A/D 581,40

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U.S. Department of Commerce Patent and Trademark Office

RECORDATION FORM COVER SHIPET POT/PTO 0 1 JUN 2000

 \mathbf{P}_{I} Our Ref.: 3764-35 Commissioner of Patents and Trademarks Box Assignment, Washington, D.C. 20231 To the Honorable Commissioner of Patents and Trademark 101462580 nents or copy thereof. 1. Name of conveying party(ies): Z. Name and address of receiving party(ies): Lilian Alcaraz Mark Furber Name: AstraZeneca AB Michael Mortimore Internal Address: Street Address: S-151 85 Additional name/s of conveying party/ies attached? 3. Nature of conveyance: City: Sodertalje **◯** Assignment Merger State/Country: Sweden Security Assignment Change of Name Zip: Other Additional name/s & address/es attached? Yes No Execution Date: May 24, 2000, May 24, 2000 and May 26, 2000, respectively. 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: A. Patent Application No(s). B. Patent No(s). (1) Unassigned (1)(2) (2)(3)(3) Additional numbers attached Yes No 5. Name and address of party to whom correspondence 6. Total number of applications & patents involved: concerning document should be mailed: 7. Total fee (37 CFR 3.41) 40.00 Name: Leonard C. Mitchard □ Enclosed Authorized to be charged to deposit account #14-1140 Internal Address: 8. The Commissioner is hereby authorized to charge any Street Address: Nixon & Vanderhye P.C. deficiency in the fee(s) filed, or asserted to be filed, or which 1100 North Glebe Road should have been filed herewith (or with any paper thereafter 8th Floor filed in this application by this firm) to our Account No. 22201 14-1140. FC:561 DO NOT USE THIS SPACE 9. Statements 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. Leonard C. Mitchard Name of Person Signing Reg. No. 29,009 Total number of pages/inc/uding original cover sheet, attachments, and document: 151

PATENT

431376

REEL: 011071 FRAME: 0176

ASSIGNMENT OF PATENT APPLICATION

(ALCARAZ, Lilian; of AstraZeneca R&D Charnwood, Bakewell Road, Loughborough, Leics. LE11 5RH, United Kingdom;

(Inventors)

(FURBER, Mark; of AstraZeneca R&D Charnwood, Bakewell Road, Loughborough, Leics. LE11 5RH, United Kingdom

(MORTIMORE, Michael; of Vertex Pharmaceuticals, 88 Milton Park Abingdon, Oxfordshire OX14 4RY, United Kingdom

(

In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to

(Assignee)

(AstraZeneca AB

(Address)

(of S-151 85 Södertälje, Sweden

(hereinafter designated as the Assignee) the entire right, title and interest for the United States, its territories, dependencies and possessions, and for the country of

(Other countries)

in the invention, and all application for patent and any

Letters Patent which may be granted therefore, known as

(Title)

(NOVEL COMPOUNDS_(Assignee's Case No. F 2097-1P US., filed as SE00/00663 on 6 April 2000 and designating the US)

for which the undersigned has (have) executed on even date herewith an application for patent in the United States of America or, if not on even date, then has executed

(on_or has already filed in (U.S. appln. Serial No., filed on

(The undersigned acknowledges an obligation of assignment of this invention to said assignee at the time the invention was made.

The undersigned agree(s) to execute all papers and documents necessary in connection with the application or any interference which may be declared and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient and further to perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from said application or any division or divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the firm of NIXON & VANDERHYE P.C. the power to insert on this assignment any further identification which may be necessary to desirable in order to comply with the rules of the United States Patent Office for recordation of this document.

| In witn | ess whereof, exec | cuted by the undersigned on th | e date(s) opposite the under | rsigned signature(s). |
|---------|-------------------|--------------------------------|------------------------------|---------------------------|
| Date: | 24/5/00 | Signature of Inventor | -10- | |
| Date: | 24/5/00 | Signature of Inventor | Mark Furber | |
| Date: | | Signature of Inventor: | | |
| | | | Michael Mortimore | |
| | ssed by: | ARCHIOCUS. | Date Date | 24#/May, 2000 24/5/200 |

ASSIGNMENT OF PATENT APPLICATION

(ALCARAZ, Lilian; of AstraZeneca R&D Charnwood, Bakewell Road, Loughborough, Leics. LE1² 5RH, United Kingdom;

(Inventors)

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The undersigned hereby grant(s) the firm of NIXON & VANDERHYE P.C. the power to insert on this assignment any further identification which may be necessary to desirable in order to comply with the rules of the United States Patent Office for recordation of this document.

| Date: | Signature of Inventor: | Lilian Alcaraz | |
|---------------|------------------------|--|---------|
| Date: | Signature of Inventor: | | |
| Date: 24/5/00 | Signature of Inventor: | Mark Furber // Lulimon Michael Mortimore | |
| Witnessed by: | 5/2= | Date | 26/5/00 |
| Witnessed by: | C. Son | Date | 76/5/00 |

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned signature(s).

RECORDED: 06/01/2000 REEL: 01107