Claims

1. An implantable component comprising a composite made of at least two layers that are connected to each other, whereby
   a. the first layer comprises at least one hole;
   b. the second layer comprises a thickness in the range of 1 to 50 µm; and
   whereby the first layer and the second layer each comprise at least one metal; and
   whereby the composition of the first layer differs from the composition of the second layer; and
   whereby the first layer and the second layer form a membrane for measuring a pressure difference; and
   whereby the materials of the first layer and the second layer are biocompatible; and
   whereby the first layer and the second layer are connected by means of cold welding or roll cladding; and
   whereby the at least one hole of the first layer is formed by a dissolution process or an oxidation process.

2. Component according to claim 1, whereby the second layer comprises a thickness in the range of 2.0 up to 25 µm.

3. Component according to any one of the preceding claims, whereby the first layer comprises a thickness in the range of 50 up to 500 µm.

4. Component according to any one of the preceding claims, whereby the at least one metal of the first layer is selected from the group consisting of silver, gold, platinum, titanium, iridium, niobium, tantalum, tungsten, palladium, copper, iron, a steel or a combination of at least two thereof.

5. Component according to any one of the preceding claims, whereby the at least one metal of the second layer is selected from the group consisting of

silver, gold, platinum, titanium, iridium, niobium, tantalum, tungsten, palladium, a steel, or a combination of at least two thereof.

6. Component according to any one of the preceding claims, whereby the metal or metals of the first layer is or are different from the metal or metals of the second layer.

7. Component according to any one of the preceding claims, whereby a diffusion layer is arranged as connection between the first layer and the second layer.

8. Component according to any one of the preceding claims, whereby a third layer is arranged on the side of the first layer facing away from the second layer and comprises at least one hole, whereby each hole of the first layer has a hole of the third layer superimposed on it.

9. A method for producing an implantable component comprising a composite made of at least two layers that are connected to each other,

whereby the second layer comprises a thickness in the range of 1 to 50 µm;

whereby the first layer and the second layer each comprise at least one metal;

whereby the composition of the first layer differs from the composition of the second layer;

whereby the first layer and the second layer form a membrane for measuring a pressure difference;

comprising at least the following process steps:

i. providing, superimposing, and connecting the first layer and a second layer while forming a composite, whereby the connecting of the first layer and second layer to form a composite is effected through cold welding or cladding;

ii. applying a coating SL onto a part of the first layer;

iii. contacting parts of the first layer not provided with the coating to a liquid CA;

whereby the contacting causes at least a part of the first layer to be removed and at least one hole to be formed in the first layer;

whereby the component is being obtained.

10. Method for producing a component according to claim 9, whereby at least a part of the first layer is removed by mechanical or electrical processing after step i. and before step ii.

11. Method for producing a component according to any one of the claims 9 or 10, whereby the coating SL is resistant to the liquid CA, at least during step iii.

12. A method for producing an implantable component comprising a composite made of at least three layers, a first layer, a second layer and a third layer that are connected to each other,

whereby the second layer comprises a thickness in the range of 1 to 50 µm;

whereby the first layer, the second layer, and the third layer each comprise at least one metal;

whereby the third layer comprises a thickness of at least 1 µm;

whereby the composition of the first layer differs from the composition of the second layer; and

whereby the composition of the third layer differs from the composition of the first layer;

whereby the first layer and the second layer form a membrane for measuring a pressure difference;

comprising at least the following process steps:

i) providing, superimposing, and connecting the third layer, first layer, and second layer while forming a composite;

ii) removing a part of the third layer;

iii) contacting parts of the first layer not provided with the third layer to a liquid CA;

whereby the contacting causes at least a part of the first layer to be removed and at least one hole to be formed in the first layer;

~~whereby the component is being obtained.~~

~~13. Component comprising a composite that can be obtained according to a method according to any one of the claims 9 to 12.~~

~~14. Component comprising a composite according to any one of the claims 1 to 8 that can be obtained according to a method according to any one of the claims 9 to 12.~~

~~15. Use of a component comprising a composite according to any one of the claims 1 to 8, 13 or 14 in a device or for producing a device for use in a living body.~~

Claims

1. A method for producing an implantable component comprising a composite made of at least two layers that are connected to each other,
whereby the second layer comprises a thickness in the range of 1 to 50 µm;
whereby the first layer and the second layer each comprise at least one metal;
whereby the composition of the first layer differs from the composition of the second layer;
whereby the first layer and the second layer form a membrane for measuring a pressure difference;
comprising at least the following process steps:
i. providing, superimposing, and connecting the first layer and a second layer while forming a composite, whereby the connecting of the first layer and second layer to form a composite is effected through cold welding or cladding;
ii. applying a coating SL onto a part of the first layer;
iii. contacting parts of the first layer not provided with the coating to a liquid CA;
whereby the contacting causes at least a part of the first layer to be removed and at least one hole to be formed in the first layer;
whereby the component is being obtained.

2. Method for producing a component according to claim 1, whereby at least a part of the first layer is removed by mechanical or electrical processing after step i. and before step ~~iii~~.

3. Method for producing a component according to any one of the claims 1 or 2, whereby the coating SL is resistant to the liquid CA, at least during step ~~iiii~~.