# 503894795 06/29/2016

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3941445

| UBMISSION TYPE:   |  | NEW ASSIGNMENT  |                         |
|---|--|---|-------------------------|
| NATURE OF CONVEYANCE:   |  | ASSIGNMENT  |                         |
| CONVEYING PARTY D   | ΑΤΑ  |   |                         |
|   |  | Name  | Execution Date          |
| CHRISTOPHER MALCO   | OLM BIR                                      | KIN   | 06/28/2016              |
| RIAAN VAN WYK   |  |   | 06/28/2016              |
| ANDRE KOEKEMOER   |  |   | 06/28/2016              |
| TREVOR WATT   |  |   | 06/28/2016              |
| RECEIVING PARTY DA  |  |   |                         |
| Name:   | DETNET SOUTH AFRICA (PTY) LTD (ZA)           |   |                         |
| Street Address:   | AECI PLACE, THE WOODLANDS                    |   |                         |
| Internal Address:   | WOODLANDS DRIVE                              |   |                         |
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| State/Country:  | SOUTH AFRICA                                 |   |                         |
|   |  |   |                         |
|   | 2196   |   |                         |
| Postal Code:<br>PROPERTY NUMBERS<br>Property Type   |  |   |                         |
| PROPERTY NUMBERS<br>Property Type   |  | <b>Number</b><br>15103419   |                         |
| PROPERTY NUMBERS<br>Property Type<br>Application Number:  | 6 Total: 1                                   | Number  |                         |
| PROPERTY NUMBERS<br>Property Type<br>Application Number:<br>CORRESPONDENCE D  | 6 Total: 1                                   | <b>Number</b><br>15103419   |                         |
| PROPERTY NUMBERS<br>Property Type<br>Application Number:<br>CORRESPONDENCE E<br>Fax Number:   | 5 Total: 1                                   | Number<br>15103419<br>(414)277-0656   | essful, it will be sent |
| PROPERTY NUMBERS<br>Property Type<br>Application Number:<br>CORRESPONDENCE E<br>Fax Number:<br>Correspondence will b  | 5 Total: 1                                   | <b>Number</b><br>15103419   |                         |
| PROPERTY NUMBERS<br>Property Type<br>Application Number:<br>CORRESPONDENCE E<br>Fax Number:<br><i>Correspondence will b</i><br><i>using a fax number, if</i><br>Phone:  | S Total: 1<br>DATA<br>De sent to<br>provideo | Number   15103419   (414)277-0656   o the e-mail address first; if that is unsuccesd; if that is unsuccessful, it will be sent via   414-271-6560   |                         |
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**Total Attachments: 2** 

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PATENT REEL: 039043 FRAME: 0297

#### ASSIGNMENT

Pursuant to our obligation to DETNET SOUTH AFRICA (PTY) LTD (ZA) (hereinafter

referred to as "Assignee"), a South African company having its principal place of business at:

AECI Place The Woodlands Woodlands Drive Woodmead 2196

#### South Africa

and for other valuable and sufficient consideration, receipt whereof is hereby acknowledged,

we:

Christopher Malcolm Birkin c/o AECI Place The Woodlands Woodlands Drive Woodmead 2196 South Africa

Riaan Van Wyk c/o AECI Place The Woodlands Woodlands Drive Woodmead 2196 South Africa

Andre Koekemoer c/o AECI Place The Woodlands Woodlands Drive Woodmead 2196 South Africa

Trevor Watt c/o AECI Place The Woodlands Woodlands Drive Woodmead 2196 South Africa

confirm our obligation to and hereby sell, assign and convey, unto Assignee, its successors and

assigns, our entire right, title and interest in the United States -

(1) in and to inventions described in a patent application titled BLASTING SYSTEM

CONTROL the specification of which was filed with my authority on December 9, 2014 as

### PATENT REEL: 039043 FRAME: 0298

International Patent Application No. PCT/ZA2014/000071 (Atty. File No. 029643-9038-US00) (hereinafter the "PCT application"); and

(2) in and to the PCT application, in and to all other U.S. patent applications (including PCT national phase, divisional, continuation, continuation-in-part, §111(b) provisional, §111(a), and reissue applications) based upon said inventions or claiming the benefit of the PCT application, and in and to the patent or patents to be granted thereon, to the full end of the term or terms for which said patent or patents may be granted.

We hereby agree that we will, upon demand of Assignee, its successors or assigns, and without further consideration to us, execute any and all papers that may be necessary, or deemed by Assignee, its successors or assigns, to be necessary, to a complete fulfillment of the intent and purposes of this Assignment, it being understood that any expense incident to the execution of such papers shall be paid by Assignee, its successors and assigns, and not by us.

The Commissioner of Patents and Trademarks of the United States is hereby authorized and requested to issue said patent or patents to Assignee.

28 06 2016 Date

Date

28/06/2016 28/06/2016 28/06/2016

Date

Date

Christopher Malcolm Birkin