

TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

ETAS ID: TM431699

SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	Supplement to Intellectual Property Security Agreement		
CONVEYING PARTY DATA			
Name	Formerly	Execution Date	Entity Type
Analytical Graphics, Inc.		06/16/2017	Corporation: PENNSYLVANIA
RECEIVING PARTY DATA			
Name:	Silicon Valley Bank		
Street Address:	3003 Tasman Drive		
Internal Address:	HF 150		
City:	Santa Clara		
State/Country:	CALIFORNIA		
Postal Code:	95054		
Entity Type:	Corporation: CALIFORNIA		
PROPERTY NUMBERS Total: 19			
Property Type	Number	Word Mark	
Registration Number:	4985630	3D TILES	
Registration Number:	4261392	CESIUM	
Registration Number:	4873583	CESIUM PRO	
Registration Number:	4873584	CESIUM PRO	
Registration Number:	5020566	CESIUM 3D TILES	
Registration Number:	5020567	CESIUM 3D TILES	
Registration Number:	4867186	COMSPOC	
Registration Number:	4644676	COMSPOC COMMERCIAL SPACE OPERATIONS CENT	
Registration Number:	4867209	COMSPOC COMMERCIAL SPACE OPERATIONS CENT	
Registration Number:	4718303	HIDEPH	
Registration Number:	4738986	ODTK	
Registration Number:	4739127	ODTK	
Registration Number:	4644533	SPACEBOOK	
Registration Number:	4898079	SSA	
Registration Number:	4898078	SSA SOFTWARE SUITE	
Registration Number:	4800837		
Registration Number:	4270839	STK SYSTEMS TOOL KIT	
Registration Number:	4228072	SYSTEMS TOOL KIT	

OP \$490.00 4985630

Property Type	Number	Word Mark
Serial Number:	87128379	SKYVUE

CORRESPONDENCE DATA

Fax Number: 8004947512

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 800-494-5225

Email: ipteam@cogencyglobal.com

Correspondent Name: Stewart Walsh

Address Line 1: 1025 Vermont Ave NW, Suite 1130

Address Line 2: Cogency Global Inc.

Address Line 4: Washington, D.C. 20005

ATTORNEY DOCKET NUMBER:	F170845
NAME OF SUBMITTER:	Andrew Nash
SIGNATURE:	/Andrew Nash/
DATE SIGNED:	06/19/2017

Total Attachments: 10

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SUPPLEMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Supplement to Intellectual Property Security Agreement (this "*Supplement*") is made as of June 16, 2017 by and between **SILICON VALLEY BANK**, a California corporation ("*Bank*"), and **ANALYTICAL GRAPHICS, INC.**, a Pennsylvania corporation (as "*Grantor*").

WHEREAS, Grantor executed and delivered an Intellectual Property Security Agreement dated May 19, 2011 (as amended of record from time to time hereinafter, the "*IP Agreement*") in favor of the Bank, pursuant to which Grantor pledged, assigned and granted a security interest in certain Intellectual Property Collateral, which was recorded with (i) the Patent division of the United States Patent and Trademark Office on June 22, 2011 at Reel 026477, Frame 0843 and (ii) the Trademark division of the United States Patent and Trademark Office on June 22, 2011 at Reel 004567, Frame 0537, as amended by that certain Addendum to Intellectual Property Security Agreement dated August 19, 2011 and recorded with the Trademark division of the United States Patent and Trademark Office on August 24, 2011 at Reel 004610, Frame 0889

WHEREAS, the Grantor has developed additional patents and trademarks, and desires to hereby confirm the pledge of, and the grant of a security interest in, such additional intellectual property in favor of Bank.

NOW, THEREFORE, in consideration of the mutual covenants herein contained and benefits to be derived herefrom, it is hereby agreed as follows:

1. Definitions. All capitalized terms herein and not otherwise defined shall have the same meaning herein as in the IP Agreement.
2. Supplement to Exhibit B and Exhibit C. Exhibit B and Exhibit C to the IP Agreement are hereby supplemented, but not replaced, by Exhibit B-1 and Exhibit C-1 annexed hereto.
3. Miscellaneous:
 - a. Except as provided herein, all terms and conditions of the IP Agreement remain in full force and effect. The Grantor hereby ratifies, confirms and reaffirms all of the representations, warranties and covenants contained therein.
 - b. This Supplement covers the entire understanding of the parties with respect to the matters set forth herein and supersedes all prior discussions and negotiations hereon.

[Signature page follows]

IN WITNESS WHEREOF, the undersigned has executed this Supplement as of the date first written above.

GRANTOR:

ANALYTICAL GRAPHICS, INC.

By: Will D. Brock
Name: William J. Broderick
Title: CEO

EXHIBIT B-1

PATENT AND PATENT APPLICATIONS

See attached

Subject	Principal Inventor(s)	Awarded Patents
Addressing Nonlinear Relative Motion for Collision Probability Using Parallelepipeds	S. Alfano	US Patent: 8,041,509 Issued: 10-18-2011
System & Method for Aircraft Mission Modeling	T. Neely	US Patent: 8,221,122 Issued: 07-17-2012
System & Method of Assessing the Risk of Conjunction of a Rocket Body with Orbiting and Non-Orbiting Platforms	S. Alfano	US Patent: 8,275,498 Issued: 09-25-2012
Nonlinear Variable Lag Smoother	J. Wright J. Woodburn	US Patent: 8,433,544 Issued: 04-30-2013
System & Method for Detection of Anti-Satellite Vulnerability of an Orbiting Platform	S. Alfano	US Patent: 8,494,688 Issued: 07-23-2013
System & Method for Determining Earth-Fixed Trajectory Launching from Within a Specific Area	S. Tanygin	US Patent: 8,718,920 Issued: 05-06-2014
System & Method for Data Rendering and Transformation in 2-and 3-Dimensional Images	M. Bartholomew P. Cozzi F. Linsalata J. Tucholski	US Patent: 9,153,063 B2 Issued: 10-06-2015
Visualization of Field of View Obstruction by an Ellipsoid	F. Stoner P. Cozzi	US Patent: 9,449,424 B2: Issued: 09-20-2016

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**AGI Current and Pending Patents
Status Report
As of June 9, 2017**

Subject	Principal Inventor(s)	Awarded Patents
Maneuver Processing	D. Cather M. Berry	US Patent: 9,540,122 B2: Issued: 01-10-2017
Pending Patent Applications		Pending
Volumetric Assessment of Encounter Probability		Application No.: 62/197,796 Application Date 07-28-2015 Pending
Recording & Visualizing Images Using Augmented Image Data	S. Narayan P. Graziani	Application No.: 14/136,357 Application Date: 12-20- 2013 (Published); Pending

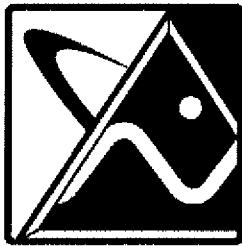
EXHIBIT C-1

TRADEMARK AND TRADEMARK APPLICATIONS

See attached

Mark: **3D Tiles**
Class: 42
Filing Date: August 17, 2015
Date of 1st Use: August 9, 2015
Serial No.: 86/727,023
Registration No.: 4,985,630

Mark: **Cesium**
Class: 09
Filing Date: May 2, 2012
Date of 1st Use: April 16, 2012
Serial No.: 85/614,966
Registration No.: 4,261,392



**CESIUM
PRO**

Mark:
Class: 09
Filing Date: April 29, 2015
Date of 1st Use: October 1, 2014
Serial No.: 86/614,300
Registration No.: 4,873,583

Mark: **CESIUM PRO**
Class: 09
Filing Date: April 29, 2015
Date of 1st Use: October 1, 2014
Serial No.: 86/614,311
Registration No.: 4,873,584

Mark: **Cesium 3D Tiles**
Class: 42
Filing Date: August 17, 2015
Date of 1st Use: August 9, 2015
Serial No.: 86/727,005
Registration No.: 5,020,566



Mark:

Class: 42

Filing Date: August 17, 2015

Date of 1st Use: August 9, 2015

Serial No.: 86/727,048

Registration No.: 5,020,567

Mark: **ComSpOC**

Class: 42

Filing Date: June 16, 2015

Date of 1st Use: March 11, 2014

Serial No.: 86/663,686

Registration No.: 4,867,186

Mark: **ComSpOC Commercial Operations Space Center
and Design**



Filing Date: April 11, 2014

Date of 1st Use: March 11, 2014

Serial No.:

Registration No.: 4,644,676

Mark: **ComSpOC Commercial Space Operations Center and Design**



Class: 42
Filing Date: June 29, 2015
Date of 1st Use: March 11, 2014
Serial No.: 86/677,090
Registration No.: 4,867,209

Mark: **HiDEph**
Class: 42
Filing Date: April 9, 2014
Date of 1st Use: January 23, 2015
Serial No.: 86/247,151
Registration No.: 4,718,303 (On Supplemental Register)

Mark: **ODTK (Word Only)**
Class: 09
Filing Date: October 2, 2014
Date of 1st Use: September 30, 2004
Serial No.: 86/413,340
Registration No.: 4,738,986



Mark:
Class: 09
Filing Date: October 21, 2014
Date of 1st Use: August 31, 2006
Serial No.: 86/430,352
Registration No.: 4,739,127
Date of Registration: May 19, 2015

Mark: **SKYVUE**
Class: 42
Filing Date: August 5, 2016

Date of 1st Use:
Serial No.: 87/128,379
Registration No.:

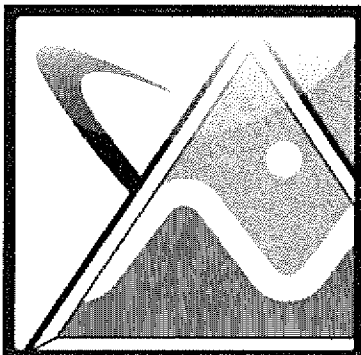
Mark: **SPACEBOOK**
Class: 42
Filing Date: April 9, 2014
Date of 1st Use: March 11, 2014
Serial No.: 86/247,141
Registration No.: 4,644,533

Mark: **SSA (B&W Stylized Design)**



Class: 9
Filing Date: June 8, 2015
Date of 1st Use: November 15, 2012
Serial No.: 86/654,671
Registration No.: 4,898,079

Mark: **SSA SOFTWARE SUITE**
Class: 9
Filing Date: June 8, 2015
Date of 1st Use: November 15, 2012
Serial No.: 86/654,660
Registration No.: 4,898,078



Mark:
Class: 09

Filing Date: June 18, 2014
Date of 1st Use: October 1, 2014
Serial No.: 86/312,907
Registration No.: 4,800,837

Mark: **STK SYSTEMS TOOL KIT**
Class: 09
Filing Date: December 5, 2011
Date of 1st Use: October 17, 2011
Serial No.: 85/486,899
Registration No.: 4,270,839

Mark: **SYSTEMS TOOL KIT**
Class: 09
Filing Date: November 2, 2011
Date of 1st Use: October 17, 2011
Serial No.: 85/462,741
Registration No.: 4,228,072 (Supplemental Register)