

7. The method according to claim 6, wherein said cover is fabricated from fused silica.

8. The method according to claim 6, wherein said cover is fabricated from an acrylic material.

9. The method according to claim 6, wherein said cover is a mirror image of said substrate.

10. The method according to claim 6, wherein said cover has flat surfaces.

11. In a method of electrophoretic separation of a sample in which sample components are separated in an electrophoretic separation medium in a channel by application of a voltage differential to said medium, the improvement comprising the steps of employing a microchannel formed from a surface of an acrylic material and having cross-sectional inner dimensions ranging from about 1 to 200 μm , the acrylic material being optically transparent, and optically detecting separated sample components in said microchannel.

12. The method according to claim 11, wherein said microchannel is a groove in a substrate.

13. The method according to claim 12, wherein said substrate is covered by a cover.

14. The method according to claim 13, wherein said cover is fabricated from fused silica.

15. The method according to claim 13, wherein said cover is fabricated from an acrylic material.

16. The method according to claim 13, wherein said cover is a mirror image of said substrate.

17. The method according to claim 13, wherein said cover has flat surfaces.

18. The method according to claim 11, wherein said microchannel is in a capillary.

19. In a method of electrophoretic separation of a sample in which sample components are separated in an electrophoretic separation medium in a channel by application of a voltage differential to said medium, the improvement comprising the step of employing a microchannel formed from a groove in a surface of a polymethylmethacrylate substrate and having cross-sectional inner dimensions ranging from about 1 to 200 μm .

20. The method according to claim 19, further comprising the step of disposing a sample having nucleic acids therein in the microchannel for electrophoretic separation.

21. The method according to claim 19, further comprising the step of disposing a sample having proteins therein in the microchannel for electrophoretic separation.

22. In a method of electrophoretic separation of a sample in which sample components are separated in an electrophoretic separation medium in a channel by application of a voltage differential to said medium, the improvement comprising the step of employing a polymethylmethacrylate capillary having an inner diameter ranging from about 10 to 200 μm .

23. The method according to claim 22, further comprising the step of disposing a sample having nucleic acids therein in the microchannel for electrophoretic separation.

24. The method according to claim 22, further comprising the step of disposing a sample having proteins therein in the microchannel for electrophoretic separation.

25. A device for use in a method where charged entities are moved through a channel under the influence of an applied voltage differential comprising a body at least partially made from an acrylic material, said body having a surface and a microchannel provided in said surface adapted to receive said charged entities for movement under the influence of said applied voltage differential, said microchannel formed by the acrylic material and having cross-sectional inner dimensions ranging from about 1 to 200 μm .

26. The device according to claim 25 further comprising an electrophoretic medium disposed in said microchannel.

27. The device according to claim 26, wherein said acrylic material is polymethylmethacrylate.

28. The device according to claim 27, wherein said acrylic material is a copolymer.

29. A device according to claim 25 wherein said body is a card-like substrate.

30. A device according to claim 29 wherein said card-like substrate is made solely of an acrylic material.

31. In an electrophoretic device for use in electrophoretic applications in which charged entities are moved through an electrophoretic medium in response to an applied voltage differential, said device having a microchannel and an electrophoretic medium disposed in said microchannel, the improvement comprising said device being provided with a wall of an acrylic material for forming said microchannel, said microchannel having cross-sectional inner dimensions ranging from about 1 to 200 μm , said wall of an acrylic material being optically transparent to permit optical detection of said charged entities within said microchannel.

32. The device according to claim 31, wherein said device includes an acrylic substrate having a surface, said microchannel provided in the surface of said acrylic substrate.

33. The device according to claim 32, wherein said acrylic substrate is covered with a cover plate.

34. The device according to claim 31, wherein said device includes a capillary having said wall for forming said microchannel.

35. The device according to claim 31, wherein said acrylic material is polymethylmethacrylate.

36. A kit for use in a method where charged entities are moved through a channel under the influence of an applied voltage differential comprising a component provided with a microchannel formed from an acrylic copolymer, said microchannel having cross-sectional inner dimensions ranging from about 1 to 200 μm , and an electrophoretic medium for disposition in said microchannel.

37. The kit according to claim 36, wherein said microchannel is provided in a surface of a substrate.

38. The kit according to claim 35, wherein said microchannel is contained within a capillary.

39. A device for use in electrophoretic applications in which charged entities are moved through an electrophoretic medium for separation in response to a voltage differential applied across the electrophoretic medium and the charged entities disposed therein comprising a body provided with a microchannel adapted for receiving said electrophoretic medium and said charged entities for electrophoretic separation, said body having a portion made from polymethylmethacrylate for forming said microchannel, said microchannel having cross-sectional inner dimensions ranging from 1 to 200 μm .

40. The device according to claim 39, wherein said body is an acrylic substrate and said microchannel is a groove on said acrylic substrate.

41. The device according to claim 40, wherein said substrate has card-like dimensions.

42. The device according to claim 40, further comprising an electrophoretic medium disposed in said microchannel.

43. The device according to claim 39, wherein said body is a capillary provided with said microchannel.

44. A device for use in electrophoretic applications in which charged entities are moved through an electrophoretic medium for separation in response to a voltage differential applied across the electrophoretic medium and the charged entities disposed therein comprising a body provided with a