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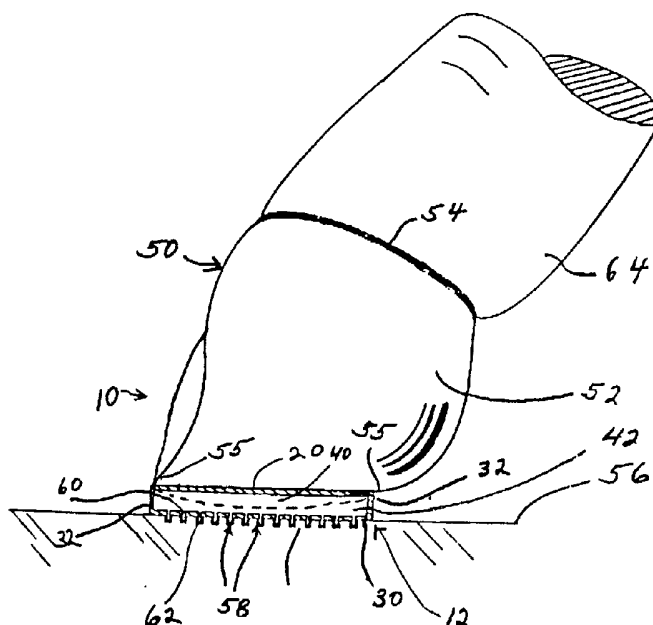
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(54) Title: DEVICE FOR MANIPULATING A NEEDLE OR ABRADER ARRAY



(57) Abstract: The present invention relates to an apparatus for intradermally administering a pharmaceutical composition or other substance through the skin into a mammalian body in a manner that avoids or eliminates excess pain and discomfort normally caused as a result of the microabraders or microneedles entering the epithelial layers beneath the stratum corneum. In a preferred embodiment, the apparatus is a microdevice with an array of microabraders or microneedles with a manipulating member.



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INTERNATIONAL SEARCH REPORT

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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)

IPC 7 A61M A61B

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 practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 190 367 B1 (HALL JOHN P) 20 February 2001 (2001-02-20) column 4, line 1 -column 5, line 21; figures ---	1-14
X	US 3 735 760 A (VREELAND W) 29 May 1973 (1973-05-29) column 2, line 12 -column 3, line 21; figures ---	1-3,5,6, 14-16
A	WO 00 74763 A (GEORGIA TECH RES CORP) 14 December 2000 (2000-12-14) page 31, line 9 -page 32, line 18 page 51, line 20 -page 52, line 10; figures --- -/--	1-14

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Patent family members are listed in annex.

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Date of the actual completion of the international search

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, A	WO 01 93946 A (BECTON DICKINSON CO ;LASTOVICH ALEXANDER G (US); HARVEY NOEL G (US) 13 December 2001 (2001-12-13) abstract; figures -----	1-14

INTERNATIONAL SEARCH REPORT

Information on patent family members

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			EP 1187653 A2	20-03-2002
			WO 0074763 A2	14-12-2000
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