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(54) Title: COMPOSITIONS AND METHODS FOR PREVENTING PROTEIN AGGREGATION IN NEURODEGENERATIVE DISEASES

(57) Abstract: Disclosed are methods for treating a disease that involves protein aggregation, including Alzheimer's, Parkinson's, prion diseases such as BSE and CJD, and Down's syndrome. The methods involve administering to a subject suspected of having the disease a very high affinity antibody fragment immunoreactive with the protein that is aggregating. Such treatment will have the effect of preventing, slowing, or halting the disease progression by inhibiting protein aggregation.



**WO 03/000714 A3**

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/20009

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 39/395, 39/40, 39/42; C12N 5/00, 5/02; C12P 21/08; C07K 16/00  
US CL : 424/133.1, 130.1, 139.1; 530/387.3, 387.9; 435/375

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. : 424/133.1, 130.1, 139.1; 530/387.3, 387.9; 435/375

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)

MEDLINE, EMBASE, CAPLUS, BIOSIS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                                                                                   | Relevant to claim No. |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| A          | SOLOMON et al. Monoclonal antibodies inhibit in vitro fibrillar aggregation of the Alzheimer beta-amyloid peptide. PNAS USA, January 1996, Vol. 93, pp. 452-455, whole document.                                                                     | 1-15                  |
| A          | BARD et al. Peripherally administered antibodies against amyloid beta-peptide enter the central nervous system and reduce pathology in a mouse model of Alzheimer disease. Nature Medicine, August 2000, Vol. 6, No. 8, pp. 916-919, whole document. | 1-15                  |
| A          | BUEE et al. Comparative biochemistry of tau in progressive supranuclear palsy, corticobasal degeneration, FTDP-17 and pick's disease. Brain Pathology, 1999, Vol. 9, pp. 681-693, whole document.                                                    | 1-15                  |

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