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- (71) Applicant (for all designated States except US): **OSTEOLOGIX A/S** [DK/DK]; c/o Symbion Science Park, Fruebjergvej 3, DK-2100 Copenhagen Ø (DK).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **CHRISTGAU, Stephan** [DK/DK]; Raeveskovsvej 10A, DK-2820 Gentofte (DK). **ANDERSEN, Jens, E., T.** [DK/DK]; Kohavevej 28, DK-2950 Vedbæk (DK).
- (74) Agent: **ALBIHNS A/S**; H.C. Andersens Boulevard 49, DK-1553 Copenhagen v (DK).
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- (88) Date of publication of the international search report: 29 December 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: HIGH YIELD AND RAPID SYNTHESSES METHODS FOR PRODUCING METALLO-ORGANIC SALTS

(57) Abstract: A new method for preparing salts of metal cations and organic acids, especially divalent salts of alkaline earth metal ions from group II of the periodic system and carboxylic acids. The method comprising the use of a high temperature (about 90° or more) and, optionally, high pressure, in order to obtain a higher yield, purity and faster reaction speed than obtained with known synthesis methods. In particular, the present invention relates to the production of strontium salts of carboxylic acids. Novel strontium salts are also provided by the present method.



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INTERNATIONAL SEARCH REPORT

International Application No
PCT/DK2005/000307

A. CLASSIFICATION OF SUBJECT MATTER
 A61K33/24 A61P19/08 C07C51/41 C07C55/08 C07C59/19
 C07C57/15 C07C57/145 C07C53/06 C07C229/08

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)
 C07C A61K A61P

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, 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	US 3 478 073 A (THORE OSKAR VERNER RYDH) 11 November 1969 (1969-11-11) example 1 -----	1,4,5,9, 12
X	GB 729 376 A (NAAMLooZE VENNOOTSCHAP DE BATAAFSCHE PETROLEUM MAATSCHAPPIJ) 4 May 1955 (1955-05-04) experiment no. 2 page 4, lines 17-31 -----	1-3,9-11
X	US 4 056 567 A (LAMBERTI ET AL) 1 November 1977 (1977-11-01) examples 1-14 column 4, lines 35-44 -----	1-5,11, 12
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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 "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
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Date of the actual completion of the international search 30 August 2005	Date of mailing of the international search report 24 11 2005
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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 DeLanghe, P
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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	BACCE, E.D. ET AL: "Thermal decomposition and rehydration of strontium oxalate: morphological evolution" INTERNATIONAL JOURNAL OF INORGANIC MATERIALS, vol. 3, 2001, pages 443-452, XP002339739 page 444, column 1, paragraph 4 - column 2, paragraph 3 page 445, column 1, paragraph 2-4 table 1 -----	1-5,9-11
P,X	WO 2004/098619 A (NORDIC BONE A/S; HANSEN, CHRISTIAN; NILSSON, HENRIK; ANDERSEN, JENS, E) 18 November 2004 (2004-11-18) claims 35,36 -----	1-25
A	US 2004/063972 A1 (VAYSSE-LUDOT LUCILE ET AL) 1 April 2004 (2004-04-01) examples 1-3 claims 1,3 -----	1

INTERNATIONAL SEARCH REPORT

International application No.
PCT/DK2005/000307

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:

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.:

1-25

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: 1-25

A method for the preparation of a divalent metal ion salt of an organic acid

2. claims: 26-30

Strontium-glutamate hydrate salts

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/DK2005/000307

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