

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 September 2004 (10.09.2004)

PCT

(10) International Publication Number
WO 2004/076408 A2

(51) International Patent Classification⁷: **C07D**
(21) International Application Number:
PCT/EP2004/050208
(22) International Filing Date: 26 February 2004 (26.02.2004)
(25) Filing Language: English
(26) Publication Language: English
(30) Priority Data:
200300833-1 28 February 2003 (28.02.2003) SG

(71) Applicant (for all designated States except US): **SHELL INTERNATIONAL RESEARCH MAATSCHAPPIJ B.V.** [NL/NL]; Carel van Bylandtlaan 30, NL-2596 HR The Hague (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **FOONG, Wan Shi** [SG/SG]; 61 Seraya Avenue, Jurong Island, 627879 (SG).
JUNE, Raymond Lawrence [US/SG]; 61 Seraya Avenue, Jurong Island, 627879 (SG).

(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, 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, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that 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.

(54) Title: PROCESS

(57) Abstract: Process for preparing organic hydroperoxides, which process comprises (a) oxidation of an organic compound to obtain reaction product containing organic hydroperoxide, (b) treating at least part of the organic hydroperoxide containing reaction product with a basic aqueous solution and separating hydrocarbonaceous phase containing organic hydroperoxide from basic aqueous phase, (c) washing with water at least part of the separated hydrocarbonaceous phase containing organic hydroperoxide and separating hydrocarbonaceous phase containing organic hydroperoxide from aqueous phase, and (d) optionally repeating step (c) one or more times, in which process solid particles are removed from the reaction product containing organic hydroperoxide and/or basic aqueous solution before use in step (b), preferably by filtering, and a process for preparing oxirane compounds in which such organic hydroperoxide is used.

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