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(71) Applicant (for all designated States except US): **WINDY HILL MEDICAL** [US/US]; 26051 Merit Circle, Suite 104, Laguna Hills, CA 92653 (US).

(72) Inventors: **LICATA, David**; 9036 Gibson Street, Los Angeles, CA 90034 (US). **JOHANSEN, Jerry**; Aubrey Group, Inc., 6 Cromwell, Ste 100, Irvine, CA 92618-1820 (US). **SLIZYNSKI, Roman**; Aubrey Group, Inc., 6 Cromwell, Ste 100, Irvine, CA 92618-1820 (US). **LOVE, Susan, M.**; 2811 Wilshire Blvd., Suite 500, Santa Monica, CA 90403 (US).

(74) Agent: **ALTMAN, Daniel, E.**; Knobbe, Martens, Olson & Bear, LLP, 2040 Main Street, 14th Floor, Irvine, CA 92614 (US).

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Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:
10 December 2009

(54) Title: DEVICE AND METHOD FOR ACCESSING AND TREATING DUCTS OF MAMMARY GLANDS

(57) Abstract: This application relates to a device for the local delivery of a substance to a mammary duct by ductal cannulation via an orifice on a nipple, wherein the substance may any substance or combinations of substances, such as for example, compositions capable of forming a solid or semisolid gel within the ducts, a marker, and/or an active agent which is preferably effective in treating and/or preventing breast cancer. More particularly, a device is disclosed comprising a probe for locating the orifice on the nipple, wherein the device is further configured to cannulate the duct and allow local delivery of a substance(s).



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INTERNATIONAL SEARCH REPORT

International application No

PCT/US2009/040730

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61B5/053 A61M25/00

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)

A61B 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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2006/116091 A2 (DAVIES RICHARD J [US] EPI SCI LLC [US]; DAVIES RICHARD J [US]) 2 November 2006 (2006-11-02)	1
Y	paragraph [0129] figures 1-3, 5	2
Y	----- WO 97/05898 A1 (UNIV JOHNS HOPKINS MED [US]) 20 February 1997 (1997-02-20)	2
A	the whole document	1
A	----- WO 00/41618 A1 (PRO DUCT HEALTH INC [US]) 20 July 2000 (2000-07-20)	1-2
	the whole document	

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

☒ See patent family annex.

* Special categories of cited documents :

"A" 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

"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)

"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

"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

"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

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

29 July 2009

Date of mailing of the international search report

21/10/2009

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Dydenko, Igor

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/040730

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.: 3-20
because they relate to subject matter not required to be searched by this Authority, namely:
see FURTHER INFORMATION sheet PCT/ISA/210
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:

see additional sheet

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.:
1-2

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-2

a kit for accessing a duct of a mammary gland and
administering an agent effective to destroy at least a
portion of the ductal epithelium

2. claims: 21-28

an apparatus for distinguishing types of biological tissue
based on a relationship between the electrical
characteristics at the first and at the second frequency

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.1

Claims Nos.: 3-20

Claims 3 - 20 relate to a method for treatment of the human or animal body surgery, because they all comprise the step of inserting a catheter into a milk duct of a mammary gland, which is an invasive (i.e. surgical) procedure. Said claims 3 - 20 also relate to a method for treatment of the human or animal body by therapy, because they either explicitly comprise or encompass the step of delivering a therapeutic or prophylactic agent to the mammary gland.

This Authority is not required to search the present application with respect to the aforementioned claims (Article 17(2)(b) PCT and Rule 39.1(iv) PCT). Consequently, no International Search Report has been established with respect to them.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2009/040730

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
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			AU	2505400 A	01-08-2000
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