

## PATENT ASSIGNMENT COVER SHEET

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|---|--------------------------------|
| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT                 |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT                     |
| <b>CONVEYING PARTY DATA</b>   |                                |
|   |                                |
| <b>Name</b>   | <b>Execution Date</b>          |
| HEIKKI KARVINEN   | 02/25/2019                     |
| PEDRO VILACA  | 02/25/2019                     |
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| <b>State/Country:</b>   | FINLAND                        |
| <b>Postal Code:</b>   | 00076                          |
| <b>PROPERTY NUMBERS Total: 1</b>  |                                |
|   |                                |
| <b>Property Type</b>  | <b>Number</b>                  |
| <b>Application Number:</b>  | 16312511                       |
| <b>CORRESPONDENCE DATA</b>  |                                |
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| <b>ATTORNEY DOCKET NUMBER:</b>  | 66897-5                        |
| <b>NAME OF SUBMITTER:</b>   | NALINI P. SAHADEO              |
| <b>SIGNATURE:</b>   | /nps/                          |
| <b>DATE SIGNED:</b>   | 06/21/2019                     |
| This document serves as an Oath/Declaration (37 CFR 1.63).  |                                |
| <b>Total Attachments: 2</b>   |                                |
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| source=02420397#page2.tif   |                                |

COMBINED DECLARATION FOR UTILITY OR  
DESIGN PATENT APPLICATION (37 CFR 1.63)  
AND ASSIGNMENT

Attorney Docket Number 66897-5  
First Named Inventor KARVINEN, Heikki  
Application Number COMPLETE IF KNOWN  
Application Number New Application  
Filing Date Herewith

**A NON-CONSUMABLE TOOL AND A PROCESS FOR SOLID-STATE PRODUCTION OF A CHANNEL AND A WELD JOINT, AND A STRUCTURE OF AT LEAST TWO COMPONENTS BASED ON ORIGINALLY BULK COMPONENTS OF SIMILAR, OR D MATERIALS**

(the Invention)

As a below named inventor, I hereby declare that:

This declaration is directed to:

- The attached application,  
OR  
 United States application number or PCT International application number **PCT/FI2017/050467**  
filed on **21 June 2017**.

The above-identified application was made or authorized to be made by me.  
I believe I am the original inventor or an original joint inventor of a claimed invention in the application.  
I hereby acknowledge that any willful false statement made in this declaration is punishable under 8 U 001 by  
fine or of not more than five or both.

WHEREAS, having place of businesses at PL 11000, 00076 Aalto,

Finland, as assignee, is desirous of acquiring all right, title and interest in and to said invention and any Patent that may be granted therefor.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, I (we), as inventor(s) and as assignor(s), hereby sell, assign and set over to said assignee the entire right, title and interest for the United States in and to said aforesaid application for Patent and all my (our) invention(s) disclosed and claimed in said aforesaid application, all original, divisional, continuation, substitute, reissue or reexamination applications and patents applied for or granted therefor in the United States and all rights for past infringement, and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said invention(s) or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for myself (ourselves) and my (our) legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all divisional, continuation, reissue and other applications for Patent on said invention(s) and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its re es all facts the undersigned res said invention(s), where ed, to testify in any in or other le dings in which any applications or patents m involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to assist assignee, its successors, assigns and nominees to obtain patent protection for said invention(s) in the United States, the expenses incident to said applications to be borne and paid by said assignee.

LEGAL NAME OF SOLE OR FIRST INVENTOR

**Heikki KARVINEN**

TURE

RESIDENCE: CITY

Espoo

STATE

COUNTRY

FI

5.2.2019

MAILING

Leipurinkuja 1 B 14 FI-02650 Espoo, Finland

{02349141.1}

DECLARATION FOR UTILITY OR DESIGN  
PATENT APPLICATION (37 CFR 1.63) AND ASSIGNMENT

Attorney Docket Number

66897-5

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identify them. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available. Petitioner/applicant is advised that documents which form the record of a patent application (such as the PTO/SB/01) are placed into the Privacy Act system of records DEPARTMENT OF COMMERCE, COMMERCE-PAT-7, System name: Patent Application Files. Documents not retained in an application file

LEGAL NAME OF ADDITIONAL JOINT INVENTOR, IF ANY:

DATE

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