WHAT IS CLAIMED IS:

1. A transseptal insertion device ~~which is suitable~~ for facilitating precise and safe transseptal puncture of a cardiac interatrial septum, comprising:

a sheath ~~that defines~~ having a proximal end and distal end and a central lumen extending between said sheath proximal end and said sheath distal end, said sheath comprising an outer wall and an inner wall wherein said inner wall faces said central lumen;

at least one ~~lumen therein and has a distal end that is closest~~balloon extending parallel to said sheath central lumen wherein said at least one balloon extends adjacent said sheath outer wall from said distal end and extends proximally therefrom, wherein said balloon is changeable from a first configuration for sheath implantation to a second configuration wherein said balloon is expanded to stabilize said transseptal insertion device for puncturing the cardiac interatrial septum;

a second lumen extending substantially along the length of ~~a patient when the transseptal insertion device~~ said sheath between said sheath proximal end and said at least one balloon and said second lumen extends between and parallel to said sheath outer wall and said sheath inner wall and wherein said second lumen is in ~~use and a proximal end that is external to~~ fluid communication with said at least one balloon; and

a dilator positioned within said sheath central lumen and moveable along the ~~patient;~~length thereof wherein said dilator includes a distal end configured for puncturing the interatrial septum, and said dilator is moveable from an insertion position and a penetrating position wherein said dilator distal end extends distally from said sheath distal end when the septum is penetrated and said dilator distal end contacts the interatrial septum for puncturing.

~~one or more balloons that are contained in the sheath when deflated, wherein the balloons, when inflated and the transseptal insertion device is in use, 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;~~

~~one or more hypotubes connected to the one or more balloons, wherein the one or more hypotubes are configured to inflate and deflate the one or more balloons;~~

~~one or more ultrasound transceivers that emit and receive ultrasound waves, and convert the ultrasound waves to electrical signals; and~~

~~a dilator that is positioned within the at least one lumen, wherein the dilator has a distal end and is designed to and is capable of precisely puncturing the cardiac interatrial septum.~~

~~2.~~2. The transseptal insertion device according to Claim 1 wherein said second lumen is operatively connected to a fluid source adjacent said sheath proximal end.

3. The transseptal insertion device ~~of claim~~according to Claim 1 wherein said second lumen is generally parallel to said sheath central lumen and is positioned a first radial distance from said sheath central lumen.

4. The transseptal insertion device according to Claim 1 wherein said at least one balloon extends on said sheath outer wall.

5. The transseptal insertion device according to Claim 4 wherein said at least one balloon has a first and second end which are fluid sealed to said sheath outer wall and wherein said second lumen is in fluid communication with said at least one balloon between said balloon first and second ends.

6. The transseptal insertion device according to Claim 5 wherein said at least one balloon is at least two balloons circumferentially spaced apart along said sheath outer wall.

7. The transseptal insertion device according to Claim 1 further comprising at least one ~~lumen shaft contained in the sheath, wherein said at least one lumen shaft defines the at least one lumen and the dilator is positioned in said at least one lumen shaft~~ultrasound transducer on an outer surface of said at least one balloon.

~~3.~~8. The transseptal insertion device ~~of claim 2 wherein the one or more hypotubes are contained in the sheath outside~~ according to Claim 1 further comprising at least one ultrasound transducer on an inner surface of said at least one ~~lumen shaft~~balloon.

~~4.~~9. The transseptal insertion device ~~of claim 1 wherein the~~according to Claim 1 further comprising at least one ~~or more ultrasound transceivers are located on surfaces of the~~an outer covering around said sheath outer wall and said at least one ~~or more~~balloon.

10. The transseptal insertion device according to Claim 9 further comprising at least one ultrasound transducer positioned on an inwardly facing surface of said outer covering adjacent said at least one balloon.

11. The transseptal insertion device according to Claim 10 wherein said at least one balloon is at least two balloons~~.~~ circumferentially spaced apart along said sheath outer wall and said at least one ultrasound transducer is positioned between said at least two balloons.

~~5.~~12. The transseptal insertion device according to Claim 11 wherein said at least two balloons is at least three balloons circumferentially spaced apart along said sheath outer wall and said at least one ultrasound transducer is at least two ultrasound transducers wherein, in a radial direction, one of said at two ultrasound transducers is positioned between a first and second of said at least three balloons and a second of said two ultrasound transducers is positioned between said second of said at least three balloons and a third of said at least three balloon.

13. The transseptal insertion device of ~~claim 1~~Claim 7 wherein ~~the~~said at least one ~~or more~~ ultrasound ~~transceivers are located between the balloons.~~

~~6. The transseptal insertion device of claim 1 wherein the one or more ultrasound transceivers are~~transducer is oriented ~~towards~~to face the cardiac interatrial septum when ~~the~~said at least one ~~or more balloons are inflated~~balloon is in said second configuration and the distal end of ~~the~~said sheath ~~is oriented towards~~faces the cardiac interatrial septum.

~~7~~14. The transseptal insertion device of Claim 7 wherein said at least one ultrasound transducer is oriented perpendicular to said sheath when said at least one balloon is in said first configuration.

15. The transseptal insertion device of ~~claim 1~~Claim 7 wherein ~~the~~said at least one ~~or more~~ ultrasound ~~transceivers are oriented perpendicular to the sheath when the balloons are deflated.~~

8. The transseptal insertion device of claim 1 wherein the one or more ultrasound transceivers aretransducer is configured in the shape of a disc.

9.16. The transseptal insertion device of claim 1 wherein theClaim 7 said at least one or more ultrasound transceivers aretransducer is connected to an external imaging device wirelessly or through a wire that runs via the sheath, and transmit theand transmits electrical signals to the external imaging device to produce images of the cardiac interatrial septum from the received electrical signals.

1017. The transseptal insertion device of claimClaim 1 wherein the dilator includes cap or crown with radio frequency (RF) energy capability or capable of delivering RF energy.

11. A transseptal insertion device which is suitable for facilitating precise and safe transseptal puncture of a cardiac interatrial septum, comprising:

a sheath that defines at least one lumen therein and has a distal end that is closest to the cardiac interatrial septum of a patient when the transseptal insertion device is in use and a proximal end that is external to the patient;

at least one balloon that is connected to the distal end of the sheath, wherein the balloon, when inflated and the transseptal insertion device is in use, 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;

at least one hypotube connected to the at least one balloon, wherein the at least one hypotube is configured to inflate and deflate the at least one balloon;

one or more ultrasound transceivers that emit and receive ultrasound waves, and convert the ultrasound waves to electrical signals; and

a dilator that is positioned within the at least one lumen, wherein the dilator has a distal end and is designed to and is capable of precisely puncturing the cardiac interatrial septum.

12. The transseptal insertion device of claim 11 further comprising at least one lumen shaft contained in the sheath, wherein said at least one lumen shaft defines the at least one lumen and the dilator is positioned in said at least one lumen shaft.

13. The transseptal insertion device of claim 12 wherein the at least one hypotube is contained in the sheath outside the at least one lumen shaft.

14. The transseptal insertion device of claim 13 wherein the one or more ultrasound transceivers are located on a surface of the at least one balloon.

15. The transseptal insertion device of claim 11 wherein the one or more ultrasound transceivers are oriented towards the distal end of the sheath when the at least one balloon is inflated and the distal end of the sheath is oriented towards the cardiac interatrial septum.

16. The transseptal insertion device of claim 11 wherein the one or more ultrasound transceivers are oriented perpendicular to the sheath when the at least one balloon is deflated.

17. The transseptal insertion device of claim 11 wherein the one or more ultrasound transceivers are connected to an external imaging device wirelessly or through a wire that runs via the sheath, and transmit the electrical signals to the external imaging device to produce images of the cardiac interatrial septum from the received electrical signals.

18. The transseptal insertion device of claim 11 wherein the dilator includes cap or crown with radio frequency (RF) energy capability or capable of delivering RF energy.