Patent claims

1. An implant comprising:
   - a substrate;
   - a first housing, wherein the first housing is disposed on the substrate;
   - a first electronic circuit disposed on the substrate inside the first housing;
   - an electronic component disposed on the substrate outside the first housing;
   - a conductor track, wherein the conductor track connects the first electronic circuit to the electronic component;

   wherein the conductor track is embedded into the substrate at least in sections in such a way that at least one section of the conductor track is completely surrounded by the substrate, and wherein
   the substrate is made of a thermoplastic, and
   the first housing is made of a thermoplastic.

2. The implant according to claim 1, wherein the conductor track is completely embedded into the substrate in such a way that the conductor track is surrounded by the substrate across the entire length thereof.

3. The implant according to claim 1 or 2, wherein the electronic component is an electrode or a sensor.

4. The implant according to any one of the preceding claims, wherein multiple electronic components are disposed on the substrate outside the first housing, the multiple electronic components being connected to the first electronic circuit by way of multiple conductor tracks, and the multiple conductor tracks being embedded into the substrate at least in sections in such a way that, for each conductor track, at least one section of the respective conductor track is completely surrounded by the substrate.

5. The implant according to any one of the preceding claims, wherein the substrate is a multi-layer substrate, and at least one section of the conductor track is embedded between two layers of the multi-layer substrate.

6. The implant according to any one of the preceding claims, wherein the substrate and the first housing are made of the same material.

7. The implant according to any one of the preceding claims, wherein a second housing is disposed on the substrate, and a second electronic circuit is disposed on the substrate inside the second housing.

8. The implant according to claim 7, wherein the first housing comprising the first electronic circuit and the second housing comprising the second electronic circuit are disposed on the same side of the substrate.

9. The implant according to claim 8, wherein the first housing and the second housing are disposed at a distance from one another, and the substrate is flexible in a region between the first housing and the second housing.

10. The implant according to claim 7, wherein the first housing comprising the first electronic circuit is disposed on a first side of the substrate, and the second housing comprising the second electronic circuit is disposed on a second side of the substrate, the second side being situated opposite the first side.

11. The implant according to any one of the preceding claims, wherein a coil is integrated into the first housing.

12. The implant according to one of the preceding claims, wherein the thermoplastic of the housing is coated in sections or in its entirety with a diffusion barrier, wherein the diffusion barrier is one of: a metal, palladium, gold, platinum, titanium.

13. The implant according to one of the preceding claims, wherein the first housing is joined to the substrate by local fusion of the thermoplastic of the first housing and the thermoplastic of the substrate.

14. The implant according to one of the preceding claims, wherein the thermoplastic of the first housing is an LCP and wherein the thermoplastic of the substrate is an LCP.

15. A method for creating an implant, comprising the following steps:
- disposing a first electronic circuit on a substrate;
- disposing a first housing on the substrate in such a way that the first electronic circuit is disposed inside the first housing;
- disposing an electronic component on the substrate outside the first housing; and
- establishing a connection between the first electronic circuit and the electronic component by way of a conductor track,

wherein the conductor track is embedded into the substrate at least in sections in such a way that at least one section of the conductor track is completely surrounded by the substrate, and wherein
the substrate is made of a thermoplastic, and
the first housing is made of a thermoplastic.

16. The method according to claim 15, wherein the thermoplastic of the housing is coated in sections or in its entirety with a diffusion barrier, wherein the diffusion barrier is one of: a metal, palladium, gold, platinum, titanium.

17. The method according to claim 15 or 16, wherein the first housing is joined to the substrate by locally fusing of the thermoplastic of the first housing and the thermoplastic of the substrate.

18. The method according to one of the claims 15 to 17, wherein the thermoplastic of the first housing is an LCP and wherein the thermoplastic of the substrate is an LCP.