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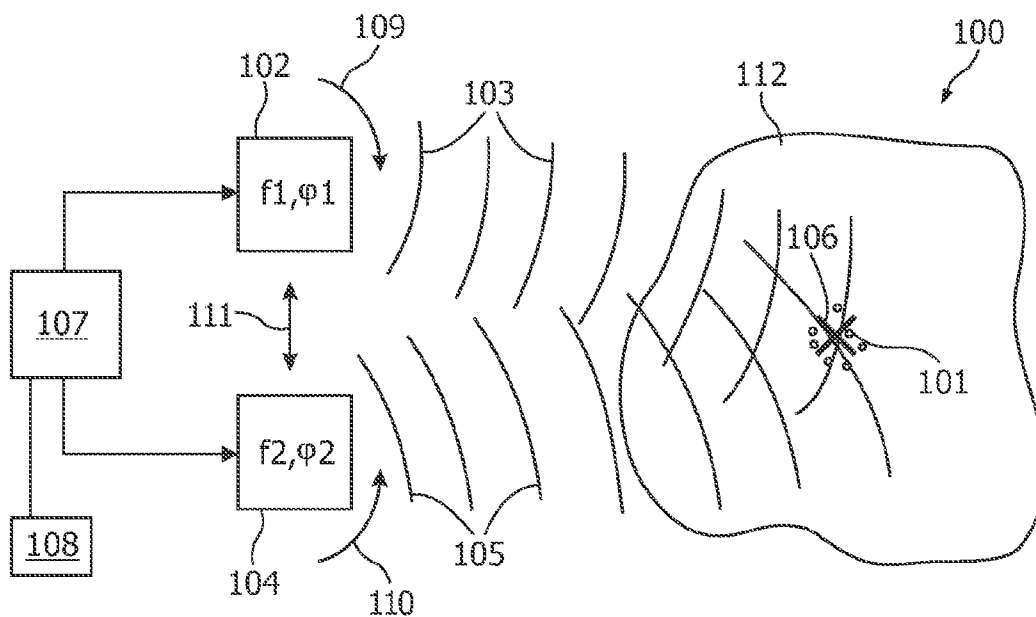
(74) **Agents:** **SCHOUTEN, Marcus M.** et al.; High Tech Campus 44, NL-5656 AE Eindhoven (NL).

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[Continued on next page]

(54) **Title:** A DEVICE FOR AND A METHOD OF ACTIVATING A PHYSIOLOGICALLY EFFECTIVE SUBSTANCE BY ULTRASONIC WAVES, AND A CAPSULE



(57) **Abstract:** A device (100) for activating a physiologically effective substance (101) by ultrasonic waves (103, 105), the device comprising an ultrasonic transducer (102) adapted to generate ultrasonic waves (103), a focusing element (104) adapted to focus the generated ultrasonic waves (103), and an adjustment unit (107) adapted to adjust a position (106) to which the focusing element (105) focuses the generated ultrasonic waves (103) in a manner that the focused ultrasonic waves (103) are bringable in interaction with the physiologically effective substance (101) at the adjusted position (106).

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INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2007/053109

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61N7/00

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)
A61N

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	US 2001/041163 A1 (SUGITA NAMI [JP] ET AL) 15 November 2001 (2001-11-15) abstract; claim 1 paragraph [0125] - paragraph [0127]	1
X	EP 1 062 933 A (WOLF GMBH RICHARD [DE]) 27 December 2000 (2000-12-27) abstract paragraph [0012] - paragraph [0021]	1,2,6
X	EP 0 351 610 A (HITACHI LTD [JP]) 24 January 1990 (1990-01-24) abstract page 2, line 55 - page 3, line 21 page 3, line 56 - page 8, line 58	1-4
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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 1 February 2008	Date of mailing of the international search report 28/04/2008
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Beck, Ewa
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INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2007/053109

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/78232 A (TRANSURGICAL INC [US]) 28 December 2000 (2000-12-28) abstract page 7, line 6 - page 10, line 19 -----	1-3,5,6
X	WO 2006/034049 A (GUIDED THERAPY SYSTEMS L L C [US]; BARTHE PETER G [US]; SLAYTON MICHAEL) 30 March 2006 (2006-03-30) abstract page 2, line 20 - line 30 page 5, line 13 - page 13, line 26 -----	1-3,6,7
X	WO 02/051501 A (INSIGHTEC IMAGE GUIDED TREAT L [IL]) 4 July 2002 (2002-07-04)	1-3,6
Y	abstract page 7, paragraph 2 - page 8, paragraph 2 page 12, paragraph 1 - page 13, paragraph 2 page 21, paragraph 2 - page 27, paragraph 1 -----	8
Y	US 2005/055053 A1 (PHALEN MICHAEL P [US] ET AL) 10 March 2005 (2005-03-10) abstract -----	8

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2007/053109

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.: 9-13
because they relate to subject matter not required to be searched by this Authority, namely:
The method of activating a physiologically effective substance by ultrasonic waves as defined in claims 9-13 is regarded a method for treatment of the human or animal body by therapy. Therefore, the subject-matter of claims 9-13 has not been search (Art.17(2)(a)(i) and Rule 39.1(iv) PCT).
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.:

see annex

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: 1-8

A device for activating a physiologically effective substance by ultrasonic waves comprising an ultrasonic transducer, a focusing element, an adjustment unit and at least one further ultrasonic transducer. The ultrasonic transducers are adapted to generate ultrasonic waves which are frequency-shifted and/or phase-shifted with respect to one another.

2. claims: 14-20

A capsule comprising an encapsulation and a compartment formed in the encapsulation accommodating a physiologically effective substance.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2007/053109

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