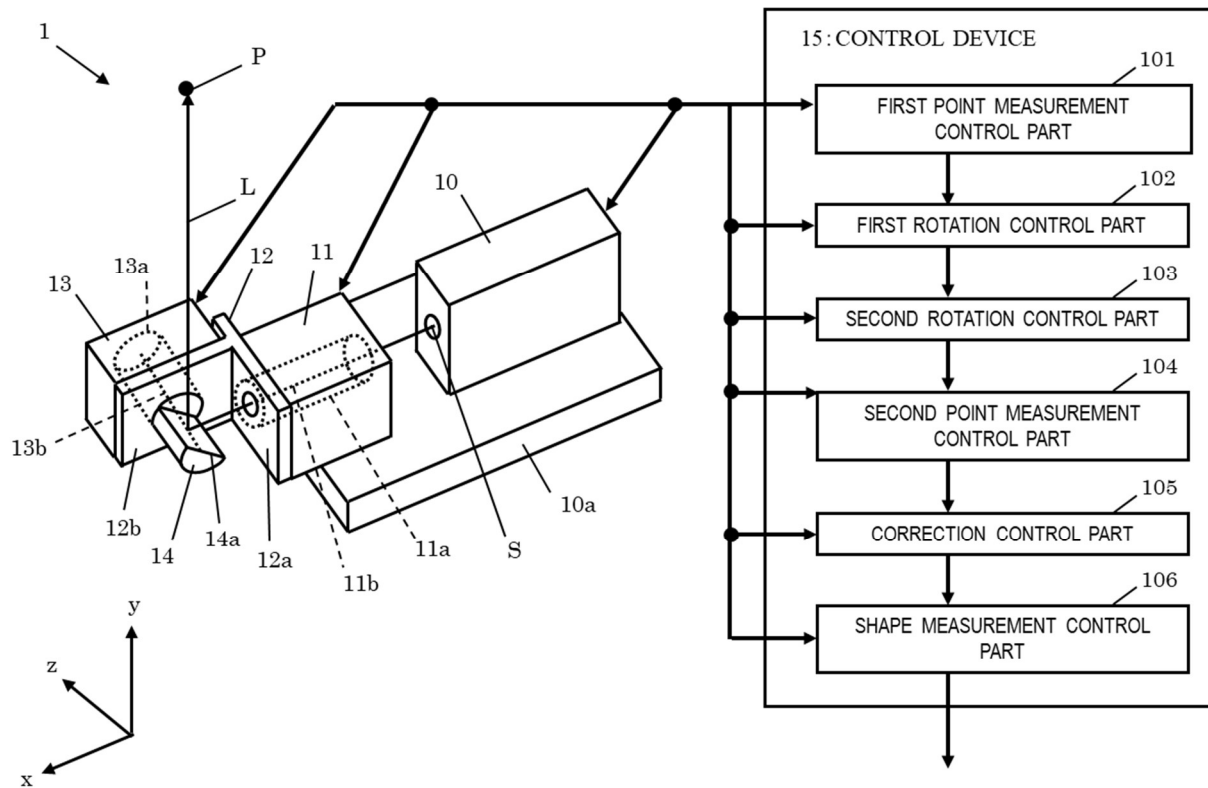


**FIG. 1**

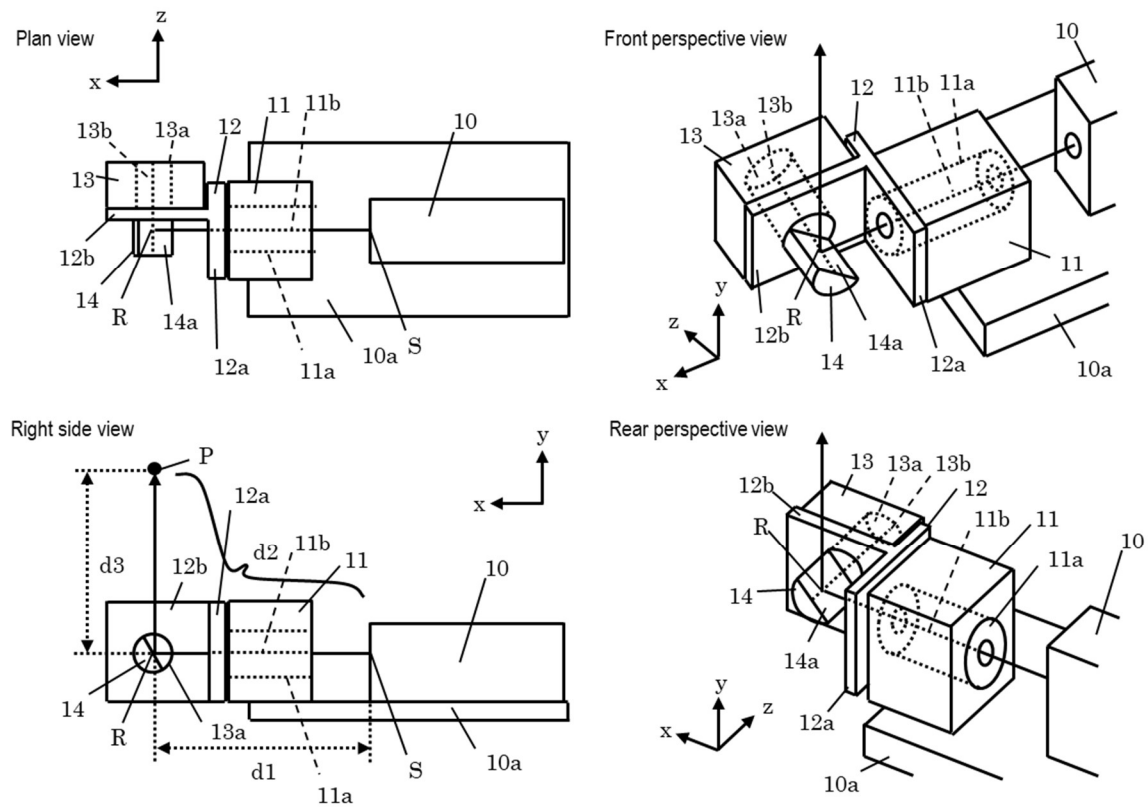


FIG. 2

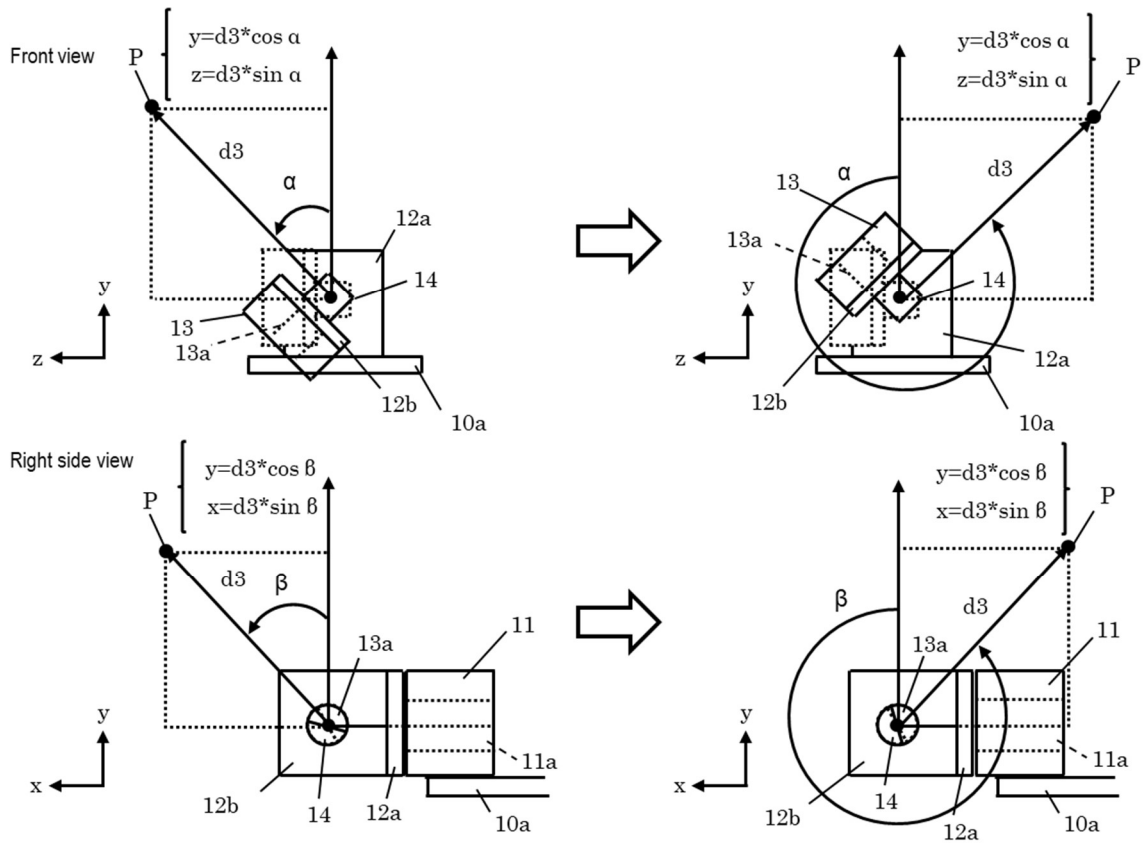
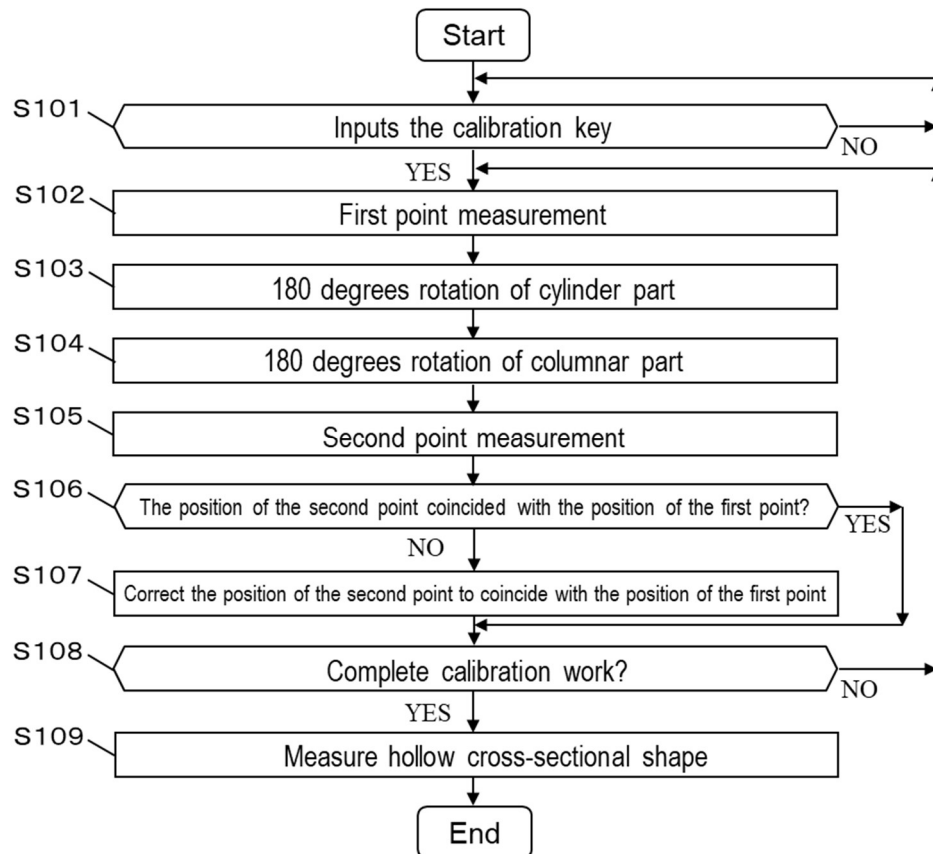
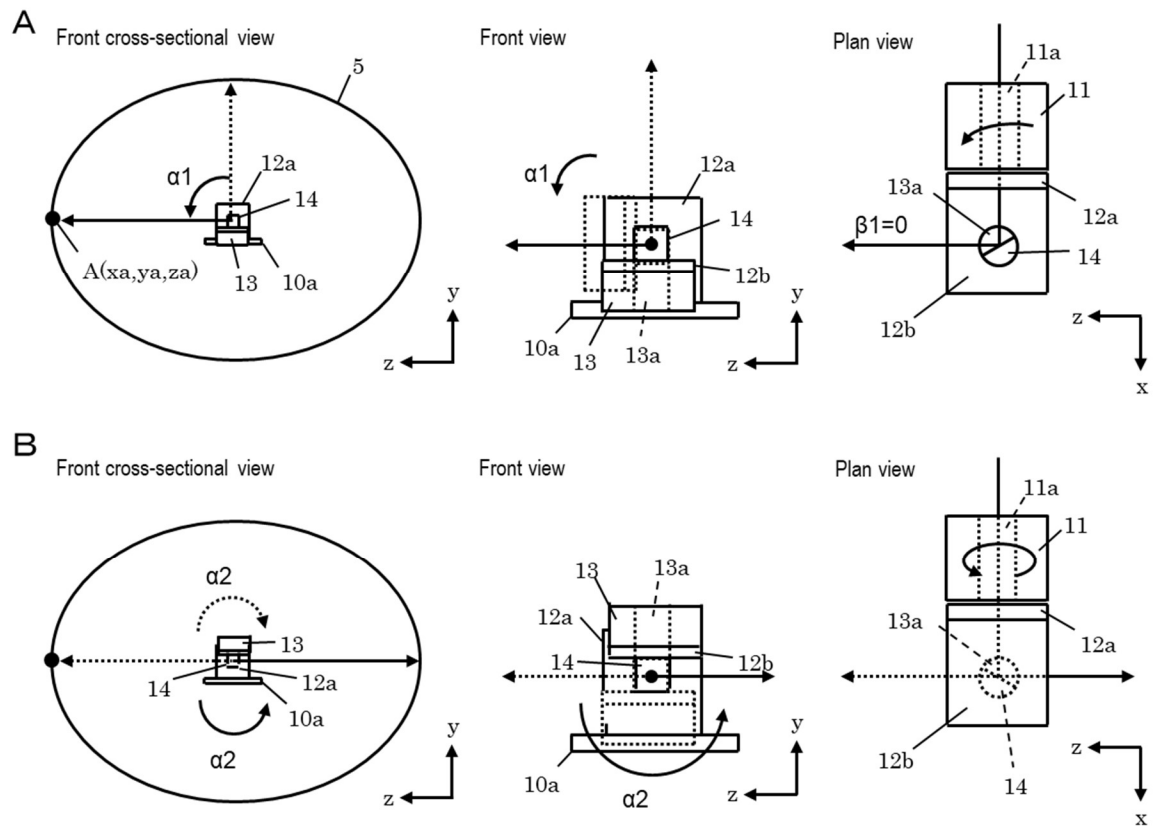


FIG. 3

**FIG. 4**

**FIG. 5**

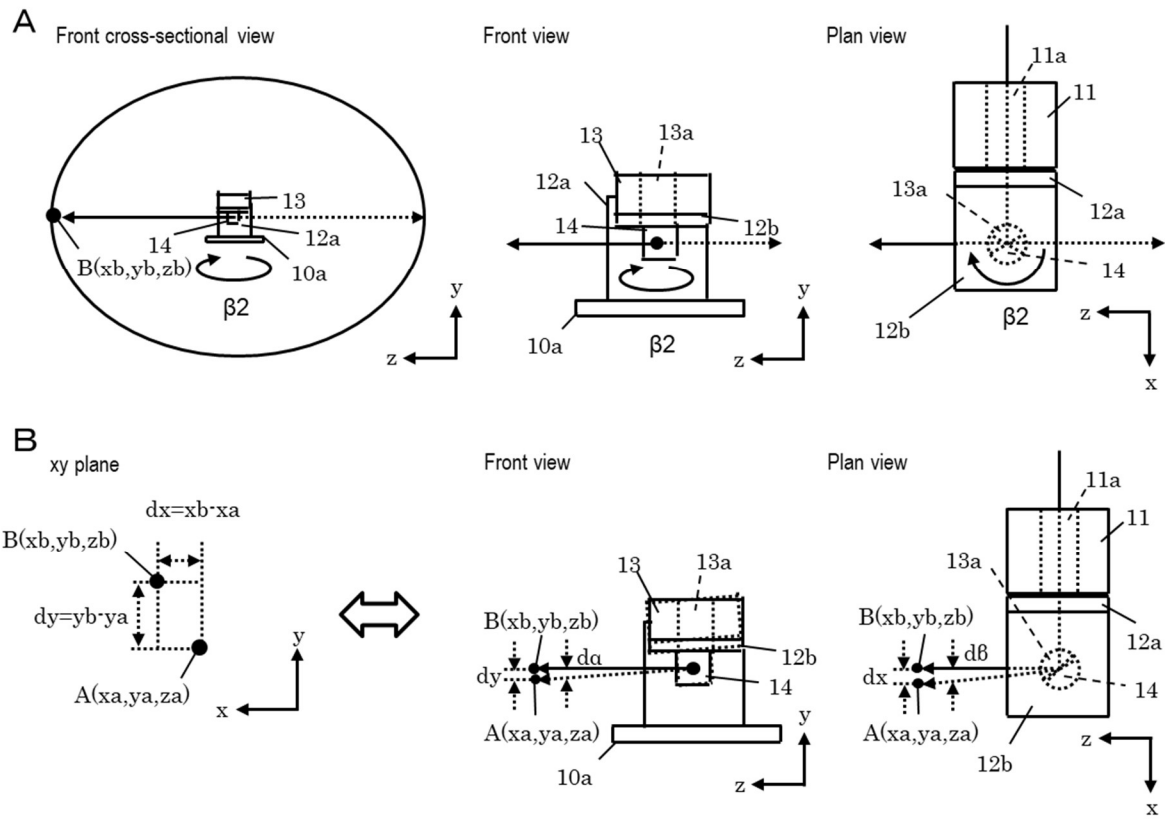


FIG. 6

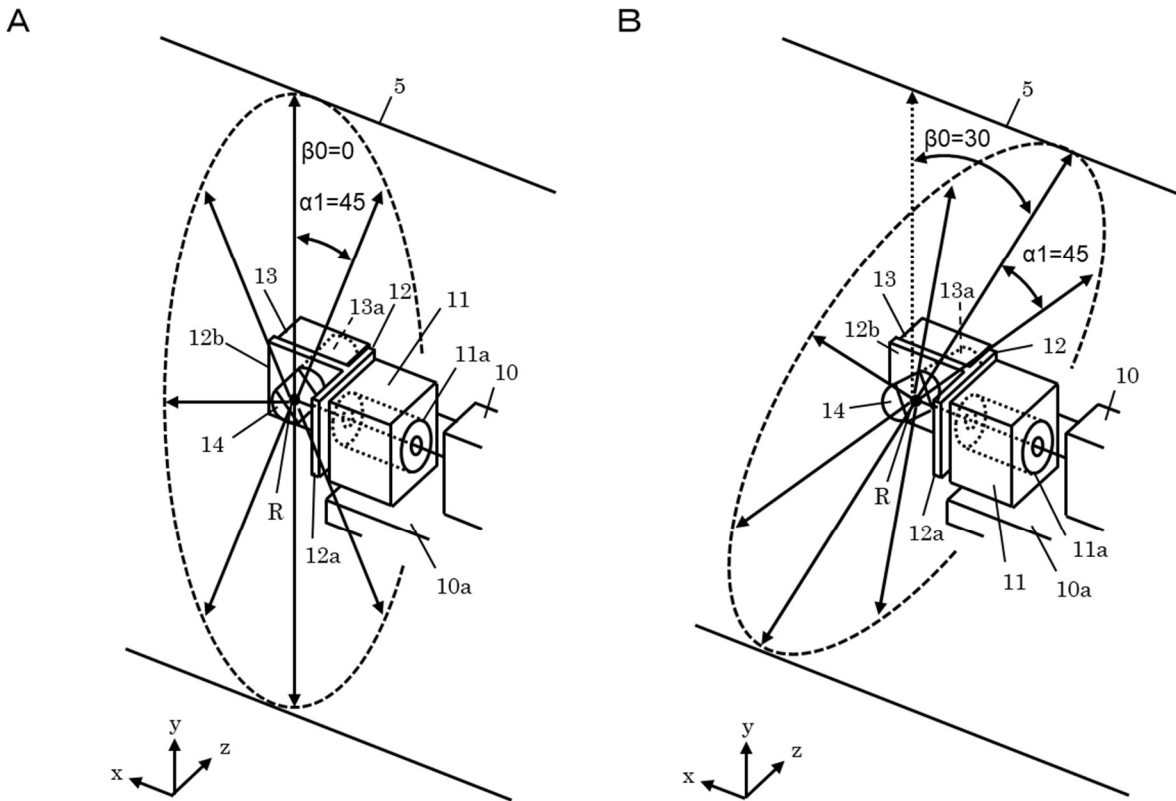


FIG. 7

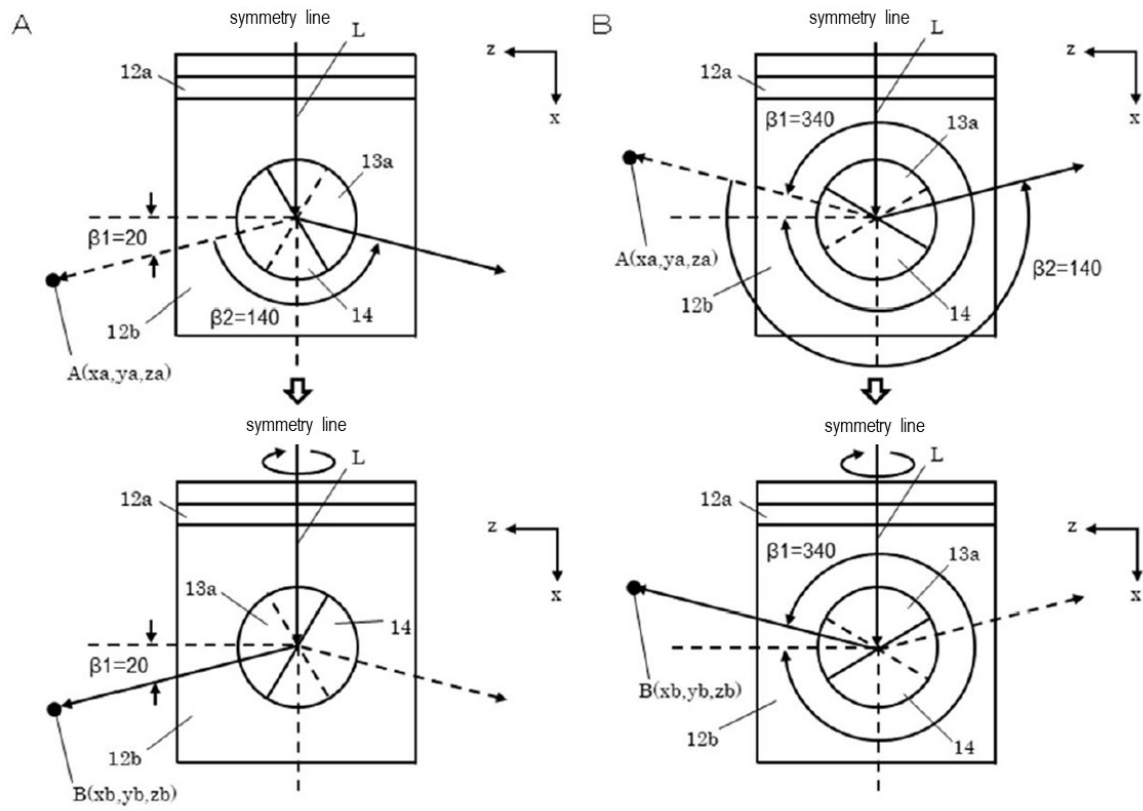
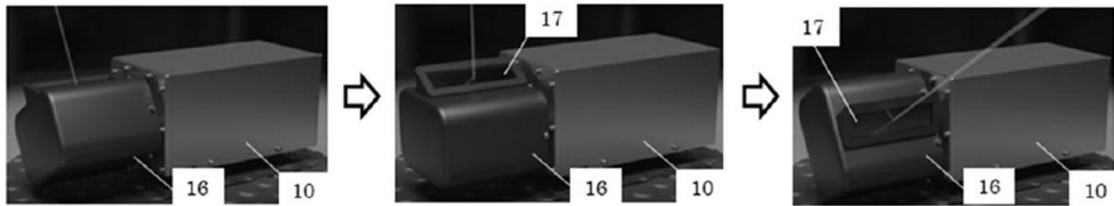


FIG. 8

Rotation of first rotation angle α



Rotation of second rotation angle β

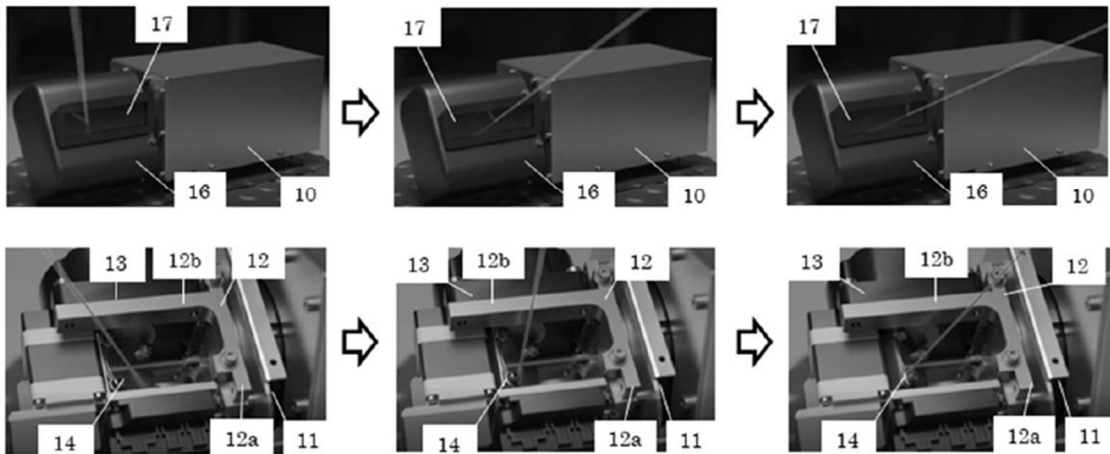
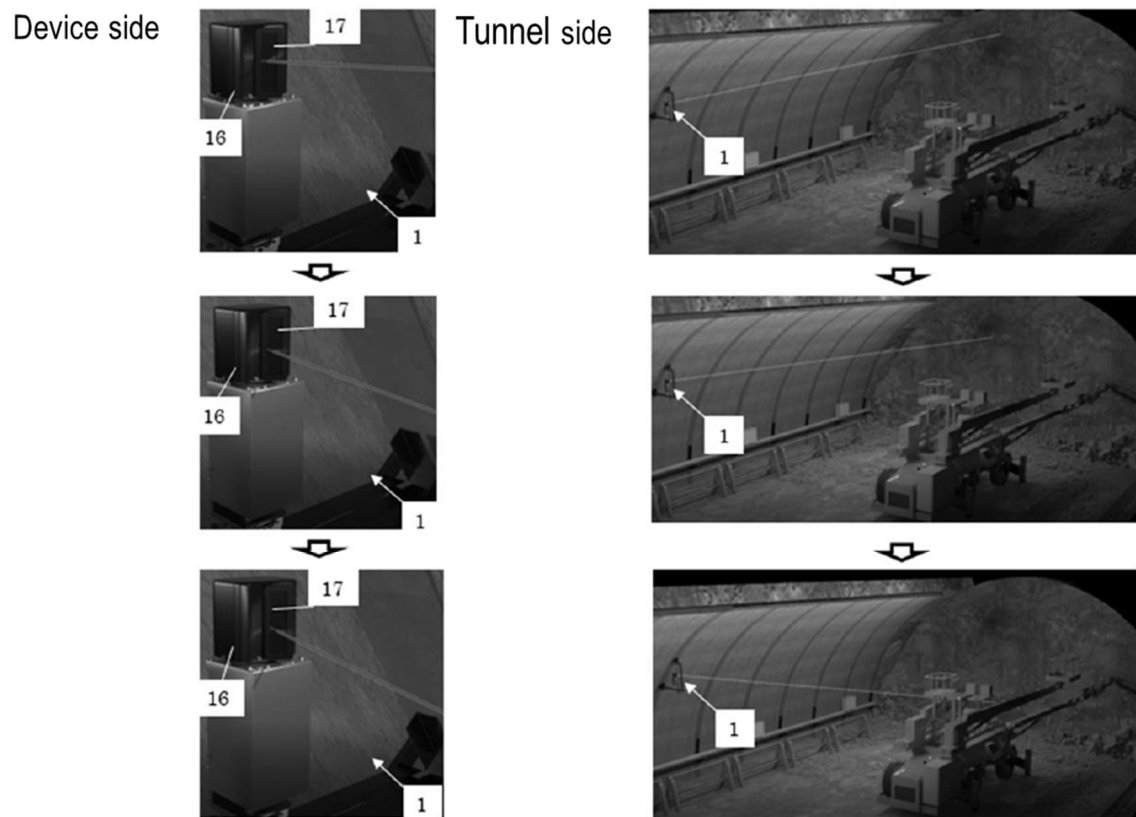
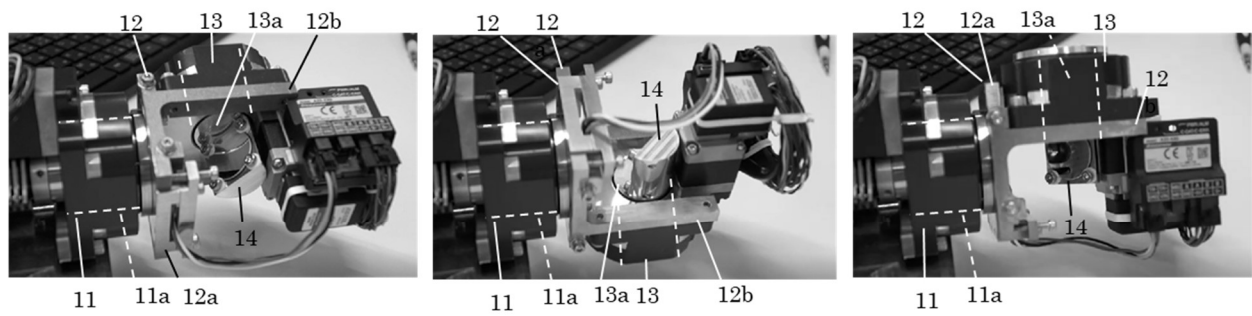
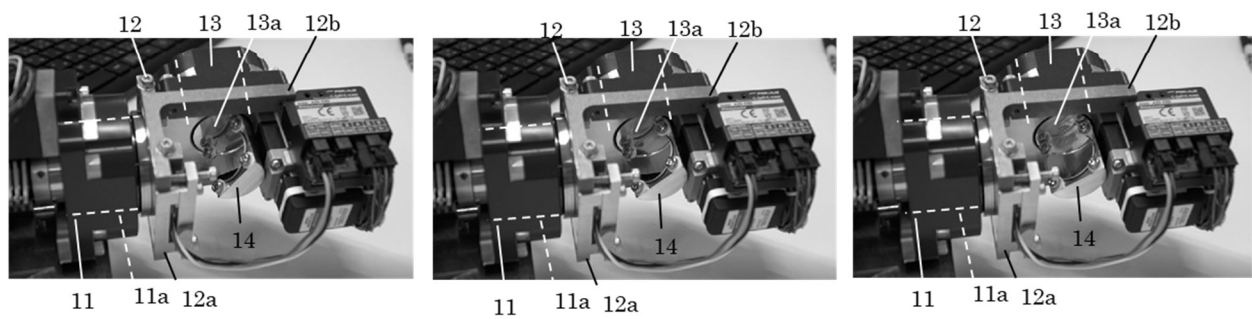
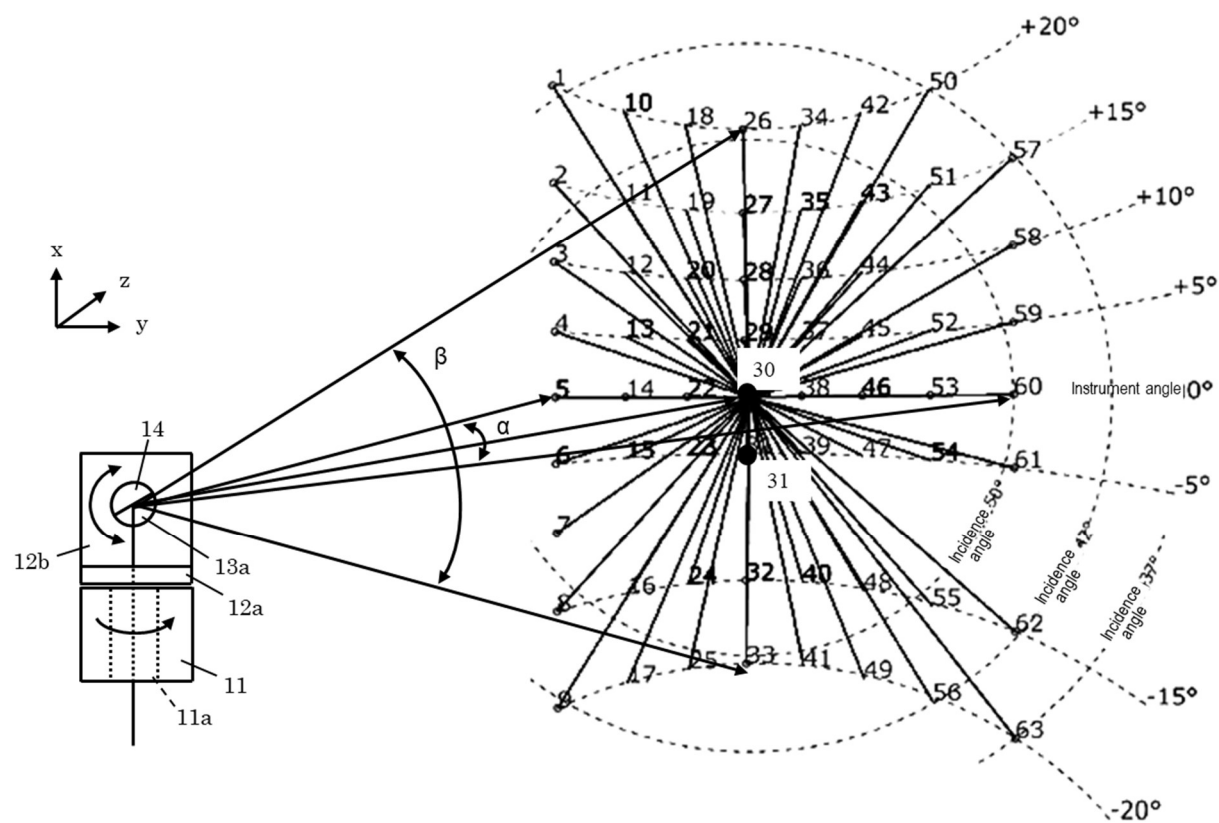


FIG. 9

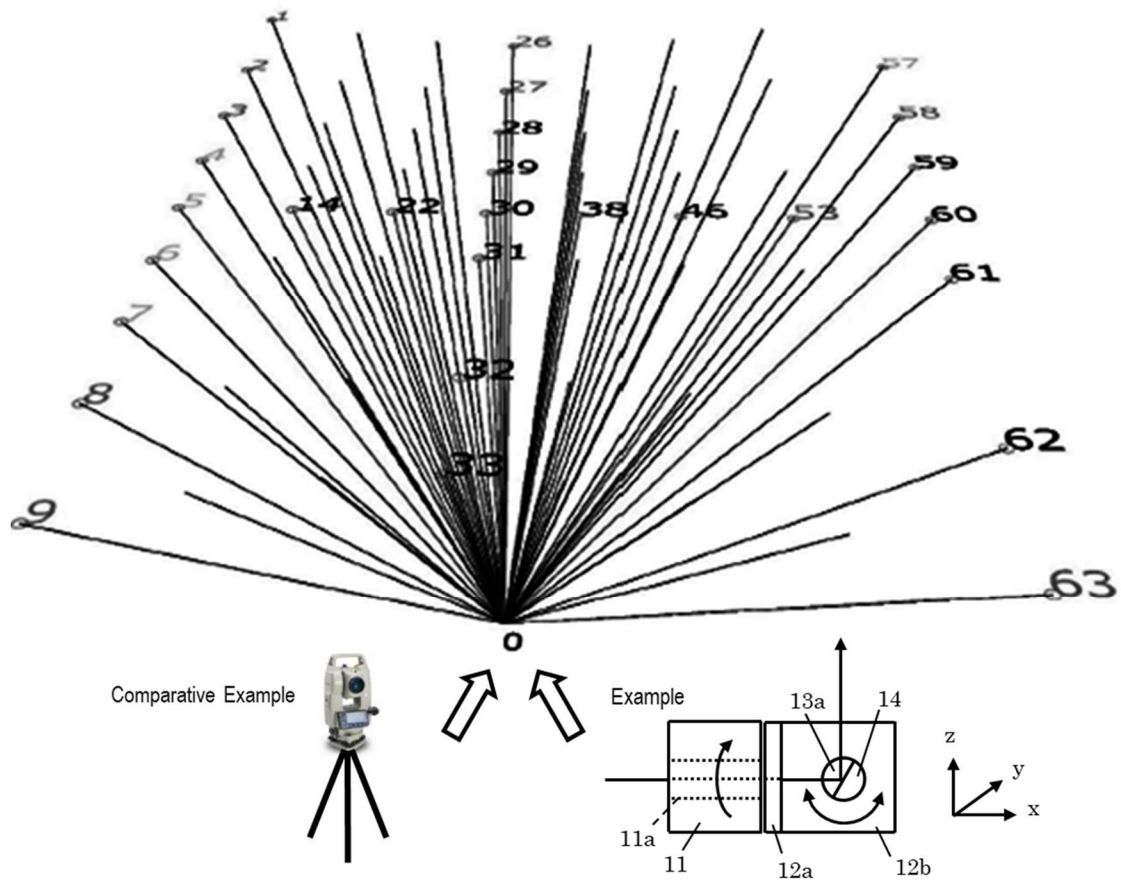
**FIG. 10**

A Rotation of the cylinder part**B** Rotation of the columnar part**FIG. 11**

**FIG. 12**

Measurement point name	No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	No.9	No.10	No.11	No.12	No.13
The largest value	2984.96	2652.82	2455.10	2345.86	2310.86	2342.82	2448.24	2644.86	2970.18	2751.88	2446.76	2263.86	2164.72
The smallest value	2984.44	2652.26	2454.24	2345.34	2310.56	2342.44	2447.60	2643.92	2969.34	2751.46	2446.22	2263.32	2164.46
Difference	0.52	0.56	0.86	0.52	0.30	0.38	0.64	0.94	0.84	0.42	0.54	0.54	0.26
Average value of 10 measurements	2984.70	2652.60	2454.62	2345.61	2310.73	2342.59	2447.87	2644.38	2969.72	2751.68	2446.46	2263.55	2164.58
Measurement point name	No.14	No.15	No.16	No.17	No.18	No.19	No.20	No.21	No.22	No.23	No.24	No.25	No.26
The largest value	2133.06	2162.70	2441.38	2742.94	2622.56	2332.80	2159.40	2064.74	2033.80	2062.94	2329.32	2617.56	2576.64
The smallest value	2132.54	2162.30	2440.40	2742.38	2621.42	2332.30	2158.92	2064.34	2033.36	2062.62	2328.88	2616.52	2575.68
Difference	0.52	0.40	0.98	0.56	1.14	0.50	0.48	0.40	0.44	0.32	0.44	1.04	0.96
Average value of 10 measurements	2132.80	2162.48	2440.76	2742.57	2622.08	2332.57	2159.12	2064.59	2033.60	2062.77	2329.07	2617.02	2576.28
Measurement point name	No.27	No.28	No.29	No.30	No.31	No.32	No.33	No.34	No.35	No.36	No.37	No.38	No.39
The largest value	2292.96	2122.18	2028.86	2000.12	2028.14	2290.20	2572.68	2607.88	2320.48	2147.16	2052.90	2023.00	2051.98
The smallest value	2292.66	2121.70	2028.38	1999.54	2027.58	2289.78	2571.90	2606.82	2320.00	2146.62	2052.40	2022.32	2051.44
Difference	0.30	0.48	0.48	0.58	0.56	0.42	0.78	1.06	0.48	0.54	0.50	0.68	0.54
Average value of 10 measurements	2292.78	2121.92	2028.64	1999.84	2027.87	2290.01	2572.27	2607.45	2320.27	2146.94	2052.70	2022.67	2051.65
Measurement point name	No.40	No.41	No.42	No.43	No.44	No.45	No.46	No.47	No.48	No.49	No.50	No.51	No.52
The largest value	2318.04	2603.38	2718.66	2419.08	2237.58	2139.44	2108.08	2138.86	2417.30	2713.68	2928.58	2604.56	2302.76
The smallest value	2317.60	2602.50	2717.36	2418.60	2236.86	2138.56	2107.76	2138.24	2416.50	2713.06	2927.96	2603.28	2302.08
Difference	0.44	0.88	1.30	0.48	0.72	0.88	0.32	0.62	0.80	0.62	0.62	1.28	0.68
Average value of 10 measurements	2317.78	2602.98	2718.26	2418.84	2237.25	2139.05	2107.90	2138.65	2416.94	2713.42	2928.27	2603.85	2302.51
Measurement point name	No.53	No.54	No.55	No.56	No.57	No.58	No.59	No.60	No.61	No.62	No.63		
The largest value	2268.74	2303.28	2603.60	2922.88	2915.64	2697.10	2577.86	2540.62	2579.84	2912.76	3271.02		
The smallest value	2268.14	2302.92	2602.40	2921.74	2914.44	2696.48	2576.64	2539.56	2578.58	2911.94	3270.08		
Difference	0.60	0.36	1.20	1.14	1.20	0.62	1.22	1.06	1.26	0.82	0.94		
Average value of 10 measurements	2268.51	2303.14	2602.85	2922.38	2914.96	2696.80	2577.42	2540.23	2579.22	2912.49	3270.60		

FIG. 13



	Comparative Example			Example			Difference		
Measurement point	X	Y	Z	X	Y	Z	X	Y	Z
No.1	205.0	1682.0	1718.0	207.2	1681.4	1716.2	-2.2	0.6	1.8
No.2	211.0	1110.0	1718.0	212.3	1109.0	1715.8	-1.3	1.0	2.2
No.3	215.0	644.0	1719.0	215.6	643.1	1716.9	-0.6	0.9	2.1
No.4	218.0	233.0	1719.0	219.4	233.4	1716.2	-1.4	-0.4	2.8
No.5	222.0	-150.0	1720.0	222.5	-150.8	1716.5	-0.5	0.8	3.5
No.6	226.0	-535.0	1720.0	225.6	-534.4	1716.7	0.4	-0.6	3.3
No.7	228.0	-944.0	1721.0	228.7	-942.3	1717.3	-0.7	-1.7	3.7
No.8	231.0	-1407.0	1723.0	231.6	-1406.3	1719.0	-0.6	-0.7	4.0
No.9	235.0	-1975.0	1724.0	235.8	-1974.3	1719.9	-0.8	-0.7	4.1
No.14	626.0	-149.0	1717.0	627.1	-148.3	1716.2	-1.1	-0.7	0.8
No.22	980.0	-146.0	1716.0	981.0	-146.1	1714.6	-1.0	0.1	1.4
No.26	1299.0	1426.0	1716.0	1301.0	1426.6	1714.6	-2.0	-0.6	1.4
No.27	1302.0	935.0	1716.0	1304.1	935.5	1714.3	-2.1	-0.5	1.7
No.28	1305.0	536.0	1715.0	1306.7	536.1	1714.7	-1.7	-0.1	0.3
No.29	1308.0	185.0	1715.0	1308.9	183.8	1714.0	-0.9	1.2	1.0
No.30	1311.0	-144.0	1715.0	1311.0	-144.0	1715.1	0.0	0.0	-0.1
No.31	1313.0	-173.0	1717.0	1313.1	-173.0	1715.7	-0.1	0.0	1.3
No.32	1318.0	-1223.0	1721.0	1317.8	-1222.2	1720.8	0.2	-0.8	0.2
No.33	1320.0	-1712.0	1724.0	1320.9	-1711.5	1722.6	-0.9	-0.5	1.4
No.38	1638.0	-142.0	1715.0	1639.1	-141.9	1714.6	-1.1	-0.1	0.4
No.46	1985.0	-141.0	1715.0	1986.5	-139.7	1715.6	-1.5	-1.3	-0.6
No.53	2376.0	-138.0	1716.0	2378.5	-137.1	1715.3	-2.5	-0.9	0.7
No.57	2847.0	1253.0	1717.0	2850.1	1256.5	1714.3	-3.1	-3.5	2.7
No.58	2853.0	742.0	1718.0	2853.4	742.6	1716.0	-0.4	-0.6	2.0
No.59	2854.0	290.0	1717.0	2855.2	290.3	1716.2	-1.2	-0.3	0.8
No.60	2856.0	-134.0	1718.0	2857.7	-134.0	1717.5	-1.7	0.0	0.5
No.61	2860.0	-559.0	1722.0	2861.6	-558.5	1720.4	-1.6	-0.5	1.6
No.62	2866.0	-1524.0	1723.0	2866.8	-1523.1	1722.8	-0.8	-0.9	0.2
No.63	2866.0	-2151.0	1723.0	2868.7	-2150.0	1722.4	-2.7	-1.0	0.6

FIG. 15