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- (71) Applicants (for all designated States except US): **BIO-GEN IDEC MA INC.** [US/US]; 14 Cambridge Center, Cambridge, MA 02142 (US). **YALE UNIVERSITY** [US/US]; Two Whitney Avenue, New Haven, CT 06511 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **RELTON, Jane K.** [GB/US]; 55 Pine Street, Belmont, MA 02478 (US). **ENGBER, Thomas M.** [US/US]; 545 Acorn Park Drive, Ac-ton, MA 01720 (US). **STRITTMATTER, Stephen M.** [US/US]; 96 Tulip Tree Drive, Guilford, CT 06437 (US).
- (74) Agents: **STEFFE, Eric, K.** et al.; Sterne, Kessler, Gold-stein & Fox P.L.L.C., 1100 New York Avenue, N.W., Wash-ington, D.C. 2005-3934 (US).
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- Published:**
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- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: TREATMENT OF CONDITIONS INVOLVING DOPAMINERGIC NEURONAL DEGENERATION USING NOGO RECEPTOR ANTAGONISTS

(57) Abstract: The invention provides methods for promoting regeneration or survival of dopaminergic neurons in a mammal displaying signs or symptoms of dopaminergic neuronal degeneration, including a human with Parkinson's disease, using Nogo receptor antagonists.

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INTERNATIONAL SEARCH REPORT

In nal Application No
 FU1/US2005/002535

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 A61K38/17 C07K16/28 A61P25/00 A61P25/28

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)
 IPC 7 A61K

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, BIOSIS, EMBASE, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 03/031462 A (YALE UNIVERSITY; STRITTMATTER, STEPHEN, M) 17 April 2003 (2003-04-17) cited in the application page 5, line 11 - page 8, line 19; examples 1-23; table 2 -----	1-23
Y	LI W ET AL: "NEUTRALIZATION OF NGR1 MAY BE SUFFICIENT TO PROMOTE RAT DRG NEURITE OUTGROWTH IN THE PRESENCE OF CNS MYELINE" SOCIETY FOR NEUROSCIENCE ABSTRACTS, SOCIETY FOR NEUROSCIENCE, US, 2003, page ABSTRN067803, XP001199825 ISSN: 0190-5295 abstract ----- -/--	1-23

Further documents are listed in the continuation of box C. Patent family members are listed in 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
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Date of the actual completion of the international search	Date of mailing of the international search report
10 October 2005	24/10/2005

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 Mateo Rosell, A.M.
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INTERNATIONAL SEARCH REPORT

Intern	Application No
	PCT/US2005/002535

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>DATABASE BIOSIS 'Online! BIOSCIENCES INFORMATION SERVICE, PHILADELPHIA, PA, US; 2003, LI M ET AL: "Effect of soluble Nogo receptor treatment on functional and histological outcome after spinal cord injury in the rat." XP002348264 Database accession no. PREV200400194121 abstract & SOCIETY FOR NEUROSCIENCE ABSTRACT VIEWER AND ITINERARY PLANNER, vol. 2003, 2003, pages Abstract No. 80.22 URL-http://sf, 33RD ANNUAL MEETING OF THE SOCIETY OF NEUROSCIENCE; NEW ORLEANS, LA, USA; NOVEMBER 08-12, 2003 abstract</p>	1-23
Y	<p>----- GRANDPRE T ET AL: "Nogo-66 receptor antagonist peptide promotes axonal regeneration" NATURE, NATURE PUBLISHING GROUP, LONDON, GB, vol. 417, 30 May 2002 (2002-05-30), pages 547-551, XP002963387 ISSN: 0028-0836 abstract page 547, right-hand column, paragraph 1 - page 551, left-hand column, paragraph 2</p>	1-23
Y	<p>----- OERTLE T ET AL: "Nogo-A inhibits neurite outgrowth and cell spreading with three discrete regions" JOURNAL OF NEUROSCIENCE, NEW YORK, NY, US, vol. 23, no. 13, 2 July 2003 (2003-07-02), pages 5393-5406, XP002973436 ISSN: 0270-6474 abstract page 5397, right-hand column, paragraph 1 - page 5402, right-hand column, last paragraph; figure 2</p> <p>----- -/--</p>	1-23

INTERNATIONAL SEARCH REPORT

Inter Application No
PC 1/052005/002535

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>DOMENICONI MARCO ET AL: "Myelin-associated glycoprotein interacts with the Nogo66 receptor to inhibit neurite outgrowth" NEURON, vol. 35, no. 2, 18 July 2002 (2002-07-18), pages 283-290, XP002348380 ISSN: 0896-6273 page 284, left-hand column, paragraph 1 - page 286, right-hand column, paragraph 2 page 288, right-hand column, last paragraph - page 289, left-hand column, paragraph 1</p> <p style="text-align: center;">-----</p>	1-23
P,X	<p>WO 2004/014311 A (YALE UNIVERSITY; BIOGEN, INC; LEE, DANIEL, H., S; PEPINSKY, R., BLAKE;) 19 February 2004 (2004-02-19) cited in the application abstract page 3, paragraph 29 - page 9, paragraph 28 page 15, paragraph 59 page 16, paragraph 64 - page 18, paragraph 71 page 37, paragraph 121 - page 41, paragraph 134; examples 1-22</p> <p style="text-align: center;">-----</p>	1-23
P,X	<p>LI W ET AL: "A neutralizing anti-Nogo66 receptor monoclonal antibody reverses inhibition of neurite outgrowth by central nervous system myelin" JOURNAL OF BIOLOGICAL CHEMISTRY 15 OCT 2004 UNITED STATES, vol. 279, no. 42, 15 October 2004 (2004-10-15), pages 43780-43788, XP002348205 ISSN: 0021-9258 the whole document</p> <p style="text-align: center;">-----</p>	1-23

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2005/002535

Box 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:

Although claims 1-23 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
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:

see FURTHER INFORMATION sheet PCT/ISA/210
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 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:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
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.
- No protest accompanied the payment of additional search fees.

Continuation of Box II.1

Although claims 1-23 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

Continuation of Box II.2

The specific sequences of claim(s) 6-9, 17,18 have, according to PCT Rule 13ter.1.c, not been searched since the Sequence Listing as present in the description does not comply with WIPO Standard ST 25 prescribed in the administrative instructions under Rule 5.2. The Sequence Listing has been furnished neither in paper form nor in machine readable form as provided for in the same instructions and the applicant has not remedied the disclosed deficiencies within the time limit fixed in the invitation pursuant to PCT Rule 13ter.1.a.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US2005/002535

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03031462	A	17-04-2003	CA 2461655 A1	17-04-2003
			EP 1451337 A2	01-09-2004
			JP 2005508165 T	31-03-2005

WO 2004014311	A	19-02-2004	AU 2003264033 A1	25-02-2004
			CA 2495121 A1	19-02-2004
			EP 1534736 A2	01-06-2005
