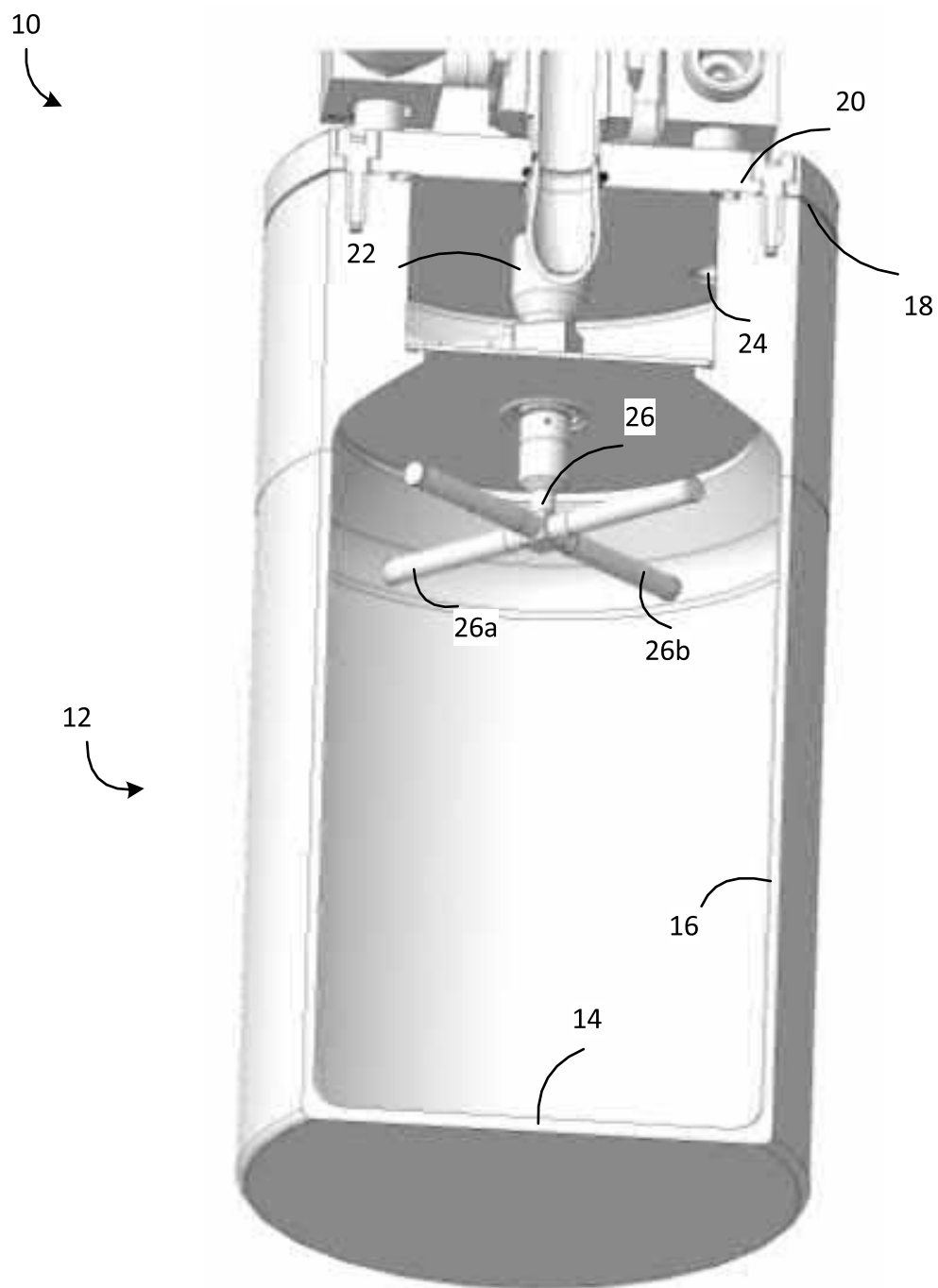
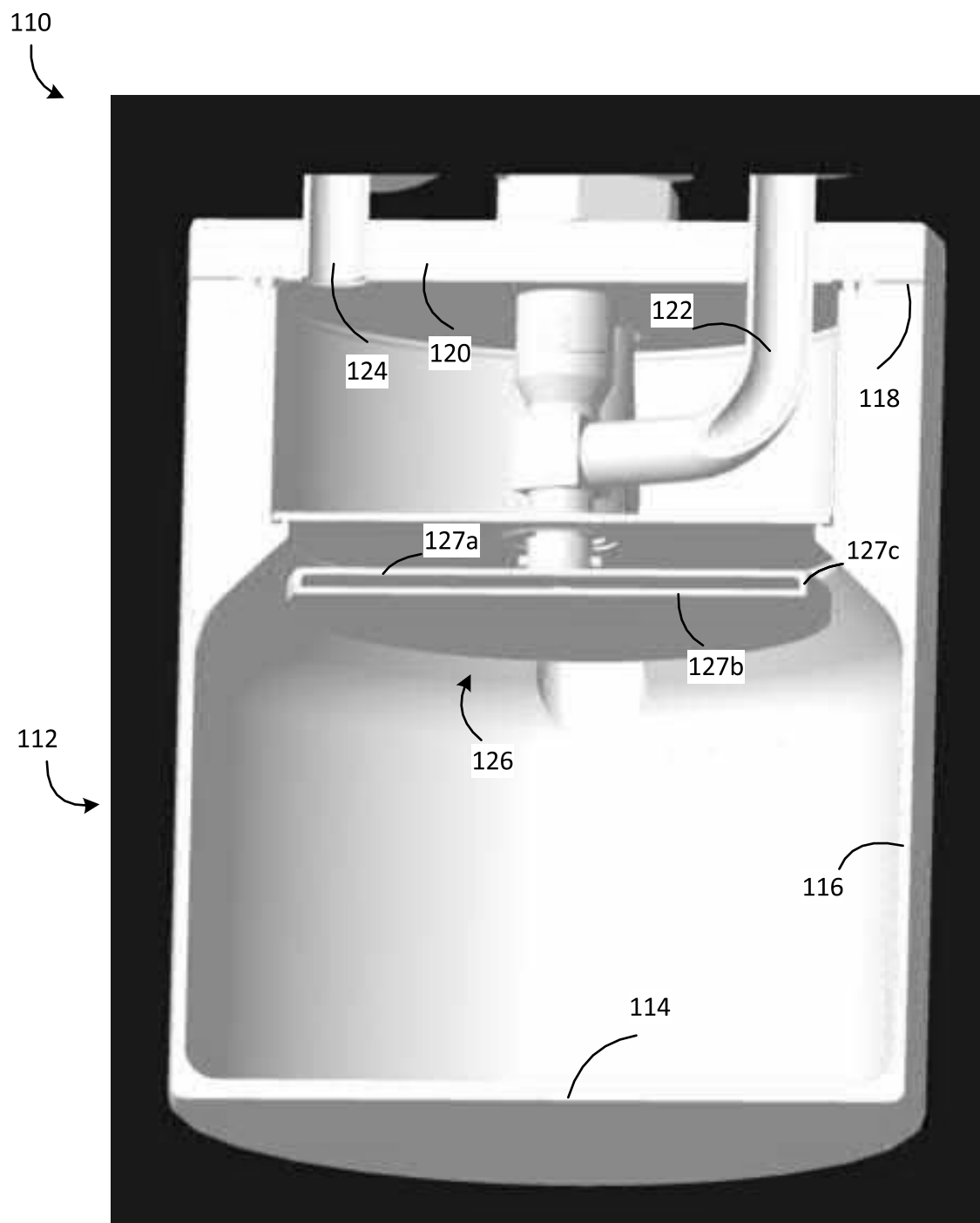


**FIG. 1 (PRIOR ART)**

**FIG. 2 (PRIOR ART)**

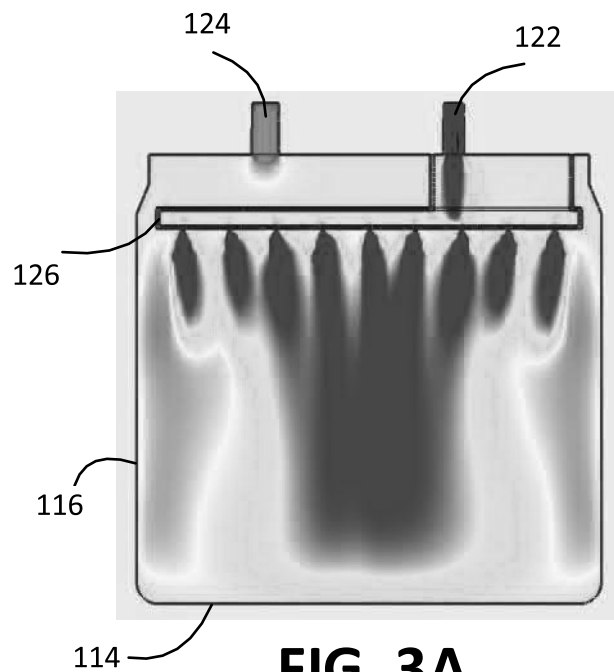


FIG. 3A
(PRIOR ART)

Downward Flow
 Horizontal/Slow Flow
 Upward Flow

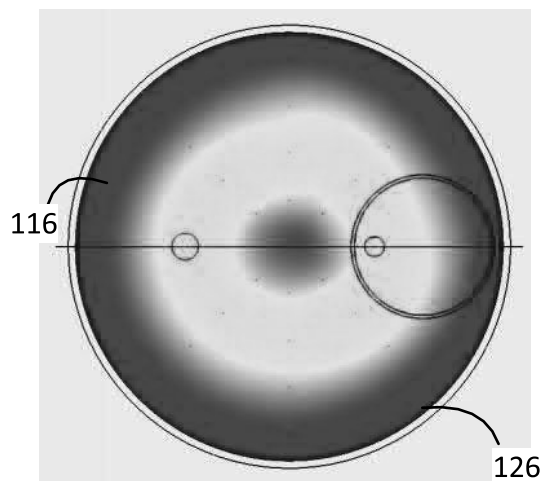


FIG. 3B
(PRIOR ART)

Low Shear Stress
 Moderate Shear Stress
 High Shear Stress

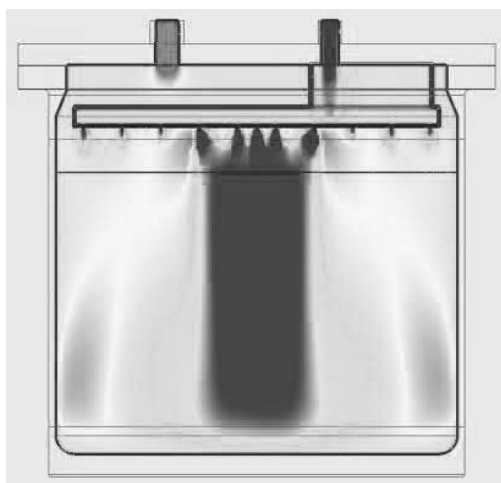


FIG. 4A

Downward Flow

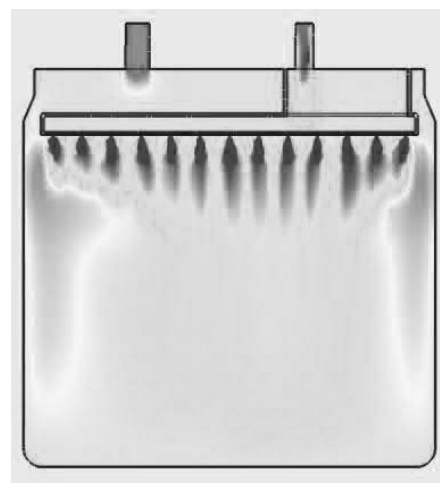


FIG. 5A

Horizontal/Slow Flow

Upward Flow

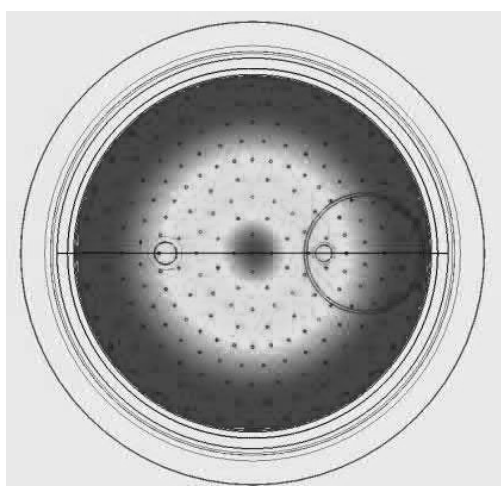


FIG. 4B

Low Shear Stress

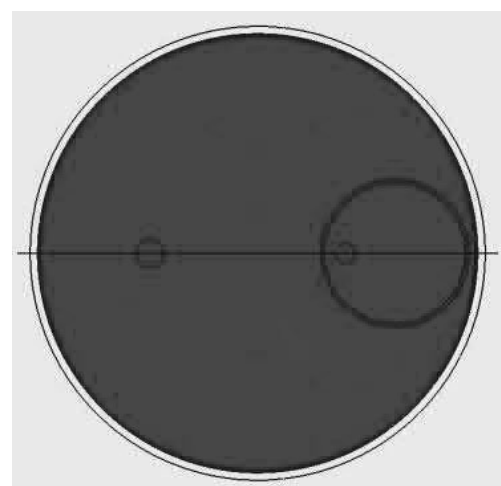


FIG. 5B

Moderate Shear Stress

High Shear Stress

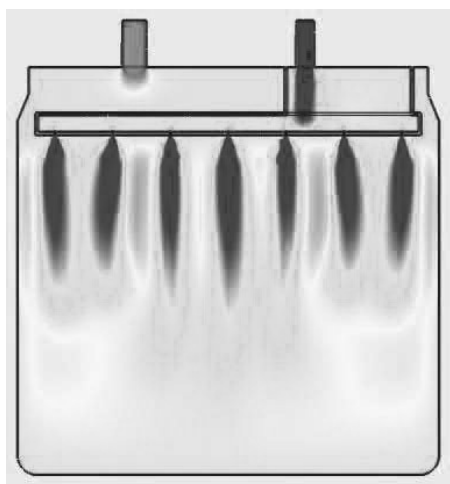


FIG. 6A

Downward Flow

Horizontal/Slow Flow

Upward Flow

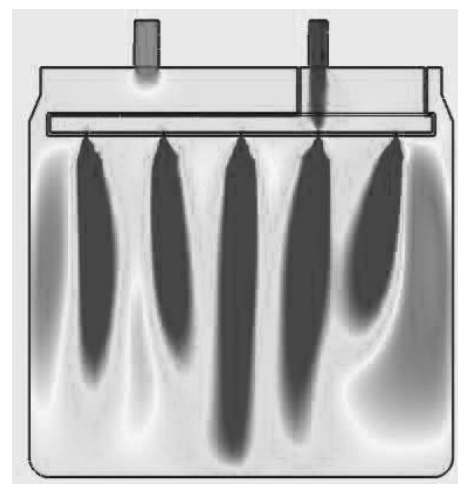


FIG. 7A

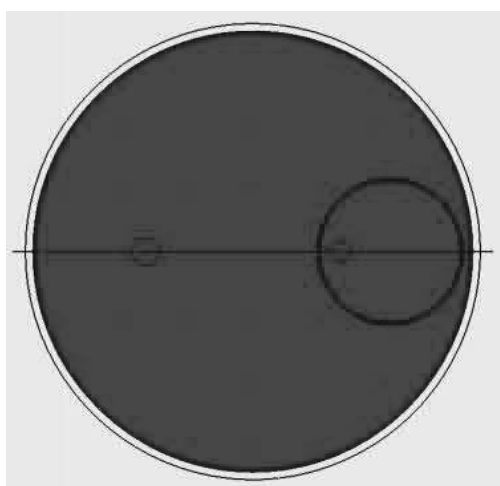


FIG. 6B

Low Shear Stress

Moderate Shear Stress

High Shear Stress

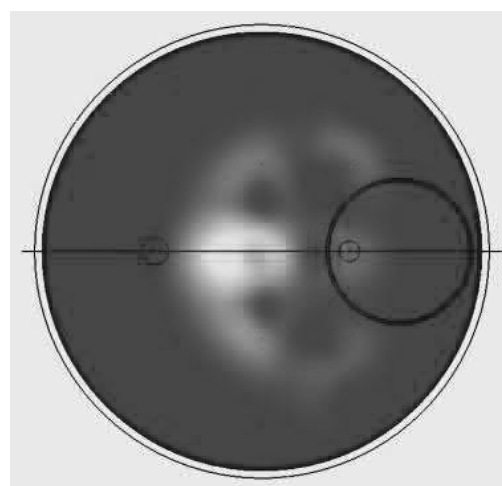
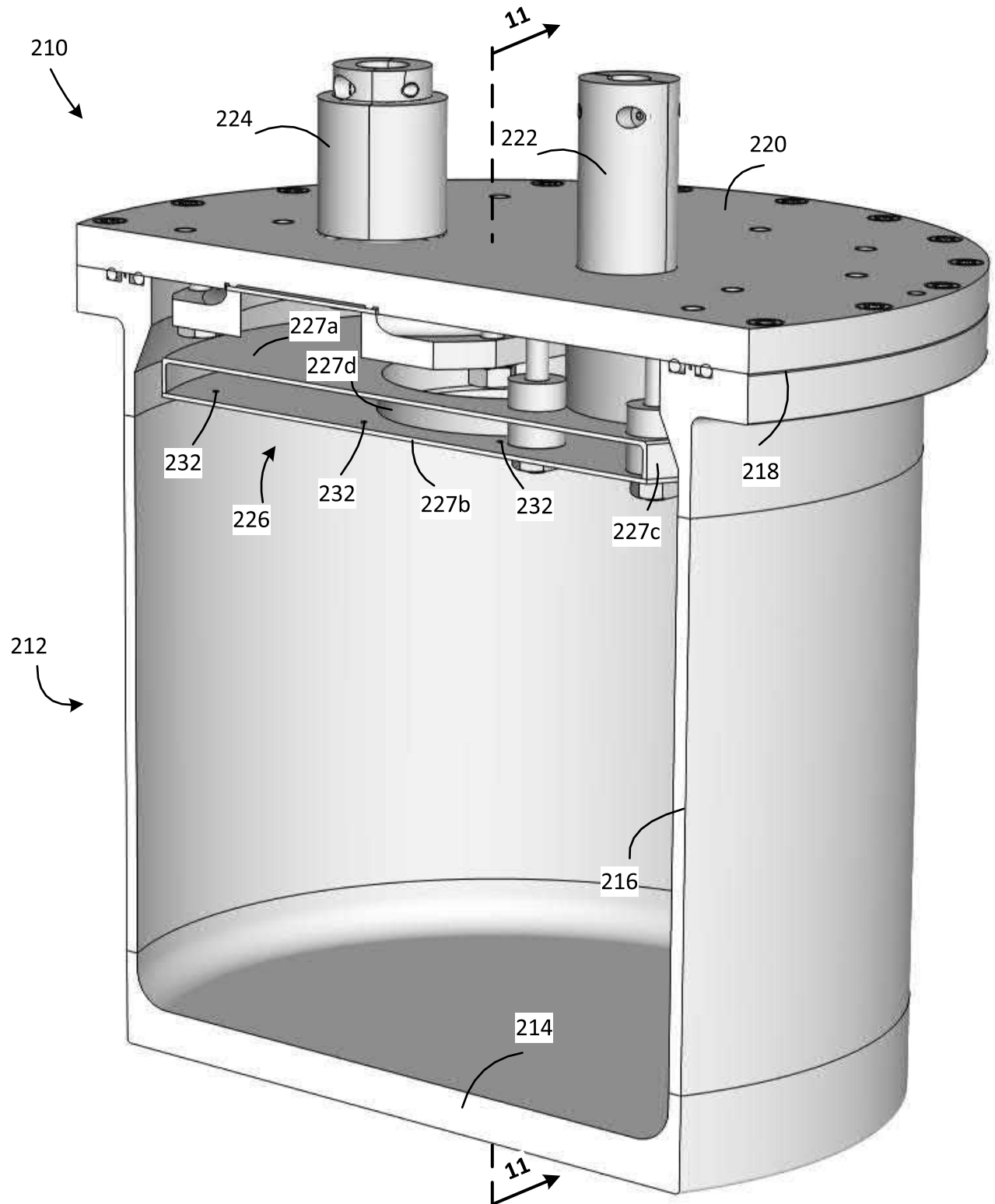


FIG. 7B

**FIG. 8**

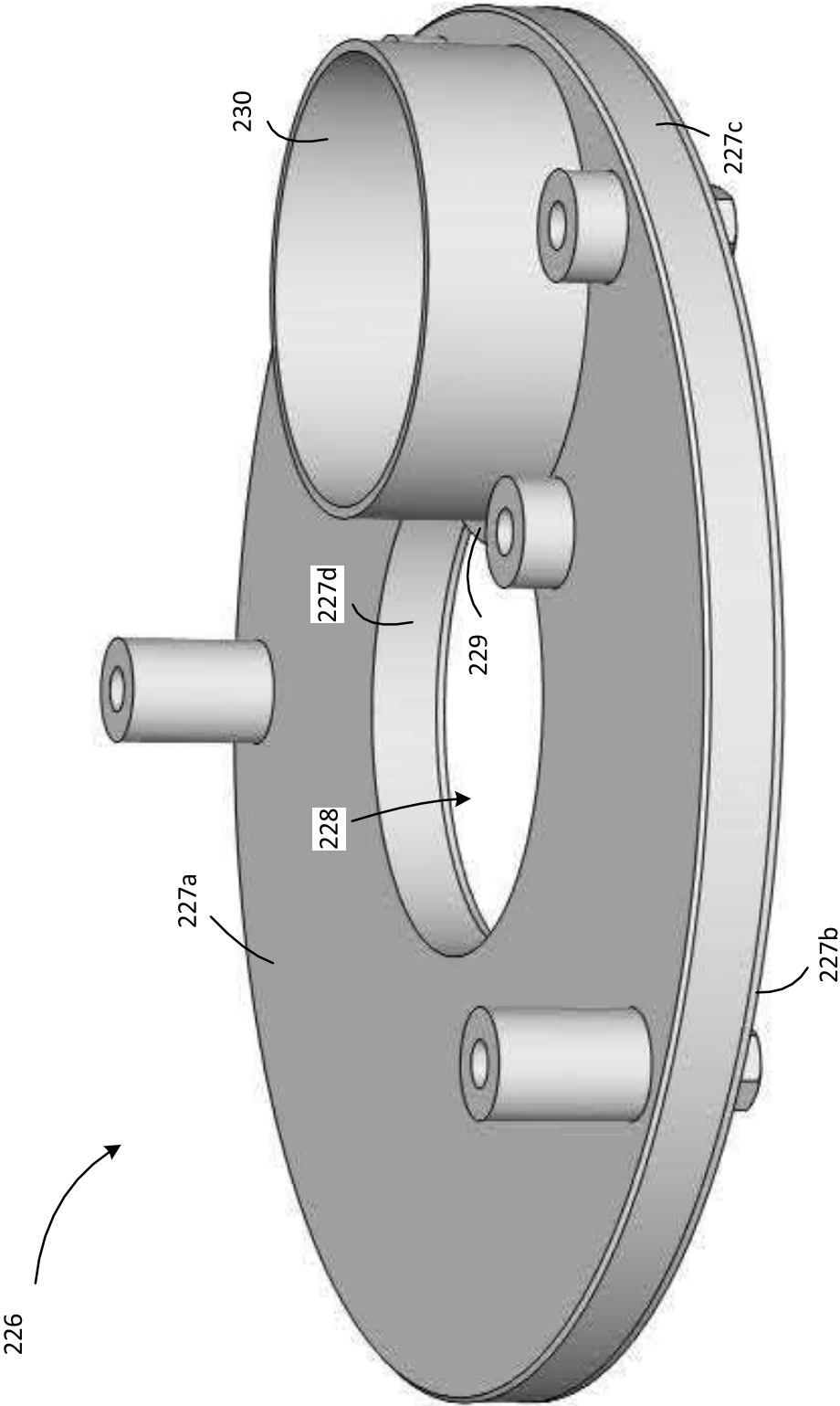


FIG. 9

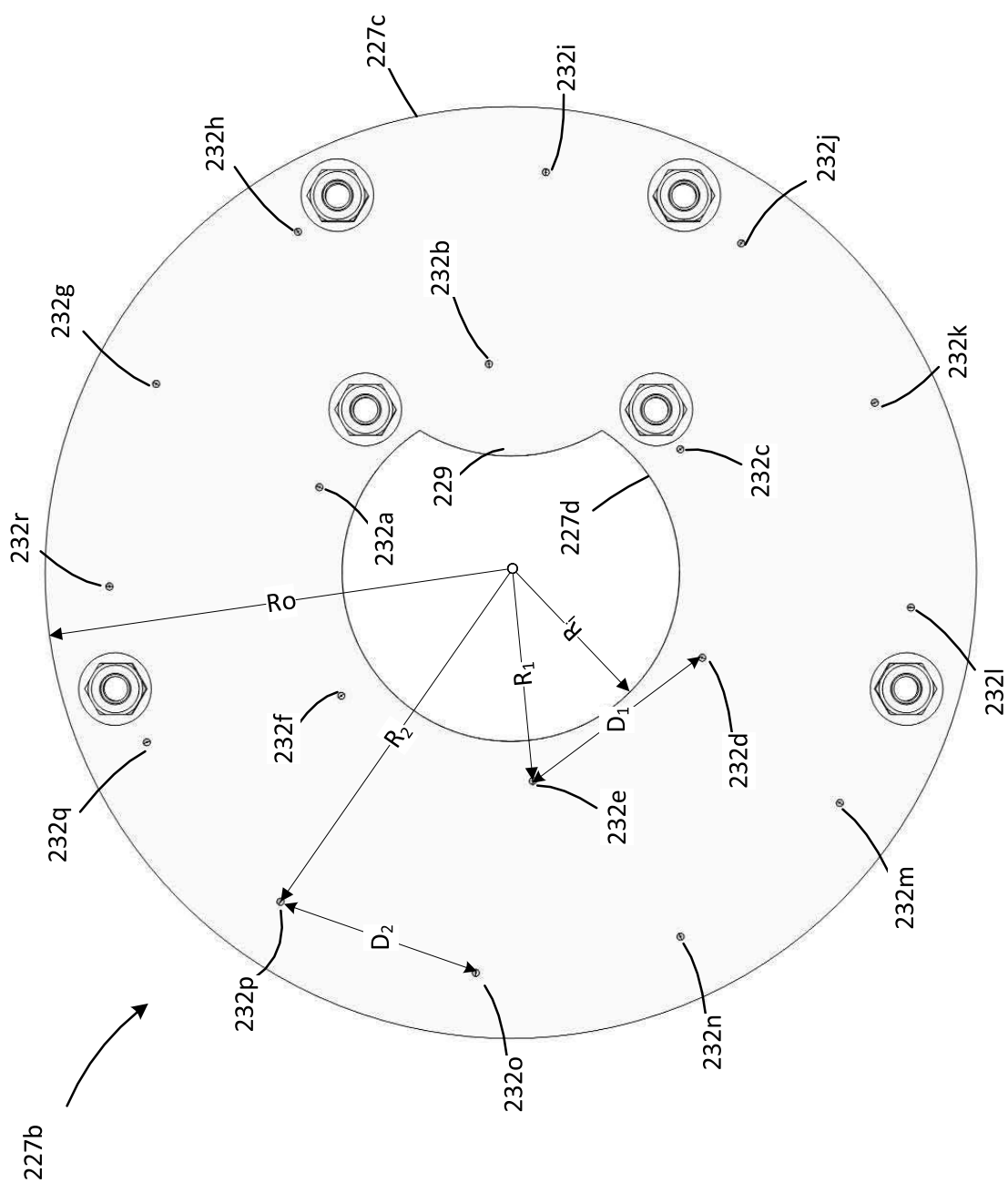


FIG. 10

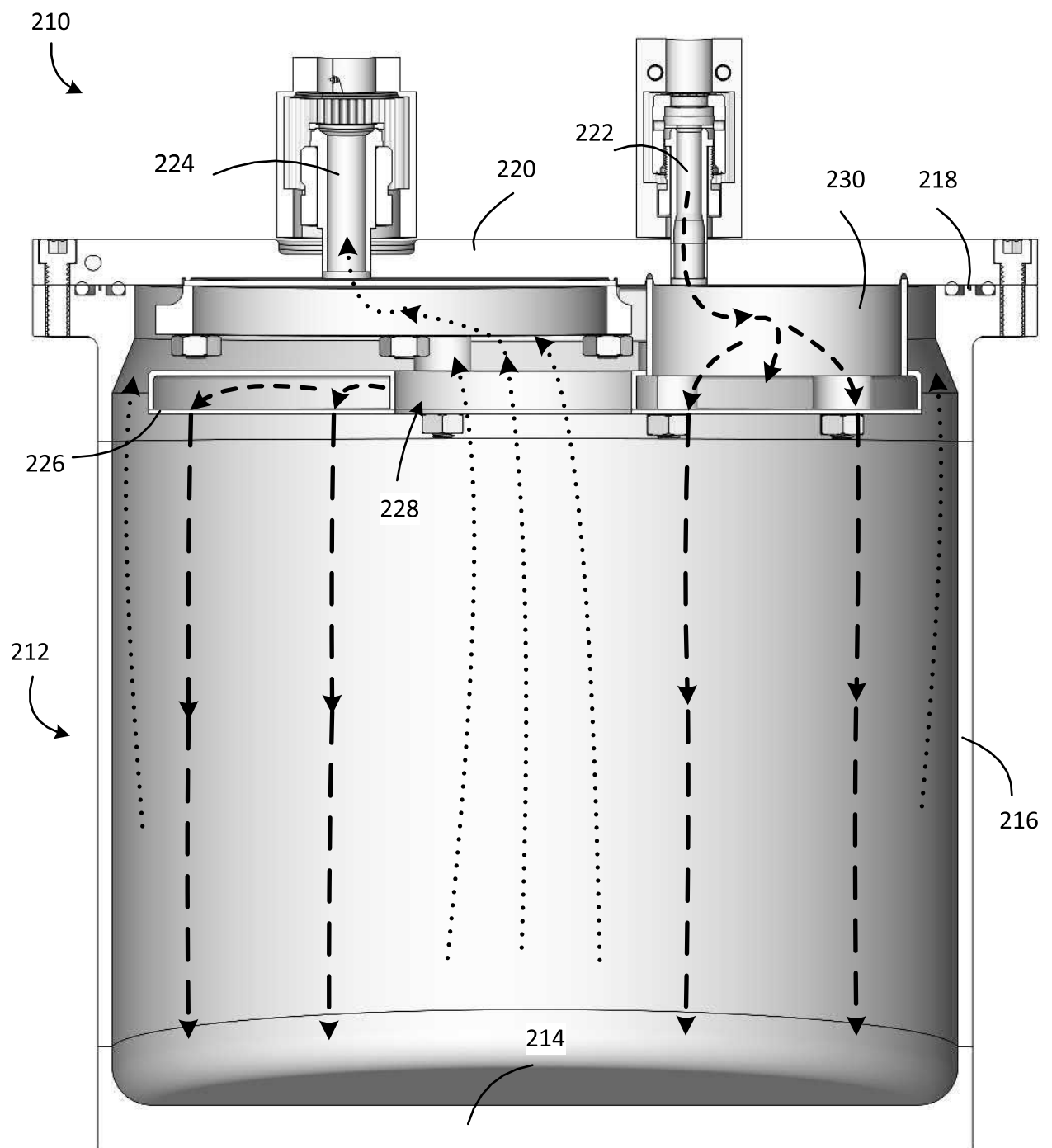


FIG. 11

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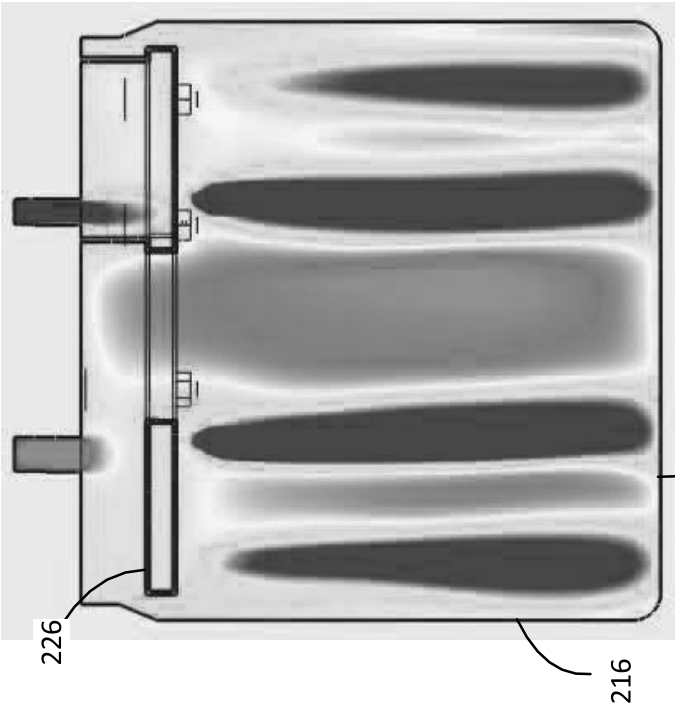


FIG. 12A

- Downward Flow
- Horizontal/Slow Flow
- Upward Flow

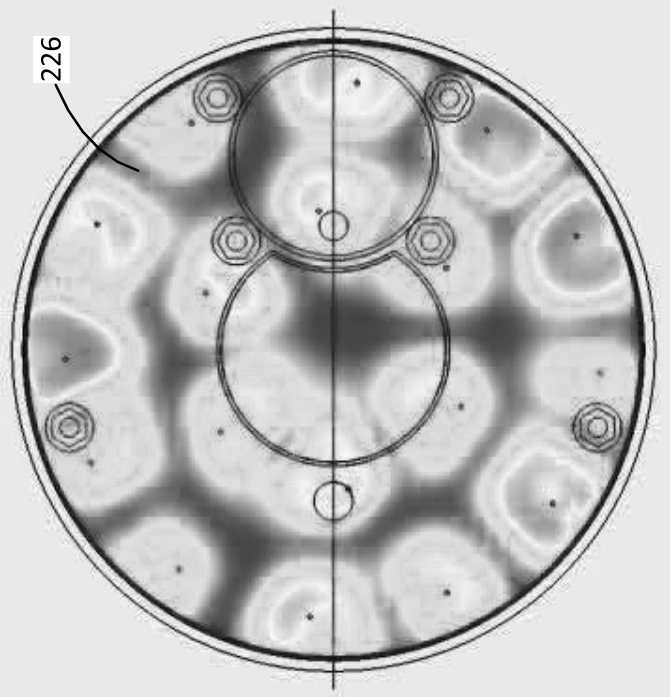


FIG. 12B

- Low Shear Stress
- Moderate Shear Stress
- High Shear Stress

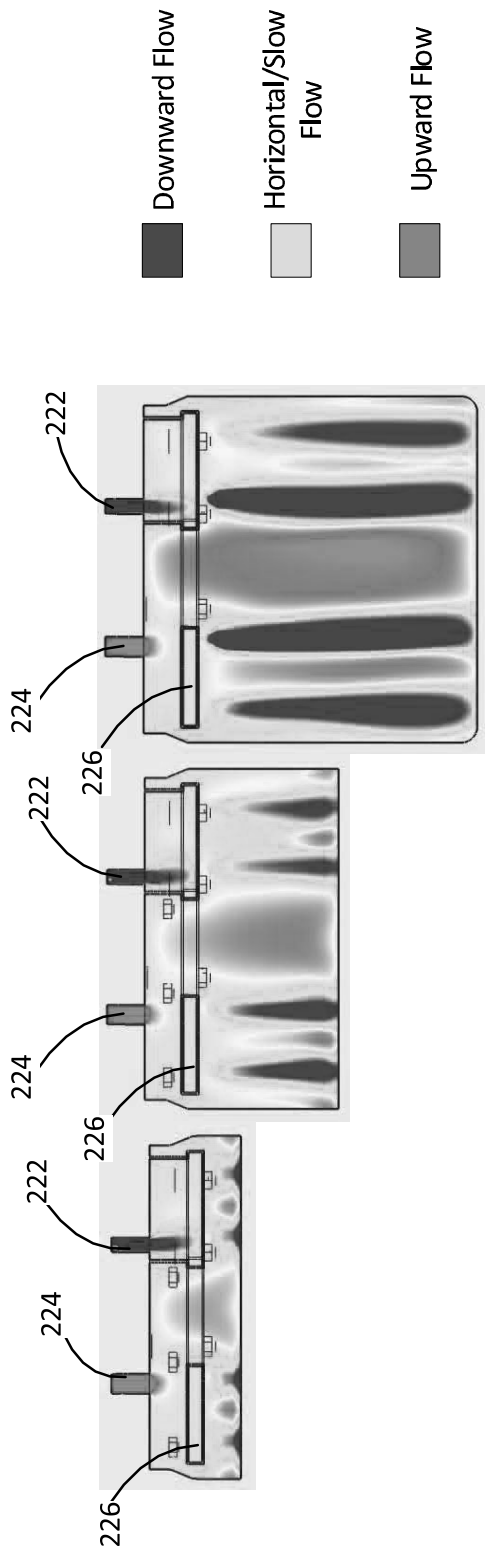


FIG. 13A **FIG. 13C** **FIG. 13E**

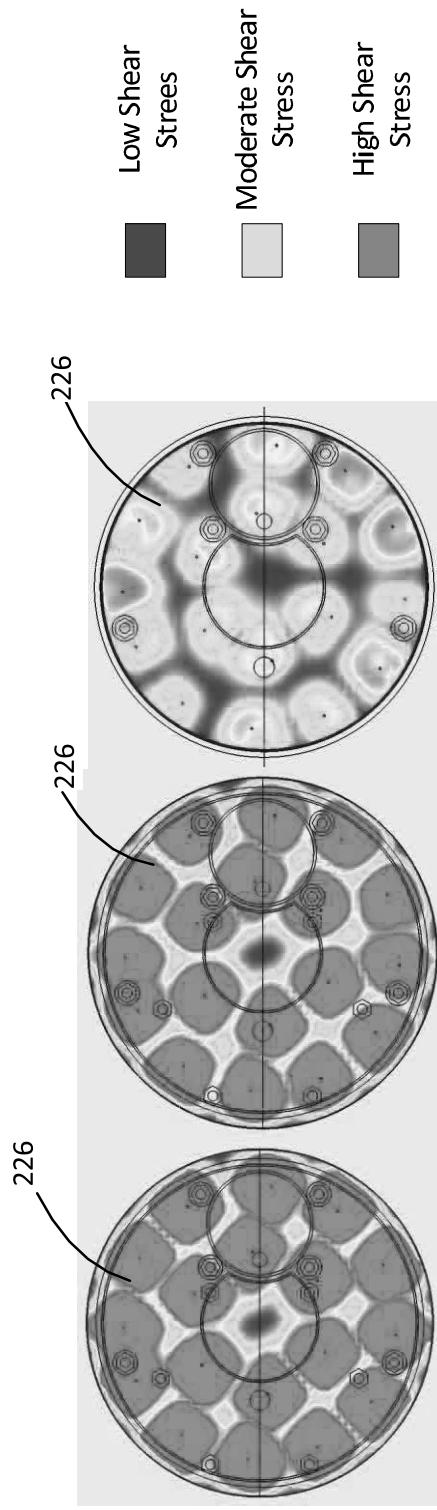


FIG. 13B **FIG. 13D** **FIG. 13F**