Wind Harvest Files International Patent Application for Reinforced Blade for Vertical Axis Wind Turbines

PCT filing extends global protection on the company's breakthrough VAWT technology, preserving rights across 150+ countries through the end of 2027.

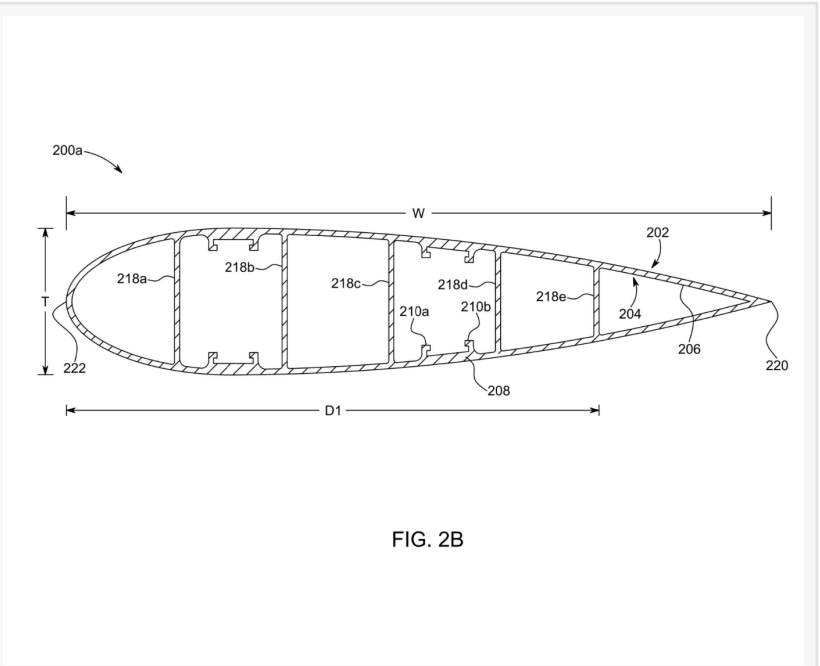

FIG. 2B

Diagram of Patented VAWT Blade Design - Side View

DAVIS, CA, UNITED STATES, May 8, 2026 /EINPresswire.com/ -- Wind Harvest International, Inc. (Wind Harvest), a pioneer in low-altitude, utility-scale vertical axis wind turbine (VAWT) technology, announced today that it has filed an international patent application under the Patent Cooperation Treaty (PCT) covering its Reinforced Blade for a Vertical Axis Wind Turbine — the structural innovation fundamental to the company's commercial wind energy platform.

The PCT application (PCT/US26/26856), filed May 6, 2026 with the United States Patent and Trademark Office acting as Receiving Office, claims priority to U.S. Patent No. 12,595,781 B1, granted April 6, 2026. The filing was authorized by patent counsel Jeremy A. Briggs of Briggs IP and processed by Stephen Malik.

"This PCT filing marks a pivotal step in our global commercialization strategy," remarked Wind Harvest CEO Kevin Wolf. "Our reinforced blade technology is what makes utility-scale VAWTs viable — and we're now positioned to protect that advantage in every major wind energy market in the world."

Wind Harvest's reinforced blade created the foundation for solving a fundamental engineering challenge that had historically limited vertical axis wind turbines from scaling to industrial size machines. 15 million rotations annually with the loads of a larger blade resulted in structural

failure at the blade attachment point. The patent covers a reinforcement architecture that allows large VAWT blades to be made. The large blade is critical to eliminating the need for epoxying on a plate between the hinge mechanism (US Patent 11927174B1 and the blade).

This makes the patent unusually broad in its competitive reach. Any manufacturer seeking to produce large VAWT blades through either of the two dominant industrial fabrication processes — aluminum extrusion or composite pultrusion — must contend with Wind Harvest's claims. The interior wall spacing and geometry protected by the patent is not a design choice; it is a structural necessity imposed by the physics of large-format blade manufacturing at these scales.

Under the PCT framework, WHI now has until December 17, 2027 — 30 months from the domestic priority date — to elect specific countries and regional patent bodies in which to pursue full national-stage protection. Target markets under active consideration include but are not limited to the European Union (via the European Patent Office), China, Australia, Latin America and nine countries in Africa. Once granted in each country, patents will remain in force through approximately 2046.

During the PCT phase, an International Searching Authority under WIPO's PCT system issues an International Search Report and Written Opinion giving a preliminary, independent assessment of the patent's novelty and inventive step, which is a valuable signal of how the claims may fare in subsequent national examinations.

The PCT filing complements Wind Harvest's existing domestic patent portfolio of eight other granted U.S. patents covering the company's polygonal mast, hinge-mast and hinge blade connections, structural bracing, and collapsible rotor systems. An independent freedom-to-operate analysis conducted in connection with investor due diligence confirmed that Wind Harvest's core commercial technology operates freely within the current patent landscape.

U.S. Patent No. 12,595,781 B1 | PCT App. No. PCT/US26/26856 | Filed: May 6, 2026 | National Stage Deadline: December 17, 2027 | Full Patent Term Through: ~2046

About Wind Harvest International Inc.
Wind Harvest International Inc., headquartered in Davis, California, develops advanced vertical axis wind turbine systems engineered for performance in challenging, near-ground wind environments. The company's technology portfolio addresses the structural, aerodynamic, and manufacturing challenges unique to VAWT deployment at commercial scale.

Media and Investor Inquiries - Kevin Wolf

Wind Harvest International
+1 855-963-7697
email us here
Visit us on social media:
LinkedIn
Bluesky
Instagram
Facebook
YouTube
