

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6514815

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MATTHEW TOLLIVER RAWLS	03/05/2019
DAVID OLAF JOHNSON	03/04/2019
MING CHUNG LEE	03/04/2019

RECEIVING PARTY DATA

Name:	ORICA USA INC.
Street Address:	33101 EAST QUINCY AVENUE
City:	WATKINS
State/Country:	COLORADO
Postal Code:	80137

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16978347

CORRESPONDENCE DATA

Fax Number: (317)231-7433
Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.
Phone: 3172311313
Email: juan.amador@btlaw.com
Correspondent Name: JUAN P AMADOR
Address Line 1: 11 SOUTH MERIDIAN STREET
Address Line 4: INDIANAPOLIS, INDIANA 46204

ATTORNEY DOCKET NUMBER:	84945-325325
NAME OF SUBMITTER:	BRIAN K JARMAN
SIGNATURE:	/Brian K. JARMAN/
DATE SIGNED:	01/26/2021

Total Attachments: 12

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MARCH 2019

DEED OF CONFIRMATION AND ASSIGNMENT

**RODNEY WAYNE APPLEBY
AND
RICHARD JOHN GOODRIDGE
AND
MATTHEW TOLLIVER RAWLS
AND
DAVID OLAF JOHNSON
AND
MING CHUNG LEE
AND
ORICA AUSTRALIA PTY LTD
AND
ORICA USA, INC.
AND
ORICA INTERNATIONAL PTE LTD**

Davies Collison Cave Pty Ltd
Intellectual Property
1 Nicholson St, Melbourne, VIC, 3000
Tel: +61 3 9254 2777 Fax: +61 3 9254 2770
Ref: 35278972
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INTELLECTUAL PROPERTY

davies.com.au

PATENT

REEL: 055026 FRAME: 0904

DEED OF CONFIRMATION AND ASSIGNMENT

THIS DEED is made on March 2019.

BETWEEN:

Rodney Wayne Appleby of 19 Norton Drive, Shailer Park, Queensland 4128 Australia
(**Appleby**)

AND

Richard John Goodridge of 30 Cowlshaw St, Redhead, New South Wales 2290
Australia (**Goodridge**)

AND

Matthew Tolliver Rawls of 5677 Park Place Ave., Greenwood Village, Colorado 80111
United States of America (**Rawls**)

AND

David Olaf Johnson of 25328 East Costilla Place, Aurora, Colorado 80016 United States
of America (**Johnson**)

AND

Ming Chung Lee of 4604 Ketchwood Circle, Highlands Ranch, Colorado 80130 United
States of America (**Lee**)

(Appleby, Goodridge, Rawls, Johnson and Lee are, together, referred to as **the
Inventors**)

AND

Orica Australia Pty Ltd (ACN 004 117 828) of 1 Nicholson Street, Melbourne, Victoria
3000, Australia (**OA**)

AND

Orica USA, Inc. of 33101 East Quincy Avenue, Watkins, Colorado 80137, United States
of America (**Orica USA**)

AND

Orica International Pte Ltd of 78 Shenton Way #06-15 Tower 2, Singapore 079120
(**OIPL**)

WHEREAS:

- A. The Inventors have each contributed to an invention or inventions generally relating to optically initiating a target volume of tertiary explosive medium in the absence of prior or concurrent initiation of primary and/or secondary explosive charges (**Invention**) and on 8 March, 2018 have jointly filed in their own names United States Provisional Patent Application No. 62/640334 (**Application**) entitled

"Systems and methods for optically initiating a target volume of tertiary explosive medium in the absence of prior or concurrent initiation of primary and/or secondary explosive charges" directed to the Invention.

- B. At the time of making their respective contributions to the Invention, Appleby and Goodridge were employed by OA, and Rawls, Johnson and Lee were employed by Orica USA, and each of them hereby acknowledges that he is under an obligation to assign all his right, title and interest in and to the Invention for the United States of America and for all countries foreign thereto (**Foreign Territories**) and in and to the Application to OA and Orica USA respectively or to such other party as may be nominated by OA or Orica USA (as applicable).
- C. OIPL has now requested that OA, Orica USA and the Inventors, and OA, Orica USA and the Inventors have agreed to, enter into this Deed of Confirmation and Assignment.

NOW THIS DEED OF ASSIGNMENT WITNESSES as follows:

- 1. Each of Appleby and Goodridge hereby acknowledges that:
 - (a) he was involved in the creation of the Invention;
 - (b) the Invention was created by him while he was an employee of OA;
 - (c) all of his involvement in the creation of the Invention was in the ordinary course of his employment, that is, all such involvement was in performance of the position which he was employed by OA to perform; and
 - (d) as a consequence of the employment relationship with OA, the whole right, title and interest in the Invention vested in OA upon creation.
- 2. Each of Rawls, Johnson and Lee hereby acknowledges that:
 - (a) he was involved in the creation of the Invention;
 - (b) the Invention was created by him while he was an employee of Orica USA;
 - (c) all of his involvement in the creation of the Invention was in the ordinary course of his employment, that is, all such involvement was in performance of the position which he was employed by Orica USA to perform; and
 - (d) as a consequence of the employment relationship with Orica USA, the whole right, title and interest in the Invention vested in Orica USA upon creation
- 3. To the extent that an Inventor has retained any right, title or interest in the Invention or Application, at OA or Orica USA's (as applicable) direction, that Inventor hereby assigns all of that right, title and interest in and to the Invention and Application to OIPL absolutely.

4. OA and Orica USA hereby acknowledge that all their right, title and interest in and to the Invention and Application is vested absolutely in and is the property of OIPL, the right, title and interest in and to the Invention and in and to the Application being:
 - (a) all of the right, title and interest in and to the Invention and in and to the Application (including all rights of priority to the Application) for the United States of America and for Foreign Territories;
 - (b) the right to file any application for patent or similar provision in the United States of America or Foreign Territories in respect of the Invention (including any regular divisional, continuation or continuation-in-part application) whether in the name of OIPL or in such other name or names as OIPL may direct (**Foreign Application**) together with the rights obtained in any patent or patents issued pursuant thereto or reissue or re-examination thereon; and
 - (c) the right to file an international application under the Patent Cooperation Treaty designating the United States of America and/or Foreign Territories for patent or similar provision in respect of the Invention whether in the name of OIPL or in such other name or names as OIPL may direct together with the rights obtained in any patent or patents issued pursuant thereto in the United States of America or in Foreign Territories.
5. To the extent that, as at the date of this Deed, OA or Orica USA holds any right, title or interest in the Invention or Application in its own right, OA and Orica USA hereby assign, transfer and set over to OIPL absolutely any and all of that right, title and interest in and to the Invention and in and to the Application.
6. Each of the Inventors, OA and Orica USA agree, at the request of OIPL, to execute such documents and do all such acts and things as OIPL may reasonably require:
 - (a) to enable any application in respect of the Invention to be filed in the name of OIPL or otherwise as it may direct;
 - (b) to assist in the prosecution of any such application so filed; and
 - (c) to vest in OIPL or as it may direct any such application and any right granted pursuant thereto.

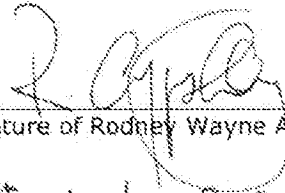
The provisions of this clause 6 shall continue to bind the Inventors notwithstanding that at the time when they are called upon to implement the same their employment with OA or Orica USA may have ceased.

7. OA and Orica USA hereby agree that the Inventors may execute assignments of the Invention and any Foreign Application directly to OIPL subsequent to the effective date hereof and that any such assignment by the Inventors shall be treated as a confirmatory assignment of the rights assigned hereby.
8. In this Deed, the expression "the Inventors" includes their respective legal personal representatives and the expressions "OA", "Orica USA" and "OIPL" include their respective successors and assigns.

- 9. The Deed may be executed in counterparts by each party to this Deed, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same document.
- 10. This Deed takes effect under, is governed by, and shall be construed according to the laws of the State of Victoria, Australia.

IN WITNESS WHEREOF the parties hereto have executed this Deed effective the date first above mentioned.

SIGNED, SEALED and DELIVERED by)
RODNEY WAYNE APPLEBY in the)
presence of:)



Signature of Rodney Wayne Appleby

S Appleby -
Signature of Witness

6th March 2019
Date

Sara Appleby
Name of Witness

SIGNED, SEALED and DELIVERED by)
RICHARD JOHN GOODRIDGE in the)
presence of:)

Signature of Richard John Goodridge

Signature of Witness

Date

Name of Witness

SIGNED, SEALED and DELIVERED by)
MATTHEW TOLLIVER RAWLS in the)
presence of:)

Signature of Matthew Tolliver Rawls

Signature of Witness

Date

Name of Witness

- 9. The Deed may be executed in counterparts by each party to this Deed, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same document.
- 10. This Deed takes effect under, is governed by, and shall be construed according to the laws of the State of Victoria, Australia.

IN WITNESS WHEREOF the parties hereto have executed this Deed effective the date first above mentioned.

SIGNED, SEALED and DELIVERED by)
RODNEY WAYNE APPLEBY in the)
 presence of:)

 Signature of Rodney Wayne Appleby


 Signature of Witness

 Date

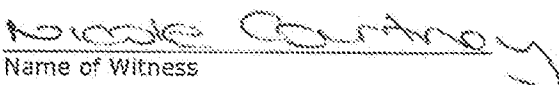
 Name of Witness

SIGNED, SEALED and DELIVERED by)
RICHARD JOHN GOODRIDGE in the)
 presence of:)


 Signature of Richard John Goodridge


 Signature of Witness

06/03/2019
 Date


 Name of Witness

SIGNED, SEALED and DELIVERED by)
MATTHEW TOLLIVER RAWLS in the)
 presence of:)

 Signature of Matthew Tolliver Rawls

 Signature of Witness

 Date

 Name of Witness

9. The Deed may be executed in counterparts by each party to this Deed, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same document.
10. This Deed takes effect under, is governed by, and shall be construed according to the laws of the State of Victoria, Australia.

IN WITNESS WHEREOF the parties hereto have executed this Deed effective the date first above mentioned.

SIGNED, SEALED and DELIVERED by)
RODNEY WAYNE APPLEBY in the)
presence of:)

Signature of Rodney Wayne Appleby

Signature of Witness

Date

Name of Witness

SIGNED, SEALED and DELIVERED by)
RICHARD JOHN GOODRIDGE in the)
presence of:)

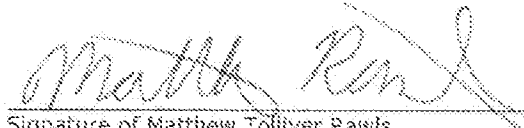
Signature of Richard John Goodridge

Signature of Witness


Date

Name of Witness

SIGNED, SEALED and DELIVERED by)
MATTHEW TOLLIVER RAWLS in the)
presence of:)



Signature of Matthew Tolliver Rawls



Signature of Witness

Date



Name of Witness

SIGNED, SEALED and DELIVERED by)
DAVID OLAF JOHNSON in the presence of:
of:)

David Olaf Johnson
Signature of David Olaf Johnson

Rebecca A. Johnson
Signature of Witness

3-9-19
Date

Rebecca A. Johnson
Name of Witness

SIGNED, SEALED and DELIVERED by)
MING CHUNG LEE in the presence of:)

Signature of Ming Chung Lee

Signature of Witness

Date

Name of Witness

EXECUTED for and on behalf of ORICA)
AUSTRALIA PTY LTD (ACN 004 117)
S26) by its duly authorised officer in the)
presence of:)

Signature of Authorised Officer

Signature of Witness

Name and title of Authorised Officer

Name of Witness

Date

EXECUTED for and on behalf of ORICA)
USA, INC. by its duly authorised officer in)
the presence of:)

Signature of Authorised Officer

Signature of Witness

Name and title of Authorised Officer

Name of Witness

Date

SIGNED, SEALED and DELIVERED by)
DAVID OLAF JOHNSON in the presence)
of:)

Signature of David Olaf Johnson

Signature of Witness

Date

Name of Witness

SIGNED, SEALED and DELIVERED by)
MING CHUNG LEE in the presence of:)

Signature of Ming Chung Lee

Ming Chung Lee

[Handwritten Signature]

Signature of Witness

Date

3-4-19

REBECCA A. J. MILLING
Name of Witness

EXECUTED for and on behalf of ORICA)
AUSTRALIA PTY LTD (ACN 004 117)
828) by its duly authorised officer in the)
presence of:)

Signature of Authorised Officer

Signature of Witness

Name and title of Authorised Officer

Name of Witness

Date

EXECUTED for and on behalf of ORICA)
USA, INC. by its duly authorised officer in)
the presence of:)

Signature of Authorised Officer

Signature of Witness

Name and title of Authorised Officer

Name of Witness

Date

SIGNED, SEALED and DELIVERED by)
DAVID OLAF JOHNSON in the presence of)
of:)

Signature of David Olaf Johnson

Signature of Witness

Date

Name of Witness

SIGNED, SEALED and DELIVERED by)
MING CHUNG LEE in the presence of)
of:)

Signature of Ming Chung Lee

Signature of Witness

Date

Name of Witness

EXECUTED for and on behalf of **ORICA**)
AUSTRALIA PTY LTD (ACN 004 117)
828) by its duly authorised officer in the)
presence of:)

Signature of Authorised Officer

Signature of Witness

Name and title of Authorised Officer

Name of Witness

Date

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USA, INC. by its duly authorised officer in)
the presence of:)

Signature of Authorised Officer

Signature of Witness

Name and title of Authorised Officer

Name of Witness

Date

SIGNED, SEALED and DELIVERED by)
DAVID OLAF JOHNSON in the presence of:
of:)

Signature of David Olaf Johnson

Signature of Witness

Date

Name of Witness

SIGNED, SEALED and DELIVERED by)
MING CHUNG LEE in the presence of:)

Signature of Ming Chung Lee

Signature of Witness

Date

Name of Witness

EXECUTED for and on behalf of ORICA)
AUSTRALIA PTY LTD (ACN 004 117)
828) by its duly authorised officer in the
presence of:)

Signature of Authorised Officer

Signature of Witness

Name and title of Authorised Officer


Name of Witness

Date

EXECUTED for and on behalf of ORICA)
USA, INC. by its duly authorised officer in)
the presence of:)

Signature of Authorised Officer

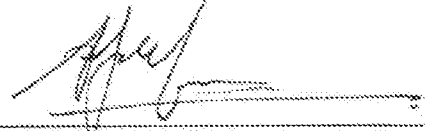

Signature of Witness


James K. Bonner, President
Name and title of Authorised Officer

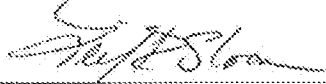
Tereasa K. Harsh
Name of Witness

March 5, 2019
Date

EXECUTED for and on behalf of **ORICA**)
INTERNATIONAL PTE LTD by its duly
authorised officer in the presence of:)



Signature of Authorised Officer



Signature of Witness

Adam Mooney, VP Technology
Name and title of Authorised Officer

Leif R. Sloan
Name of Witness

4 March 2019
Date