

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 July 2007 (12.07.2007)

PCT

(10) International Publication Number
WO 2007/079210 A3

(51) International Patent Classification:

A01N 59/20 (2006.01) *A01P 7/04* (2006.01)
A01N 59/16 (2006.01) *A01N 37/10* (2006.01)
B27K 3/32 (2006.01) *A01N 35/06* (2006.01)
A01P 3/00 (2006.01) *B27K 3/52* (2006.01)

(21) International Application Number:

PCT/US2006/049541

(22) International Filing Date:

28 December 2006 (28.12.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/755,213 30 December 2005 (30.12.2005) US

(71) Applicant (*for all designated States except US*): **E. I. DU PONT DE NEMOURS AND COMPANY** [US/US]; 1007 Market Street, Wilmington, Delaware 19898 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **ANDERSON, Albert, Gordon** [US/US]; 2410 Saint Francis Street, Wilmington, Delaware 19808 (US). **FEASTER, John** [US/US]; 367 N. Saint Augustine Road, Chesapeake, Maryland 21915-1316 (US). **PATEL, Damini** [US/US]; 212 Moore Road, Wallingford, Pennsylvania 19086-6843 (US). **SCIALDONE, Mark** [US/US]; 77 Allsmeer Drive, West Grove, Pennsylvania 19390 (US).

(74) Agent: **LANGWORTHY, John, A.**; E. I. du Pont de Nemours and Company, Legal Patent Records Center, 4417 Lancaster Pike, Wilmington, Delaware 19805 (US).

(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, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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*

(88) Date of publication of the international search report:

25 October 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.

(54) Title: TUNGSTATE AND MOLYBDATE WOOD PRESERVATIVES

(57) Abstract: Complexes of copper and/or zinc with molybdate and/or tungstate were solubilized in ammonia or ammoniacal solution providing preservative solutions that fully penetrate wood. With loss of the ammonia from the wood, the complexes were stably retained in the wood providing a long lasting preservative.



WO 2007/079210 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2006/049541

A. CLASSIFICATION OF SUBJECT MATTER

INV. A01N59/20 A01N59/16 B27K3/32 A01P3/00 A01P7/04
ADD. A01N37/10 A01N35/06 B27K3/52

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A01N B27K

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE WPI Week 200026 Derwent Publications Ltd., London, GB; AN 2000-303576 XP002444080 -& WO 00/19827 A1 (REUT V I) 13 April 2000 (2000-04-13) abstract	1,13
Y	EP 0 238 413 A1 (KATAYAMA CHEMICAL WORKS CO [JP]) 23 September 1987 (1987-09-23) cited in the application page 2, line 55 - page 3, line 39; table 1 page 4, lines 26-57 ----- -/--	1-30



Further documents are listed in the continuation of Box C.



See patent family annex.

* 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

25 July 2007

Date of mailing of the international search report

10/08/2007

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

Klaver, Jos

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2006/049541

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0 111 995 A2 (CETUS MADISON CORP [US]) 27 June 1984 (1984-06-27) cited in the application page 4, lines 12-22 page 5, lines 2-22 page 12, lines 6-12 page 12, line 28 - page 13, line 13 -----	1-30
Y	US 4 737 491 A (LEPPAEVUORI SIRKKA L [FI] ET AL) 12 April 1988 (1988-04-12) column 1, line 56 - column 2, line 23 column 2, line 66 - column 3, line 32 example 5 -----	1-4, 13-23, 29, 30
Y	WO 2004/041491 A (DU PONT [US]; ANDERSON ALBERT GORDON [US]; SCIALDONE MARK A [US]) 21 May 2004 (2004-05-21) cited in the application page 1, lines 30-37 page 2, line 30 - page 3, line 10 page 6, lines 16-32 -----	1, 2, 5-22, 24-30
A	AU 614 386 B2 (DAINIPPON JOCHUGIKU KK) 29 August 1991 (1991-08-29) cited in the application page 3, paragraphs 1, 2 page 4, lines 14-20 page 7, paragraphs 2, 3 page 7 page 7, paragraph 6 - page 8, paragraph 1 -----	1-30

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2006/049541

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0019827	A1	13-04-2000	NONE
EP 0238413	A1	23-09-1987	AU 595868 B2 12-04-1990 AU 7013887 A 24-09-1987 DE 3764284 D1 20-09-1990
EP 0111995	A2	27-06-1984	BR 8305367 A 08-05-1984 CA 1233412 A1 01-03-1988 DE 3375445 D1 03-03-1988
US 4737491	A	12-04-1988	CA 1256654 A1 04-07-1989 DE 3520313 A1 09-01-1986 DK 264585 A 21-12-1985 FI 842509 A 21-12-1985 SE 503371 C2 03-06-1996 SE 8503068 A 21-12-1985
WO 2004041491	A	21-05-2004	AU 2003290615 A1 07-06-2004 CA 2503573 A1 21-05-2004 EP 1555878 A2 27-07-2005
AU 614386	B2	29-08-1991	AU 3700589 A 04-01-1990 PH 26220 A 01-04-1992