D (81.40 FORM **PTO-1595** U.S. DEPARTMENT OF COMMERCE **'ER SHEET** 07-22-2003 Patent and Trademark Office (Rev. 6-93) 10,4380611 OMB No. 0651-0011 (exp. 4/94) Y ne attaches Regist PCT/RefQ or lofy tMARbf 2005 To the Honorable Commissioner 102503100 2. Name and address of receiving party(ies) 1. Name of conveying party(ies): 3-14-03 (1) Jeffrey Browning Name: BIOGEN, INC. (2) Linda Burkly (3) Aniela Jakubowski and Internal Address: (4) Timothy Zheng Additional name(s) of conveying party(ies) attached? /_/ Yes /X/ No Street Address: 14 Cambridge Center Nature of conveyance: /X/ Assignment // Merger City: Cambridge State: MA ZIP: 02142 // Security Agreement // Change of Name Additional name(s) & address(es) attached? // Yes /X/ No /_/ Other ___ Execution Date: March 12, 2003 10380611 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: March ^2, 2003 Patent No.(s) Patent Application No.(s). Additional numbers attached? // Yes /X/ No Total number of applications and patents involved: Name and address of party to whom correspondence 1 concerning document should be mailed: Total fee (37 CFR 3.41).....\$ 40.00 Name: Jonathan M. Kaplan Internal Address: ☐ Authorized to be charged to deposit account ☑ Enclosed ☑ Charge excess/credit overpayment to deposit account Street Address: FISH & NEAVE Deposit account number: 1251 Avenue of the Americas 06-1075 City: New York State: NY ZIP: 10020 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE THIS SPACE 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. 3/14/03 Jonathan M. Kaplan Date Name of Person Signing Total number of pages including cover sheet, attachments, and Reg. No. 46,819 document:

PATEMOR 051719US

REEL: 014282 FRAME: 0288

PCT ASSIGNMENT

We,

(1) Jeffrey Browning,

(2) Linda Burkly,

(3) Aniela Jakubowski, and

(4) Timothy Zheng,

residing at:

(1) 32 Milton Road, Brookline, MA, 02146 ,
 (2) 34 Winthrop Street, West Newton, MA, 02465 ,
 (3) 151 Mystic Street, #41, Arlington, MA, 02474 ,
 (4) 221 Massachusetts Avenue, Apt. 1105, Boston, MA, 02115,

for good and valuable consideration, receipt of which is hereby acknowledged, have assigned, sold and transferred to, and do hereby assign, sell and transfer to <u>BIOGEN</u>, <u>INC.</u>, a corporation organized and existing under the laws of the <u>State of Massachusetts</u> and having an office and a place of business at <u>14 Cambridge Center</u>, <u>Cambridge</u>, <u>MA</u>, <u>02142</u>, its successors and assigns: (1) the entire right, title and interest in all countries throughout the world in and to any and all our inventions and discoveries disclosed in our International Patent Application, filed under the Patent Cooperation Treaty in the United States Receiving Office ("RO/US"), entitled:

TWEAK RECEPTOR AGONISTS AS ANTI-ANGIOGENIC AGENTS,

and designating Albania (AL), Algeria (DZ), Antigua & Barbuda (AG), Armenia (AM), Australia (AU), Austria (AT), Azerbaijan (AZ), Barbados (BB), Belarus (BY), Belgium (BE), Belize (BZ), Benin (BJ), Bosnia and Herzegovina (BA), Brazil (BR), Bulgaria (BG), Burkina Faso (BF), Cameroon (CM), Canada (CA), Central African Republic (CF), Chad (TD), China (CN), Colombia (CO), Congo (CG), Costa Rica (CR), Côte d'Ivoire (CI), Croatia (HR), Cuba (CU), Cyprus (CY), Czech Republic (CZ), Democratic People's Republic of Korea (KP), Denmark (DK), Dominica (DM), Ecuador (EC),

EK708051719US

PATENT REEL: 014282 FRAME: 0289 Equatorial Guinea (GQ); Estonia (EE), Finland (FI), France (FR), Gabon (GA), Gambia (GM), Georgia (GE), Germany (DE), Ghana (GH), Greece (GR), Grenada (GD), Guinea (GN), Guinea Bissau (GW), Hungary (HU), Iceland (IS), India (IN), Indonesia (ID), Ireland (IE), Israel (IL), Italy (IT), Japan (JP), Kazakstan (KZ), Kenya (KE), Kyrgyzstan (KG), Latvia (LV), Lesotho (LS), Liberia (LR), Liechtenstein (LI), Lithuania (LT), Luxembourg (LU), Madagascar (MG), former Yugoslav Republic of Macedonia (MK), Malawi (MW), Mali (ML), Mauritania (MR), Mexico (MX), Monaco (MC), Mongolia (MN), Morocco (MA), Mozambique (MZ), Netherlands (NL), New Zealand (NZ), Niger (NE), Norway (NO), Poland (PL), Portugal (PT), Republic of Korea (KR), Republic of Moldova (MD), Romania (RO), Russian Federation (RU), Saint Lucia (LC), Senegal (SN), Sierra Leone (SL), Singapore (SG), Slovakia (SK), Slovenia (SI), South Africa (ZA), Spain (ES), Sri Lanka (LK), Sudan (SD), Swaziland (SZ), Sweden (SE), Switzerland (CH), Tajikistan (TJ), Tanzania (TZ), Togo (TG), Trinidad and Tobago (TT), Turkey (TR), Turkmenistan (TM), Uganda (UG), Ukraine (UA), United Arab Emirates (AE), United Kingdom (GB), United States of America (US), Uzbekistan (UZ), Viet Nam (VN), Yugoslavia (YU), and Zimbabwe (ZW),

[subsequently identified as International Patent PCT/US01/28451, filed September 12, 2001], including any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof, and any substitute applications therefor; (2) the full and complete right to file patent applications in the name of BIOGEN, INC., its designee, or in my name at BIOGEN, INC.'s, or its designee's election, on the aforesaid inventions, discoveries and applications in all countries of the world; (3) the entire right, title and interest in and to any Letters Patent which may issue on the aforesaid inventions, discoveries and applications in any country of the world and any renewals, revivals, reissues, reexaminations and extensions thereof, and any patents of confirmation, registration and importation of the same; and (4) the entire right, title and interest in and to all Convention and Treaty Rights of all kinds thereon, including without limitation all rights of priority in any country of the world, in and to the following priority application(s):

60/232,355 United States September 14, 2000 filing date

and all rights of priority in any country of the world deriving from the above-identified International Patent Application.

page $\underline{2}$ of $\underline{6}$

PATENT REEL: 014282 FRAME: 0290 We hereby authorize and request the competent authorities to grant and to issue any and all such Letters Patent in any country throughout the world to <u>BIOGEN</u>, <u>INC</u>. as the assignee of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

We agree, at any time, upon the request of <u>BIOGEN</u>, <u>INC</u>., to execute and to deliver to <u>BIOGEN</u>, <u>INC</u>. any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any Letters Patent issuing on said inventions, discoveries or applications, and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof.

We further agree, at any time, upon request of <u>BIOGEN, INC.</u> to execute and to deliver to <u>BIOGEN, INC.</u> such additional documents, if any, as are necessary or desirable to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do the necessary to give full effect to and to perfect any and all rights of <u>BIOGEN, INC.</u> under this Assignment, including the execution, delivery and procurement of any and all further documents evidencing this assignment, transfer and sale as may be necessary or desirable.

ASSIGNOR:

3/12/03 Date

Jeffrey Browning

On this 12 day of Wareh, 2003, Jeffrey Browning (1) personally appeared before me, a Notary Public in and for Stake of Massichusetts, and executed the foregoing Assignment and duly acknowledged to me that such Assignment was executed for the uses and purposes therein expressed.

Notary Public

(Notarial Seal)

My Commission Expires:

page $\underline{3}$ of $\underline{6}$

PATENT REEL: 014282 FRAME: 0291

Notary Public

(Notarial Seal)

My Commission Expires:

page <u>4</u> of <u>6</u>

March 12, 2003 Date	Timothy Zheng
personally appeared before me, a Not	Timothy Zheng (4) tary Public in and for Stak of Massa Musetts ent and duly acknowledged to me that such es and purposes therein expressed.
	Notary Public
(Notarial Seal)	My Commission Expires: May 19, 2006

page $\underline{5}$ of $\underline{6}$

ACKNOWLEDGEMENT OF ASSIGNEE:

By:

Name: Raymond Arner

Title: Vice President, Chief IP Counsel

On this 13 day of Mark, 2003, Raymond G. Arner personally appeared before me, a Notary Public in and for the State of Massaheth, and duly acknowledged the executed Assignment on behalf of the Assignee.

Notary Public

(Notarial Seal)

My Commission Expires:

page <u>6</u> of <u>6</u>

PATENT REEL: 014282 FRAME: 0294

RECORDED: 03/14/2003