

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3605772

|   |                                |
|---|--------------------------------|
| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT                 |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT                     |
| <b>CONVEYING PARTY DATA</b>   |                                |
| <b>Name</b>   | <b>Execution Date</b>          |
| ANDREAS HARTUNG   | 10/20/2015                     |
| MANFRED SCHILL  | 10/22/2015                     |
| GERHARD-HEINZ ROESELE   | 10/23/2015                     |
| <b>RECEIVING PARTY DATA</b>   |                                |
| <b>Name:</b>  | MTU AERO ENGINES AG            |
| <b>Street Address:</b>  | DACHAUER STRASSE 665           |
| <b>City:</b>  | MUNICH                         |
| <b>State/Country:</b>   | GERMANY                        |
| <b>Postal Code:</b>   | 80995                          |
| <b>PROPERTY NUMBERS Total: 1</b>  |                                |
| <b>Property Type</b>  | <b>Number</b>                  |
| <b>Application Number:</b>  | 14934970                       |
| <b>CORRESPONDENCE DATA</b>  |                                |
| <b>Fax Number:</b>  | (401)273-4447                  |
| <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> |                                |
| <b>Phone:</b>   | 401-273-4446                   |
| <b>Email:</b>   | drj@barjos.com                 |
| <b>Correspondent Name:</b>  | BARLOW, JOSEPHS & HOLMES, LTD. |
| <b>Address Line 1:</b>  | 101 DYER STREET                |
| <b>Address Line 2:</b>  | 5TH FLOOR                      |
| <b>Address Line 4:</b>  | PROVIDENCE, RHODE ISLAND 02903 |
| <b>ATTORNEY DOCKET NUMBER:</b>  | M078 P03075-US                 |
| <b>NAME OF SUBMITTER:</b>   | DAVID R. JOSEPHS               |
| <b>SIGNATURE:</b>   | /david r. josephs/             |
| <b>DATE SIGNED:</b>   | 11/06/2015                     |
| This document serves as an Oath/Declaration (37 CFR 1.63).  |                                |
| <b>Total Attachments: 3</b>   |                                |
| source=M078_P03075-US_P808476-US-1_decl-assign_SIGNED_ltr#page1.tif   |                                |
| source=M078_P03075-US_P808476-US-1_decl-assign_SIGNED_ltr#page2.tif   |                                |



Attorney Docket No. M078 P03075-US (U.S. Rights)

**ASSIGNMENT AND DECLARATION UNDER 37 C.F.R. § 1.63**  
**(For Use with Signed Application Data Sheet)**

Title of Invention: BLADE OR VANE ARRANGEMENT FOR A TURBOMACHINE

This assignment and declaration are directed to (check one):

- ☐ the attached application;  
☒ the application identified by the attorney docket no. and title of invention given above;  
☐ US Application or PCT International Application No. \_\_\_\_\_ filed \_\_\_\_\_

**ASSIGNMENT**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, as a below-named inventor I have sold and assigned, and by these presents hereby sell and assign, unto:

**Name of Assignee: MTU Aero Engines AG****Address of Assignee: Dachauer Strasse 665, 80995 Munich, Germany**

(hereinafter ASSIGNEE) all my right, title, and interest for the United States, its territories, and possessions in and to the above-identified invention and United States patent application, including any and all divisions or continuations thereof, and in and to any and all Letters Patent of the United States that may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, or assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by me had this Assignment not been made.

I hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue any and all such Letters Patent to said ASSIGNEE, its successors, or assigns in accordance herewith.

I warrant and covenant that I have the full and unencumbered right to sell and assign the interests herein sold and assigned and that I have not executed and will not execute any document or instrument in conflict herewith.

I further covenant and agree that I will communicate to said ASSIGNEE, its successors, legal representatives, or assigns all information known to me relating to said invention or patent application and that I will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings, and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives, or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent that may be granted therefor or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns, or to assist said ASSIGNEE, its successors, legal representatives, or assigns in obtaining, reissuing, or enforcing Letters Patent of the United States for said invention.

**DECLARATION**

As a below-named inventor, I hereby declare that:

The above-identified application was made or authorized to be made by me.

I believe that 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 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

Signature:

Inventor:

*Dr. Andreas Hartung*  
 Dr. Andreas Hartung

*20.10.2015*  
 DATE

Attorney Docket No. M078 P03075-US (U.S. Rights)

**ASSIGNMENT AND DECLARATION UNDER 37 C.F.R. § 1.63**  
(For Use with Signed Application Data Sheet)

Title of Invention: BLADE OR VANE ARRANGEMENT FOR A TURBOMACHINE

This assignment and declaration are directed to (check one):

- ☐ the attached application;  
☒ the application identified by the attorney docket no. and title of invention given above;  
☐ US Application or PCT International Application No. \_\_\_\_\_ filed \_\_\_\_\_

**ASSIGNMENT**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, as a below-named inventor I have sold and assigned, and by these presents hereby sell and assign, unto:

**Name of Assignee: MTU Aero Engines AG****Address of Assignee: Dachauer Strasse 665, 80995 Munich, Germany**

(hereinafter ASSIGNEE) all my right, title, and interest for the United States, its territories, and possessions in and to the above-identified invention and United States patent application, including any and all divisions or continuations thereof, and in and to any and all Letters Patent of the United States that may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, or assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by me had this Assignment not been made.

I hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue any and all such Letters Patent to said ASSIGNEE, its successors, or assigns in accordance herewith.

I warrant and covenant that I have the full and unencumbered right to sell and assign the interests herein sold and assigned and that I have not executed and will not execute any document or instrument in conflict herewith.

I further covenant and agree that I will communicate to said ASSIGNEE, its successors, legal representatives, or assigns all information known to me relating to said invention or patent application and that I will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings, and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives, or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent that may be granted therefor or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns, or to assist said ASSIGNEE, its successors, legal representatives, or assigns in obtaining, reissuing, or enforcing Letters Patent of the United States for said invention.

**DECLARATION**

As a below-named inventor, I hereby declare that:

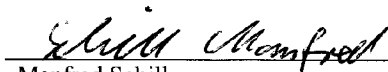
The above-identified application was made or authorized to be made by me.

I believe that 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 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

Signature:

Inventor: Manfred Schill

22.10.2015  
DATE

Attorney Docket No. M078 P03075-US (U.S. Rights)

**ASSIGNMENT AND DECLARATION UNDER 37 C.F.R. § 1.63**  
**(For Use with Signed Application Data Sheet)**

Title of Invention: BLADE OR VANE ARRANGEMENT FOR A TURBOMACHINE

This assignment and declaration are directed to (check one):

- ☐ the attached application;  
☒ the application identified by the attorney docket no. and title of invention given above;  
☐ US Application or PCT International Application No. \_\_\_\_\_ filed \_\_\_\_\_

**ASSIGNMENT**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, as a below-named inventor I have sold and assigned, and by these presents hereby sell and assign, unto:

**Name of Assignee: MTU Aero Engines AG****Address of Assignee: Dachauer Strasse 665, 80995 Munich, Germany**

(hereinafter ASSIGNEE) all my right, title, and interest for the United States, its territories, and possessions in and to the above-identified invention and United States patent application, including any and all divisions or continuations thereof, and in and to any and all Letters Patent of the United States that may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors, or assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by me had this Assignment not been made.

I hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue any and all such Letters Patent to said ASSIGNEE, its successors, or assigns in accordance herewith.

I warrant and covenant that I have the full and unencumbered right to sell and assign the interests herein sold and assigned and that I have not executed and will not execute any document or instrument in conflict herewith.

I further covenant and agree that I will communicate to said ASSIGNEE, its successors, legal representatives, or assigns all information known to me relating to said invention or patent application and that I will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings, and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives, or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent that may be granted therefor or thereon, including reissues or extensions, in said ASSIGNEE, its successors, or assigns, or to assist said ASSIGNEE, its successors, legal representatives, or assigns in obtaining, reissuing, or enforcing Letters Patent of the United States for said invention.

**DECLARATION**

As a below-named inventor, I hereby declare that:

The above-identified application was made or authorized to be made by me.

I believe that 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 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

Signature:

Inventor: Gerhard Heinz Roessele

23.10.2015  
 DATE