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| Applicant(s) | Geert DEVISCH | **DECLARATION**  **UNDER 37 C.F.R. § 1.132** |
| Serial No. | 14/399,752 |
| Filing Date | November 7, 2014 |
| Group Art Unit | 3745 |
| Examiner Name | HUNTER, John S. |
| Confirmation No. | 7315 |
| Attorney Docket No. | 7020-261 |
| Title: WINDTURBINE AND BUILDING HAVING SUCH A WIND TURBINE | | |

To the Director of Patents and Trademarks

Sir:

1. I, Ibrahim Bakry, do declare and state:

2. I am a citizen of Syria, residing at Russia, Nizhny Novgorod state, St. Timereziva, D.3

3. I am author of publication has ISSN 2227-7498 and No. 2162 which published in Research Journal of University of Aleppo R.J.A.U, holder of a Bachelor of Science degree in Mechanical Engineering, Aeronautical Specialist, from Aleppo University, from which I graduated first in my class, currently studying Master of Science in Avionics in Russia.

4. I am an expert in computational fluid dynamic (CFD) analysis and turbine devices. This expert based on the Fluid, Aerodynamics and CFD courses I received in the university, and then I developed them by my own based on Ansys Tutorials and Academics Books. Then worked for two years as teaching assistant holding responsibilities of CFD laboratory of University of Aleppo, where there we did real studies of wind turbines for the market, besides freelancering over internet.

5. I have reviewed U.S. patent application serial no. 14/399,752 to inventor Geert Devisch,(“Devisch”) as well as the cited references U.S. Patent No. 5,852,331 to Giorgini (“Giorgini”) and U.S. Patent No. 6,465,899 to Roberts (“Roberts”).

6. I have conducted a CFD analysis of the device of claim 1, as well as CFD analysis of other turbine devices. I have discovered that a device as recited in claim 1 exhibits substantially increased rotor velocity at given wind velocities, relative to previously known turbine devices.

7. This increased rotor velocity is unexpected, and could not have been predicted by an expert in the field of wind turbines at the time of filing of Devisch based on existing knowledge in the field, including Roberts and Giorgini.

8. This increased rotor velocity over previously known turbine devices is due, in my opinion, to the unique structure of the turbine device recited in claim 1, in particular that when the vanes and the blades are in line with one another, they merge into each other at the second blade ends of the blades and the first vane ends of the vanes at approximately the same curvature approximately mathematically tangentially in a plane approximately at right angles to the rotation shaft, that there are approximately twice as many blades as vanes, that the curvature of the blades, at the location of their first blade ends, extends radially to the rotation shaft in this plane, that the curvature of the vanes in this plane is described by a part of an approximately logarithmic spiral, and that the ratio of the distance between the second vane ends of two consecutive vanes and the distance between the second blade ends of two consecutive blades of the rotor is given by a factor A which can assume values from 2.6 on (collectively, the “Features”).

9. Neither Roberts nor Giorgini discloses the Features. Neither Roberts nor Giorgini discloses the factor A assuming values from 2.6 on. No expert in the field of wind turbines at the time of filing of Devisch would have thought to modify Roberts or Giorgini in such a way as to achieve the Features. There would have been no reason for doing so.

10. No expert in the field of wind turbines would have thought to combine Roberts and Giorgini, as proposed by the Office Action dated May 5, 2017 for Devisch (the “Office Action”). Their designs are very different, and it would not have been apparent that they could have been combined in any practical matter. Furthermore, there would have been no apparent benefit in doing so.

11. The Examiner states on pages 9-10 of the Office Action that “it would have been obvious to a person having ordinary skill in the art before the time the invention was made to apply the teachings of Giorgini to the arrangement of Roberts in order for one of ordinary skill in the art to perform routine experimentation to optimize the arrangement of Roberts for the desired outcome of increasing the speed of the air traveling through the vanes and being supplied to the rotor in order to achieve increased energy output of the wind turbine of Roberts.” I disagree with this statement. It would not have been obvious to such a person to combine Giorgini and Roberts as proposed to the Examiner. There would have been no reason to believe that such a combination would result in the “desired outcome” stated by the Examiner. Even if Roberts and Giorgini were combined for some reason, no one would end up with a turbine having the Features.

12. There is no reason to believe that any person trying to optimize their wind turbine design would arrive at the Features. Wind turbines have been around for many decades, and in all this time nobody has come up with the Features before Devisch. Furthermore, there is no single variable to be optimized. Rather, there is a complex set of design features, including the entire shape and geometry of a turbine device, each of which has various effects on the others. Therefore, it is not a simple or obvious matter to find the best combination of such design features.

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I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: \_\_\_\_\_\_05/11/2017\_\_\_\_\_\_\_ \_\_\_\_ Ibrahim Bakry \_\_\_\_\_

Mr. Ibrahim Bakry