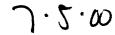


07/31/2000







RM COVER SHEET TS ONLY

| To: Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies). | | | | |
|---|--------------------------------|--------------------------|---------------------------|---------------------------|
| Submission Type: ☐ New ☐ Resubmission ☐ Correction-PTO ☐ Correction-Doc. Reel # Frame # | | | | |
| Conveyance Ty | y pe: 🔀 Assign | nment 🔲 License | Merger Sec | urity Agreement |
| | Cha | inge of Name 🔲 | Other | |
| | | Conveying | y Party(ies) | |
| Fleeter, Richa | ard D. | 6/3/00 | Hanson, John E. | 2/28/00 |
| Name | | Execution Date | Name | Execution Date |
| McDermott, S | Scott A. | 6/6/00 Execution Date | Raymond G. Zenick | 5/20/00 Execution Date |
| <u> </u> | | Receivir | ng Party | |
| AeroAstro, Inc | | | | |
| 520 W Huntma | | | | |
| Herndon, VA | 22070 | | | |
| | | Correspondent N | ame and Address | |
| Robert M. Mc | Dermott, Esa | - | ame and Address | |
| 16 Samuelson | | • | | |
| Weston, CT 06 | 883 | | | |
| | | | | |
| | | | ce document, including at | tachments: <u>10</u> . |
| • | et Number: AA Application N | A 980217, AA 9802 | 218 Patent Ni | ımher(s) |
| | | dinber(s) | Tatent 14 | imber (3) |
| 09/045,971 | 09/045,970 | | | |
| | | | | |
| Total Number of Properties 2. Fee Amount for Properties Listed (37 CFR 3.41): \$ 80. | | | | |
| | | | | |
| Method of Payment: | | | | |
| Authorization to charge additional fees: Yes. | | | | |
| To the heat of my language and halief the foresting information is true and correct and any | | | | |
| 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. Charges to deposit account are authorized, | | | | |
| as indicated herein. | | | | |
| Robert M. McDermott Authority 1 July 2000 | | | | |
| Reg. Number | | Signature | | Date |
| | \ | | | |
| DNGUYEN 00000052 0 | 1 | | | |
| | 80.00 OP } | | | |

Attorney Docket AA 980218

For good and valuable consideration, I as a below-named Assignor, hereby sell, assign, and transfer the entire right, title, and interest in the following to:

AeroAstro, Inc.

520 W Huntmar Park Dr.

Herndon, VA 22070

and to its successors, assigns, and legal representatives, including any nominees (collectively "the Assignee") my/our invention relating to as described in the U.S. patent application entitled: Low-Cost Satellite Communication System

application entitled: Low-Cost Satellite Communication System

secuted concurrently herewith,

secuted on

filed in the United States Patent and Trademark Office on 3/21/98 as Serial

the foregoing patent application and all other U.S. and foreign patent applications based thereon, including divisions, continuations, reissues, and extensions, and all patents granted on these applications.

I will provide my cooperation to enable the Assignee to enjoy the foregoing right, title, and interest to the fullest extent. Upon request at the expense of the Assignee, I agree to execute all papers, take all rightful oaths, testify in all legal proceedings including patent prosecution actions and infringement actions, and do all other such acts which may be necessary, desirable, or convenient for securing and maintaining patents on the foregoing invention or for perfecting title thereto in the Assignee. I authorize and request that these patents be issued to the Assignee.

I certify that I have the full right to convey the above rights.

Number 09/045,970,

| Date: <u>6/3/00</u> | Signature: Assignor: Fleeter, Richard D. |
|---------------------|--|
| Date: | Signature: Assignor: Hanson, John E. |
| Date: | Signature:Assignor: McDermott, Scott A. |
| Date: | Signature: Assignor: Zenick Raymond G |

ASSIGNMENT OF INTELLECTUAL PROPERTY

WHEREAS, <u>John Hanson</u>, whose signature and address appear below (hereinafter referred to as "Assignor"), has invented certain new and useful improvements in a <u>Low-Cost Satellite Communications System</u> (hereinafter referred to as the "Invention") for which an application for United States Letters Patent was filed on 3/21/98, <u>Application Number 09/045,970</u> (hereinafter referred to as the "Application"); and

WHEREAS, <u>AeroAstro, Inc.</u>, whose address is <u>Suite 100; 520 West Huntmar Park Drive; Herndon, Virginia 02170</u> (hereinafter referred to as "Assignee"), is desirous of acquiring the entire right, title and interest in and to the same in the United States and throughout the world; and

WHEREAS, <u>John Hanson</u> and <u>AeroAstro, Inc.</u> have entered into an Agreement of even date herewith whereby John Hanson shall provide engineering consulting services and shall, pursuant to the terms and conditions of the Agreement, assign all his right, title, and interest in the invention to AeroAstro, Inc. in exchange for money paid to him by AeroAstro, Inc. over the course of the Agreement.

NOW, THEREFORE, for good and valuable consideration, receipt and sufficiency of which is hereby acknowledged, Assignor, by these presents, does hereby sell, assign and transfer unto said Assignee, the entire right, title and interest in and to said Invention and Application throughout the United States of America, including any and all United States Letters Patent granted on any division, continuation, continuation-in-part and reissue of said Application; and the entire right, title and interest in and to said Invention throughout the world, including the right to apply for patents and inventor certificates in respect thereof and to claim priority pursuant to rights accorded Assignor under the terms of the Paris International Convention and all other available and applicable international conventions and treaties; and the entire right, title and interest in and to any and all patents, patents of addition, utility models, patents of importation, revalidation patents and inventor certificates which may be granted throughout the world in respect of said Invention.

ALSO, Assignor hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said Application or any other patent application(s) or inventor certificate(s) in the United States and in foreign countries for said Invention, including additional documents that may be required to affirm the rights of Assignee in and to said Invention, all without further consideration. Assignor also agrees, without further consideration and at Assignee's

DATENT PS:01 0002-21-YAM

REEL: 010945 FRAME: 0892

expense, to identify and communicate to Assignee at Assignee's request documents and information concerning said Invention that are within Assignor's possession or control, and to provide further assurances and testimony on behalf of Assignee that lawfully may be required of Assignor in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. Assignor's obligations under this instrument shall extend to Assignor's heirs, executors, administrators and other legal representatives.

Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent referred to above to Assignee of the entire right, title and interest in and to the same, for Assignee's sole use and benefit; and for the use and benefit of Assignee's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made.

ASSIGNOR:

| Signature: | John Hanson | 2/18/2000 Date |
|------------|--|--|
| Address: | 345 Nita Avenue Mountain View, CA 94043 | |
| WITNESS: | | |
| | JACK HANSON | 2/28/2 <i>006</i> Date |
| Address: | 1503 ALMANOR CT. LWERMORE, CA 94550 | ······································ |
| | | |

PEROPSTRO

Attorney Docket AA 980218

For good and valuable consideration, I as a below-named Assignor, hereby sell, assign, and transfer the entire right, title, and interest in the following to:

AeroAstro, Inc.

520 W Huntmar Park Dr.

Herndon, VA 22070

| and to its successors, assigns, and legal representatives, including any nominees |
|--|
| (collectively "the Assignee") my/our invention relating to as described in the U.S. patent |
| application entitled: Low-Cost Satellite Communication System |
| executed concurrently herewith, |
| executed on . |
| filed in the United States Patent and Trademark Office on 3/21/98 as Serial |
| Number 09/045.970 |

the foregoing patent application and all other U.S. and foreign patent applications based thereon, including divisions, continuations, reissues, and extensions, and all patents granted on these applications.

I will provide my cooperation to enable the Assignee to enjoy the foregoing right, title, and interest to the fullest extent. Upon request at the expense of the Assignee, I agree to execute all papers, take all rightful oaths, testify in all legal proceedings including patent prosecution actions and infringement actions, and do all other such acts which may be necessary, desirable, or convenient for securing and maintaining patents on the foregoing invention or for perfecting title thereto in the Assignee. I authorize and request that these patents be issued to the Assignee.

I certify that I have the full right to convey the above rights.

| Date: | Signature: |
|---------------------------|-------------------------------|
| | Assignor: Fleeter, Richard D. |
| Date: | Signature: |
| | Assignor: Hanson, John E. |
| Date: <u>6 June, 2000</u> | Signature: Signature: |
| | Assignor: McDermott, Scott A. |
| Date: | Signature: |
| | Assignor: Zenick, Raymond G. |

Attorney Docket AA 980218

For good and valuable consideration, I as a below-named Assignor, hereby sell, assign, and transfer the entire right, title, and interest in the following to:

AeroAstro, Inc.

520 W Huntmar Park Dr.

520 W Huntmar Park Dr. Herndon, VA 22070

and to its successors, assigns, and legal representatives, including any nominees (collectively "the Assignee") my/our invention relating to as described in the U.S. patent application entitled: Low-Cost Satellite Communication System

| The state of the s |
|--|
| executed concurrently herewith, |
| executed on |
| ifiled in the United States Patent and Trademark Office on 3/21/98 as Serial |
| Number 09/045,970, |

the foregoing patent application and all other U.S. and foreign patent applications based thereon, including divisions, continuations, reissues, and extensions, and all patents granted on these applications.

I will provide my cooperation to enable the Assignee to enjoy the foregoing right, title, and interest to the fullest extent. Upon request at the expense of the Assignee, I agree to execute all papers, take all rightful oaths, testify in all legal proceedings including patent prosecution actions and infringement actions, and do all other such acts which may be necessary, desirable, or convenient for securing and maintaining patents on the foregoing invention or for perfecting title thereto in the Assignee. I authorize and request that these patents be issued to the Assignee.

I certify that I have the full right to convey the above rights.

| Date: | Signature: |
|-----------------|-------------------------------|
| • | Assignor: Fleeter, Richard D. |
| Date: | Signature: |
| | Assignor: Hanson, John E. |
| Date: | Signature: |
| | Assignor: McDermott, Scott A. |
| Date: 20 may 00 | Signature: Kunnon 4. |
| / | Assignor: Zenick, Raymond G. |

Attorney Docket AA 980217

For good and valuable consideration, I as a below-named Assignor, hereby sell, assign, and transfer the entire right, title, and interest in the following to:

AeroAstro, Inc

520 W Huntmar Park Dr.

Herndon, VA 22070

and to its successors, assigns, and legal representatives, including any nominees (collectively "the Assignee") my/our invention relating to as described in the U.S. patent application entitled: Satellite Communication System with a Sweeping High-Gain

| * * | | U | | 0 |
|----------------|-----------------------|--------------|-----------|-------------------|
| Antenna | | | | |
| executed conc | urrently herewith, | | | |
| executed on _ | | | | |
| iled in the Un | ited States Patent ar | nd Trademark | Office on | 3/21/98 as Serial |
| Number 0 | 9/045,971, | | | |

the foregoing patent application and all other U.S. and foreign patent applications based thereon, including divisions, continuations, reissues, and extensions, and all patents granted on these applications.

I will provide my cooperation to enable the Assignee to enjoy the foregoing right, title, and interest to the fullest extent. Upon request at the expense of the Assignee, I agree to execute all papers, take all rightful oaths, testify in all legal proceedings including patent prosecution actions and infringement actions, and do all other such acts which may be necessary, desirable, or convenient for securing and maintaining patents on the foregoing invention or for perfecting title thereto in the Assignee. I authorize and request that these patents be issued to the Assignee.

I certify that I have the full right to convey the above rights.

| Date: 6(3/00 | Signature: Assignor: Fleeter, Richard D. |
|--------------|--|
| Date: | Signature: Assignor: Hanson, John E. |
| Date: | Signature:Assignor: McDermott, Scott A. |
| Date: | Signature: Assignor: Zenick, Raymond G. |

ASSIGNMENT OF INTELLECTUAL PROPERTY

WHEREAS, John Hanson, whose signature and address appear below (hereinafter referred to as "Assignor"), has invented certain new and useful improvements in a <u>Satellite Communication System with a Sweeping High-Gain Antenna</u> (hereinafter referred to as the "Invention") for which an application for United States Letters Patent was filed on 3/21/98, <u>Application Number 09/045,971</u> (hereinafter referred to as the "Application"); and

WHEREAS, <u>AeroAstro, Inc.</u>, whose address is <u>Suite 100; 520 West Huntmar Park Drive; Herndon, Virginia 02170</u> (hereinafter referred to as "Assignee"), is desirous of acquiring the entire right, title and interest in and to the same in the United States and throughout the world; and

WHEREAS, <u>John Hanson</u> and <u>AeroAstro, Inc.</u> have entered into an Agreement of even date herewith whereby John Hanson shall provide engineering consulting services and shall, pursuant to the terms and conditions of the Agreement, assign all his right, title, and interest in the invention to AeroAstro, Inc. in exchange for money paid to him by AeroAstro, Inc. over the course of the Agreement.

NOW, THEREFORE, for good and valuable consideration, receipt and sufficiency of which is hereby acknowledged, Assignor, by these presents, does hereby sell, assign and transfer unto said Assignee, the entire right, title and interest in and to said Invention and Application throughout the United States of America, including any and all United States Letters Patent granted on any division, continuation, continuation-in-part and reissue of said Application; and the entire right, title and interest in and to said Invention throughout the world, including the right to apply for patents and inventor certificates in respect thereof and to claim priority pursuant to rights accorded Assignor under the terms of the Paris International Convention and all other available and applicable international conventions and treaties; and the entire right, title and interest in and to any and all patents, patents of addition, utility models, patents of importation, revalidation patents and inventor certificates which may be granted throughout the world in respect of said Invention.

ALSO, Assignor hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of sald Application or any other patent application(s) or Inventor certificate(s) in the United States and in foreign countries for said Invention, including additional documents that may be required to affirm the rights of Assignee In and to said Invention, all without further consideration. Assignor also agrees, without further consideration and at Assignee's

WHX-15-5000 10:23 HEROHELKO

PATENT

REEL: 010945 FRAME: 0897

expense, to Identify and communicate to Assignee at Assignee's request documents and information concerning said Invention that are within Assignor's possession or control, and to provide further assurances and testimony on behalf of Assignee that lawfully may be required of Assignor in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. Assignor's obligations under this instrument shall extend to Assignor's heirs, executors, administrators and other legal representatives.

Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent referred to above to Assignee of the entire right, title and interest in and to the same, for Assignee's sole use and benefit; and for the use and benefit of Assignee's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made.

ASSIGNOR: 345 Nita Avenue Address: Mountain View, CA 94043 WITNESS: Name: JACK MANSON Address: LIVERMORE, CA 94550

PATENT OBJECT OF STATE OF STAT

Attorney Docket AA 980217

For good and valuable consideration, I as a below-named Assignor, hereby sell, assign, and transfer the entire right, title, and interest in the following to:

AeroAstro, Inc

Date: _____

| 520 W Huntn | iar Park Dr. |
|--|---|
| Herndon, VA | 22070 |
| | assigns, and legal representatives, including any nominees ignee") my/our invention relating to as described in the U.S. patent |
| application entitled: S | atellite Communication System with a Sweeping High-Gain |
| Antenna | |
| executed c | oncurrently herewith, |
| executed o | n |
| | United States Patent and Trademark Office on 3/21/98 as Serial |
| | er 09/045,971, |
| <u> </u> | patent application and all other U.S. and foreign patent applications |
| | ing divisions, continuations, reissues, and extensions, and all patents |
| granted on these appli | cations. |
| agree to execute all paincluding patent proses which may be necessar the foregoing invention | the fullest extent. Upon request at the expense of the Assignee, I appers, take all rightful oaths, testify in all legal proceedings ecution actions and infringement actions, and do all other such acts ary, desirable, or convenient for securing and maintaining patents on on or for perfecting title thereto in the Assignee. I authorize and ents be issued to the Assignee. |
| I certify that I | have the full right to convey the above rights. |
| Date: | Signature: |
| Dute. | Assignor: Fleeter, Richard D. |
| | 71001611071 71001011 4 20 |
| Date: | Signature: |
| | Assignor: Hanson, John E. |
| | 1 deter |
| Date: <u>6 June</u> , 2000 | Signature: Aug W. W. |
| | Assignor: McDermott, Scott A. |
| | • |

Signature: Zenick, Raymond G.

Attorney Docket AA 980217

For good and valuable consideration, I as a below-named Assignor, hereby sell, assign, and transfer the entire right, title, and interest in the following to:

AeroAstro, Inc

520 W Huntmar Park Dr.

Herndon, VA 22070

and to its successors, assigns, and legal representatives, including any nominees (collectively "the Assignee") my/our invention relating to as described in the U.S. patent application entitled: Satellite Communication System with a Sweeping High-Gain

Antenna

| executed concurrently herewith,
| executed on _____.
| filed in the United States Patent and Trademark Office on 3/21/98 as Serial Number 09/045,971,

the foregoing patent application and all other U.S. and foreign patent applications based thereon, including divisions, continuations, reissues, and extensions, and all patents granted on these applications.

I will provide my cooperation to enable the Assignee to enjoy the foregoing right, title, and interest to the fullest extent. Upon request at the expense of the Assignee, I agree to execute all papers, take all rightful oaths, testify in all legal proceedings including patent prosecution actions and infringement actions, and do all other such acts which may be necessary, desirable, or convenient for securing and maintaining patents on the foregoing invention or for perfecting title thereto in the Assignee. I authorize and request that these patents be issued to the Assignee.

I certify that I have the full right to convey the above rights.

| Date: | Signature: Assignor: Fleeter, Richard D. |
|-----------------|--|
| Date: | Signature: Assignor: Hanson, John E. |
| Date: | Signature: Assignor: McDermott, Scott A. |
| Date: 20 MAY 00 | Signature: Assignor: Zenick, Raymond G. |

PATENT
RECORDED: 07/05/2000 REEL: 010945 FRAME: 0900