Colored 2007       PATENT         101366549       1103326-0522 - 0527         RECORDATION FORM COVER SHEET         DOBTION FORM COVER SHEET         DOBTION FORM COVER SHEET         DOBTION FORM COVER SHEET         DOBTION FORM COVER SHEET         OSD TO: The Commissioner of Patents and Trademarks: Plass record the attached original document(2) or copy(les).         Conveyance Type         New       Assignment         Scurity Agreement       Security Agreement         Rest domination of PTO Error       Rest domination of PTO Error         Real d       Frame d       Dopartment after         Dopartmental File       Security Mark if additional names of conveying parties attached         Name (line 1)       Astra Akticlobolacy       O2         Name (line 2)       Mark if additional names of conveying parties attached       Is an asgument.         Name (line 2)       Second Party       Execution Date Stack and Date S	FORM PTO-16 Expires 06/30/99 OMB 0651-0027			5-24-200	- 1			epartment of Commerce and Trademark Office
RECORDATION FORM COVER SHEET       103220-0322 - 0527         DOT: The Commissioner of Patents and Trademarks: Please record the attached original document(s) br copy(les).         Submission Type       Conveyance Type         New       Assignment       Security Agreement         Resubmission (Non-Recordation)       License       Conveyance Type         Octrection of PTO Error       Receit # Grave # Grave # Gravement Agnetes)         Reel #       Frame #       Departmental File       Security Agreement         Corrective Document       Marger       Other       U.S. Government Agnetes)         Reel #       Frame #       Departmental File       Security Agreement Agnetes)         Name (ine 1)       Astra Akticholag       Got 15 2000       Mark if additional names of conveying parties attached       Effect type and agnetes)         Name (ine 2)       Second Party       Mark if additional names of receiving parties attached       If decument to be receiving parties attached         Name (ine 2)       Second Party       Mark if additional names of receiving parties attached       If decument to be receiving parties attached         Name (ine 2)       Second Party       Mark if additional names of receiving parties attached       If decument to be receiving party is nat doment to be receiving party is nat doment to be		N W w						PATENT
RECORDATION FORM COVER SHEET       0935; dis 20; dis 20; dis 20;         PATENTS ONLY       0535; band 0633         Conveyance Type         New       Conveyance Type         New       Conveyance Type         New       Conveyance Type         Obsumission Type       Conveyance Type         New       Assignment       Security Agreement         Resubmission (Mon-Recordation)       License       Conveying of Name         Corrective Document       Other       Corrective Document         Reel #       Frame #       Departmental File       Security Agreement         Mare file       Security Agreement         Reel #       Frame #       Departmental File       Security Agreement         Mare file       Security Document         Mare file       Security Batterit Actional names of conveying parties attached	Y					-	11033	26-0522 - 0527:
TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) br copy(ies).         Submission Type       Cnveyance Type         New       Assignment       Security Agreement         Resubmission (Non-Recordation)       License       X Change of Name         Correction of PIO From       Frame #       U.S. Government         Corrective Document       Frame #       U.S. Government         Corrective Document       Frame #       U.S. Government         Corrective Document       Frame #       02 15 2000         Name (line 1)       Astra Aktiebolag       02 15 2000         Name (line 2)       Execution Date       Month Daty Year         Name (line 2)       StataZeneca AB       If document to be recorder becoming parties attached         Name (line 2)       StataZeneca AB       If document to be recorder becoming parties attached         Name (line 2)       StataZeneca AB       If document to be recorder becoming parties attached         Address (line 3)       Cay       StataCountry       Zay Gote         Domestic Representative is attached			RECORDA			ET (	)531; d	539; 0540;
New       Assignment       Security Agreement         Document ID#       License       X Change of Name         Corrective Document       Merger       Other         Corrective Document       Frame #       U.S. Government         Corrective Document       Frame #       U.S. Government         Corrective Document       Frame #       U.S. Government         Corrective Document       Merger       U.S. Government         Mark If additional names of conveying parties attached       Second Option Date         Name (line 1)       Astra Aktiebolag       02 15 2000         Name (line 2)       Second Party       Execution Date         Second Party       Mark If additional names of receiving parties attached       If counting Date         Name (line 2)       Second Party       If decument to be focoded         Name (line 2)       Second Party       If decument is the bridged         Name (line 2)       Second Party       If decument is the bridged of a domestic         Name (line 2)       Second Party       If decument is the bridged of a domestic         Name (line 2)       Second Party       If decument is the bridged of a domestic         Address (line 3)       Second Party       If decument is the bridged of a domestic         Name (line 2)       Second P			nd Trademark	s: Please record	the attached ori	ginal docı	ument(s)	or copy(ies).
Resubmission (Non-Recordation)       License       X       Change of Name         Correction of PTO Error       Ref #       Other       Other         Reel #       Frame #       U.S. Government         (For Use ONLY by U.S. Sourcement Agencies)       Merger       U.S. Government Agencies)         Name (ine 1)       Astra Aktiebolag       Departmental File       Secret File         Name (ine 2)       Mark if additional names of conveying parties attached \$#\$	<b>_</b>	уре			<b>~·</b>	urity Aare	ement	
Corrective Document       Merger       Other         Corrective Document       (For Use ONLY by US. Government (For Use ONLY by US. Government Agencies)         Reel #       Frame #       Departmental File       Secret File         Corrective Document       (Inc 1)       Astra Aktiebolag       O2 15 2000         Name (Inc 1)       Astra Aktiebolag       D2 15 2000         Name (Inc 2)       Execution Date Month Day Year       Mark if additional names of conveying parties attached         Second Party       Name (Inc 2)       Execution Date Month Date       Month Date Year         Name (Inc 2)       Execution Date       Month Date       Month Date         Name (Inc 2)       Execution Date       Month Date       Month Date         Name (Inc 2)       Execution Date       Month Date       Month Date         Name (Inc 2)       Execution Date       Month Date       Month Date         Name (Inc 2)       AstraZenecca AB       If document to be recorded         Name (Inc 2)       Socientalje, Sweden       If document to be recorded         Address (Inc 3)       Socientalje, Sweden       Grade         Address (Inc 3)       StateSouth       Zin Code         Domestic Representative Name and Address       Enter for the first Receiving Party only.         Name			n)					
Reel #       Frame #       G. Government (For Use ONLY by U.S. Government (For Use						-		
Reel #       Frame #       Departmental File       Secret File         Conveying Party(ies)       Mark if additional names of conveying parties attached       Officient (Conveying Party (Conveying Party (Conveying Party (Conveying Party (Conveying Party (Converted attached (Conveying Party (Converted attached (Conveying Party (Converted attached (Conveying Party (Converted attached	Reel #	Frame #		•	U.S. Go	vernmen	t	
Name (line 1)       Astra Aktiebolag       O2 15 2000         Name (line 2)       Execution Date Month Day Year         Second Party       Month Day Year         Name (line 1)       Execution Date Month Day Year         Name (line 2)       Mark if additional names of receiving parties attached         Receiving Party       Mark if additional names of receiving parties attached         Name (line 2)       If document to be recorder is an assignment and the receiving parties attached         Name (line 2)       State/Cauthy         Address (line 1)       S-151 85 Sodertalje, Sweden         Address (line 2)       State/Cauthy         Address (line 3)       City         City       State/Cauthy         Zip Code       Enter for the first Receiving Party only.         Name (line 1)       Patent Department         Address (line 2)       1155 Avenue of the Americas         Address (line 2)       1155 Avenue of the Americas         Address (line 3)       New York         Address (line 4)       New York         Address (line 4)       New York         Address (line 4)       New York					7			
Name (line 1)       Astra Aktiebolag       02 15 2000         Name (line 2)       Execution Date Month Day Year         Second Party       Mark if additional names of receiving parties attached         Name (line 1)       Mark if additional names of receiving parties attached         Name (line 1)       AstraZeneca AB         Name (line 2)       If document to be recorder         Name (line 2)       States, an appointent and the united         Name (line 2)       States, an appointent and the united         Address (line 2)       States, an appointent for a domestic receiving parties attached         Address (line 2)       State/Country         Address (line 2)       State/Country         Address (line 3)       City         State/Country       Zip Code         Domestic Representative Name and Address       Enter for the first Receiving Party only.         Name       White & Case IJP         Address (line 2)       1155 Avenue of the Americas         Address (line 3)       New York         Address (line 4)       N	Conveying Pa	rty(ies)		Mark if addi	tional names of cor	iveying part	ies attache	ed effective dat
Second Party       Execution Date         Name (line 1)	Name (line 1)	Astra Aktiebol	. <b>a</b> g					
Name (line 1)	L							Execution Date
Receiving Party       Mark if additional names of receiving parties attached         Name (line 1)       AstraZeneca AB       If document to be recorder         Name (line 2)       If additional names of receiving parties attached         Address (line 1)       S-151 85 Sodertalje, Sweden       States, an appointment of the receiving party is not domiciled in the United State, end, appointment of a domestic representative is attached.         Address (line 2)       State, an appointment of a domestic representative is attached.         Address (line 3)       City       State/Country         Address (line 3)       City       State/Country         Name       White & Case IJ.P         Address (line 2)       1155 Avenue of the Americas         Address (line 3)       New York         Address (line 4)       New York         Address (line 3)       New York         FOR OFFICE USE ONLY       FOR OFFICE USE ONLY	<b>J</b> —		<u></u>	1. 1 <u></u>				
Name (line 1)       AstraZeneca AB       If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached.         Address (line 2)       Sodertalje, Sweden       If document from Assignment.         Address (line 2)       State/Country       Zip Code         Address (line 3)       City       State/Country       Zip Code         Domestic Representative Name and Address       Enter for the first Receiving Party only.         Name       White & Case LLP         Address (line 2)       1155 Avenue of the Americas         Address (line 3)       New York         Address (line 4)       New York         FOR OFFICE USE ONLY       FOR OFFICE USE ONLY	Name (line 2)							
Name (line 1)       AstraZeneca AB       If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached.         Address (line 2)       Subscription must be a separate document from Assignment.         Address (line 2)       State/Country       Zip Code         Convestic Representative Name and Address       Enter for the first Receiving Party only.         Name       White & Case IJ.P.         Address (line 2)       1155 Avenue of the Americas         Address (line 3)       New York         Address (line 4)       New York         Address (line 4)       New York         FOR OFFICE USE ONLY       FOR OFFICE USE ONLY	Receiving Par	rty			Mark if addition	al names of	receiving	parties attached
Name (line 2)       receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)         Address (line 2)       Address (line 3)         City       State/Country         Zip Code       City         Domestic Representative Name and Address       Enter for the first Receiving Party only.         Name       White & Case LLP         Address (line 2)       1155 Avenue of the Americas         Address (line 3)       New York         Address (line 4)       New York         Pror OFFICE USE ONLY       FOR OFFICE USE ONLY	Name (line 1)	AstraZeneca Al	3					
Address (line 1)       S-151 85 Sodertalje, Sweden       of a domestic representative is attached. (Designation must be a separate document from Assignment.)         Address (line 2)       State/Country       Zip Code         Domestic Representative Name and Address       Enter for the first Receiving Party only.         Name       White & Case LLP         Address (line 1)       Patent Department         Address (line 2)       1155 Avenue of the Americas         Address (line 3)       New York         Address (line 4)       New York         Propriet       FOR OFFICE USE ONLY	Name (line 2)						n   d	eceiving party is not lomiciled in the United
S=151 65 Societ (at je, Sweden       (Designation must be a separate document from Assignment.)         Address (line 2)	Address (line 1)						, •	of a domestic
Address (line 3) City   City State/Country   Domestic Representative Name and Address Enter for the first Receiving Party only.   Name White & Case LLP   Address (line 1) Patent Department   Address (line 2) 1155 Avenue of the Americas   Address (line 3) New York   Address (line 4) New York   Properties (line 4) New York   FOR OFFICE USE ONLY	·	<u> </u>	lertalje,	Sweden			) (. 1 5	Designation must be a reparate document from
City       State/Country       Zip Code         Enter for the first Receiving Party only.         Name       White & Case II.P       Enter for the first Receiving Party only.         Address (line 1)       Patent Department       Address (line 2)       1155 Avenue of the Americas         Address (line 2)       1155 Avenue of the Americas       Address (line 3)       New York         Address (line 4)       New York       10036       USA         FOR OFFICE USE ONLY								Assignment)
Name       White & Case LLP         Address (line 1)       Patent Department         Address (line 2)       1155 Avenue of the Americas         Address (line 3)       New York         Address (line 4)       New York         FOR OFFICE USE ONLY					ntry	Zip	Code	
Address (line 1) Patent Department   Address (line 2) 1155 Avenue of the Americas   Address (line 3) New York   Address (line 4) New York   New York 10036   JSMADAZZ 00000011 09171581   FOR OFFICE USE ONLY	Jomestic Rep	presentative Na	ne and Ad	idress <sub>e</sub>	nter for the first Re	ceiving Part	y only.	
Address (line 2)       1155 Avenue of the Americas         Address (line 3)       New York         Address (line 4)       New York         10036       USA         /2000 JSHABAZZ 00000011 09171581       FOR OFFICE USE ONLY	Name	White & Case	IIP					
Address (line 3)         New York           Address (line 4)         New York           10036         USA           /2000 JSHNBAZZ 00000011 09171581         FOR OFFICE USE ONLY	Address (line 1)	Patent Depa	urtment					
Address (line 4)         New York         10036         USA           /2000 JSHABAZZ 00000011 09171581         FOR OFFICE USE ONLY	Address (line 2)	1155 Aveni	e of the	Americas		<u> </u>	·····	
FOR OFFICE USE ONLY	Address (line 3)	New York						
/2000 JSHABAZZ 00000011 09171581	Address (line 4)	New York	10036	USA				
	/2000 19100077 000	00011 09171581	F	OR OFFICE USE (	ONLY			
Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and		]		<u> </u>	<u></u>			

PATENT REEL: 010800 FRAME: 0094

FORM PTO-16	519B	Page 2	U.S. Department of Commerce
Expires 06/30/99 OMB 0651-0027			Patent and Trademark Office PATENT
Corresponden	t Name and Address	Area Code and Telephone Number	212-819-8200
Name	White & Case LLP		
Address (line 1)	Patent Department		
Address (line 2)	1155 Avenue of the	Americas	
Address (line 3)	New York		
Address (line 4)	New York 10036	USA	
	nter the total number of pancluding any attachments	ages of the attached conveyance docun	nent # 4
Application Nu	Imber(s) or Patent Nu	mber(s)	additional numbers attached
		Patent Number (DO NOT ENTER BOTH numbers	
	Application Number(s)		t Number(s)
09/171,581	09/171,580 09/	/171,578	
09/171,570	09/171,572 09/	/171,575	
09/171,950	09/214,318 09/	/214,317	
	ing filed together with a <u>new</u> Pate med executing inventor.	ent Application, enter the date the patent application	on was Month Day Year
Patent Cooper	ation Treaty (PCT)	РСТ РСТ	
	CT application number		
-	a U.S. Application Numbe been assigned.	PCT PCT	PCT
Number of Pro	perties Enter the to	tal number of properties involved. #	eleven (11)
Fee Amount	Fee Amount	for Properties Listed (37 CFR 3.41): \$	440
Method of F Deposit Ac		osed X Deposit Account	
-	ment by deposit account or if add	litional fees can be charged to the account.) Deposit Account Number: #	23-1703
		Authorization to charge additional fees:	Yes XX No
Statement and	Signature	· · · · · · · · · · · · · · · · · · ·	
	copy is a true copy of the o	elief, the foregoing information is true a original document. Charges to deposit	5
		John M Germ	ZM JAN
John M. Geno Name of	va – 32,224 Person Signing	Signature	J May 2000

PATENT REEL: 010800 FRAME: 0095

FORM PTO-1619B Expires 06/30/99 OMB 0651-0027 Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT
Correspondent Name and Address Area Code and Telep	phone Number
Name	
Address (line 1)	
Address (line 2)	
Address (line 3)	
Address (line 4)	
Pages Enter the total number of pages of the attached con including any attachments.	veyance document #
Application Number(s) or Patent Number(s)	Mark if additional numbers attached
Enter either the Patent Application Number or the Patent Number (DO NOT ENTE Patent Application Number(s)	ER BOTH numbers for the same property). Patent Number(s)
09/194,823 09/194,618	
If this document is being filed together with a <u>new</u> Patent Application, enter the date to signed by the first named executing inventor.	the patent application was Month Day Year
Patent Cooperation Treaty (PCT)	
Enter PCT application number	
only if a U.S. Application Number PCT	PCT PCT
Number of Properties Enter the total number of properties	s involved. #
Fee Amount Fee Amount for Properties Listed (3	37 CFR 3.41): \$
Method of Payment: Enclosed Deposit Ac Deposit Account	ccount
(Enter for payment by deposit account or if additional fees can be charged to t Deposit Account Number:	the account.) #
Authorization to charge ad	lditional fees: Yes No
Statement and Signature	
To the best of my knowledge and belief, the foregoing informattached copy is a true copy of the original document. Chai Indicated herein.	
Name of Person Signing Signature	Date



The enclosed Certificate of Registration has been issued for

AstraZeneca Aktiebolag registration number: 556011-7482

which is registered as "PUBLIKT", generally written (publ), in the Companies Register kept by this office, the Companies Department of the Patent and Registration Office, Sweden.

A Swedish company classed as "PUBLIKT" is entitled to invite the general public to subscribe for or acquire shares and other securities which the company issues.

The share capital for a company classed as "PUBLIKT" must amount to a minimum of SEK 500 000.

Sundsvall, 15<sup>th</sup> February, 2000

PATENT REEL: 010800 FRAME: 0097 3252940 PRV PATENT- OCH REGISTRERINGSVERKET Bolagsavdelningen

CERTIFICATE OF REGISTRATION

## SWEDEN

Registration number: 556011-7482 Date of registration: 1913-10-31 Company name: AstraZeneca AB Address: Registered office: 151 85 SÖDERTÄLJE Södertälje

Share capital:SEK 2.054.029.452,50Note:FUSION IN PROGRESS



BOARD OF DIRECTORS: 440802-3556 Björnsson, Björn Einar, (A), Bäckahästvägen 3, 240 13 GENARP 420527-5938 From, Per Anders Gideon, Drottningholmsvägen 1 6tr., 112 42 STOCKHOLM 500523-4330 Lerenius, Per Göran, (E), Pettersbergsvägen 66, 129 40 HÄGERSTEN 430319 McKillop, Thomas Fulton Wilson, (E), (O), Flat 3, 15 Stanhope Gate, LONDON W1Y 6LN, STORBRITANNIEN OCH NORDIRLAND 590228 Symonds, Jonathan, (E), 16 Moor Lane, Rickmansworth, Herfordshire, WD3 1LG, STORBRITANNIEN OCH NORDIRLAND 591026-0024 Sörensen, Pia Carina, (A), Skämbylötsvägen 6, 640 60 ÅKERS STYCKEBRUK 560902-0093 Wallenberg, Marcus, Vidbynäs Gård 33, 148 91 ÖSMO 390324-5714 Wilhelmsson, Claes-Erik, Strandvägen 63, 115 23 STOCKHOLM DEPUTY MEMBERS OF THE BOARD: 690810-6690 Johansson, Stig-Ove Michael, Ekhöjden Taxinge-Näsby, 155 93 NYKVARN 580928-3335 Lundblad, Karl Alf Lennart, Envigsgränden 1, 224 75 LUND MANAGING DIRECTOR: 420527-5938 From, Per Anders Gideon, Drottningholmsvägen 1 6tr., 112 42 STOCKHOLM OTHER PERSONS AUTHORIZED TO SIGN ON BEHALF OF THE COMPANY: 520121-1751 Johansson, John Roland, Pilvägen 8, 610 60 TYSTBERGA 561115-2710 Johansson, Per Olof Kjell, Bränningstrandsvägen 72, 151 39 SÖDERTÄLJE 580712-5116 Linde, Carl Fredrik Johannes, Auravägen 24, 182 68 DJURSHOLM 580111-2086 Ljungqvist, Margit Inga Susanne, Solhemsvägen 13A, 141 31 HUDDINGE

True copy certified by:

CONTD.

PATENT REEL: 010800 FRAME: 0098



PATENT- OCH REGISTRERINGSVERKET Bolagsavdelningen

CERTIFICATE OF REGISTRATION

S

WEDEN	
Registration number:	556011-7482
Date of registration:	1913-10-31
Company name:	AstraZeneca AB
Address:	
Registered office:	151 85 SÖDERTÄLJE Södertälje
Share capital: Note:	SEK 2.054.029.452,50 FUSION IN PROGRESS
470520-1939 Sveréus, Bj	jörn Gustaf, Hedåvägen 9, 152 51 SÖDERTÄLJE
COMPANY AUDITORS: 430319-0658 Magnusson,	Bo Vilhelm, Karpvägen 36, 181 30 LIDINGÖ
Box 101 52, 121 26 STG	auditor: 430319-0658 Magnusson, Bo Vilhelm
SIGNATORY POWER: In addition to the Boan Lerenius, Per Gö McKillop, Thomas From, Per Anders Linde, Carl Free individually,	bran s Fulton Wilson s Gideon
or any two jointly of Wilhelmsson, Cla Johansson, John Johansson, Per ( Ljungqvist, Marc Sveréus, Björn (	Roland Dlof Kjell git Inga Susanne
SECONDARY NAMES: Astra	
FINANCIAL YEAR: Registered financial ye Latest annual report su period 980101-981231	ear: 0101-1231 ubmitted covers financial
	True copy certified by:

PATENT REEL: 010800 FRAME: 0099

Page



Bolagsavdelningen

SWEDEN

Registration number:	556011-7482
Date of registration:	1913-10-31
Company name:	AstraZeneca AB
Address:	
Registered office:	151 85 SÖDERTÄLJE Södertälje
Share capital: Note:	SEK 2.054.029.452,50 FUSION IN PROGRESS

DATE OF REGISTRATION OF CURRENT AND PREVIOUS COMPANY NAMES: 2000-01-03 AstraZeneca AB 1994-06-20 Astra Aktiebolag 1966-05-12 Aktiebolaget Astra 1913-10-31 Aktiebolaget Astra, Apotekarnas Kemiska Fabriker

SUNDSVALL 2000-02-15 Ex officio

ute ANETTE JACOBSSON

(A) = employee representative (U) = person resident outside EEA (E) = person resident outside Sweden but within EEA (0) = Chairman of the Board

True copy certified by:

**RECORDED: 05/08/2000** 

Page

CERTIFICATE OF REGISTRATION