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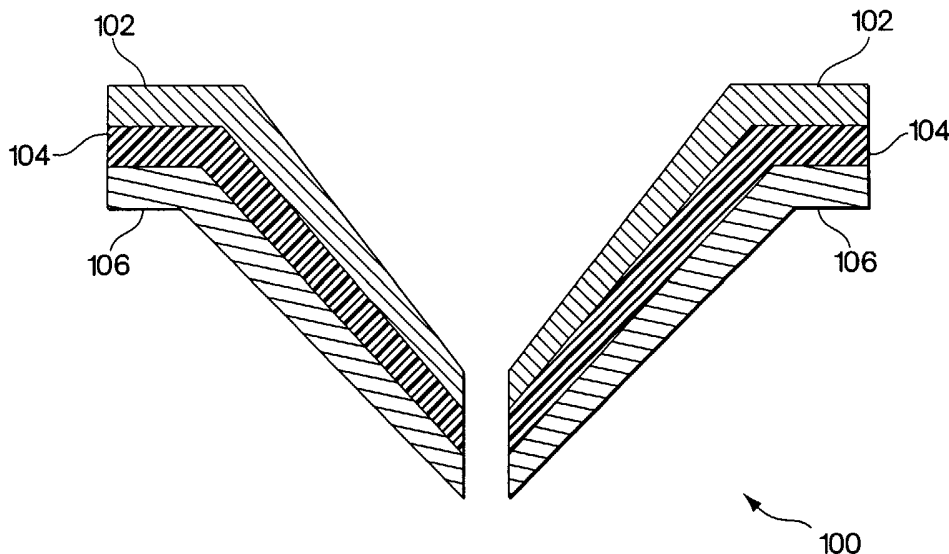
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(54) Title: MICRONEEDLES, MICRONEEDLE ARRAYS, AND SYSTEMS AND METHODS RELATING TO SAME



(57) Abstract: The microneedle devices (100) disclosed herein in some embodiments include a substrate (104); one or more microneedles; and, optionally, a reservoir for delivery of drugs or collection of analyte, as well as pump(s), sensor(s), and/or microprocessor(s) to control the interaction of the foregoing.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/29913

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61M 5/32

US CL : 604/272

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 604/272, 80, 85, 93.01, 173, 180, 183, 184, 187, 191, 192, 239, 258, 261, 272, 890.1; 424/449, 483

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,932,936 A (DYKSTRA et al) 12 June 1990 (12.06.1990), Figures 1-3.	1-23
A	US 6,451,240 A (SHERMAN et al) 17 September 2002 (17.09.2002), Figures 1-57B.	
A, E	US 6,743,211 (PRAUSNITZ et al.) 01 June 2004 (01.06.2004), Figures 1-19.	



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	
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