Change Wind Corp. ("Applicant") seeks registration on the Principal Register pursuant to the provisions of Section 2(f) of the Trademark Act, 15 U.S.C. § 1052(f), of the product configuration set forth below as a mark for “Wind turbines; Wind-powered electricity generators” in International Class 7:¹

¹ Application Serial No. 86046590 was filed on August 23, 2013, based upon Applicant’s allegation of first use anywhere and use in commerce since January 12, 2010.
The amended description of the mark states:

The mark consists of a three-dimensional configuration of a wind powered turbine for generating electricity featuring four vertically extending turbine wings that are obliquely curved in a twisting manner and spaced from and relative to a vertically extending cylindrical base that tapers at its upper end into [sic] truncated cone with the turbine wings extending from a [sic] elevation beneath that of the truncation of the truncated cone to an elevation above the truncation of the truncated cone, the matter shown in broken or dotted lines is not part of the mark and serves only to show the position or placement of the mark.

\(^2\) Color is not claimed as a feature of the mark.
The Trademark Examining Attorney has refused registration of Applicant’s applied-for mark under Section 2(e)(5) of the Trademark Act, 15 U.S.C. § 1052(e)(5), on the ground that the product design is functional. Alternatively, registration has been refused under Sections 1, 2 and 45 of the Trademark Act, 15 U.S.C. §§ 1051, 1052 and 1127, on the ground that the configuration fails to function as a mark because it consists of a non-distinctive product design, is not registrable on the Principal Register without proof of acquired distinctiveness under Section 2(f) of the Trademark Act, 15 U.S.C. § 1052(f), and the proffered evidence of acquired distinctiveness is insufficient.

When the refusal and alternative refusal were made final, Applicant appealed and requested reconsideration seven times. After the Examining Attorney denied the requests for reconsideration, the appeal resumed. We affirm the refusal to register on the ground that the matter sought to be registered is functional, and we also affirm on the alternative ground that the matter sought to be registered constitutes product

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3 March 20, 2015, March 23, 2015, March 25, 2015, March 25, 2015 (second filing), April 7, 2015, October 13, 2015, and October 22, 2015, Requests for Reconsideration. Applicant filed an appeal brief on December 29, 2015, after which jurisdiction was restored to the Examining Attorney for consideration of the outstanding requests for reconsideration. (4 TTABVUE; 6 TTABVUE). Applicant then filed, on May 23, 2016, an appeal brief that exceeded the page limits under Trademark Rule 2.142(b)(2), 37 C.F.R. § 2.142 (b)(2). (11 TTABVUE). On June 4, 2016, Applicant filed an appeal brief that complied with the page limits. (13 TTABVUE). After various orders issued regarding the appeal briefs, the Board indicated in its order issued September 22, 2016, that the June 4, 2016, appeal brief was accepted. (19 TTABVUE). Applicant’s evidence attached to its reply brief has not been considered. Trademark Rule 2.142(d), 37 C.F.R. § 2.142(d); In re Zanova Inc., 59 USPQ2d 1300, 1302 (TTAB 2001) (“By attempting to introduce evidence with its reply brief, applicant has effectively shielded this material from review and response by the Examining Attorney.”). See TBMP §§1203.02(e), 1207.01 (June 2017).
design that does not function as a mark and the Applicant has not proved acquired distinctiveness.

I. Functionality

Section 2(e)(5) of the Trademark Act provides that registration of a product design be denied if it “comprises any matter that, as a whole, is functional.” Generally, a product design or product feature is considered to be functional in a utilitarian sense if it is: (1) “essential to the use or purpose of the article;” or if it (2) “affects the cost or quality of the article.” *TrafFix Devices Inc. v. Mktg. Displays Inc.*, 532 U.S. 23, 58 USPQ2d 1001, 1006 (2001) (quoting *Inwood Labs., Inc. v. Ives Labs., Inc.*, 456 U.S. 844, 214 USPQ 1, 4 n.10 (1982)).

In making our determination of functionality we are also guided by the analysis first applied in *In re Morton-Norwich Prods., Inc.*, 671 F.2d 1332, 213 USPQ 9, 15-16 (CCPA 1982). See also *Valu Eng’g Inc. v. Rexnord Corp.*, 278 F.3d 1268, 61 USPQ2d 1422, 1427 (Fed. Cir. 2002). *Morton-Norwich* identifies four nonexclusive categories of evidence which may be helpful in determining whether a particular design is functional: (1) the existence of a utility patent disclosing the utilitarian advantages of the design; (2) advertising materials in which the originator of the design touts the design’s utilitarian advantages; (3) the availability to competitors of functionally equivalent designs; and (4) facts indicating that the design results in a comparatively simple or cheap method of manufacturing the product. *Morton-Norwich*, 213 USPQ at 15-16.
The Supreme Court has made it clear, however, that if evidence such as statements in a relevant utility patent or the applicant's own promotional materials establishes that the design is functional under the *Inwood* formulation of the test, further inquiry into the existence of available alternative designs or whether there is a competitive necessity for the feature is unnecessary. *TrafFix Devices*, 58 USPQ2d at 1006 (“Where the design is functional under the *Inwood* formulation there is no need to proceed further to consider if there is a competitive necessity for the feature.”); *In re Becton, Dickinson and Co.*, 675 F.3d 1368, 102 USPQ2d 1372, 1378 (Fed. Cir. 2012) (“[S]ince the patent and advertising evidence established functionality, the Board did not need to analyze whether alternative designs exist.”). Thus, there is no requirement that all of the categories of evidence identified in *Morton-Norwich* appear in every case in order to make a functionality refusal. *In re Heatcon, Inc.*, 116 USPQ2d 1366, 1370 (TTAB 2015).

In considering the applied-for mark as a whole, our primary reviewing court has recognized that the initial analysis may be of the separate features of the involved configuration, followed by consideration of the entire design. *Becton, Dickinson*, 102 USPQ2d at 1376 (“[O]ne object of the *Morton-Norwich* inquiry is to weigh the elements of a mark against one another to develop an understanding of whether the mark as a whole is essentially functional and thus non-registrable.”); *In re R. M. Smith, Inc.*, 734 F.2d 1482, 222 USPQ 1, 2 (Fed. Cir. 1984). Here, in considering the functionality of the configuration as a whole, we may consider the functional role of
the individual features of the design—the conical housing and the helical wings—to determine whether the applied-for mark is functional and thus, unregistrable.

1. The Existence of Patents.

The first category of evidence identified in Morton-Norwich is whether a utility patent discloses the utilitarian advantages of the design. A utility patent is strong evidence that the features an applicant claims are functional. TrafFix Devices, 58 USPQ2d at 1005. A utility patent need not “claim the exact configuration for which trademark protection is sought in order to undermine an applicant’s assertion that an applied-for mark is not de jure functional.” Becton, Dickinson, 102 USPQ2d at 1377. In the case at hand, the Examining Attorney required that Applicant provide a copy of any utility patent showing any of the utilitarian features of the configuration in the Application, which Applicant provided on reconsideration.4 We have reviewed the utility patent as a whole, including its claims, as evidence of functionality under the first category of evidence in Morton-Norwich. In re Howard Leight Indus. LLC, 80 USPQ2d 1507, 1511 (TTAB 2006).

The patent Applicant provided is for an “on or off grid vertical access wind turbine and self-contained rapid deployment autonomous battlefield robot recharging and forward operating base horizontal axis wind turbine.” (October 13, 2015, Request for Reconsideration p. 2). The summary of the invention includes the following

4 U.S. Patent No. 9,103,321 (“’321 patent”) issued to Applicant’s CEO Jaime Bardia, and was provided in connection with the Examining Attorney’s earlier information request under Trademark Rule 2.61(b), 37 C.F.R. § 2.61(b), made in the December 22, 2013, Office Action. See October 13, 2015, Request for Reconsideration, pp. 2-31.
disclosures in pertinent part: “Various aspects of the present invention relate to a self-supporting structure without the need for guy wires . . . helical swept airfoils . . . [and] a boundary layer fence for self-starting.” (October 13, 2015, Request for Reconsideration p. 24; ‘321 patent, column 1 lines 45-50). The background explanation of the invention contains the following statements: “an off or on grid wind turbine for capturing and maximizing dissimilar airflow(s) (laminar and turbulent) through a series of magnetically levitated helical variable geometry asymmetrical wings.” (October 13, 2015, Request for Reconsideration p. 24; ‘321 patent, column 1 lines 18-20).

The patent provides the preferred embodiment of a vertical axis wind turbine (VAWT) and structural components to include “helical swept wings 11 (FIGS. 1A and 1B) (shown below) with a series of boundary fences 12 at their ends and toward the middle. A conical tower 20 tapers toward the top where it supports in a rotatable
manner via a magnetic repulsion levitated rotary wing hub 30 rods 13 that connect to each of the helical swept wings 11.” (October 13, 2015, Request for Reconsideration p. 25; ‘321 patent, column 3, lines 12-17).

According to the preferred embodiment, the turbine is self-supporting, does not require guy wires (due to the structural frame), and is self-starting, assisted by components such as the helical wings and the boundary layer fences that are at the top and bottom of each helical wing section. (October 13, 2015, Request for Reconsideration, pp. 25-26; ‘321 patent, column 4, lines 24-25, 34-35, 54-59, column 5, lines 13-15).

As set forth in pertinent part, the features in the applied-for mark (helical wings and housing enclosing frame structure) are specified in the twenty-one claims of the invention:

A wind turbine, comprising: a frame structure; a housing enclosing said frame structure . . . helical swept wings that rotate to capture wind throughout a circumference of the rotary wing assembly from both windward and leeward sides so that a torque input spreads evenly to mitigate damaging harmonic pulsations that would otherwise arise without the torque input spreading evenly . . .

(October 13, 2015, Request for Reconsideration pp. 28-31; ‘321 patent, column 9, lines 30-41; columns 9-10, lines 62-67, lines 1-5; column 10, lines 57-59; column 11, lines 4-14; column 11, lines 45-54; column 12, lines, 16-26; column 12, lines 54-64; column 13, lines 17-27; column 13, lines 54-56; column 13, lines 57-67; column 14, line 19; column 14 lines, 24-34; column 14, line 58; column 15, line 4; column 15, line 11; column 15, line 22; column 15, line 26; column 16, line 1; column 16, line 9; column 16, line 16).

Applicant argues that no utilitarian advantages are described by the patent with respect to the applied-for mark which displays a wind turbine with helical wings
straddling a conical tipped tower, and contends that the “patent describes utilitarian advantages associated with the mechanical gear drive train system and with components that are NOT found in the design sought to be registered, such as flaps, boundary layers and spoilers of the wings.” (13 TTABVUE 6-7). Applicant also argues that the features in its mark are not functional components. (21 TTABVUE 4).

However, both the disclosures and the claims of the patent reveal that the shape of the housing and the use of helical wings and their placement are not merely arbitrary, ornamental, or incidental, but serve an essential function in the invention for the VAWT and that these features are necessary for its use. Both the conical tipped tower (cylindrical base and conical top), which forms the exterior of the VAWT and acts as the protective housing enclosing the structural frame, and the helical wings are features of the invention as set forth in the specified claims. The references in the patent to the housing which encloses the structural frame, the placement of the helical wings to the structural frame, and the helical wings’ placement in relation to the conical-tipped tower of the configuration clearly indicate the utilitarian advantages of how these features are arranged and the benefits of the arrangement to enable the VAWT invention to operate optimally.\textsuperscript{5} Furthermore, the preferred embodiment of the invention shown in figures 1A and 1B of the patent, (October 13, 2015, Request for Reconsideration, pp. 4-5; ‘321 patent, sheets 1-2 of 20, column 3, 5

\textsuperscript{5} See Description of Preferred Embodiment in the patent. (October 13, 2015, Request for Reconsideration, pp. 25-26, ‘321 patent, columns 3-5). Also, as disclosed by the patent, these features are structural components of a VAWT. \textit{Id.} (at p. 25, ‘321 patent, column 3, lines 9-11).
lines 9-17), as shown below, are in essence the applied-for mark, also shown below, except that the “magnetic repulsion levitated rotary wing hub” to which the helical wings attach is not displayed in the drawing for the applied-for mark, and the rods that are part of the rotary wing hub and are shown in the trademark application drawing are not claimed as part of the mark.

The patent shows that the tower constituting the housing, which comprises a cylindrical base portion with a conical-tipped top, encloses the self-standing structural frame of the VAWT invention, which is “within the conical tower.” (October 13, 2015, Request for Reconsideration, p. 25, ‘321 patent, column 3, lines 62-64). In order to be self-supporting without guy wires, and for optimal placement of the helical wings in connection with the magnetically levitated rotary wing hub, the preferred embodiment of the VAWT requires an internal frame structure that is wider at the
bottom and more conical and tipped at the top of the structure; therefore, the internal frame structure dictates the housing shape. See Figure 3A of the patent shown below. (October 13, 2015, Request for Reconsideration, p. 7; '321 patent, sheet 4 of 20, column 3, lines 20-23). See In re Carr-Griff, Inc., 223 USPQ 359, 361 (TTAB 1984) (shamrock shaped housing that conformed to shape of three-chambered pump functional).

As stated, the internal frame structure also dictates the placement of the rotary wing hub assembly to which the helical wings of the turbine attach, see Figure 3A above and Figure 4D of the patent, shown below. (October 13, 2015, Request for Reconsideration, pp. 7, 12, 25; ‘321 patent, sheets 4 and 9 of 20, column 3, lines 10-22, 61-63).
The placement of the helical wings to straddle the conical tipped tower is dictated by the structural frame and placement of the rotary wing hub assembly. (October 13, 2015, Request for Reconsideration, p. 25; '321 patent, column 3, lines 14-17). See *Honeywell*, 532 F.2d 180, 189 USPQ 343, 344 (CCPA 1976) (protective cover for round thermostat so arranged that essential operating and temperature controlling and indicating mechanisms are visible to operator). As to the helical wings themselves, they are not only necessary to the VAWT invention as a means for generating electricity by rotating to capture wind, but also contribute to the self-starting feature of the VAWT invention. (October 13, 2015, Request for Reconsideration, p. 25; '321 patent, column 4, lines 34-35, 54-59). The helical wings maximize dissimilar airflow and multiply the resultant rotational force into kinetic energy, thereby creating the torque required to rotate the mechanical drive system. (October 13, 2015, Request for
Reconsideration, p. 24; ‘321 patent, column 1, lines 18-21). The wings are placed throughout the circumference of the rotary wing assembly from both windward and leeward sides so that the torque input spreads evenly to mitigate damaging harmonic pulsations. (October 13, 2015, Request for Reconsideration, pp. 28; ‘321 patent, column 4, lines 54-61).

The drawing of the mark also includes a component to which the patent assigns the number “12” (in FIGS. 1A and 1B) and refers variously to this as “boundary fences” or “boundary layer fences.” This component, while not specifically highlighted by name in the prose description of the mark, is not excluded from the drawing of the mark via dotted lines, but rather is portrayed in solid lines and thus is part of the claimed design.6 See Becton, Dickinson, 102 USPQ2d at 1374 (where features of a product mark described in the amended description did not embody the mark in its entirety, the Board concluded that the proposed mark included all elements shown in the drawing except those elements shown in dotted lines). The patent states that this component assists in self-starting the wind turbine as it “obstruct[s] span-wise airflow” and “reduces the noise arising from rotation of the helical swept wings by dispersing the sound waves by changing the direction of the airflow along the helical swept wings.” (October 13, 2015, Request for Reconsideration, pp. 25-26; ‘321 patent,

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6 We note that the drawing of the mark, not the words an applicant uses to describe it, controls what the mark is. Trademark Rule 2.52, 37 C.F.R. § 2.52 (“A drawing depicts the mark sought to be registered.”); Trademark Manual of Examining Procedure (TMEP) § 807.02 (April 2017) (“The drawing ... indicates what the mark is, and provides a means for reproducing the mark in the Official Gazette and on the certificate of registration.”).
column 4, 34-35, column 5, lines 14-20). As mentioned earlier, Applicant, in its appeal brief, agrees that the patent discloses the utilitarian benefits of “boundary layers.” (13 TTABVUE 6-7).

The patent thus plainly discloses the functional role of the three components disclosed and claimed in Applicant’s drawing of the mark: the conical tower, the helical wings, and the boundary fences affixed to the helical wings. These features are necessary elements of the invention and are essential to the functioning of Applicant’s wind turbine. See TrafFix, 58 USPQ2d at 1005 (“A utility patent is strong evidence that the features claimed therein are functional.”). Further, Applicant has acknowledged that “the helical design and mounting pole do perform the function of turning in response to turbulent and gusty winds for enabling the harvesting of power from the turbulent and gusty winds.” (March 20, 2015, Request for Reconsideration, Declaration of Jaime Bardia, p. 5).

The functional advantages of these features apply equally to the preferred embodiment shown above in figures 1A and 1B in the patent, as well as to the applied-for mark. In light of these disclosures, we reject Applicant’s argument that no utilitarian advantages are described by the patent with respect to the applied-for mark and find the disclosures of the patent are relevant to the question of the functionality of Applicant’s wind turbine design mark. In short, the utility patent demonstrates the utilitarian advantages of the VAWT design at issue, and for this reason, we find the product configuration functional.7 Our finding is buttressed by

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7 Applicant claims that “the features depicted in Fig. 1A are not in the claims and are not described in the patent as providing any functional utilitarian advantage to the so-called
our finding, discussed *infra*, that granting Applicant protection for this design would hinder competition in light of the similarity among many of the competing product designs that Applicant contends show a large variety of alternative designs.


Under the second category of evidence identified in *Morton Norwich*, we next consider evidence regarding “advertising materials in which the originator of the design touts the design’s utilitarian advantages.” *Valu Eng’g*, 61 USPQ2d at 1426 (citing *Morton-Norwich*, 213 USPQ at 15-16).

The Examining Attorney argues that the statements in Applicant’s specimen and on Applicant’s website tout the utilitarian benefits of Applicant’s applied-for design. (20 TTABVUE 13; December 22, 2013, Office Action, pp. 1-2). Applicant’s website includes images of the applied-for design (December 22, 2013, Office Action, p. 2) as does the product brochure specimen (Specimen, August 23, 2013, p. 1).

helical design of the airfoil wings or their placement.” (October 13, 2015, Request for Reconsideration, p. 1.) However, we may look to the disclosures as well as the claims in a utility patent to determine functionality. *Becton-Dickinson*, 102 USPQ2d at 1377 (“statements in a patent’s specification illuminating the purpose served by a design may constitute equally strong evidence of functionality”) (citation omitted); *In re Howard Leight*, 80 USPQ2d at 1511 (“although we may and must look to the patent’s claims in determining functionality, we are not limited to review of the claims”). *See, e.g., In re Van Valkenburgh*, 97 USPQ2d 1757, 1761 (TTAB 2011) (finding utility patent provided prima facie evidence of functionality as the drawing of the invention incorporated the proposed mark, the “detailed description of the invention” describes the proposed mark, and the proposed mark was part of the subject matter of one of the claims).
Excerpts from Applicant’s product brochure include the following statements:

(Specimen, August 23, 2013, pp. 1-2).
Applicant argues that its advertisements tout the advantages of a vertical-axis wind turbine over a horizontal-axis (propeller-type) wind turbine but not over other vertical-access wind turbines, and thus do not describe or reference any utilitarian aspects or advantages of the proposed mark. (Appeal Brief, 13 TTABVUE 11, referencing March 20, 2015, Request for Reconsideration, Declaration of Jaime Bardia, pp. 4, 9-10). We fail to see language indicating that a vertical-axis wind turbine is being compared to a horizontal-axis wind turbine. However, assuming that such a comparison is being made, that would not itself detract from the probative value of the advertisements. Applicant seems to be suggesting that other vertical-axis designs would similarly benefit from a comparison to horizontal-axis competing turbines, and that this means Applicant’s design is not functional. We disagree.
Applicant argues further that other vertical-axis designs may share some of the advantages over horizontal-axis designs enjoyed by Applicant’s design. For example, Darrieus-type turbines (also known as eggbeater turbines) include helical-shaped wings and require three or more helical wings to lower torque ripple. (June 15, 2014, Response to Office Action, pp. 11-12). Newer types of Darrieus-type turbines are not held up by guy wires but have an external superstructure. (June 15, 2014, Response to Office Action, p. 12). These circumstances do not lessen the fact that these are, in fact, features or benefits showing the functionality of this vertical-axis design over competing horizontal designs. As the Seventh Circuit succinctly put it in a similar situation involving a foldable chair design that was simply a variation of many competing but similar folding chair designs, “[w]hat this says to us is that all of the designs [sharing these benefits] are functional ....” Specialized Seating, Inc. v. Greenwich Indus., L.P., 616 F.3d 722, 96 USPQ2d 1580, 1584 (7th Cir. 2010); see also In re Bose Corp., 772 F.2d 866, 227 USPQ 1, 6 (Fed. Cir. 1985) (Where evidence shows that a particular product feature is functional, the fact that it “may be produced in other forms or shapes does not and cannot detract from the functional character of the configuration here involved.”) (quoting In re Honeywell, Inc., 189 USPQ at 344). Put another way, if, as Applicant says, its advertisements are directed to advantages its design enjoys over horizontal-axis wind turbine designs, then those advertisements are probative of functionality. Functionality does not prohibit registration only of the specific design with the best functionality, it prohibits registration of all functional designs because, unless they are subject to patent
protection, the public should be able to copy them. Protection of functional designs is the purview of the Patent Act.

Applicant also urges that many of the benefits touted in its advertising are the result of the internal workings of its turbine, not the external features depicted in the drawing. While this may be, in part, true, we observe that the advertising touts some of the same benefits set forth in the patent: that the design does not need guy wires; and that the helical swept wings are conducive to “self-starting,” i.e., the ability to generate electricity at a low wind speed. That other statements in the advertisements relate to the internal mechanical drive system and other features of the helical wings that are not part of the applied-for mark, see Appeal Brief, 13 TTABVUE 12, referencing March 20, 2015, Request for Reconsideration, Declaration of Jaime Bardia, pp. 12-15, does not negate that some of the statements arguably relate to the design at issue. We agree with Applicant, however, that the advertisements do not explicitly tie the touted benefits to the various aspects of the turbine depicted in the drawing in this application. While we think that some consumers may connect the listed advantages as flowing from the external design aspects depicted in the application, some may not.

In light of the above, we find that the advertising in the record is inconclusive on the issue of functionality.

3. Availability of Alternative Designs

Because we have found under Inwood that the utility patent shows that the design features for which Applicant seeks trademark protection are essential to the use and
purpose of Applicant’s wind turbine, there is no need to address whether design alternatives exist. See TrafFix Devices, 58 USPQ2d at 1006. Nevertheless, we will do so in the interests of completeness and to aid any subsequent judicial review of our decision. Where relevant patents and/or advertising do not themselves establish functionality, the availability of alternate designs can “be a legitimate source of evidence to determine whether a feature is functional,” Valu Eng’g, 61 USPQ2d at 1427, and may be relevant to show whether or not the design sought to be registered will hinder competition. Morton-Norwich, 213 USPQ at 16. See also In re Bose Corp., 227 USPQ at 5-6 (“If the feature asserted to give a product distinctiveness is the best, or at least one, of a few superior designs for its de facto purpose, it follows that competition is hindered. Morton-Norwich does not rest on total elimination of competition in the goods.”).

With respect to alternative designs, Applicant submitted photographs of competing VAWTs with helical blades as well as VAWTs without helical blades, asserting that there are multiple different designs for vertical axis wind turbines with helical blades and without helical blades. (13 TTABVUE 12, referencing June 15, 2014, Response to Office Action, p. 8; March 20, 2015, Request for Reconsideration, pp. 13-14). Applicant states its design differs in that “its turbine wings straddle an elongated conical top of a cylindrical tower,” but acknowledges that there are other

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8 Applicant’s June 15, 2014, Response to Office Action, pp. 6-7 also includes links to Internet websites. These materials are not of record because providing only a website address or hyperlink to Internet materials is insufficient to make such materials of record. In re Powermat Inc., 105 USPQ2d 1789, 1791 (TTAB 2013).
conventional thinner monopole VAWTs that have wings that straddle their towers and arrange their blades helically and are therefore similar in arrangement of the functional features and design of its product configuration. (June 15, 2014, Response to Office Action, p. 7; March 20, 2015, Request for Reconsideration, Declaration of Jaime Bardia, p. 8). Mr. Bardia’s statement of like VAWT designs is illustrated by some of the Examining Attorney’s evidence of VAWT images as provided in connection with the non-distinctiveness refusal:

![Image of VAWT designs](image)

(May 12, 2015, Office Action, pp. 2-3).

Applicant provided the alternative VAWT designs both with and without helical blades shown below:

9 March 20, 2015, Request for Reconsideration, pp. 13-15; June 15, 2014, Response to Office Action, p. 8. Jaime Bardia’s declaration and the June 15, 2014, Response to Office Action, quoted from Internet websites regarding VAWTs generally and also provided excerpted photographs of VAWTs obtained from a Google image search for the phrase “VAWT,” taking images from the first 20 pages of Google hits. However, the web pages and photographs were not properly made of record as they were neither submitted with nor attached to Mr. Bardia’s declaration as web pages nor were they submitted with or attached to the June 15, 2014, Response to Office Action as web pages. We would also note that Internet search engine “image” search result pages are problematic in this case (and many other types of trademark cases) because they simply aggregate images on third-party websites with essentially no indicia of what is depicted. The better practice is use the image search result page to click through to the originating website and obtain a copy of the original image on the originating website in order to provide the context from which evidentiary points the party proffering the image wishes to make can be supported. Nonetheless, because the Examining Attorney has not objected in his Office Actions or appeal brief to the quoted excerpts and excerpted photos we have considered them.
While none of the third-party VAWT’s with helical blades in the record are identical to Applicant’s, none is so sufficiently different so as to constitute an “alternative design” as contemplated by the case law. Specifically, we note that several of these depicted designs display two, three, or more vertically extending wings (many helical) that are mounted on or near the top of a cylindrical axis, similar to Applicant’s. We find that this evidence supports the conclusion that the alternative
designs of VAWTs with mounting poles and helical blades (as well as mounting poles with straight blades) are all merely variations of a single basic VAWT design. It is probative of functionality that others in the industry use similar designs; they do not have to be identical. See Becton, Dickinson, 102 USPQ2d at 1378 (finding it probative of functionality that others in the closure cap industry generally use ribs on the caps and “similar functional openings”); see also In re Caterpillar Inc., 43 USPQ2d 1335, 1341 (TTAB 1997) (citing Greenhouse Sys. Inc. v. Carson, 37 USPQ2d 1748, 1754 (TTAB 1995)). It is apparent there are only a limited number of variations in these design elements which maintain the functional advantages inherent in those design elements and in the overall VAWT design. To allow Applicant to register a design incorporating one of that quite limited number of superior designs as a trademark clearly would hinder competition. See In re Bose, 227 USPQ at 6 (five sided speaker enclosure “efficient and superior design as an enclosure and thus de jure functional, whether or not it contributes to the functionality of the sound system itself”); In re Honeywell, Inc., 189 USPQ at 344 (protective cover for round thermostat functional, noting there are only so many basic shapes for a thermostat cover); In re Lincoln Diagnostics Inc., 30 USPQ2d 1817, 1824-25 (TTAB 1994) (skin testing apparatus functional, limited number of designs available to competitors); In re Vico Products Mfg. Co., 229 USPQ 364, 368 (TTAB 1985) (citing In re Bose, 227 USPQ at 6) (venturi body for whirlpool functional and one of few superior designs).

See March 20, 2015, Response to Office Action, p. 5, Declaration of Jaime Bardia which states that both Applicant’s VAWT and other VAWTs with helical wings and mounting poles “enable the harvesting of power from turbulent and gusty winds.”
Where the supposed alternatives in the marketplace “share[] the same utilitarian function of [Applicant’s] design,” they cannot “be characterized as alternative designs” as that term is applied in the functionality inquiry. *Becton, Dickinson*, 102 USPQ2d at 1378. We find that these images of supposed alternatives thus provide additional support for our finding of functionality based on the utility patent evidence.

4. Cost of Manufacture

Because the patent and advertisements disclosed *use*-related benefits, the lack of *cost*-related benefits does not undercut our finding of functionality. The Supreme Court has stated that “a product feature is functional, and cannot serve as a trademark, [1] if it is essential to the use or purpose of the article or [2] if it affects [a] the cost or [b] quality of the article.” *TrafFix*, 58 USPQ2d at 1006 (citation omitted; emphasis and numbering added). Thus, a product feature can be found functional for affecting *either* the quality of the article or its cost. While evidence that a product feature makes the product cheaper to manufacture may be probative in showing functionality, evidence that it does not affect its cost is not necessarily proof of non-functionality. *In re N.V. Organon*, 79 USPQ2d 1639, 1646 (TTAB 2006). In other words, evidence that a design costs more, or has no impact on cost, is irrelevant if the design is found to work better.

The specimen of use in the record touts that Applicant’s wind turbines “cost 1/2 the price of all competing units while generating up to 4 times more electricity” and that they save the user money because they start making electricity at a low wind
speed. Mr. Bardia denies that this cost savings is due the helical wings or the cylindrical base but instead attributes it to the product’s internal parts and Applicant’s manufacturing efficiency. (13 TTABVUE 13, referencing the Declaration of Jaime Bardia, March 20, 2015, Request for Reconsideration, p. 11; April 7, 2015, Request for Reconsideration, pp. 6-7).11

We are skeptical of Mr. Bardia’s claim that the touted cost advantages have nothing at all to do with the vertical base and helical wings, in light of the statements in the specimen of use alluding to the higher costs of necessarily larger horizontal axis wind-conversion units. Ultimately, however, we find the evidence of cost savings touted in the advertisements to be inconclusive as to whether the savings are attributable to the design features depicted in the drawing or to the turbine’s internal workings.

II. Conclusion on Functionality

We find that the evidence of record, assessed in its entirety, establishes that Applicant’s design is functional because it is essential to the use or purpose of the product. Applicant has failed to rebut the evidence that supports this conclusion, specifically, the utility patent and the possible adverse effect on competition because of the similarity of Applicant’s design to those of other VAWTs. *TrafFix Devices*, 58

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11 Applicant’s counsel stated in a response to one of the Office actions that the design is more complex and expensive to manufacture in some respects than other VAWT designs—although conceding that in other respects the design is less complex and less expensive to manufacture than other VAWT designs. See June 15, 2014, Response to Office Action, p. 9. We do not consider unsworn statements of counsel to be evidence. See *e.g.*, *In re Teledyne Indus., Inc.*, 696 F.2d 968, 217 USPQ 9, 11 (Fed. Cir. 1982).
USPQ2d at 1007. Accordingly, registration of the design as a trademark is barred under Trademark Act Section 2(e)(5). We affirm the Trademark Examining Attorney’s refusal on this ground.

III. Acquired Distinctiveness

As noted at the beginning of this decision, the Examining Attorney issued a refusal on the alternative ground that the proposed configuration mark is nondistinctive product design. Applicant responded by stating that it sought to overcome that refusal by seeking registration under the provisions of Section 2(f) of the Trademark Act. (January 12, 2015, Response to Office Action, p. 1).12 Even though our finding of functionality under Section 2(e)(5) precludes registration regardless of any showing of acquired distinctiveness under Section 2(f), in order to render a full decision on the issues presented in this appeal, we consider the question of acquired distinctiveness in connection with the alternative ground for refusal that the mark consists of a non-distinctive product design and the evidence of acquired distinctiveness is insufficient.

A product configuration such as this one is not inherently distinctive and, if non-functional, may be registered on the Principal Register only upon a showing of acquired distinctiveness under Section 2(f). See Wal-Mart Stores, Inc. v. Samara Bros., Inc., 529 U.S. 205, 54 USPQ2d 1065, 1068-69 (2000). In order to obtain a

12 The Examining Attorney noted in his appeal brief that during prosecution and on appeal Applicant has not disputed that its configuration is a non-distinctive product design. (20 TTABVUE 18). See also March 20, 2015 Response to Office Action, p. 24, where Applicant stated that “[t]he refusal for non-distinctive product configuration . . . is traversed in view of the perfection of its claim for acquired distinctiveness . . . .”
registration under the provisions of Section 2(f), Applicant has the burden of demonstrating that its mark has acquired distinctiveness. See Yamaha Intern. Corp. v. Hoshino Gakki Co., Ltd., 840 F.2d 1572, 6 USPQ2d 1001, 1006 (Fed. Cir. 1988). The amount and character of evidence required to establish acquired distinctiveness depends on the facts of each case. Roux Lab., Inc. v. Clairol Inc., 427 F.2d 823, 166 USPQ 34, 39 (CCPA 1970).

To support a claim of acquired distinctiveness, an Applicant may submit evidence of “copying, advertising expenditures, sales success, length and exclusivity of use, unsolicited media coverage, and consumer studies (linking the name to a source).” In re Steelbuilding.com, 415 F.3d 1293, 75 USPQ2d 1420, 1424 (Fed. Cir. 2005) (citing Cicena Ltd. v. Columbia Telecomms. Grp., 900 F.2d 1546, 14 USPQ2d 1401 (Fed. Cir. 1990)). The evidence must relate to the promotion and recognition of the specific configuration embodied in the applied-for mark and not to the goods in general. See Inwood Labs., 214 USPQ at 4 n.11 (“To establish secondary meaning, a manufacturer must show that, in the minds of the public, the primary significance of a product feature or term is to identify the source of the product rather than the product itself.”).

As evidence that its product design would be perceived as an indication of source, Applicant claims five years of exclusive use. In addition, Applicant points to the (undated) declaration of Michael Ferrara, co-founder of Prudencia LLC, Applicant’s marketer. Mr. Ferrara states that Applicant has spent $48,750 for sales consulting as of March 31, 2015, and $3,000 in marketing expenditures for a trade show booth, travel and props. Prudencia participated on Applicant’s behalf in the Energy Expo at
Metra Park held in Billings, Montana and another trade show in Missoula, Montana. Mr. Ferrara states that Applicant was mentioned in press coverage for the trade show and has been featured on Fox News television (no date provided), the Jerry Doyle Show (radio) (June 13, 2014), and the HARTFORD COURANT newspaper (June 1, 2014). Mr. Ferrara also states that Prudencia’s website has a webpage featuring Applicant’s product that includes a photograph of the three-dimensional product configuration of the wind turbine and includes information relating to $12 million in pre-production orders for Applicant’s $59,500 wind turbine. Applicant’s counsel also points to Applicant’s “look for” advertising, as shown below, as evidence of distinctiveness. (October 22, 2015, Request for Reconsideration, p. 2).

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13 No transcripts were provided for the Jerry Doyle radio show or the Fox News television video. Applicant provided the news story in the HARTFORD COURANT.
Here, Applicant’s claim of distinctiveness based on five years of prior use is not sufficient to establish acquired distinctiveness of a product configuration. See e.g., In re R.M. Smith, Inc., 222 USPQ at 3 (eight years use not sufficient evidence of acquired distinctiveness for configuration of pistol grip water nozzles); In re Van Valkenburgh, 97 USPQ2d at 1766 (16 years use not conclusive or persuasive to show acquired distinctiveness of motorcycle stands); In re ic! berlin brillen GmbH, 85 USPQ2d 2021, 2024 (TTAB 2008) (five years use not sufficient to establish acquired distinctiveness for configuration of an earpiece for frames for sunglasses and spectacles).

Although Applicant has provided an example of “look for” advertising, the record contains no evidence of how widely this “look for” advertising was disseminated, how many consumers may have been exposed to it, or its effectiveness in indoctrinating consumers to view the design as an indicator of source. Mr. Ferrara also described the manner in which Applicant’s wind turbine has been marketed on Prudencia’s website and provided a photograph of the trade show display; however, this information does not establish that Applicant’s wind turbine design has been advertised on the Prudencia website or at trade shows in a way that consumers would perceive the configuration as a mark. See, e.g. In re Semel, 189 USPQ 285, 287 (TTAB 1975) (“[I]t is necessary to consider not only the extent of advertising but also whether the use of the designation therein has been of such nature as to create in the minds of the purchasing public an association of the designation with the user and/or his goods or services.”). We find that the $12 million pre-production sales figure, while perhaps indicating some initial commercial success for Applicant’s product, does not
demonstrate that purchasers view the shape of the wind turbine as a mark. See e.g., *In re Bongrain Int’l (Am.) Corp.*, 894 F.2d 1316, 13 USPQ2d 1727, 1729 (Fed. Cir. 1990) (growth in sales may be indicative of popularity of a product itself rather than recognition of a term or design as denoting origin); *Goodyear Tire and Rubber Co. v. Interco Tire Corp.*, 49 USPQ2d 1705, 1720 (TTAB 1998) (sales figures may demonstrate popularity or commercial success as opposed to public recognition of trademark rights). Additionally, we find that Applicant’s advertising figures are not so significant that they establish acquired distinctiveness. It is well settled that even compelling sales and advertising figures do not always result in the achievement of distinctiveness. See *In re Boston Beer Co., L.P.*, 198 F.3d 1370, 53 USPQ2d 1056 (Fed. Cir. 1999) ($85 million in annual sales revenues and in excess of $10 million in advertising expenditures found insufficient to establish acquired distinctiveness).

Lastly, Applicant has identified three instances of unsolicited media coverage. However, the media coverage does not demonstrate that the applied-for mark has acquired distinctiveness. The content of the stories on Fox News and the Jerry Doyle radio show is undisclosed, and the submitted newspaper article focuses on the advantages of the wind turbine and its manufacture and not on the configuration mark. In view of the foregoing, we find that Applicant’s five year’s use, declaration and other evidence are insufficient to establish that Applicant’s mark has acquired distinctiveness under Section 2(f).

**Decision:** The refusal to register under Section 2(e)(5) on the ground that the applied-for mark is a functional product design is affirmed. In the event the applied-
for mark is found not to be functional but a non-distinctive product design, the alternative ground for refusal based on insufficient evidence of acquired distinctiveness is affirmed.