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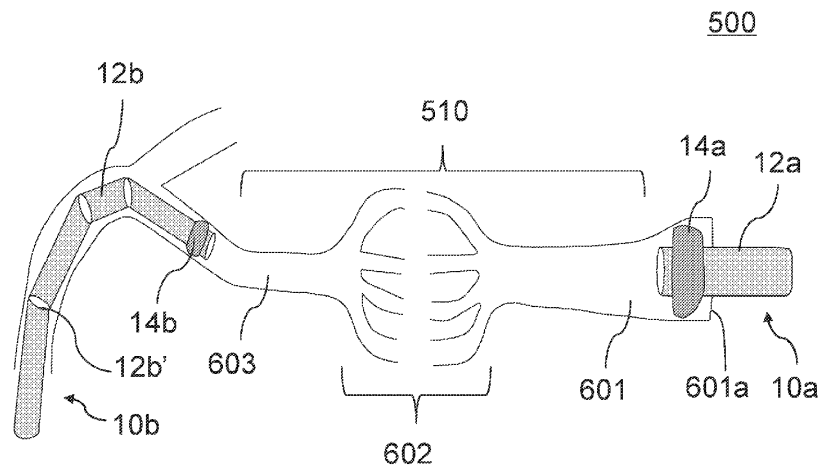


FIG. 19

(57) Abstract: The disclosed invention provides a closed loop catheter system for treatment of pulmonary embolism with balloon tipped catheter insertion devices. The system includes a first catheter insertion device configured to be positioned at proximal segment of a designated pulmonary vein and a second catheter insertion device configured to be positioned at proximal segment of a designated pulmonary artery. The first and second catheter insertion devices each include a sheath defining at least one lumen therein and at least one balloon that is connected to the distal end of the sheath. The at least one balloon seals ostium of the pulmonary vein or ostium of the pulmonary artery when inflated and the first catheter insertion device is in use.

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