

CLAIMS

1. A medical device (1) comprising an attachment surface (3) and an evaporation layer (9), and at least one hollow microneedle (4) extending from the attachment surface (3), the device (1) further comprising a flow channel (6), an analysis unit (8) for analysing a body fluid, where the flow channel (6) is arranged to transport fluid from the microneedle (4) to the analysis unit (8) and from the analysis unit (8) to the evaporation layer (9), such that the flow channel (6) can release fluid into the evaporation layer (9),
where the evaporation layer is removably attached and can be removed from the medical device and be replaced with another evaporation layer
or
where the medical device comprises a skin attachment layer which comprises the attachment surface, where said skin attachment layer is removably attached and can be removed from the device and replaced with another skin attachment layer.
2. The medical device according to claim 1 where the evaporation layer is removably attached and can be removed from the medical device and be replaced with another evaporation layer.
3. The medical device according to claim 1 where the medical device comprises a skin attachment layer which comprises the attachment surface, where said skin attachment layer is removably attached and can be removed from the device and replaced with another skin attachment layer.
4. The medical device according to any one of claims 1 to 3 where the analysis unit (8) is arranged in a reusable part 21 of a main body 26 of device 1, where the reusable part 21 is located between the evaporation layer 9 and the adhesive attachment layer 15.

5. The medical device according to any one of claims 1 to 4 where the device comprises a main body, and where the at least one microneedle extends from the main body, and where the analysis unit is comprised in the main body.
6. The medical device according to any one of claims 1 to 5 where the transport of fluid through the medical device can be driven by the evaporation layer.
7. The medical device according to any one of claims 1 to 6 where the device comprises at least one heat-generating electronic unit and the evaporation layer is arranged in contact with the at least one heat-generating electronic unit.
8. The medical device according to any one of claims 1 to 7 comprising a heat conducting element that is arranged between the attachment surface and the evaporation layer.
9. The medical device according to claim 8 where the heat conducting element is arranged between the evaporation layer and a heat generating electronic unit.
10. The medical device according to any one of claims 7 to 9 where the heat-generating electronic unit or the heat conducting element is provided with at least one surface area increasing element.
11. The medical device according to any one of claims 1 to 10 where the skin attachment layer comprises the at least one microneedle.
12. An evaporation layer for attaching to a medical device according to any one of claims 1 to 11.

13. A skin attachment layer for attaching to a medical device according to any one of claims 1 to 12.
14. The skin attachment layer according to claim 13, said attachment layer comprising at least one microneedle.
15. A method of analysing a body fluid comprising the steps of attaching a device according to any one of claims 1 to 11 to the skin of a user, collecting body fluid from the user with use of the at least one microneedle, using the analysis unit to analyse the body fluid, and allowing at least a part of the fluid to be absorbed by the evaporation layer, and allowing at least a part of the fluid to evaporate from the evaporation layer.
16. The method of claim 15, where after evaporation has occurred, the attachment layer is replaced or where the evaporation layer is replaced.