pressure, positive pressure from aspiration pump 6, negative pressure from aspiration pump 6, and the like. For example, the differential pressure may be selected such that the blood pressure in the vessel does not result in flow of fluid into inner catheter lumen 20 via one or more sidewall openings 24.

[0071] The plurality of sidewall openings 24 may have a variety of sizes (e.g., diameters, circumferences, lengths, widths, shapes, etc.). In some examples, all sidewall openings of the plurality 24 have substantially the same size (e.g., may only differ by manufacturing variances). In some examples, some sidewall openings of the plurality of sidewall openings 24 have different sizes. In some examples, a size and distribution of the plurality of sidewall openings may be selected according to a particular surface area of a distal end of inner catheter 14. For example, a number of sidewall openings 24 and surface area of each of sidewall openings 24 may be selected so that the plurality of sidewall openings may have a percentage of a surface area of a distal portion (e.g., distal-most 10 centimeters) of inner catheter 14, such as greater than about 10%.

[0072] In some examples, sidewall openings 24 may have a median largest surface dimension (e.g., length, width, diameter, or area defined by the boundary of the respective opening) that is less than or equal to about 30% of the diameter of inner catheter lumen 20 in order to help minimize the potential of blocking inner catheter lumen 20 and restricting flow through inner catheter lumen 20. In some examples, sidewall openings 24 may have a median surface area that is less than about that corresponding to a diameter of 0.024 inches (about 0.61 mm). For example, a median surface area may correspond to a flow rate of fluid into inner catheter lumen 20 for a particular positive pressure, negative pressure, position of inner catheter 14 relative to outer catheter 12, such that a median surface area may be selected to balance suction provided at inner catheter distal opening 22 (i.e., near the thrombus) when inner catheter distal opening 22 is not blocked, such that adequate fluid is flowing near the thrombus, with flow through sidewall openings 24 when inner catheter distal opening 22 is blocked, such that adequate fluid is flowing into inner catheter lumen 20. Sidewall openings 24 may also have a minimum size, such as, but not limited to, about 0.001 inches (about 0.025 mm), which may help aid manufacturability' of catheter 14. In some examples, the plurality of sidewall openings 24 include between 2 sidewall openings and 15 sidewall openings.

[0073] In some examples, the distal-most sidewall opening 24B of the plurality of sidewall openings 24 may be positioned at a length Li between about 0.5 centimeters and about 10 centimeters proximal to inner catheter distal opening 22. For example, a length