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(54) Title: DIRECTIONAL BALLOON TRANSSEPTAL INSERTION DEVICE FOR MEDICAL PROCEDURES

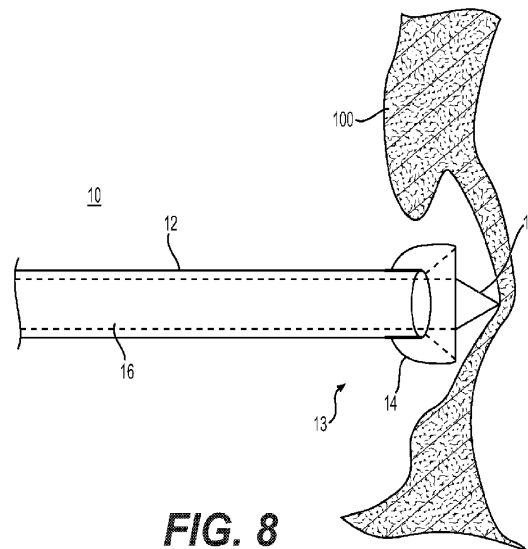


FIG. 8

(57) **Abstract:** A transseptal insertion device includes a sheath that defines a lumen and has a distal end that is closest to the cardiac interatrial septum of a patient, at least one balloon connected to the distal end of the sheath, in which the at least one balloon, when inflated, overhangs and extends past the distal end of the sheath, preventing accidental puncturing of the cardiac interatrial septum and stabilizing the transseptal insertion device against fossa ovalis of the cardiac interatrial septum, and a dilator positioned within the lumen. The dilator has a distal end and is capable of precisely puncturing the cardiac interatrial septum without the use of a needle or other sharp instrument. The at least one balloon is connected to at least one hypotube through which the at least one balloon is inflated or deflated by gas or fluid flowing through the at least one hypotube.

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