

CLAIMS

We claim:

1. A valve repair device for repairing a native valve of a patient, the valve repair device comprising:
 - a main shaft formed from plastic;
 - a pair of paddles comprising a connection portion, an inner paddle portion, and an outer paddle portion;
 - wherein each connection portion of the pair of paddles is connected to the main shaft;
 - and
 - wherein the pair of paddles are moveable between an open position and a closed position.
2. The valve repair device of claim 1, wherein the connection portion, the inner paddle portion, and the outer paddle portion are formed from a single strip of metal.
3. The valve repair device of claim 1, wherein the connection portion, the inner paddle portion, and the outer paddle portion have a ribbon-like form.
4. The valve repair device of claim 1 further comprising a plastic hollow coaptation element mounted over the main shaft.
5. The valve repair device of claim 1 wherein the pair of paddles are configured to narrow and widen.
6. The valve repair device of claim 5 wherein the pair of paddles are configured to narrow and widen during opening and closing of the pair of paddles.
7. The valve repair device of claim 5 wherein each inner paddle portion of the pair of paddles is configured to narrow and widen.
8. The valve repair device of claim 1 wherein the pair of paddles are formed from a single ribbon of material.

9. The valve repair device of claim 7 wherein the single ribbon of material is attached to a distal cap and wherein movement of the distal cap moves the pair of paddles between the open position and the closed position.
10. A valve repair system for repairing a native valve of a patient, the valve repair system comprising:
 - a valve repair device comprising:
 - a main shaft;
 - a pair of paddles comprising a connection portion, an inner paddle portion, and an outer paddle portion;
 - wherein each connection portion of the pair of paddles is connected to the main shaft;
 - at least one clasp attached to each paddle of the pair of paddles;
 - an actuation shaft extending through the main shaft;
 - a cap attached to the actuation shaft such that the cap can be moved by the actuation shaft away from the main shaft; and
 - wherein movement of the cap toward the main shaft causes the pair of paddles to move to a closed position, and movement of the cap away from the main shaft causes the pair of paddles to move to an open position.
11. The valve repair system of claim 10, wherein the connection portion, the inner paddle portion, and the outer paddle portion are formed from a single strip of metal.
12. The valve repair system of claim 10, wherein the connection portion, the inner paddle portion, and the outer paddle portion have a ribbon-like form.
13. The valve repair system of claim 10 further comprising a hollow coaptation element mounted to the main shaft.
14. The valve repair system of claim 10 wherein the pair of paddles are configured to narrow and widen.

15. The valve repair system of claim 14 wherein the pair of paddles are configured to narrow and widen during opening and closing of the pair of paddles.
16. The valve repair system of claim 10 wherein each inner paddle portion of the pair of paddles is configured to narrow and widen.
17. The valve repair system of claim 10 wherein the pair of paddles are formed from a single ribbon of material.
18. The valve repair system of claim 17 wherein the single ribbon of material is attached to a distal cap and wherein movement of the distal cap moves the pair of paddles between the open position and the closed position.
19. A valve repair device for repairing a native valve of a patient, the valve repair device comprising:
 - a main shaft formed from plastic;
 - a pair of paddles comprising a connection portion, an inner paddle portion, and an outer paddle portion made from a single metal ribbon-like strip;
 - wherein ribbon-like material of each connection portion of the pair of paddles extends along and is connected to the main shaft; and
 - wherein the pair of paddles are moveable between an open position and a closed position.
20. The valve repair device of claim 19, wherein the pair of paddles are configured to narrow and widen during implantation.