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(71) Applicant (for all designated States except US): **Lectus Therapeutics Limited** [GB/GB]; Babraham Research Campus, Cambridge Cambridgeshire CB22 3AT (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MASON, Roger** [GB/GB]; Babraham Research Campus, Cambridge Cambridgeshire CB22 3AT (GB).

(74) Agent: **MARKS & CLERK**; 62-68 Hills Road, Cambridge CB2 1LA (GB).

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[Continued on next page]

(54) Title: MULTIELECTRODE ARRAY AND METHOD OF MANUFACTURING THE SAME

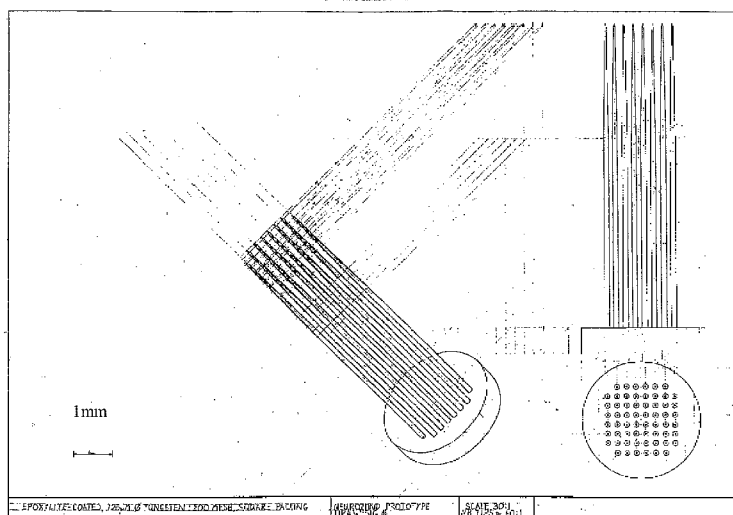


Figure 1

(57) Abstract: Abstract The invention relates to a multi-electrode array comprising a plurality of electrodes, the electrodes being spaced apart from each other by spacer means, the electrodes being secured to the spacer means, the spacer means being encapsulated within a housing. The invention also relates to an implantable device comprising a multi-electrode array of the invention, a method of manufacturing electrodes for use in an array of the invention and a method for manufacturing a multi-electrode array of the invention. The invention also relates to a method for monitoring the effect of a test substance on a biological tissue using a multi-electrode array of the invention.

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A. CLASSIFICATION OF SUBJECT MATTER

INV. A61B5/04 A61B5/0478 A61B5/0492 G01N33/487

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 A61N G01N

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.
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Y	page 13, line 1 - line 9  page 13, line 15 page 15, line 8 - line 31; figure 4	6, 7, 9, 13-16, 18-20, 49
Y	US 2003/195384 A1 (FRANCISCHELLI DAVID E [US] ET AL) 16 October 2003 (2003-10-16) paragraphs [0031], [0060], [0061]	6, 7
Y	WO 03/026525 A (RITA MEDICAL SYSTEMS INC [US]) 3 April 2003 (2003-04-03) page 30, line 20 - line 27	9
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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
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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)
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- \*Z\* document member of the same patent family

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

Authorized officer

Hunt, Brynley

## INTERNATIONAL SEARCH REPORT

International application No  
PCT/GB2007/050390

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	US 5 928 143 A (MCNAUGHTON BRUCE L [US]) 27 July 1999 (1999-07-27) column 2, line 59 - line 61 column 4, line 44 - line 65	15
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Y	page 23, line 25 - page 24, line 2 page 41, line 10 - line 18 page 42, line 22 - line 26; figure 14A	20
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## INTERNATIONAL SEARCH REPORT

International application No  
PCT/GB2007/050390

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	YI QIAO ET AL: "Fabrication of nanoelectrodes for neurophysiology: cathodic electrophoretic paint insulation and focused ion beam milling; Fabrication of nanoelectrodes for neurophysiology: cathodic electrophoretic paint insulation and focused ion beam milling" NANOTECHNOLOGY, IOP, BRISTOL, GB, vol. 16, no. 9, 1 September 2005 (2005-09-01), pages 1598-1602, XP020091267 ISSN: 0957-4484 page 2, line 28 - line 29 page 2, line 44 - page 3, line 10 page 3, line 28 page 4, paragraph "2.4. Impedance measurements" -----	30, 45
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# INTERNATIONAL SEARCH REPORT

International application No.  
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## 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.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
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.:

### 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: 1-29, 47-50

multi-electrode array; method of testing a substance on biological tissue

1.1. claims: 1-21, 47-50

multi-electrode array

1.2. claims: 22-29

method of testing a substance on biological tissue  
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2. claims: 30-46

method of manufacturing metal electrodes  
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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2007/050390

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Information on patent family members

International application No PCT/GB2007/050390
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