

Claims

1. An analyte sensor system ~~(110)~~, comprising
 - an analyte sensor ~~(112)~~ having
 - a first contact pad ~~(124)~~, and
 - a second contact pad ~~(128)~~;
 - a circuit carrier ~~(114)~~ having
 - a first contact area ~~(130)~~, and
 - a second contact area ~~(132)~~, wherein the second contact area ~~(132)~~ comprises at least two individual electrically conductive surfaces ~~(138, 138')~~; and
 - a connecting element ~~(116)~~ electrically connecting the second contact pad ~~(128)~~ of the analyte sensor ~~(112)~~ with each of the at least two individual electrically conductive surfaces ~~(138, 138')~~ of the second contact area ~~(132)~~ of the circuit carrier ~~(114)~~,
 - wherein the second contact area ~~(132)~~ further comprises at least one electrically insulating surface ~~(140)~~ between the at least two individual electrically conductive surfaces ~~(138, 138')~~ that jointly constitute the second contact area ~~(132)~~, and
 - wherein the analyte sensor ~~(112)~~ comprises an electrically insulating cover ~~(134)~~ which covers surfaces of the analyte sensor ~~(112)~~ apart from the first contact pad ~~(124)~~ and the second contact pad ~~(128)~~.
2. The analyte sensor system ~~(110)~~ according to ~~any one of the preceding~~ claim 1s, wherein the at least two individual electrically conductive surfaces ~~(138, 138')~~ of the second contact area ~~(132)~~ are electrically connected with each other outside the surface of the second contact area ~~(132)~~.
3. The analyte sensor system ~~(110)~~ according to any one of the preceding claims, wherein the first contact pad ~~(124)~~ is located on a first side ~~(122)~~ of the analyte sensor ~~(112)~~, and wherein the second contact pad ~~(128)~~ is located on a second side ~~(126)~~ of the analyte sensor ~~(112)~~.

4. The analyte sensor system-(110) according to any one of the preceding claims, wherein the first contact pad-(124) and the second contact pad-(128) are located on opposing sides-(122, 126) of the analyte sensor-(112).
5. The analyte sensor system-(110) according to any one of the preceding claims, wherein the first contact pad-(124) faces the first contact area-(130) of the circuit carrier-(114), and wherein the second contact pad-(128) faces away from the second contact area-(132) of the circuit carrier-(114).
6. The analyte sensor system-(110) according to any one of the preceding claims, wherein the first contact pad-(124) directly connects the first contact area-(130) of the circuit carrier-(114).
7. The analyte sensor system-(110) according to any one of the preceding claims, wherein at least one of the first contact pad-(124), the second contact pad-(128), the first contact area-(130), and the second contact area-(132) comprises a layer of an electrically conductive material.
8. The analyte sensor system-(110) according to ~~any one of the two preceding claims~~ 7, wherein the conductive material is selected from at least one of gold or an electrically conductive carbon material.
9. The analyte sensor system-(110) according to any one of the preceding claims, wherein the connecting element-(116) comprises at least one of
 - an electrically conductive rubber;
 - an electrically conductive foam;
 - an elastomeric connector.
10. The analyte sensor system-(110) according to any one of the preceding claims, wherein the circuit carrier-(114) is or comprises a printed circuit board.
11. The analyte sensor system-(110) according to any one of the preceding claims, wherein the analyte sensor-(112) is a partially implantable analyte sensor for continuously monitoring an analyte.

12. A method~~(160)~~ for producing an analyte sensor system~~(110)~~, in particular the analyte sensor~~(110)~~ system according to any one of the preceding claims, the method comprising the steps of:

5 a) providing a circuit carrier~~(114)~~ having
○ a first contact area~~(130)~~, and
○ a second contact area~~(132)~~, wherein the second contact area~~(132)~~ comprises at least two individual electrically conductive surfaces~~(138, 138')~~;

10 b) arranging an analyte sensor~~(112)~~ having
○ a first contact pad~~(124)~~, and
○ a second contact pad~~(128)~~;
and

15 c) applying a connecting element~~(116)~~ in a manner that the connecting element~~(116)~~ electrically connects the second contact pad~~(128)~~ of the analyte sensor~~(112)~~ with each of the at least two individual electrically conductive surfaces~~(138, 138')~~ of the second contact area~~(132)~~ of the circuit carrier~~(114)~~.

20 13. The method~~(160)~~ according to ~~the preceding~~ claim 12, wherein step b) further comprises arranging the analyte sensor~~(112)~~ in a manner that the first contact pad~~(124)~~ directly connects the first contact area~~(130)~~ of the circuit carrier~~(114)~~.