

Claims

1. A positioning device (1) for deploying a delivery device for
a medical implant, comprising a distal part (8) that is
5 adapted to be delivered through a defect, preferably an
opening in a ventricular or atrial or vessel wall, wherein
it comprises a mechanism to selectively expand said distal
part (8), said distal part (8) being adapted such that be-
fore expansion, it can be deployed through said defect, and
10 upon expansion, is mechanically prevented from being re-
tracted through the same defect, such that the positioning
device (1) is temporarily engaged at the defect site, and
the distal part is adapted to be retracted through said
medical implant such that upon the deployment of said im-
15 plant, the positioning device (1) can be retracted with the
delivery device.
2. A positioning device (1) according to claim 1, wherein the
positioning device comprises a balloon (10), preferably ar-
20 ranged such that in the deployed state, the balloon (10) is
located on a different side of the defect (14) than the
distal part (8).
3. A positioning device (1) according to one of the preceding
25 claims, wherein the distal part (8) of the positioning de-
vice (1) comprises at least one wire (7), said wire (7)
having a first and a second shape.
4. A positioning device (1) according to claim 3, wherein the
30 second shape is substantially planar.
5. A positioning device (1) according to one of the claims 3 or
4, wherein the positioning device (1) comprises actuation
mechanism, preferably a mechanical actuation mechanism,

even more preferably a pull wire (11), to pull back the distal part of the positioning device (1) in relation to the positioning device (1).

- 5 6. A positioning device (1) according to claim 5, wherein the positioning device (1) is adapted such that the at least one wire (7) is brought from its first shape into its second shape by actuating of the actuation mechanism.
- 10 7. A positioning device (1) according to one of the claims 3 to 6, wherein the second shape is selected from a group comprising a spiral, a flat disk, a star.
- 15 8. A positioning device (1) according to one of the preceding claims, comprising a tubular structure (5), preferably a hypotube.
- 20 9. A positioning device (1) according claim 8, wherein the tubular structure (5) is made of a shape memory material, preferably Nitinol.
- 25 10. A positioning device (1) according one of the claims 8 or 9, wherein the tubular structure (5), comprises at least one slit (2).
- 30 11. A positioning device (1) according to claim 10, wherein the at least one slit (2) is arranged such that it forms at least one strut (3) that can extend away from the tubular structure (5).
- 35 12. A positioning device (1) according to claim 10 and one of the claims 3 to 7, wherein the at least one slit (2) is adapted such that the at least one wire (7) can be deployed through said slit (2).

13. A positioning device (1) according to one of the claims 8 to 12, wherein the at least one slit (2) extends spirally around the circumference and a longitudinal axis (L) of the tubular structure (5), such that the at least one strut (3) can be extended away from the tubular structure (5), by a rotation of a part of the tubular structure (5),.
14. A catheter device, characterized in that the catheter device comprises a positioning device (1) according to one of the claims 1 to 12.
15. A method of delivering a medical implant in the human body, in particular at an opening in a ventricular or atrial wall, comprising the steps:
- delivering a positioning device (1), preferably a positioning device (1) according to one of the claims 1 to 13, through an opening in a wall
 - engaging the positioning device (1) at the opening
 - delivering the medical implant
 - disengaging the positioning device (1).