

CLAIMS

What is claimed is

1. A lead (10) for an implantable stimulation device (1) for cardiac stimulation of a patient (P), the lead (10) generally extending along a longitudinal axis (L) and comprising:
 - a body section (100),
 - a distal lead section (101) extending from the body section (100) along the longitudinal axis (L) and forming a distal end (102),
 - a first electrode device (14) arranged on the distal lead section (101) for at least one of transmitting an electrical pacing signal and sensing an electrical sense signal, the first electrode device (14) being configured for placement in or on intra-cardiac tissue (M), and
 - a second electrode device (13) arranged on the body section (100) for emitting an electrical defibrillation signal,

characterized in that the distal lead section (101) in at least one portion comprises a reduced bending stiffness with respect to at least a portion of said body section (100).
2. The lead (10) according to claim 1, **characterized in** that the distal lead section (101) in at least one portion comprises a reduced bending stiffness with respect to a portion of said body section (100) carrying the second electrode device (13).
3. The lead (10) according to claim 1 or 2, **characterized in** that the distal lead section (101) comprises an isodiametric cross-sectional shape.
4. The lead (10) according to one of claims 1 to 3, **characterized in** that the body section (100) comprises an isodiametric cross-sectional shape.
5. The lead (10) according to one of the preceding claims, **characterized in** that the distal lead section (101) comprises a first diameter (D1) and the body section (100)

comprises a second diameter (D2), wherein the first diameter (D1) is smaller than the second diameter (D2).

6. The lead (10) according to one of the preceding claims, **characterized in** that the distal lead section (101) comprises a length (L2), measured between the distal end (102) and the body section (100), equal to or larger than 10 mm, preferably equal to or larger than 20 mm, even more preferably equal to or larger than 30 mm, even more preferably equal to or larger than 40 mm, even more preferably equal to or larger than 50 mm.
7. The lead (10) according to one of the preceding claims, **characterized in** that the first electrode device (14) is arranged at the distal end (102).
8. The lead (10) according to one of the preceding claims, **characterized in** that the first electrode device (14) is configured to pierce into intra-cardiac tissue (M) for fixing the lead (10) at the distal end (102) to intra-cardiac tissue (M).
9. The lead (10) according to one of the preceding claims, **characterized in** that the first electrode device (14) is formed by a screw to engage with intra-cardiac tissue (M).
10. The lead (10) according to one of the preceding claims, **characterized in** that the first electrode device (14) extends from the distal end (102) by a length (L1), as measured along the longitudinal axis (L), configured to reach into a left bundle branch (LBB) of the cardiac conduction system for injecting a pacing signal into the left bundle branch (LBB).
11. The lead (10) according to one of the preceding claims, **characterized in** that the distal lead section (101) comprises at least one drug eluting reservoir.
12. The lead (10) according to one of the preceding claims, **characterized in** that the second electrode device (13) comprises a helical coil-shape.

13. The lead (10) according to one of the preceding claims, **characterized in** that the second electrode device (13) comprises at least a first electrode section (13A) and a second electrode section (13B), wherein the lead (10) comprises a connection section (103) extending in between the first electrode section (13A) and the second electrode section (13B).
14. The lead (10) according to claim 13, **characterized in** that the connection section (103) in at least one portion comprises a reduced bending stiffness with respect to a portion of said body section (100) carrying the first electrode section (13A) and/or to a portion of said body section (100) carrying the second electrode section (13B).
15. A method for operating an implantable stimulation device (1) for cardiac stimulation of a patient (P), comprising:
- providing a lead (10) generally extending along a longitudinal axis (L), the lead (10) comprising a body section (100) and a distal lead section (101) extending from the body section (100) along the longitudinal axis (L) and forming a distal end (102), the lead (10) further comprising a first electrode device (14) arranged on the distal lead section (101) for at least one of transmitting an electrical pacing signal and sensing an electrical sense signal and a second electrode device (13) arranged on the body section (100) for emitting an electrical defibrillation signal,
- characterized by** using the first electrode device (14), which is placed on intra-cardiac tissue to reach into a left bundle branch (LBB) of the cardiac conduction system, to at least one of inject pacing signals into or receive sense signals from the left bundle branch (LBB).