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(71) Applicant (*for all designated States except US*): **PHARMACIA & UPJOHN COMPANY** [US/US]; 301 Henrietta Street, Kalamazoo, MI 49001 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **WHITE, Michael, J.** [US/US]; 7049 Moorsbridge Road, Portage, MI 49024 (US). **WUTS, Peter, G., M.** [US/US]; 8835 Pine Island Court, N., Mattawan, MI 49071 (US). **BECK, Doris** [US/US]; 410 Creston Avenue, Kalamazoo, MI 49001 (US).

(74) Agent: **O'BRIEN, Jonathan, P.**; Global Intellectual Property, Pharmacia & Upjohn Company, 301 Henrietta Street, Kalamazoo, MI 49001 (US).

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(54) Title: 5 ANDROSTEN-3 β -OL STEROID INTERMEDIATES AND PROCESSES FOR THEIR PREPARATION

(57) Abstract: The present invention provides 5-androsten-3 β -ol steroid intermediates and processes for their preparation.



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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/07791

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7: C07J1/00 C07J21/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, BEILSTEIN Data, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95/10527 A (NEUROCRINE BIOSCIENCES INC) 20 April 1995 (1995-04-20) compound 5 page 8	1-8, 23-33
X	BENSASSON C. M., ET AL.: "The Hydroxylation of Delta-5-androstenes by Cephalosporium aphidicola" PHYTOCHEMISTRY, vol. 49, no. 8, 1998, pages 2355-2358, XP002265637 compounds 7 and 8 page 2356	1-15, 23-43
X	DE 26 17 295 A (CIBA GEIGY AG) 4 November 1976 (1976-11-04) page 26; example 13	77,78
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

° Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

21 April 2004

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19. 05. 2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Seelmann, I

INTERNATIONAL SEARCH REPORT

International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 026 921 A (FURST ANDOR ET AL) 31 May 1977 (1977-05-31) column 22, line 30; example 24 -----	9-15, 34-43

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 03/07791

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8, 23-33

subject-matter relating to compounds of formula (II)

2. claims: 9-15, 34-43

subject-matter relating to compounds of formula (III)

3. claims: 16-22, 44-76

subject-matter relating to compounds of formula (IV)

4. claims: 77, 78

subject-matter relating to compounds of formula (I)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/07791

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