Claims

1. An analyte sensor for determining at least one analyte, comprising,
   - a substrate;
   - a working electrode and a conductive layer located on different sites on the substrate;
   - a silver comprising layer partially covering the conductive layer; and
   - a protective layer covering
     - the silver comprising layer fully apart from at least one area accessible to at least one body fluid comprising the at least one analyte; and
     - a portion of the conductive layer.

2. The analyte sensor according to claim 1, wherein the conductive layer, the silver comprising layer and the protective layer form at least one further electrode selected from a group consisting of a counter electrode, a reference electrode and a combined counter/reference electrode,

3. The analyte sensor according to claim 2, wherein the at least one further electrode is or comprises a single combined counter/reference electrode.

4. The analyte sensor according to any one of claims 2 or 3, wherein the working electrode is located on a first side of the substrate and wherein the at least one further electrode is located on a second side of the substrate, wherein the first side and the second side of the substrate are positioned opposite each other.

5. The analyte sensor according to claim 4, wherein the working electrode and the at least one further electrode are located on the substrate in a manner that a geometrical projection of a site of the working electrode onto the second side of the substrate on which the at least one further electrode is located does not result in overlap between the geometrical projection of the site of the working electrode and the site of the at least one further electrode.

6. The analyte sensor according to any one of claims 1 to 5, wherein the conductive layer comprises an electrically conductive carbon material.

7. The analyte sensor according to any one of claims 1 to 6, wherein the silver comprising layer comprises Ag/AgCl.

8. The analyte sensor according to any one of claims 1 to 7, wherein the portion of the conductive layer covered by the protective layer is of 20 % to 80 %.

9. The analyte sensor according to any one of claims 1 to 8, wherein the protective layer is a hydrophobic layer.

10. The analyte sensor according to any one of claims 1 to 9, wherein the protective layer is a membrane comprising a plurality of holes, wherein the holes are designed to provide access to the silver comprising layer for the at least one body fluid comprising the at least one analyte.

11. The analyte sensor according to any one of claims 1 to 10, wherein the silver comprising layer comprises an exposed cutting edge which provides access to the silver comprising layer for the at least one body fluid comprising the at least one analyte.

12. The analyte sensor according to any one of claims 1 to 11, wherein the analyte sensor is a flat sensor.

13. The analyte sensor according to any one of claims 1 to 12, wherein the analyte sensor is a partially implantable sensor.

14. A method for producing an analyte sensor for determining at least one analyte, in particular the analyte sensor according to any one of claims 1 to 13, the method comprising the steps of:

a) providing a raw substrate;
b) applying a conductive layer on the raw substrate;
c) applying a silver comprising layer in a manner that it partially covers the conductive layer;
d) applying a protective layer in a manner that it covers
   - the silver comprising layer; and
   - a portion of the conductive layer;
e) preparing a working electrode; and
f) cutting the raw substrate to obtain the analyte sensor.

15. The method according to claim 14, wherein the protective layer is applied in a manner that it fully covers the silver comprising layer,

- wherein the protective layer comprises a plurality of holes which are designed to provide access to the silver comprising layer for at least one body fluid comprising the at least one analyte; and/or

– wherein, after cutting the raw substrate, the silver comprising layer has an exposed cutting edge which provides access to the silver comprising layer for at least one body fluid comprising the at least one analyte.