504645452 11/16/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4692172

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------------|----------------|
| EIK HERBSLEB | 09/16/2015 |
| FABIANO DAHER ADEGAS | 12/20/2015 |
| POUL BRANDT CHRISTENSEN | 10/26/2015 |
| ROBERT BOWYER | 09/15/2015 |
| FABIO CAPONETTI | 09/30/2015 |
| IAN COUCHMAN | 09/12/2015 |
| LARS FINN SLOTH LARSEN | 10/27/2016 |

RECEIVING PARTY DATA

| Name: | VESTAS WIND SYSTEMS A/S |
|-----------------------------|-------------------------|
| Street Address: HEDEAGER 42 | |
| City: | AARHUS N |
| State/Country: | DENMARK |
| Postal Code: | DK-8200 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14766380 |

CORRESPONDENCE DATA

Fax Number:

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.

Email: cthomas@pattersonsheridan.com,

psdocketing@pattersonsheridan.com

Correspondent Name: PATTERSON & SHERIDAN, LLP

Address Line 1: 24 GREENWAY PLAZA

Address Line 2: SUITE 1600

Address Line 4: HOUSTON, TEXAS 77046

| ATTORNEY DOCKET NUMBER: | VEST/0358USP (075707) |
|-------------------------|-----------------------|
| NAME OF SUBMITTER: | GERO G. MCCLELLAN |
| SIGNATURE: | /Gero G. McClellan/ |
| DATE SIGNED: | 11/16/2017 |

PATENT 504645452 REEL: 044149 FRAME: 0515

Total Attachments: 14 source=VEST358_ASG#page1.tif source=VEST358_ASG#page2.tif source=VEST358_ASG#page3.tif source=VEST358_ASG#page4.tif source=VEST358_ASG#page5.tif source=VEST358_ASG#page6.tif source=VEST358_ASG#page7.tif source=VEST358_ASG#page8.tif source=VEST358_ASG#page9.tif source=VEST358_ASG#page10.tif source=VEST358_ASG#page11.tif source=VEST358_ASG#page11.tif source=VEST358_ASG#page12.tif source=VEST358_ASG#page13.tif source=VEST358_ASG#page13.tif

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

| | Eik HERBSLEB | | Fabiano DAHER ADEGAS |
|----|-------------------------|----|----------------------|
| 1) | Uldhøjs Ager 2 | 2) | Sølvgade 11, 2 Th |
| | 8300 Odder | | DK-1304 Copenhagen |
| | DENMARK | | DENMARK |
| | Poul Brandt CHRISTENSEN | | Robert BOWYER |
| 3) | Heimdalsvej 6 | 4) | 18 Adam Walk |
| | DK-8680 Ry | | LONDON |
| | DENMARK | | SW6 6LE |
| | | | UNITED KINGDOM |
| | Fabio CAPONETTI | ٥, | lan COUCHMAN |
| 5) | Saltholmsgade 9 | 6) | 135 Brookfield Drive |
| | DK-8000 Aarhus C | | HORLEY |
| | DENMARK | | RH6 9NS |
| | | | UNITED KINGDOM |
| | Lars Finn SLOTH LARSEN | | |
| 7) | Toften 22 | 8) | · |
| | DK-6470 Sydals | | |
| | DENMARK | | |

(hereinafter referred to as Assignors), have invented a certain invention entitled:

MODEL BASED CONTROLLER FOR A WIND TURBINE GENERATOR

for which application for Letters Patent in the United States was filed on August 6, 2015, under Serial No. 14/766,380, executed on even date herewith; and

WHEREAS, VESTAS WIND SYSTEMS A/S, a corporation having a place of business at Hedeager 42, DK-8200 Aarhus N, DENMARK (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a conventional, division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, conventional, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.
- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

| 1) | 16/9 -2015 (DATE) | Eik Malele Eik HERBSLEB |
|----|-------------------|----------------------------|
| 2) | (DATE) | Fabiano DAHER ADEGAS |
| 3) | (DATE) | Poul Brandt CHRISTENSEN |
| 4) | (DATE) | Robert BOWYER |
| 5) | (DATE) | Fabio CAPONETTI |
| 6) | (DATE) | lan COUCHMAN |
| 7) | (DATE) | Lars Finn SLOTH LARSEN |

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

| | Eik HERBSLEB | 0) | Fabiano DAHER ADEGAS | |
|----|-------------------------|----|-----------------------------------|-------|
| 1) | Uldhøjs Ager 2 | 2) | Sølvgade 11,2 Th ECHINGER STRASTE | |
| | 8300 Odder | | DK-1304 Copenhagen 10E, 32 | . / i |
| | DENMARK | | DENMARK 80805 MUNICH, GOLHAN | M , |
| | Poul Brandt CHRISTENSEN | | Robert BOWYER | |
| 3) | Heimdalsvej 6 | 4) | 18 Adam Walk | |
| Ì | DK-8680 Ry | | LONDON | |
| | DENMARK | | SW6 6LE | |
| 1 | | | UNITED KINGDOM | |
| | Fabio CAPONETTI | | Ian COUCHMAN | |
| 5) | Saltholmsgade 9 | 6) | 135 Brookfield Drive | |
| | DK-8000 Aarhus C | | HORLEY | |
| | DENMARK | | RH6 9NS | |
| } | | | UNITED KINGDOM | |
| | Lars Finn SLOTH LARSEN | | | |
| 7) | Toften 22 | 8) | | |
| | DK-6470 Sydals | | | |
| | DENMARK | | | |

(hereinafter referred to as Assignors), have invented a certain invention entitled:

MODEL BASED CONTROLLER FOR A WIND TURBINE GENERATOR

for which application for Letters Patent in the United States was filed on August 6, 2015, under Serial No. 14/766,380, executed on even date herewith; and

WHEREAS, VESTAS WIND SYSTEMS A/S, a corporation having a place of business at Hedeager 42, DK-8200 Aarhus N, DENMARK (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a conventional, division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

ADDRES CORRECTED IN 20 DEC 2015 Jahren PATENTY

- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, conventional, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.
- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

| 1) | (DATE) | Eik HERBSLEB |
|----|-------------------|-------------------------|
| 2) | 20 DEC 2015(DATE) | Fabiano DAHER ADEGAS |
| 3) | (DATE) | Poul Brandt CHRISTENSEN |
| 4) | (DATE) | Robert BOWYER |
| 5) | (DATE) | Fabio CAPONETTI |
| 6) | (DATE) | Ian COUCHMAN |
| 7) | (DATE) | Lars Finn SLOTH LARSEN |

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

| | Eik HERBSLEB | | Fabiano DAHER ADEGAS |
|----|-------------------------|----|----------------------|
| 1) | Uldhøjs Ager 2 | 2) | Sølvgade 11, 2 Th |
| | 8300 Odder | | DK-1304 Copenhagen |
| | DENMARK | | DENMARK |
| 2, | Poul Brandt CHRISTENSEN | | Robert BOWYER |
| 3) | Heimdalsvej 6 | 4) | 18 Adam Walk |
| | DK-8680 Ry | | LONDON |
| | DENMARK | | SW6 6LE |
| | | | UNITED KINGDOM |
| | Fabio CAPONETTI | ۵) | Ian COUCHMAN |
| 5) | Saltholmsgade 9 | 6) | 135 Brookfield Drive |
| | DK-8000 Aarhus C | | HORLEY |
| | DENMARK | | RH6 9NS |
| | | | UNITED KINGDOM |
| _, | Lars Finn SLOTH LARSEN | 0) | |
| 7) | Toften 22 | 8) | |
| | DK-6470 Sydals | | |
| | DENMARK | | |

(hereinafter referred to as Assignors), have invented a certain invention entitled:

MODEL BASED CONTROLLER FOR A WIND TURBINE GENERATOR

for which application for Letters Patent in the United States was filed on August 6, 2015, under Serial No. 14/766,380, executed on even date herewith; and

WHEREAS, VESTAS WIND SYSTEMS A/S, a corporation having a place of business at Hedeager 42, DK-8200 Aarhus N, DENMARK (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a conventional, division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, conventional, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.
- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

| 1) | (DATE) | Eik HERBSLEB |
|----|-------------------|-------------------------|
| 2) | (DATE) | Fabiano DAHER ADEGAS |
| 3) | 26/10-26/5 (DATE) | Poul Brandt CHRISTENSEN |
| 4) | (DATE) | Robert BOWYER |
| 5) | (DATE) | Fabio CAPONETTI |
| 6) | (DATE) | Ian COUCHMAN |
| 7) | (DATE) | Lars Finn SLOTH LARSEN |

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

| 1) | Eik HERBSLEB Uldhøjs Ager 2 8300 Odder DENMARK | 2} | Fabiano DAHER ADEGAS Sølvgade 11, 2 Th DK-1304 Copenhagen DENMARK |
|-----|---|----|---|
| 3) | Poul Brandt CHRISTENSEN Heimdalsvej 6 DK-8680 Ry DENMARK | 4) | Robert BOWYER 18 Adam Walk LONDON SW6 6LE UNITED KINGDOM |
| 5) | Fabio CAPONETTI Saltholmsgade 9 DK-8000 Aarhus C DENMARK | 6) | Ian COUCHMAN 135 Brookfield Drive HORLEY RH6 9NS UNITED KINGDOM |
| 7,) | Lars Finn SLOTH LARSEN Toften 22 DK-6470 Sydals DENMARK | 8) | |

(hereinafter referred to as Assignors), have invented a certain invention entitled:

MODEL BASED CONTROLLER FOR A WIND TURBINE GENERATOR

for which application for Letters Patent in the United States was filed on August 6, 2015, under Serial No. 14/766,380, executed on even date herewith; and

WHEREAS, VESTAS WIND SYSTEMS A/S, a corporation having a place of business at Hedeager 42, DK-8200 Aarhus N, DENMARK (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise, (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a conventional, division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filling and prosecuting substitute, conventional, divisional, continuing or additional applications covering said Invention; (d) for filling and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.
- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

| 1) | (DATE) | EIK HERBSLEB |
|----|--------------------|-------------------------------|
| 2) | (DATE) | Fabiano DAHER ADEGAS |
| 3) | (DATE) | Poul Brandt CHRISTENSEN |
| 4) | 19 583 2015 (DATE) | <u>Las A</u> Robert BOWYER |
| 5) | (DATE) | Fabio CAPONETTI |
| 6) | (DATE) | Ian COUCHMAN |
| 7) | (DATE) | Lars Finn SLOTH LARSEN |

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

| 1) | Eik HERBSLEB Uldhøjs Ager 2 8300 Odder DENMARK | 2) | Fabiano DAHER ADEGAS Sølvgade 11, 2 Th DK-1304 Copenhagen DENMARK |
|----|---|----|--|
| 3) | Poul Brandt CHRISTENSEN Heimdalsvej 6 DK-8680 Ry DENMARK | 4) | Robert BOWYER 18 Adam Walk LONDON SW6 6LE UNITED KINGDOM |
| 5) | Fabio CAPONETTI Saltholmsgade 9 DK-8000 Aarhus C DENMARK | 6) | Ian COUCHMAN 135 Brookfield Drive HORLEY RH6 9NS UNITED KINGDOM |
| 7) | Lars Finn SLOTH LARSEN Toften 22 DK-6470 Sydals DENMARK | 8) | |

(hereinafter referred to as Assignors), have invented a certain invention entitled:

MODEL BASED CONTROLLER FOR A WIND TURBINE GENERATOR

for which application for Letters Patent in the United States was filed on August 6, 2015, under Serial No. 14/766,380, executed on even date herewith; and

WHEREAS, VESTAS WIND SYSTEMS A/S, a corporation having a place of business at Hedeager 42, DK-8200 Aarhus N, DENMARK (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a conventional, division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

1

- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, conventional, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.
- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

| 1) | | _ (DATE) | |
|----|------------|----------|-----------------------------|
| | | | Eik HERBSLEB |
| 2) | | _ (DATE) | Fabiano DAHER ADEGAS |
| | | | FADIANO DAMER ADEGAS |
| 3) | | _ (DATE) | Poul Brandt CHRISTENSEN |
| | | | 1 our Brandt Of INTO LENGER |
| 4) | | _ (DATE) | Robert BOWYER |
| 5) | 30,09.2015 | _ (DATE) | Atio Cocelos. |
| | | | Fabio CAPÓNETTI |
| 6) | | _ (DATE) | |
| | | | Ian COUCHMAN |
| 7) | | _ (DATE) | |
| | | | Lars Finn SLOTH LARSEN |

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

| 1) | Eik HERBSLEB | 2) | Fabiano DAHER ADEGAS |
|----|-------------------------|----|----------------------|
| ' | Uldhøjs Ager 2 | -' | Sølvgade 11, 2 Th |
| | 8300 Odder | | DK-1304 Copenhagen |
| | DENMARK | | DENMARK |
| | Poul Brandt CHRISTENSEN | 4) | Robert BOWYER |
| 3) | Heimdalsvej 6 | 4) | 18 Adam Walk |
| | DK-8680 Ry | | LONDON |
| | DENMARK | | SW6 6LE |
| | | | UNITED KINGDOM |
| | Fabio CAPONETTI | 6) | Ian COUCHMAN |
| 5) | Saltholmsgade 9 | | 135 Brookfield Drive |
| | DK-8000 Aarhus C | | HORLEY, SURREY |
| | DENMARK | | RH6 9NS |
| | | | UNITED KINGDOM |
| | Lars Finn SLOTH LARSEN | | |
| 7) | Toften 22 | 8) | |
| | DK-6470 Sydals | | |
| | DENMARK | | |

(hereinafter referred to as Assignors), have invented a certain invention entitled:

MODEL BASED CONTROLLER FOR A WIND TURBINE GENERATOR

for which application for Letters Patent in the United States was filed on August 6, 2015, under Serial No. 14/766,380, executed on even date herewith; and

WHEREAS, VESTAS WIND SYSTEMS A/S, a corporation having a place of business at Hedeager 42, DK-8200 Aarhus N, DENMARK (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a conventional, division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, conventional, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.
- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

| 1) | (DATE) | |
|----|------------------|--------------------------------|
| | | Eik HERBSLEB |
| 2) | (DATE) | Fabiana DALIER ADECAS |
| | | Fabiano DAHER ADEGAS |
| 3) | (DATE) | Poul Brandt CHRISTENSEN |
| 4. | (0.475) | r dai Brandt Griffice Perfocit |
| 4) | (DATE) | Robert BOWYER |
| 5) | (DATE) | |
| | | Fabio CAPONETTI |
| 6) | × 9/12/15 (DATE) | × h |
| ŕ | , | lan COŬCHMAN |
| 7) | (DATE) | |
| | | Lars Finn SLOTH LARSEN |

ASSIGNMENT FOR APPLICATION FOR PATENT

WHEREAS:

Names and Addresses of Inventors:

| 1) | Eik HERBSLEB Uldhøjs Ager 2 8300 Odder DENMARK | 2) | Fabiano DAHER ADEGAS Sølvgade 11, 2 Th DK-1304 Copenhagen DENMARK |
|----|---|----|---|
| 3) | Poul Brandt CHRISTENSEN Heimdalsvej 6 DK-8680 Ry DENMARK | 4) | Robert BOWYER 18 Adam Walk LONDON SW6 6LE UNITED KINGDOM |
| 5) | Fabio CAPONETTI Saltholmsgade 9 DK-8000 Aarhus C DENMARK | 6) | Ian COUCHMAN 135 Brookfield Drive HORLEY RH6 9NS UNITED KINGDOM |
| 7) | Lars Finn SLOTH LARSEN Toften 22 DK-6470 Sydals DENMARK | 8) | |

(hereinafter referred to as Assignors), have invented a certain invention entitled:

MODEL BASED CONTROLLER FOR A WIND TURBINE GENERATOR

for which application for Letters Patent in the United States was filed on August 6, 2015, under Serial No. 14/766,380, executed on even date herewith; and

WHEREAS, VESTAS WIND SYSTEMS A/S, a corporation having a place of business at Hedeager 42, DK-8200 Aarhus N, DENMARK (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said application (hereinafter referred to as Application), and the invention disclosed therein (hereinafter referred to as Invention), and in and to all embodiments of the Invention, heretofore conceived, made or discovered by said Assignors, and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter referred to as Patents) thereon granted in any and all countries and groups of countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Assignors to have been received in full from said Assignee:

1. Said Assignors hereby sell, assign, transfer and convey to Assignee the full and exclusive right, title and interest (a) in and to said Application and said Invention; (b) in and to all rights to apply for patents on said Invention in any and all countries pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all Applications filed and any and all Patents granted on said Invention in any and all countries and groups of countries, including each and every Application filed and each and every Patent granted on any application which is a conventional, division, substitution, or continuation of said Application; and (d) in and to each and every reissue or extension of any of said Patents.

- 2. Said Assignors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest to said Invention herein conveyed in any and all countries and groups of countries. Such cooperation by said Assignors shall include prompt production of pertinent facts and documents, giving testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, conventional, divisional, continuing or additional applications covering said Invention; (d) for filing and prosecuting applications for reissuance of any of said Patents; (e) for interference or other priority proceedings involving said Invention; and (f) for legal proceedings involving said Invention and any application therefore and any Patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Assignors in providing such cooperation shall be paid for by said Assignee.
- 3. The term and covenants of this agreement shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Assignors, their respective heirs, legal representatives and assigns.
- 4. Said Assignors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

| 1) | (DATE) | Eik HERBSLEB |
|----|-------------------|-------------------------|
| 2) | (DATE) | Fabiano DAHER ADEGAS |
| 3) | (DATE) | Poul Brandt CHRISTENSEN |
| 4) | (DATE) | Robert BOWYER |
| 5) | (DATE) | Fabio CAPONETTI |
| 6) | (DATE) | lan COUCHMAN |
| 7) | 27/10-2016 (DATE) | Lars Finn SLOTH LARSEN |