

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence or, if this paper is a transmittal letter, every other paper or fee referred to therein, is being deposited electronically, via facsimile at (703) 306-5995 to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

Date: March 4, 2004
Name: Melissa Scanzillo
Signature: *Melissa Scanzillo*
Clifford Chance US LLP

Docket No. 100593/5

Commissioner of Patents
Mail Stop Box Assignment
P.O. Box 1450, Alexandria, VA 22313-1450

Please record the attached original document(s) or copy(ies) thereof:

Conveying party(ies):
(name) (Exec. date)
Almatis, Inc. 2/27/2004

Receiving party:
The Bank of Nova Scotia
Scotia House
33 Finsbury Square
London EC2A 1BB

Conveyance Type:
 Assignment Security Agreement
 License Change of Name
 Merger Other

Submission Type:
 New
 Resubmission: Doc. ID# _____
 Correction of PTO error Reel _____
 Corrective Document Frame _____

U.S. Patent Applications

U.S. Patent Applications	U.S. Patents	U.S. Patents
5,194,243	4,711,673	4,585,645
4,755,374	4,835,124	4,781,982
4,847,064	5,480,587	4,970,181
4,915,930	5,207,968	5,149,520
5,206,190	5,445,807	5,225,115
5,219,800	5,171,631	5,252,655
5,226,959	5,270,268	5,260,119
5,256,470	5,543,173	5,681,658
5,624,646	5,590,017	5,573,622
6,203,773	5,800,922	5,919,724
RE34,164	5,514,361	5,728,363
5,728,366	4,797,139	

Correspondence Address:
Melissa Scanzillo
CLIFFORD CHANCE US LLP
200 Park Avenue
New York, New York 10166
Telephone: (212) 878-8476
Facsimile: (212) 878-8375

Number of Properties:
Total number of properties involved: 35
Fee:
Total fee under 37 CFR 1.21(h) (\$40/per) **\$1,400.00**
 Authorized to charge to Deposit Account Number: **50-0521**. A duplicate copy of this cover sheet is attached. Please apply any additional fee or any credits to Deposit Account 50-0521.

Statement and signature: To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Melissa Scanzillo *Melissa Scanzillo* March 4, 2004
Signature Date

CH \$1400.00 500521 5194243

SUPPLEMENT TO SECURITY AGREEMENT (PATENTS)

WHEREAS, ALMATIS, Inc, a Delaware corporation (herein referred to as "Grantor"), having an address at 501 West Park Drive, Leetsdale, Pennsylvania 15056 owns the letters patent, and/or applications for letters patent, of the United States of America, more particularly described on Schedule 1-A annexed hereto as part hereof (the "Patents").

WHEREAS, Grantor has entered into a Security Agreement (said Security Agreement, as it may hereafter be amended or otherwise modified from time to time being the "Security Agreement", the terms defined therein and not otherwise defined herein being used herein as therein defined) in favor of Secured Party; and

WHEREAS, pursuant to the Security Agreement, Grantor has granted to Secured Party a security interest in all right, title and interest of Grantor in and to the Patents, together with all registrations and recordings thereof, including, without limitation, applications, registrations and recordings in the United States Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country or any political subdivision thereof, all whether now or hereafter owned or licensable by Grantor, and all reissues, continuations, continuations-in-part, term restorations or extensions thereof, all Patent Licenses and all proceeds of al of the foregoing, including, without limitation, any claims by Grantor against third parties for infringement thereof for the full term of the Patents (the "Collateral"), to secure the prompt payment and performance of the Secured Liabilities.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, Grantor does hereby further confirm, and put on the public record, its grant to Secured Party of a security interest in and mortgage on the Collateral to secure the prompt payment and performance of the Secured Liabilities.

Grantor does hereby further acknowledge and affirm that the rights and remedies of Secured Party with respect to the assignment of and grant of a security interest in the Collateral made hereby are more fully set forth in the Security Agreement, the terms and provision of which are hereby incorporated herein by reference as if fully set forth herein.

Secured Party's address is: The Bank of Nova Scotia
Scotia House
33 Finsbury Square
London EC2A 1BB.

IN WITNESS WHEREOF, Grantor has duly executed or caused this Supplement to Security Agreement to be duly executed as of February 27, 2004.

ALMATIS, INC.

By: Andrew W. Smith
Name: Andrew W. Smith
Title: President

STATE OF)
) ss.:
 COUNTY OF)

On this _____ day of _____, before me personally appeared _____, to me known, who, being by me duly sworn, did depose and say that he/she resides at _____ and that he/she is _____ of Grantor; that he/she knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was affixed pursuant to authority of the Board of Directors of said corporation and that he/she signed his/her name thereto in his/her capacity as an authorized officer of said corporation pursuant to such authority.

 Notary Public

**Schedule A to the SUPPLEMENT TO SECURITY AGREEMENT
(PATENTS)**

Schedule 3 - Patents

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP198300065	Granted	09/30/1985	06/781,208	03/16/1993	5,194,243	03/16/2010
Country: United States Assignee: Alcoa Inc. Inventors: Pearson, Alan Wall, J.R. Title: Production of Aluminum Compound						
IP1983000121	Granted	10/03/1985	06/783,863	12/08/1987	4,711,673	10/03/2005
Country: United States Assignee: Alcoa Inc. Inventors: Musselman, L.L. Levendusky, Thomas L. Title: Combination of Surface Modifiers for Powdered Inorganic Fillers						

PATENT

REEL: 014394 FRAME: 0582

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP1984000319	Granted	04/03/1985	06/719,559	04/29/1986	4,585,645	04/03/2005
Country: United States						
Assignee: Alcoa Inc.						
Inventors: Sucech, S.W.						
Title: Alpha Alumina Production in a Steam-Fluidized Reactor						
IP1984000372	Granted	07/16/1986	06/887,000	07/05/1988	4,755,374	07/18/2006
Country: United States						
Assignee: Alcoa Inc.						
Inventors: Martin, Edward S. Weaver, Mark L.						
Title: Aluminum Hydroxide Production						

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP1985000345	Granted	12/29/1986	06/946,839	05/30/1989	4,835,124	05/30/2006

Country: United States
 Assignee: Alcoa Inc.

Inventors:

Pearson, Alan
 Title: Alumina Ceramic Product from Colloidal Alumina

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP1986000286	Granted	11/27/1987	07/126,244	11/01/1988	4,781,982	11/27/2007
Country: United States Assignee: Alcoa Inc. Inventors: Musselman, L.L. Wieserman, Larry F. Title: Surface Treating Mineral Particles to Reduce Halide Adsorption						
IP1987000013	Granted	12/23/1987	07/137,159	07/11/1989	4,847,064	12/23/2007
Country: United States Assignee: Alcoa Inc. Inventors: Pearson, Alan Title: Economical Process for Alpha Alumina Production						

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP1987000132	Granted	12/21/1988	07/287,070	01/02/1996	5,480,587	01/02/2013
Country: United States						
Assignee: Alcoa Inc.						
Inventors: Musselman, L.L. Greene, H.L.						
Title: Materials for Use as Fire Retardant Additives						
IP1988000592	Granted	09/22/1988	07/247,541	11/13/1990	4,970,181	11/13/2007
Country: United States						
Assignee: Alcoa Inc.						
Inventors: Pearson, Alan						
Title: Process for Producing Ceramic Shapes						

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP198800700	Granted	11/23/1988	07/275,683	04/10/1990	4,915,930	04/10/2007
Country: United States						
Assignee: Alcoa Inc.						
Inventors:						
Goheen, R.H.						
Nigro, W.A.						
The, P.J.						
Title: Process for Producing Aluminum Hydroxide of Improved Whiteness						
IP198900151	Granted	05/16/1991	07/701,046	05/04/1993	5,207,968	05/16/2011
Country: United States						
Assignee: Alcoa Inc.						
Inventors:						
PHELPS, FRANKIE E.						
VALCHAR, C.E.						
DIMILLIA, ROBERT A.						
Title: Method for Making a Dimensionally Stable Green Ceramic Sheet						

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IPL989000201	Granted	06/19/1989	07/460,844	09/22/1992	5,149,520	12/23/2007
Country: United States Assignee: Alcoa Inc. Inventors: Sucech, S.W. Marhanka, John E. Pearson, Alan Title: Small Sized Alpha Alumina Particles and Platelets						
IPL990000018	Granted	09/04/1990	07/576,853	04/27/1993	5,206,190	09/04/2010
Country: United States Assignee: Alcoa Inc. Inventors: Jean, J. Gupta, T.K. Title: Dielectric Composition Containing Cordierite and Glass						
IPL990000060	Granted	01/09/1990	07/462,409	08/29/1995	5,445,807	08/29/2012
Country: United States Assignee: Alcoa Inc. Inventors: Pearson, Alan Title: Production of Aluminum Compound						

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP1990000372	Granted	10/15/1990	07/597,535	07/06/1993	5,225,115	07/06/2010

Country: United States
Assignee: Alcoa Inc.
Inventors:
Musselman, L.L.
Misra, C.
Grubbs, D.K.
Smith, Donald R.

Title: Method of Making A Bromide Intercalated Hydrocalcite for Use as A Flame Retardant, Smoke Suppressant Additive

IP1990000403	Granted	07/18/1991	07/732,230	06/15/1993	5,219,800	07/18/2011
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Country: United States
Assignee: Alcoa Inc.
Inventors:
Kelso, J.F.
Bowersox, K.L.
Graddy, G. Edward (Jr.)
Weirauch, Douglas A. (Jr.)

Title: Colored Ceramics for Electronic Packages

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP199100038	Granted	07/19/1990	07/555,928	12/15/1992	5,171,631	07/19/2010
Country: United States						
Assignee: Alcoa Inc.						
Inventors:						
Adkins, A.S.						
Title: Spacer Extender for Titanium Dioxide in Pigment Systems for Coatings						
IP1991000426	Granted	03/16/1992	07/851,610	10/12/1993	5,252,655	03/16/2012
Country: United States						
Assignee: Alcoa Inc.						
Inventors:						
Parker, A.A.						
Stanzione, T.T.						
Armstrong, G.H.						
Phelps, Frankie E.						
Opalka, Susanne M.						
Title: Densified Ceramic Green Sheet and Stack Having Conductors Therein						

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP1992000191	Granted	03/16/1992	07/851.959	07/13/1993	5,226,959	10/11/2010

Country: United States
Assignee: Alcoa Inc.
Inventors:

Jean, J.H.
Gupta, T.K.

Title: Gallium-Containing Glassy Low Dielectric Ceramic Compositions

PATENT

REEL: 014394 FRAME: 0591

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP1992000714	Granted	09/23/1992	07/949,154	12/14/1993	5,270,268	09/23/2012

Country: United States
 Assignee: Alcoa Inc.
 Inventors:
 Jean, J.H.
 Gupta, T.K.
 Title: Aluminum Borate Devitrification Inhibitor in Low Dielectric Borosilicate Glass

IP1993000238	Granted	03/29/1993	08/039,542	11/09/1993	5,260,119	11/09/2010
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Country: United States
 Assignee: Alcoa Inc.
 Inventors:
 Jean, J.H.
 Gupta, T.K.
 Straub, William D.
 Title: Low Dielectric Inorganic Composition for Multilayer Ceramic Package

IP1993000239	Granted	03/29/1993	08/039,543	10/26/1993	5,256,470	10/26/2010
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Country: United States
 Assignee: Alcoa Inc.
 Inventors:
 Jean, J.H.
 Gupta, T.K.
 Title: Crystal Growth Inhibitor for Glassy Low Dielectric Inorganic Composition

Matter ID ----- Status -----
 IP1994000575 ----- Granted
 Country: United States
 Assignee: Alcoa Inc.
 Inventors:

Horn, W.E.
 Balaba, W.M.
 Parker, A.A.
 Title: Surface Treating Aluminum Trihydrate Powders with Prehydrolyzed Silane

AppIn Dt ----- AppIn No ----- Grant Dt ----- Patent No ----- Expires -----
 09/19/1994 ----- 08/308,263 ----- 08/06/1996 ----- 5,543,173 ----- 10/12/2013

IP1994000648 ----- Granted
 Country: United States
 Assignee: Alcoa Inc.
 Inventors:

Anderson, E.M.
 Dando, Neal R.
 Lawhon, C.H.
 McRaven, M.D.
 Title: Gelation-Resistant Alumina

AppIn Dt ----- AppIn No ----- Grant Dt ----- Patent No ----- Expires -----
 05/30/1995 ----- 08/453,551 ----- 10/28/1997 ----- 5,681,658 ----- 05/30/2015

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP1995000146	Granted	02/02/1995	08/382,936	04/29/1997	5,624,646	04/29/2014
Country: United States						
Assignee: Alcoa Inc.						
Inventors:						
Phillips, R.B.						
Fitzgerald, N.M.						
McCormick, B.L.						
Title: Method for Improving the Brightness of Aluminum Hydroxide						
IP1995000190	Granted	04/03/1995	08/415,874	12/31/1996	5,590,017	04/03/2015
Country: United States						
Assignee: Alcoa Inc.						
Inventors:						
Kelso, J.F.						
Title: Alumina Multilayer Wiring Substrate Provided With High Dielectric Material Layer						
IP1995000605	Granted	06/05/1995	08/465,017	11/12/1996	5,573,622	11/12/2013
Country: United States						
Assignee: Alcoa Inc.						
Inventors:						
Hass, A.R.						
Dynys, Joseph M.						
Title: Apparatus for Fabricating Multilayer Structures						

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP1995001062	Granted	07/12/1999	09/351,968	03/20/2001	6,203,773	07/12/2019

Country: United States
 Assignee: Alcoa Inc.
 Inventors:

Easley, Michael A.
 Fearson, Alan
 Moorjani, Dinesh
 Marhanka, John E.

Title: Low Temperature Mineralization of Alumina

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP199600571	Granted	07/30/1996	08/688,702	09/01/1998	5,800,922	05/30/2015

Country: United States
Assignee: Alcoa Inc.
Inventors:
Dando, Neal R.
Lawhon, C.H.
McRaven, M.D.
Anderson, E.M.

Title: Method of Making a Gelation-Resistant Alumina

Matter ID	Status	Appln Dt	Appln No	Grant Dt	Patent No	Expires
IP1997002514	Granted	03/05/1998	09/035,360	07/06/1999	5,919,724	03/05/2018

Country: United States
 Assignee: Alcoa Inc.
 Inventors:

Perrotta, A.J.
 Minick, R.B.

Title: Process for Making Phosphate Stabilized Metal Oxide Particles

PATENT

REEL: 014394 FRAME: 0597

Schedule 3 - Patent Licenses

Matter ID	Effective Dt	Signed Dt	Amended Dt	Terminated Dt	Royalty
IP1998003018	01/25/1999	05/14/1999		04/29/2014	N
Company Name: E&E Chemical and Service Co., L.L.C					
Agreement Type: Patent License					
Subject: Synthetic Hydrotalcite					
Lic. Patents:	RE34,164	5,514,361	5,728,366		
IP1989000762		10/01/1991	05/18/1992	05/30/2006	Y
Company Name: Norton Company					
Agreement Type: Patent License					
Subject: Monal Dispersible Alumina					
Lic. Patents:	4,835,124	06/781208	4,797,139		
IP1990000537		12/03/1990			Y
Company Name: Schoofs, Inc.					
Agreement Type: Patent License					
Subject: Sub-Micron Aluminum Trihydroxide Product as a Titanium Dioxide Spacer and Extender					