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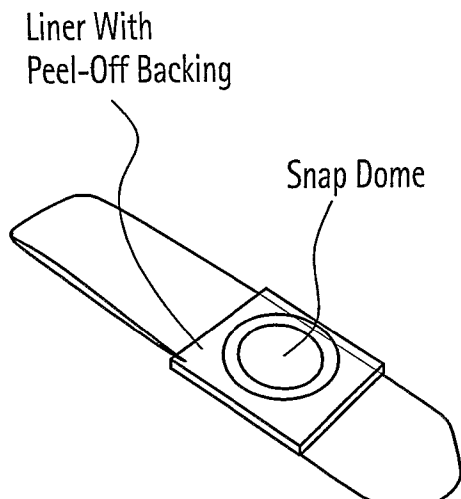
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[Continued on next page]

(54) Title: DEVICES FOR TRANSCUTANEOUS DELIVERY OF VACCINES AND TRANSDERMAL DELIVERY OF DRUGS AND USES THEREOF



(57) Abstract: The invention provides devices for the disruption of one or more layers of skin and methods of their use to administer therapeutic agents, e.g., antigens or drugs. The devices are designed to disrupt a defined area of skin. The defined area can approximate the area that a patch or other suitable vehicle for therapeutic agent, e.g., drug or vaccine, delivery is designed to contact. Exemplary devices employ a mask to define the area to be disrupted. Other devices disrupt a defined area by rotating in place. For devices that employ a mask that is secured to the skin, the invention provides methods of disrupting the stratum corneum by first securing the mask to the skin and then disrupting the skin. For rotating devices, the disrupting member is simply placed against the skin and actuated to effect disruption.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 06/34620

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8)-A61M 35/00 (2007.01)
USPC-604/46

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)
USPC: 604/46

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 604/22, 604/46, 604/68, 604/148, 604/200 (text search - see terms below)

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

Electronic data base: PubWEST(USPT,PGPB,EPAB,JPAB); Google Scholar; WIPO search
Search Terms Used: transdermal; transcutaneous; delivery; skin; disrupting; derm\$ etc.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 6,797,276 B1 (GLENN et al) 28 September 2004 (28.09.2004) entire document	1-45, 62-65, 89-91, 93-105, 112-118 ----- 92, 112-118
Y	US 5,599,545 A (STANFORD et al) 4 February 1997 (04.02.1997) entire document	92
Y	WO 2002/074244 A2 (GLENN et al) 26 September 2002 (26.09.2002) entire document	112-118
Y	RICHARD W, BRUNO G, WILLIAM D, THOMAS JR, PAUL JG, THOMAS PM. Parenteral Adjuvant Activities of Escherichia coli Heat-Labile Toxin and Its B Subunit for Immunization of Mice against Gastric Helicobacter pylori Infection, Infect. Immun., May 2000, Vol. 68, No. 5, pages 2775-2782, ISSN 0019-9567	115
A	US 2002/0193729 A1 (MICHEL et al) 19 December 2002 (19.12.2002) entire document	1-118

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