

17. The article of any one of the preceding claims, wherein the at least one microneedle comprises a hollow channel extending through the article from a first opening proximate the tip to a second opening in the second side of the article.

5 | 18. ~~The use of the article~~, as claimed in any one of claims 1 through 17, for injecting fluid into a body.

19. The article, as claimed in any one of claims 1 through 17, for extracting fluid from a body.

10 | 20. ~~The use of the article as~~ according to claim 18 or claim 19, wherein the article is operatively coupled to an actuator.

15 | 21. The article according to claim 20, wherein the actuator comprises an adhesive assembly, wherein the adhesive assembly comprises a skin-contact adhesive layer that, when the actuator is actuated, is urged against a skin surface.

22. The article of claim 1 or claim 2, wherein the first angle is less than about 45° and/or wherein the second angle is less than about 45°.

20 | 23. The article of claim 6, wherein the height comprises a first height component associated with the base segment and a second height component associated with the tip segment; wherein the second height component is about 650 μm to about 800 μm .

25 | 24. The article of any one of claims 1 through 7, wherein the at least three microneedles forms a two-dimensional array.

25. The article of claim 24, wherein the array of microneedles is distributed all the way around the platform portion.

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