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(54) Title: BI-DIRECTIONAL STENT DELIVERY SYSTEM

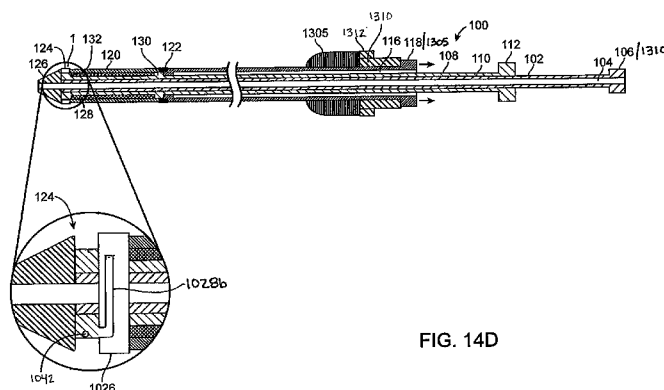


FIG. 14D

(57) Abstract: A bi-directional stent delivery system includes an inner elongate shaft, a radially expandable prosthesis disposed over the inner elongate shaft, an outer elongate shaft, and a shuttle sheath disposed over the radially expandable prosthesis. The distal portion of the inner shaft is releasably coupled to the distal portion of the shuttle sheath, and the distal portion of the outer shaft is releasably coupled the proximal portion of the shuttle sheath. Distal advancement of the inner shaft advances the shuttle sheath distally when the outer shaft is uncoupled from the shuttle sheath, thereby allowing the prosthesis to radially expand from a proximal end to a distal end. Proximal retraction of the outer shaft retracts the shuttle sheath proximally when the inner shaft is uncoupled from the shuttle sheath, thereby allowing the prosthesis to radially expand from a distal end to a proximal end thereof.