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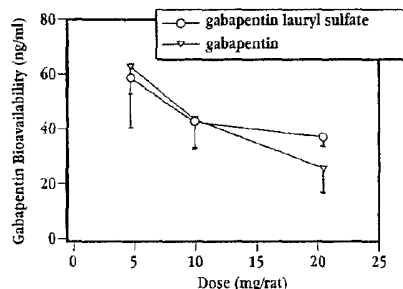
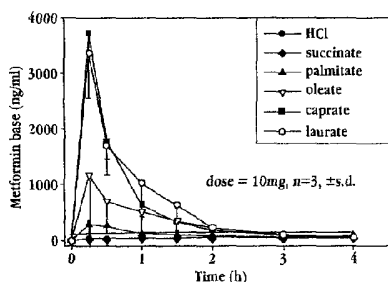
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12 May 2005 (12.05.2005)

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60/516,259 31 October 2003 (31.10.2003) US  
60/519,509 12 November 2003 (12.11.2003) US
- (71) Applicant (for all designated States except US): **ALZA CORPORATION** [US/US]; 1900 Charleston Road, P.O. Box 7210, Mountain View, CA 94039-7210 (US).
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- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **WONG, Patrick, S., L.** [US/US]; 1533 Burlingame Avenue, Burlingame, CA 94010 (US). **YAN, Dong** [US/US]; 10134 Congress Place, Cupertino, CA 95014 (US).
- (74) Agents: **ABRAHAM, David** et al.; Alza Corporation, c/o Johnson & Johnson, One Johnson & Johnson Plaza, WH3221, New Brunswick, NJ 08933 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, 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, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
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- (88) Date of publication of the international search report:  
29 September 2005
- 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: COMPOSITIONS AND DOSAGE FORMS FOR ENHANCED ABSORPTION



(57) Abstract: Disclosed is controlled delivery of pharmaceutical agents and methods, dosage forms and devices therefore. In particular, formulation, dosage forms, methods and devices for enhanced absorption and controlled delivery drug compounds are disclosed.

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INTERNATIONAL SEARCH REPORT

International Application No  
 PCT/US2004/036040

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K9/00 A61K31/20 A61K31/155 A61K31/185 A61K33/26  
 A61P3/10 A61P7/06 C07C53/126 C07C279/00

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 A61K A61P C07C

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, PAJ, WPI Data, CHEM ABS Data, EMBASE, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ABRAHAMSON H B ET AL: "Synthesis and characterization of iron stearate compounds" JOURNAL OF INORGANIC BIOCHEMISTRY 1994 UNITED STATES, vol. 54, no. 2, 1994, pages 115-130, XP002318274 ISSN: 0162-0134 page 116, paragraph 1 page 118, last paragraph page 127, paragraph 2 ----- -/--	1-5, 10-17, 19, 21-23, 25,27-33

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
- "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

22 February 2005

Date of mailing of the international search report

13.07.2005

Name and mailing address of the ISA :

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 Fax: (+31-70) 340-3016

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Büttner, U

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/036040

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SIMPSON R J ET AL: "SIGNIFICANCE OF NON-ESTERIFIED FATTY ACIDS IN IRON UPTAKE BY INTESTINAL BRUSH-BORDER MEMBRANE VESICLES" BIOCHIMICA ET BIOPHYSICA ACTA, vol. 941, no. 1, 1988, pages 39-47, XP002318275 ISSN: 0006-3002 page 45; figure 6 page 46, column 2, paragraph 1 -----	1-3, 10-17, 19, 21-23, 25,27-33
X	CHANG S-C ET AL: "EFFECTS OF DIETARY FAT ON LIPID COMPOSITION AND IRON UPTAKE OF INTESTINAL BRUSH-BORDER MEMBRANE OF RATS" JOURNAL OF NUTRITIONAL BIOCHEMISTRY, vol. 3, no. 3, 1992, pages 135-139, XP002318276 ISSN: 0955-2863 page 138, column 1, paragraph 2 -----	1-5, 21-23, 25,27-31
X	US 6 537 976 B1 (GUPTA AJAY) 25 March 2003 (2003-03-25) ----- column 10, line 13	1-5, 21-23, 25,27,28
X	GB 2 212 396 A (* THE PROCTER & GAMBLE COMPANY) 26 July 1989 (1989-07-26) ----- page 5, line 34	1-3, 10-17, 19, 21-23, 25,27-31
X	DATABASE WPI Section Ch, Week 200126 Derwent Publications Ltd., London, GB; Class B05, AN 2001-255346 XP002318277 & RU 2 161 963 C2 (HAEMATOLOGY TRANSFUSION RES INST) 20 January 2001 (2001-01-20) abstract -----	1-3, 10-17, 19, 21-23, 25,27-31
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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	<p>DATABASE WPI                      Section Ch, Week 199519                      Derwent Publications Ltd., London, GB;                      Class A89, AN 1995-144382                      XP002318279                      &amp; JP 07 068940 A (HONSHU PAPER MFG CO LTD)                      14 March 1995 (1995-03-14)                      abstract</p>	1-5
X	<p>-----                      AMANO T: "ABSORPTION OF FATTY ACID-IRON                      FROM THE INTESTINE. I. ABSORPTION OF IRON                      AFTER A SINGLE ORAL ADMINISTRATION OF                      FATTY ACID-IRON."                      ACTA MEDICINAE OKAYAMA. JUN 1963,                      vol. 17, June 1963 (1963-06), pages                      139-146, XP009044233                      ISSN: 0001-6152                      page 140, paragraph 2</p>	1-5, 10-17, 19, 21-23, 25,27-31
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X	<p>-----                      WO 03/068209 A (SONUS PHARMACEUTICALS,                      INC; LAL, MANJARI; PALEPU, NAGESH;                      KESSLER, DEA) 21 August 2003 (2003-08-21)</p> <p>page 2, line 11 - line 18                      page 5, line 16 - line 25                      page 9, line 10 - line 12                      page 10; example 4                      page 14; example 9                      claims 11-13                      figures 1,2</p>	1-5, 10-17, 19, 21-23, 25,27-33
X	<p>-----                      US 4 599 326 A (MARVOLA ET AL)                      8 July 1986 (1986-07-08)</p> <p>column 4; example 1</p> <p>-----</p>	1-5, 10-17, 19, 21-23, 25,27-31

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/ISA2004/036040

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 4 432 987 A (BARTH ET AL) 21 February 1984 (1984-02-21)  column 4, paragraph 3 -----	1-3, 10-17, 19, 21-23, 25,27-33
X	US 3 957 853 A (BOHUON ET AL) 18 May 1976 (1976-05-18)  the whole document -----	1-3, 21-23, 25,27-31
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2004/036040

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 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:  
Although claims 13,14, 21-33 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
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 III Observations where unity of invention is lacking (Continuation of item 3 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.:

see annex

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: 1,2,10-17, 19-23,25-33 (all in part); 3-5

fatty acids, fumaric acids, salicylic acid, benzenesulfonic acid, benzoic acid for enhancing absorption of drugs

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2. claims: 1,2,10-17, 19-23,25-33 (all in part); 6-8

alkyl sulfate for enhancing absorption of drugs

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3. claims: 1,2,10-18, 20-24, 26-33 (all in part); 9

amines for enhancing absorption of drugs

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