

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number  
**WO 2005/063619 A3**

(51) International Patent Classification<sup>7</sup>: **C01B 15/013**,  
15/029

(21) International Application Number:  
PCT/EP2004/013656

(22) International Filing Date:  
29 November 2004 (29.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
MI 2003 A002553  
22 December 2003 (22.12.2003) IT

(71) Applicant (for all designated States except US):  
**POLIMERI EUROPA S.P.A.** [IT/IT]; Via E. Fermi  
4, I-72100 Brindisi (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MIGLIO, Roberta**  
[IT/IT]; Via Borzighella 3, I-28047 Oleggio-Novara (IT).  
**PAPARATTO, Giuseppe** [IT/IT]; Via Vasari 7, I-20092  
Cinisello Balsamo-Milan (IT). **DE ALBERTI, Giordano**  
[IT/IT]; Largo Brianzoni 4, I-21010 Besnate-Varese (IT).

(74) Agents: **DE GREGORI, Antonella**, et al.; Ing. Barzano'  
& Zanardo Milano S.p.A., Via Borgonuovo 10, I-20121  
Milan (IT).

(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, NA, 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, IS, IT, LU, MC, NL, PL, PT, RO, SE,  
SI, SK, TR), OAPI (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

(88) Date of publication of the international search report:  
22 September 2005

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR THE REMOVAL OF THE INORGANIC ACID AND METAL IMPURITIES PRESENT IN ESSEN-  
TIALLY ALCOHOLIC SOLUTIONS OF HYDROGEN PEROXIDE COMING FROM DIRECT SYNTHESIS

(57) Abstract: Process for the contemporaneous removal of inorganic acids and heavy metals present in solutions of H<sub>2</sub>O<sub>2</sub> coming  
from direct synthesis starting from hydrogen and oxygen, fed to a reactor containing a palladium and platinum catalyst, in an es-  
sentially alcoholic liquid reaction medium containing an inorganic acid and a halogen as promoters, which comprises treating the  
solution of H<sub>2</sub>O<sub>2</sub> by putting it in contact with an anionic exchange resin.



WO 2005/063619 A3