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[Continued on next page]

(54) Title: APPLICATORS FOR MICRONEEDLE ARRAYS

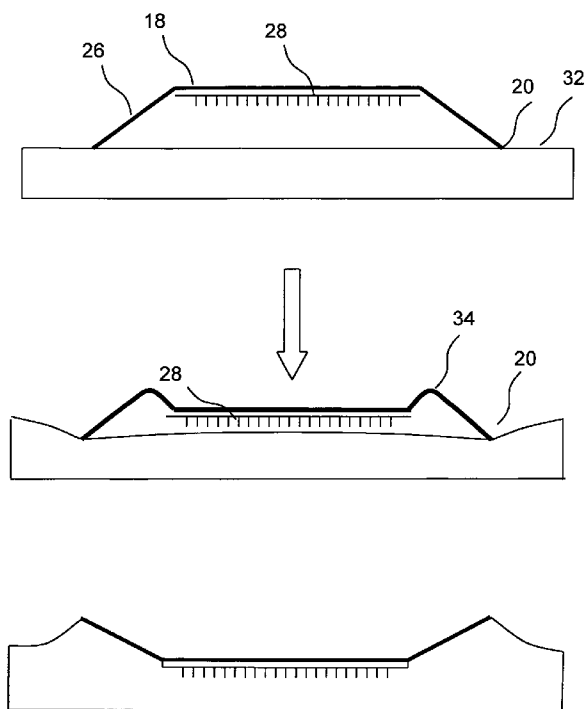


FIG. 4

(57) Abstract: A microneedle applicator is provided which has two roughly concentric portions (18, 26) which may be, for example, a solid disk and an annulus surrounding it. On the skin-facing side of the inner portion of the applicator a microneedle array (28) is located. The outer portion of the applicator is placed against the skin (32), contacting it at a zone. The microneedle array is then pressed towards the skin.

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INTERNATIONAL SEARCH REPORT

International application No

PGT/US2008/000824

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61M37/00

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)

A61M

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2007/002523 A (3M INNOVATIVE PROPERTIES CO [US]; FREDERICKSON FRANKLYN L [US]; JOHNSO) 4 January 2007 (2007-01-04) the whole document	1-31, 41-44
X	WO 2006/055795 A (3M INNOVATIVE PROPERTIES CO [US]; CANTOR ADAM S [US]; FREDERICKSON FRA) 26 May 2006 (2006-05-26) paragraphs [0034] - [0036], [0040], [0041]; figures 1A-11	1-31, 41-44
X	US 6 537 242 B1 (PALMER PHYLLIS J [US]) 25 March 2003 (2003-03-25) cited in the application figures 1-10	1-31, 41-44
-/-		

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :

¹A¹ document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

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"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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Date of the actual completion of the international search

18 July 2008

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INTERNATIONAL SEARCH REPORT

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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
X	US 2002/032415 A1 (TRAUTMAN JOSEPH C [US] ET AL TRAUTMAN JOSEPH C [US] ET AL) 14 March 2002 (2002-03-14) cited in the application paragraph [0061]; figure 21 -----	1-31, 41-44
P, X	WO 2007/124411 A (3M INNOVATIVE PROPERTIES CO [US]; SIMONS JOHN K [US]; FREDERICKSON FRA) 1 November 2007 (2007-11-01) figures 1-17 -----	1-31, 41-44

INTERNATIONAL SEARCH RE=PORT

International application No.
PCT/US2008/000824

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 32-40,45,46
because they relate to subject matter not required to be searched by this Authority, namely:

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
Applying the microprojection array to the skin of a patient implicitly includes surgical penetration of the skin by the microprojections.
2. ☒ Claims Nos.:
because they relate to parts of the International application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2008/000824

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