WO 2020/210024 PCT/US2020/024465

14. The aspiration system of any of claims 1-13, wherein the fluid oscillator is configured to increase a frequency of the vibrations in response to an increase in a flow rate of the fluid through the fluid oscillator.

- 15. The aspiration system of any of claims 1-14, further comprising a fluid switch configured to start and stop the flow of the fluid through the fluid oscillator.
- 16. The aspiration system of claim 15, wherein the fluid switch is upstream of the fluid flow sensor.
- 17. The aspiration system of claim 16, wherein the fluid switch is coupled to the flow oscillator by less than ten centimeters aspiration tubing.
- 18. The aspiration system of any of claims 1-17, wherein the catheter is upstream of the fluid flow sensor, the system further comprising a fluid pump downstream of the flow sensor and configured to generate a suction through the catheter.
- 19. The aspiration system of any of claims 1-18, wherein the flow oscillator is coated with at least one of an anti-thrombogenic material or a lubricious material.
- 20. A fluid flow sensor, comprising:
  - a fluid inlet configured to receive fluid from a catheter;
- an inlet connector proximate to the fluid inlet and configured to couple to at least one of aspiration tubing or a fluid switch;
  - a fluid outlet configured to discharge the fluid;
- an outlet connector proximate to the fluid outlet and configured to couple to aspiration tubing; and
- a flow oscillator configured to oscillate flow of the fluid through the fluid flow sensor to generate flow-induced vibrations.