

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5672460

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|---|-------------------------------|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| BRYAN E. PAPILLON | 07/01/2014 |
| LARRY S. HOWE | 08/26/2014 |
| GIMTONG TEOWEE | 08/25/2014 |
| THOMAS ALLEN HOOPES | 07/14/2014 |
| RECEIVING PARTY DATA | |
| Name: | AUSTIN POWDER COMPANY |
| Street Address: | 25800 SCIENCE PARK DRIVE |
| City: | CLEVELAND |
| State/Country: | OHIO |
| Postal Code: | 44122 |
| PROPERTY NUMBERS Total: 1 | |
| Property Type | Number |
| Application Number: | 16542764 |
| CORRESPONDENCE DATA | |
| Fax Number: | (216)363-9001 |
| <i>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.</i> | |
| Phone: | 216.363.9000 |
| Email: | uspto@faysharpe.com |
| Correspondent Name: | FAY SHARPE LLP |
| Address Line 1: | 1228 EUCLID AVENUE, 5TH FLOOR |
| Address Line 2: | THE HALLE BUILDING |
| Address Line 4: | CLEVELAND, OHIO 44115 |
| ATTORNEY DOCKET NUMBER: | ATNZ200102US02 |
| NAME OF SUBMITTER: | ERIC HIGHMAN |
| SIGNATURE: | /Eric Highman/ |
| DATE SIGNED: | 08/16/2019 |
| Total Attachments: 12 | |
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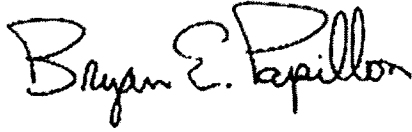
ASSIGNMENT OF INVENTION

WHEREAS, **BRYAN E. PAPILLON, LARRY S. HOWE** and **THOMAS ALLEN HOOPES** and **GIMTONG TEOWEE** (hereinafter sometimes referred to as "said inventors"), have invented certain new and useful improvements in an invention disclosed in a utility patent application entitled **METHOD AND APPARATUS FOR WIRELESS BLASTING** which invention (hereinafter sometimes referred to as "said invention") has been disclosed to and filed, under Docket No. **ATNZ 200102USP1**, in the patent files of **AUSTIN POWDER COMPANY** and which invention is the subject of provisional patent application serial no. 61/910,654 filed December 2, 2013.

NOW THEREFORE, it is agreed that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, said inventors have sold, assigned and transferred and by these presents do sell, assign and transfer unto **AUSTIN POWDER COMPANY**, an Ohio corporation, having a place of business at 25800 Science Park Drive, Cleveland, Ohio 44122, the entire right, title and interest in said invention in the United States of America and all foreign countries and in and to said U.S. patent application and all patent applications, divisions, substitutions, continuations and continuations-in-part thereof, and in all United States Letters Patents which may be granted thereon and all reissues and extensions thereof, and in all priority rights under the International Convention for the Protection of Industrial Property for every member country, and in all applications for patents (including related rights such as utility-model registrations, inventor's certificates, and the like) heretofore or hereafter filed for said invention in any foreign countries, and in all patents (including all extensions, renewals and reissues thereof) granted for said invention; said applications and patents to be held and enjoyed by said **AUSTIN POWDER COMPANY**, for its use and for the use of its successors and assigns, to the full end of the term for which Letters Patent on same may be granted, as fully and entirely as the same would have been held by said inventors had this assignment and sale not been made.

FURTHER, said inventors hereby agree to sign all lawful papers necessary or helpful in obtaining patents on said invention or in filing any divisional, continuation,

substitution, or reissue patent application or re-examination proceedings on said invention whether in the United States of America or in any foreign country.



BRYAN E. PAPILLON

01 July 2014

Date

CERTIFICATE OF ACKNOWLEDGEMENT

State of _____)
County of _____) ss

On this ___ day of _____, 2013, before me personally appeared BRYAN E. PAPILLON, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL)

Notary Public, State of _____

My Commission Expires: _____

LARRY S. HOWE

Date

CERTIFICATE OF ACKNOWLEDGEMENT

State of _____)
County of _____) ss

On this ___ day of _____, 2013, before me personally appeared LARRY S. HOWE, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL)

Notary Public, State of _____

My Commission Expires: _____

THOMAS ALLEN HOOPES

Date

CERTIFICATE OF ACKNOWLEDGEMENT

State of _____)
County of _____) ss

On this ___ day of _____, 2013, before me personally appeared THOMAS ALLEN HOOPES, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL)

Notary Public, State of _____
My Commission Expires: _____

GIMTONG TEOWEE

Date

CERTIFICATE OF ACKNOWLEDGEMENT

State of _____)
County of _____) ss

On this ___ day of _____, 2013, before me personally appeared **GIMTONG TEOWEE**, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL)

Notary Public, State of _____
My Commission Expires: _____

ASSIGNMENT OF INVENTION

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substitution, or reissue patent application or re-examination proceedings on said invention whether in the United States of America or in any foreign country.

BRYAN E. PAPILLON

Date

CERTIFICATE OF ACKNOWLEDGEMENT

State of _____)
County of _____) ss

On this ___ day of _____, 2013, before me personally appeared BRYAN E. PAPILLON, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL)

Notary Public, State of _____
My Commission Expires: _____

Larry S. Howe
LARRY S. HOWE

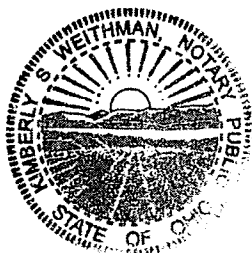
8/26/14
Date

CERTIFICATE OF ACKNOWLEDGEMENT

State of OHIO)
County of HURON) ss

On this 26th day of August, 2014, before me personally appeared LARRY S. HOWE, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL)



Kimberly S. Weithman
Notary Public, State of OHIO
My Commission Expires: 4-26-14

ASSIGNMENT OF INVENTION

WHEREAS, **BRYAN E. PAPILLON, LARRY S. HOWE** and **THOMAS ALLEN HOOPES** and **GIMTONG TEOWEE** (hereinafter sometimes referred to as "said inventors"), have invented certain new and useful improvements in an invention disclosed in a utility patent application entitled **METHOD AND APPARATUS FOR WIRELESS BLASTING** which invention (hereinafter sometimes referred to as "said invention") has been disclosed to and filed, under Docket No. **ATNZ 200102USP1**, in the patent files of **AUSTIN POWDER COMPANY** and which invention is the subject of provisional patent application serial no. 61/910,654 filed December 2, 2013.

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substitution, or reissue patent application or re-examination proceedings on said invention whether in the United States of America or in any foreign country.

BRYAN E. PAPILLON

Date

CERTIFICATE OF ACKNOWLEDGEMENT

State of _____)
County of _____) ss

On this ___ day of _____, 2013, before me personally appeared BRYAN E. PAPILLON, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL)

Notary Public, State of _____

My Commission Expires: _____

LARRY S. HOWE

Date

CERTIFICATE OF ACKNOWLEDGEMENT

State of _____)
County of _____) ss

On this ___ day of _____, 2013, before me personally appeared LARRY S. HOWE, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL)

Notary Public, State of _____

My Commission Expires: _____

THOMAS ALLEN HOOPES

Date

CERTIFICATE OF ACKNOWLEDGEMENT

State of _____)
County of _____) ss

On this ___ day of _____, 2013, before me personally appeared THOMAS ALLEN HOOPES, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL)

Notary Public, State of _____

My Commission Expires: _____



GIMTONG TEOWEE

8/25/14
Date

CERTIFICATE OF ACKNOWLEDGEMENT

State of _____)
County of _____) ss

On this ___ day of _____, 2013, before me personally appeared **GIMTONG TEOWEE**, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL)

Notary Public, State of _____

My Commission Expires: _____

ASSIGNMENT OF INVENTION

WHEREAS, **BRYAN E. PAPILLON, LARRY S. HOWE** and **THOMAS ALLEN HOOPES** and **GIMTONG TEOWEE** (hereinafter sometimes referred to as "said inventors"), have invented certain new and useful improvements in an invention disclosed in a utility patent application entitled **METHOD AND APPARATUS FOR WIRELESS BLASTING** which invention (hereinafter sometimes referred to as "said invention") has been disclosed to and filed, under Docket No. **ATNZ 200102USP1**, in the patent files of **AUSTIN POWDER COMPANY** and which invention is the subject of provisional patent application serial no. 61/910,654 filed December 2, 2013.

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BRYAN E. PAPILLON Date _____

CERTIFICATE OF ACKNOWLEDGEMENT

State of _____)
County of _____) ss

On this ___ day of _____, 2013, before me personally appeared BRYAN E. PAPILLON, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL) _____
Notary Public, State of _____
My Commission Expires: _____

LARRY S. HOWE Date _____

CERTIFICATE OF ACKNOWLEDGEMENT

State of _____)
County of _____) ss

On this ___ day of _____, 2013, before me personally appeared LARRY S. HOWE, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL) _____
Notary Public, State of _____
My Commission Expires: _____

Thomas Allen Hoopes
THOMAS ALLEN HOOPES

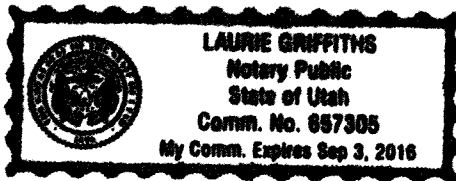
7/14/2014
Date

CERTIFICATE OF ACKNOWLEDGEMENT

State of UTAH)
County of SALT LAKE) ss

On this 14 day of JULY, 2014, before me personally appeared THOMAS ALLEN HOOPES, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL)



Laurie Griffiths
Notary Public, State of Utah
My Commission Expires: 9/3/16

GIMTONG TEOWEE

Date

CERTIFICATE OF ACKNOWLEDGEMENT

State of _____)
County of _____) ss

On this ___ day of _____, 2013, before me personally appeared **GIMTONG TEOWEE**, to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(SEAL)

Notary Public, State of _____
My Commission Expires: _____