505773545 11/14/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5820362

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the THIS DOCUMENT DOES NOT AFFECT TITLE. MISSING WORDING BETWEEN THE ASSIGNEE'S NAME AND THE LIST OF PATENTS HAS BEEN ADDED previously recorded on Reel 045762 Frame 0991. Assignor(s) hereby confirms the ADD: AND INTERESTS IN AND TO THE INVENTION AND IMPROVEMENTS MADE OR CONCEIVED BY US DESCRIBED IN.

CONVEYING PARTY DATA

Name	Execution Date
ARASH SHAHINPOUR	10/07/2019
ANDREAS ROBERT ZEMLA	10/08/2019
CHRISTIAN EITSCHBERGER	10/23/2019

RECEIVING PARTY DATA

Name:	DYNAENERGETICS GMBH & CO. KG
Street Address:	KAISERSTRASSE 3
City:	TROISDORF
State/Country:	GERMANY
Postal Code:	53840

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	15975816	

CORRESPONDENCE DATA

Fax Number: (866)250-1636

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.

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Email:joneill@moylesip.comCorrespondent Name:MOYLES IP, LLCAddress Line 1:1 ENTERPRISE DRIVE

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Address Line 4: SHELTON, CONNECTICUT 06484

ATTORNEY DOCKET NUMBER:	DMC042US_CORRECTED	
NAME OF SUBMITTER:	JANELLE A. O'NEILL	
SIGNATURE:	/Janelle A. O'Neill/	
DATE SIGNED:	11/14/2019	

PATENT 505773545 REEL: 051039 FRAME: 0943

Total Attachments: 10 source=DMC042US Recordation Cover Sheet_10May18#page1.tif source=DMC042US_Original_Assignment_executed#page2.tif source=DMC042US_Original_Assignment_executed#page2.tif source=DMC042US_Original_Assignment_executed#page3.tif source=DMC042US_Original_Assignment_executed#page4.tif source=DMC042US_Corrected_Assignment_executed#page1.tif source=DMC042US_Corrected_Assignment_executed#page2.tif source=DMC042US_Corrected_Assignment_executed#page3.tif source=DMC042US_Corrected_Assignment_executed#page4.tif source=DMC042US_Corrected_Assignment_executed#page4.tif source=DMC042US_Corrected_Assignment_executed#page5.tif

PATENT REEL: 051039 FRAME: 0944

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4954616

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ARASH SHAHINPOUR	03/28/2018
ANDREAS ROBERT ZEMLA	03/29/2018
CHRISTIAN EITSCHBERGER	04/03/2018

RECEIVING PARTY DATA

Name:	DYNAENERGETICS GMBH & CO. KG		
Street Address:	KAISERSTRASSE 3		
City:	TROISDORF		
State/Country:	GERMANY		
Postal Code:	53840		

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	15975816	

CORRESPONDENCE DATA

Fax Number: (866)250-1636

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: 2038704024

Email: jbailey@moylesip.com **Correspondent Name:** MOYLES IP LLC

Address Line 1: 970 BEAVER DAM ROAD

Address Line 4: STRATFORD, CONNECTICUT 06614

ATTORNEY DOCKET NUMBER:	DMC042US
NAME OF SUBMITTER:	JANELLE A. BAILEY
SIGNATURE:	/Janelle A. Bailey/
DATE SIGNED:	05/10/2018

Total Attachments: 4

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> **PATENT** REEL: 051039 FRAME: 0945

GLOBAL ASSIGNMENT

In accordance with my/our obligation(s) under any employee agreement or (as applicable) arising out of other agreements, and/or for other good and valuable consideration of which we acknowledge receipt, I/we,

Inventor First Name	Inventor Middle Name	Inventor Last Name		Residence Town	Residence Country
Arash		Shahinpour	of	Troisdorf	DE
Andreas	Robert	Zemla	of	Much	DE
Christian		Eitschberger	of	München	DE:

hereby sell and assign to:

Name of Co	ompany: DynaEnergetics GmbH & Co. KG	
Address:	Kaiserstrasse 3, Troisdorf 53840, Germany	

herein referred to as "Company", its successors and assigns our entire respective rights, titles and interests in and to the invention and improvements made or conceived by us described in the application(s) listed in the following table:

Country of Filing	Type of Filing	Application Number	Filing Date	Title
US	Provisional	62/647,103	3/23/2018	FLUID-DISABLED DETONATOR AND METHOD OF USE
US	Utility	15/975,816	5/10/2018	FLUID-DISABLED DETONATOR AND METHOD OF USE

(We hereby authorize and request the Company or its delegated attorneys or agents to insert above the application number and filing date of the application(s) when known.)

and any and all applications for patent and patents therefrom in any and all countries, including all divisions, continuations, continuations-in-part, reexaminations, renewals, and reissues thereof, and all rights of priority resulting from the filing of the application(s), and authorize and request any official whose duty it is to issue patents, to issue any patent on the inventions and improvements resulting therefrom to the Company, or its successors or assigns, and agree that on request and without further consideration, we will communicate to the Company or its representatives or nominees any facts known to us respecting the inventions and improvements and testify in any legal proceeding, make all rightful oaths, sign all lawful papers and execute all

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instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights in all countries including, but not limited to, any provisional, non-provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, for any derivation proceedings relating thereto, and, as to any patents that issue from such applications, for any supplemental examination, derivation proceeding, opposition, post grant review, reissue, re-examination, inter partes review, or extension thereof, and generally do everything possible to aid the Company, its successors, assigns, and nominees to obtain and enforce proper patent protection for the invention and its improvements in all countries.

Remuneration claims of the inventor(s)/assignor(s) potentially arising from German Law on Employee Inventions, or any other respective country law, remain unaffected by this assignment.

Moyles IP Docket No. DMCU42	
INVENTOR 1	
Signature: Arash Shahinpour	Date: 7th October 201
Witnessed by: Signature ANDREAS ACMIA	Date: 2 th Oct. 2019
Printed Name of Witness	
Witnessed by: Signature	Date: <u>7° 0ct, 200</u>
CIAM MCNEUS Printed Name of Witness	

Moyles IP Docket No. DMC042

INVENTOR 2		
Signature:	Date:	8th October 2013
Andreas Robert Zemla		
Witnessed by: Signature	Date:	8th October 2013
Frank Cryziola		
Printed Name of Witness		
Witnessed by:	Date:	gred October 2019
Signature Daniet Vampert		
Printed Name of Wilhess		

Moyles IP Docket No. DMC042

INVENTOR 3	
Signature:	Date: <u>23, 10, 19</u>
Christian Eitschberger	
Witnessed by: Signature	Date: 23.10,15
Dadia Vienello	
Printed Name of Witness	
Witnessed by Signature	Date: <u>28.10.20</u> 19
Printed Name of Witness	
LUMBER LABOUR OF LABOURDE	

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