(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
8 April 2004 (08.04.2004)

PCT

(10) International Publication Number
WO 2004/029032 A1

(51) International Patent Classification: C07D 301/12

(21) International Application Number:
PCT/EP2003/010559

(22) International Filing Date:
23 September 2003 (23.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02021966.3 30 September 2002 (30.09.2002) EP

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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, 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, 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, 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).

Published:
— *with international search report*

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.

WO 2004/029032 A1

(54) Title: PROCESS FOR THE EPOXIDATION OF OLEFINS

(57) Abstract: The present invention refers to a continuos process for the epoxidation of olefins with hydrogen peroxide in presence of a heterogeneous catalyst promoting the epoxidation reaction, whereby the aqueous reaction mixture comprises: i) an olefin;ii) hydrogen peroxide;iii) less than 100 wppm of alkali metals, earth alkali metals, both irrespective whether in ionic, complex or covalently bonded form, bases or cations of bases having a pkB of less than 4.5, or combinations thereof; and iv) at least 100 wppm of bases or cations of bases having a pkB of at least 4.5 or combinations thereof,whereby the wppm are based on the total weight of hydrogen peroxide in the reaction mixture.