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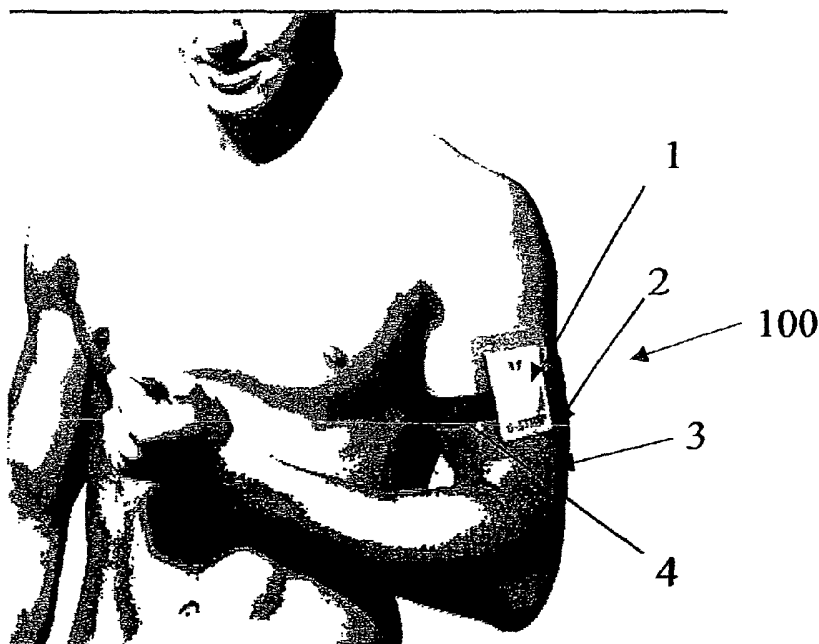
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(54) Title: SUBSTANCE DELIVERY DEVICE



(57) Abstract: A system being suitable for being secured substantially adjacent to a surface of a subject so as to effect delivery of at least one substance (15) through the surface and into the subject. The system includes at least one aperture (9) for receiving at least one ultrasonic transmission. The at least one substance (15) is releasably secured substantially adjacent to the at least one aperture. (19); A sonic member (11) is disposed with respect to the at least one aperture (19) so as to communicate the at least one transmission to the at least one substance (15) so as to effect the delivery of the at least one substance (15) through the surface of the subject.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/01449

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 17/20

US CL : 604/22

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. : 604/22, 20, 46, 500-503; 607/115, 145, 152-153; 424/448-449

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)

BRS: ultrasound, ultrasonic, sonic, waveform

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4,787,888 A (FOX) 29 November 1988, see entire patent	1-20
X	US 5,978,701 A (JOHNSON et al.) 02 November 1999, see patent	1-20
X	US 6,030,374 A (McDaniel) 29 February 2000, see entire patent	1-20
X	US 6,086,572 A (JOHNSON et al) 11 July 2000, please note alternating waveform column 14, lines 29-39	1-20
X	US 6,171,294 B1 (SOUTHAM et al.) 09 January 2001, see patent	1-20
X	US 6,181,963 B1(CHIn et al) 30 January 2001, see entire patent	1-20
Y	US 6,175,763 B1 (SORENSEN et al.) 16 January 2001, not waveform configuration	1-20
A	US 2,065,295 A (SULLIVAN) 16 May 1935, note securing means	1-20

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

☐ See patent family annex.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

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