

Title (en)  
LONG-LIFE FLEXIBLE ELECTRODE LEAD.

Title (de)  
LANGLEBIGES FLEXIBLES ELEKTRODENKABEL.

Title (fr)  
CABLE D'ELECTRODE FLEXIBLE A LONGUE DUREE.

Publication  
**EP 0027465 A4 19810831 (EN)**

Application  
**EP 80901031 A 19801104**

Priority  
US 3273179 A 19790424

Abstract (en)  
[origin: WO8002231A1] Flexible electrode lead (1) for use with pacemakers and other organ stimulators and method for making the lead wherein improved flex-stress resistance is achieved by the use of a larger coil diameter lead wire (3), having a diameter in the range from 0.040 to about 0.100 inch, preferably about 0.065 inch, to which wire the tip (2) and terminal (4) electrodes are securely connected before the application of the insulation (5) and wherein the insulation is of segmented polyurethane that is bonded to the wire and electrodes enhancing durability and permitting reduction of the overall diameter of the lead. The reduction in lead diameter also permits the construction of multipolar concentric leads (1'), no larger than currently available standard unipolar leads with the additional advantage that a pacemaker connector block (50) with a single port may be used for connecting multiple electrically active members. Further, the larger diameter lead wire results in a markedly larger lumen or channel (8) within the conductive coil (0.045 inch or larger) allowing the insertion of an improved guide mechanism (20) which achieves unprecedented torque and flex control of the electrode tip. Finally, the coating technique can be used with coils of standard external diameters of about 0.039 inch to attain leads with very tiny total external diameters (e.g. 0.050 inch) suitable for pediatric and other applications requiring access through a very small vein, or through an intravascular needle or guide sheath.

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**A61N 1/04**

IPC 8 full level  
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**A61N 1/056** (2013.01)

Citation (search report)  
• FR 1449811 A 19660506 - FR D ETUDES ET DE CONST ELECTR  
• US 3596662 A 19710803 - BOLDUC LEE R  
• FR 2123435 A1 19720908 - ARCO NUCLEAR CO  
• WO 8002801 A1 19801224 - REENSTIERNA B

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