Sutro Product Development, Inc. filed, on March 10, 2008, an application under Section 1(a) of the Trademark Act, 15 U.S.C. § 1051(a), to register on the Supplemental Register a sound mark for “eye glasses; optical glasses; [and] sun glasses.” The sound mark is described as follows: “A series of three, regularly spaced, repeated clicks, wherein the clicks resemble the sound of a small object striking another metal object.” Applicant claims first use anywhere and first use in commerce on February 24, 2006.
The trademark examining attorney refused registration under Section 2(e)(5) of the Trademark Act, 15 U.S.C. § 1052(e)(5), on the ground that the proposed mark, when used in connection with the goods, “comprises a feature of the identified goods that serves a utilitarian purpose” and, accordingly, is functional.

When the refusal was made final, applicant appealed. Applicant and the examining attorney filed briefs, and both appeared at an oral hearing.

The examining attorney maintains the following position:

Functionality refusals have not been limited to design elements. A color has been held to be functional if it yields a utilitarian or functional advantage, for example, yellow or orange for safety signs. Using color as an analogy, sounds must also be refused if the sound yields a utilitarian or functional advantage, or results naturally from a feature providing such an advantage.

Applicant’s mark is the sound of a small metal object striking another metal object. The metal objects are struck in order to provide resistance to the hinges on the eyewear so that the temples “lock” into the open or closed position. Applicant’s brief states “the click sounds are primarily due to the shape and material of the cam surfaces, the shape and materials of the cam follower that mates with the cam surfaces, and the spring that biases the cam surfaces.” ... The clicking sound is thus functional because the steps necessary to

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1 The examining attorney also originally refused registration under Sections 1, 2 and 45 of the Trademark Act, U.S.C. §§ 1051-1052 and 1127, on the ground that the proposed mark fails to function as a trademark for the goods. When applicant amended its application to seek registration on the Supplemental Register, the examining attorney withdrew the “fails to function” refusal.
eliminate it would increase the cost of producing the product, or at the very least would require a third party to vary its method of manufacture from the method described under the applicable utility patents.

Because resistant hinges in eyewear (including hinges similar in kind to the applicant’s) contain cam elements, cam followers, and spring mechanisms that slide, roll, or rub on the surface of each other, the hinges produce friction when in operation. Since sound is a common byproduct of friction, it follows that sound is a natural byproduct of the operation of eyewear hinges. Because applicant’s goods involve a ratcheting mechanism that involves metallic components rubbing against each other to provide resistance, the sound produced is merely a natural byproduct of the friction created by the functional hinge mechanism, and any similar design will naturally produce a similar or even identical sound.

Put another way, because the clicking sound naturally emanates as a result of the friction caused by the surfaces within the functional resistance hinge rubbing or striking against each other, and because eliminating such a sound would require an additional step in the manufacturing process, the sound itself is also a functional feature of the goods. (Brief, pp. 4, 6, 7, 9).

The examining attorney asserts that to muffle the sound created by the hinges, lubricants and bearings would need to be added to reduce the friction, thereby increasing the difficulty and cost of manufacturing the product. Also relied upon is applicant’s advertising which, according to the examining attorney, touts
the functionality of the proposed mark; the advertising states that applicant’s “Three Click Hinge” is “10X stronger than a conventional hinge” and that it is “unmatched in strength, durability and fit.” The examining attorney concludes that eyewear hinges incorporating a cam element and spring that provide resistance to their opening and closing “are either functional or utilitarian, or both.” The fact that two third-party utility patents covering eyeglass hinges fail to mention a sound does not mean, according to the examining attorney, that the actual operation of the hinges does not, in fact, create a sound. In support of the refusal the examining attorney introduced dictionary definitions of the word “friction”; examples of applicant’s advertising; and excerpts of third-party websites.

Applicant argues that its proposed sound mark is not functional. More specifically, applicant contends that while the third-party patents may cover hinges for eye glasses, the patents do not cover any sound; that its advertising, while touting superior hinges, does not tout any functionality of the sound made by the hinges; that alternative designs exist, with or without sound; and that the cost of manufacture of applicant’s goods is not reduced by the sound made by operation of the hinges. In support of its arguments, applicant submitted, in pertinent part, the declaration of Jeff Sand, the
designer of applicant’s goods; copies of two third-party utility patents covering spectacle hinges; and excerpts of third-party websites. The record also includes videos submitted as specimens showing how the “three click” sound is produced when the eyeglass frames are opened and closed.

Section 2(e)(5) of the Trademark Act, 15 U.S.C. § 1052(e)(5), provides that registration of a product design may be denied if it “comprises any matter that, as a whole, is functional.” A product feature is functional and cannot serve as a trademark “when it is essential to the use or purpose of the device or when it affects the cost or quality of the device.” TrafFix Devices, Inc. v. Marketing Displays, Inc., 532 U.S. 23, 58 USPQ2d 1001, 1006 (2001) (citations omitted). To afford registration to functional designs would inhibit legitimate competition by, in effect, granting a monopoly to a non-reputational, or nonsource-identifying, feature of a product. Qualitex Co. v. Jacobson Products Co., Inc., 514 U.S. 159, 34 USPQ2d 1161, 1163-64 (1995); and In re Bose Corp., 772 F.2d 866, 227 USPQ 1, 6 (Fed. Cir. 1985) (“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”).

The term “friction” is defined as “surface resistance to relative motion; the rubbing of the surface of one body against
Applicant summarizes, accurately in our view, the sum of the examining attorney’s argument based on the functionality of the sound created by the friction of eyeglass hinges:

The resistance provided by the hinge against the opening and closing of the temples is a functional feature of [the] goods. The resistance to opening and closing of the hinges is due to friction. The sound which applicant seeks to register is a natural byproduct of the friction created by the functional feature. It would increase the cost to manufacture the product to eliminate the sound, therefore the sound is a functional feature. (Brief, p. 8).

It is important to note at the outset that the examining attorney does not attribute any functional features to the "click" sound itself, or to the fact that there are three clicks instead of another number of clicks. Rather, the examining attorney maintains that the sound is a necessary by-product of a functional feature and, thus, cannot be registered. When the Board asked the examining attorney at the oral hearing if there was any case law on point to support his "by-product" theory behind the functionality refusal, the examining attorney replied in the negative. And we are unaware of any such case law.² On

² In a different context, the Board has held that sounds emitted in the course of a product’s ordinary function can never be inherently distinctive and can only be registered on a showing of secondary meaning. In re Powermat Inc., 105 USPQ2d 1789 (TTAB 2013); Nextel Communications, Inc. v. Motorola, Inc., 91 USPQ2d 1393 (TTAB 2009); and In re Vertex Group LLC, 89 USPQ2d 1694 (TTAB 2009). However, this
the other hand, if the “by-product” sound were “essential” to the use or purpose of the goods, then it would fall within the traditional definition of functionality.

A determination of functionality generally involves consideration of the following factors (known as the Morton-Norwich factors):

1. Whether a utility patent exists that discloses the utilitarian advantages of the design sought to be registered;

2. Whether applicant's advertising touts the utilitarian advantages of the design;

3. Whether alternative designs are available that serve the same utilitarian purpose; and

4. Whether the design results from a comparatively simple or inexpensive method of manufacture.


is far from finding that such sounds are functional and always unregistrable. Moreover, there is no evidence before us to indicate that sound is emitted from eyeglasses in the course of their ordinary function.
The first Morton-Norwich factor is whether a utility patent discloses the utilitarian advantages of the proposed mark. “[T]he disclosure of a feature in the claims of a utility patent constitute strong evidence of functionality,” and “statements in a patent’s specification illuminating the purpose served by a design may constitute equally strong evidence of functionality.” Becton, Dickinson, 102 USPQ2d at 1377 (citations and internal quotations omitted); accord Kistner Concrete Products, Inc. v. Contech Arch Technologies, Inc., 97 USPQ2d 1912, 1920 (TTAB 2011); and In re Dietrich, 91 USPQ2d 1622, 1627 (TTAB 2009). Here, we also consider the technical information introduced into the record by the examining attorney and applicant.

The record includes two third-party utility patents (Reg. Nos. 3837735 and 3957360) covering hinges for eyeglasses. Applicant submitted this evidence and concedes that “these patents show that a hinge that resists opening and closing is a utilitarian feature” and “[t]he functional feature that is the subject of the utility patents is the resistance of the hinges.” (Brief, p. 12). Applicant is quick to point out, however, that the patents do not mention sound in any manner.

To the extent that the examining attorney concludes the eyeglass hinges are functional, we would agree only insofar as it has been shown that it is useful to be able to ”lock” one’s eyeglasses in an open or closed position. (There is nothing of
record to indicate that there is any purpose for locking one’s eyeglasses in the two intermediate positions between open and closed – the positions at which one would hear the first and second clicks.) Moreover, the third-party patents do not even mention sound, let alone identify any sound caused by the hinges as a functional feature of the eyeglasses. We do not agree that a clicking sound is functional simply because the sound is a "by-product" of the friction caused by a functional eyeglass hinge.

So as to be clear, applicant does not own and has never applied for any utility patents covering its hinges or any sound caused by their operation. Further, Jeff Sand, one of applicant’s founders, cleared up an incorrect statement in applicant’s literature when he stated the following in his declaration:

It should also be noted that any of Applicant’s literature that states that patents are pending for applicant’s eye wear is also inaccurate. Applicant is not seeking to patent its spectacles or spring hinge.

The absence of a utility patent covering the sound sought to be registered is a factor in applicant’s favor.

With respect to the second Morton-Norwich factor, the examining attorney contends that applicant’s advertising promotes the utilitarian advantages of the “Three Click Hinge,”
and is “strong” evidence of functionality, whereas applicant asserts that it is touting the hinge, not the sound, in the advertising. The examining attorney, in his brief (p. 8), makes specific reference to the following statements in the advertising: “[w]e’ve introduced the Ratchet Hinge™, a combination of form and function that is unmatched in strength, durability and fit”; the hinge “is integrated into the frame for incredible strength and durability”; and the hinge “allows the use of a lighter, more comfortable spring, keeping the frame centered on the face without oppressive pressure.” The examining attorney also highlights the following additional claims in the advertising: “[T]he new Three Click Hinge used in this collection addresses the weakest point in conventional eyewear construction. The hinge uses a revolutionary 3-D lance design that anchors the hinge into the frame from all directions,” and the “Three Click Hinge” is “10X stronger than a conventional hinge.” The examining attorney concludes that “nothing in the record would explain why consumers would encounter the phrase ‘Three Click Hinge,’ and go on to only relate the utilitarian advantages to the term ‘Hinge.’ To the contrary, since nearly all eyewear contains a hinge mechanism, consumers would regard the ‘Three Click’ element as having the utilitarian advantage of being ‘unmatched in strength, durability and fit.’” (Brief, p. 8)(emphasis in original).
We agree with applicant’s assessment on this point, and fail to find any touting of functional advantages deriving from the sound made by the hinge (as opposed to the functional advantages of the hinge itself) when the eyeglass frames are opened or closed. There certainly are no statements to the effect that applicant’s hinge is better because of the sound it emits when the eyeglasses are opened or closed or because of any feature that necessarily creates such a sound. We readily recognize that applicant touts the benefits of its hinges, but nowhere does applicant tout the sound made by the hinges as having utilitarian advantages. Indeed, what appears to be touted is the “3-D lance design that anchors the hinge into the frame from all directions.” This factor weighs in applicant’s favor.

We turn to consider the other Morton-Norwich factors. As noted earlier, applicant introduced the declaration of Jeff Sand who indicates that he is an industrial designer and inventor. More specifically, Mr. Sand designed the spring hinge used in applicant’s eyewear that creates the three-click sound sought to be registered. Mr. Sand made the following pertinent statements which relate to functionality, more specifically, the factors dealing with alternative designs and cost of manufacture:

The series of regularly spaced, repeated clicks produced by the spring hinge used in [applicant’s] eyewear when the temples of
the spectacles are moved from a fully opened to fully closed position and vice versa is not a feature of the product that is essential to the use or purpose of the article, or affects the cost or quality of the article, or is a feature that is needed by competitors.

I could have designed the spring hinge used in [applicant’s] eyewear to make no appreciable sound at all when operated while still maintaining the spring hinge’s other features.

The temples of the spectacles are “locked” into the open or closed position due to the intersection of the cam surface of the hinge and the spring biased cam follower of the hinge. Indentations, slots or grooves are provided in the cam surface of the hinge and when the spring pushes the cam follower into one of these slots, the hinge resists movement out of this position. There is no need for movement of the cam follower with respect to the cam surface to produce a sound for the cam follower and cam surface to provide resistance to movement. This resistance to movement out of the groove by the follower can often be felt although nothing is heard when the follower moves from one groove to the next.

The same resistance to movement from a selected position can be provided by a cam surface and cam follower that produces no appreciable sound when the hinge is operated as is provided by a cam surface and cam follower that does produce sound.

While this resistance to moving from a selected position may be considered a feature that adds to the quality of the spectacles, the design features of the spring hinge in [applicant’s] eyewear that create sound when the spring hinge is operated do not create or have an
appreciable affect [sic] on the spring hinge’s resistance to moving.

First, there are numerous ways to create sounds due to the operation of the hinges between the temples of the glasses and the frames whether a spring hinge is used or not, yet it is my experience that most, if not almost all, commercially available spectacles do not make an appreciable sound when the temples are folded against the frames or opened for wearing. This suggests to me that an audible indicator that the temples are either closed or opened is not a feature that is necessary to compete in the marketplace, and thus this is not a feature that needs to be available so that other manufacturers can successfully compete with [applicant].

Second, even if an audible indicator of whether the temples were closed or opened was an important, competitive feature, other spring hinges could be economically designed to make numerous variations of click sounds rather than the series of regularly spaced, repeated clicks used in [applicant’s] eyewear. The click sounds are primarily due to the shape and material of the cam surfaces and the spring that biases the cam surfaces. If the profiles or transitions of these mating surfaces are smooth then almost all appreciable sound of the parts moving against each other can be eliminated, such that no “clicks” are produced. It would be possible to make some of the grooves in the cam surface smooth and others abrupt such that as the temples are moved from opened to closed position there could be variations in the number as well as the spacing of the clicks. There could be no clicks, one click, or, I believe, as many as five clicks. A competitor designing such a hinge would not have to add to the cost of his hinge to create these variations in sound. Also, in response to another statement by the Examiner, Applicant’s web site does
describe the particular design of our spring hinge as enabling the spring of the hinge to be lighter. This statement is inaccurate. [Applicant does] in fact use a relatively light spring in the hinge; however, the spring used by Applicant is also used in other conventional spring hinge eyewear, and Applicant merely chose the relatively lighter spring because it made the clicks more resonate. The fact that I designed our spring hinge to produce a series of regularly spaced, repeated clicks did not allow me to use a particular spring that would be more cost effective.

The availability of alternative designs can, in some cases, be relevant to show that the design sought to be registered “preserves competition by ensuring competitors the right to compete effectively.” Valu Eng’g, 61 USPQ2d at 1428. However, the mere fact that other designs are available does not necessarily mean that applicant’s design is not functional. Bose, 227 USPQ at 5-6.

As highlighted by Mr. Sand, there are alternative designs available to competitors, ranging from designs that produce no sound, to others that produce a different number of click sounds than the three clicks comprising applicant’s proposed mark. This factor is in applicant’s favor.

The last Morton-Norwich factor to consider is whether the design results from a comparatively simple or inexpensive method of manufacture. The examining attorney essentially contends that the three-click sound is a natural by-product of the
friction inherent in the operation of applicant’s resistance hinge, and that it would add to the cost of the hinge to eliminate the sound. Applicant “agrees with the Examiner that the distinct sound produced by the operation of Applicant’s resistance hinge is a natural by-product of the friction developed between the cam surface and the cam follower of Applicant’s hinge.” (Reply Brief, p. 2). Applicant disagrees, however, that competitors would be placed at a significant competitive disadvantage if applicant gains trademark rights in the sound sought to be registered.

Mr. Sand, who has experience in the eyeglasses field, states “it is my experience that most, if not almost all, commercially available spectacles do not make an appreciable sound when the temples are folded against the frames or opened for wearing.” Further, Mr. Sand indicates, as shown in his declaration highlighted above, that the mating cam surfaces could be smooth, thereby eliminating all sound, or that the grooves in the cam surfaces could be made alternatively smooth and abrupt, thereby creating variations in the number of clicks when the eyeglasses are opened and closed. In fact, as mentioned in the article (relied upon by the examining attorney) from the Cornell Center for Materials Research regarding the reduction of friction, smoothing the surfaces is the first solution. Mr. Sand stated credibly that “[a] competitor
designing such a hinge would not have to add to the cost of his hinge to create these variations in sound.” As summed up by applicant, a competitor can use replacement components or utilize cam surfaces and cam followers that are designed differently from the start rather than modifying applicant’s design (by grinding down the surfaces, and/or adding lubricants or bearings), and as such could make a resistance hinge that sounded differently or made no sound at all, but was no more expensive to produce than applicant’s product. We agree. This factor weighs in applicant’s favor.

As spelled out by applicant, the hinges in its eyeglasses could have been designed to not produce any sound, yet the hinge would still have all of its functional features. The sound, in and of itself, has no appreciable effect on the hinge’s resistance to movement. Thus, while the hinge movements produce the sound, the sound is not dictated by functionality.

After carefully considering all the arguments and evidence submitted by applicant and the examining attorney, including those not specifically discussed herein, we cannot conclude that the examining attorney has met his burden of establishing a prima facie case of functionality. In re R.M. Smith, Inc., 734 F.2d 1482, 222 USPQ 1, 3 (Fed. Cir. 1984). See also In re Howard Leight Industries LLC, 80 USPQ2d 1507, 1509 n.7 (TTAB 2006) (“In ex parte proceedings before the Board, ... the Office
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has the initial burden of establishing a prima facie case of functionality.”). Neither the fact that there are clicks nor the fact that there are three of them is “essential” to making a resistance hinge. The examining attorney quite simply has not shown how applicant's proposed sound mark is functional or how it would hinder competition to recognize applicant’s claim of trademark rights in it.

**Decision:** The refusal to register is reversed. The application will proceed to registration on the Supplemental Register.