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(54) Title: METHOD OF PRODUCTION OF OPTICALLY ACTIVE HALOHYDROCARBONS AND ALCOHOLS USING HYDROLYTIC DEHALOGENATION CATALYSED BY HALOALKANEDEHALOGENASES

(57) Abstract: A method of production of optically active compounds, particularly halohydrocarbons, haloalcohols, alcohols, halopolyols and polyols using hydrolytic dehalogenation of racemic or prochiral halegenhydrocarbons by dehalohenation catalysed by haloalkane dehalogenases (EC 3.8.1.5) where at least one wild type or modified haloalkane dehalogenase is affected by at least one racemic or prochiral chlorinated, brominated or iodinated compound at the temperature ranged between +10 and +70 °C and pH value between 4.0 and 12.0, in aqueous system or in a monophasic organic solution or in a monophasic organic/aqueous solution or in organic/aqueous biphasic systems.



INTERNATIONAL SEARCH REPORT

International application No PCT/CZ2005/000099

A. CLASSIFICATION OF SUBJECT MATTER INV. C12P7/02 C12P5 C12P5/00 C12P41/00 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) C12P 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, BIOSIS, Sequence Search C. DOCUMENTS CONSIDERED TO BE RELEVANT Category' Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Х PIETERS R J ET AL: "The 1-8 enantioselectivity of haloalkane dehalogenases" TETRAHEDRON LETTERS, ELSEVIER, AMSTERDAM, vol. 42, no. 3, 15 January 2001 (2001-01-15), pages 469-471, XP004316595 ISSN: 0040-4039 cited in the application abstract; table 1 page 469, left-hand column χ US 4 943 528 A (NAKAMURA ET AL) 1-8 24 July 1990 (1990-07-24) column 1, line 59 - line 62 column 2, line 6 - line 8 examples 1-3 χl Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: *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 "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to "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) 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 docu-ments, such combination being obvious to a person skilled "O" document referring to an oral disclosure, use, exhibition or *P* document published prior to the International filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 26 September 2006 10/10/2006 Name and mailing address of the ISA/ Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Ceder, Ove Fax: (+31-70) 340-3016

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International application No
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Information on patent family members

International application No
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