PATENT ASSIGNMENT

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| CONVEYING PARTY | DATA | JL | | |
| | | | | |
| | | Name | Execution Date | |
| Ruth BAMFORD | | | 06/10/2010 | |
| Robert BINGHAM | | | 06/10/2010 | |
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| Internal Address: | Rutherford Appleton Laboratory | | | |
| City: | Chilton, Didcot, Oxon | | | |
| State/Country: | | | | |
| Postal Code: | OX11 0QX | | | |
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| PROPERTY NUMBER | RS Total: 1 | | | G |
| Property Type | | Number | | 06408664 |
| Application Number: | | 2990420 | | 129 |
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| Total Attachments: 4 | | | | |
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| source=01Nov_1028-0227PUS1_Assignment#page2.tif PATENT | | | | |

ASSIGNMENT

WHEREAS, I, Ruth BAMFORD

of c/o The Science and Technology Facilities Council, Harwell Innovation Campus, Rutherford Appleton Laboratory, Chilton, Didcot, Oxon, OX11 0QX, United Kingdom

have invented certain new and useful improvements as described in an International Patent Application entitled SPACECRAFT SHIELD

being identifiable under the Patent Co-operation Treaty by Serial No. **PCT/GB2010/000588**, filed on **26 March 2010**; and in the United States Patent and Trademark Office by Serial No. 12/990, 420 , filed on October 29, 2010;

WHEREAS, THE SCIENCE AND TECHNOLOGY FACILITIES COUNCIL

a corporation organized and existing under the laws of the United Kingdom and having offices at Harwell Innovation Campus, Rutherford Appleton Laboratory, Chilton, Didcot, Oxon, OX11 0QX, United Kingdom

("Assignee") is desirous of acquiring the entire right, title and interest in and to the invention, the application, and any and all Letters Patent or similar legal protection, foreign or domestic, to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I transfer to Assignee, its successors and assigns, my entire right, title and interest in and to the invention, the above-identified application, corresponding domestic and foreign applications, all Letters Patents or similar legal protection issuing thereon, and all rights and benefits under any applicable treaty or convention; and I authorize the Commissioner of Patents and Trademarks of the United States or foreign equivalent thereof to issue the Letters Patent of similar legal protection to the Assignee.

> PATENT REEL: 025225 FRAME: 0477

- 2 -

I authorize the Assignee, its successors and assigns, to insert in this instrument the United States filing date and serial number of the application when ascertained.

I authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries.

I represent to the Assignee, its successors and assigns, that I have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. I, my executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the Letters Patent or similar legal protection on the invention in any and all countries.

(Signature of Inventor)

Date: 10t The 10

Witness: Them KIMBER Signature Thym Lamber Name:

Address: 47 Gravel would, Faringdon, oxon SN7 7JN

391516; JRP; SCJ

PATENT REEL: 025225 FRAME: 0478

ASSIGNMENT

WHEREAS, I, Robert BINGHAM

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of c/o The Science and Technology Facilities Council, Harwell Innovation Campus, Rutherford Appleton Laboratory, Chilton, Didcot, Oxon, OX11 0QX, United Kingdom

have invented certain new and useful improvements as described in an International Patent Application entitled **SPACECRAFT SHIELD**

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("Assignee") is desirous of acquiring the entire right, title and interest in and to the invention, the application, and any and all Letters Patent or similar legal protection, foreign or domestic, to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I transfer to Assignee, its successors and assigns, my entire right, title and interest in and to the invention, the above-identified application, corresponding domestic and foreign applications, all Letters Patents or similar legal protection issuing thereon, and all rights and benefits under any applicable treaty or convention; and I authorize the Commissioner of Patents and Trademarks of the United States or foreign equivalent thereof to issue the Letters Patent of similar legal protection to the Assignee. - 2 -

I authorize the Assignee, its successors and assigns, to insert in this instrument the United States filing date and serial number of the application when ascertained.

I authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries.

I represent to the Assignee, its successors and assigns, that I have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. I, my executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the Letters Patent or similar legal protection on the invention in any and all countries.

Kolut Burghan

(Signature of Inventor)

Date: 10 th June 2010

laig

Witness:

Signature Tayu lämber Name: There Knuece Address: 47 Grave wark, Faringdon, 0x02, 5N7 7JN

391522; JRP; SCJ

PATENT REEL: 025225 FRAME: 0480

RECORDED: 11/01/2010