

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT
CONVEYING PARTY DATA	
Name	Execution Date
Sierra Nevada Corporation	06/26/2006
RECEIVING PARTY DATA	
Name:	Bank of America, N.A., as Administrative Agent
Street Address:	231 S. LaSalle Street, IL 1-231-10-41
City:	Chicago
State/Country:	ILLINOIS
Postal Code:	60604
PROPERTY NUMBERS Total: 3	
Property Type	Number
Patent Number:	7147184
Application Number:	12981326
Application Number:	13291911
CORRESPONDENCE DATA	
Fax Number:	7044448847
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	704-343-2000
Email:	ksaltrick@mcguirewoods.com
Correspondent Name:	McGuireWoods LLP
Address Line 1:	201 North Tryon Street, Suite 3000
Address Line 2:	Attention: Rebecca Chaffin, Esq.
Address Line 4:	Charlotte, NORTH CAROLINA 28202
ATTORNEY DOCKET NUMBER:	SNC / CHAFFIN
NAME OF SUBMITTER:	Gregory J. Livingston
Signature:	/Gregory J. Livingston/

Date:

05/06/2013

Total Attachments: 13

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**RECORDATION FORM COVER SHEET
PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

Sierra Nevada Corporation

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) 06-26-08

- ☐ Assignment ☐ Merger
☒ Security Agreement ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other _____

2. Name and address of receiving party(ies)

Name: Bank of America, N.A., as Administrative Agent

Internal Address: Mailcode: IL1-231-10-41

Street Address: 231 S. LaSalle Street

City: Chicago

State: Illinois

Country: USA Zip: 60604

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application or patent number(s):

☐ This document is being filed together with a new application.

A. Patent Application No.(s)

See attached Annex.

B. Patent No.(s)

See attached Annex.

Additional numbers attached? ☒ Yes ☐ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: McGuireWoods LLP

Internal Address: Attention: R. Chaffin, Esq. /

K. Saltrick, Paralegal

Street Address: 201 North Tryon Street

City: Charlotte

State: North Carolina Zip: 28202

Phone Number: 704-343-2000

Docket Number: _____

Email Address: rchaffin@mcguirewoods.com

6. Total number of applications and patents involved: 3

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 120.00

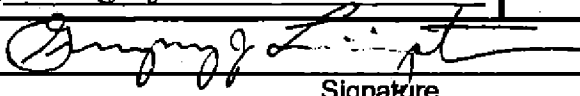
- ☐ Authorized to be charged to deposit account
☒ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

Deposit Account Number _____

Authorized User Name _____

9. Signature:



Signature

5-2-2013

Date

Gregory J. Livingston

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

13

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

**ANNEX TO
RECORDATION FORM COVER SHEET
(Patents)**

Owner: Sierra Nevada Corporation

Patent	Patent No.	Application No.
AERODYNAMIC FAIRING SYSTEM FOR AIRSHIP	7,147,184	-
BEAM-FORMING ANTENNA WITH AMPLITUDE- CONTROLLED ANTENNA ELEMENTS	-	12/981326
PLANAR DIELECTRIC WAVEGUIDE WITH METAL GRID FOR ANTENNA APPLICATIONS	-	13/291911

**NOTICE OF SECURITY INTEREST IN
PATENTS AND TRADEMARKS**

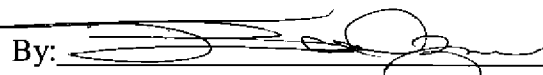
U.S. Department of Commerce
U.S. Patent and Trademark Office

Please be advised that each of the undersigned has granted a continuing security interest in, and a continuing lien upon, all of the trademarks and trademark applications listed on ANNEX I attached hereto and all patents and patent applications listed on ANNEX II attached hereto, to **BANK OF AMERICA, N.A.**, as Administrative Agent (the "Administrative Agent"), pursuant certain Security Agreement dated as of June 26, 2008 and as further amended and restated by that certain Amended and Restated Security Agreement dated as of December 14, 2012 (and as further amended, restated, supplemented or otherwise modified from time to time, including by joinder of additional grantors, the "Security Agreement") among the Assignor, Advanced Concept and Mission Systems, Dream Chaser, Inc., E.F. Solar LLC, Kisa Acquisition, LLC, MicroSat Systems, Inc., Nevada Solar Development, LLC, Sierra Solar I LLC, Sierra Solar II LLC, SpaceDev, Inc., Starsys, Inc., Straight Flight Nevada Commercial Leasing, LLC, Straight Flight, Inc., Global Security Management Services, LLC, SNC Holding LLC, Sierra Nevada Technical Services LLC, Airborne Services Global LLC, Airborne Services Global II LLC, 3S Holding LLC, 3S Certification, LLC, 3S Engineering, LLC and the Administrative Agent.

[Remainder of page left blank intentionally; signature page follows.]

Dated this 30 day of April, 2013.

SIERRA NEVADA CORPORATION

By: 
Name: Eren F. Ozmen
Title: Secretary & Treasurer

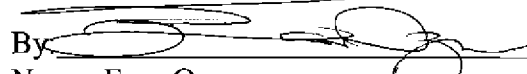
ADVANCED CONCEPT & MISSION

SYSTEMS, a Nevada corporation

DREAM CHASER, INC., a Delaware corporation

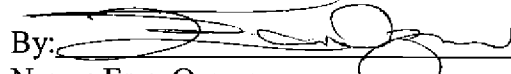
SPACEDEV, INC., a Delaware corporation

STARSYS, INC., a Colorado corporation

By: 
Name: Eren Ozmen
Title: President

MICROSAT SYSTEMS, INC., a Colorado
corporation

STRAIGHT FLIGHT, INC., a Colorado
corporation

By: 
Name: Eren Ozmen
Title: Secretary

E.F. SOLAR LLC, a Nevada limited liability
company

SIERRA SOLAR I LLC, a Nevada limited liability
company

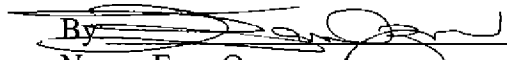
SIERRA SOLAR II LLC, a Nevada limited liability
company

By: 
Name: Eren Ozmen
Title: Manager

AIRBORNE SERVICES GLOBAL LLC, a
Delaware limited liability company
AIRBORNE SERVICES GLOBAL II LLC, a
Delaware limited liability company
KISA ACQUISITIONS, LLC, a Delaware limited
liability company

By: **STRAIGHT FLIGHT NEVADA**
COMMERCIAL LEAVING, LLC, its Manager

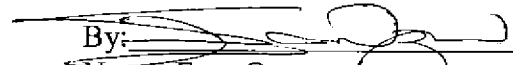
By: **SIERRA NEVADA CORPORATION**, its
Manager

By: 
Name: Eren Ozmen
Title: President

3S CERTIFICATION, LLC, a Missouri limited
liability company
3S ENGINEERING, LLC, a Missouri limited
liability company

By: **3S HOLDING LLC**, its Manager

By: **SIERRA NEVADA CORPORATION**, its
Manager

By: 
Name: Eren Ozmen
Title: President

3S HOLDING LLC, a Delaware limited liability
company

NEVADA SOLAR DEVELOPMENT, LLC, a
Nevada limited liability company

SNC HOLDING LLC, a Nevada limited liability
company

**STRAIGHT FLIGHT NEVADA COMMERCIAL
LEASING, LLC**, a Nevada limited liability
company

**GLOBAL SECURITY MANAGEMENT
SERVICES LLC, LLC**, a Delaware limited
liability company

By: **SIERRA NEVADA CORPORATION**, its
Manager

By: 

Name: Eren Ozmen

Title: President

ANNEX I
TRADEMARKS AND TRADEMARK APPLICATIONS

Sierra Nevada Corporation:

Description of Intellectual Property	Application or Registration Number
Tactilink	78878458
Tactisight	78878541
Combat Controller	78878465
VAP	78878536
Tactiview	78880018
Tacticomp	78878507
Tactibot	78878521
Tactinet	78878476
3S (DESIGN)	85832115
3S	85832114
3S Certification (DESIGN)	85842277
3S Certification	85842244
REVS	85843111
3S Engineering (DESIGN)	85846423
3S Engineering	85846413
Straight Flight	85899863
Straight Flight (DESIGN)	85899865

SpaceDev, Inc.:

Description of Intellectual Property	Application or Registration Number
Dream Chaser	3978406
Dream Chaser & Design	3944551
SpaceDev	3514869
Starsys	3514870

3S Holding LLC: None.

3S Certification, LLC:

Description of Intellectual Property	Application or Registration Number
3S (DESIGN)	85832115
3S	85832114
3S Certification (DESIGN)	85842277
3S Certification	85842244

3S Engineering, LLC:

Description of Intellectual Property	Application or Registration Number
3S Engineering (DESIGN)	85846423
3S Engineering	85846413

Advanced Concept & Mission Systems: None.

Airborne Services Global LLC: None.

Airborne Services Global II LLC: None.

Dream Chaser, Inc.: None.

Kisa Acquisitions, LLC: None.

MicroSat Systems, Inc.: None.

Nevada Solar Development LLC: None.

SNC Holding LLC: None.

Starsys, Inc.: None.

Straight Flight Nevada Commercial Leasing, LLC: None.

Straight Flight, Inc.: None.

Global Security Management Services LLC: None

E.F. Solar LLC: None.

Sierra Solar I LLC: None.

Sierra Solar II LLC: None.

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ANNEX II
PATENTS AND PATENT APPLICATIONS

A. U.S. Patents And Patent Applications

Sierra Nevada Corporation:

DESCRIPTION OF INTELLECTUAL PROPERTY	APPLICATION OR REGISTRATION NUMBER
AERODYNAMIC FAIRING SYSTEM FOR AIRSHIP	Granted Issued: 12/12/2006 Patent No.: 7,147,184
METHOD FOR FUSING MULTIPLE GPS MEASUREMENT TYPES INTO WEIGHTED LEAST SQUARES SOLUTION	Granted Issued: 3/23/2010 Patent No.: 7,683,832
SYSTEM AND METHOD FOR 3D RADAR IMAGE RENDERING	Granted Issued: 3/30/2010 Patent No.: 7,688,248
MONOLITHIC SEMICONDUCTOR MICROWAVE SWITCH ARRAY	Granted Issued: 8/17/2010 Patent No.: 7,777,286
SCANNING ANTENNA WITH BEAM-FORMING WAVEGUIDE STRUCTURE	Granted Issued 2/23/2010 Patent No.: 7,667,660
RECONFIGURABLE DIELECTRIC WAVEGUIDE ANTENNA	Granted Issued: 12/19/2006 Patent No.: 7,151,499
BEAM-FORMING ANTENNA WITH OSCILLATING ANTENNA ELEMENTS	Granted Filed: 1/4/2011 Patent No.: 7,864,112
ELECTRONICALLY CONTROLLED ARRAY ANTENNA	Granted Issued: 10/27/2009 Patent No.: 7,609,223
ELECTRONICALLY CONTROLLED ARRAY ANTENNA	Granted Issued: 8/9/2011 Patent No.: 7,995,000
OPTICALLY CONTROLLED PHASE SHIFTER AND PHASED ARRAY ANTENNA FOR USE THEREWITH	Granted Issued: 12/2/1997 Patent No.: 5,694,498
LIGHTWIEGHT ANTENNA AND METHOD FOR THE UTILIZATION THEREOF	Granted Issued: 8/18/1998 Patent No.: 5,796,881
SCANNING ANTENNA INCLUDING A DIELECTRIC WAVEGUIDE AND A ROTATABLE CYLINDER COUPLED THERETO	Granted Issued: 4/3/2001 Patent No.: 6,211,836
MONOLITHIC MILLIMETER-WAVE BEAM-STEERING ANTENNA	Granted Issued: 11/6/2001 Patent No.: 6,313,803

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DESCRIPTION OF INTELLECTUAL PROPERTY	APPLICATION OR REGISTRATION NUMBER
DIELECTRIC WAVEGUIDE ANTENNA WITH IMPROVED INPUT WAVE COUPLER	Granted Issued: 6/15/2004 Patent No.: 6,750,827
2-D SCANNING ANTENNA AND METHOD FOR THE UTILIZATION THEREOF	Granted Issued: 8/3/1999 Patent No.: 5,933,120
ANTENNA WITH PLASMA-GRATING	Granted Issued: 11/9/1999 Patent No.: 5,982,334
PLANAR DIELECTRIC WAVEGUIDE WITH METAL GRID FOR ANTENNA APPLICATIONS	Granted Issued: 11/15/2011 Patent No.: 8,059,051
PROJECTILE FOR DELIVERING AN INCAPACITATING AGENT	Granted Issued: 5/8/2012 Patent No.: 8,171,853
BEAM-FORMING ANTENNA WITH AMPLITUDE-CONTROLLED ANTENNA ELEMENTS	Granted Issued: 11/25/2008 Patent No. 7,456,787
SYSTEM AND METHOD FOR 3D RADAR IMAGE RENDERING	Granted Issued: 11/25/2008 Patent No. 7,456,779
BEAM-FORMING ANTENNA WITH AMPLITUDE-CONTROLLED ANTENNA ELEMENTS	Pending Filed: 12/29/2010 App No. 12/981326
PLANAR DIELECTRIC WAVEGUIDE WITH METAL GRID FOR ANTENNA APPLICATIONS	Pending Filed: 11/8/2011 App No. 13/291911

SpaceDev, Inc.:

DESCRIPTION OF INTELLECTUAL PROPERTY	APPLICATION OR REGISTRATION NUMBER
HYBRID ROCKET COMBUSTION ENHANCEMENT	Granted Issued: 12/10/1996 Patent No.: 5,582,001
HYBRID PROPULSION SYSTEM	Granted Issued: 7/04/06 Patent No.: 7,069,717
HYBRID PROPULSION SYSTEM	Granted Issued: 3/17/09 Patent No.: 7,503,165
HYBRID PROPULSION SYSTEM	Granted Issued: 1/24/12 Patent No.: 8,099,945

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DESCRIPTION OF INTELLECTUAL PROPERTY	APPLICATION OR REGISTRATION NUMBER
HIGH PROPULSION MASS FRACTION HYBRID PROPELLANT SYSTEM	Granted Issued: 7/29/08 Patent No.: 7,404,288
SINGLE-PIECE HYBRID ROCKET MOTOR	Granted Issued: 6/28/11 Patent No.: 7,966,809
HYBRID ROCKET MOTOR WITH ANNULAR, CONCENTRIC SOLID FUEL ELEMENTS	Pending Filed: 06/18/07 App No.: 11/764,677
SLEW GUIDANCE METHOD FOR SPACECRAFT	Granted Issued: 3/20/12 Patent No.: 8,140,198
EXCLUSION ZONE GUIDANCE METHOD FOR SPACECRAFT	Granted Issued: 9/14/10 Patent No.: 7,795,566
SPACECRAFT ADVERTISEMENT SYSTEMS AND METHODS	Pending Filed: 09/24/08 App No.: 12/237,240

3S Holding LLC: None.

3S Certification, LLC: None.

3S Engineering, LLC: None.

Advanced Concept & Mission Systems: None.

Airborne Services Global LLC: None.

Airborne Services Global II LLC: None.

Dream Chaser, Inc.: None.

Kisa Acquisitions, LLC: None.

MicroSat Systems, Inc.:

DESCRIPTION OF INTELLECTUAL PROPERTY	APPLICATION OR REGISTRATION NUMBER
APPARATUS & METHOD FOR THE DESIGN & MANUFACTURE OF FOLDABLE INTEGRATED ARRAY STIFFENERS	Granted Issued: 8/31/04 Patent No. 6,784,359

Nevada Solar Development LLC: None.

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SNC Holding LLC: None.

Starsys, Inc.: None.

Straight Flight Nevada Commercial Leasing, LLC: None.

Straight Flight, Inc.: None.

Global Security Management Services LLC: None

E.F. Solar LLC: None.

Sierra Solar I LLC: None.

Sierra Solar II LLC: None.

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