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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ARIZONA

Cornucopia Products, LLC, Plaintiff, vs. Dyson, Inc. and Dyson, Ltd., Defendants.	No. CV 12-00234-PHX-NVW **CONSOLIDATED WITH:**
Dyson Technology Limited; Dyson, Inc., Plaintiffs, vs. Cornucopia Products, LLC, Defendant.	No. CV 12-00924-PHX-NVW **ORDER**

Before the Court is Dyson, Inc.'s and Dyson Technology Limited's Motion for a Preliminary Injunction (Doc. 33) against Cornucopia Products, LLC. This order comprises the Court's findings of fact and conclusions of law pursuant to Fed. R. Civ. P. 52(a).

Dyson seeks to enjoin sale of Cornucopia's bladeless fan. Cornucopia's fan, from an unknown Chinese manufacturer, is "almost a direct copy" of Dyson's bladeless fan. *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1125 (Fed. Cir. 1993). There

are a few differences, but the overall appearance is strikingly similar. Intentional copying is both proven and undisputed.

Dyson's U.S. patent estate in its bladeless fan includes four utility patents and two design patents. Yet on this motion Dyson relies only on its design patents. It withdraws two of its utility patents from any claim against Cornucopia and withdraws the other two from consideration in this motion. Cornucopia's defense is that everything it copied is functional and cannot be monopolized by a design patent. Much of what it copied is functional. But some of Dyson's design is valid and easily could have been avoided without loss of function to Cornucopia. Instead, Cornucopia strained for the same look. Though Dyson's motion fails in important respects and is a close call in other respects, on balance preliminary injunctive relief is warranted. A bond of $500,000 will be required.

I. BACKGROUND

In February of this year, Cornucopia Products, LLC, filed an action in this Court against Dyson Ltd., a United Kingdom company, and its United States subsidiary, Dyson, Inc. Cornucopia's complaint accused Dyson Ltd. and Dyson, Inc. of violating Section 2 of the Sherman Act by illegally monopolizing the "bladeless fan" market through obtaining patents by fraud on the United States Patent and Trademark Office, and enforcing those patents through sham litigation. More specifically, Cornucopia claimed that the Dyson entities failed to provide the Patent Office with a full English translation of a Japanese patent (JP S56-167897), which allegedly was invalidating prior art. Cornucopia further claimed that its bladeless fan product embodied the Japanese patent and sought a declaration that four Dyson-owned utility patents were invalid, unenforceable, and not infringed.

On May 2, 2012, Dyson Technology Limited (the actual owner of the Dyson patents) and Dyson, Inc. (collectively, for purposes of this order, "Dyson"), but not Dyson Ltd., filed a separate action in this district against Cornucopia for infringement of four patents — two of which overlapped the four utility patents identified in Cornucopia's antitrust action. Dyson's complaint also charged that Cornucopia infringed

two design patents not identified in Cornucopia's antitrust complaint, namely U.S. Design Patent Nos. D602,143 ("D143") and D605,748 ("D748").

The two actions were consolidated by stipulation of the parties on May 24, 2012. (Doc. 25.) The next day, Dyson filed this Motion for Preliminary Injunction with supporting declarations and evidence. (Doc. 32 (sealed version); Doc. 33 (public redacted version).) Dyson's Motion seeks to enjoin Cornucopia from making, using, offering to sell, or selling the bladeless fan it currently offers (model no. D8600-12), on the grounds that it infringes the D143 and D748 patents. Although Dyson's complaint alleges infringement of both design and utility patents, Dyson seeks a preliminary injunction only on the design patents.

On July 11, 2012, the Court took evidence from Dyson by declarations and testimony of three witnesses. Cornucopia offered no witnesses at the hearing.

II. THE TECHNOLOGY AT ISSUE

A. The Japanese Patent

In 1981, the Japanese patent office issued patent number S56-167897. All parties agree that this Japanese patent discloses a "bladeless fan," depicted in the patent through the following three figures:

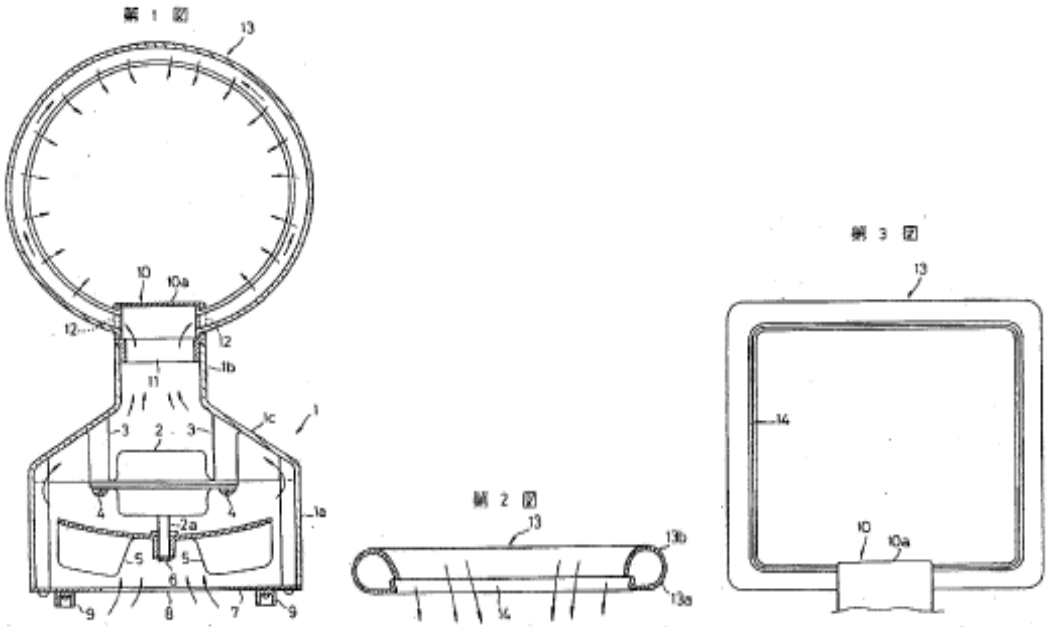


Figure 1 depicts a cross-section of the entire fan, which is not truly bladeless. The trapezoid shapes towards the bottom of the fan (items 5) are fan blades driven by a motor (item 2). The fan blades draw air from underneath the base, as denoted by the arrowed lines surrounding the number 8, and push it through the fan's neck (item 1b) into what the patent calls — according to Cornucopia's translation — the "wind discharge ring" (item 13), where one might expect a traditional fan's blades to be located. The parties refer to this ring as a "nozzle."

Figure 2 is a cutaway view of the nozzle. As figure 2 shows, the nozzle is a tube with an annular slit (item 14) — as if one had taken a hose, sliced it open lengthwise, rolled it back into a hose shape with one side of the slice slightly overlapping the other side, and then curled the entire thing into the shape of a ring. As the fan inside the base fills the nozzle with air, the air escapes from the nozzle through the slit (and presumably toward the user), as depicted by the two shorter arrowed lines in figure 2 (and the inward-pointing arrows arranged radially over item 13 in figure 1).

The four longer arrowed lines in figure 2 appear to depict air from behind the fan being pulled into the open ring and forward. According to Cornucopia's translation of the Japanese patent, "'the actual amount of wind [generated by the fan] is much higher than the amount of wind directly discharged from the slit.'" (Doc. 1 ¶ 12 (bracketed material inserted).)

How the fan accomplishes this feat is somewhat in question. Cornucopia's complaint claims that the Japanese fan induces the "Coanda effect." (*See id.*) The Coanda effect is "[t]he tendency of a gas or liquid coming out of a jet to travel close to the wall contour even if the wall's direction of curvature is away from the jet's axis." *McGraw-Hill Dictionary of Scientific and Technical Terms* 416 (6th ed. 2003). The Coanda effect can supposedly "entrain" — grab and pull along — surrounding air, thus increasing the flow of air beyond what is being pushed out of the "jet."

The Coanda effect necessarily requires a curved surface downstream from the "jet" — in this case, downstream from the slit through which air escapes the nozzle. The

Japanese patent's figures do not disclose such a surface, nor does Cornucopia quote any text from the Japanese patent regarding the Coanda effect. As far as the figures disclose, it appears that the nozzle and slit are designed to push air both forward and inward, with nothing downstream from the slit. Conceivably, this could create a low-pressure zone within the nozzle, thus pulling air from behind the nozzle forward. However, nothing in the figures discloses the necessary physical shape downstream from the slit to take advantage of the Coanda effect.

B. Dyson's '449 Patent

In April 2011, the Patent Office issued a utility patent to Dyson, numbered 7,931,449 ("'449 patent"). Though not directly at issue in these preliminary injunction proceedings, the '449 patent is relevant to questions of functionality discussed below. The following figures from that patent will assist this discussion:

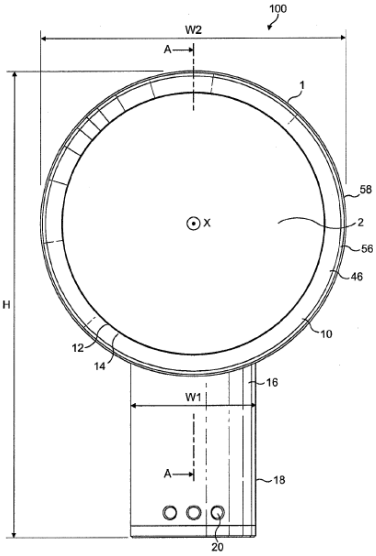


FIG. 1

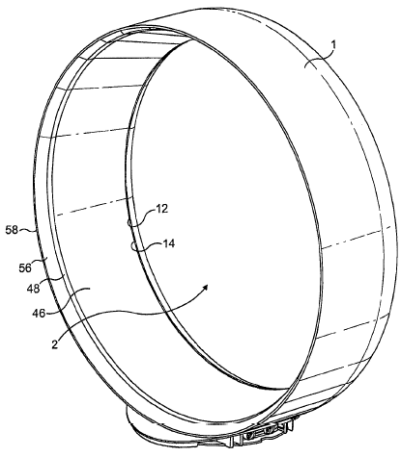


FIG. 2

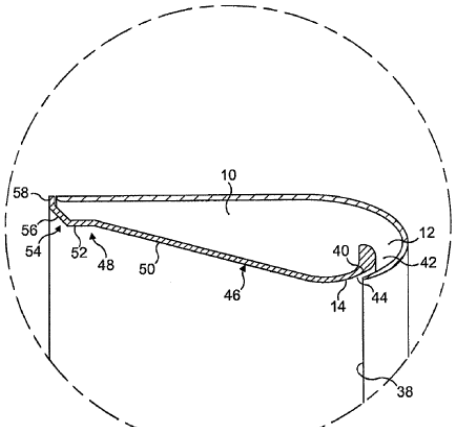


FIG. 4

Figure 1, although a front view and not a cross-section, roughly corresponds to figure 1 of the Japanese patent, showing a base and a ring-shaped nozzle. Like the Japanese patent, a fan (which Dyson calls an impeller) hides within the base of Dyson's preferred embodiment and pushes air into the nozzle (figs. 1 and 2, item 1), which escapes from an annular slit (fig. 4, item 38; *see also* fig. 2, items 12 and 14) and can therefore create a

low-pressure zone by "which air from outside the fan assembly is drawn by the air flow emitted from the mouth [*i.e.*, the slit in the nozzle]." '449 Patent, col. 9, ll. 7–9.

The nozzle is depicted from the outside in figure 2 and in cutaway in figure 4. Its cross-section resembles an inverted airfoil. A part of this airfoil shape — the angles formed by items 38, 46, 48, 50, 52, 54, 56, and 58 in relation to each other and in relation to the nozzle's axis (fig. 1, item x) — is not only a preferred embodiment but also comprises a "diffuser" claimed as part of the invention. This shape supposedly focuses, smoothes, and accelerates the airflow emerging from the slit (fig. 4, item 38). Cornucopia's fan does not practice the diffuser shape on the interior of the nozzle as claimed in the '449 patent.

The '449 patent's specification — although not the claims — also discusses the potential for a "Coanda surface" upstream from the "diffuser" but downstream from the slit. Figure 4, item 14, represents such a surface — a curvature sloping away from the direction in which air escaping the slit would most naturally travel. According to the specification: "Through the use of a Coanda surface, an increased amount of air from outside the fan assembly is drawn through the opening by the air emitted from the [slit in the nozzle]." *Id*., col. 3, ll. 15–18.

C. Dyson's '166 Patent

In January 2012, the Patent Office issued a utility patent to Dyson, numbered 8,092,166 ("'166 patent"). The '166 patent is not directly at issue in these preliminary injunction proceedings, but it too is relevant to questions of functionality discussed below.

The figures disclosed in the '166 patent are almost identical to those in the '449 patent. The most significant difference for present purposes is the addition of "spacers" — tiny tabs that keep the two sides of the nozzle's slit a uniform distance apart, as depicted in the following figures (fig. 4, items 26, 260, 266; also visible in fig. 2):

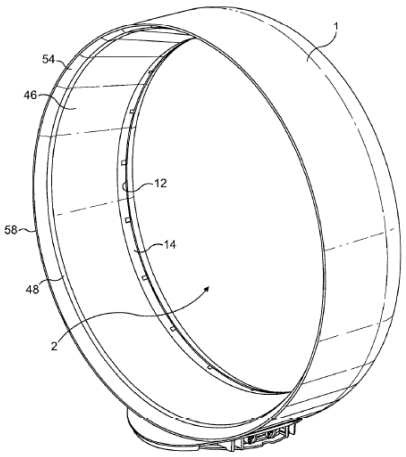


FIG. 2

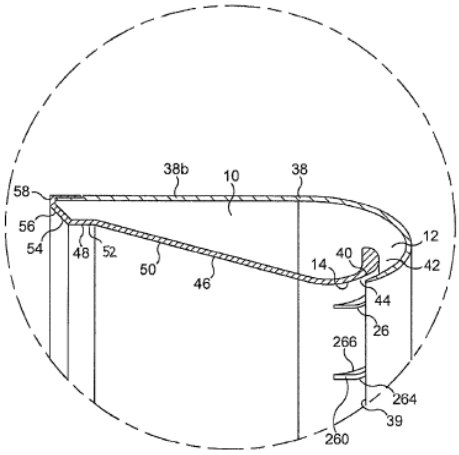


FIG. 4

Similar to the ’449 patent, the ’166 patent calls for a “nozzle defining an opening through which air from outside the fan assembly is drawn by the air flow emitted from the mouth.” ’166 Patent, col. 10, ll. 32–34. Unlike the ’449 patent, however, the ’166 patent makes no claims based on the angles formed by what the ’449 patent calls a “diffuser.” Also unlike the ’449 patent, the ’166 patent contains a claim based on the Coanda effect, calling for “a Coanda surface located adjacent to the [slit] and over which the [slit] is arranged to direct the air flow.” *Id*., Claim 15. (*See also* figs. 2 and 4, item 14.)

D. Dyson’s D143 Patent

On October 13, 2009, the Patent Office issued to Dyson a design patent, numbered D602,143 (“D143”). Titled “fan,” the design patent claims the following design through six figures — a perspective view (fig. 1), a front view (fig. 2), a rear view (fig. 3), a side view (fig. 4), a top view (fig. 5), and a bottom view (fig. 6):

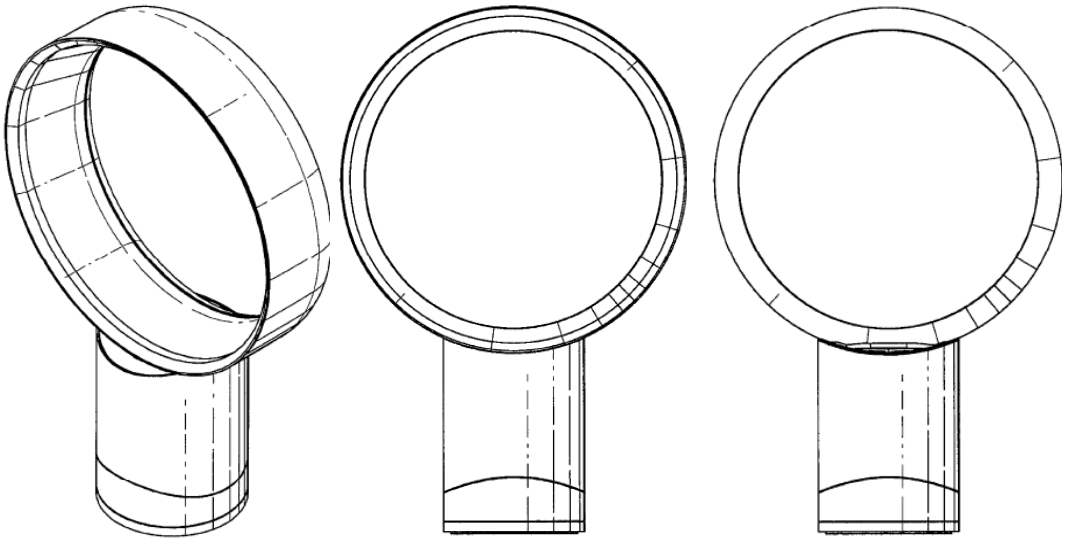


FIG. 1 FIG. 2 FIG. 3

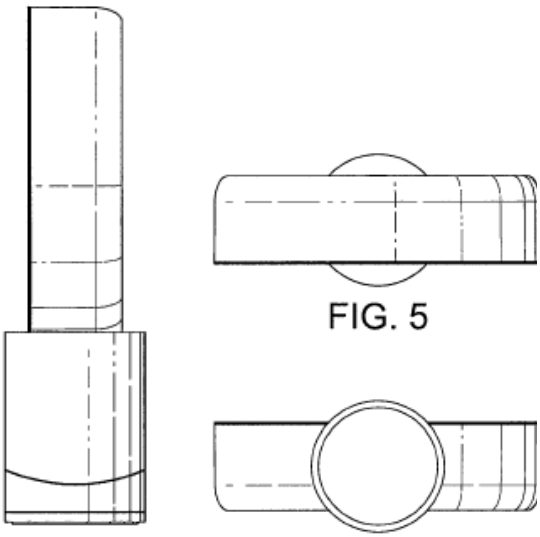


FIG. 4 FIG. 5 FIG. 6

This design essentially mimics the preferred embodiment of the ’449 and ’166 patents.

E. The D748 Patent

On December 8, 2009, the Patent Office issued to Dyson a design patent, numbered D605,748 (“D748”). Also titled “fan,” the design patent claims the following design through the same six figures used in the D143 patent, except that all lines representing the cylindrical base were changed from solid to dashed, such as in this perspective view:

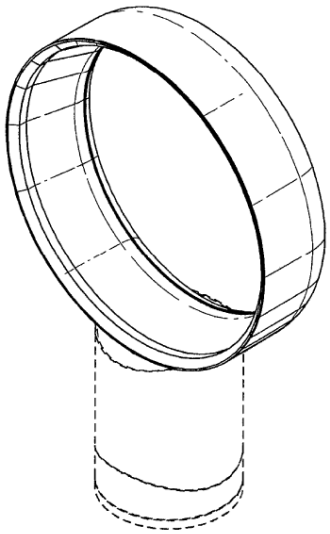
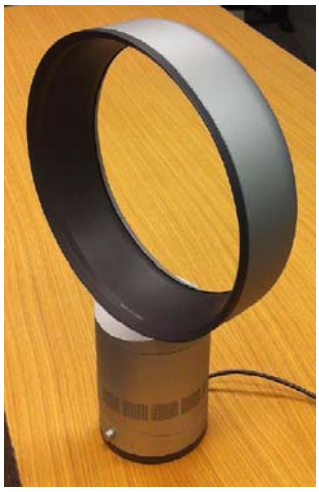


FIG. 1

In other words, the D748 patent claims the design of the nozzle only, not the design of the entire fan.

F. Dyson's Fan

Dyson claims that its AM01 "Air Multiplier" fan embodies the design disclosed in the D143 and D748 patents. The following is a photograph of the AM01:



Dyson began marketing these fans in Australia in October 2009, and first introduced them in the United States in March 2010.

G. Cornucopia's Fan

In January 2012, Cornucopia began marketing a competing fan. The following photographs show perspective, front, and top views of Cornucopia's fan:

III. ANALYSIS

A plaintiff seeking a preliminary injunction must establish: (1) likelihood of success on the merits, (2) likelihood of irreparable harm absent preliminary relief, (3) that the balance of equities tips in its favor, and (4) that an injunction is in the public interest. *Winter v. Natural Res. Defense Council*, 555 U.S. 7, 20 (2008). A full analysis of these four factors is only necessary as to the D143 patent, which claims the design of the entire fan, as opposed to the D748 patent, which claims only the nozzle. There is a substantial question of invalidity of the D748 patent and of the D143 patent as to the nozzle, which will be discussed together in the context of the D143 patent. However, a preliminary injunction is appropriate as to other likely infringement of the D143 patent.

A. Likelihood of Infringement

1. Legal Standard

With respect to design patents, infringement comes down to whether, "in the eye of an ordinary observer, giving such attention as a purchaser usually gives . . . [the] resemblance [between the claimed design and the accused product] is such as to deceive

such an observer, inducing him to purchase one supposing it to be the other." *Gorham Co. v. White*, 81 U.S. 511, 528 (1871). This "ordinary observer" test is somewhat artificial. For example, labeling usually may not be considered. The company logo undoubtedly helps ordinary observers distinguish products, but design patent protection would essentially collapse if putting one's own logo on an otherwise identical product could defeat the ordinary observer test. *See L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1126 (Fed. Cir. 1993) (one cannot avoid design patent infringement by labeling). In addition, the ordinary observer is one who compares the accused product to the claimed design "as a whole," rather than making a feature-by-feature comparison. *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 679–80 (Fed. Cir. 2008) (en banc). Finally, the ordinary observer is assumed to be familiar with the prior art — *i.e.*, all relevant preexisting designs for similar products. *Id*. at 677.

2. Claim Construction

Before evaluating an accused product, the scope of the patent must first be settled. Questions of functionality often predominate in this analysis because design patents protect only "the novel, ornamental features of the patented design," not the functional elements. *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1405 (Fed. Cir. 1997). "Where a design contains both functional and non-functional elements, the scope of the claim must be construed in order to identify the non-functional aspects of the design as shown in the patent." *Egyptian Goddess*, 543 F.3d at 680.

If a given "configuration is made imperative by the elements which it combines and by the utilitarian purpose of the device," that configuration is functional and not protected by a design patent. *Lee v. Dayton-Hudson Corp.*, 838 F.2d 1186, 1188 (Fed. Cir. 1988). If, on the other hand, "there are several ways to achieve the function of an article of manufacture, the design of the article is more likely to serve a primarily ornamental purpose." *L.A. Gear*, 988 F.2d at 1123.

> Other appropriate considerations [when evaluating the functional/ornamental distinction] might include: whether the

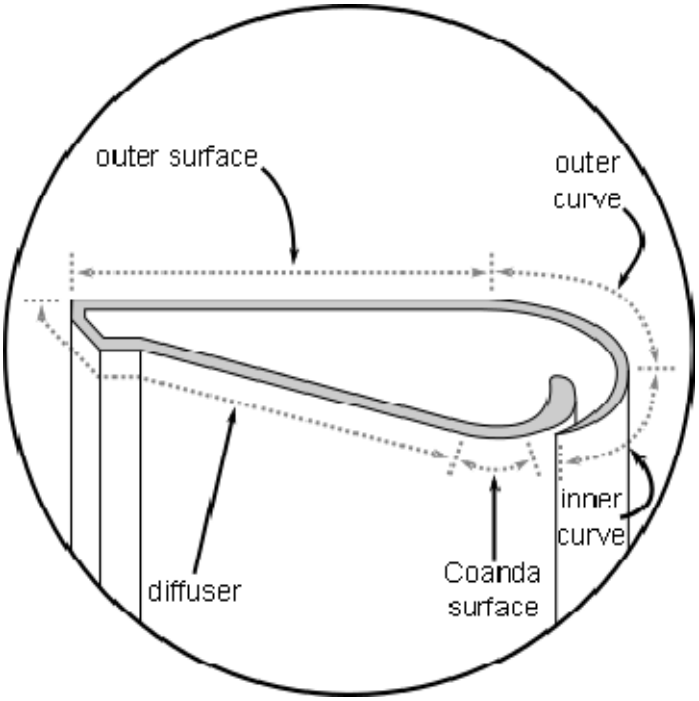
> protected design represents the best design; whether alternative designs would adversely affect the utility of the specified article; whether there are any concomitant utility patents; whether the advertising touts particular features of the design as having specific utility; and whether there are any elements in the design or an overall appearance clearly not dictated by function.

Berry Sterling Corp. v. Pescor Plastics Inc., 122 F.3d 1452, 1456 (Fed. Cir. 1997).

Here, Cornucopia raises a question of functionality as to nearly every aspect of the D143 design. This analysis can be reduced to four categories: (1) the shape of the nozzle's cross-section, (2) the nozzle's circularity, (3) the nozzle's depth, and (4) the shape of the base. Each will be discussed in turn.

a. The Nozzle's Cross-Section

The first aspect of the nozzle that raises a functionality question is the shape of its cross-section. The following cutaway illustration (based on figure 4 of the '449 patent) will assist this discussion:



For purposes of this preliminary injunction, the Court finds that the portions labeled here as "Coanda surface" and "diffuser" (the interior surface of the nozzle) are functional for two reasons. First, this configuration is claimed as novel in Dyson's utility patents. Specifically, the '449 utility patent claims the diffuser's general shape (although not the length of the various faces) as follows: "a diffuser portion tapering away from [the nozzle's] axis, a guide portion downstream from the diffuser portion and angled inwardly relative thereto, and a tapering portion downstream from the guide portion and angled outwardly relative thereto." '449 Patent, col. 9, ll. 14–18. A dependent claim calls for an embodiment "wherein the angle subtended [*i.e.*, formed] between the diffuser portion and the [nozzle's central] axis is in the range from 7º to 20º." *Id.*, col. 9, ll. 19–21. And the '166 utility patent claims the Coanda surface. '166 Patent, claim 16.

Second, Peter Gammack, Dyson Technology's concept design director and one of the named inventors of the D143, D748, and '449 patents, testified that the shape of the diffuser and Coanda surface are "functional to achieve specifically what we are trying to achieve as a velocity and a flow." (Doc. 54 at 36.) Accordingly, given the functionality of the diffuser and Coanda surface, Dyson's D143 and D748 patents do not protect those features.

As to the outer surface and outer curve, however, Gammack testified that they are not functional. He stated that, for example, the outer surface could bulge upward (rather than running parallel to the nozzle's axis), or the outer curve could form a right angle rather than a curve, without affecting the fan's performance.

At this stage of the proceedings and the evidence, the Court is not persuaded that performance would be unaffected by a different design on the outer surface and outer curve. For example, if the outer surface dipped inward (rather than bulged outward), thus creating a "pinch" within the nozzle, undesirable air pressure effects might result. An outer bulge in the surface of the ring would increase the interior volume of the nozzle and the air to be driven through it, which could dissipate some of the fan's energy in compressing air in dead space rather than driving it through the discharge ring with

maximum force. For many customers, a bulkier nozzle would reduce convenience, especially on a surface, like a table or desk, shared with other objects.

The outer and inner curves directing airflow to the air discharge slit are also functional. Together, their appearance discloses the function they perform. A competitor need not disguise obvious function, and the design patentee cannot own the look of function. *Cf.* U.S. Patent & Trademark Office, *Manual of Patent Examination Procedure* § 1504.01(c) (8th ed. 2001, rev. 2010) ("An ornamental feature or design [worthy of design patent protection] . . . cannot be the result or 'merely a by-product' of functional or mechanical considerations."). Thus, for preliminary injunction purposes, the shape of the outer surface, outer curve, and inner curve is not appropriately claimed in the D143 or D748 patents.

b. The Nozzle's Circularity

The second question of functionality arises from the circularity of Dyson's nozzle. It could be shaped differently, *e.g.*, as a square, which the Japanese patent proposed. But it cannot be disputed that a circle is the only design that will achieve the sort of air discharge pattern and effectiveness normally associated with a table fan. Indeed, none of Dyson's various bladeless fans has a shape other than a circle or a vertically oriented racetrack shape (mimicking the now-popular "tower fan"). (*See* Doc. 55 at 15.) It is unworthy of belief to say that this was purely an aesthetic, ornamental choice.

In addition, the '449 utility patent claims circularity in its dependent claims, *see* '449 Patent, claims 8–10, as does the '166 utility patent, *see* '166 Patent, claims 7–9, 18, 22–24. Whether that claim is valid or invalid, it concedes functionality of the circle and precludes a design patent on the same feature.

Finally, even if circularity were not functional, it is anticipated by the Japanese patent, which proposes — like the D143 patent — a circular nozzle sitting on a base that is thinner than the nozzle's diameter at the point where the nozzle attaches to the base. Thus, Dyson's claim of ownership of the look of a circle raises substantial questions of invalidity. The D143 and D748 patents thus do not appropriately claim the nozzle's

circularity as such. In the case of the D143 patent, its combination with other elements may nonetheless be protectable, as discussed below.

c. The Nozzle's Depth

The D143 and D748 patents disclose a nozzle of a certain depth. On cross examination, Gammack testified that reducing the depth of the nozzle by half "might affect" air flow and velocity. (Doc. 54 at 25.) This point was not explored in any greater detail. However, the fact that Dyson's nozzle has depth downstream from the air discharge slit is certainly functional. It is necessary to Dyson's claim to have harnessed the Coanda effect to improve airflow. Even if the Coanda effect is illusory, the nozzle's depth reduces peripheral diffusion in favor of airflow in the axis and the plain of the nozzle. It is likely that a bladeless fan nozzle with little or no depth (as in the Japanese patent) would be less effective than a nozzle with a few inches of depth (as in Dyson's design). Indeed, the addition of such depth — through a "diffuser" — is one of the ways in which Dyson's '449 utility patent claims to differ from the prior art. Thus, the D143 and D748 patents do not appropriately claim *any* nozzle with depth. As discussed below, however, the D143 patent may appropriately claim that depth relative to other proportions disclosed by that patent.

d. The Shape of the Base

Cornucopia argues that the cylindrical shape of the base, and its height relative to the rest of the fan, is functional. Gammack countered with drawings of various shapes he explored for Dyson's bladeless fans, including square, cylindrical but bulbous, and cylindrical tapering into a dome shape at the top. Where a taller stand is needed, there could also be a "neck" component — a transition between the base and the nozzle that is narrower. Dyson markets such a model, although it is not at issue here.

The function of the base is as a platform for the concealed fan that draws air from around the base and forces it into the nozzle for discharge. Since exposed fan blades are an obvious safety hazard, some sort of housing is necessary. And since the fan blades rotate in circular fashion, any sort of housing will, at a minimum, be cylindrical.

The cylindrical shape of such housing is not just one among many equally useful shapes. Rather, function requires cylindrical housing of the fan, or air and pressure would be lost between the blades and the housing. Thus, Gammack was right that numerous designs could accommodate the impeller and ducting inside the base without changing the fan's performance or stability — but only in the sense that the operating internal cylindrical shape could be hidden with an additional external covering of any shape. The question here is whether Dyson can monopolize the look of a cylindrical form that is functional. The answer in general is no. The look of a cylinder is not arbitrary or decorative; it is the look of operation. Like everyone else, Dyson can monopolize in a design patent only an arbitrary shape. Accordingly, the D143 patent does not appropriately claim all circular bladeless fan bases.

e. Specific Proportions

"That elements of the [patented] design[have a utilitarian purpose] does not mean that . . . the combination of these elements into the patented design[] is dictated by primarily functional considerations." *See L.A. Gear*, 988 F.2d at 1124. Here, by contrast, each portion of the design and its combination with other portions appears to have a functional purpose.

At oral argument, however, Dyson's counsel relied heavily on the overall proportions disclosed in the D143 design. (*See* Doc. 54 at 74 ("[t]he dimensions, the proportions, the overall proportions of the width to the height of the fan is worthy of design protection"); *id*. at 77 ("[T]here are proportions . . . . When you look at the [perspective] view, you see relevant proportions between the diameter of the fan and the width of the nozzle."); *id*. at 78 ("[T]he proportions are in the [D143 patent's] figures. The proportions are relevant."); *id*. at 79 ("the patent has perspective views that show all the proportions").) The Court is persuaded that although a substantial question exists whether the combination of shapes and their orientation to each other is functional, the proportions of the various components in relation to each other is ornamental.

3. Comparison to Cornucopia's Fan

The D143 patent appropriately claims a bladeless fan design with a cylindrical base of a certain diameter and height in proportion to a ring-shaped nozzle of a certain diameter and depth. Cornucopia's fan precisely embodies these limitations. Distinguishing features also exist, but they do not alter the overall impression as compared to the D143 patent. For example, like Dyson's AM01 fan, Cornucopia's adds buttons, air intake grilles, and a power cord, all of which are necessary. Also, the foot of Cornucopia's base flares out to a square pedestal. The D143 patent discloses none of these features. But the Cornucopia fan otherwise mimics the valid design precisely. Indeed, the proportions are mimicked with such exactness that the Cornucopia fan's nozzle is interchangeable with the Dyson AM01 base.

Despite the minor the differences, the overall impression of the Cornucopia fan is deceptively similar to the D143 patent in the eye of the "ordinary observer." The Cornucopia fan's pedestal, in particular, does not materially distinguish Cornucopia's fan from Dyson's valid design. Rather, the overall impression made by the Cornucopia fan is as if one simply set the Dyson design on a pedestal. On balance, such a difference does not vitiate Dyson's likelihood of success on the merits. *Cf. Crocs, Inc. v. Int'l Trade Comm'n*, 598 F.3d 1294, 1303–04 (Fed. Cir. 2010) (reversing ITC's finding of non-infringement because, among other things, it "concentrate[ed] on small differences in isolation" and was thus "distracted from the overall impression of the claimed ornamental features"); *Int'l Seaway Trading Corp. v. Walgreens Corp.*, 589 F.3d 1233, 1243 (Fed. Cir. 2009) (affirming district court's conclusion that slight changes and additions to a patented design do not detract from the overall impression); *Payless Shoesource, Inc. v. Reebok Int'l Ltd.*, 998 F.2d 985, 990–91 (Fed. Cir. 1993) (reversing denial of preliminary injunction because district court "focus[ed] on a single difference as opposed to the entirety of the patented design"); *Litton Sys., Inc. v. Whirlpool Corp.*, 728 F.2d 1423, 1444 (Fed. Cir. 1984) ("minor differences between a patented design and an accused

article's design cannot, and shall not, prevent a finding of infringement"); *E. Am. Trio Prods., Inc. v. Tang Elec. Corp.*, 97 F. Supp. 2d 395, 407–08 (S.D.N.Y. 2000) ("differences in the detail of the design will not defeat infringement where two designs give substantially the same impression to an ordinary observer"). Dyson is therefore likely to persuade the trier of fact that the "ordinary observer" would consider Cornucopia's fan materially indistinguishable from the D143 design. Dyson has therefore satisfied the first element of the preliminary injunction test.

B. Irreparable Harm

Although submitted through declarations and based on hearsay, the Court accepts for purposes of these proceedings Dyson's evidence regarding consumer response to its AM01 fan. *Johnson v. Couturier*, 572 F.3d 1067, 1083 (9th Cir. 2009) ("A district court may . . . consider hearsay in deciding whether to issue a preliminary injunction."). The design of the AM01, which substantially embodies the D143 patent, is the single most important driver of consumer demand for that product. (Doc. 32-3 at 4 (sealed).) Cornucopia's fan was obviously created to provide consumers with almost exactly the same overall appearance, but at a much lower price. While Dyson's 12-inch AM01 fan carries a suggested retail price of $329, Cornucopia's equivalent fan retails at Bed Bath & Beyond — one of Dyson's top retail distributors — for $79.99.

Some retailers are reluctant to stock or continue to carry Dyson's fan due to its high price. Greg Forrest, sales director for Dyson Inc., testified that a retailer in the "DIY channel"[1] recently informed Dyson it was considering no longer stocking Dyson fans due to price. (Doc. 54 at 51–52.) Dyson submitted no evidence that the Cornucopia fan had anything to do with this retailer's deliberations, but it illustrates that retailers, like consumers, can be put off by Dyson's price — from which it is a persuasive inference that retailers would more readily stock a much less expensive version of the fan with

[1] The Court presumes "DIY channel" refers to do-it-yourself home improvement stores such as Lowe's and The Home Depot.

essentially the same function and design. Indeed, Dyson has photographed a Bed Bath & Beyond store in California where both the Dyson and Cornucopia fans were displayed side-by-side, but only Cornucopia's fans were available for sale (Doc. 54 at 49–50), suggesting that the store was shifting its focus to marketing Cornucopia's fan. Bed Bath & Beyond has also recently asked Dyson to lower its price. (*Id*. at 57.)

Cornucopia's fan and pricing will likely cause price erosion in Dyson's fan. If retailers become accustomed to stocking and selling an equivalent-appearing fan at a fraction of the price, these retailers may then be able to demand price concessions from Dyson. Likewise, some consumers who would have seriously considered buying a Dyson fan at the original price will choose the much cheaper competitors, or hold out, expecting Dyson to lower its price in response. Accordingly, the Court finds that Cornucopia's infringing fan is likely to cause Dyson harm.

Whether the harm is irreparable is a separate question. Irreparable harm may be found where "[t]he nature of the plaintiff's loss may make damages very difficult to calculate." *Roland Machinery Co. v. Dresser Indus., Inc.*, 749 F.2d 380, 386 (7th Cir. 1984). In this case, the novelty of bladeless fans — having only been available in the U.S. market since 2010 — creates a volatile market, especially in light of lower-cost competition like Cornucopia's fan. Thus, it is difficult to predict Dyson's damages, which would be at least a reasonable royalty, and perhaps compensation for price erosion. The price erosion, in particular, may be irreversible regardless of an ultimately favorable outcome for Dyson — creating a significant uncertainty as to amount of damages and a probability of a large damage award for continuing price erosion. Accordingly, Dyson has established irreparable harm if Cornucopia can continue to market its bladeless fan during the course of this litigation.

C. Balance of Equities

The balance of equities weighs in favor of Dyson. Even assuming no utility patent protection, as Dyson posits this motion by not moving on its utility patents, Dyson still invested substantial resources in developing its patented design and bringing its AM01

fan to market. (Doc. 32-7 at 3–4 (sealed).) Cornucopia, by contrast, slavishly copied Dyson's fan, including the infringing design feature. Dyson's design patents may overreach, but the potentially overreaching portions are not the basis for the relief granted here. And Cornucopia may have easily made a fan with the same functions and the same look of those functions that would not infringe the purely design feature of Dyson's fan. But it did not. Cornucopia's overreach remains seriously damaging and warrants prevention. The balance of equities thus tips toward Dyson.

D. Public Interest

The public interest also favors Dyson. In many cases, as in this one, the factor of public interest tracks the likelihood of success, as the predominant public interest lies in enforcing valid private rights, or freedom to compete, whichever has the better of it. In some cases the public interest has an additional and distinct import. This case is not of that second variety, but the public interest in favor of private property rights is nonetheless sufficient.

Cornucopia's counterargument largely rests on its antitrust claim, asserting that Dyson should fail in its attempt to monopolize the bladeless fan market by sham litigation and by enforcing patents obtained by fraud. By separate order, those claims have been dismissed for failure to state a claim upon which relief can be granted. Thus, they carry no weight in this preliminary injunction inquiry. The public interest therefore favors Dyson.

IV. BOND

The preliminary injunction must be conditioned on Dyson posting security "in an amount that the court considers proper to pay the costs and damages sustained by any party found to have been wrongfully enjoined or restrained." Fed. R. Civ. P. 65(c). The amount of the bond is within the Court's discretion. *See Save Our Sonoran, Inc. v. Flowers*, 408 F.3d 1113, 1126 (9th Cir. 2005).

Neither party provided any evidence to support a reasoned bond amount. The Court therefore draws upon its experience in light of the nature of Cornucopia's single-

product business and the range of likely harm from suspending that business until this action is concluded. A bond will be required in the amount of $500,000.00.

V. FORM OF THE INJUNCTION

Dyson's proposed injunction language is not entirely acceptable. The following reproduces Dyson's proposed language with the Court's insertions (underline) and deletions (~~strikeout~~):

> IT IS THEREFORE ORDERED that Cornucopia Products, LLC, its officers, ~~directors, partners,~~ agents, servants, employees, attorneys, ~~subsidiaries,~~ and ~~those acting in concert~~ other persons who are in active concert or participation with any of them, are enjoined from making, using, offering to sell, or selling within the United States, or importing into the United States, or exporting from the United States, Cornucopia's 12-inch bladeless fan~~, which is depicted in Dyson's moving papers~~ (model no. D8600-12), and any product that is no more than colorably different from that product ~~and embodies any design contained in U.S. Patent nos. D605,748 or D602,143~~.
>
> IT IS FURTHER ORDERED that, within ~~three (3) business days~~ seven (7) calendar days of the entry of this order, Cornucopia shall disclose to Dyson the names of all retailers and/or wholesalers to whom Cornucopia has sold or provided the Cornucopia 12-inch bladeless fan.

The model number has been inserted in place of "which is depicted in Dyson's moving papers" because it is more precise. To the extent Dyson worries that Cornucopia might market the same fan under a different model number, the "no more than colorably different" language would provide relief. *See, e.g.*, *Acumed LLC v. Stryker Corp.*, 525 F.3d 1319, 1324 (Fed. Cir. 2008) ("no more than colorably different" satisfied when accused device and new device are "essentially the same").

The "embodies any design" phrase is deleted for two reasons. First, the D748 patent is not enforced, and the D143 patent is not enforced in its entirety. Second, the language could be misread to say that the legal status of any Cornucopia fan that comes close to Dyson's patented designs can be adjudicated through contempt. That is not the

case. If (i) Cornucopia begins to market another fan similar to Dyson's patented designs, (ii) Dyson in good faith believes the fan is no more than colorably different from the D8600-12, (iii) Dyson brings a contempt motion, and (iv) the Court agrees that the new fan is no more than colorably different from the D8600-12, then the status of Cornucopia's new fan could be adjudicated in contempt proceedings, at which point the Court would reach the question of infringement. *TiVo Inc. v. EchoStar Corp.*, 646 F.3d 869, 881–84 (Fed. Cir. 2011) (en banc). But if the Court disagrees, Cornucopia is entitled to have the infringement question adjudicated in a separate lawsuit. *Id*. Thus, confining the injunction to the currently accused product and those no more than colorably different appropriately expresses the restrictions the injunction will impose on Cornucopia.

IT IS THEREFORE ORDERED that Dyson's Motion for a Preliminary Injunction (Doc. 33) is GRANTED, conditioned upon Dyson posting a bond in the amount of $500,000.00.

Dated this 27th day of July, 2012.

Neil V. Wake
United States District Judge