

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

(19) World Intellectual Property Organization
International Bureau



G00002



(43) International Publication Date
4 July 2002 (04.07.2002)

PCT

(10) International Publication Number
WO 02/051801 A1

(51) International Patent Classification⁷: **C07C 407/00**,
C07D 301/19

(21) International Application Number: PCT/EP01/14992

(22) International Filing Date:
17 December 2001 (17.12.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
00311709.0 27 December 2000 (27.12.2000) EP

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

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MESTERS, Caro-
lus, Matthias, Anna, Maria** [NL/NL]; Badhuisweg 3,
NL-1031 CM Amsterdam (NL).

(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, 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, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, 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, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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.



162162

WO 02/051801 A1

(54) Title: PROCESS FOR PREPARING ORGANIC HYDROPEROXIDE HAVING A REDUCED AMOUNT OF CONTAMINANTS

(57) Abstract: Process for preparing organic hydroperoxide having a reduced content of contaminants, which process comprises: (a) oxidation of an organic compound to obtain reaction product containing an organic hydroperoxide, (b) contacting at least part of the organic hydroperoxide containing reaction product with a basic aqueous solution, (c) separating the hydrocarbonaceous phase containing organic hydroperoxide from the aqueous phase, (d) washing at least part of the separated hydrocarbonaceous phase containing organic hydroperoxide, and (e) contacting at least part of the hydrocarbonaceous phase containing organic hydroperoxide with a guard bed comprising solid adsorbent having a void content of from 50% to 98% by volume.