03/10/02
20020601 76

162162

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
11 October 2001 (11.10.2001)

PCT

(10) International Publication Number
WO 01/075454 A3

(51) International Patent Classification[7]: G01N 33/68, 33/561, C07K 14/47, A61P 25/28

(21) International Application Number: PCT/US01/10908

(22) International Filing Date: 3 April 2001 (03.04.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/194,504 3 April 2000 (03.04.2000) US
60/253,647 28 November 2000 (28.11.2000) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:
US 60/194,504 (CON)
Filed on 3 April 2000 (03.04.2000)

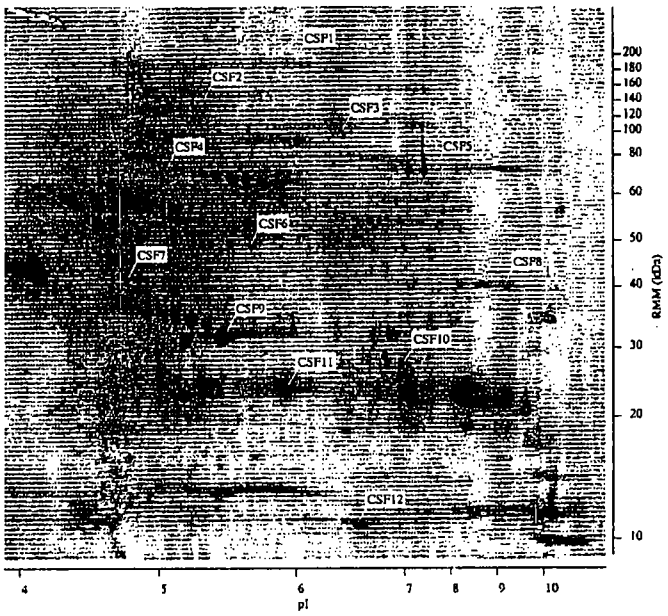
(71) Applicants *(for all designated States except US)*: **OXFORD GLYCOSCIENCES (UK) LTD.** [GB/GB]; The Forum, 86 Milton Park, Abingdon, Oxfordshire OX14 4RY (GB). **PFIZER INC.** [US/US]; 234 East 42nd Street, New York, NY 10017 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **DURHAM, Kathryn, L.** [US/US]; 94 Glenwood Avenue, New London, CT 06320 (US). **FRIEDMAN, David, L.** [US/US]; 368 Bartlett Drive, Madison, CT 06443 (US). **HERATH, Herath, Mudiyanselage, Athula, Chandrasiri** [GB/GB]; 53 Foster Road, Abingdom OX14 1YW (GB). **KIMMEL, Lida, H.** [US/US]; 55 Bokum Road, Chester, CT 06412 (US). **PAREKH, Rajesh, Bhikhu** [GB/GB]; Alchester House, Langford Lane, Near Wendlebury OX6 0NS (GB). **POTTER, David, M.** [US/US]; 33 Chriswood Trace, Ledyard, CT 06339 (US). **ROHLFF, Christian** [GB/GB]; 19 Rewley Road, Oxford OX1 2RA (GB). **SILBER, B., Michael** [US/US]; 104 Randi Drive, Madison, CT 06443 (US). **STIGER, Thomas, R.** [US/US]; 93 Castle Hill Road, Pawcatuck, CT 06379 (US). **SUNDERLAND, P., Trey** [US/US]; 4718 Cumberland Avenue, Chevy Chase, MD 20815 (US). **TOWNSEND, Robert, Reid** [GB/GB]; 2 Oatlands Road, Oxford OX2 0EU (GB). **WHITE, Frost** [US/US]; 65 Homestead Road, Ledyard, CT 06339 (US).

[Continued on next page]

(54) Title: DIAGNOSIS AND TREATMENT OF ALZHEIMER'S DISEASE



(57) Abstract: The present invention provides methods and compositions for screening, diagnosis and prognosis of Alzheimer's disease, for monitoring the effectiveness of Alzheimer's disease treatment, and for drug development. Alzheimer's Disease-Associated Features (AFs), detectable by two-dimensional electrophoresis of cerebrospinal fluid, serum or plasma are described. The invention further provides Alzheimer's Disease-Associated Protein Isoforms (APIs) detectable in cerebrospinal fluid, serum or plasma, preparations comprising isolated APIs, antibodies immunospecific for APIs, pharmaceutical compositions, diagnostic and therapeutic methods, and kits comprising or based on the same.

WO 01/075454 A3

ACTION

WILLIAMS, Stephen, A. [GB/US]; 114 Colony Road, Groton, CT 06340 (US).

(74) Agent: JACKSON, David, A.; Klauber & Jackson, 411 Hackensack Avenue, Hackensack, NJ 07601 (US).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

(88) Date of publication of the international search report:
8 May 2003

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.