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IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF CALIFORNIA

GENERAL ELECTRIC COMPANY, et al.,

Case No. 1:10-cv-00674 LJO JLT

Counterclaim-Defendants,

DECISION OF THE COURT; FINDINGS OF  
FACT AND CONCLUSIONS OF LAW  
FOLLOWING BENCH TRIAL

vs.

THOMAS WILKINS,

Counterclaim-Plaintiff.

MITSUBISHI HEAVY INDUSTRIES, Ltd., et al,

Intervenors

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The Court conducted a six-day bench trial in this case. The bench trial began on November 6, 2012 and ended on November 14, 2012. The sole issue before the Court was whether Counter-Plaintiff Thomas A. Wilkins (“Mr. Wilkins”) should be named a co-inventor of U.S. Patent No. 6,921,985 (“the ’985 patent”) pursuant to 35 U.S.C. § 256.

Having considered the evidence presented at trial and the parties’ proposed findings of fact and conclusions of law submitted after trial, the Court concludes that the heavy burden of proof by clear and convincing evidence has not been met, and therefore that Mr. Wilkins should not be named a co-inventor of the ’985 patent. The Court sets forth the following findings of fact and conclusions of law underlying its conclusion, in accordance with Federal Rule of Civil Procedure 52(a).

1 **I. FINDINGS OF FACT<sup>1</sup>**

2 **A. The Parties**

3 1. Counterclaim-Defendants General Electric Company and General Electric Wind Energy,  
4 LLC (collectively “GE”) develop wind energy technologies. (Doc. 76 ¶ 8.) Counterclaim-Defendant  
5 General Electric Company is the named assignee of the ’985 patent. (JTX-701.)

6 2. Mr. Wilkins is a former GE employee who claims to be an unnamed co-inventor of the ’985  
7 patent. (Doc. No. 177 ¶¶ 28, 158.)

8 3. Intervenors Mitsubishi Heavy Industries, Ltd. and Mitsubishi Power Systems Americas, Inc.  
9 (collectively “Mitsubishi”) have obtained a license from Mr. Wilkins to any rights he may have in the  
10 ’985 patent. (Doc. No. 126 at 1, 6.)

11 **B. Technology Background: Low Voltage Ride Through**

12 4. “Low voltage events” are dips in the voltage on the power grid. Low voltage events occur  
13 when there are shorts in the wires of the power grid, which can be caused by any number of random  
14 events such as animal contact or lightning. (Kirtley Tr. 1212:11-1213:1.)

15 5. During low voltage events, wind turbines connected to the power grid generally face two  
16 problems, both of which can cause damage to the wind turbine itself: (1) an increase in blade speed; and  
17 (2) an increase in current in the turbine. (Kirtley Tr. 1214:5-23.)

18 6. In the past, wind turbines responded to low voltage events by simply disconnecting from the  
19 power grid. However, as wind farms became responsible for producing a growing percentage of the  
20 overall grid power, utilities began requiring wind turbines to remain connected to the grid and continue  
21 operating during low voltage events. The ability of a wind turbine to meet this requirement is known  
22 as “low voltage ride through” (“LVRT”). (JTX-701 1:25-33, 41-42; Harley Tr. 611:4-612:6.)

23 **C. The ’985 Patent**

24 7. The ’985 patent is entitled, “Low Voltage Ride Through for Wind Turbine Generators.” The  
25 ’985 patent describes a LVRT solution. The inventors named in the patent are: Henning Luetze (“Mr.  
26 Luetze”), Wilhelm Janssen (“Mr. Janssen”), Andres Buecker (“Mr. Buecker”), Ralf Hagedorn (“Mr.

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<sup>1</sup> Any finding of fact that may be construed as a conclusion of law is hereby also adopted as a conclusion of law. Likewise, any conclusion of law that may be construed as a finding of fact is hereby also adopted as a finding of fact. See, e.g., ProMex, LLC v. Hernandez, 781 F. Supp. 2d 1013, 1016, 1019 (C.D. Cal. 2011).

1 Hagedorn”), and Till Hoffman (“Mr. Hoffman”). (JTX-701.)

2 8. The ’985 patent consists of four independent claims and forty-one dependent claims. (JTX-  
3 701; Harley Tr. 623:12-18.)

4 9. The four independent claims of the ’985 patent are:

5 (a) Claim 1:

6 A wind turbine generator comprising: a blade pitch control system to vary a pitch  
7 of one or more blades; a turbine controller coupled with the blade pitch control  
8 system; a first power source coupled with the turbine controller and with the  
9 blade pitch control system to provide power during a first mode of operation; and  
10 an uninterruptible power supply coupled to the turbine controller and with the  
11 blade pitch control system to provide power during a low voltage event; wherein  
12 the turbine controller causes the blade pitch control system to vary the pitch of  
13 the one or more blades in response to the transition in response to detection of a  
14 transition from the first mode of operation. (JTX-701 6:65-7:13.)

11 (b) Claim 15:

12 A wind turbine generator comprising: a generator; a power converter coupled  
13 with the generator, the power converter having an inverter coupled to receive  
14 power from the generator, a converter controller coupled with the inverter to  
15 monitor a current flow in the inverter wherein the converter controller is coupled  
16 to receive power from an uninterruptible power supply during a low voltage  
17 event, and a circuit coupled with the input of the inverter and with the converter  
18 controller to shunt current from the inverter and generator rotor in response to a  
19 control signal from the converter controller. (JTX-701 7:58-8:3.)

17 (c) Claim 29:

18 A method comprising: providing power to wind turbine components using a  
19 generator of the wind turbine; detecting a low voltage event; receiving power  
20 from an uninterruptible power supply to a first subset of wind turbine  
21 components, wherein the first subset of wind turbine components comprises a  
22 blade pitch controller to selectively power the blade pitch controller to maintain  
23 a rotor speed below a predetermined overspeed limit during the low voltage  
24 event; and disconnecting a second subset of wind turbine components from the  
25 generator during the low voltage event. (JTX-701 8:46-58.)

22 (d) Claim 39:

23 An apparatus comprising: means for providing power to wind turbine  
24 components using a generator of the wind turbine; means for detecting a low  
25 voltage event; means for providing power from an uninterruptible power supply  
26 to a first subset of wind turbine components, wherein the first subset of wind  
27 turbine components comprises a blade pitch controller to selectively power the  
28 blade pitch controller to maintain a rotor speed below a predetermined overspeed  
limit during the low voltage event; and means for disconnecting a second subset  
of wind turbine components from the generator during the low voltage event.  
(JTX-701 9:13-10-5.)

1           10. Claim 1 requires the use of an uninterruptible power supply (“UPS”) to supply power to the  
2 turbine controller and the blade pitch controller during a low voltage event. The turbine controller and  
3 blade pitch controller are powered in order to allow the wind turbine to control its blade speed during  
4 a low voltage event. (See Harley Tr. 624:4-625:1.)

5           11. Claim 15 requires the use of a UPS to supply power to the converter controller, which is  
6 coupled to a crowbar. The converter controller is powered so that it may send a signal to the crowbar  
7 to shunt current away from the wind turbine’s inverter and generator rotor during a low voltage event.  
8 (See Harley Tr. 630:8-19.)

9           12. Claims 29 and 39 require a method and apparatus that (1) detects a low voltage event; (2)  
10 uses a UPS to supply power to a subset of components that includes the blade pitch controller so that  
11 the rotor speed may be maintained below a predetermined limit; and (3) disconnects a second subset of  
12 components during the low voltage event. (See Harley Tr. 625:17-627:3.)

13 **D. Mr. Wilkins’ Credibility**

14           13. Mr. Wilkins is biased. (See infra Section I.)

15           14. Mr. Wilkins further undermined his own credibility while testifying at trial. First, the Court  
16 found many of Mr. Wilkins’ responses to basic questions purposefully evasive. (See, e.g., Wilkins Tr.  
17 339: 25-340:6; 344:5-345:20; 350:8-351:13; 351:21-352:14; 383:16-384:23; 401:10-19.) Second, Mr.  
18 Wilkins was repeatedly impeached during cross-examination, to the point where the veracity of even  
19 simple answers were called into question. (See, e.g., Wilkins Tr. 314:19315:24; 322:12-18; 367:23-  
20 368:24; 370:21-372:11; 395:7-396:6; 397:20-398:24.) Third, having observed Mr. Wilkins’ demeanor  
21 during examination, the Court is left with the firm impression that Mr. Wilkins is a game player who was  
22 more concerned about gaining personal advantage than testifying truthfully.

23           15. Taking all these factors together, the Court does not find Mr. Wilkins’ trial testimony to be  
24 credible evidence. The Court attributes weight to Mr. Wilkins’ trial testimony only on the rare occasion  
25 where that testimony has sufficiently been corroborated and reinforced by independent, credible  
26 evidence.

27 **E. Mr. Wilkins’ Work at Lake Benton II**

28           16. Lake Benton II was a 100 megawatt class wind farm located in Minnesota. The wind farm

1 was owned by Zond/Enron Wind and connected to the power grid owned by Northern States Power  
2 (“NSP”). (Gonzales Tr. 104:1-15; Christenson Tr. 975: 13-17; Wilkins Tr. 135:5-13.)

3 17. Under the B-5 Appendix to the Lake Benton II purchase agreement, the wind turbines were  
4 required to have the ability to ride through voltage dips down to 70% of nominal voltage. (WTX-190;  
5 Gonzales Tr. 106:17-107:1; Kirtley Tr. 1328:7-10.)

6 18. Mr. Wilkins acted as Zond/Enron Wind’s lead technical person on the matter. Mr. Wilkins  
7 was tasked with understanding the requirements of the B-5 Appendix and developing solutions that met  
8 those specifications. (Gonzales Tr. 110:14-112:4.)

9 19. After some modifications were made, the Lake Benton II wind turbines were tested and  
10 eventually shown to be capable of riding through voltage dips down to 70% of nominal voltage for 0.5  
11 seconds. This satisfied the LVRT requirements under the B-5 Appendix. (WTX-191; Christenson Tr.  
12 1004:3-14; Gonzales Tr. 117:9-118:18.)

13 20. Mr. Wilkins drafted a document entitled, “Scope of Work for LB1 and LB2,” which outlined  
14 the modifications made to the Lake Benton II wind turbines. The document indicates that two changes  
15 were made: (1) the addition of a new DC power supply for new contactors; and (2) modifications in the  
16 converter software. (WTX-248.)

17 21. No modifications were made to the Lake Benton II wind turbines in order to control blade  
18 pitch during a low voltage event. (Gonzales Tr. 119:23-120:12; 121:25-122:10.)

19 22. The Lake Benton II wind turbines had a very small capacitor on the control board that keeps  
20 an overspeed sensor alive for a brief period during a grid outage. (Christenson Tr. 999:3-7.)

21 23. The nonvolatile overspeed (“NOS”) capacitor did not power the converter controller of the  
22 Lake Benton II wind turbines during a low voltage event. The converter controller had enough power  
23 on its own. (Kirtley Tr. 1239:4-10; Wilkins Tr. 371:19-372:11.)

24 24. The Lake Benton II wind turbines did not utilize a crowbar to achieve LVRT. (Christenson  
25 Tr. 999:11-13; 1009:21-1010:2.)

26 25. There is no other documentary evidence regarding modifications made to the Lake Benton  
27 II wind turbines. Controller diagrams of the Lake Benton II wind turbines were offered into evidence,  
28 but the diagrams were authored before any of the Lake Benton II LVRT tests were conducted and did

1 not, in of themselves, reflect any modifications made by Mr. Wilkins. (JTX-704; Harley Tr. 697:20-  
2 698:8; Wilkins Tr. 352:2-14.)

3 26. Mr. Wilkins was aware of the policy requiring an employee to complete and submit an  
4 invention disclosure form (“IDL”) for any idea that was believed to be inventive, but Mr. Wilkins did  
5 not complete an IDL for any idea developed at Lake Benton II relating to the ’985 patent. (Christenson  
6 Tr. 976:21-977:19; Wilkins Tr. 376:8-12.)

7 **F. Mr. Wilkins’ Work with the German Engineers**

8 27. In October 2000, Mr. Wilkins traveled to Germany to meet with several German engineers,  
9 including Mr. Luetze, Mr. Janssen, and Mr. Buecker. (WTX-033; WTX-368.)

10 28. The only documentary evidence offered with respect to this trip is a short email outlining  
11 the very general objectives of the trip. The purpose of the trip was to discuss the implementation of  
12 voltage control (which is the subject matter of a different patent) at India Mesa. (WTX-368.)

13 29. Mr. Wilkins left Enron Wind in May 2001. (Wilkins Tr. 177:23-25.)

14 30. At the end of 2001, the E.ON standards were promulgated in Germany. Under the E.ON  
15 standards, European wind turbines were required to be capable of riding through voltage dips of as low  
16 as 15% of nominal voltage. (Harley Tr. 725:4-726:24; Christenson Tr. 1000:7-10, 1002:24; 1012:10-12;  
17 Wilkins Tr. 385:7-11.)

18 31. Mr. Wilkins returned to Enron Wind in January 2002.<sup>2</sup> (Wilkins Tr. 178:4-6.)

19 32. Mr. Wilkins’ work included, among other things, converter design and implementation for  
20 the “Americianized” model of the 1.5 MW wind turbine. This work was done in conjunction with Trace,  
21 a converter manufacturer, and in discussion with Mr. Janssen, who at the time was also working on the  
22 design of a different converter. (See WTX-008; WTX-249; WTX-362; WTX-371; MTX-036; Wilkins  
23 Tr. 178:7-180:9.)

24 33. On April 16, 2002, Mr. Janssen sent Mr. Wilkins an email, in which Mr. Janssen suggests  
25 that Mr. Wilkins travel to Salzbergen, Germany to meet with him. Mr. Janssen outlines several topics  
26 that he wishes to discuss, including (1) the behavior of the turbine system at grid tolerances of 70% of  
27 nominal voltage; (2) a comparison of different converter manufacturers; and (3) the use of simulations

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28 <sup>2</sup> Mr. Wilkins was later employed by GE after GE acquired certain assets from Enron Wind. (Doc. 657 at 2.)

1 to test converters. (WTX-373.)

2 34. On April 17, 2002, Mr. Janssen sent Mr. Wilkins an email indicating that the converter that  
3 he was working on (“the SEG converter”) was unable to ride through voltage dips of less than 10% of  
4 nominal voltage. Mr. Janssen also noted that he was informed that the Trace converters at Lake Benton  
5 II were tested for LVRT using a transformer, and not a doubly fed generator. Mr. Janssen emphasized  
6 that the two tests were not interchangeable. (WTX-436.)

7 35. In response, Mr. Wilkins clarified that the testing of the Lake Benton II converters did use  
8 a doubly fed generator. Mr. Wilkins later sent Mr. Janssen a copy of the test results from Lake Benton  
9 II. (WTX-436; MTX-043.)

10 36. On April 22, 2002, Mr. Janssen sent Mr. Wilkins an email asking for information regarding  
11 the ride through requirements and specifications of utilities. Mr. Janssen suggested that this information  
12 was needed to evaluate the performance of the SEG converter. (MTX-036.)

13 37. As a whole, the emails between Mr. Wilkins and Mr. Janssen show that the two discussed  
14 converter design and LVRT. Nevertheless, there is no specific mention in any of the emails of a UPS  
15 coupled to a converter for the purpose of LVRT.

16 38. In August 2002, Mr. Wilkins traveled to Salzbergen in order to meet with Mr. Luetze and  
17 the other German engineers. (WTX-033; Wilkins Tr. 202:2-25; Luetze Tr. 440:5-7.)

18 39. Mr. Luetze testified in his deposition that during Mr. Wilkins’ trip there was one or perhaps  
19 there were two meetings where only Mr. Luetze and Mr. Wilkins were present. Those meetings lasted  
20 for several hours in total, but not a full day. (Luetze Tr. 450:6-20; 456:13-16.)

21 40. Mr. Luetze testified in his deposition that there was also one meeting that was attended by  
22 Mr. Luetze, Mr. Wilkins, and other people. (Luetze Tr. 450:21-25.)

23 41. Mr. Luetze testified in his deposition that as a general matter Mr. Wilkins discussed grid  
24 requirements and LVRT solutions. This included: a capacitor that was used for a wind turbine by Mr.  
25 Cosineau (Luetze Tr. 441:7-9); crowbars for the 1.5 MW wind turbine (Luetze Tr. 441:20-21); power  
26 management and the removal of non-critical systems during a low voltage event (Luetze Tr. 442:1-8);  
27 pitch control systems (Luetze Tr. 441:9-11); and the use of UPSs, both large and small, to meet LVRT  
28 requirements (Luetze Tr. 443:9-20; 446:25-447:12; 448:9-17; 452:10-17).

1           42. However, despite acknowledging that these *discussions* took place, Mr. Luetze testified in  
2 his deposition that he could not say what exactly Mr. Wilkins *contributed* to the '985 patent. (Luetze  
3 Tr. 453:21-454:3; 462:16-24.)

4           43. Mr. Luetze testified in his deposition that he could not recall where exactly the concept of  
5 a UPS supplying power to the controllers during a low voltage event originated from and that this was  
6 a “very obvious requirement.” (Luetze Tr. 459:5-8; 461:6-462:8.)

7           44. Mr. Wilkins admitted, in the context of his work at Lake Benton II, that it was obvious to  
8 any engineer that a capacitor could provide energy storage for a converter controller. (See Wilkins Tr.  
9 372:18-373:3.)

10          45. Mr. Luetze was the person with the most knowledge regarding what ideas were ultimately  
11 shared between Mr. Wilkins and the German engineers regarding LVRT. (See Romano Tr. 1172:11-19;  
12 1188:6-20.)

13          46. Beyond Mr. Wilkins’ testimony at trial, there is no other evidence, either documentary or  
14 testimonial, regarding Mr. Wilkins’ August 2002 trip to Germany.

15 **G.     The Florida Power & Light Project**

16          47. In the fall of 2002, Florida Power and Light (“FP&L”) requested that the wind turbines at  
17 Taiban Mesa, New Mexico be able to stay connected to the power grid when voltage dropped down to  
18 30% of nominal voltage. (WTX-027; Fogarty Tr. 824:12-825:6.)

19          48. The nature of the LVRT problem posed by FP&L’s request (30% of nominal voltage) was  
20 substantially different from the one posed at Lake Benton II (70% of nominal voltage). (Christenson Tr.  
21 996:20-997:7, 1004:15-23; Kirtley Tr. 1323:8-10.)

22          49. On October 29, 2002, Mr. Wilkins drafted and circulated a document entitled “Design and  
23 Cost Analysis Of Adding Extended Ride Through Capability To The GE WIND 1.5 WTG” (“Design  
24 and Cost Analysis”). The Design and Cost Analysis represented Mr. Wilkins’ proposal for achieving  
25 LVRT in response to FP&L’s request. (WTX-027; WTX-051; Christenson Tr. 1022:2-8; Romano Tr.  
26 1174:7-1175:10.)

27          50. The concept embodied in Mr. Wilkins’ proposal was the use of a 50-kilowatt UPS, which  
28 is a large UPS, to supply power to *all* auxiliary systems for 60 seconds during a low voltage event. The



1 UPS then supplied power only to the wind turbine's essential electronic equipment for up to two hours.  
2 (WTX-027 at GEWK00034738.)

3 51. Mr. Wilkins' proposal acknowledged that the pitch system would need to be able to pitch  
4 toward feather (pitch away from the wind) during the low voltage event in order to protect the system  
5 from overspeed. (WTX-027 at GEWK00034737, 41.)

6 52. Mr. Wilkins' proposal also suggested that if the converter's capacity to withstand the low  
7 voltage event was exceeded, the crowbar would be fired. (WTX-027 at GEWK00034737.)

8 53. Mr. Wilkins admitted, however, that coupling a crowbar to the converter was not his idea.  
9 (Wilkins Tr. 280:5-12; 286:12-20; 387:17-389:13.)

10 54. By late summer or early fall of 2002, the German engineers in Salzbergen were already in  
11 the process of developing their own LVRT solution to meet the more stringent E.ON standards (15%  
12 nominal voltage). (Romano Tr. 1177:8-16.)

13 55. In an email sent on November 22, 2002, Mr. Luetze outlined his solution for meeting the  
14 E.ON standards. The approach entailed the use of a 24 VDC UPS (an ultracapacitor) to supply power  
15 to the converter controller during the low voltage event. Further, the pitch system would be powered  
16 by a UPS (in the form of a battery) and would pitch towards 90 degrees during the low voltage event.  
17 (WTX-062 at GEWK00256612-13.)

18 56. Under this approach, the 24 VDC UPS ultracapacitor supplied power to all the controllers  
19 during the low voltage event. (See GETX-2159 at GEWK00225199; Hoffman Tr. 1116:2-16; Romano  
20 Tr. 1187:5-11.)

21 57. By December 2002, GE decided to pursue Mr. Luetze's approach to satisfy FP&L's LVRT  
22 request and not Mr. Wilkins' 50-kilowatt UPS approach. The high cost of Mr. Wilkins' approach was  
23 a factor in the decision. (Christenson Tr. 983:18-20; 987:1-5.)

#### 24 **H. The '985 Patent Application Process**

25 58. In December 2002, Mr. Wilkins resigned from GE. (WTX-084; WTX-210.)

26 59. Thus, Tim Mohammad, a GE engineer, drafted an invention disclosure letter on December  
27 5, 2002, ("the December 5 IDL") outlining Mr. Wilkins' proposed LVRT solution as embodied in the  
28 Design and Cost Analysis. (WTX-205.)

1           60. On December 16, 2002, Dr. James Fogarty (“Dr. Fogarty”) drafted an invention disclosure  
2 letter of his own (“the December 16 IDL”). (WTX-068.)

3           61. The December 16 IDL incorporated the 50-kilowatt UPS solution proposed by Mr. Wilkins  
4 as reflected in the Design and Cost Analysis and the December 5 IDL. (Fogarty Tr. 845:1-25; WTX-068  
5 at GEWK00366053.)

6           62. The December 16 IDL also incorporated the use of a reversible crowbar, which Dr. Fogarty  
7 attributed to the team of German engineers in Salzbergen. (WTX-068 at GEWK00366054; Fogarty Tr.  
8 845:18-846:3.)

9           63. In general, Dr. Fogarty learned of the German team’s ideas through his discussions with  
10 them. (Fogarty Tr. 846:4-13.)

11           64. Dr. Fogarty conceded that he was never involved in the discussions among Mr. Wilkins, Mr.  
12 Luetze, and Mr. Buecker during Mr. Wilkins’ 2002 Germany trip. Dr. Fogarty also conceded that he  
13 never received information regarding what ideas those individuals may have shared among one other.  
14 (Fogarty Tr. 915:24-916:13.)

15           65. Dr. Fogarty named Mr. Wilkins as an inventor in the December 16 IDL as a result of his  
16 inclusion of the 50-kilowatt UPS solution. Dr. Fogarty also placed question marks in the subsequent  
17 signature line because he was unsure of the names of the other inventors for the other ideas. (Fogarty  
18 Tr. 846:19-847:18.)

19           66. Dr. Fogarty did not intend to suggest that Mr. Wilkins was the sole inventor of the invention  
20 disclosed in the December 16 IDL. (Fogarty Tr. 847:19-21.)

21           67. On January 15, 2003, Dr. Fogarty drafted a second invention disclosure letter (“the January  
22 15 IDL”). The January 15 IDL was almost identical to the December 16 IDL and did not include any  
23 substantive changes. (WTX-206; Fogarty Tr. 853:2-7.)

24           68. On January 16, 2003, Dr. Fogarty drafted a third invention disclosure letter (“the January  
25 16 IDL”) to encompass the LVRT solution presented by Mr. Leutze and the team of German engineers.  
26 (See WTX-170; Fogarty Tr. 854:12-856:8.)

27           69. Dr. Fogarty did not intend to include any idea from Mr. Wilkins. (Fogarty Tr. 856:9-12.)

28           70. Dr. Fogarty indicated in the January 16 IDL that the identities of the inventors still needed

1 to be determined. (Fogarty Tr. 857:2-16.)

2 71. Dr. Fogarty believed that both the ideas embodied in the January 15 IDL and the January 16  
3 IDL were worth patenting. (WTX-170.)

4 72. Both invention disclosures were quickly forwarded to GE's outside patent counsel to begin  
5 the patent application process. (See Mendonsa Tr. 1033:15-21.)

6 73. GE's outside patent counsel was given one week to prepare and file the application for the  
7 patent. The drafting of the application was rushed due to an upcoming customer presentation. (Mallie  
8 Tr. 514:8-515:4; Christenson Tr. 987:25-988:3.)

9 74. The draft application named Mr. Wilkins as an inventor. (JTX-702.)

10 75. Paul Mendonsa ("Mr. Mendonsa"), who drafted the patent application for the '985 patent,  
11 believed that he used the January 16 IDL to draft the application but included Mr. Wilkins name in the  
12 application due to a simple "mix-up." (Mendonsa Tr. 1029:11-14, 1044:8-1045:2.) The Court finds that  
13 it was much more than a mix-up. It was a hurried job without the important factual discovery and  
14 investigation having been completed before the trigger on the application was pulled.

15 76. Mr. Mendonsa and Dr. Fogarty corresponded about drafts of the patent application prior to  
16 its filing, but Dr. Fogarty never commented on the fact that Mr. Wilkins was included as an inventor on  
17 the cover page. (Mendonsa Tr. 1034:9-1038:15.)

18 77. On January 23, 2003, Mr. Mendonsa circulated a copy of the proposed patent application  
19 to the German inventors, but Mr. Mendonsa does not recall receiving any comments from the German  
20 inventors. (WTX-090; Mendonsa Tr. 1039:5-15.)

21 78. The application for the '985 patent was filed on January 24, 2003. (JTX-702.)

22 79. On February 12, 2003, Lisa Moyles ("Ms. Moyles"), GE's in-house patent counsel, sent an  
23 email to Mr. Luetze, Mr. Buecker, Mr. Janssen, and Dietmar Meyer ("Mr. Meyer"), among others, with  
24 several documents attached: (1) an IDL for interrupted pitching; (2) an IDL for yawing a wind turbine;  
25 (3) the January 15 IDL; and (4) the as-filed application for the '985 patent. (WTX-103.)

26 80. In the email, Ms. Moyles stated that the as-filed application incorporated at least two IDLs  
27 and that she wanted to "clean up" the situation. Therefore, Ms. Moyles requested a written narrative  
28 describing what each inventor believed his contribution to be regarding the as-filed patent application.

1 (WTX-103.)

2 81. On February 18, 2003, Mr. Meyer responded to Ms. Moyles' email. (WTX-112.)

3 82. Mr. Meyer was not a lawyer, and Ms. Moyles did not rely on him for legal determinations.

4 (Moyles Tr. 1062:23-1063:12.)

5 83. Mr. Meyer indicated that he had "checked the issue" with Mr. Luetze and Mr. Buecker, and  
6 the LVRT issue could be divided into "three" categories: (1) the UPS was attributable to Mr. Wilkins;  
7 (2a) the converter idea was attributable to Mr. Henning, Mr. Buecker, and Mr. Janssen; (2b) the idea to  
8 switch off electric devices such as fans during the low voltage event was attributable to Mr. Henning,  
9 Mr. Buecker, and Mr. Janssen; and (3) the interrupted pitching system was attributable to Mr. Hoffman  
10 and Mr. Hagedorn. (WTX-112.)

11 84. The email, however, does not indicate what standard Mr. Meyer applied in deciding which  
12 names to list; what instructions, if any, Mr. Meyer provided to Mr. Leutze and Mr. Buecker; whether  
13 anyone else felt obligated to include Mr. Wilkins for claims because his name had already appeared in  
14 the cover sheet of the as-filed application, or anything else Mr. Leutze and Mr. Buecker may have been  
15 thinking, had discussed, or had relied upon. Thus, the substantive opinions lack foundation.

16 85. On March 11, 2003, Stefan Rieken ("Mr. Rieken"), a GE patent engineer, prepared a chart  
17 dividing the interests in the '985 patent. The chart divided the interests in the same manner as did the  
18 Meyer email: Mr. Wilkins was attributed with the concept of using a equal or less than 50 kVA UPS;  
19 Mr. Leutze, Mr. Buecker, and Mr. Janssen were attributed with the converter ideas; and Mr. Hoffman  
20 and Mr. Hagedorn were attributed with the interrupted pitching concept. (WTX-122.)

21 86. Mr. Rieken based his determinations on discussions he had with Mr. Buecker. (McGinness  
22 Tr. 1149:18-1150:8.)

23 87. However, there is no indication as to the extent or specific substance of the discussions, nor  
24 is there any indication upon what, if anything, Mr. Rieken relied on as a result of the discussions to place  
25 him in a position of knowledge to divide those interests among anyone.

26 88. In March or April 2003, Ms. Moyles held a conference call to discuss inventorship of the  
27 as-filed patent application. (WTX-465; Mallie Tr. 561:9-562:3.)

28 89. Mr. Mallie could not recall who participated in the conference call, but he believed that at

1 least two of the five German engineers named as inventors in the as-filed application were on the call.  
2 (Mallie Tr. 561:9-562:3.)

3 90. On April 8, 2003, Mr. Mallie circulated an email summarizing the conference call. Suffice  
4 it to say that details were not a focal point of the email. After discussing the issue with all the inventors  
5 and reviewing materials, Mr. Mallie recommended in the email that Mr. Wilkins be removed from the  
6 pending application because Mr. Wilkins' original idea was not disclosed in the application. Mr. Mallie  
7 also recommended that GE prepare a new patent application that covers Mr. Wilkins' concept. (GETX-  
8 2323.)

9 91. The '985 patent was issued on July 26, 2005. Mr. Wilkins is not named as an inventor in  
10 the patent. (JTX-701.)

### 11 **I. Mr. Wilkins' Financial Relationship with Mitsubishi**

12 92. In March 2008, a law firm working with Mitsubishi contacted Mr. Wilkins and asked him  
13 to work for Mitsubishi in connection with a proceeding pending between GE and Mitsubishi in the U.S.  
14 International Trade Commission ("ITC"). (GETX-2499.)

15 93. Between March 2008 and the end of January 2009, Mr. Wilkins billed Mitsubishi close to  
16 \$150,000 for approximately 1,000 hours of work searching for prior art in an attempt to help Mitsubishi  
17 invalidate the '985 patent in the ITC proceeding. Mitsubishi also paid Mr. Wilkins another \$50,000 in  
18 legal fees associated with the ITC proceeding. (GETX-2661.)

19 94. In August 2009, after the ITC hearing had been completed, Mr. Wilkins entered a second  
20 agreement with Mitsubishi. That agreement was later amended in December 2009. Pursuant to these  
21 agreements, Mitsubishi agreed to pay Mr. Wilkins \$100,000 for an option to license the '985 patent and  
22 \$200,000 in retainer fees. (GETX-2451; GETX-2477.)

23 95. In December 2009, Mitsubishi exercised its option to license the '985 patent. Mitsubishi  
24 paid Mr. Wilkins \$1,500,000 for the license. Mitsubishi also has the option of extending the license by  
25 paying Mr. Wilkins another \$1,000,000 by December 18, 2012. (GETX-2482.)

## 26 **II. CONCLUSIONS OF LAW**

### 27 **A. Framework for Correcting a Patent**

28 The issuance of a patent "creates a presumption that the named inventors are the true and only

1 inventors.” Ethicon, Inc. v. United States Surgical Corp., 135 F.3d 1456, 1460 (Fed. Cir. 1998) (citation  
2 omitted). However, pursuant to 35 U.S.C. § 256, a court may order correction of a patent and have an  
3 individual named a co-inventor if that individual was erroneously omitted from the patent. See Stark  
4 v. Advanced Magnetics, 119 F.3d 1551, 1553 (Fed. Cir. 1997). The court’s analysis with respect to a  
5 claim brought under § 256 generally consists of two steps. See Trovan, Ltd. v. Sokymat SA, 299 F.3d  
6 1292, 1302 (Fed. Cir. 2002). First, the court must construe the patent claims in dispute “to determine  
7 the subject matter encompassed” by the claims. Id. Second, the court must “then compare the alleged  
8 contributions of each asserted co-inventor with the subject matter of the properly construed claim[s] to  
9 . . . determine whether the correct inventors were named.” Id.

#### 10 **B. Claim Construction**

11 The parties do not dispute any particular term in the patent. However, during trial the parties  
12 suggested that a dispute existed as to whether the figures in the patent, or the descriptions thereof, limit  
13 the scope of the claims of the patent. For example, much was discussed regarding the description of  
14 Figure 3, which provides, in part: “In one embodiment, UPS 330 does not have sufficient capacity to  
15 energize all of the electrical loads served by LVDP 320.” (JTX-701 3:67-4:2.) There was suggestion  
16 that this language somehow narrowed the scope of the claims of the patent by intimating that the UPS  
17 was to be of a certain size or in a certain location.

18 As the patent itself indicates, the invention described in the patent “is illustrated by way of  
19 example, and not by way of limitation, in the figures of the accompanying drawings . . .” (JTX-701 2:3-  
20 5.) Moreover, the Federal Circuit has “cautioned against limiting the claimed invention to preferred  
21 embodiments or specific examples in the specification.” Teleflex, Inc. v. Ficosa N. America Corp., 299  
22 F.3d 1313, 1328 (Fed. Cir. 2002). “Absent . . . clear statements of scope, [courts] are constrained to  
23 follow the language of the claims, rather than that of the written description.” Id. Here, the claims in  
24 the patent are broad in scope and therefore the Court construes them as such.

#### 25 **C. Mr. Wilkins’ Contributions**

26 Conception, which is the “formation in the mind of the inventor[] of a definite and permanent  
27 idea of the complete and operative invention,” is the touchstone of inventorship. Burroughs Wellcome  
28 Co. v. Barr Laboratories, Inc., 40 F.3d 1223, 1227 (Fed. Cir. 1994) (internal quotation marks omitted).

1 Thus, to be a co-inventor an individual must “*contribute in some significant manner to the conception*  
2 *of the invention.*” Fina Oil & Chemical Co. v. Ewen, 123 F.3d 1466, 1473 (Fed. Cir. 1997) (emphasis  
3 added). “[M]erely assisting the actual inventor after conception of the claimed invention;” providing  
4 the actual inventor with well-known principles or state of the art without having a definite idea of the  
5 claimed combination as a whole; or simply reducing the actual inventor’s idea to practice using state of  
6 the art does not make one a co-inventor. Ethicon, 135 F.3d at 1460.

7 To be a co-inventor, an individual need not contribute to the conception of every claim of the  
8 patent, nor must he make the same amount of contribution as another inventor. See 35 U.S.C. § 116.  
9 “A contribution to one claim is enough.” Ethicon, 135 F.3d at 1460. Therefore, “the critical question  
10 for joint conception is who conceived, as that term is used in the patent law, the subject matter of the  
11 claims at issue.” Id.

12 Because the issuance of a patent creates a presumption that the named inventors are the true and  
13 only inventors, an individual claiming that he was omitted as a named inventor in the patent carries a  
14 “heavy” burden. Hess v. Advanced Cardiovascular Sys., Inc., 106 F.3d 976, 980 (Fed. Cir. 1997). The  
15 alleged co-inventor must prove his contribution to the conception of the claims at issue by “clear and  
16 convincing evidence.” Id. To meet this burden, an alleged co-inventor cannot rely solely on his own  
17 testimony as to the facts. See Trovan, 299 F.3d at 1302. Rather, “an alleged co-inventor must supply  
18 evidence to corroborate his testimony.” Ethicon, 135 F.3d at 1461. Corroborating evidence may take  
19 many forms, such as contemporaneous documents prepared by the alleged co-inventor; circumstantial  
20 evidence relating to the inventive process; or testimony provided from someone other than the alleged  
21 co-inventor. Id.

22 “Whether an alleged inventor’s testimony has been sufficiently corroborated is evaluated under  
23 a ‘rule of reason’ analysis.” Id. Under this analysis, “an evaluation of *all* pertinent evidence must be  
24 made so that a sound determination of the credibility of the [alleged] inventor’s story may be reached.”  
25 Price v. Symsek, 988 F.2d 1187, 1194 (Fed. Cir. 1993) (emphasis in original). The court must “consider  
26 corroborating evidence in context, make necessary credibility determinations, and assign appropriate  
27 probative weight to the evidence[.]” Ethicon, 135 F.3d at 1464. In the end, the corroborating evidence  
28 and the alleged co-inventor’s testimony must together establish inventorship by clear and convincing

1 evidence. Id.

### 3 III. CONCLUSION

4 A person who claims to be a co-inventor would ordinarily be of nearly indispensable value to the  
5 proof of that claimed contribution. Mr. Wilkins leaves this case with no credibility. He was a purchased  
6 witness/party, and whether or not that was the intent of Mitsubishi, clearly that was the result. His bias  
7 is only paralleled by his attitude that this is all a game. His definition of truth seems to be that which  
8 personally will benefit him most. The Court does not share that definition. Over and over again during  
9 his trial testimony, Mr. Wilkins studied the questions in an obvious attempt to project where the answer  
10 might take him—or more to the point, trap him. Impeachment during cross examination became so  
11 constant that it became routine, even to the point of the Court’s finding it difficult to believe the obvious  
12 without corroboration.

13 A second witness who should have been key to attempting to meet the burden of proof was the  
14 retained expert for Mitsubishi, Professor Ronald Harley. He is intelligent and experienced in pertinent  
15 matters, and he had strong opinions. The fundamental problem with his opinions is that he relied heavily  
16 on Mr. Wilkins, and therefore lacked a credible foundation. He accepted Mr. Wilkins’ deposition and  
17 trial testimony as true without concern for an independent analysis for credibility. He never had any  
18 give/take discussions with Wilkins that might have facilitated such an exercise so that he could have  
19 made a crucial determination.

20 The third witness who should have been in the linchpin category to prove the case for Mr.  
21 Wilkins was Inventor Luetze. Mr. Luetze, a member of what was referred to during the trial as “The  
22 German Group,” expressed strong opinions that Mr. Wilkins contributed to the relevant patent, and an  
23 equally strong opinion that he should have been included as an inventor of the ‘985. At first blush, this  
24 testimony was largely convincing, at least until he was put to the test of explaining the basis for the  
25 opinions. He was unable to give even a single, specific or convincing example to justify the conclusion  
26 of Wilkins’ contribution. (See Luetze deposition, pages 457-459, 462). With that absence of foundation,  
27 the opinions themselves lacked the weight needed to convince.

28 Absent those three witnesses, the trier of fact is left to look to the documentation of the



1 discussions between Mr. Luetze and Mr. Wilkins. Simply put, there are no reliable documents that  
2 verify what, if anything, Mr. Wilkins contributed to any of the claims of the '985 patent. The fact that  
3 discussions occurred is alone not enough. The burden remains unmet in that the Court is not clearly  
4 convinced that Mr. Wilkins contributed in some significant manner to the conception or reduction to  
5 practice of the "Low Voltage Ride Through for Wind Turbine Generators" patent #6921985 (aka the  
6 '985 patent). Judgment is to enter in favor of the General Electric parties and against the Wilkins and  
7 the Mitsubishi parties.

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IT IS SO ORDERED.

**Dated: November 29, 2012 /s/ Lawrence J. O'Neill**  
UNITED STATES DISTRICT JUDGE