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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### **Declarations under Rule 4.17:**

- as to the identity of the inventor (Rule 4.17(i)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
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with international search report

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5 February 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ORAL OSMOTIC CONTROLLED DRUG DELIVERY SYSTEM

(57) Abstract: The present invention provides an oral osmotic controlled drug delivery system comprising (a) a core comprising a homogeneous mixture of glipizide, a hydrophilic polymer and other pharmaceutically acceptable excipients, (b) a semipermeable wall surrounding the core, said wall being impermeable to the contents of the core, but permeable to fluids present in the environment of use, and (c) a passageway through the wall for release of contents of the core to the environment of use.





International application No. PCT/IN 03/00186-0

### CLASSIFICATION OF SUBJECT MATTER

IPC7: A61K 31/64, 31/166, 31/4965, A61P 3/10

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)

# IPC7: A61K, A61P

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

## EPODOC, WPI, PAJ

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

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1027888 A2 (PFIZER PRODUCTS INC.) 16 August 2000 (16.08.00) the whole document.	1-4,7,8,11- 21,25- 28,31,32, 35-45
X	WO 98/18452 A1 (SHIRE LABORATORIES, INC.) 7 May 1998 (07.05.98) abstract; page 9, line 14; page 11, lines 11-23; claims 1-11,13.	1-3,8,9,19,21, 25- 27,32,33,43, 45
X	WO 01/91717 A1 (ADD ADVANCED DRUG DELIVERY TECHNOLOGIES AG) 6 December 2001 (06.12.01) the whole document.	1-3,8,15-27,32, 39-48
A	WO 02/11702 A2 (PFIZER PRODUCTS INC.) 14 February 2002 (14.02.02) the whole document.	1-4,6-28,30-48

Further documents are listed in the continuation of Box C.	See patent family 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 application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "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	Date of mailing of the international search report
10 October 2003 (10.10.2003)	7 November 2003 (07.11.2003)
Name and mailing adress of the ISA/AT Austrian Patent Office Dresdner Straße 87, A-1200 Vienna	Authorized officer  KRENN M.
Facsimile No. 1/53424/535	Telephone No. 1/53424/435

See patent family appey

Form PCT/ISA/210 (second sheet) (July 1998)

International application No.
PCT/IN 03/00186-0

tegory*	ation). DOCUMENTS CONSIDERED TO BE RELEVANT  Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
		+
Α	WO 01/47500 A1 (PFIZER PRODUCTS INC.) 5 July 2001 (05.07.01) the whole document.	1-4,6-28,30-48
		·

Form PCT/ISA/210 (continuation of second sheet) (July 1998)

International application No. PCT/IN 03/00186-0

Box 1	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This inte	rnational search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. 🛛	Claims Nos.: 5,29 because they relate to subject matter not required to be searched by this Authority, namely:
:	Claims 5, 29 do not refer to concrete technical features.
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 11	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This into	ernational Searching Authority found multiple inventions in this international application, as follows:
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.:
Remar	k on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.

Information on patent family members

International application No. PCT/IN 03/00186-0

	Patent document cited in search report		Publication date	Patent family member(s)			Publication date
EP	A	1027888	2000-08-16	BR JP	A A	0000358 2000229846	2001-08-2 2000-08-2
WO	A	147500				none	
WO	A	191717				none	
WO	A	211702				none	