PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------------|----------------|
| MR. ROBERTO J. ACOSTA | 07/09/2007 |
| MS. CAROL KORY | 07/09/2007 |
| MR. KEVIN LAMBERT | 07/09/2007 |

RECEIVING PARTY DATA

| IIName: | UNITED STATES OF AMERICA, AS REPRESENTED BY THE ADMINISTRATOR OF THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION |
|-----------------|--------------------------------------------------------------------------------------------------------------------|
| Street Address: | N.A.S.A. (USA) |
| City: | WASHINGTON |
| State/Country: | DISTRICT OF COLUMBIA |
| Postal Code: | 20546 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 11774574 |

CORRESPONDENCE DATA

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Address Line 2: 8412-LEW 18089-1

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| ATTORNEY DOCKET NUMBER: | 8412-LEW 18089-1 |
|-------------------------|------------------|
| | |

NAME OF SUBMITTER: KENNETH L. MITCHELL

Total Attachments: 3

REEL: 019548 FRAME: 0067

PATENT 500313121

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PATENT REEL: 019548 FRAME: 0068



Title of Invention:

Patent Application

Assignment to the Government (by Government Employee)

CUP CYLINDRICAL WAVEGUIDE ANTENNA WITH INTEGRATED POLARIZER

| лventor(s): | ROBERTO J. | ACOSTA | | | | |
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| NASA Case No.: | LEW-18089-1 | Application No.*; | 11774574 | Filing Date*: | JULY | 7, 2007 |
| | rties to this Assignmen fter Government), as r | | | | | |
| VHEREAS, the ma | king of this Assignmer | t and Agreement is | in accordance with S | 17 CFR Part 501; | and | |
| | dersigned inventor(s) he above-entitled invent | | , on the date(s) indic | ated below, an ap | plication for | United |
| Assign to the America, its territori | i, in consideration of ea Government my (our) es and possessions, a nuation or divisional a | full and exclusive r nd my (our) entire ri | ight in and to said inv ght, title and interest | rention within the in and to said app | | |
| ccordance with 37 mended, if the Gov | nt to the Government n CFR 501.9(d), including vernment chooses not noe with 37 CFR 501.9 | ng rights of priority u to file an application | inder the international in any foreign count | il Convention of P ry, I (we) may req | aris (1883), uest rights i | n that |
| irposes. The term: | cable, royalty-free lices s of such reservation w | nse in the Invention | with power to grant I | icenses for all gov | rernmental | |
| urposes. The terms evention. 3. Agree, at the formation to, and (| cable, royalty-free lices of such reservation we expense of the Governo to cooperate in any by this Assignment and | nse in the Invention will appear, where proment, (a) to execut manner with the Go | with power to grant I acticable, in any fore e any document for, | icenses for all gov ign patent which r (b) to deliver any | rernmental may issue of requested | n such |
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| arposes. The terms rention. 3. Agree, at the formation to, and (serest transferred leaves when reconstruction of inventor, ROBERTO J. | expense of the Governor to cooperate in any by this Assignment and request the attorneys d. ACOSTA | nse in the Invention rill appear, where proment, (a) to execut manner with the Go I Agreement. To record in the appear of the appear to the a | with power to grant I acticable, in any fore e any document for, vernment in order to blication to insert the Assignment Execute | icenses for all goving patent which received the covernment of the | requested ment to prote er and filing facility Execution, NORT | n such ect any date 7 ed) TH OMSTE |
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PATENT REEL: 019548 FRAME: 0069



Attorney Docket No. 8412-LEW 18089-1

ASSIGNMENT and AGREEMENT

Title of Invention: CUP WAVEGUIDE ANTENNA WITH INTEGRATED POLARIZER AND OMT

Inventor(s): Roberto J. Acosta, Carol Kory and Kevin Lambert

NASA Case No.: LEW 18089-1

Application No.*: 11774574

Application Filing Date*: ____JULY 7, 2007

WHEREAS, the parties to this ASSIGNMENT and AGREEMENT are: (1) the undersigned Inventor(s) and (2) and the United States Government, as represented by the Administrator of the National Aeronautics and Space Administration, Washington, D.C. 20546 (hereafter, the Government);

WHEREAS, the undersigned Inventor(s) is (are) desirous of sharing in any royalties that may be derived from licensing the above identified Invention (hereinafter, the Invention) and has (have) executed, in the date indicated below, an application for a United States Patent on the Invention or is (are) desirous of having such a patent application filed; and

WHEREAS, the Government is desirous of acquiring the entire right, title and interest in the Invention and the patent application filed, or to be filed, thereon.

NOW THEREFORE, in consideration of the payment of royalties, pursuant to NASA Policy Directive, NPD 2092.1, "Royalties and Other Payments Received by NASA from the Licensing of Patents and Patent Applications" (incorporated herein by reference), that may result from licensing the Invention, the undersigned hereby:

1. Assigns to the Government my (our) full right in and to the Invention within the United States of America, its territories and possessions, and my (our) entire right, title and interest in and to said patent application, and any corresponding continuation or divisional application(s) and any patent(s) that may issue therefrom.

Assignment individual inventor to NASA June 2000

Page 1 of 2 Form.IndividualAssigntoNASA

- 2. Grant to the Government the option to acquire, upon request, all my (our) foreign rights in and to the Invention.
- Agrees, at the expense of the Government, to: (a) execute any document, (b) 3. deliver any requested information, and (c) cooperate in any manner with the Government in order to allow the Government to protect any interest transferred by this ASSIGNMENT and AGREEMENT.
- 4. Warrants that I have the authority to execute this ASSIGNMENT and AGREEMENT.
- Authorizes and requests the attorneys of record in the application to insert the

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|------------------------------------------------------|----------------------------------------------------|----------------------------------|--------|
| patent application number a | and filing date above when required. | | |
| Carolday | M/9/07 | Date Application Executed | |
| (Signature of Inventor) CAROL KORY | Date Assignment Executed | Date Application Executed | |
| (Inventor's Typed Name) | | | |
| 1892 BANBURY COUR | T, WESTLAKE, OHIO 44145, | UNITED STATES OF AMERIC | A |
| | | | |
| (Signature of Inventor) | Date Assignment Executed | Date Application Executed | |
| KEVIN LAMBERT | | | |
| (Inventor's Typed Name) | | | |
| 4564 POPLAR LANE (Post Office Address - Including | NORTH ROYALTON, OHIO 44: Country) | 133, UNITED STATES OF AN | 1ERICA |
| AM Ly | 7/9/07 | 7/9/07 | |
| (Signature of Inventor) | Date Assignment Executed | Date Application Executed | |
| (Inventor's Typed Name) | | | |
| Post Office Address Including | Country | | |

Assignment individual inventor to NASA June 2000

RECORDED: 07/12/2007

Page 2 of 2 Form.IndividualAssigntoNASA