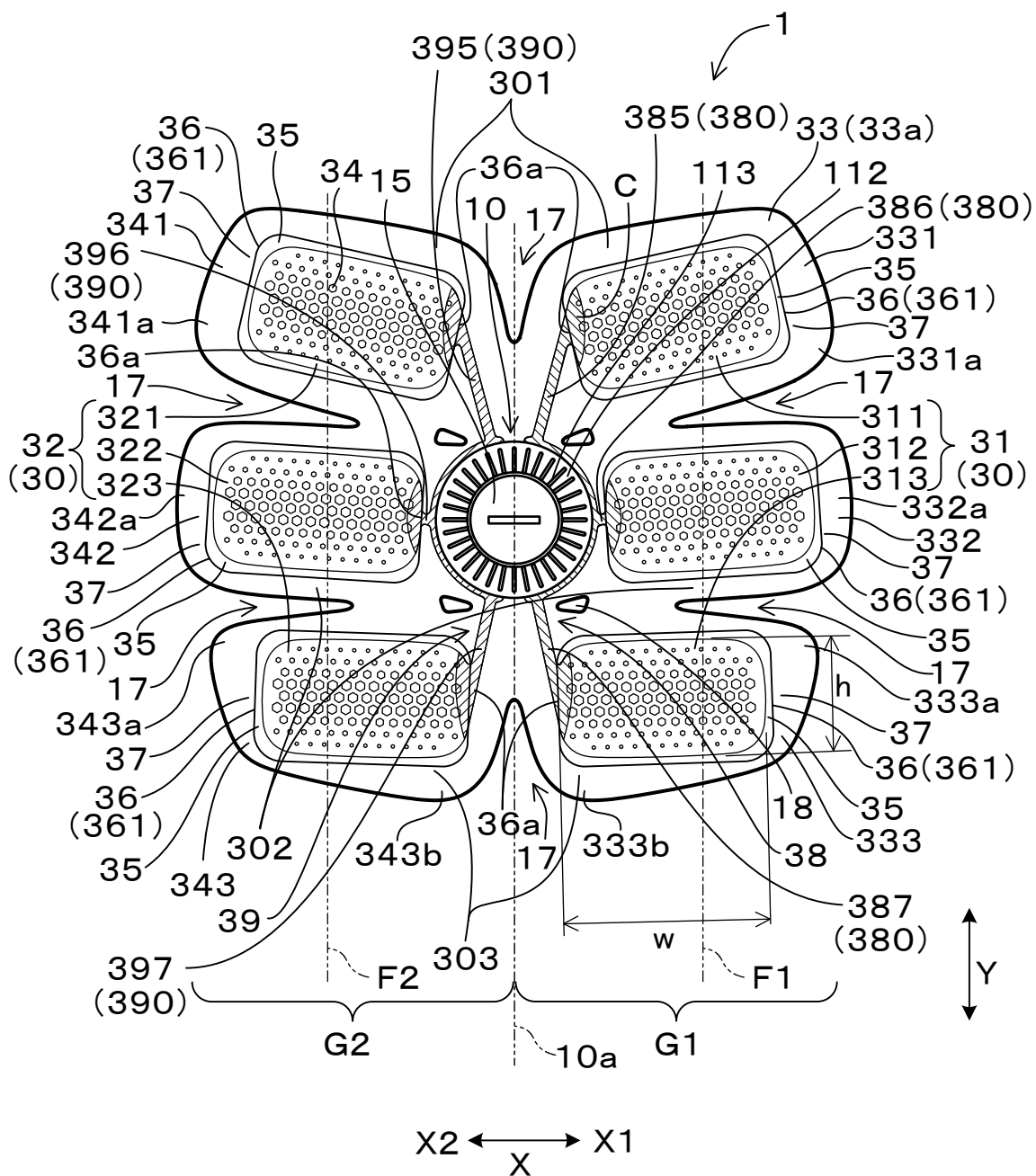


FIG. 30

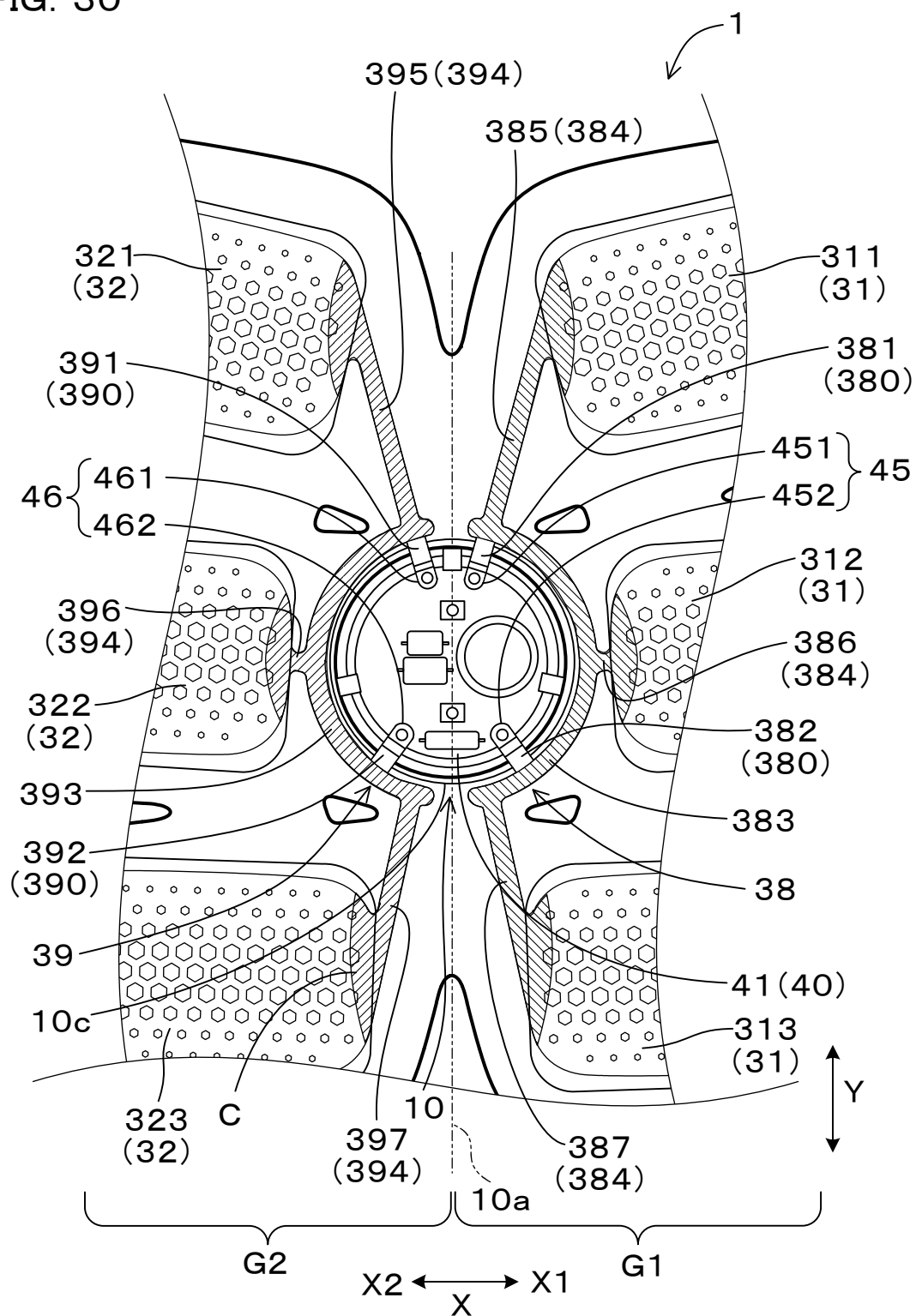


FIG. 32

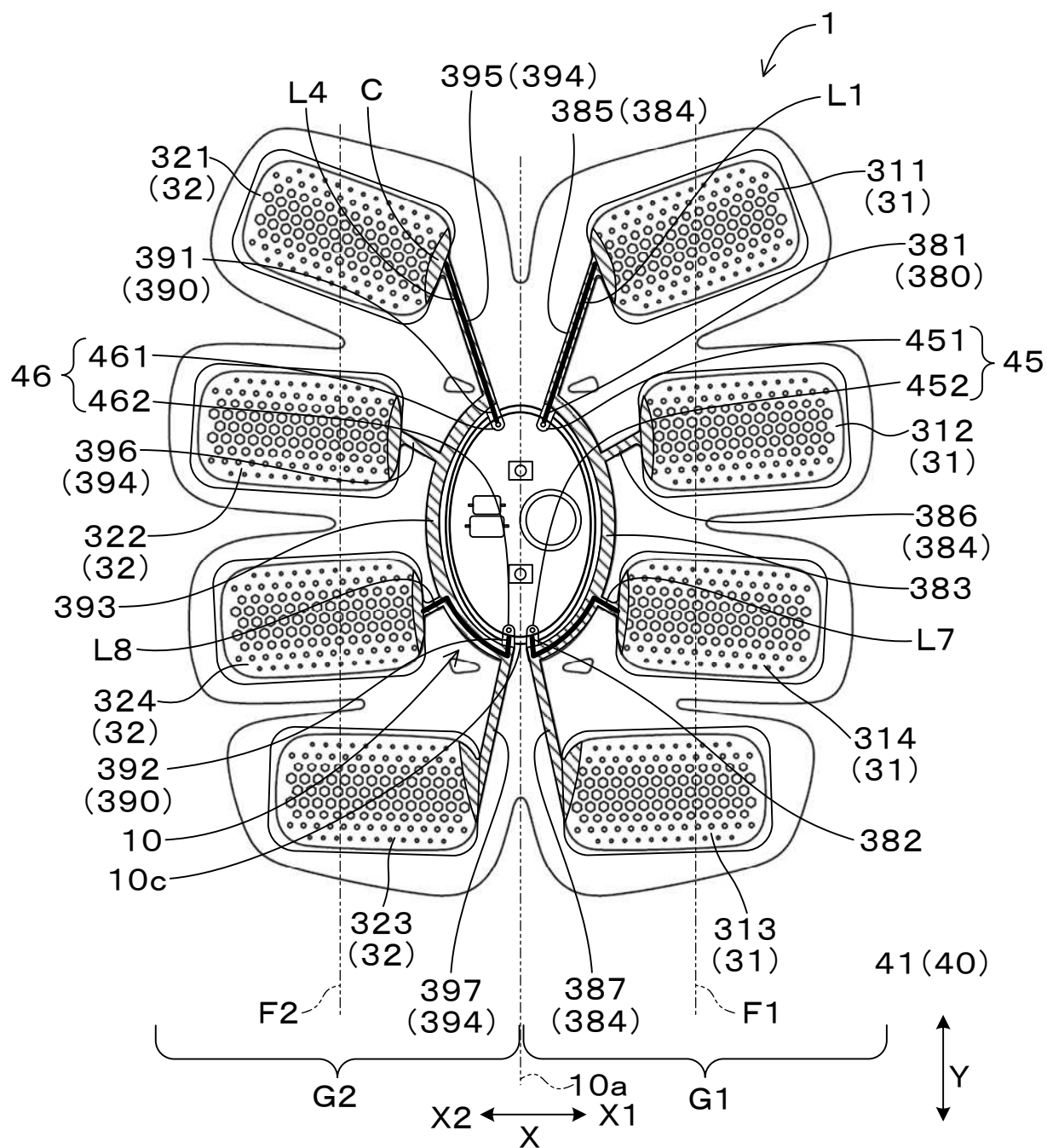


FIG. 33

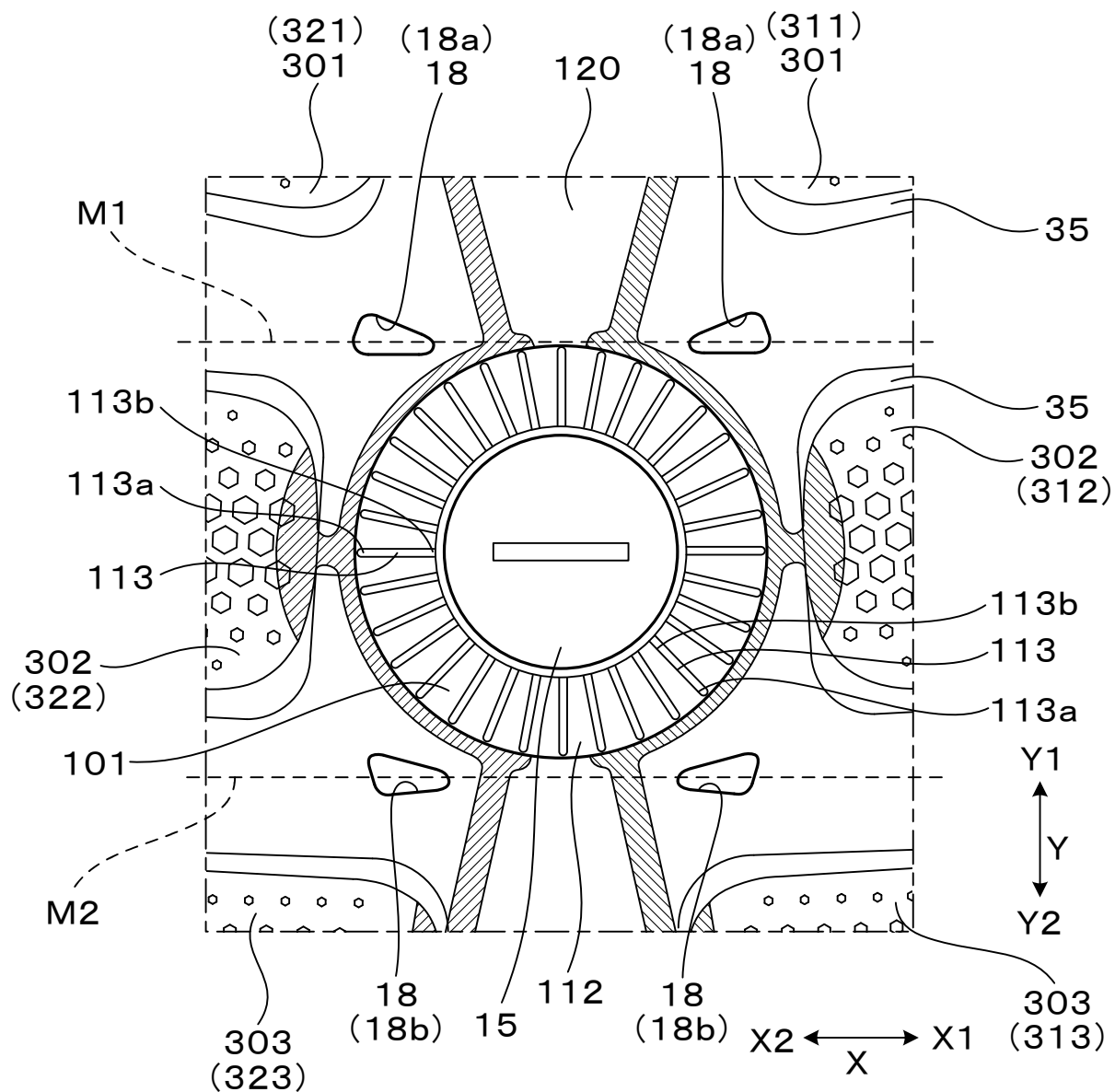
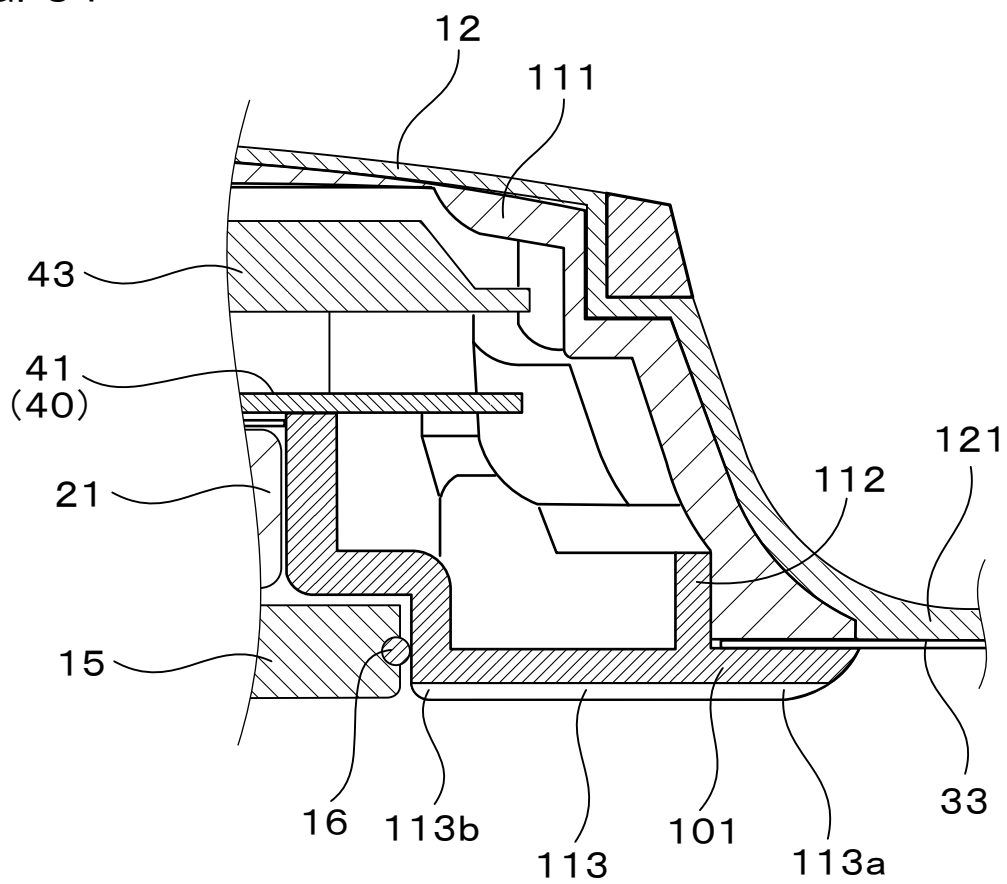


FIG. 34



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FIG. 35

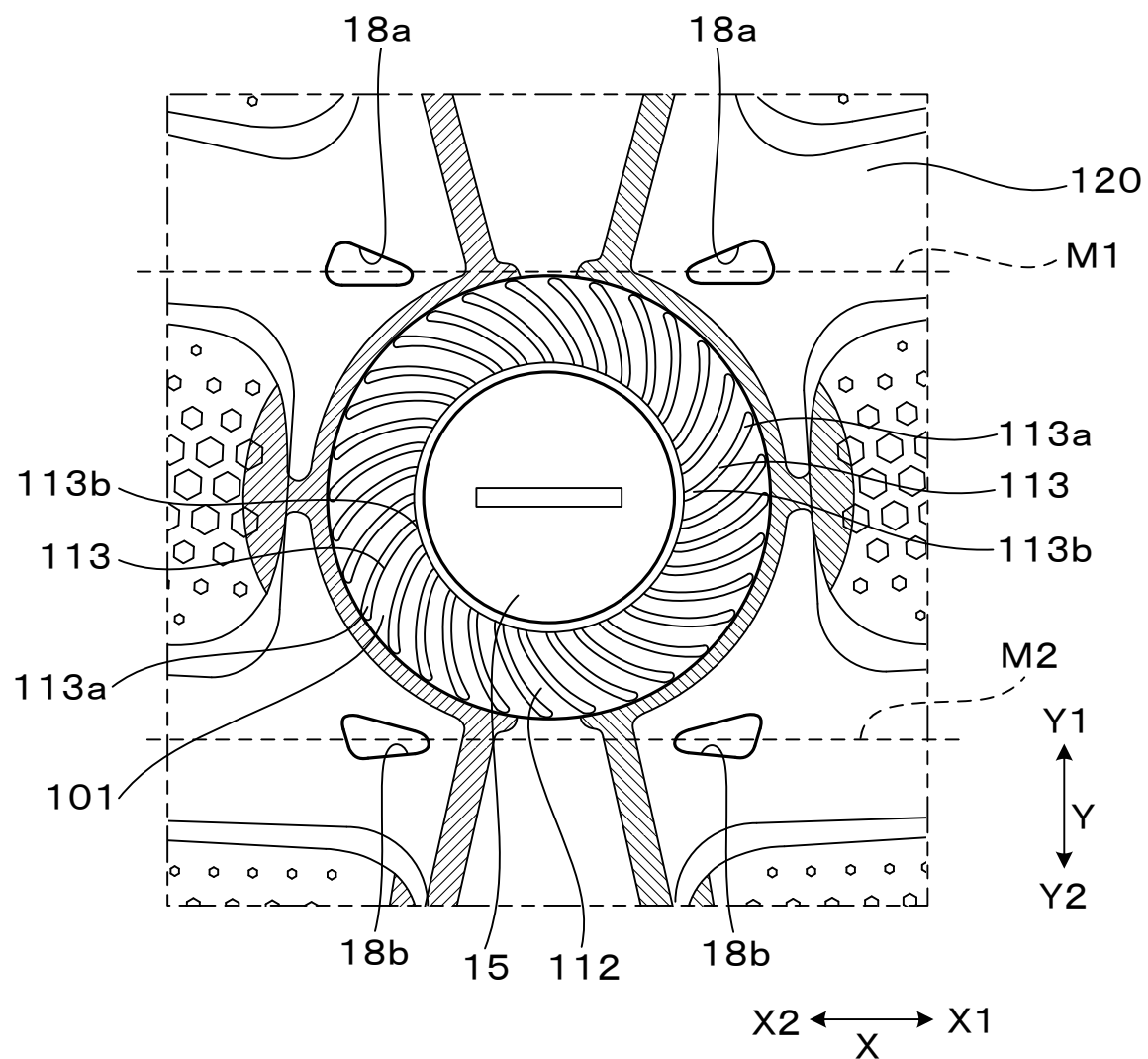


FIG. 36

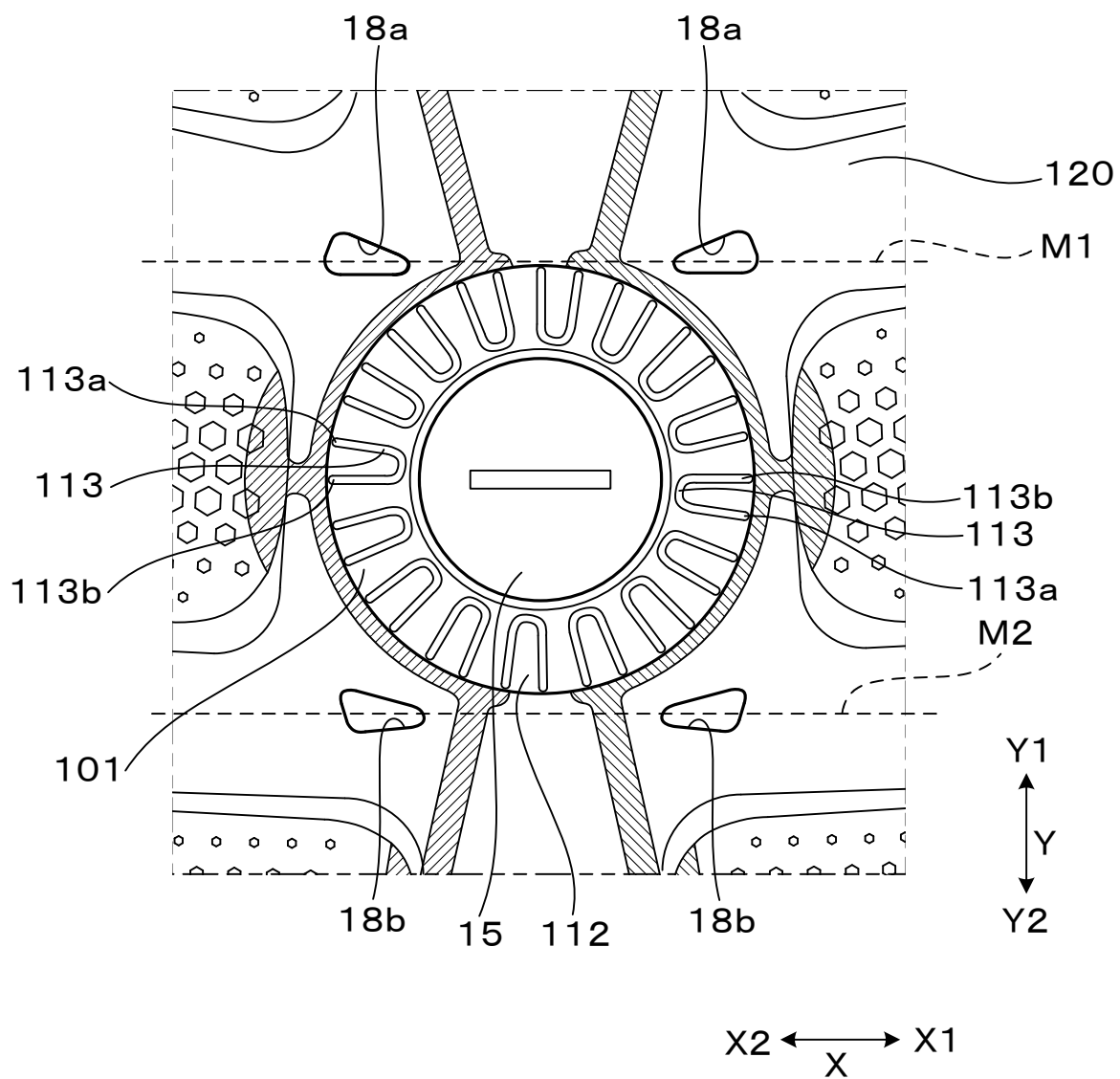
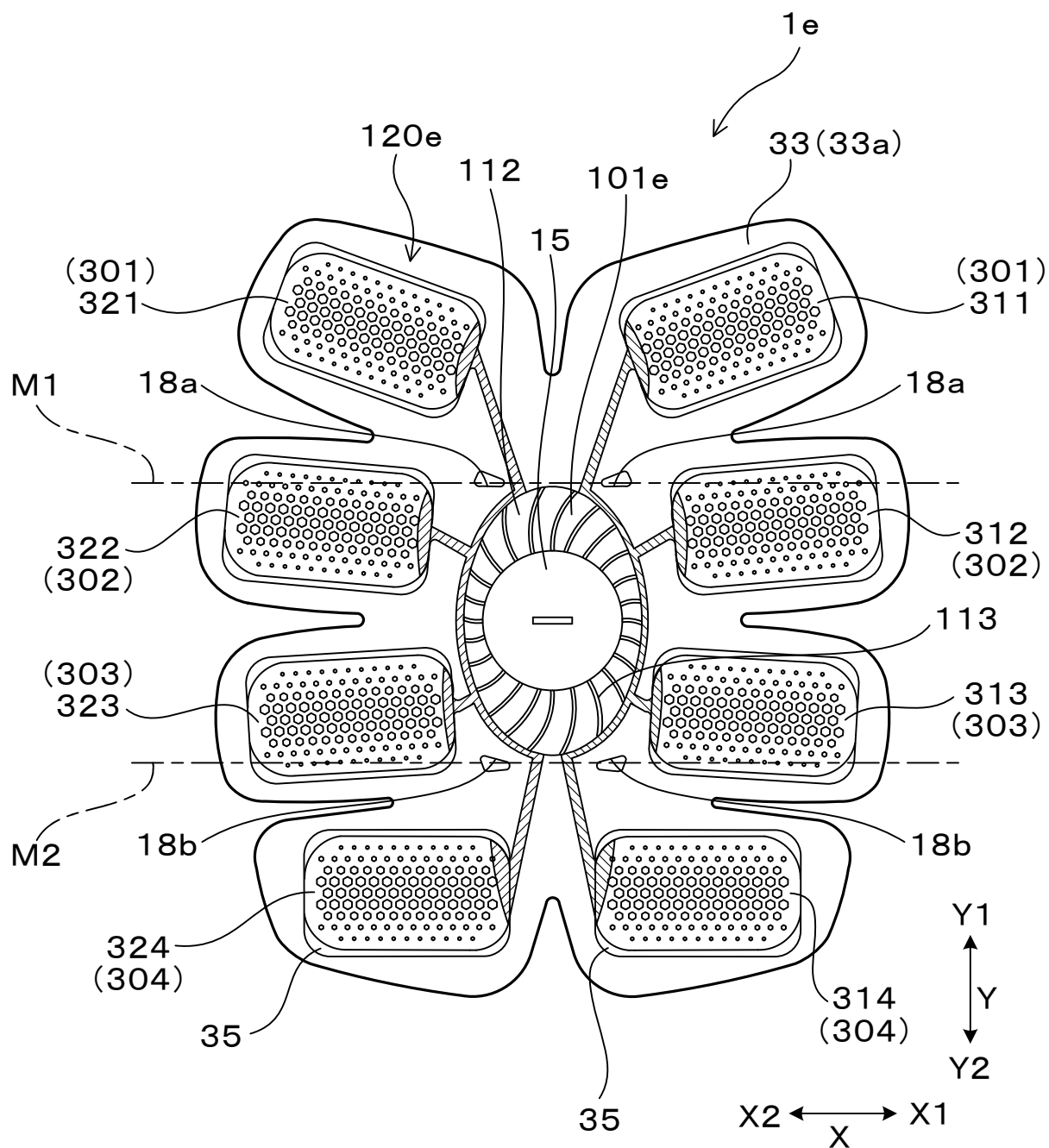


FIG. 37



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FIG. 38

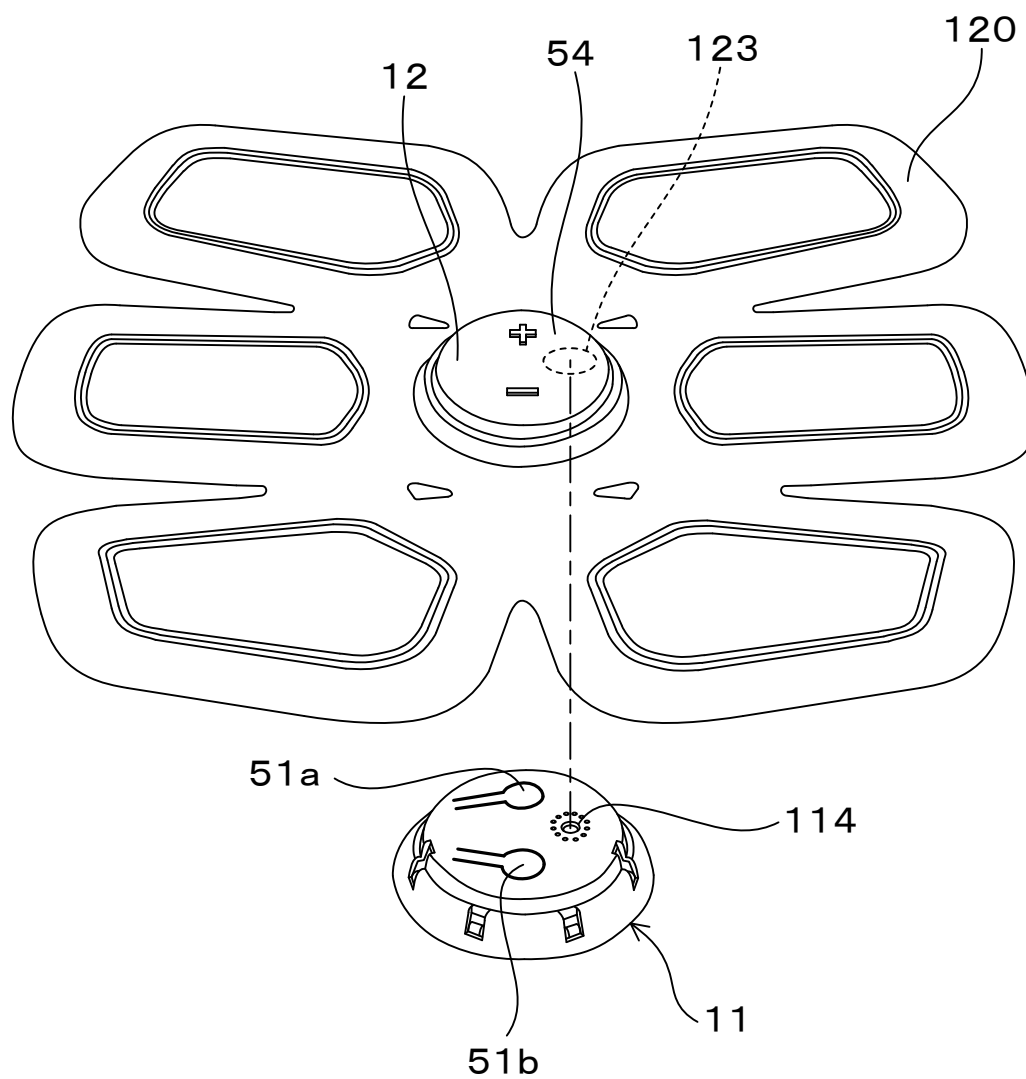


FIG. 39

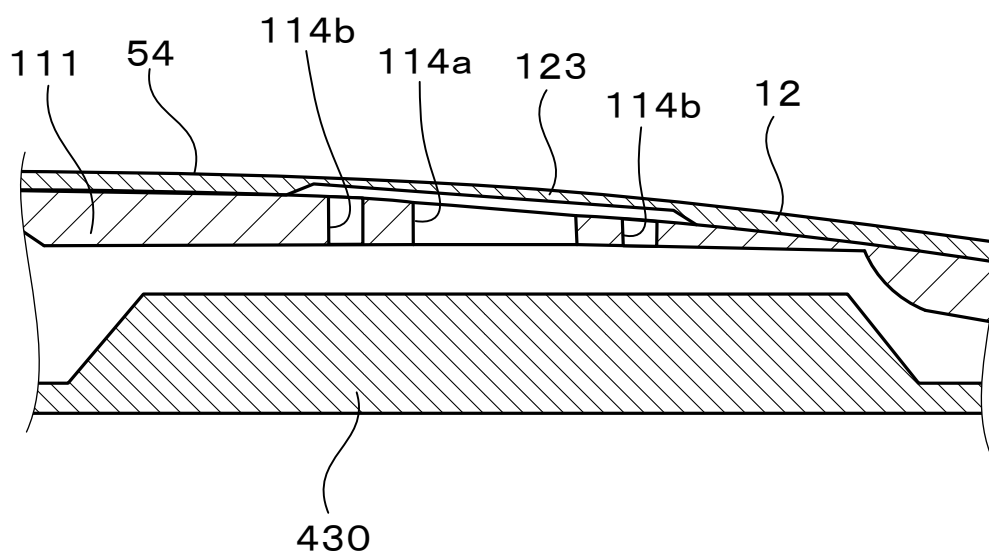


FIG. 40

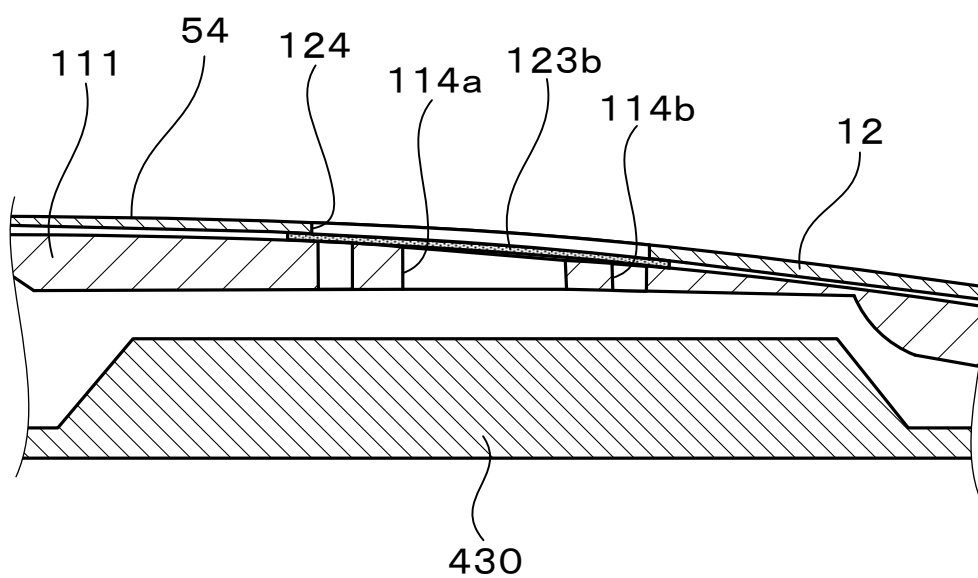


FIG. 41a

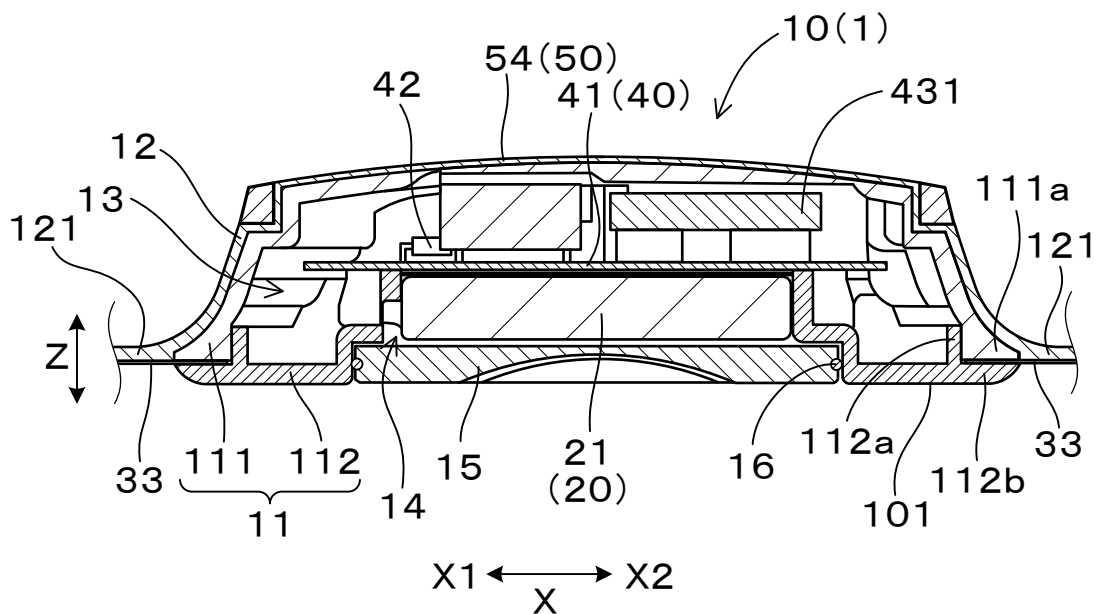


FIG. 41b

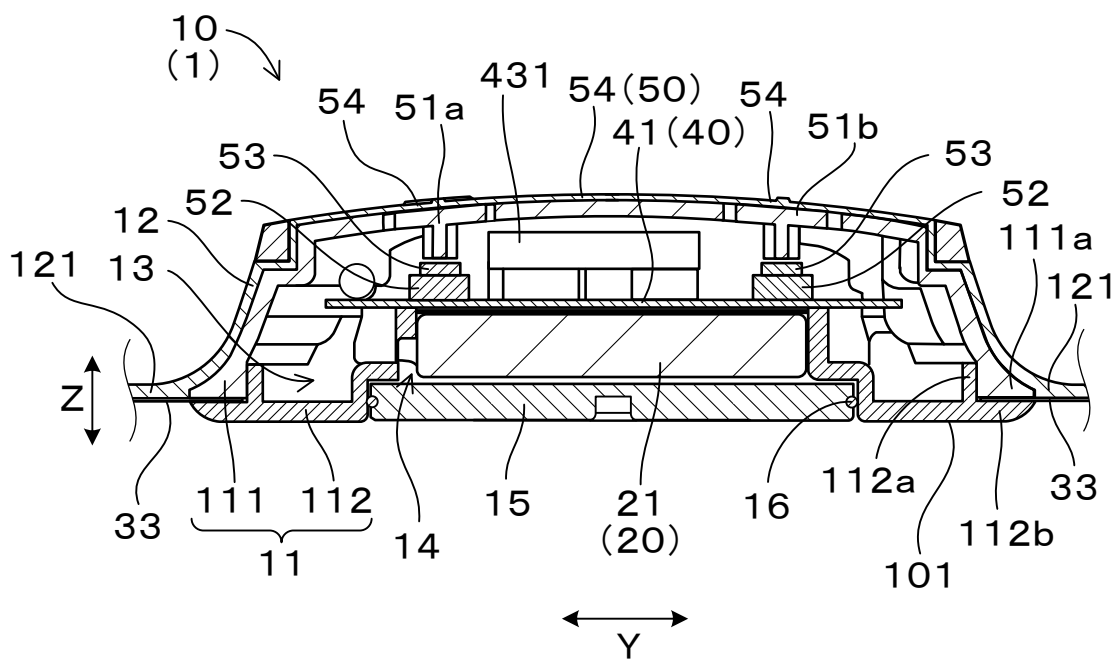


FIG. 42

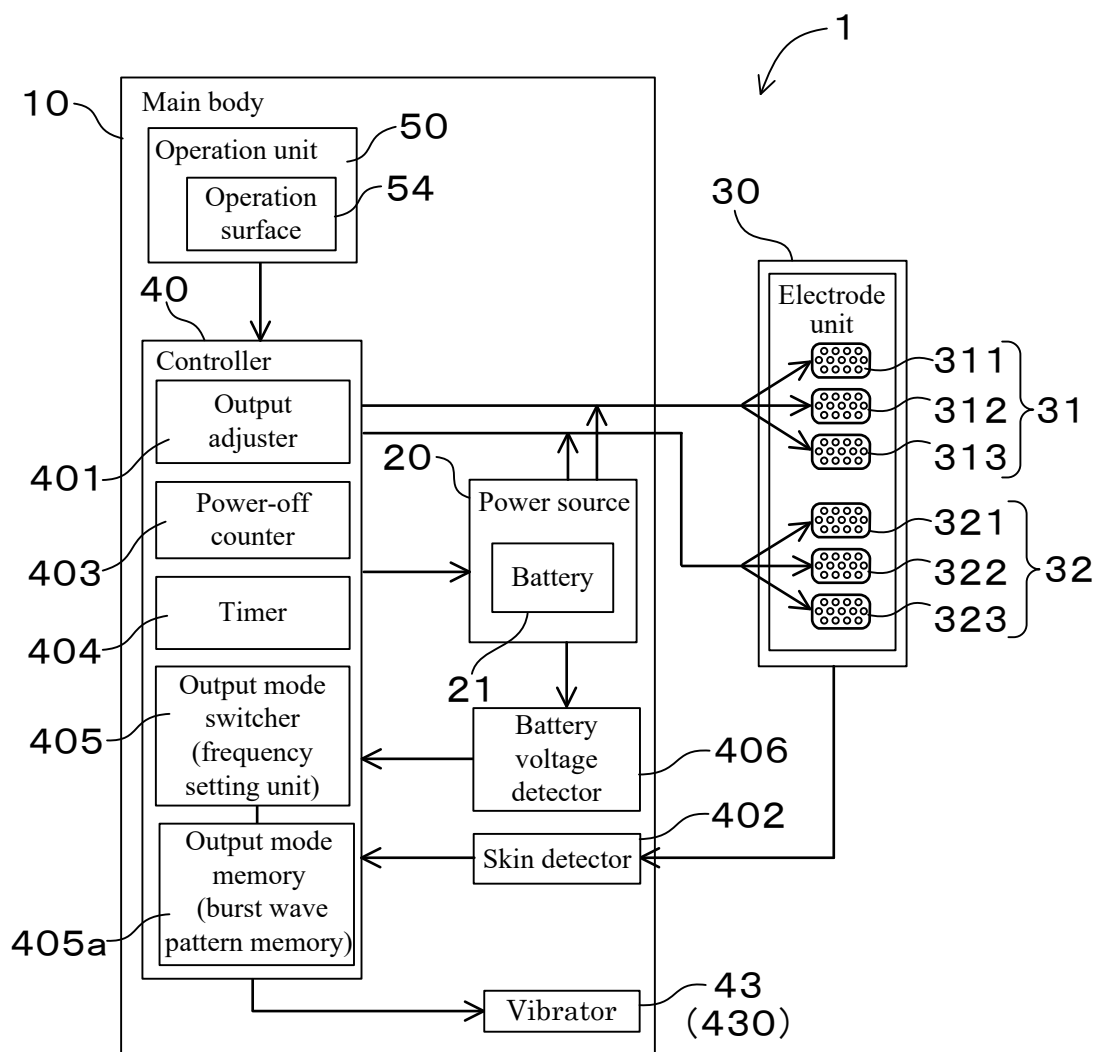


FIG. 43a

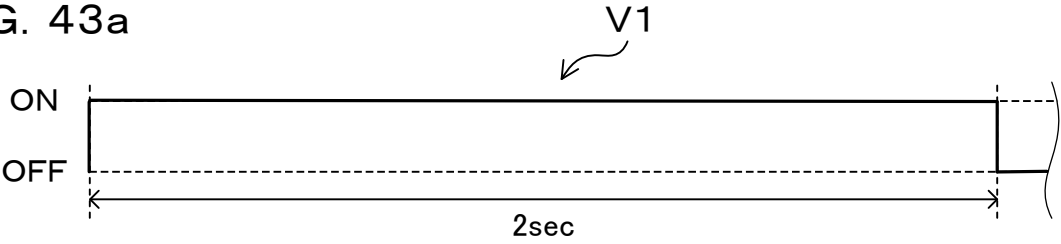


FIG. 43b

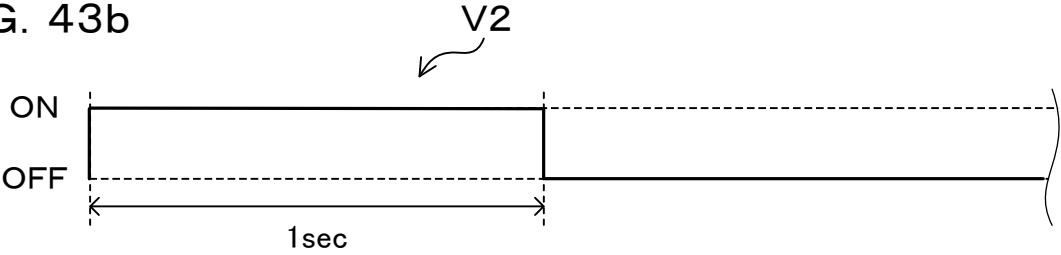


FIG. 43c

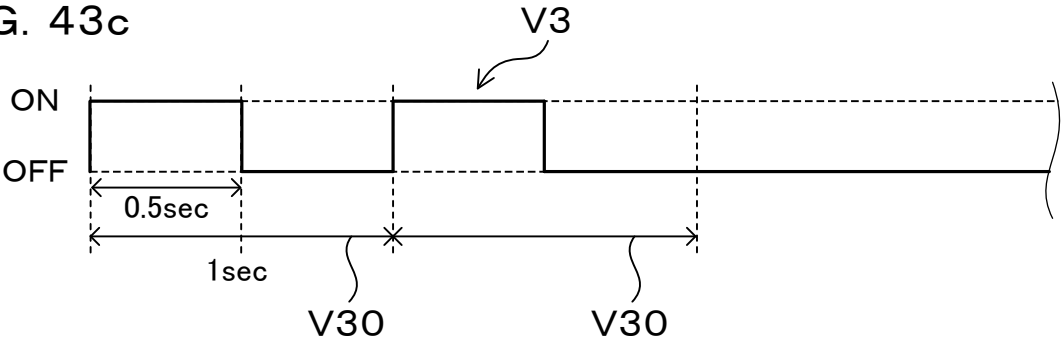


FIG. 43d

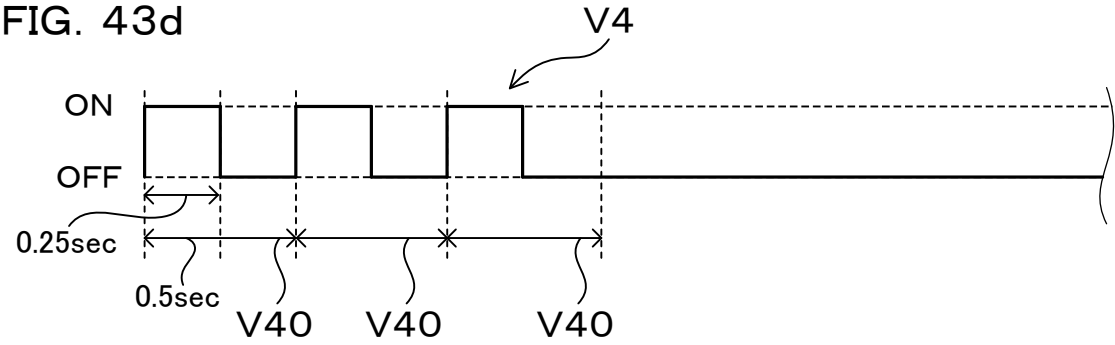


FIG. 43e

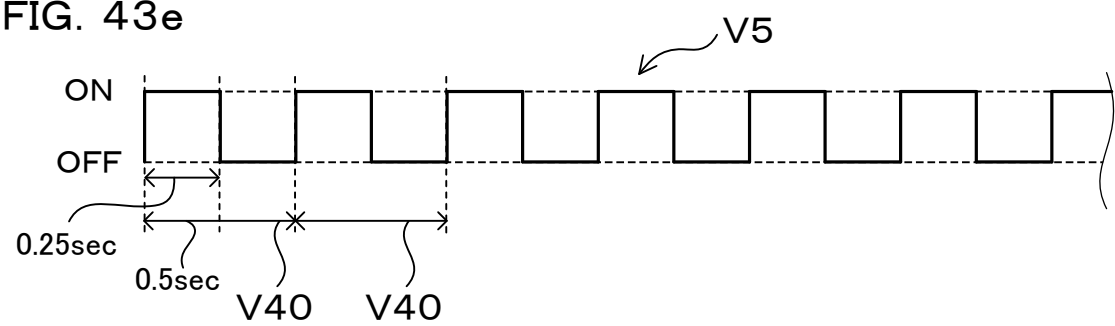


FIG. 44

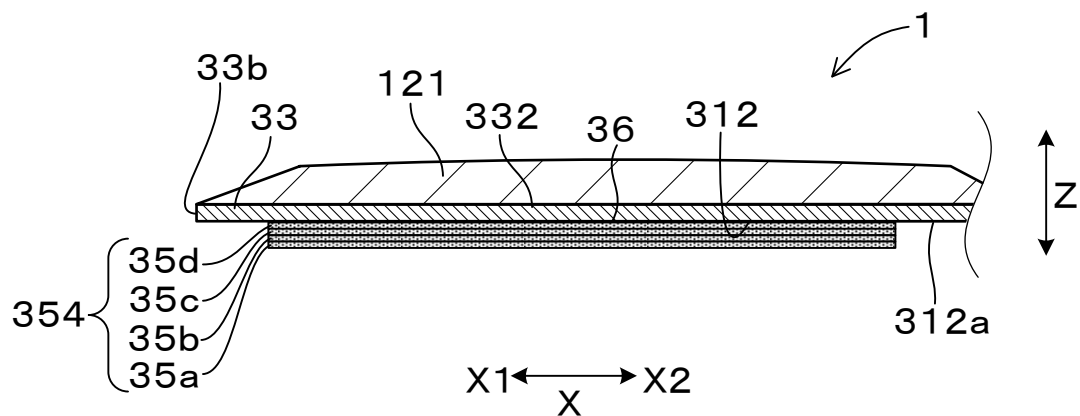


FIG. 45

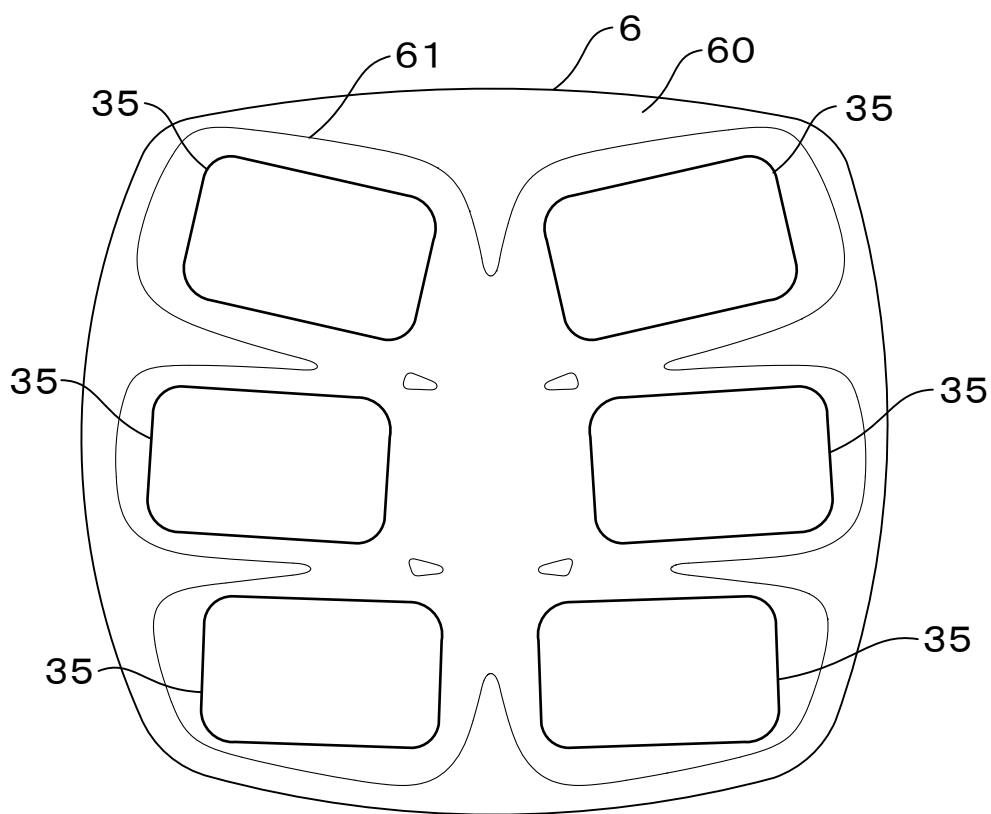


FIG. 46

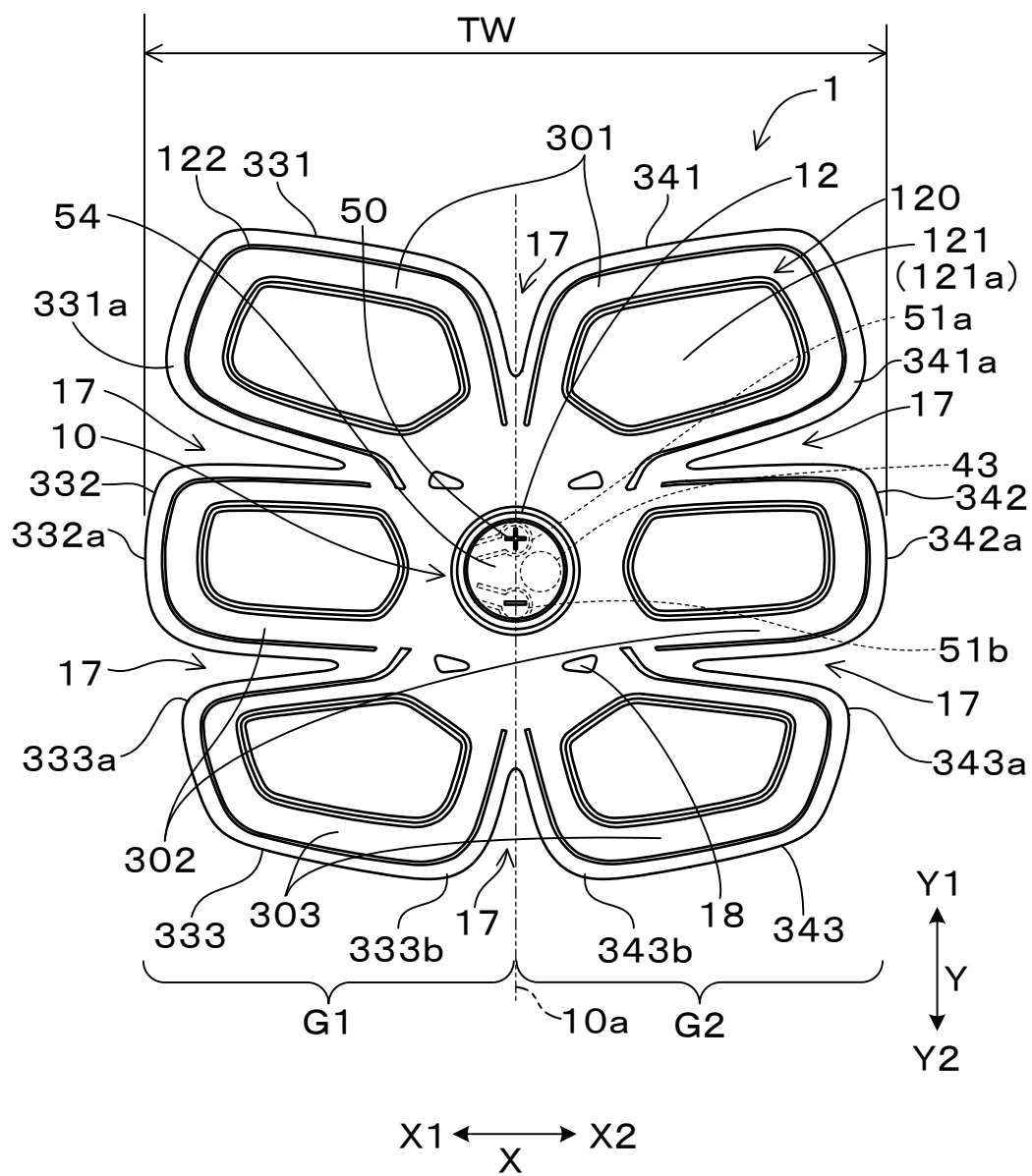
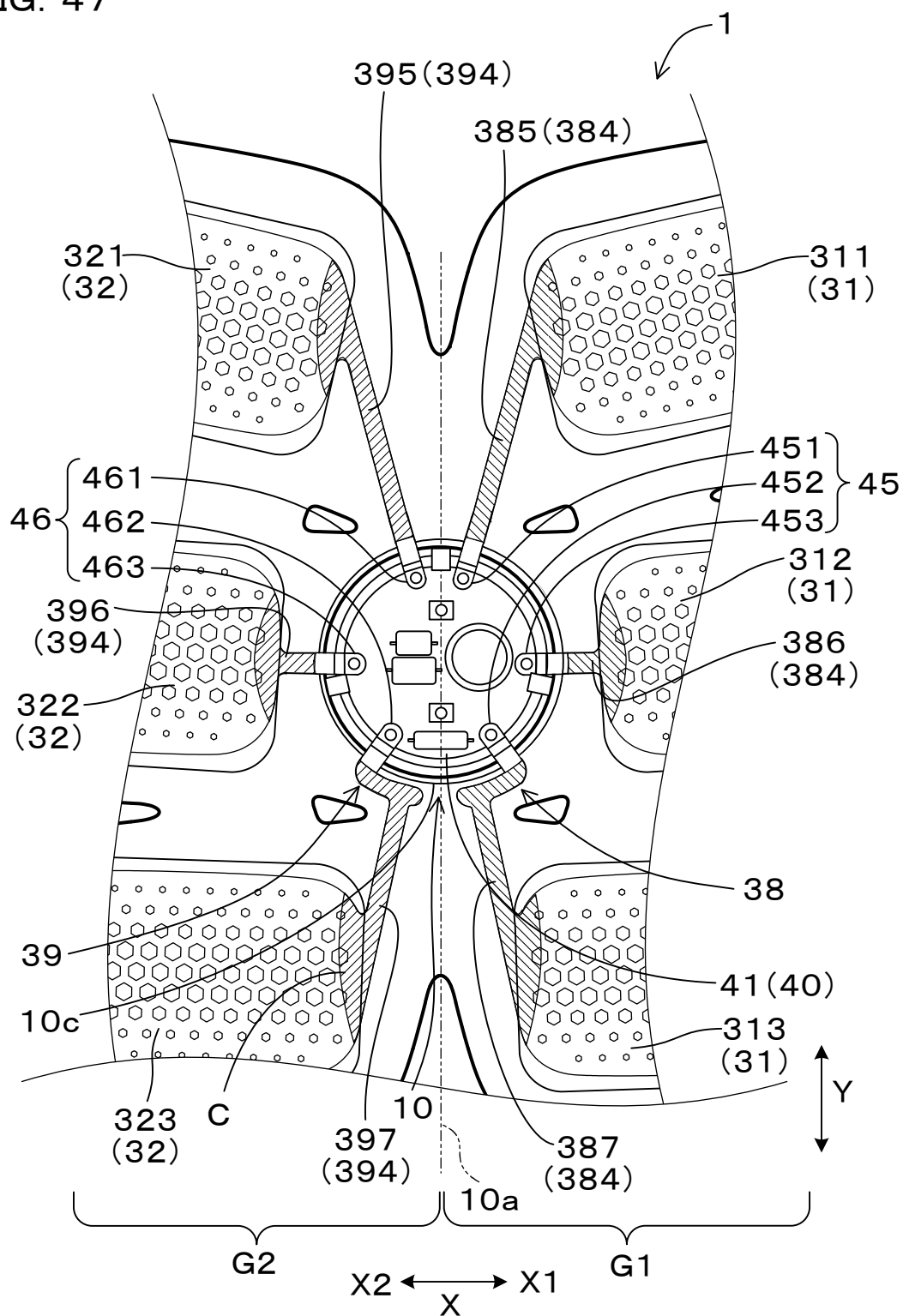


FIG. 47



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FIG. 48

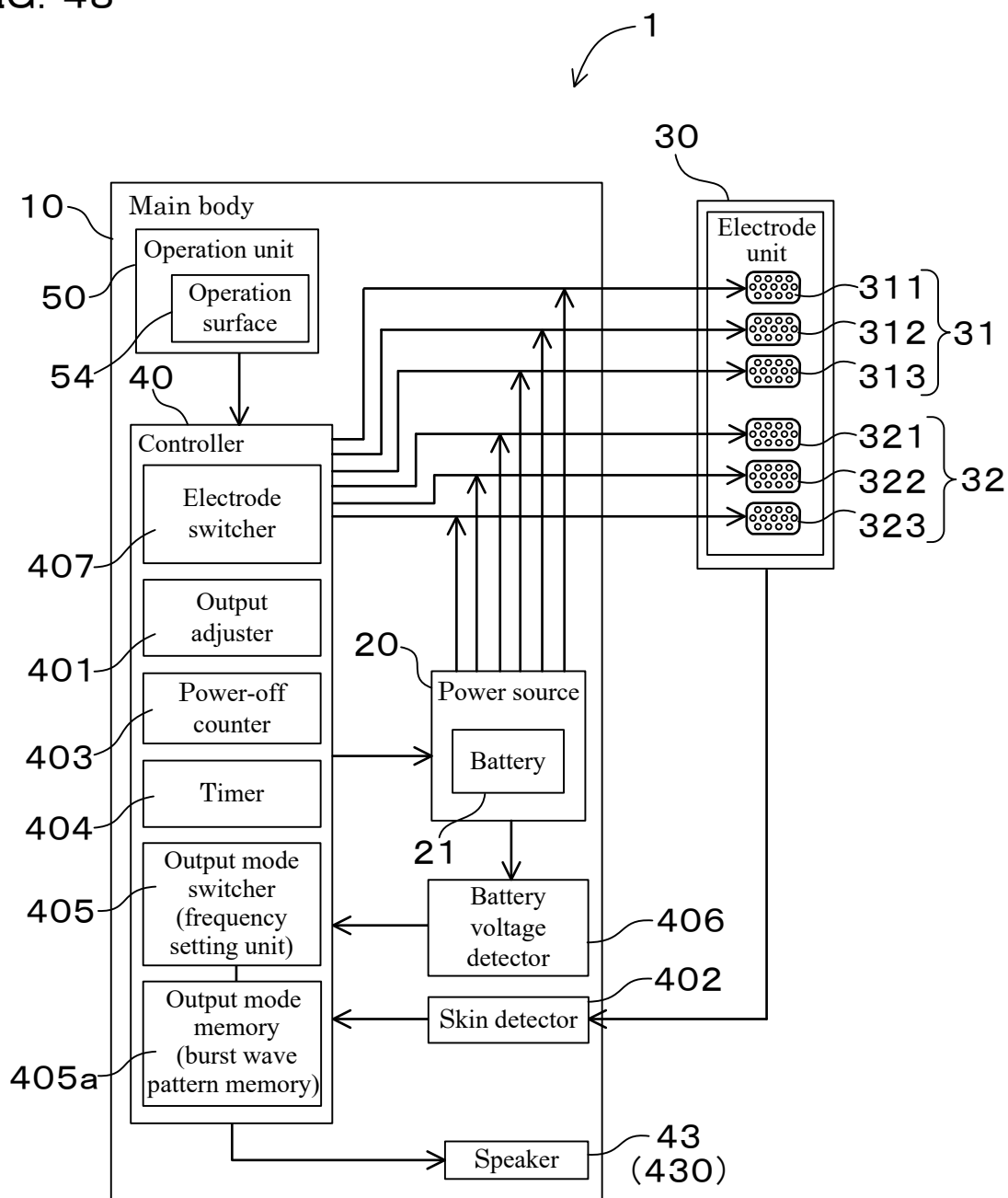
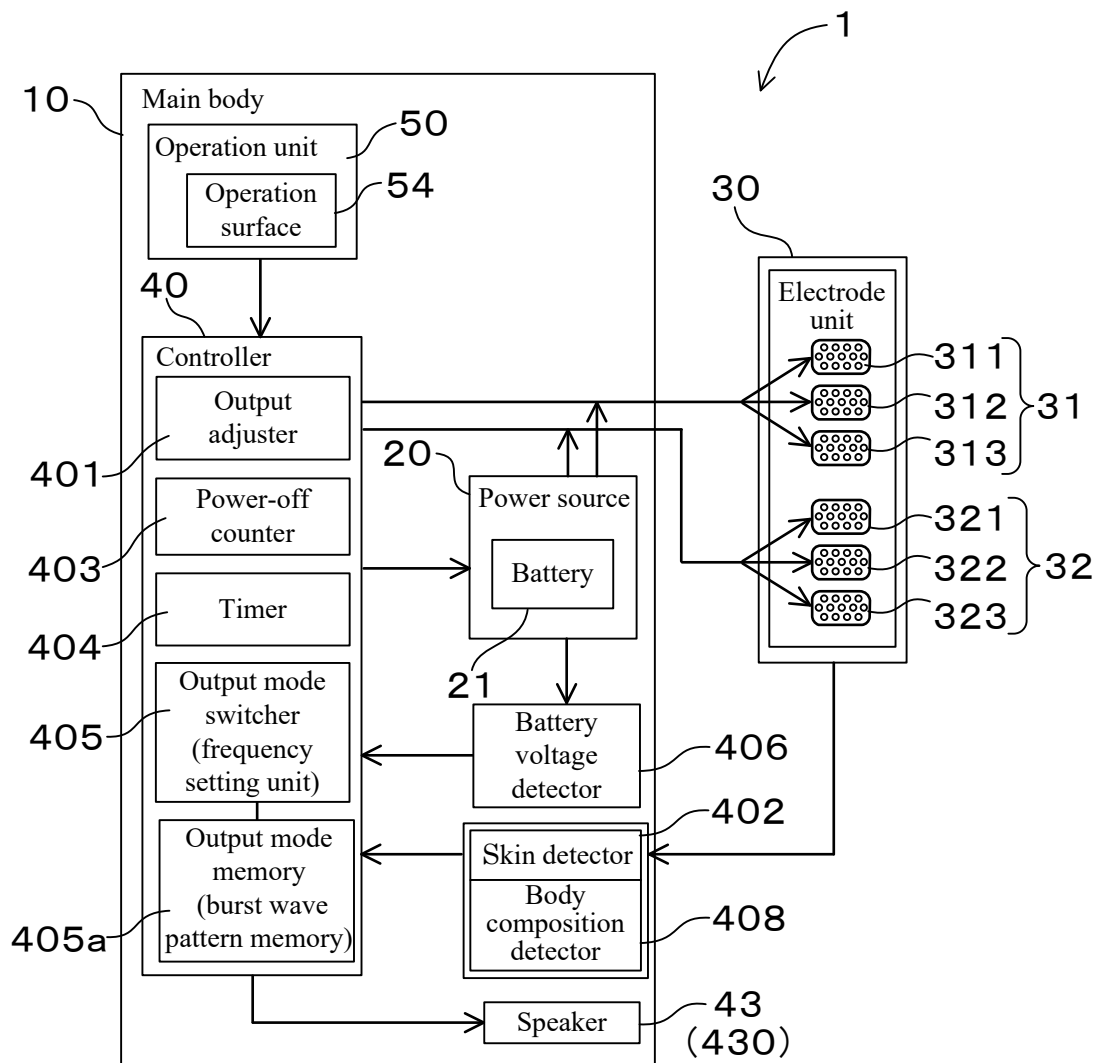


FIG. 49



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FIG. 50a

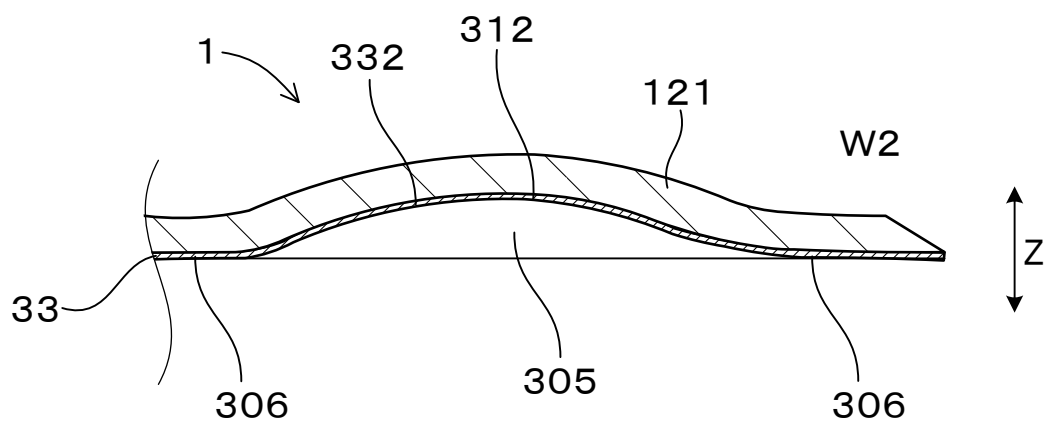


FIG. 50b

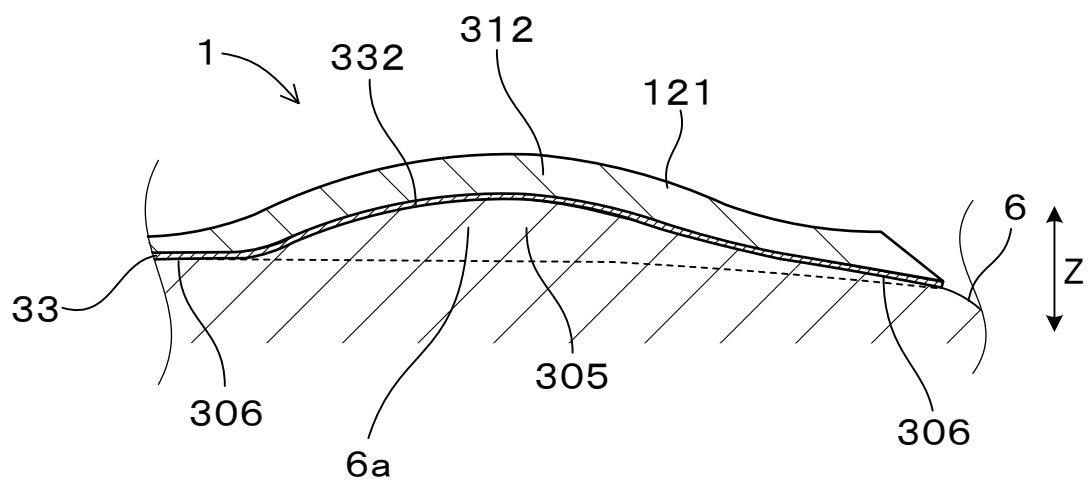


FIG. 51

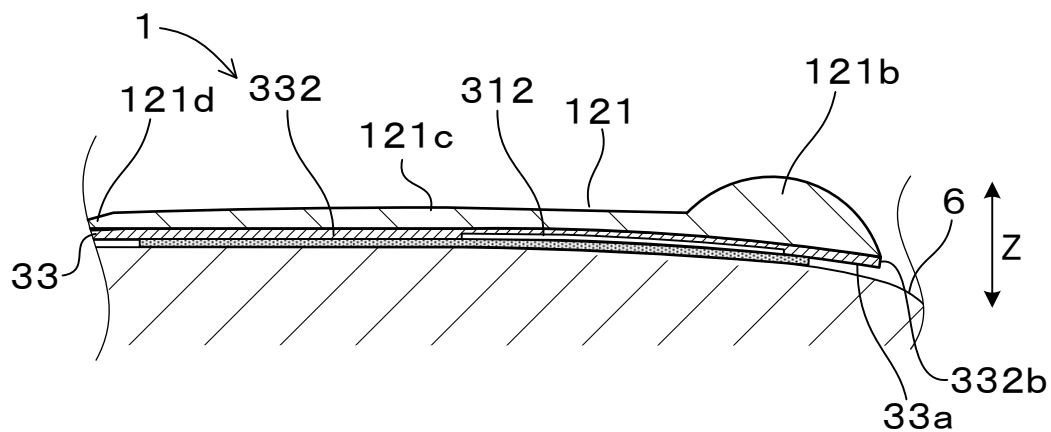


FIG. 52

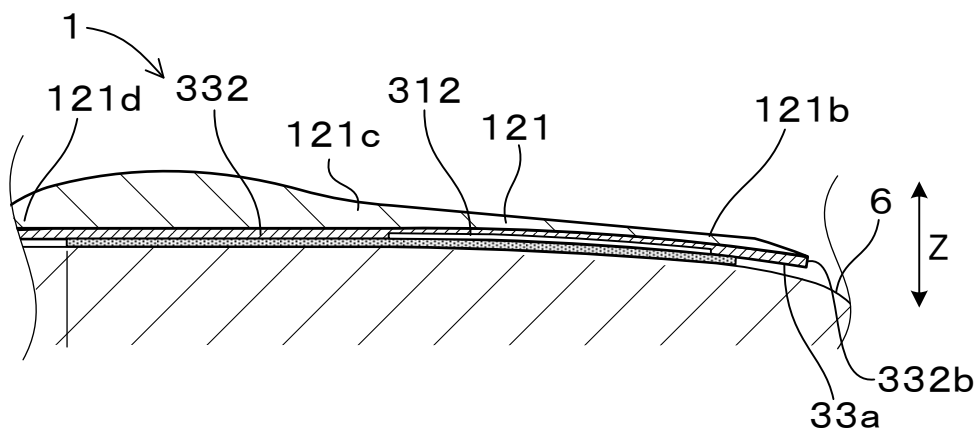


FIG. 53

