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(54) Title: DETECTION OF ALZHEIMER'S AMYLOID BY MAGNETIC RESONANCE IMAGING

(57) Abstract: Alzheimer's disease can be diagnosed in vivo using magnetic resonance imaging. A labeled A β peptide or its derivative is injected into the patient to be diagnosed, after which the patient is subjected to magnetic resonance imaging. Both pre-amyloid and amyloid plaques can be detected using this method.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/16057

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 5/055
 US CL : 424/9.3, 9.34, 9.341

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. : 424/9.3, 9.34, 9.341, 9.32, 9.323, 9.37

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 practicable, search terms used)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,837,473 A (MAGGIO et al) 17 November 1998 (17.11.1998), see columns 2-4, column 7, lines 30-47, column 8 and example 2.	1-8, 16-21, 24 and 32-36 ----- 1-36
Y	US 5,670,477 A (PODUSLO et al) 23 September 1997 (23.09.1997), see column 1, lines 48-61 and column 8, lines 11-14.	17-22, 24, 25, 27 and 28
Y	US 6,207,153 A (DAN et al) 27 March 2001 (27.03.2001), see columns 33-34.	10, 13-15, 23, 16 and 29-31

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	"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
"E" earlier application or patent published on or after the international filing date	"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
"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)	"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
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer Michael G. Hartley <i>Bella Kollins for</i> Telephone No. (703) 308-1235

INTERNATIONAL SEARCH REPORT

PCT/US02/16057

Continuation of B. FIELDS SEARCHED Item 3:

APS

search terms: MRI, NMR, magnetic resonance, imaging, paramagnetic, Alzheimer's, AB protein, amyloid, bbb, blood brain barrier, mannitol, albumin, transferrin, putrescine.