

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
28 September 2006 (28.09.2006)

PCT

(10) International Publication Number  
**WO 2006/100665 A3**

(51) International Patent Classification:  
A01N 59/20 (2006.01)

(21) International Application Number:  
PCT/IL2006/000320

(22) International Filing Date: 12 March 2006 (12.03.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
167,564 21 March 2005 (21.03.2005) IL  
174,021 1 March 2006 (01.03.2006) IL

(71) Applicant (for all designated States except US): **THE CUPRON CORPORATION** [US/US]; 3704 Chiswell Court, Greensboro, NC 27410 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **GABBAY, Jeffrey** [IL/IL]; 14/21 Jabotinsky Street, 92142 Jerusalem (IL).

(74) Agent: **WOLFF, BREGMAN AND GOLLER**; Patent Attorneys, P.O. Box 1352, 19B Keren Hayesod St., 91013 Jerusalem (IL).

(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, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, 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, LT, LU, LV, 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:  
30 August 2007

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 2006/100665 A3**

(54) Title: ANTIMICROBIAL AND ANTIVIRAL POLYMERIC MASTER BATCH, PROCESSES FOR PRODUCING POLYMERIC MATERIAL THEREFROM AND PRODUCTS PRODUCED THEREFROM

(57) Abstract: A polymeric master batch for preparing an antimicrobial and antifungal and antiviral polymeric material comprising a slurry of thermoplastic resin, an antimicrobial and antifungal and antiviral agent consisting essentially of water insoluble particles of ionic copper oxide, a polymeric wax and an agent for occupying the charge of the ionic copper oxide.

# INTERNATIONAL SEARCH REPORT

International application No  
PCT/IL2006/000320

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> INV. A01N59/20		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) A01N		
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		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2004/247653 A1 (GABBAY JEFFREY [IL]) 9 December 2004 (2004-12-09) cited in the application the whole document -----	1-46
A	WO 01/74166 A1 (CUPRON CORP [US]; GABBAY JEFFREY [IL]) 11 October 2001 (2001-10-11) page 4, line 14 - page 10, line 18 -----	1-46
A	WO 2005/020689 A (CUPRON CORP [US]; GABBAY JEFFREY [IL]) 10 March 2005 (2005-03-10) page 9, line 18 - page 15, line 19 -----	1-46
A	WO 03/055941 A (AGION TECHNOLOGIES INC [US]) 10 July 2003 (2003-07-10) the whole document -----	1-46
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <span style="margin-left: 200px;"><input checked="" type="checkbox"/> See patent family annex.</span>		
* Special categories of cited documents :		
*A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *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) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed	*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 invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to 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 documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family	
Date of the actual completion of the international search  <p style="text-align: center; font-weight: bold;">14 June 2007</p>	Date of mailing of the international search report  <p style="text-align: center; font-weight: bold;">22/06/2007</p>	
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  <p style="text-align: center; font-weight: bold;">Fort, Marianne</p>	

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IL2006/000320

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2004247653	A1	09-12-2004	NONE
<hr/>			
WO 0174166	A1	11-10-2001	AT 261248 T 15-03-2004
		AU 4679101 A	15-10-2001
		CA 2404972 A1	11-10-2001
		CN 1427672 A	02-07-2003
		DE 60102291 D1	15-04-2004
		DE 60102291 T2	17-02-2005
		EP 1272037 A1	08-01-2003
		IL 135487 A	25-07-2005
		JP 2003528975 T	30-09-2003
		TR 200400908 T4	21-07-2004
		US 2004224005 A1	11-11-2004
<hr/>			
WO 2005020689	A	10-03-2005	AU 2004267961 A1 10-03-2005
		CA 2536699 A1	10-03-2005
		EP 1657980 A1	24-05-2006
		JP 2007504291 T	01-03-2007
		KR 20060135602 A	29-12-2006
		TR 200601582 T1	22-01-2007
<hr/>			
WO 03055941	A	10-07-2003	AU 2002351366 A1 15-07-2003
		CA 2470122 A1	10-07-2003
		EP 1456291 A1	15-09-2004
		JP 2005514402 T	19-05-2005
		MX PA04006185 A	20-06-2005
		US 2003118664 A1	26-06-2003
		US 2006121078 A1	08-06-2006
<hr/>			