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**Conveying Party(ies)**

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<tr>
<th>Name (line 1)</th>
<th>Astra Aktiebolag</th>
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<td>Name (line 2)</td>
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<tr>
<td>Second Party</td>
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**Receiving Party**

<table>
<thead>
<tr>
<th>Name (line 1)</th>
<th>AstraZeneca AB</th>
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<tr>
<td>Name (line 2)</td>
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<table>
<thead>
<tr>
<th>Address (line 1)</th>
<th>S-151 85 Sodertalje, Sweden</th>
</tr>
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<tbody>
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<td>Address (line 2)</td>
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**Domestic Representative Name and Address**

<table>
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<tr>
<th>Name</th>
<th>White &amp; Case LLP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address (line 1)</td>
<td>Patent Department</td>
</tr>
<tr>
<td>Address (line 2)</td>
<td>1155 Avenue of the Americas</td>
</tr>
<tr>
<td>Address (line 3)</td>
<td>New York,</td>
</tr>
<tr>
<td>Address (line 4)</td>
<td>New York, 10036 USA</td>
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FORM PTO-1619B

Page 2

U.S. Department of Commerce
Patent and Trademark Office

PATENT

Correspondent 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

Pages

Enter the total number of pages of the attached conveyance document including any attachments. # 4 (four)

Application Number(s) or Patent Number(s)

Mark if additional numbers attached

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<td>5,714,504</td>
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<td>5,693,818</td>
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<td>5,877,192</td>
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Month Day Year

Patent Cooperation Treaty (PCT)

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Method of Payment: Enclosed [X] Deposit Account [ ]

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John M. Genova - 32,224

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Signature

Sept. 18, 2000

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, 15th February, 2000
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 2,054,029,452,50
Note: 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
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590228 Symonds, Jonathan, (E), 16 Moor Lane, Rickmansworth,
Hertfordshire, WD3 1LG, STORBRITANNIEN OCH NORDIRLAND
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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:
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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, Bränningsstrandsvägen 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 HUDINGE

True copy certified by: [Signature]

CONTD.
PRV
PATENT-OCHEGISTRENSVERKET
Bolagsavdelningen

SWEDEN

Registration number: 556011-7482
Date of registration: 1913-10-31
Company name: AstraZeneca AB
Address:

Registered office: 151 85 SÖDERTÄLJE

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

470520-1939 Sveréus, Björn Gustaf, Hedåvägen 9, 152 51 SÖDERTÄLJE

COMPANY AUDITORS:
430319-0658 Magnusson, Bo Vilhelm, Karpvägen 36, 181 30 LIDINGÖ

COMPANY AUDITOR:
556479-9103 Deloitte & Touche Stockholm Aktiebolag
Box 101 52, 121 26 STOCKHOLM-GLOBEN
Principaly responsible auditor: 430319-0658 Magnusson, Bo Vilhelm
Karpvägen 36, 181 30 LIDINGÖ

SIGNATORY POWER:
In addition to the Board of Directors,
Lerenius, Per Göran
McKillop, Thomas Fulton Wilson
From, Per Anders Gideon
Linde, Carl Fredrik Johannes
individually,
or
any two jointly of
Wilhelmsson, Claes-Erik
Johansson, John Roland
Johansson, Per Olof Kjell
Ljungqvist, Margit Inga Susanne
Sveréus, Björn Gustaf
are entitled to sign on behalf of the company.

SECONDARY NAMES:
Astra

FINANCIAL YEAR:
Registered financial year: 0101-1231
Latest annual report submitted covers financial period 980101-981231

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PATENT
REEL: 11219 FRAME: 0753
PRV
PATENT- OCH REGISTRERINGSVERKET
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: SEK 2,054,029,452,50
Note: 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

ANETTE JACOBSSON

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

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