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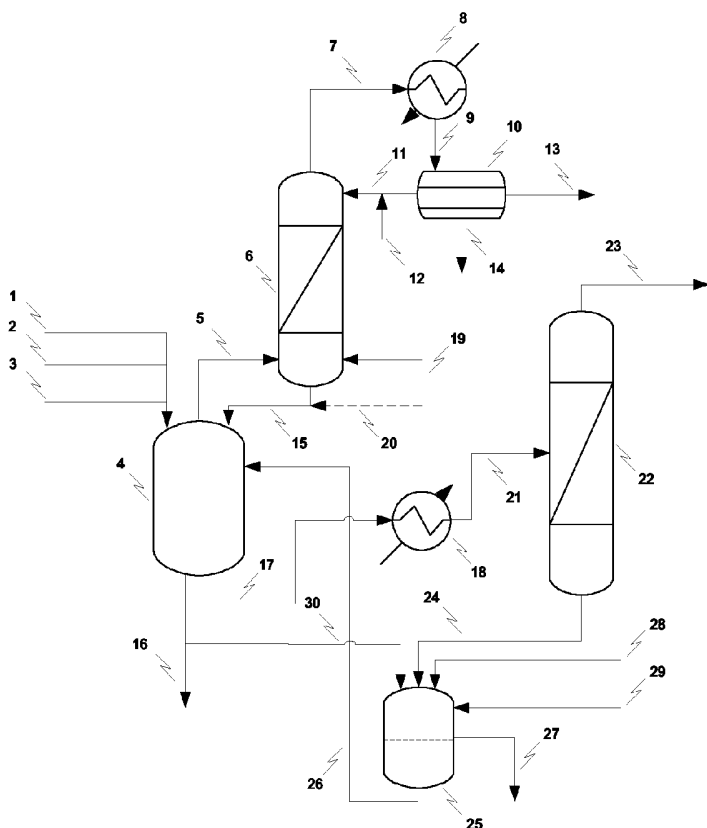
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[Continued on next page]

(54) Title: PROCESS FOR PRODUCING A CHLORHYDRIN FROM A MULTIHYDROXYLATED ALIPHATIC HYDROCARBON AND/OR ESTER THEREOF IN THE PRESENCE OF METAL SALTS



(57) Abstract: Process for producing a chlorhydrin by reaction between a multihydroxylated-aliphatic hydrocarbon, an ester of a multihydroxylated-aliphatic hydrocarbon, or a mixture thereof, and a chlorinating agent, according to which the multihydroxylated-aliphatic hydrocarbon, the ester of a multihydroxylated-aliphatic hydrocarbon, or the mixture thereof used contains at least one solid or dissolved metal salt, the process comprising a separation operation to remove at least part of the metal salt.

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INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER
 INV. C07C29/62 C07C31/36 C07C29/82

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

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, PAJ, BEILSTEIN Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GIBSON G P: "THE PREPARATION, PROPERTIES AND USES OF GLYCEROL DERIVATIVES. Part III. THE CHLOROHYDRINS" CHEMISTRY AND INDUSTRY, CHEMICAL SOCIETY, LECHWORTH, GB, 1931, pages 949-970, XP009042263 ISSN: 0009-3068 page 950, right-hand column, last paragraph - page 951, left-hand column, paragraph 1 page 953, right-hand column, last paragraph - page 954, left-hand column, paragraph 4	1-26
X	GB 404 938 A (HENRY DREYFUS) 15 January 1934 (1934-01-15) the whole document	1-26
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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 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

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06/09/2006

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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	GB 14767 A A.D. 1913 (HENRY FAIRBROTHER) 8 January 1914 (1914-01-08)	16, 20-23, 25,26
A	the whole document	1-15, 17-19,24
A	----- US 2 144 612 A (BRITTON EDGAR C ET AL) 24 January 1939 (1939-01-24) the whole document	1-26
A	----- GB 984 633 A (SOCIETE D'ELECTRO-CHIMIE, D'ELECTRO-METALLURGIE ET DES ACIERIES ELECTR) 3 March 1965 (1965-03-03) the whole document	23,24
A	----- FAUCONNIER M A: "PREPARATION DE L'EPICHLORHYDRINE" BULL.SOC.CHIM.FRANCE, vol. 50, no. 50, 1888, pages 212-214, XP009046846 the whole document	1-23
A	----- WO 2005/021476 A (SPOLEK PRO CHEMICKOU A HUTNI VYROBU, AKCIOVA SPOLECNOST; KUBICEK, PAVE) 10 March 2005 (2005-03-10) the whole document	1-26
X,P	----- WO 2005/054167 A (SOLVAY ; KRAFFT, PHILIPPE; GILBEAU, PATRICK; GOSSELIN, BENOIT; CLAESSE) 16 June 2005 (2005-06-16) cited in the application the whole document In particular see p.15, 1.21-29 -----	1-26

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2006/062438

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.:

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: 1-15,20-26

process for producing dichloropropanol from glycerol containing a metal salt.

1.1. claim: 16

process for making dichloropropanol from glycerol containing at least 10% of organic impurities

1.2. claims: 17-18

process for making dichloropropanol from glycerol wherein a fraction of the reaction mixture containing water and dichloropropanol is withdrawn, distilled and wherein the distillation step is controlled by supplying water.

1.3. claim: 19

Separation process of a mixture containing water dichloropropanol and HCl.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2006/062438

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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