

Application Serial No.: 88/230,371
Mark: **DIGITAL HARMONIC**
Applicant: Digital Harmonic LLC
SKGF Ref.: 3749.1570000

REQUEST FOR RECONSIDERATION AFTER FINAL OFFICE ACTION

In an Office Action issued June 3, 2019, the United States Patent and Trademark Office (PTO) finally refused registration of Applicant's DIGITAL HARMONIC mark under Section 2(e)(1) of the Trademark Act, alleging that the mark is merely descriptive of the applied-for goods. The Examining Attorney has also required Applicant to respond to several questions regarding the mark.

Applicant respectfully disagrees with the Examining Attorney's analysis and conclusion regarding the significance and registrability of the mark, especially when the DIGITAL HARMONIC mark is considered in its entirety. There is no evidence in the record that relevant consumers would conclude or believe that DIGITAL HARMONIC, or even the term HARMONIC, immediately describes a feature, ingredient, characteristic, quality, purpose, or function of the goods. Applicant respectfully requests reconsideration and addresses the information and refusal, in turn, below.

1. Applicant's Responses to the Examining Attorney's Inquiries Remove Any Doubt as to the Registrability of the DIGITAL HARMONIC Mark on the Principal Register

- (a) The Examining Attorney has required an explanation as to "whether the wording in the mark 'DIGITAL' and 'HARMONIC' and 'DIGITAL HARMONIC' has any meaning or significance in the trade or industry in which applicant's goods and/or services are manufactured or provided, any meaning or significance as applied to applicant's goods and/or services, or if such wording is a term of art within applicant's industry."

Response: Applicant notes that the subject application covers goods – not for services. Applicant's DIGITAL HARMONIC mark was coined by Applicant, and thus has no meaning or significance in the trade or industry in which Applicant's goods are manufactured or provided, or as applied to Applicant's goods other than as a trademark to denote Applicant's goods. As Applicant coined the mark, and as there is no definition for the composite mark other than that imparted by Applicant, Applicant respectfully submits that there is absolutely no evidence that the mark/wording is a term of art within Applicant's industry.

In light of the definitions of the term DIGITAL attached by the Examining Attorney and Applicant, Applicant concedes that this term implies something general about a feature or characteristic of the applied-for goods and may have a recognized meaning in the broader electronics industry in which Applicant's goods travel or are encountered. However, as Applicant's mark is a composite mark comprising a combination of terms that create a unique and even incongruous mark with a non-descriptive meaning, Applicant respectfully submits that the mark cannot be dissected to consider the meaning of the term DIGITAL on its own.

As evidenced by the definitions in the record for the term HARMONIC, the term HARMONIC has a number of different meanings in a number of industries, including in music and mathematics, including the following:

When the same note, say middle C, is played on different instruments, the musical notes produced sound quite different. This is because that as well as producing the fundamental frequency of middle C they also produce multiples of this frequency called harmonics. ... The number and amplitude of the harmonics determines the characteristic sound of the instrument. (see attached evidence from https://www.hobbyprojects.com/general_theory/harmonics.html).

Neither the above definition nor the definitions or evidence in the record proves that (i) HARMONIC is immediately descriptive of a feature, ingredient, characteristic, or purpose of Applicant's goods, (ii) HARMONIC, when combined with the term DIGITAL, has a separable and/or descriptive meaning when considered as a whole, or (iii) there is such a thing as a DIGITAL HARMONIC.

- (b) Explain whether the goods digitize, incorporate, and/or use and/or feature digital or digitized data and/or waveforms and/or signals?
- (c) Explain whether the goods incorporate and/or use and/or feature harmonic waveforms and signals?

Response: Applicant addresses items (b) and (c) together. Applicant's goods are described as follows:

Scientific research equipment and software **for waveform and image analysis and characterization**; sonar; radar apparatus; **waveform and image analysis and characterization equipment, namely, waveform and image analyzers,** for use in military, law enforcement, civil, scientific, and industrial applications; **waveform and image analysis and characterization software** for use in military, law enforcement, civil, scientific, and industrial applications, in Class 9; and

Medical diagnostic equipment, namely, waveform and image analyzers, **for waveform and image analysis and characterization** in Class 10.

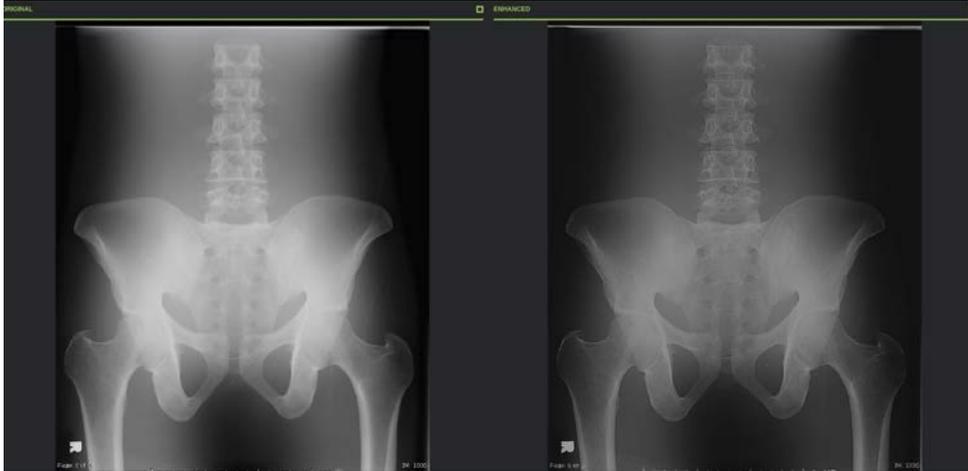
As shown above in **bold and underline**, Applicant's goods are used for analysis and characterization of waveforms and images. Further, neither the words "digital" or "harmonic" appear in the descriptions of the goods.

Applicant's process does not digitize anything. In stark contrast, Applicant's process analyzes images to improve the content and perform reformation of the images. With respect to whether Applicant's goods incorporate, use, or feature digital or digitized data or digital waveforms or signals, the goods have a digital aspect in that they may be used to look for signal characteristics in the digital domain to enable identification of the signal. However, Applicant is also **an image processing company**, and its goods relate to **image analysis**, which is very different from **signal measurement** and analysis software. The software is purchased for image analysis and enhancement.

For example, as shown in the below images, consumers use the software in the medical industry for enhancing X-ray images from lower exposure (see first image below) and for atmospheric mitigation (see second image below).

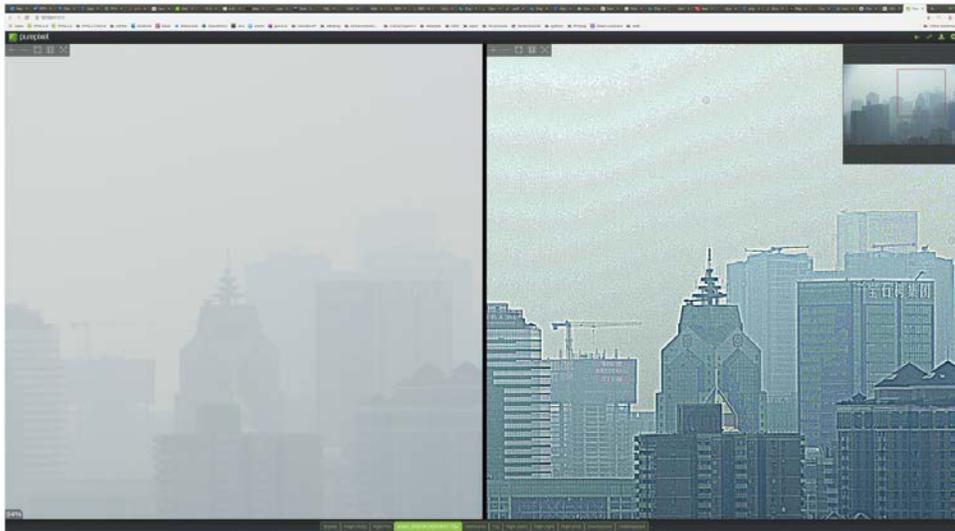
ORIGINAL IMAGE

ENHANCED IMAGE



ORIGINAL IMAGE

ENHANCED IMAGE



With respect to whether Applicant's goods incorporate, use, or feature harmonic waveforms and signals, Applicant asserts that its software does not create, capture or record harmonics nor can it produce something recognized as or called a digital harmonic since there is literally **no such thing**.

2. Applicant's DIGITAL HARMONIC Mark is Suggestive and Entitled to Registration on the Principal Register

The Examining Attorney has finally refused registration of Applicant's mark under Section 2(e)(1) of the Trademark Act on the basis that it (allegedly) merely describes a feature of Applicant's goods, namely:

Scientific research equipment and software for waveform and image analysis and characterization; sonar; radar apparatus; waveform and image analysis and characterization equipment, namely, waveform and image analyzers, for use in military, law enforcement, civil, scientific, and industrial applications; waveform and image analysis and characterization software for use in military, law enforcement, civil, scientific, and industrial applications, in Class 9; and

Medical diagnostic equipment, namely, waveform and image analyzers, for waveform and image analysis and characterization in Class 10.

Applicant's mark is suggestive, not descriptive, and entitled to registration on the Principal Register for the reasons detailed below.

A. DIGITAL HARMONIC Does Not Meet the Test for a Merely Descriptive Mark

The Final Office Action continues the refusal to register Applicant's DIGITAL HARMONIC mark on the Principal Register based on a finding that it is merely descriptive.

The Examining Attorney bears the burden of proving that a mark is merely descriptive of the relevant goods. *In re Merrill, Lynch, Pierce, Fenner, and Smith Inc.*, 828 F.2d 1567, 4 USPQ2d 1141, 1143 (Fed. Cir. 1987). A mark is descriptive if it "forthwith conveys an immediate idea of the ingredients, qualities or characteristics of the goods." *Abercrombie & Fitch Co. v. Hunting World, Inc.*, 537 F.2d 4, 189 USPQ 759, 765 (2d Cir. 1976) (emphasis added). See *In re Abcor Development Corp.*, 588 F.2d 811, 200 USPQ 215 (CCPA 1978). Furthermore, to be descriptive, the mark must immediately convey information as to the qualities, features or characteristics of the goods and/or services with a "degree of particularity." *Plus Products v. Medical Modalities Associates, Inc.*, 211 USPQ 1199, 1204-1205 (TTAB 1981). See *In re Diet Tabs, Inc.*, 231 USPQ 587, 588 (TTAB 1986); *Holiday Inns, Inc. v. Monolith Enterprises*, 212 USPQ 949, 952 (TTAB 1981); *In re TMS Corp. of the Americas*, 200 USPQ 57, 59 (TTAB 1978); and *In re Gourmet Bakers, Inc.*, 173 USPQ 565 (TTAB 1972).

To be characterized as "descriptive," a term must directly give some reasonably accurate or tolerably distinct knowledge of the characteristics of a product. *Blisscraft of Hollywood v. United Plastics Co.*, 294 F.2d 694, 131 U.S.P.Q. 55 (2d Cir. 1961). If information about the product or service given by the term used as a mark is indirect or vague, then this indicates that the term is being used in a "suggestive," not descriptive, manner. See *McCarthy's on Trademarks and Unfair Competition* §§11:62 to 11:65. Applicant respectfully submits that the Trademark Office has not met its burden of proving that both of the terms in the mark are descriptive of Applicant's

goods or that the DIGITAL HARMONIC mark, especially when considered in its entirety, is merely descriptive.

DIGITAL HARMONIC is a “combined” term that is indirect or vague when applied to image analysis and characterization software and equipment, and thus forces consumers to pause and really think about what the term means. Even if the term DIGITAL describes something very general about a purpose, feature, or function of the goods, and is therefore independently unregistrable, there is an unusual association in Applicant's mark of the terms DIGITAL and HARMONIC that results in a unique, suggestive, and even incongruous expression, which, by definition, does not immediately convey the purpose, features, uses, or characteristics of the goods.

The Examining Attorney is mistaken in concluding that the term DIGITAL HARMONIC has a “clear and plain meaning” in relation to the applied-for goods and that the mark immediately describes the use or function of the equipment and software – primarily because Applicant's hardware and software do **not** capture or record information. Applicant's goods process and analyze images. The computing hardware and software processes do not and cannot “digitally” capture or record a harmonic because a harmonic is not a digitally expressed sound. Furthermore, there is no such “thing” as a “digital harmonic.”

Of particular importance to the analysis in this case is the principle that when two or more alleged descriptive terms are combined, the determination of whether the composite mark also has a merely descriptive significance turns on the question of whether the combination of terms evokes a new and unique commercial impression. First, as evidenced by Applicant's responses to the Examining Attorney's particular inquiries, and Applicant's arguments and evidence in the record and discussed herein, the mark is not comprised of two descriptive terms because the term HARMONIC has no descriptive significance when applied to Applicant's goods.

The term HARMONIC is not merely descriptive of a feature, purpose, function, quality, or use of the applied-for goods and the specific combination of the words DIGITAL HARMONIC results in a designation which, **when considered in its entirety**, is not descriptive of Applicant's goods. Applicant's mark, intended to be used in connection with image processing and analysis software and equipment, does not convey an immediate idea about the goods with any degree of particularity.

The mark DIGITAL HARMONIC requires imagination, thought, and perception to reach any conclusion as to the nature of the goods since DIGITAL makes no sense as a modifier of HARMONIC. A consumer must engage in extremely sophisticated and mature thought or follow a multi-stage reasoning process to determine any specific attributes of applicant's products: Can image processing software analyze sounds and/or signals? Can waveform and image analysis and characterization equipment create digital signals? Can a harmonic be a digitized signal? Do all digitized signals contain a harmonic/harmonics?

The Board routinely applies the principles outlined above when determining whether a mark should be characterized as merely descriptive or suggestive. In *No Nonsense Fashions, Inc. v. Consol. Foods Corp.*, the Board held that the mark SHEER ELEGANCE was not merely descriptive of the applicant's goods -- panty hose -- because the mark did not immediately convey a quality or characteristic of the goods and the mark was not so descriptive as to prevent it from indicating a source. 226 U.S.P.Q. 502 (T.T.A.B. 1985). In another similar case, the Board found that the mark THE MONEY SERVICE was suggestive of financial services pertaining to the transfer of funds from remote locations because, although the mark suggested

some form of monetary service, it did not in any way describe the Applicant's actual services. In that case, the Board stated:

The [mark] suggests a number of things, but yet falls short of describing applicant's services in any one degree of particularity. To affect a readily understood connection between the applicant's mark and its services requires the actual or prospective customer to use thought, imagination and perhaps an exercise in extrapolation.

In re TMS Corp. of the Americas, 200 U.S.P.Q. 57, 59 (TTAB 1978). In yet another example, the Board found that the mark THE DRIVING FORCE was not merely descriptive for supplying truck drivers because the mark did not immediately convey to consumers that the applicant provided truck driving services, and the mark could also be associated with others types of drivers. *Manpower Inc. v. Driving Force, Inc.*, 212 U.S.P.Q. 961, 963 (TTAB 1981). See also *In re Polytop Corp.*, 167 U.S.P.Q. 383 (TTAB 1970) (LOC-TUP suggestive for bottle tops).

Here, there has been no showing that the phrase DIGITAL HARMONIC is merely descriptive of Applicant's goods. While the wording DIGITAL may imply something general about the Applicant's goods, the term HARMONIC is -- at best -- suggestive. Furthermore, the combination of these terms is incongruous because **something that is digital cannot vibrate as a harmonic does.** Incongruity in a mark has been designated by the Board to be "[an] accepted [guidepost] in the evolved set of legal principles for discriminating the suggestive from the descriptive mark," and the Board has noted that the notion of mere descriptiveness "should not penalize coinage of hitherto unused and somewhat incongruous word combinations whose import would not be grasped without some measure of imagination and 'mental pause.'" *In re Shutts*, 217 USPQ 363, 364-5 (TTAB 1983) (SNO-RAKE held not merely descriptive of a snow-removal hand tool); see also *In re Vienna Sausage Mfg. Co.*, 156 USPQ 155, 156 (TTAB 1967) (FRANKWURST held not merely descriptive for wieners, the Board finding that although "frank" may be synonymous with "wiener," and "wurst" is synonymous with "sausage," the combination of the terms is incongruous and results in a mark that is no more than suggestive of the nature of the goods); *In re John H. Breck, Inc.*, 150 USPQ 397, 398 (TTAB 1966) (TINT TONE held suggestive for hair coloring, the Board finding that the words overlap in significance and their combination is somewhat incongruous or redundant and does not immediately convey the nature of the product); cf. *In re Getz Found.*, 227 USPQ 571, 572 (TTAB 1985) (MOUSE HOUSE held fanciful for museum services featuring mice figurines made up to appear as human beings, the Board finding that the only conceivable meaning of "mouse house," i.e., a building at a zoo in which live and/or stuffed mice are displayed, is incongruous).

As support for his conclusion that the mark is merely descriptive, the Examining Attorney has attached definitions of the terms and excerpts of articles from the Internet – neither of which prove the mark is merely descriptive for Applicant's goods. In fact, other than a few pages from Applicant's website, attached to the first Office Action, where DIGITAL HARMONIC refer to Applicant's company name, none of the Examining Attorney's evidence shows use of the terms "digital" and "harmonic" together or even in near proximity to each other. Therefore, the Examining Attorney has not provided any evidence that the wording "digital harmonic" has any recognized significance in any industry much less Applicant's. The Examining Attorney has merely sewn together definitions and random extraneous evidence to try to prove that the term DIGITAL HARMONIC, when considered in its entirety, is merely descriptive.

B. DIGITAL HARMONIC Is Not Descriptive in Relation to Applicant's Goods

The determination of whether a mark is merely descriptive must be made in relation to the goods or services for which registration is sought, not in the abstract. *In re Chamber of Commerce*, 675 F.3d at 1300, 102 USPQ2d at 1219; *In re Bayer*, 488 F.3d at 964, 82 USPQ2d at 1831. This requires consideration of the context in which the mark is used or intended to be used in connection with those goods/services, and the possible significance that the mark would have to the *average purchaser* of the goods or services in the marketplace. See *In re Chamber of Commerce*, 675 F.3d at 1300, 102 USPQ2d at 1219; *In re Bayer*, 488 F.3d at 964, 82 USPQ2d at 1831; *In re Omaha Nat'l Corp.*, 819 F.2d 1117, 2 USPQ2d 1859 (Fed. Cir. 1987); *In re Abcor Dev. Corp.*, 588 F.2d 811, 200 USPQ 215 (C.C.P.A. 1978); *In re Datapipe, Inc.*, 111 USPQ2d 1330 (TTAB 2014); *In re Venture Lending Assocs.*, 226 USPQ 285 (TTAB 1985).

DIGITAL HARMONIC, at worst, could suggest that Applicant's goods may involve the digital domain, equipment, or vibrational ("waveform") information of some type, but the mark is in no way immediately descriptive of a feature of the goods, because the relevant equipment does not record, capture, or create harmonics.

Moreover, when considered with image analysis there is no connection whatsoever.

As stated in Applicant's prior Response, but important enough to repeat here, a harmonic can be audible and recordable **but only in the analog domain**; but, first, the recordation is usually transformed into resulting demonstrations of waves over time; second, the recordation is not a function or feature of Applicant's goods. At best, it is possible, only after several mental leaps, to presume the goods analyze and characterize results expressed digitally or from a machine that is digital, and that may be about vibrations or sounds, or may use the digital compilation of variations of harmonics to formulate a desired analysis, but a harmonic(s) cannot be digital. Moreover, the purposes of Applicant's goods are to analyze signals and images

Applicant's goods provide results that involve particularly technical experience and knowledge to interpret and/or understand. The general public not only would not purchase these goods, such that they would come into contact with Applicant's mark, but also would likely not be able to even guess as to the nature of these goods. Purchasers of Applicant's goods are sophisticated enough to understand the purpose/use of the goods and know that the mark does not describe a feature or characteristic of the goods.

To emphasize this point, Applicant attaches six declarations from established experts in the industry and channels of trade in which Applicant's goods travel and are encountered, each of whom attest to their understanding of the meaning of the term/mark DIGITAL HARMONIC to the fact that, outside of Applicant's company name and products, they are not aware of any significance of the mark DIGITAL HARMONIC as related to the goods, in the specific industry, or other industries with which they work or are familiar; there is no such "thing" as a digital harmonic. Furthermore, these declarants are also consumers of highly sophisticated technology products similar to the Applicant's, including in the relevant industry.

Applicant respectfully requests that the Examining Attorney read each of the Declarations carefully, but also highlights the following statements:

- From Gene A. Frantz, founder of Octavo Systems, a Professor in Practice in the Electrical and Computer Engineering Department at Rice University, an expert in analysis and transformation of signals, with over 40 years of experience in the engineering and technology industries:

Anyone who works in or understands the digital domain knows there is no such thing as a “digital harmonic” – harmonics are a phenomena in the analog world.

...Digital Harmonic’s technology is a uniquely different approach from classical signal processing theory.

...most people seeing or hearing the DIGITAL HARMONIC mark would likely think the software has something to do with music, which is completely inaccurate. DIGITAL HARMONIC [- -] it is an oxymoron. Those with an understanding of technology would find the DIGITAL HARMONIC mark a bit humorous. I am one of those who finds the combination of “digital” and “harmonic” a bit humorous and have had my mind wandering as I considered how the two combined words could take meaning. I have found that my own mental process to make sense of the concept these two words (digital and harmonic) might compose has not yet come to a conclusion. But I’m still thinking. I will additionally note that, as I understand the fundamental concepts of the underlying technology of the company, I have found no relationship of their technology to the DIGITAL HARMONIC mark.

- From Graham Hankey, a Senior Proposal Manager at SAIC, with approximately 22 years working directly with various U.S. Department of Defense agencies, including the Air Force, Army and Navy:

I do not believe, nor do I think that my peers in my industry, or likely consumers of Digital Harmonic’s products, would believe, that Digital Harmonic immediately conveys direct information about the exact nature of the software products or equipment, i.e., a feature, characteristic, purpose, or use. That is, I believe that my peers, as well as experts working in the federal agencies with whom we work – often experts in highly specialized software or equipment used in their particular industries, upon encountering the DIGITAL HARMONIC trademark, would not immediately understand the purpose or use of the applied-for products. There are so many possible uses of the underlying technology that it would be careless for someone to make an assumption as to its specific function or purpose.

- From Mark Schofield, Head of the Resources and Technology Assessment Section, at the U.S. Navy Civilian at the Pentagon in the Operational Support Branch, who also has over 35 years in the electronic warfare and information technology fields, and 25 years of active duty experience in the U.S. Navy:

Digital Harmonic's software does not record or capture harmonics.

In my 35 years in the electronic warfare and information technology fields, I have never run into the term DIGITAL HARMONIC other than as coined and used by Digital Harmonic.

As evidenced by the distinct and well-informed statements from each declarant, each of whom is also a consumer in the relevant industry, consumers and experts in the industry, encountering the DIGITAL HARMONIC mark would have to use great "imagination, thought, or perception" to determine the nature of Applicant's goods covered by this application, Applicant submits that its DIGITAL HARMONIC mark simply does not fit the classic formulation of a descriptive mark, and, even rises to the level of an incongruous mark – or as stated by Mr. Frantz, is an "oxymoron"; and therefore, any doubt regarding the mark's registrability at all, including on the Principal Register, should be resolved on Applicant's behalf. See *In re Merrill Lynch, Pierce, Fenner & Smith Inc.*, 828 F.2d 1567, 1571, 4 USPQ2d 1141, 1143 (Fed. Cir. 1987).

Applicant notes that Applicant's previous application for the DIGITAL HARMONIC mark, filed July 15, 2014, was allowed for registration on December 22, 2015. (See attached copy of printout of prosecution history for Applicant's Application No. 86337077 for the DIGITAL HARMONIC mark, covering the same goods, from the Office's Trademark Status and Document Retrieval System "TSDR"). Thus, the Examining Attorney in that case determined that the mark was not merely descriptive of the goods and should be allowed to register on the Principal Register.

Applicant respectfully submits that there is no on-point or more relevant evidence in the record for the subject application that indicates that the DIGITAL HARMONIC mark has suddenly become merely descriptive.

Applicant respectfully submits that the evidence and arguments herein support the fact that Applicant's mark is a unitary incongruous term/mark and therefore registrable on the Principal Register.

The burden rests with the Examining Attorney to establish a prima facie case that the mark is merely descriptive. *In re Pacer Technology*, 67 U.S.P.Q. 1629 (Fed. Cir. 2003). None of the evidence provided by the Examining Attorney is indicative that the mark DIGITAL HARMONIC is recognized as descriptive in connection with the identified goods. In the absence of any other evidence or rationale, the Examining Attorney fails to meet the burden of showing that a "substantial portion" of prospective consumers would recognize the mark DIGITAL HARMONIC as merely descriptive of Applicant's goods.

In light of the foregoing, and recognizing that any doubts as to the descriptiveness of Applicant's mark must be resolved in its favor, Applicant submits that the Examining Attorney should withdraw the Section 2(e)(1) refusal to register. *In re Micro Instrument Corp.*, 222 U.S.P.Q. 252, 255 (TTAB 1984).

For the foregoing reasons, Applicant respectfully requests that the refusal be withdrawn and the application be approved for publication on the Principal Register.