

Title (en)  
SYSTEMS AND METHODS FOR THE TRANSPORT OF FLUIDS THROUGH A BIOLOGICAL BARRIER AND PRODUCTION TECHNIQUES FOR SUCH SYSTEMS

Title (de)  
SYSTEME UND VERFAHREN ZUM TRANSPORTIEREN VON FLÜSSIGKEITEN DURCH BIOLOGISCHE BARRIEREN UND PRODUKTIONSTECHNIKEN FÜR SOLCHE SYSTEME

Title (fr)  
SYSTEMES ET PROCEDES DE TRANSPORT DE FLUIDES A TRAVERS UNE BARRIERE BIOLOGIQUE ET TECHNIQUES DE PRODUCTION DE TELS SYSTEMES

Publication  
**EP 1276426 A2 20030122 (EN)**

Application  
**EP 01918390 A 20010307**

Priority  
• IL 13499700 A 20000309  
• US 0107170 W 20010307  
• US 58936900 A 20000608  
• US 58936800 A 20000608

Abstract (en)  
[origin: WO0166065A2] A device (10) for the transport of fluids through a biological barrier includes a number of microneedles (16) projecting from the front face (14) of a substrate (12). A conduit (18) is associated with each of the microneedles (16) to provide a flow path for transport of fluid through a hole in the biological barrier formed by the corresponding microneedle (16). Each of the microneedles (16) is configured to provide a penetrating tip (20), and each conduit (18) terminates at an opening (22) which is proximal with respect to the microneedle tip (20). Also described are microneedle-based devices with integrated MEMS pumping configurations for withdrawal and/or delivery of fluids, and remote healthcare systems based on such devices.  
[origin: WO0166065A2] A device for the transport of fluids through a biological barrier includes a number of microneedles projecting from the front face of a substrate. A conduit is associated with each of the microneedles to provide a fluid flow path for transport of fluid through a hole in the biological barrier formed by the corresponding microneedle. Each of the microneedles is configured to provide a penetrating tip, and each conduit terminates at an opening which is proximal with respect to the microneedle tip. Also described are microneedle-based devices with integrated MEMS pumping configurations for withdrawal and/or delivery of fluids, and remote healthcare systems based on such devices.

IPC 1-7  
**A61B 17/20**

IPC 8 full level  
**A61B 5/00** (2006.01); **A61B 5/15** (2006.01); **A61M 37/00** (2006.01); **B81C 1/00** (2006.01)

CPC (source: EP)  
**A61B 5/14514** (2013.01); **A61B 5/150022** (2013.01); **A61B 5/150213** (2013.01); **A61B 5/150221** (2013.01); **A61B 5/150229** (2013.01); **A61B 5/150282** (2013.01); **A61B 5/150396** (2013.01); **A61B 5/150427** (2013.01); **A61B 5/150503** (2013.01); **A61B 5/150854** (2013.01); **A61B 5/150984** (2013.01); **A61B 5/157** (2013.01); **A61M 37/0015** (2013.01); **B81C 1/00111** (2013.01); **A61M 2037/003** (2013.01); **A61M 2037/0053** (2013.01); **B81B 2201/055** (2013.01)

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**WO 0166065 A2 20010913**; **WO 0166065 A3 20020131**; AU 4547201 A 20010917; EP 1276426 A2 20030122; EP 1276426 A4 20080319

DOCDB simple family (application)  
**US 0107170 W 20010307**; AU 4547201 A 20010307; EP 01918390 A 20010307