

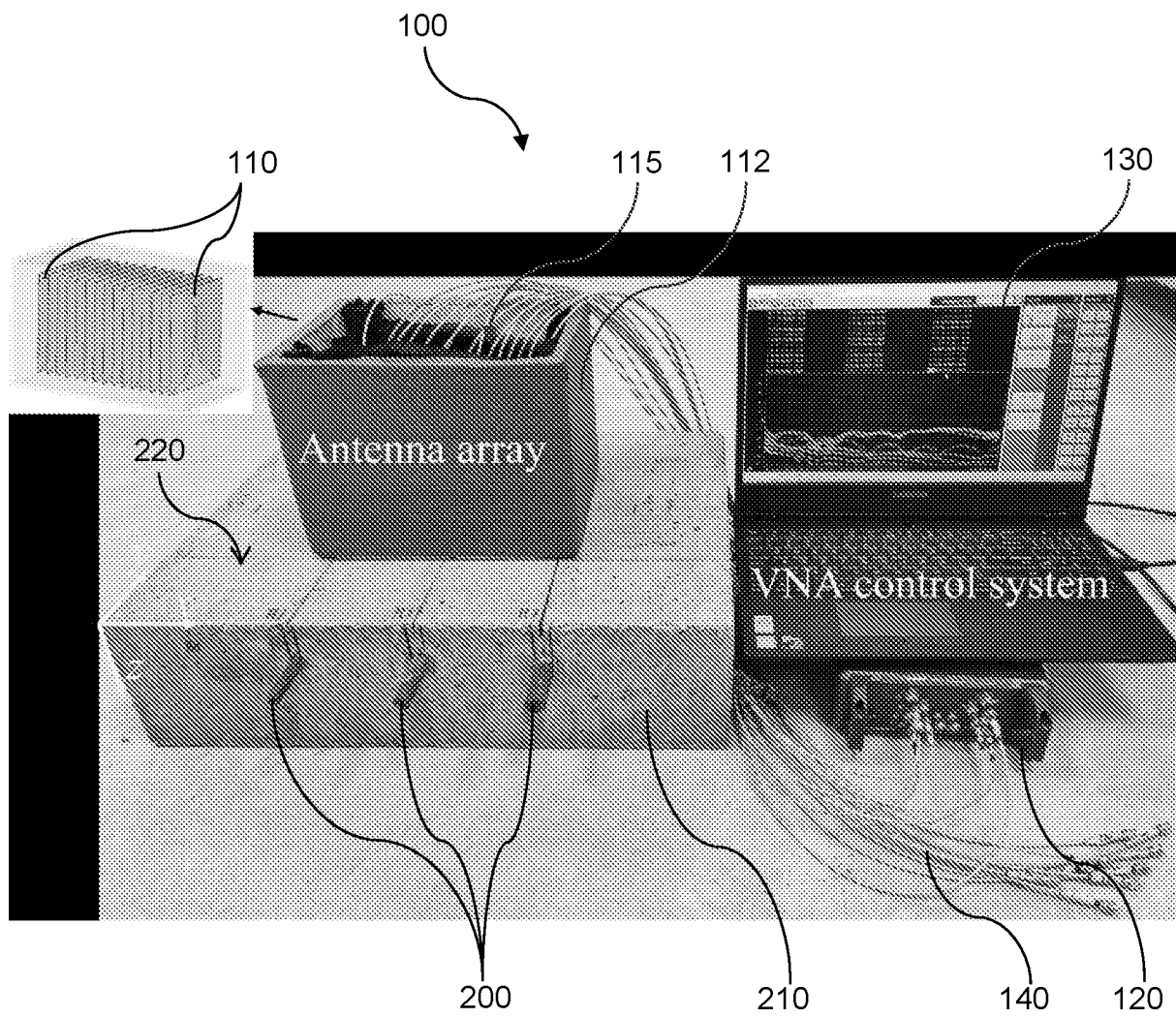


Figure 1

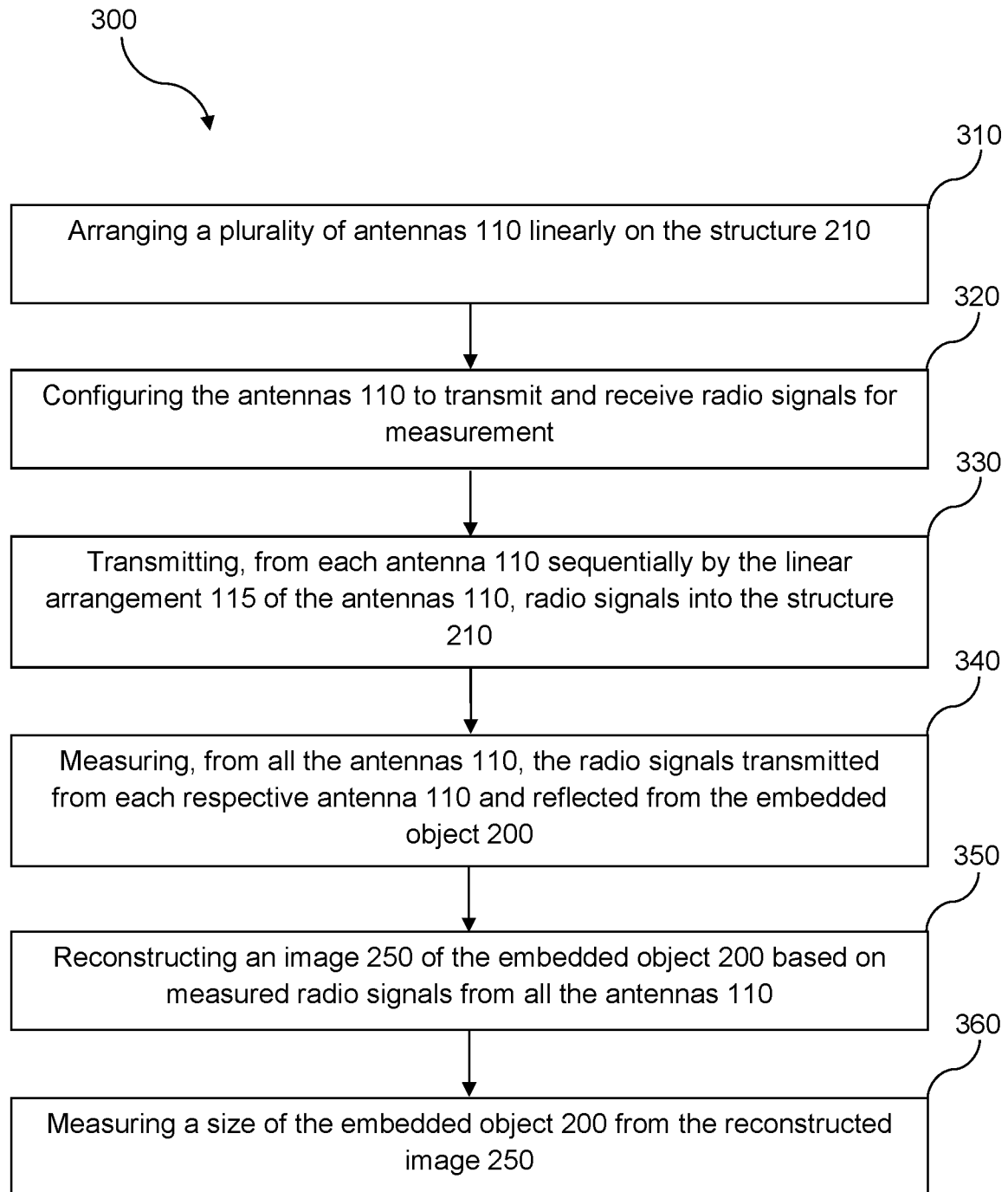


Figure 2

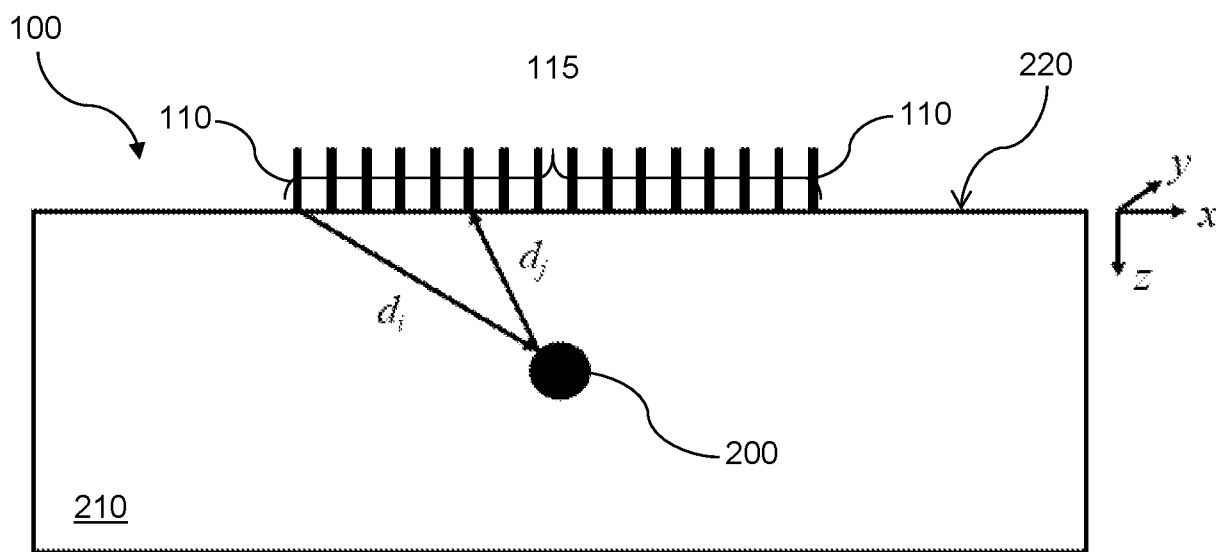


Figure 3A

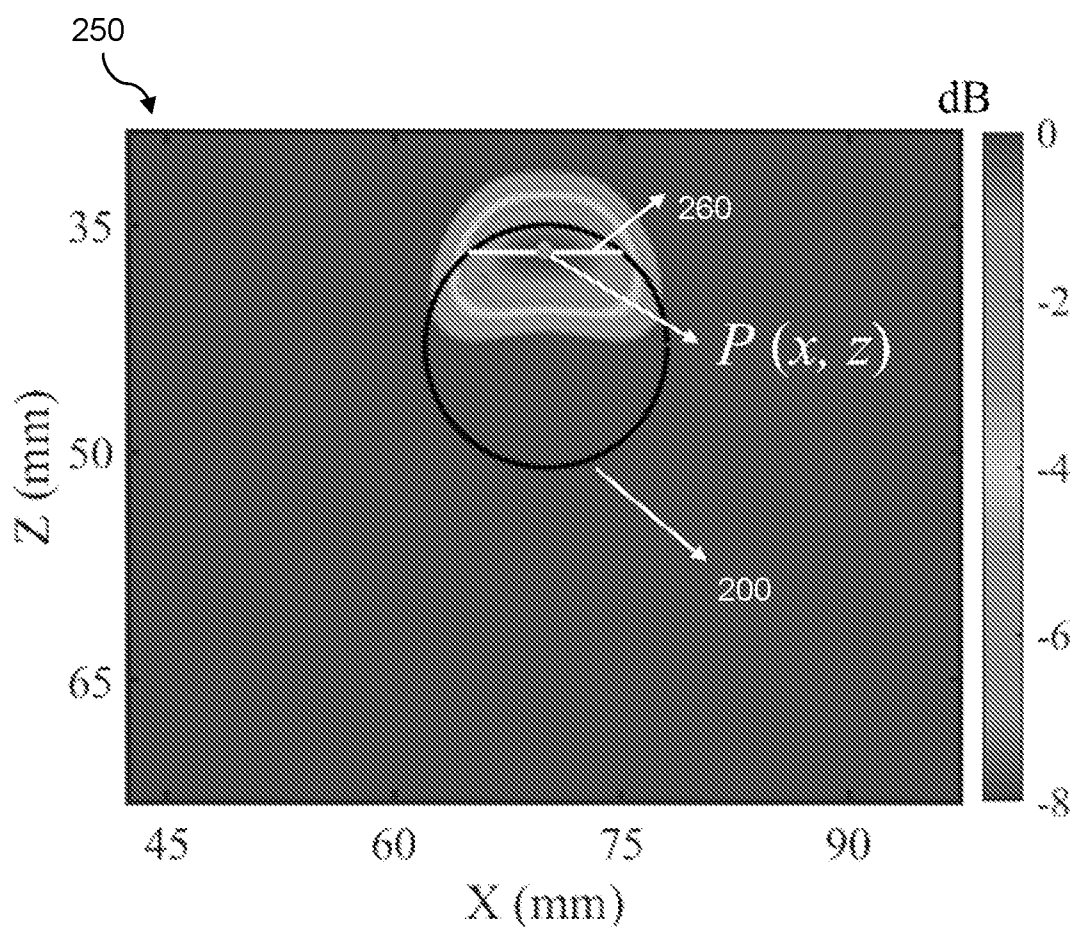


Figure 3B

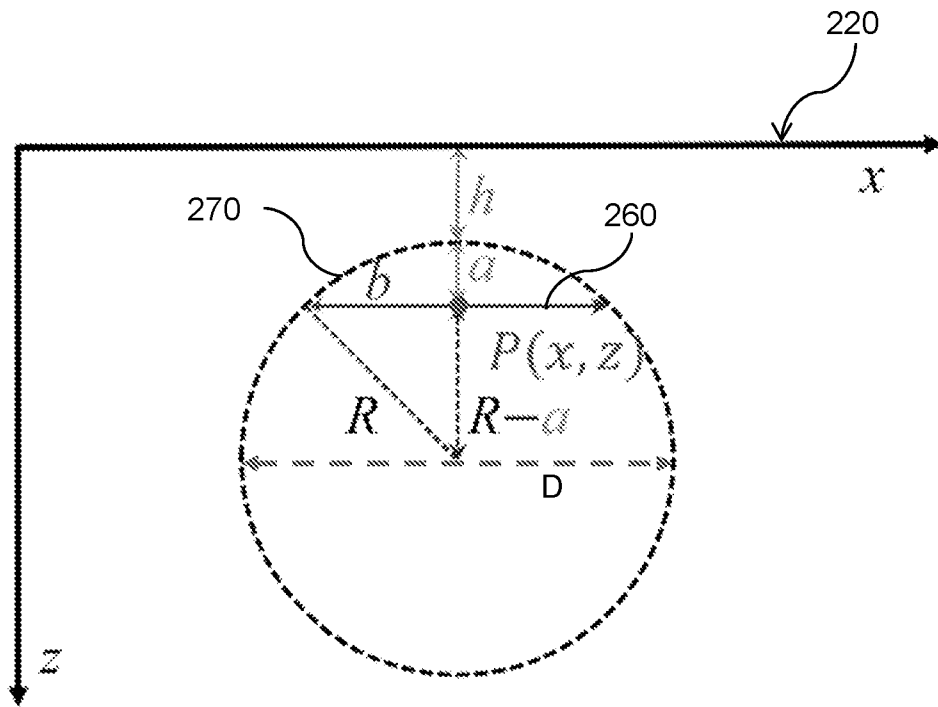


Figure 3C

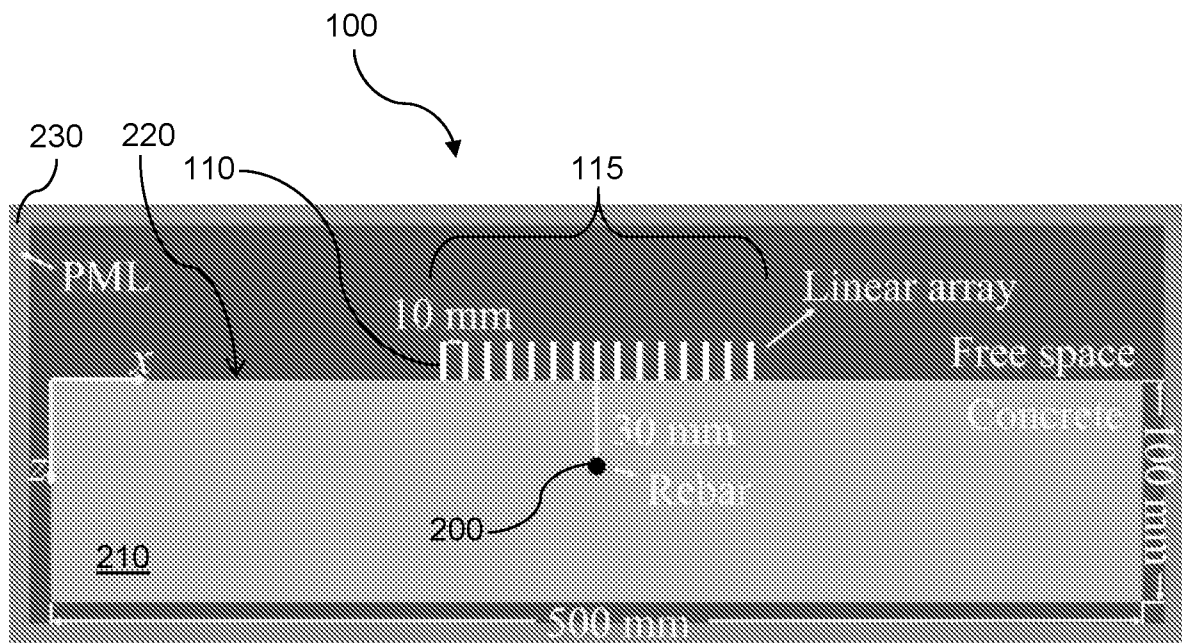


Figure 4A

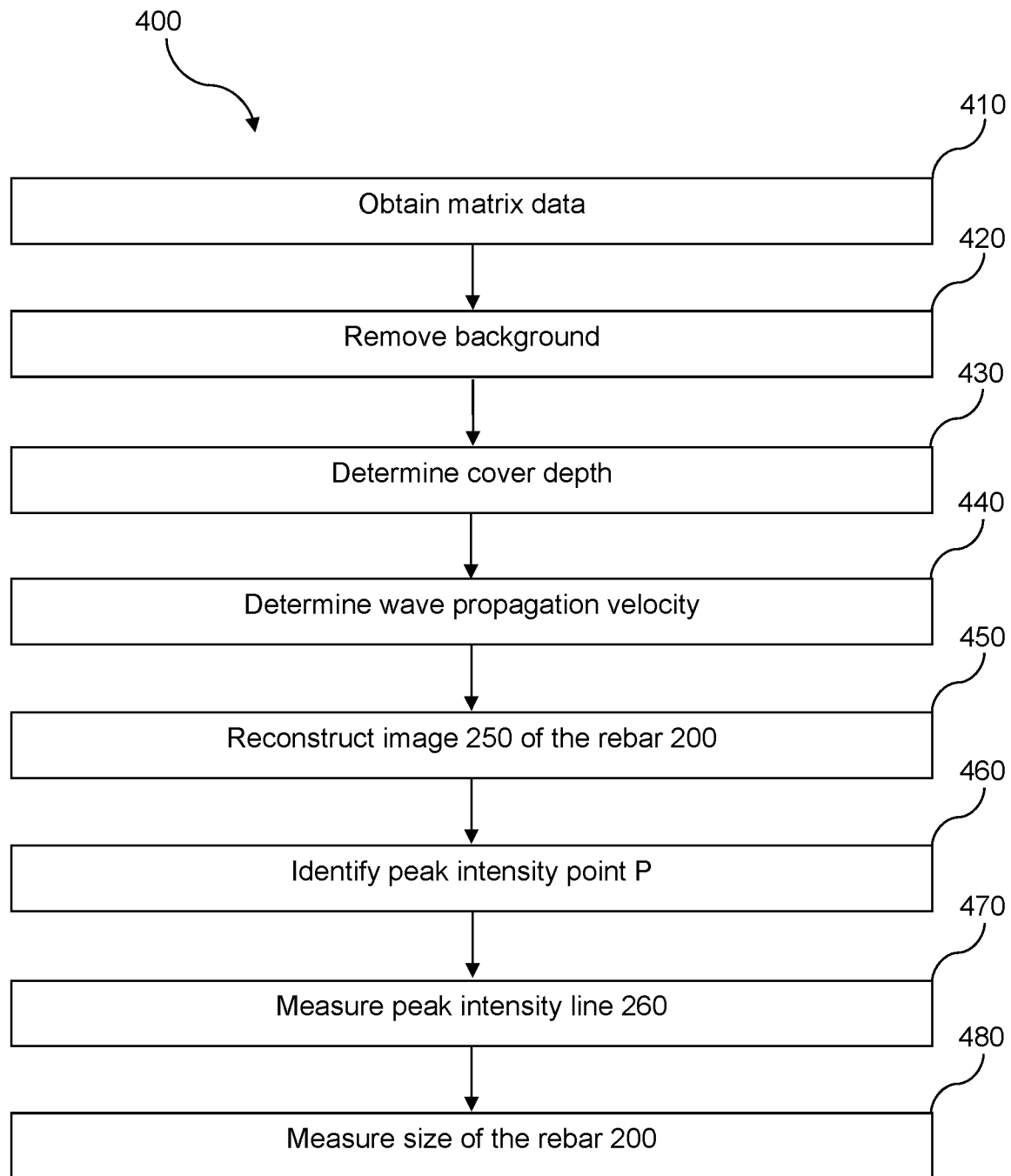


Figure 4B

6/22

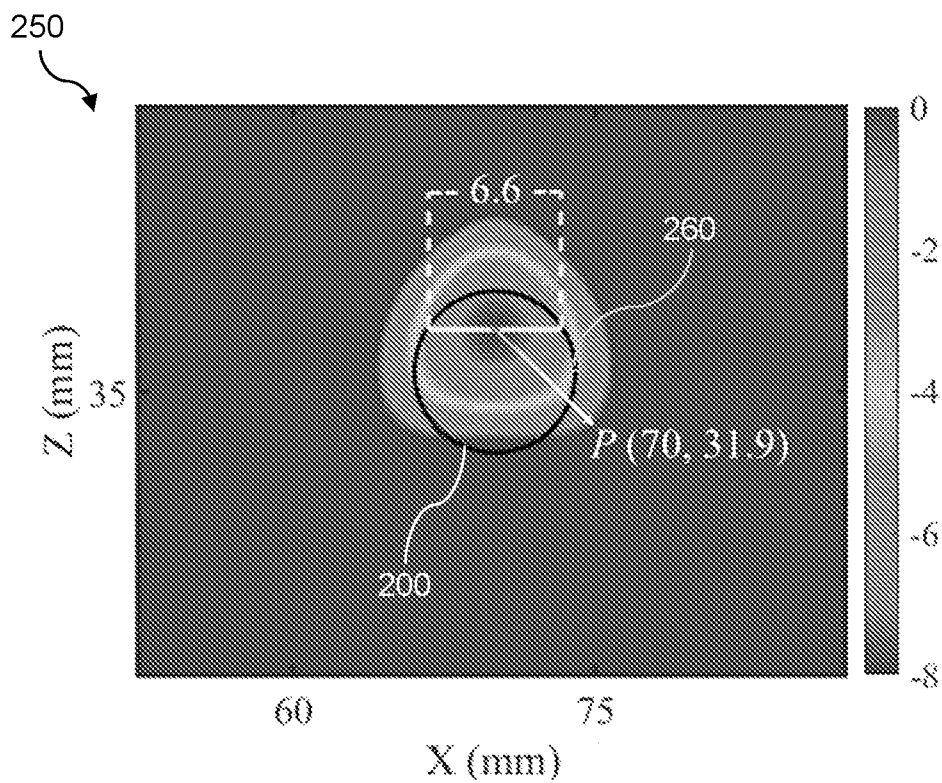


Figure 4C

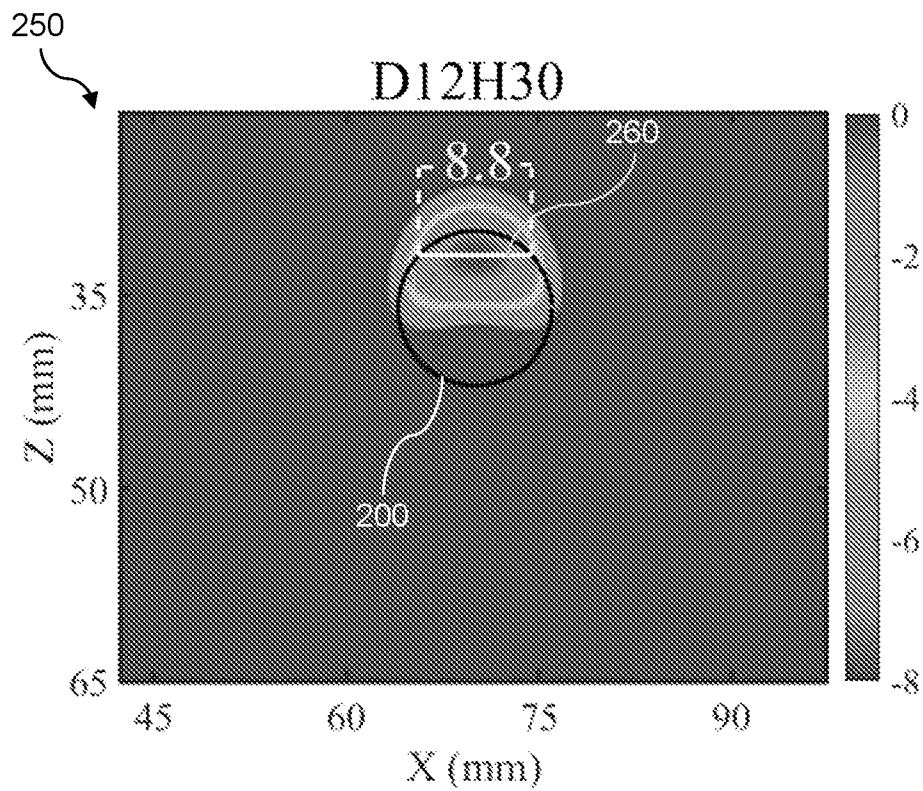


Figure 4D

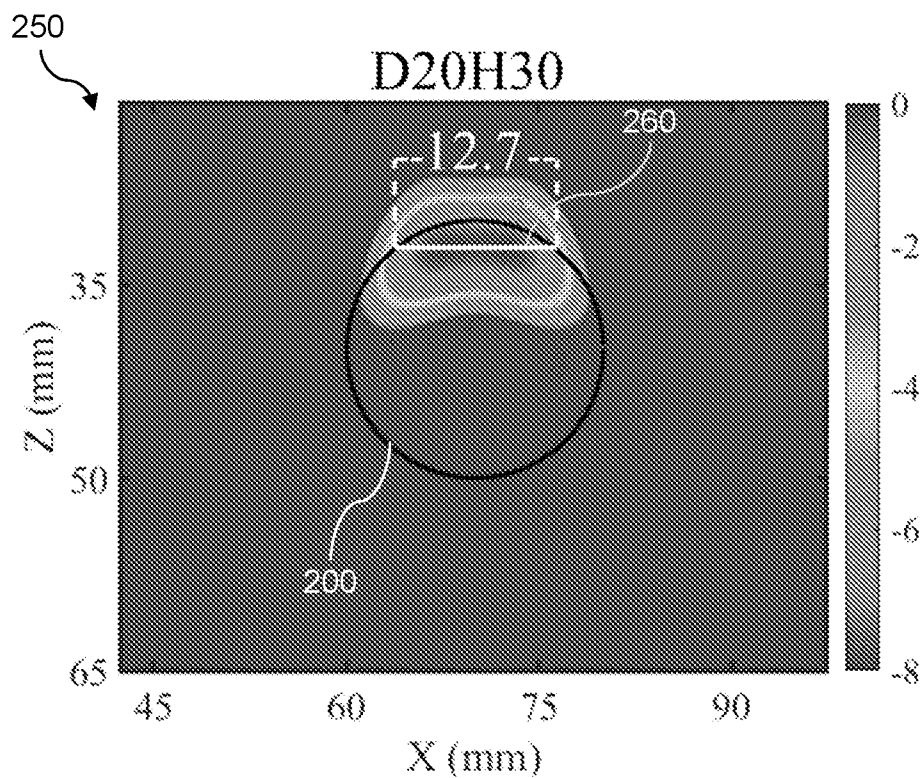


Figure 4E

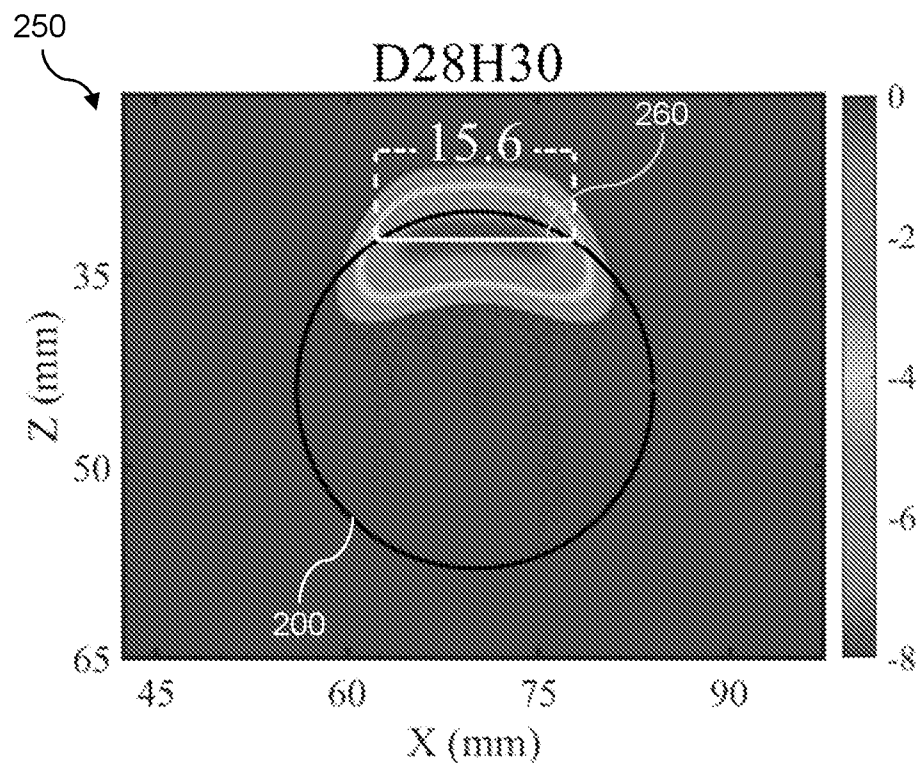


Figure 4F

8/22

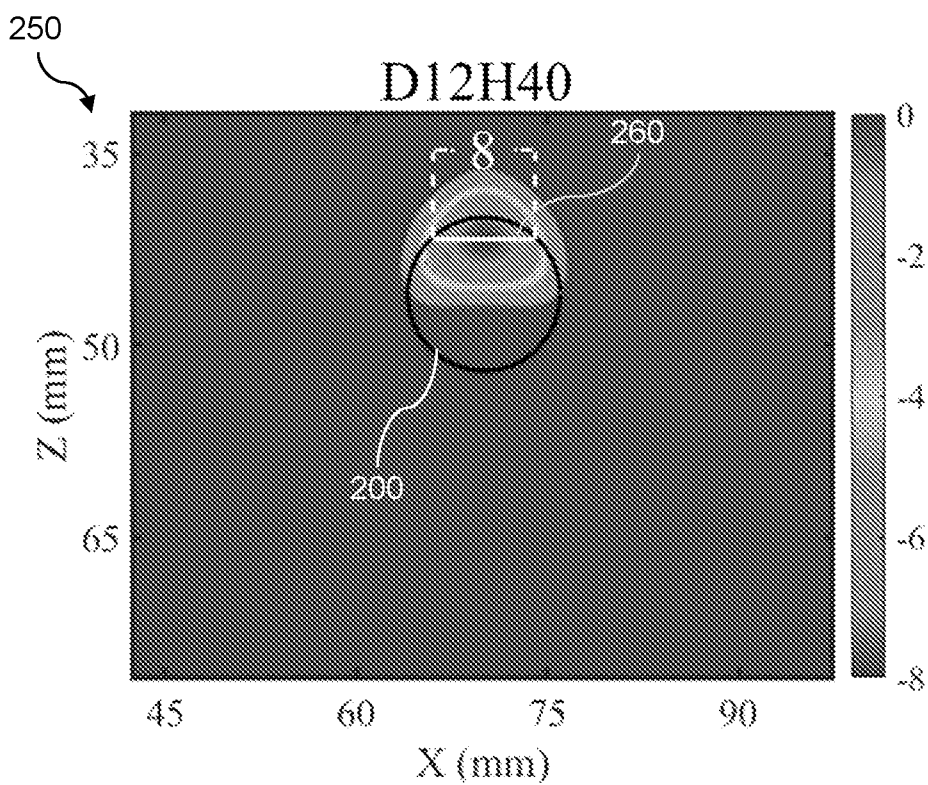


Figure 4G

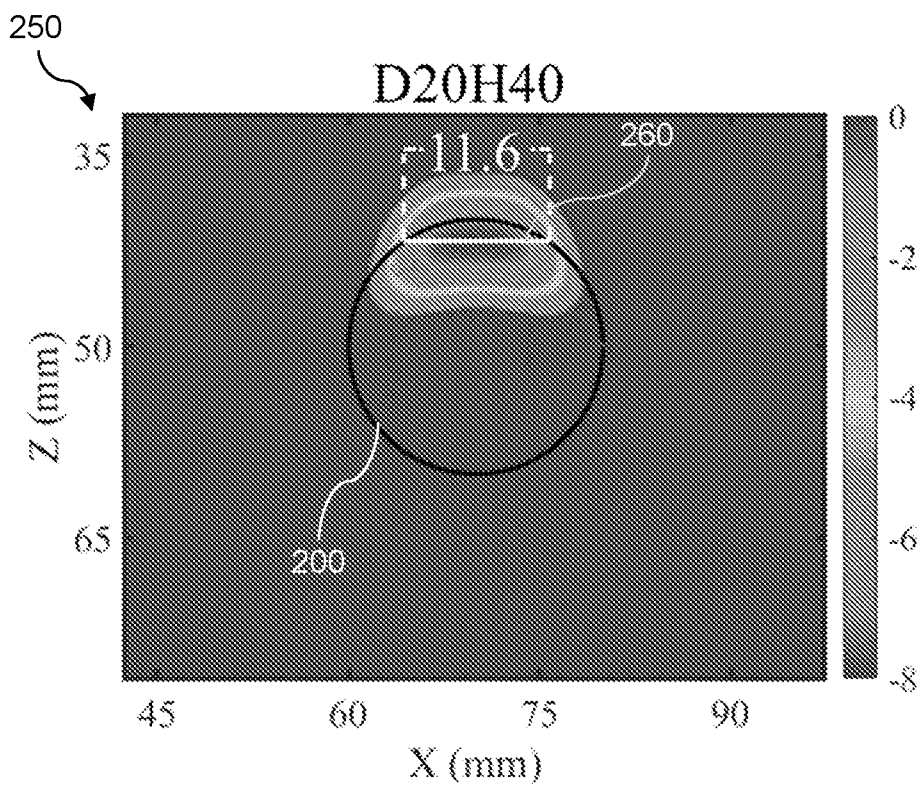


Figure 4H

9/22

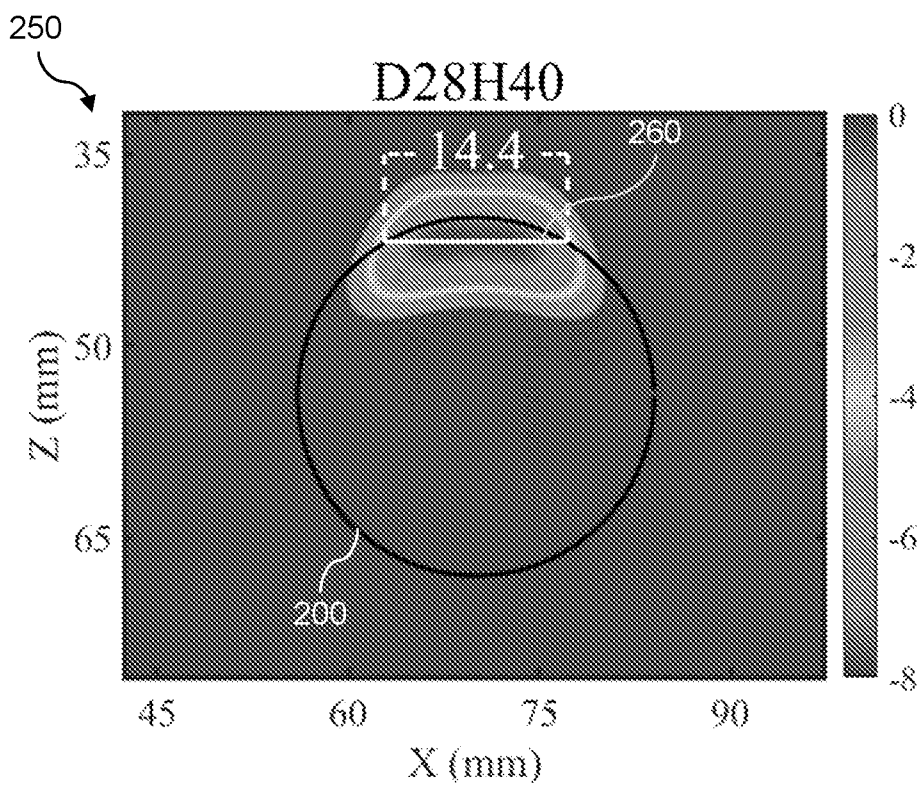


Figure 4I

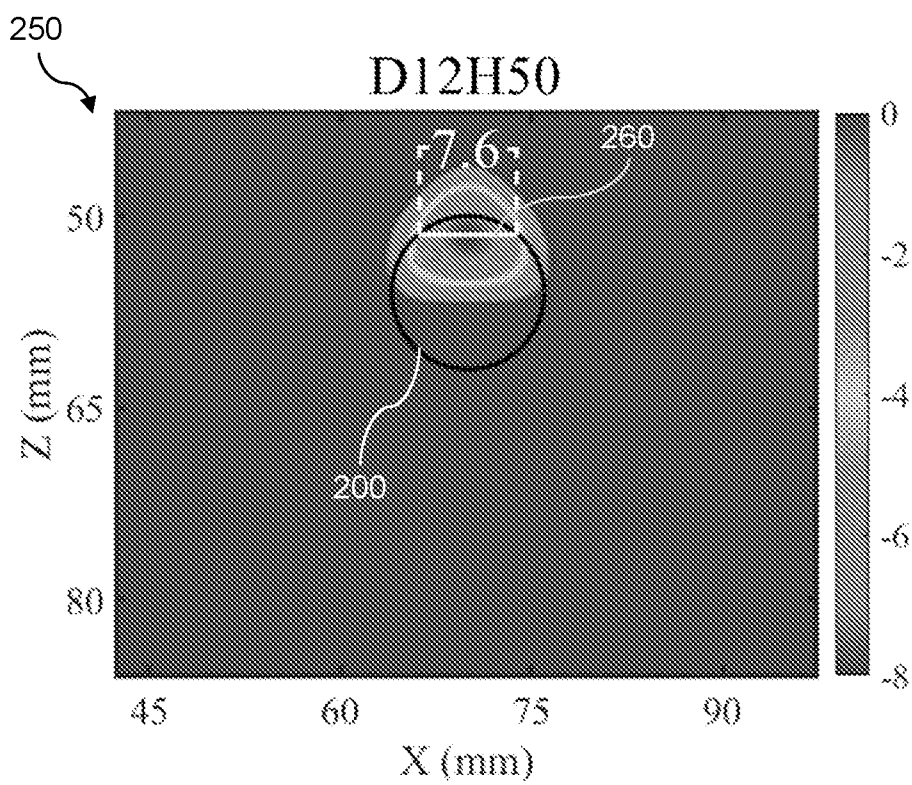
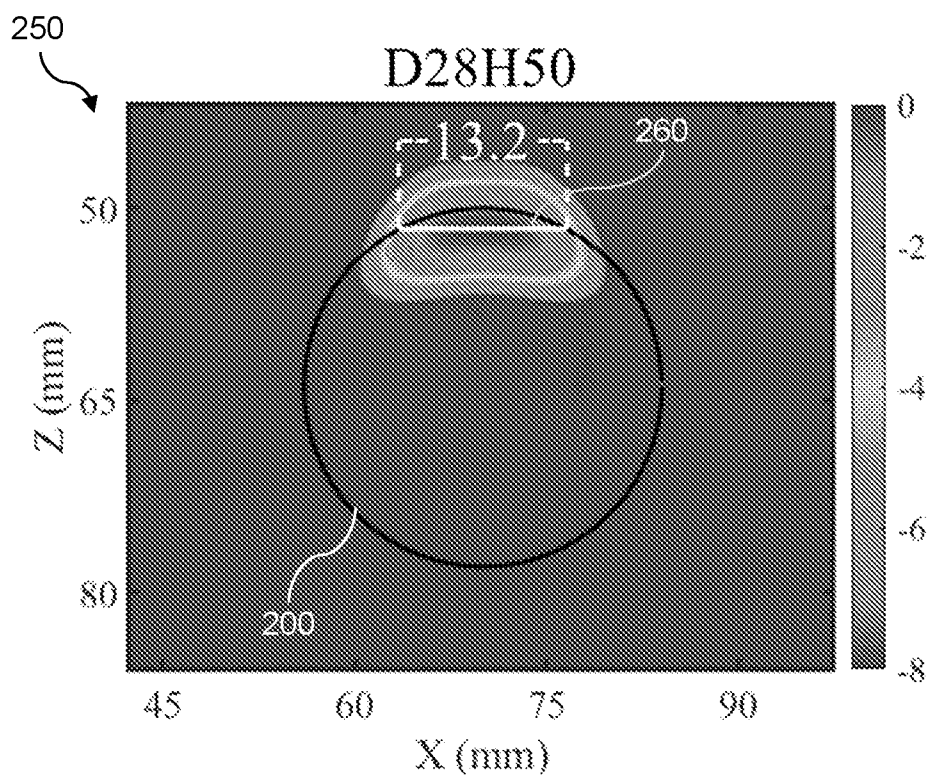
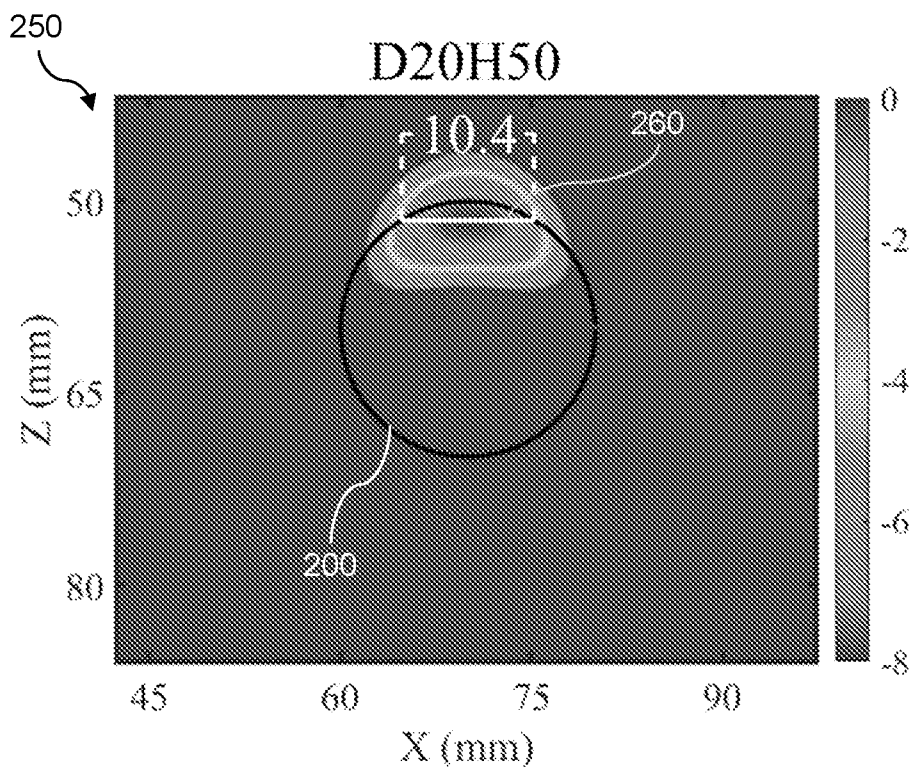


Figure 4J

10/22



Cover Depth	Actual Diameter	Measured Diameter	Error
30 mm (H30)	8 mm (D8)	7.63 mm	4.6%
	12 mm (D12)	12.09 mm	0.75%
	16 mm (D16)	17.12 mm	7.03%
	20 mm (D20)	21.3 mm	6.51%
	24 mm (D24)	25.11 mm	4.64%
	28 mm (D28)	29.85 mm	6.62%
40 mm (H40)	8 mm (D8)	7.72 mm	3.46%
	12 mm (D12)	11.11 mm	7.4%
	16 mm (D16)	15.82 mm	1.1%
	20 mm (D20)	20.49 mm	2.44%
	24 mm (D24)	25.27 mm	5.3%
	28 mm (D28)	29.18 mm	4.23%
50 mm (H50)	8 mm (D8)	8.12 mm	1.44%
	12 mm (D12)	11.13 mm	7.28%
	16 mm (D16)	15 mm	6.25%
	20 mm (D20)	19.53 mm	2.37%
	24 mm (D24)	23.36 mm	2.68%
	28 mm (D28)	28.82 mm	2.95%

Figure 4M

12/22

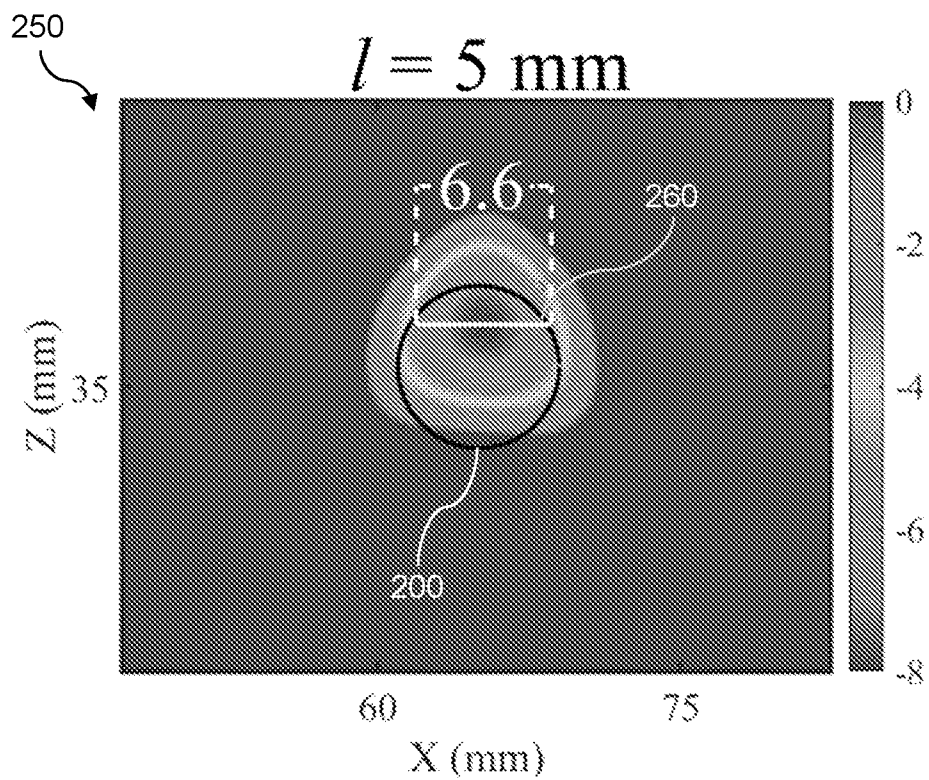


Figure 5A

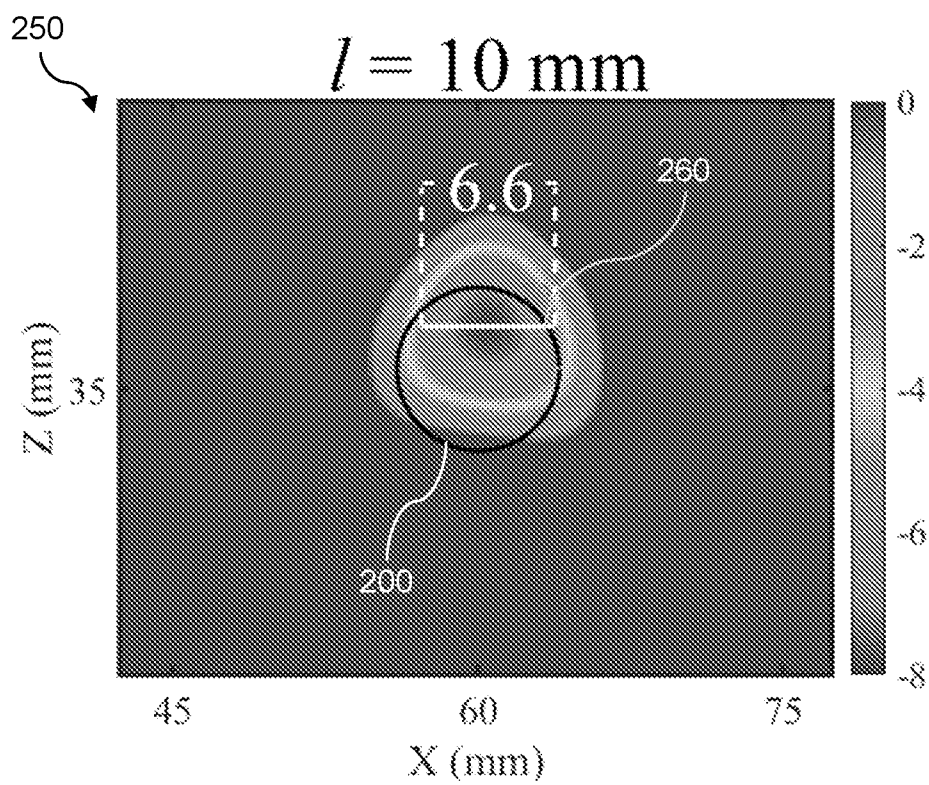


Figure 5B

13/22

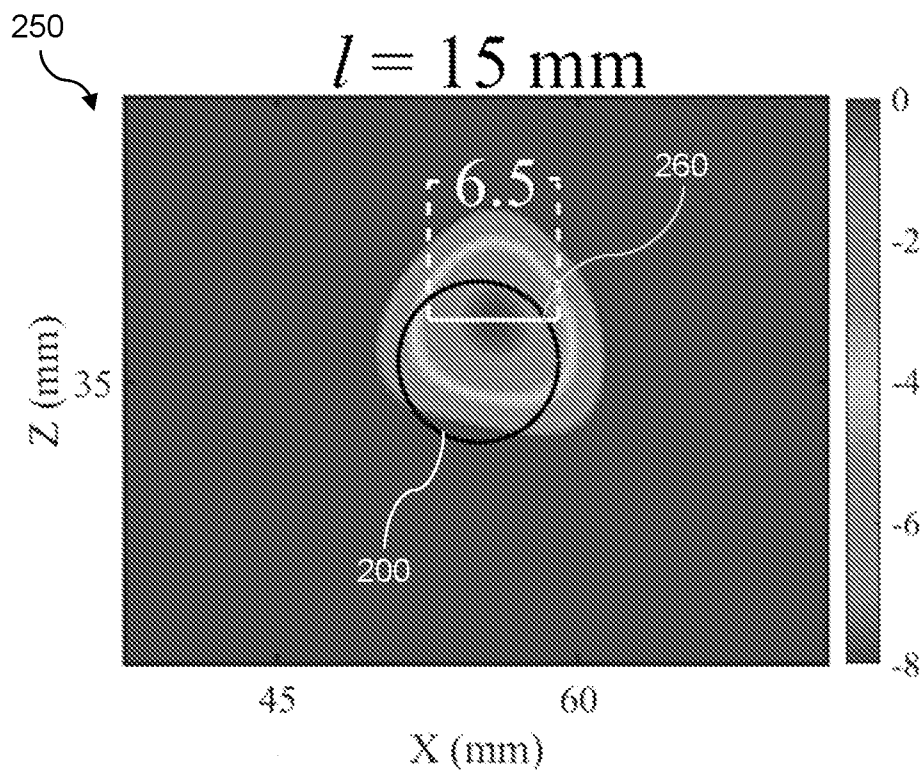


Figure 5C

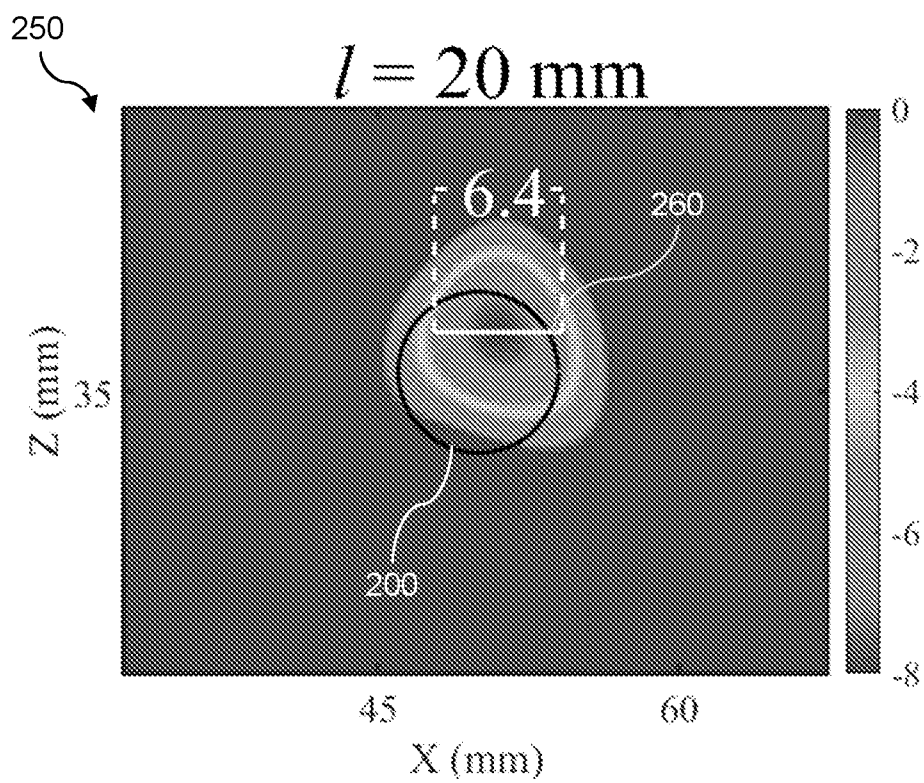


Figure 5D

Cover Depth	Misalignment Distance	Misalignment Angle	Actual Diameter	Measured Diameter	Error
30 mm	0 mm	0°	8 mm	7.63 mm	4.6%
	5 mm	9.5°		7.63 mm	4.6%
	10 mm	18.4°		7.63 mm	4.6%
	15 mm	26.6°		7.28 mm	8.68%
	20 mm	33.7°		7.12 mm	11%
	25 mm	39.8°		6.8 mm	14.94%
	30 mm	45°		6.39 mm	20.18%
	35 mm	49.4°		6.29 mm	21.36%
40 mm	0 mm	0°	8 mm	7.72 mm	3.46%
	5 mm	7.1°		7.72 mm	3.46%
	10 mm	14°		7.54 mm	5.79%
	15 mm	20.6°		7.54 mm	5.79%
	20 mm	26.6°		7.14 mm	10.76%
	25 mm	32°		6.8 mm	15.05%
	30 mm	36.9°		6.96 mm	13.03%
	35 mm	41.2°		6.68 mm	16.55%
50 mm	0 mm	0°	8 mm	8.12 mm	1.44%
	5 mm	5.7°		8.12 mm	1.44%
	10 mm	11.3°		7.8 mm	2.48%
	15 mm	16.7°		7.6 mm	4.92%
	20 mm	21.8°		7.54 mm	5.79%
	25 mm	26.6°		7.31 mm	8.59%
	30 mm	31°		7.29 mm	8.88%
	35 mm	35°		7.12 mm	11%

Figure 5E

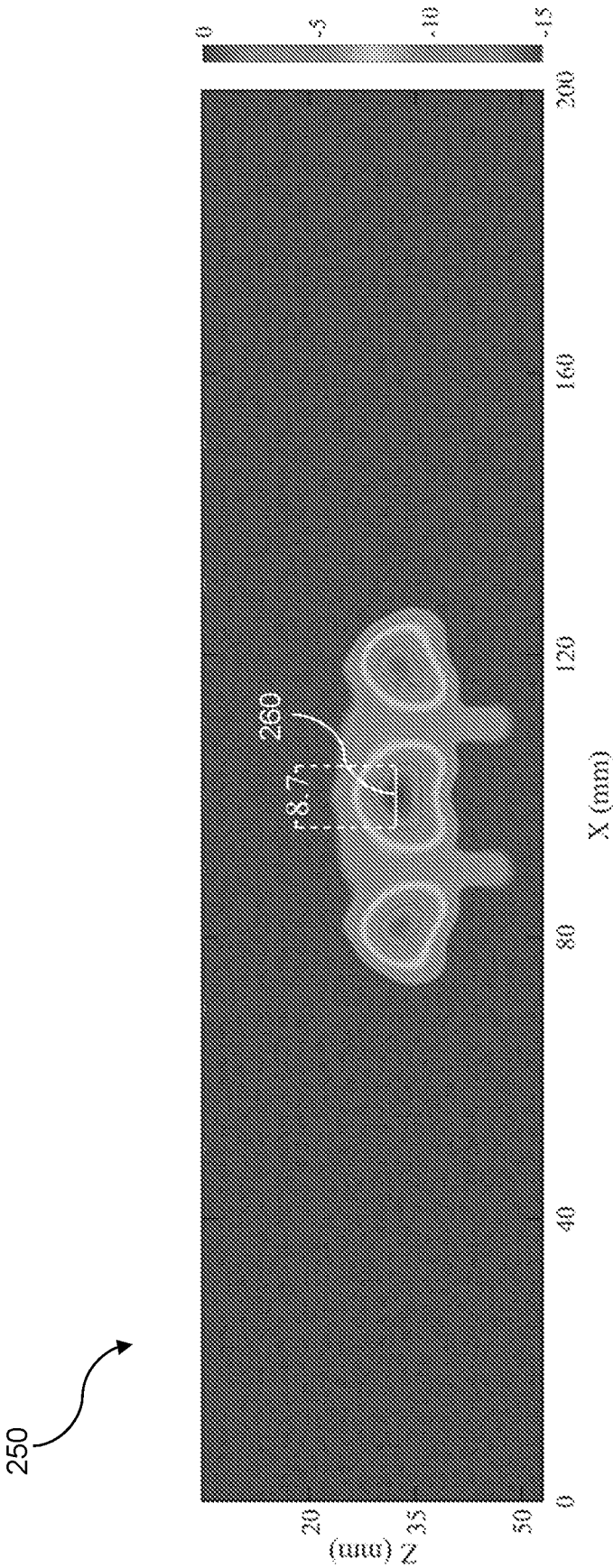


Figure 6A

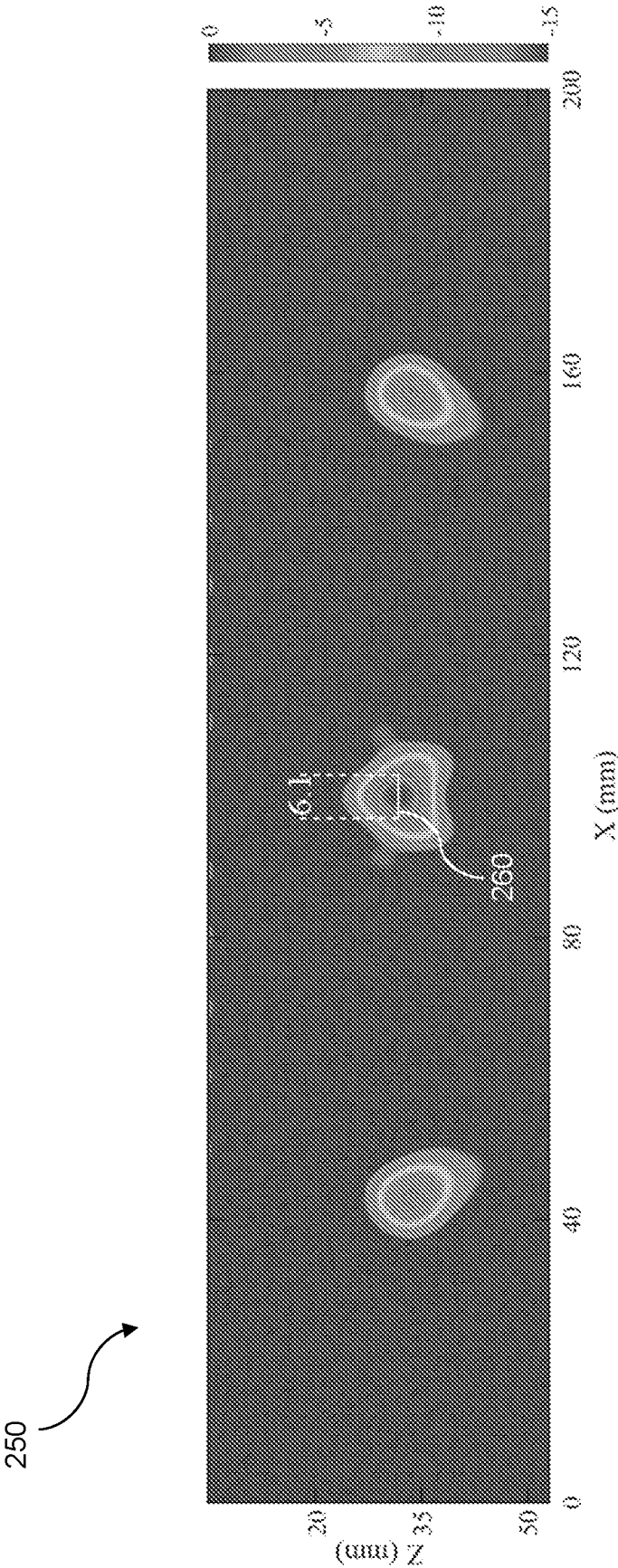


Figure 6B

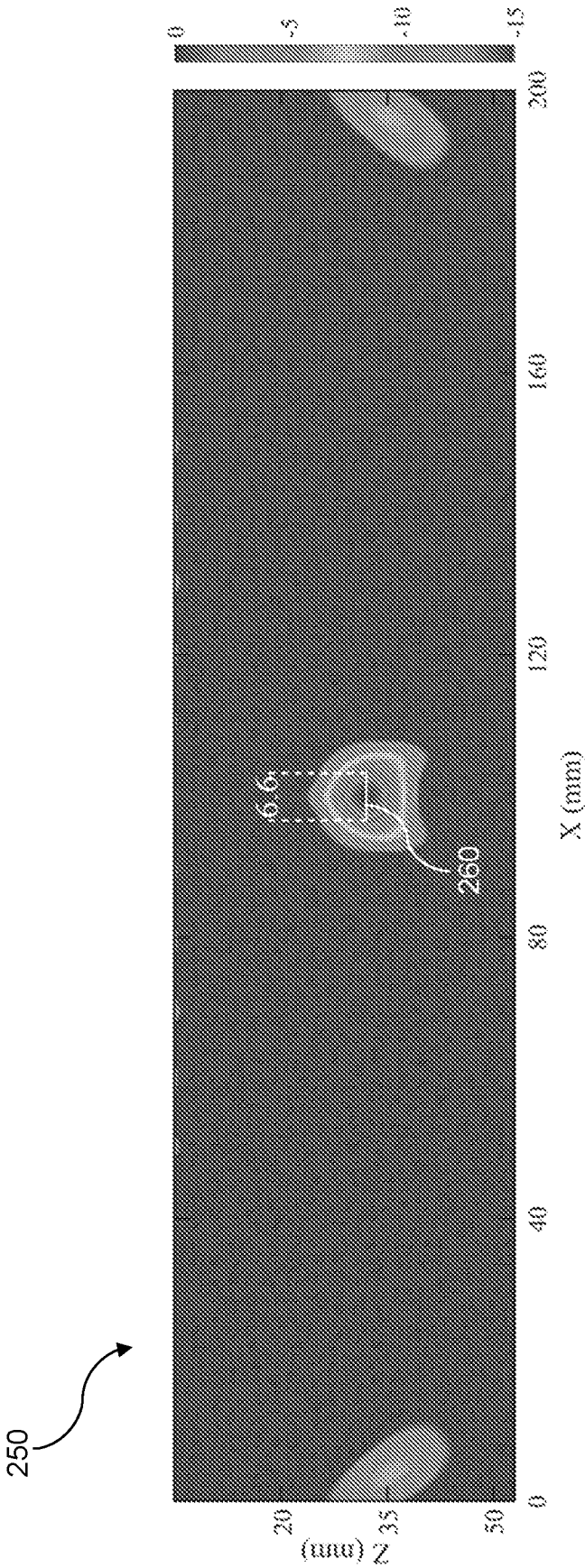


Figure 6C

Spacing	Actual Diameter	Measured Diameter	Error
20 mm	8 mm	10.8 mm	35%
60 mm		7.17 mm	10.35%
80 mm		7.31 mm	8.59%
90 mm		7.46 mm	6.76%
100 mm		7.63 mm	4.61%
200 mm		7.63 mm	4.61%

Figure 6D

Sample	Cover Depth	Actual Diameter	Measured Diameter	Error
S#1 (D10H32)	32 mm	10 mm	10.2 mm	2.01%
S#1 (D13H30)	30 mm	13 mm	13.52 mm	4%
S#1 (D16H32)	32 mm	16 mm	16.77 mm	4.8%
S#2 (D13H20)	20 mm	13 mm	13.34 mm	2.6%
S#3 (D13H30)	30 mm	13 mm	13.76 mm	5.86%
S#4 (D13H40)	40 mm	13 mm	13.05 mm	0.38%

Figure 7I

19/22

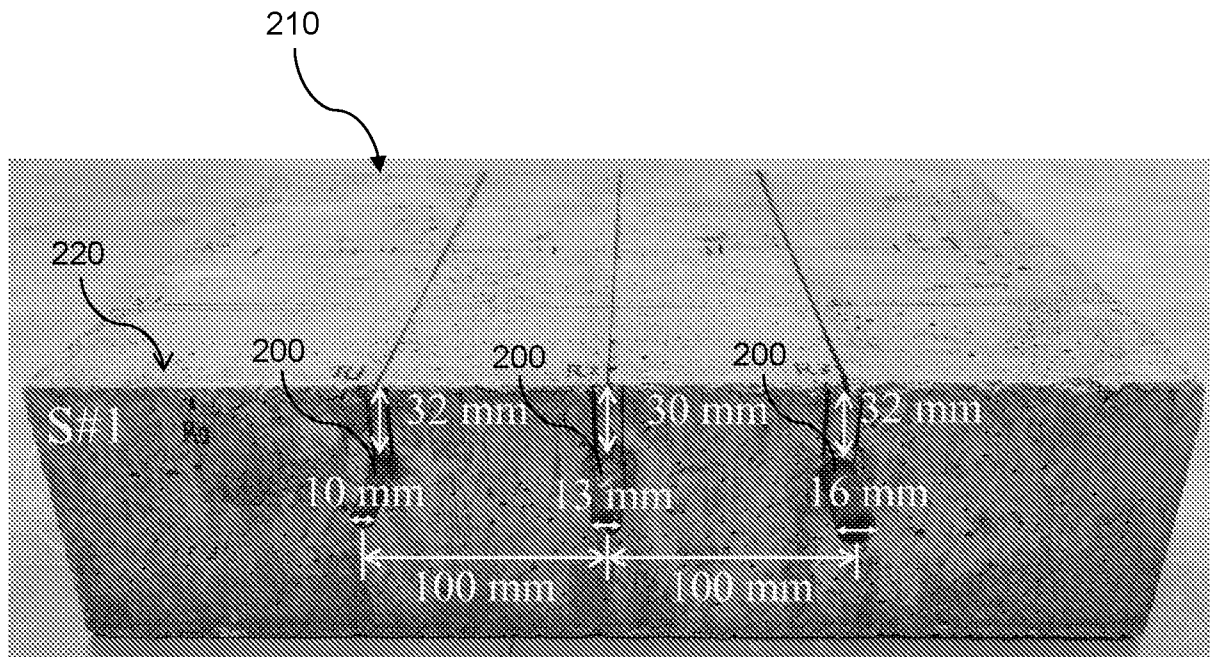


Figure 7A

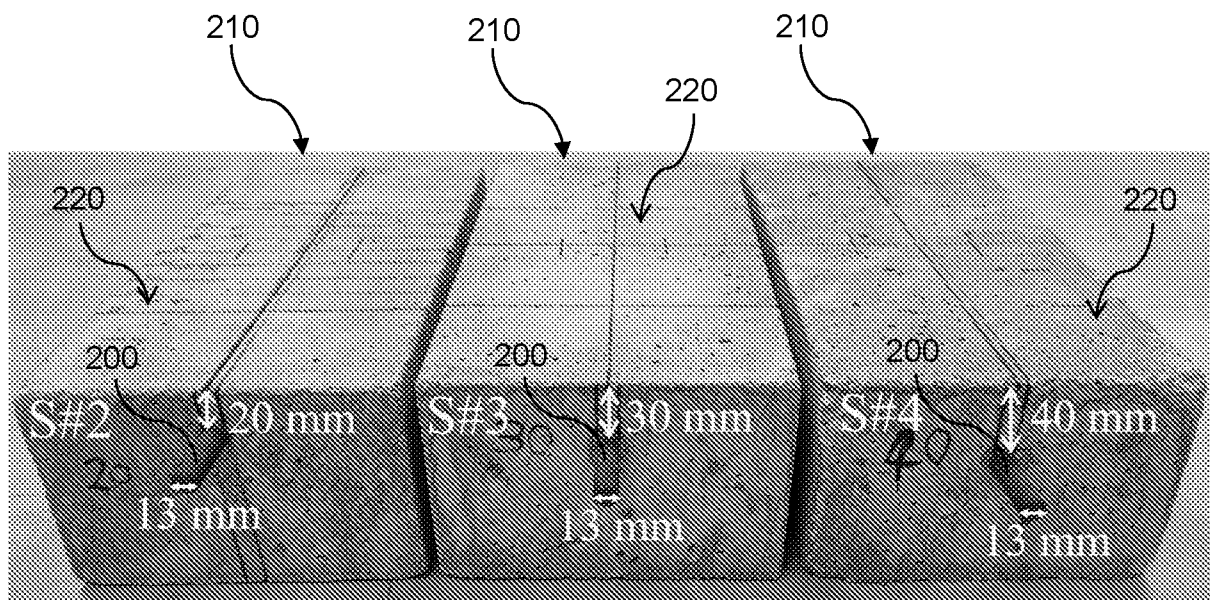
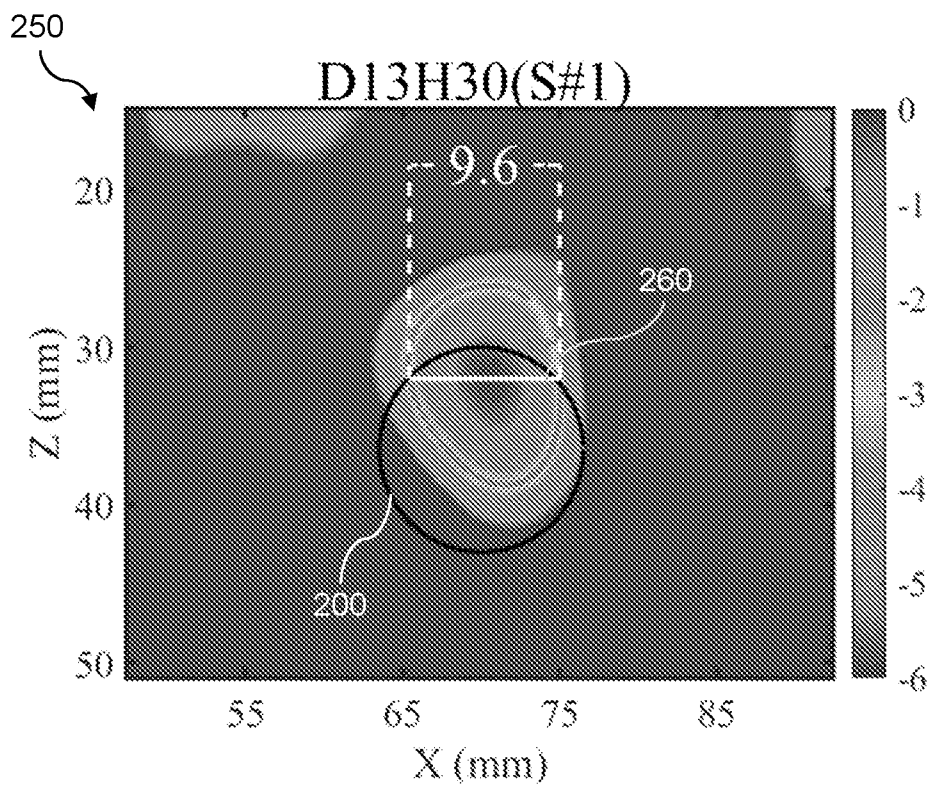
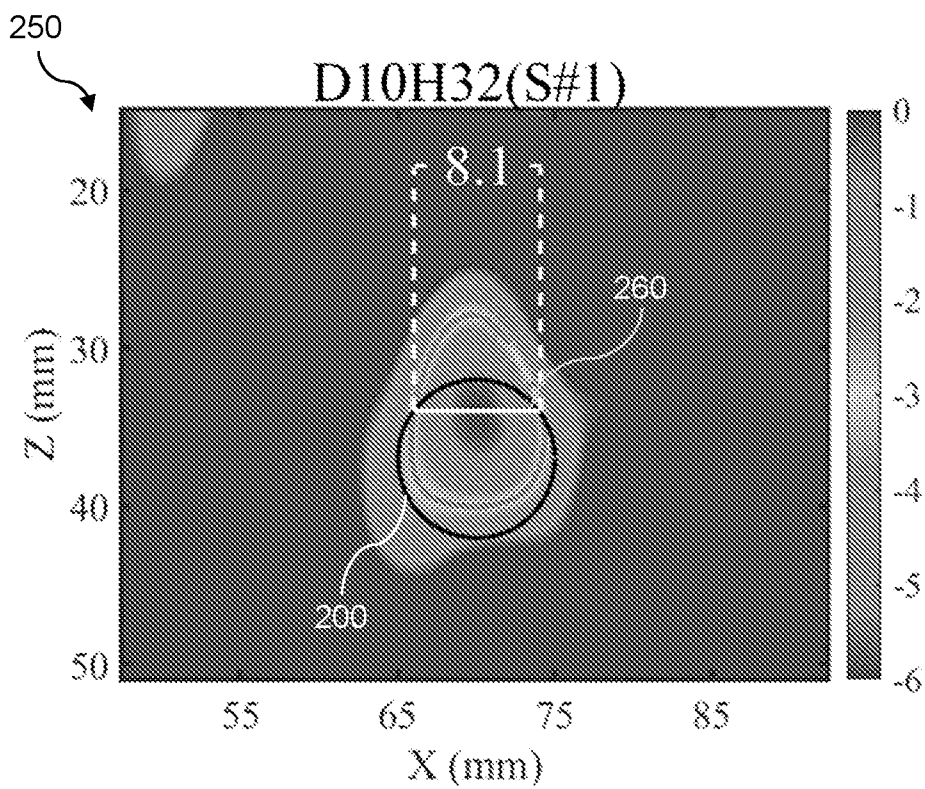


Figure 7B



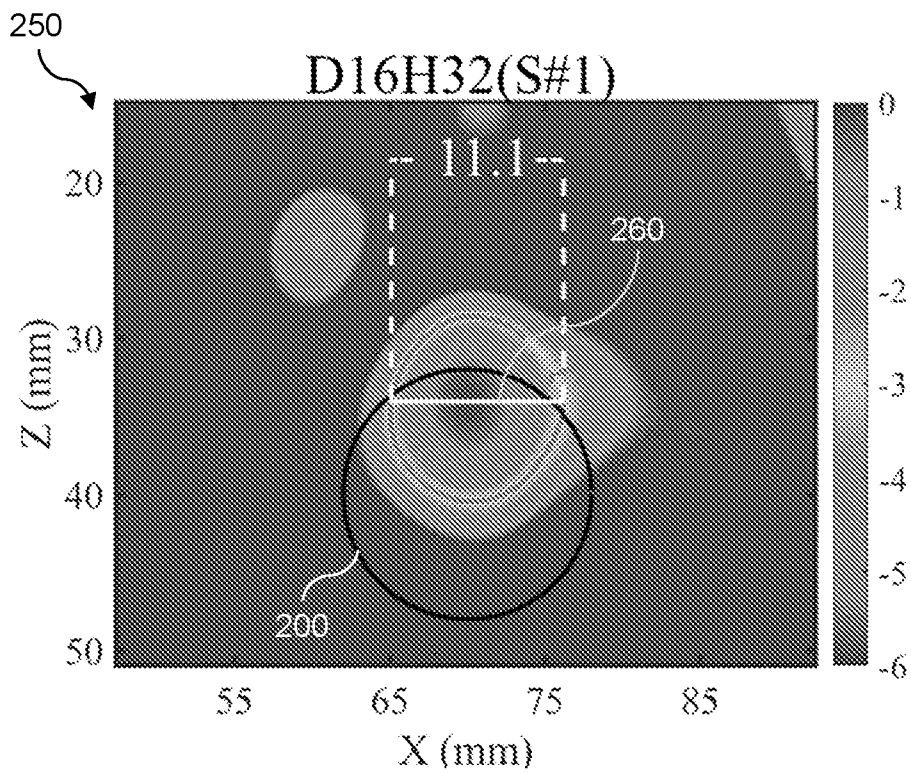


Figure 7E

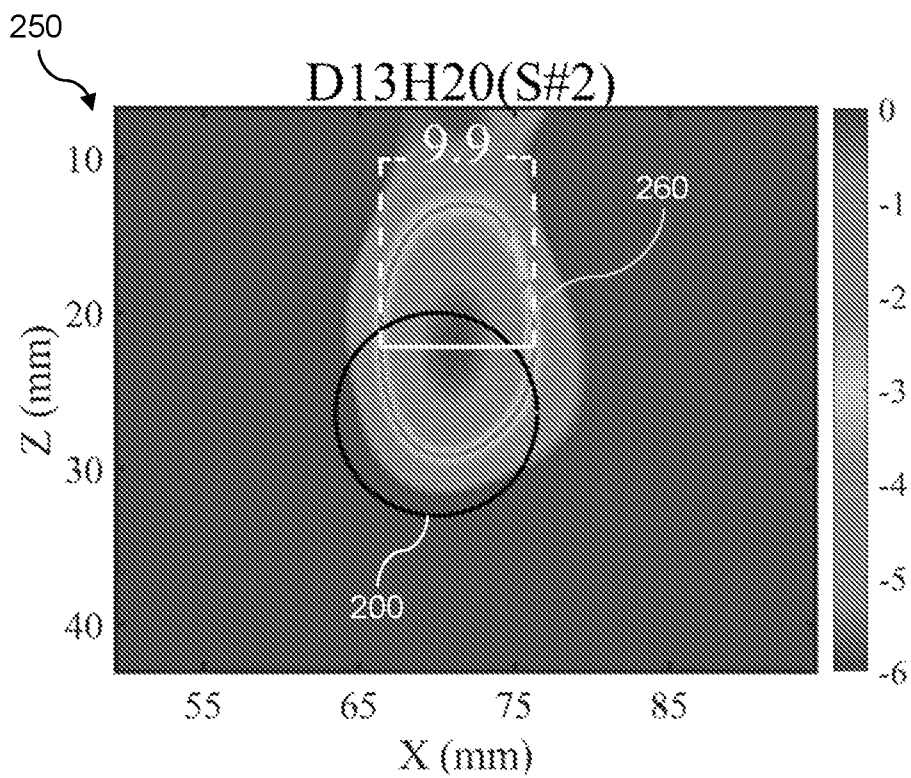


Figure 7F

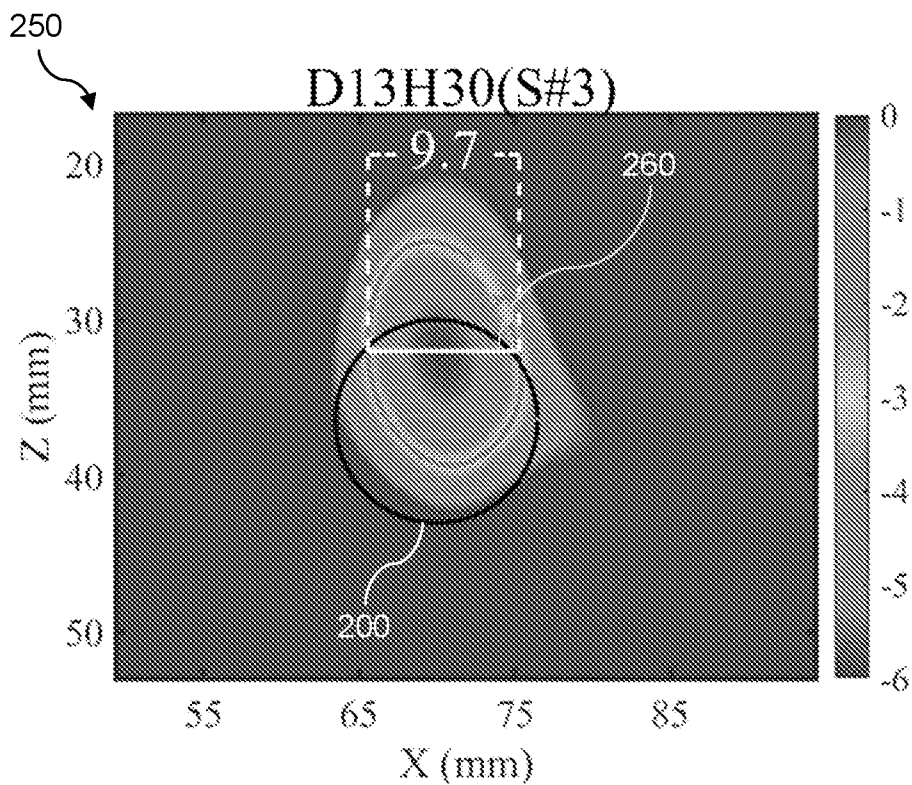


Figure 7G

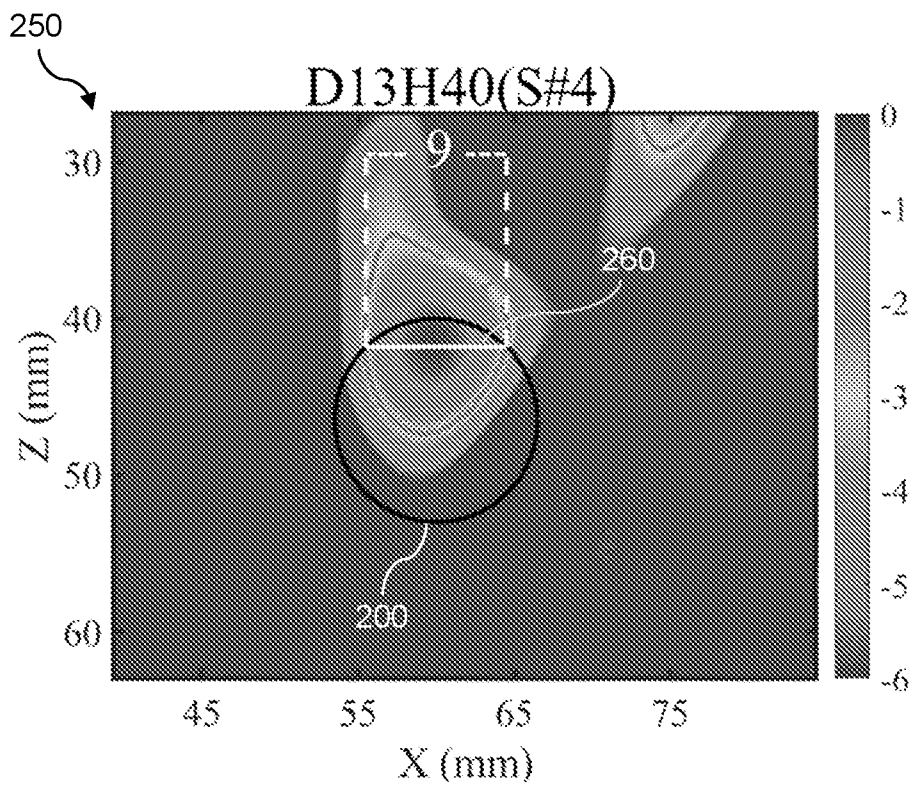


Figure 7H