Title: A METHOD FOR DIAGNOSIS AND PROGNOSIS OF MULTIPLE SCLEROSIS SUBTYPES

Abstract: This invention provides methods of assessing autoantibodies to specific epitopes of myelin components (e.g. to conformational epitope of myelin/oligodendrocyte glycoprotein) for the diagnosis and/or prognosis of multiple sclerosis.
INTERNATIONAL SEARCH REPORT

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:
Please See Continuation Sheet

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 additional fees, this Authority did not invite payment of any 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. [X] 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.: 1-9

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.

Form PCT/ISA/210 (continuation of first sheet(2)) (April 2005)
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPCl(5): G01N 33/53(2006.01)

USPC: 435/7.1
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.: 435/7.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database consulted during the international search (name of database and, where practicable, search terms used)
EAST, Pubmed, Dialog

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>MENGE T. Time course of antibody responses to myelin proteins and galactocerebroside in monomacrophage experimental allergic encephalomyelitis and multiple sclerosis. Annals of Neurology 2003 54(suppl 7), p. S38</td>
<td>1,6-8</td>
</tr>
</tbody>
</table>

Date of the actual completion of the international search 31 May 2007 (31.05.2007)

Date of mailing of the international search report 31 AUG 2007

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Form PCT/ISA/210 (second sheet) (April 2005)
BOX III. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group 1, claim(s) 1 - 9, drawn to methods comprising detecting antibodies that bind to galactocerebroside.

Group 2, claim(s) 10 - 36, drawn to methods comprising detecting antibodies that bind to MOG.

The inventions listed as Groups 1-2 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Group 1 is directed to methods comprising detection of antibodies that bind galactocerebroside (alpha-GaIC) for diagnosis of multiple sclerosis. However, because Menge (2004. Neurology 63(7) Supplement S5.A482) teaches detection of alpha-GaIC for diagnosis of multiple sclerosis, no special technical feature exists for Group 1 as defined by PCT Rule 13.2, because it does not define a contribution over the prior art. Furthermore, Group 2 does not share the same technical feature as Group 1, as Group 2 requires detection of antibodies that bind MOG whereas Group 1 requires detection of antibodies that bind GaIC. The technical features of Groups 1 and 2 are drawn to methods which require different starting materials and as such do not share the same or corresponding technical feature. Note that PCT Rule 13 does not provide for multiple products or methods within a single application. Because the technical feature of Group 1 is not a special technical feature and because Groups 1 and 2 do not share the same or corresponding technical feature, unity of invention is lacking.