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UNITED STATES PATENT AND TRADEMARK OFFICE

Trademark Trial and Appeal Board

*In re Berkeley Lights, Inc.*

Serial No. 88895703

Nikolaus A. Woloszczuk of Rimon, P.C. for Berkeley Lights, Inc.

Caitlin C. Watts-FitzGerald, Trademark Examining Attorney, Law Office 111,
Chris Doniger, Managing Attorney.

Before Zervas, Larkin, and Dunn,
Administrative Trademark Judges.

Opinion by Larkin, Administrative Trademark Judge:

Berkeley Lights, Inc. ("Applicant") seeks registration on the Principal Register of the proposed standard-character mark DEEP OPTO PROFILING for goods ultimately identified as "Chemicals in the nature of chemical solutions and preparations consisting of reagents for scientific and research use in connection with analysis of nucleic acid; kits comprised of chemicals in the nature of chemical solutions and preparations consisting of reagents for scientific and research use in connection with analysis for biotechnological and pharmaceutical research, all for performing scientific protocols and assays on microfluidic chips" in International

Class 1, and for services ultimately identified as "Performing biochemical assays and protocols in the nature of chemical and biological research and analysis on microfluidic chips, for biotechnological and pharmaceutical research; performing scientific protocols in the nature of chemical and biological research and analysis for the preparation of nucleic acids for sequencing" in International Class 42.[1]

The Examining Attorney has refused registration of Applicant's proposed mark in both classes under Section 2(e)(1) of the Trademark Act, 15 U.S.C. § 1052(e)(1), on the ground that it is merely descriptive of the goods and services identified in the application.

When the Examining Attorney made the refusal final, Applicant requested reconsideration, which was denied, and appealed to the Board. The case is fully briefed.[2] We affirm the refusal to register in both classes.

[1] Application Serial No. 88895703 was filed on April 30, 2020 under Section 1(b) of the Trademark Act, 15 U.S.C. § 1051(b), based on Applicant's allegation of a bona fide intention to use the mark in commerce in connection with the goods and services identified in the application.

[2] Citations in this opinion to the briefs refer to TTABVUE, the Board's online docketing system. *Turdin v. Tribolite, Ltd.*, 109 USPQ2d 1473, 1476 n.6 (TTAB 2014). Specifically, the number preceding TTABVUE corresponds to the docket entry number, and any numbers following TTABVUE refer to the page(s) of the docket entry where the cited materials appear. Applicant's appeal brief appears at 12 TTABVUE and its reply brief appears at 15 TTABVUE. The Examining Attorney's brief appears at 14 TTABVUE.

## I. Prosecution History and Record on Appeal[3]

We briefly summarize below the prosecution history of the application and the application record because they provide useful background to our analysis of the issues on appeal.

Applicant initially sought registration of its proposed mark for goods identified as "Chemicals and reagents, including kits containing such chemicals and reagents, for biotech/pharmaceutical research; chemicals and reagents, including kits containing such chemicals and reagents, for performing scientific protocols and assays on microfluidic chips; chemicals and reagents, including kits containing such chemicals and reagents, for preparation of nucleic acids for sequencing," and for services identified as "Providing services, including performing assays and protocols on microfluidic chips, for biotech/pharmaceutical research; providing services, including performing scientific protocols, for preparation of nucleic acids for sequencing." The Examining Attorney issued an Office Action refusing registration on the ground that the proposed mark was merely descriptive and requiring Applicant to amend its identifications of goods.[4] The Examining Attorney made of record dictionary definitions of the words "deep" and "profile,"[5] and pages from the edgar-online.com database displaying a filing made by Applicant with the United States Securities and

[3] Citations in this opinion to the application record, including the request for reconsideration and its denial, are to pages in the Trademark Status & Document Retrieval ("TSDR") database of the United States Patent and Trademark Office ("USPTO").

[4] July 24, 2020 Office Action at TSDR 1.

[5] *Id.* at TSDR 2-21.

Exchange Commission (the "SEC Filing") regarding a public offering of securities in which Applicant described itself and its business as offering test goods and services allowing "a high level of control over live single cells and other micro-objects," specifically, by "enabl[ing] deterministic positioning of living single cells and other micro-objects using light."[6]

Applicant responded to the Office Action by amending its identifications of goods and services and arguing against the mere descriptiveness refusal. Applicant made of record the declaration of its counsel, Nikolaus A. Woloszczuk,[7] which covered dictionary definitions of the phrase "combining form,"[8] and the word "profiling."[9]

The Examining Attorney then issued an Office Action accepting Applicant's amendments to its identifications of goods and services, and making final the mere descriptiveness refusal.[10] The Examining Attorney made of record a dictionary definition of the word "synonym,"[11] an article entitled "Deep Profiling of Proteome and Phosphoproteome by Isobaric Labeling, Extensive Liquid Chromatography and Mass Spectometry" on the website of the National Institutes of Health (nih.gov);[12] an article entitled "Deep Profiling of Cellular Heterogeneity by Emerging Single-Cell

[6] *Id.* at TSDR 22-25.

[7] November 6, 2020 Response to Office Action at TSDR 2-3.

[8] *Id.* at TSDR 15-22.

[9] *Id.* at TSDR 23-29.

[10] November 24, 2020 Final Office Action at TSDR 1.

[11] *Id.* at TSDR 2-11.

[12] *Id.* at TSDR 12-30.

Proteomic Technologies" on the website of wiley.com;[13] an article entitled "Deep profiling of protease substrate specificity enabled by dual random and scanned proteome substrate phage libraries" on the website of the Proceedings of the National Academy of Sciences (pnas.org);[14] an article entitled "Novel tools for primary immunodeficiency diagnosis: making a case for deep profiling" on the website of Ingenta Connect (ingentaconnect.com);[15] an article entitled "Deep profiling of apoptotic pathways with mass cytometry identifies a synergistic drug combination for killing myeloma cells" from the website at nature.com;[16] a definition of the acronym OPTO from Acronym Finder (acronymfinder.com);[17] an article entitled "Clearing and Labeling Techniques for Large-Scale Biological Tissues" from the website of the National Institutes of Health (nih.gov);[18] and an article entitled "Reagentless Bacterial Identification Using a Combination of Multiwavelength Transmission and Angular Scattering Spectroscopy" from the website at hindawi.com.[19]

[13] *Id.* at TSDR 31-52.

[14] *Id.* at TSDR 53-56.

[15] *Id.* at TSDR 57-58.

[16] *Id.* at TSDR 59-75.

[17] *Id.* at TSDR 76-78.

[18] *Id.* at TSDR 79-94.

[19] *Id.* at TSDR 95-110.

Applicant requested reconsideration and then appealed to the Board. In its Request for Reconsideration, Applicant made of record another declaration of Mr. Woloszczuk,[20] which covered pages from Applicant's website at berkeleylights.com.[21]

The Examining Attorney denied Applicant's Request for Reconsideration.[22] She made of record an article entitled "Deep profiling reveals substantial heterogeneity of integration outcomes in CRISPR knock-in experiments;"[23] an article entitled "Deep profiling and custom databases improve detection of proteoforms generated by alternative splicing" on the website of the National Institutes of Health (nih.gov);[24] an article entitled "Deep Profiling of Microgram-Scale by Tandem Mass Tag Mass Spectrometry" in the *Journal of Proteome Research*;[25] articles from the LexisNexis database in which the terms "deep profiling," "optical profiling," or "opto" appear;[26] an article entitled "Simple and Sensitive Method for Deep Profiling of Host Cell Proteins in Therapeutic Antibodies by Combining Ultra-Low Trypsin Concentration Digestion, Long Chromatographic Gradients, and BoxCar Mass Spectometry Acquisition;"[27] webpages and articles using the terms "Opto" or "Optical Profiling;"[28]

[20] May 18, 2021 Request for Reconsideration at TSDR 2-3.

[21] *Id.* at TSDR 14-17.

[22] June 14, 2021 Denial of Request for Reconsideration at TSDR 1.

[23] *Id.* at TSDR 2.

[24] *Id.* at TSDR 3-7.

[25] *Id.* at TSDR 8-16.

[26] *Id.* at TSDR 17-30.

[27] *Id.* at TSDR 31-33.

[28] *Id.* at TSDR 34-57.

an article from the Lexis/Nexis database regarding Applicant;[29] and a Wikipedia entry entitled "Optofluidics."[30]

## II. Mere Descriptiveness Refusal

### A. Applicable Law

Section 2(e)(1) of the Trademark Act, 15 U.S.C. § 1052(e)(1), prohibits registration on the Principal Register of "a mark which, (1) when used on or in connection with the goods of the applicant is merely descriptive . . . of them," unless the mark has acquired distinctiveness under Section 2(f) of the Act, 15 U.S.C. § 1052(f).[31]

"A term is deemed to be merely descriptive of goods or services, within the meaning of Section 2(e)(1), if it forthwith conveys an immediate idea of an ingredient, quality, characteristic, feature, function, purpose or use of the goods or services." *In re Fallon*, 2020 USPQ2d 11249, at *7 (TTAB 2020) (quoting *In re Canine Caviar Pet Foods, Inc.*, 126 USPQ2d 1590, 1598 (TTAB 2018) (citing *In re Chamber of Commerce of the U.S.*, 675 F.3d 1297, 102 USPQ2d 1217, 1219 (Fed. Cir. 2012); *In re TriVita, Inc.*, 783 F.3d 872, 114 USPQ2d 1574, 1575 (Fed. Cir. 2015); *In re Abcor Dev. Corp.*, 588 F.2d 811, 200 USPQ 215, 217-18 (CCPA 1978)). "A mark need not immediately convey an idea of each and every specific feature of the goods [or services] in order to be considered merely descriptive; it is enough if it describes one significant attribute, function or property of the goods [or services]." *In re Fat Boys Water Sports LLC*, 118

[29] *Id.* at TSDR 58.

[30] *Id.* at TSDR 59-60.

[31] As noted above, this application is an intent-to-use application, and Applicant does not claim that its proposed mark has acquired distinctiveness.

USPQ2d 1511, 1513 (TTAB 2016) (citing *In re Gyulay*, 820 F.2d 1216, 3 USPQ2d 1009, 1010 (Fed. Cir. 1987)).

"Whether a mark is merely descriptive is 'evaluated in relation to the particular goods [or services] for which registration is sought, the context in which it is being used, and the possible significance that the term would have to the average purchaser of the goods [or services] because of the manner of its use or intended use,'" *Fallon*, 2020 USPQ2d 11249, at *7 (quoting *Chamber of Commerce*, 102 USPQ2d at 1219) (internal quotation omitted)), and "'not in the abstract or on the basis of guesswork.'" *Id.* (quoting *Fat Boys*, 118 USPQ2d at 1513) (citing *Abcor Dev.*, 200 USPQ at 218)). "We ask 'whether someone who knows what the goods and services are will understand the mark to convey information about them.'" *Id.* (quoting *Real Foods Pty Ltd. v. Frito-Lay N. Am., Inc.*, 906 F.3d 965, 128 USPQ2d 1370, 1374 (Fed. Cir. 2018) (quoting *DuoProSS Meditech Corp. v. Inviro Med. Devices, Ltd.*, 695 F.3d 1247, 103 USPQ2d 1753, 1757 (Fed. Cir. 2012) (internal quotation omitted)). A mark is suggestive, and not merely descriptive, if it requires imagination, thought, and perception on the part of someone who knows what the goods or services are to reach a conclusion about their nature from the mark. *Id.* (citing *Fat Boys*, 118 USPQ2d at 1515).

Applicant's proposed mark consists of the words DEEP, OPTO, and PROFILING. "We must 'consider the *commercial impression* of a mark as a whole.'" *Id.* (quoting *Real Foods*, 128 USPQ2d at 1374). "In considering [the] mark as a whole, [we] 'may not dissect the mark into isolated elements,' without consider[ing] . . . the entire

mark," *id.* (quoting *Real Foods*, 128 USPQ2d at 1374) (internal quotation omitted), "but we 'may weigh the individual components of the mark to determine the overall impression or the descriptiveness of the mark and its various components." *Id.* (quoting *Real Foods*, 128 USPQ2d at 1374) (internal quotation omitted)). "Indeed, we are 'required to examine the meaning of each component individually, and then determine whether the mark as a whole is merely descriptive.'" *Id.* (quoting *DuoProSS*, 103 USPQ2d at 1758).

"If the words in the proposed mark are individually descriptive of the identified goods [or services], we must determine whether their combination 'conveys any distinctive source-identifying impression contrary to the descriptiveness of the individual parts.'" *Id.* (quoting *Fat Boys*, 118 USPQ2d at 1515-16) (internal quotation omitted)). "If each word instead 'retains its merely descriptive significance in relation to the goods [or services], the combination results in a composite that is itself merely descriptive.'" *Id.* (quoting *Fat Boys*, 118 USPQ2d at 1516) (internal quotation omitted)). "Where a mark consists of multiple words, the mere combination of descriptive words does not necessarily create a non-descriptive word or phrase." *In re Omniome, Inc.*, 2020 USPQ2d 3222, at *4 (TTAB 2019) (affirming descriptiveness refusal to register SEQUENCING BY BINDING for goods including reagents for analysis of biological analytes, research laboratory analyzers for analysis of biological analytes, and devices for analysis of biological analytes, and for services involving analysis of biological analytes). "A mark comprising a combination of merely descriptive components is registrable only if the combination of terms creates a

unitary mark with a non-descriptive meaning, or if the composite has a bizarre or incongruous meaning as applied to the goods or services." *Id.*

"Whether a mark is merely descriptive or not is determined from the viewpoint of the relevant purchasing public." *Id.*, at *5 (quoting *In re Stereotaxis, Inc.*, 429 F.3d 1039, 77 USPQ2d 1087, 1090 (Fed. Cir. 2005) (internal quotation omitted)). The goods and services identified in the application are not common, everyday goods and services purchased by ordinary consumers, but instead are scientific goods and services that Applicant describes as being "used by clinicians and researchers for the study and development of cellular therapeutics in the biotech and pharmaceutical fields," 12 TTABVUE 6, and "cellular-therapy researcher[s]." *Id.* at 13.[32] We find that the relevant purchasing public consists of cellular-therapy clinicians and researchers in the biotech and pharmaceutical fields. *See Omniome*, 2020 USPQ2d 3222, at *5 (finding that microbiologists were the relevant consumers of reagents for analysis of biological analytes, research laboratory analyzers for analysis of biological analytes, and devices for analysis of biological analytes, and services involving analysis of biological analytes).

"Evidence of the public's understanding of [a] term . . . may be obtained from any competent source, such as purchaser testimony, consumer surveys, listings in dictionaries, trade journals, newspapers[,] and other publications." *Fallon*, 2020

[32] In the SEC Filing, Applicant describes its business as "enabling and accelerating the rapid development and commercialization of biotherapeutics and other cell-based products" and "enabling the large and rapidly growing markets of antibody therapeutics, cell therapy, and synthetic biology." July 24, 2020 Office Action at TSDR 22-23.

USPQ2d 11249, at *7 (quoting *Real Foods*, 128 USPQ2d at 1374). "These sources may include [w]ebsites, publications and use in labels, packages, or in advertising materials directed to the goods [or services]." *Id.*, at *7-8 (quoting *In re N.C. Lottery*, 866 F.3d 1363, 123 USPQ2d 1707, 1710 (Fed. Cir. 2017) (internal quotation omitted)). "Evidence that a term is merely descriptive similarly may come from an applicant's own usage other than that found on its labels, packaging or advertising materials." *Omniome*, 2020 USPQ2d 3222, at *4.

"It is the Examining Attorney's burden to show, prima facie, that a mark is merely descriptive of an applicant's goods or services." *Fallon*, 2020 USPQ2d 11249, at *8 (quoting *Fat Boys*, 118 USPQ2d at 1513). "If such a showing is made, the burden of rebuttal shifts to the applicant." *Id.* (quoting *Fat Boys*, 118 USPQ2d at 1513). "The Board resolves doubts as to the mere descriptiveness of a mark in favor of the applicant." *Id.* (quoting *Fat Boys*, 118 USPQ2d at 1513).

**B. Summary of Arguments**[33]

**1. The Examining Attorney**

We begin with the arguments advanced by the Examining Attorney, who has the burden of establishing a prima facie case of mere descriptiveness. She "submits that the proposed mark is merely descriptive of a feature or characteristic of Applicant's

[33] The identifications of goods and services in the application use scientific terminology that is not used in everyday speech, and Applicant and the Examining Attorney both frequently discuss scientific terminology without defining it. "The Board may take judicial notice of dictionary definitions, including online dictionaries, definitions in technical dictionaries and translation dictionaries that exist in printed format," *Omniome*, 2020 USPQ2d 3222, at *2 n.17, and in this opinion we have taken judicial notice of the meaning of some scientific terms to the extent necessary to explain the basis for our decision.

goods and services, specifically, that Applicant's assay services, and the reagent goods they brand for the purposes of conducting those assays, are performed with involved analysis (deep profiling) and offer graphical representations of those results (opto) utilizing reagents specifically designed for such a purpose/use." 14 TTABVUE 5.[34]

The Examining Attorney argues that "DEEP in this context is defined as 'broad' and 'involved,' and indicates the level of information being garnered from the assays and via the assay reagents," *id.*, that "OPTO is commonly accepted shorthand for *optical*" and the "abbreviation OPTO as well as its full use as OPTICAL, are utilized scientifically to indicate when a procedure or process requires an *optical* scan or assay in order to perform the service, or identifies goods *used* in such an optical scan or assay," *id.* at 6 (emphasis supplied by the Examining Attorney), and that "to PROFILE something, is defined in relevant part as creating 'a graphical or other representation of information relating to particular characteristics of something, recorded in quantified form.'" *Id.* at 7. She argues that "Applicant's assays, and the reagents used for such assays, are a *profiling* service and goods used for generating such a profile," that Applicant "is aiming to provide graphical or other representation

[34] We take judicial notice that the noun "assay" means "analysis (as of an ore or drug) to determine the presence, absence, or quantity of one or more components," and that a "reagent" is "a substance used (as in detecting or measuring a component, in preparing a product, or in developing photographs) because of its chemical or biological activity." MERRIAM-WEBSTER DICTIONARY (merriam-webster.com, last accessed on January 26, 2022). The assays performed by Applicant using the goods identified in the application are discussed on its website at berkeleylights.com. May 18, 2020 Request for Reconsideration at TSDR 15-16. We take judicial notices that the "nucleic acid" identified in Applicant's identification of goods as the subject of analysis means "any of a group of long, linear macromolecules, either DNA or various types of RNA, that carry genetic information directing all cellular functions: composed of linked nucleotides." DICTIONARY.COM (based on THE RANDOM HOUSE UNABRIDGED DICTIONARY) (last accessed on January 26, 2022).

of the information relating to particular characteristics of something, recorded in quantified form, in this case, the assays and protocols on the chips, and the sequencing of the nucleic acids," and that "this profiling is accomplished via applicant's Class 1 reagent goods and its associated kits and preparations." *Id.*

The Examining Attorney further argues that

> [t]he likely consumers of applicant's goods and services are medical or scientific research personnel with substantial backgrounds in the applicant's field. Thus, taken together, the entirety of this phrase– DEEP OPTO PROFILING – would immediately inform these sophisticated consumers of the nature of the intended use of the goods, and the nature of the profiling services being provided. They would immediately perceive the above-noted descriptive meaning. . . . In this case, both the individual components and the composite result are descriptive of applicant's goods and services and do not create a unique, incongruous or non-descriptive meaning in relation to the goods and services. Rather, the phrase immediately informs a knowledgeable consumer of the intended use and result of the use of those goods: deep opto profiling.

*Id.* at 7-8.

The Examining Attorney contends further that Applicant's "mark is likewise composed of a combination of phrases with [sic] are terms of art in applicant's field, further strengthening the argument a consumer would perceive the mark as a whole as descriptive." *Id.* at 8. She argues that the word DEEP "has a broadly understood and accepted meaning in the scientific and medical fields," based on "evidence of third-party use of the term DEEP specifically when referencing *PROFILING*, as that is the service applicant is ultimately providing, and another descriptive term in the mark." *Id.* (emphasis supplied by the Examining Attorney). She cites numerous uses of the term "deep profiling" in the scientific literature in the record, *id.* at 8-11, and

concludes that "it is clearly a phrase of art in scientific and medical research related to reagents and the performance of assays similar or identical to applicant's own assay goods and services." *Id.* at 11.

As to OPTO, the Examining Attorney argues that "the mere fact that applicant has chosen to leave a space between OPTO and PROFILING, rather than creating the compound term OPTO-PROFILING, does not detract from the common meaning of the prefix," *id.* at 12, which means optic or optical. She argues that "*optical profiling* is likewise an established method or approach to assay research, one that would immediately be called to mind by applicant's use of the term OPTO (meaning optical)." *Id.* (emphasis supplied by the Examining Attorney). She cites multiple uses of the term "optical profiling" in the scientific literature in the record. *Id.* at 12-13. She concludes that "[g]iven the widespread use of 'deep profiling' and 'optical profiling,' for which OPTO PROFILING is an obvious synonym, the mark as a whole is descriptive." *Id.* at 13.

**2. Applicant**

In its appeal brief, Applicant argues that "the record is devoid of evidence that prospective purchasers encountering the mark DEEP OPTO PROFILING, as used in connection with Applicant's applied-for products and services, will *immediately* understand their nature," and that "while consumers may surmise that the goods and services involve profiling of something and the involvement of optics or light, they will have to speculate as to what type of profiling is occurring and how optics or light is involved" because "the term DEEP OPTO PROFILING doesn't complete the mental picture for them." 12 TTABVUE 10 (emphasis supplied by Applicant). Applicant

further argues that "the Examining Attorney impermissibly analyzed the terms DEEP, OPTO, and PROFILING individually, rather than considering the mark DEEP OPTO PROFILING as a whole." *Id.* at 11.

According to Applicant, "even assuming *arguendo* that each of the component parts has descriptive significance, when the three terms are combined, the resulting phrase DEEP OPTO PROFILING is a suggestive mark" because "[c]onsumers will not consider these terms individually and will instead take the mark for what it is and will consider this mark in its entirety, that is, as DEEP OPTO PROFILING." *Id.* at 12. Applicant contends that "[i]n considering the Mark in its entirety, a consumer would not know what the term DEEP is modifying, whether it is the term OPTO, PROFILING, both, or neither." *Id.*

With respect to the word OPTO, Applicant argues that it "cannot be said to be descriptive," *id.*, because "while the examiner believes that the term OPTO may be recognized as referring to something that is optic in nature and uses light in some way, the term does not even begin to describe the complicated technology behind the optofluidic systems at use," in which the "optofluidic system in the applied-for good [sic] and services uses light to activate phototransistors within a microfluidic chip, which in turn generate a dielectrophoretic force that is used to selectively move, sort, and/or export cells within/from the chip." *Id.*

Finally, Applicant argues that "the term PROFILING tells a consumer very little if anything about the product" because "it says nothing about the complicated information obtained from Applicant's goods/services where a cell's phenotypic

information is linked to its genetic code and this process is repeated for hundreds, thousands, or even tens of thousands of single cells from a population." *Id.*

Applicant also claims that its proposed mark as a whole "does not immediately or directly convey information concerning the function, characteristics, purpose or use of the products" because "[a]ll that is possibly conveyed to consumers is that the product generally involves the use of optics or vision and perhaps that profile information of some type is generated." *Id.* at 13. According to Applicant, the "mark DEEP OPTO PROFILING—as a whole—is sufficiently vague and ambiguous that a cellular-therapy researcher would have to stop and think, 'What is the purpose or function of DEEP OPTO PROFILING?'" and "[t]his kind of thought and conjecture is the hallmark of a suggestive mark." *Id.*

Applicant further argues that the refusal is based on a phrase, "deep profiling," that "is simply not part of the DEEP OPTO PROFILING mark," and that "the Examining Attorney provides neither evidence nor argument persuading that a consumer viewing the Mark as a whole would distill 'deep profiling' out from it." *Id.* at 14. Applicant notes that the "word 'OPTO' separates 'DEEP' from PROFILING,' counseling against the likelihood that a consumer would join them," and argues that "[a]ny conclusion that a consumer would read 'deep profiling' from the Mark is based on mere speculation, which is insufficient." *Id.* Applicant claims that the Examining Attorney "also joined the words 'OPTO' and 'PROFILING' in making the assertion that the mark includes the term 'optical profiling,' which directly contradicts the contention that 'deep' is modifying and should be combined with 'profiling.'" *Id.*

According to Applicant, the "unexpected and incongruent combination and ordering of DEEP OPTO PROFILING confirms that it is a unitary and nondescriptive mark." *Id.*

Applicant further argues that

> the Examining Attorney failed to provide evidence or argument that the phrase "deep profiling" is a descriptive phrase of *art with respect to the applied-for goods and services*—chemical solutions and kits for the analysis of nucleic acids through performance of scientific protocols and assays on microfluidic chips, as well as performance of these specific services. Instead, the Examining Attorney merely presented evidence that the phrase "deep profiling" has been used in various scientific articles, without demonstrating that it has a commonly understood meaning in the field of the applied-for goods and services. . . . The cited evidence fails to provide any consistent definition of "deep profiling," in any field, much less the field of the applied-for goods and services. Nor does the evidence support the Examining Attorney's conclusion that "deep profiling" is a "phrase of art in fields of scientific research, *particularly with reagents,*" as mothing more was shown than that the word "reagent" appeared somewhere is a lengthy article that also mentioned "deep profiling." . . . To the extent that "deep profiling" has any meaning along the lines of what has been asserted by the Examining Attorney subsequent to a mass document repository search engine keyword search, that meaning is obscure at best and has not been shown to be generally known by consumers of the applied-for goods and services.

*Id.* at 14-15 (emphasis supplied by Applicant).

According to Applicant, the involved goods and services do not involve "optical profiling," *id.* at 15-16, and "[a]t best, the record evidence indicates that 'optical profiling' is a phrase of art to refer to scientific techniques where information is gathered from the interaction of light with bulk/intact samples, which is very different from the ability to select, sort, and move cells *within* a sample on a

microfluidic chip," and there is "no evidentiary support for the Examining Attorney's conclusion that the term 'optical profiling' is descriptive of Applicant's applied-for goods and services, as they simply do not perform 'optical profiling.'" *Id.* at 17.

In its reply brief, Applicant also argues that there is no "evidence whatsoever of Applicant or third-party descriptive usage of 'DEEP OPTO PROFILING' to describe the technology underlying Applicant's products in its submitted specimen or otherwise." 15 TTABVUE 4.

**C. Analysis of Refusal**

As discussed above, we must first consider the possible descriptiveness of each of the three terms in Applicant's proposed mark, and, if each term is individually descriptive, we must then assess whether the whole of the proposed mark is greater than the sum of its descriptive parts.

In making those determinations, we "must consider [the] mark in its commercial context to determine the public's perception," *N.C. Lottery*, 123 USPQ2d at 1367 (internal quotation omitted), and we may look to "any competent source" of relevant evidence of descriptiveness, *Fallon*, 2020 USPQ2d 11249, at *7, including "an applicant's own usage other than that found on its labels, packaging or advertising materials." *Omniome*, 2020 USPQ2d 3222, at *4. In *Omniome*, the Board considered the applicant's patents and patent applications, *id.*, at *4-5, "specifically add[ing] such evidence to the list . . . of the types of evidence from which mere descriptiveness may be obtained." *Id.*, at *5. We expand that list here to include Applicant's SEC

Filing in connection with a public offering of securities.[35] We find that the SEC Filing is a competent source of evidence regarding the relevant purchasing public's understanding of the proposed DEEP OPTO PROFILING mark because, like a website, advertisement, or patent, it is a public-facing document that contains Applicant's own use of the proposed mark, and, as in the case of a patent application, Applicant was subject to possible legal exposure if the SEC Filing was inaccurate.

We begin with the word DEEP. The Examining Attorney made of record a definition of the word as "great in degree; intense,"[36] and Applicant's SEC Filing and website use the word in that sense. The SEC Filing states that Applicant's platform "captures **deep phenotypic, functional and genotypic information for thousands of single cells** in parallel and can also deliver the live biology customers desire in the form of the best cells."[37] It also states that Applicant "believe[s] [its] platform rapidly provides the **deepest information**, with linked phenotypic and genotypic data, on tens of thousands of live single cells relevant to the customers' end product specifications,"[38] and that "[f]inding the best cells requires the **deep understanding** generated by functional characteristics across many parameters."[39]

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[35] Applicant describes its SEC Filing as "promotional materials," 15 TTABVUE 5, while the Examining Attorney describes it as one of Applicant's "numerous public facing advertisements." 14 TTABVUE 5-6. Its precise nature is immaterial to our analysis, however, because Applicant and the Examining Attorney agree that it was accessible to the public, including prospective purchasers of Applicant's goods and services.

[36] July 24, 2020 Office Action at TSDR 12 (COLLINS DICTIONARY).

[37] *Id.* at TSDR 22 (emphasis added).

[38] *Id.* at TSDR 23 (emphasis added).

[39] *Id.* (emphasis added).

A page from Applicant's website shown below


refers to **Deeper Data**" available through the use of Applicant's Optofluidic Technology,[40] and states that Applicant's "technology combines precise cell processing, time-saving workflow automation, and rich, **deep profiling**."[41] The portion of Applicant's website shown below describes the referenced "Deep Profiling" in some detail:[42]

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[40] We discuss Applicant's "Optofluidic Technology" below in connection with our analysis of the meaning of the term OPTO as it is used in Applicant's proposed mark.

[41] May 18, 2021 Request for Reconsideration at TSDR 14 (emphasis added).

[42] *Id.* at TSDR 16. As noted above, Applicant argues that "the phrase 'deep profiling' is simply not part of the DEEP OPTO PROFILING mark and the Examining Attorney provides neither evidence nor argument persuading that a consumer viewing the Mark as a whole would distill 'deep profiling' out of it." 12 TTABVUE 14. Applicant's latter argument is belied by its own use of "Deep Profiling" on its website, particularly against the backdrop of the record evidence showing that "deep profiling" is a term of art in scientific research, including cell research. November 24, 2020 Final Office Action at TSDR 12-75; June 14, 2021 Denial of Request for Reconsideration at TSDR 2-25, 31-33. Applicant's use of "Deep Profiling" on its website also undercuts its arguments that "a consumer would not know what the term DEEP is modifying, whether it is the term OPTO, PROFILING, both, or neither," 12 TTABVUE 12, and that to "the extent that 'deep profiling' has any meaning along the lines of what has been asserted by the Examining Attorney subsequent to a mass document repository search engine keyword search, that meaning is obscure at best and has not been shown to be generally known by consumers of the applied-for goods and services." *Id.* at 15. Applicant's use of the term "Deep Profiling" on its website suggests that the term **is** "generally known by consumers of the applied-for goods and services," and a consumer viewing Applicant's website's use of


DEEP PROFILING

For every single cell or clone couple phenotypic data, genome, and transcriptome in a scalable way.

Measure individual cells over time and over many assays, stack their performance against each other and only export the cells of interest. The OptoSeq™ Single Cell 3' mRNA Library kit integrates single cell sequencing library preparation into cell profiling workflows on the Beacon® and Lightning™ optofluidic systems. Live cell phenotypic data can now be directly linked to genomic data using a single, innovative and scalable instrument.[43]

Applicant's uses of "deep," "deeper," and "deepest" in these materials leave no doubt that the scientifically literate consumers of the goods and services identified in the application, who are familiar with the term "deep profiling," would understand the term DEEP in Applicant's proposed mark to immediately describe the great degree and intensity of the information that is accessible through Applicant's assays using Applicant's goods. DEEP is thus merely descriptive of a feature or function or Applicant's goods and services.

With respect to OPTO, the Examining Attorney made of record evidence from Acronym Finder that OPTO is a recognized abbreviation of "optical."[44] As discussed above, Applicant argues that while OPTO may refer to something that is "optic in

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"Deep Profiling" would immediately understand that DEEP (like OPTO) modifies PROFILING. *Cf. In re Virtual Independent Paralegals, LLC*, 2019 USPQ2d 111512, at *3-8 (TTAB 2019) (considering evidence of use of the terms "Virtual Paralegal" and "Independent Paralegal" in determining that VIRTUAL INDEPDENT PARALEGALS was generic for paralegal services).

[43] *Id.* at TSDR 16.

[44] November 24, 2020 Final Office Action at TSDR 76.

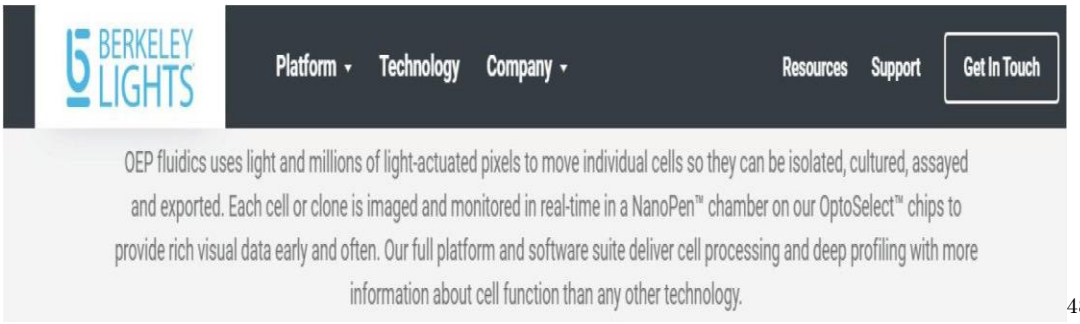
nature and uses light in some way," 12 TTABVUE 12, it is not descriptive of Applicant's goods and services because "the term does not even begin to describe the complicated technology behind the optofluidic systems at use." *Id.* Applicant further argues that its "applied-for goods and services make no use of optical profiling," *id.* at 15-16, because the "'opto' element in the applied-for goods and services is indicative – in a suggestive manner – of the use of Applicant's optofluidic systems, which notably use light to activate phototransistors within a microfluidic chip, which in turn generate a dielecctrophonetic force that is used to selectively move, sort, and/or export cells within/from the chip." *Id.* at 16.

The record includes a Wikipedia definition of "optofluidics" as "a research and technology area that combines the advantages of fluidics (in particular microfluidics) and optics," which "formally began to emerge in the mid-2000s as the fields of microfluidics and nanophotonics were maturing and researchers began to look for synergies between these two areas."[45] The entry states that "[o]ne of the primary applications of the field is for lab-on-a-chip and biophotonic products."[46] The record also includes a June 3, 2016 press release in which Applicant describes its goods and services as making it possible, "[f]or the first time, [that] individual cells can be isolated, cultured, and assayed on a single opto-fluidic chip supporting a multitude of applications."[47] Applicant's website discusses its OptoFluidic Technology as follows:

[45] June 14, 2021 Denial of Request for Reconsideration at TSDR 59 (Wikipedia.org).

[46] *Id.*

[47] *Id.* at TSDR 58.



[48]

Applicant's website makes it clear that when OPTO is used in Applicant's proposed mark, it is short for "Optofluidic" technology, which the website explains "uses light and millions of light-actuated pixels to move individual cells so they can be isolated, cultured, assayed and exported."[49] Applicant's own uses of OPTO on its website leave no doubt that consumers of the goods and services identified in the application would immediately understand that OPTO describes the optofluidic technology that is a feature of Applicant's assays, which take place on a microfluidic chip. The fact that Applicant's use of OPTO may not signal the use of the sort of optical profiling described in some of the scientific literature in the record does not mean that it is not descriptive when used as part of Applicant's proposed mark.[50]

[48] May 18, 2021 Request for Reconsideration at TSDR 15.

[49] *Id.* In its appeal brief, Applicant explains that the "optofluidic system in the applied-for good [sic] and services uses light to activate phototransistors within a microfluidic chip, which in turn generate a dielectrophoretic forced that is used to selective more, sort, and/or export cells within/from the chip." 12 TTABVUE 12.

[50] We need not concern ourselves with whether the Examining Attorney was correct in arguing that the combination of OPTO and PROFILING in Applicant's proposed mark refers to "optical profiling" because "'[i]n determining an ex parte appeal, the Board reviews the appealed decision of the examining attorney to determine if it was correctly made'" and "'need not find that the examining attorney's rationale was correct in order to affirm the refusal to register, but rather may rely on a different rationale.'" *In re Embiid*, 2021 USPQ2d 577, at *14 n.28 (TTAB 2021) (citing TRADEMARK TRIAL AND APPEAL BOARD MANUAL OF PROCEDURE Section 1217 & n.1)).

Finally, with respect to the word PROFILING, the Examining Attorney made of record a definition of the word "profile" as a "graphical or other representation of information relating to particular characteristics of something, recorded in quantified form."[51] Applicant's use of the word "profiling" in the phrases "Deep Profiling" and "cell profiling" on its website leaves no doubt that consumers of the goods and services identified in the application would understand that the word PROFILING in Applicant's proposed mark involves the "graphical or other representation of information relating to particular characteristics of" cells.[52]

Applicant's SEC Filing uses the proposed mark DEEP OPTO PROFILING as a whole in a manner that shows that the combination of the words DEEP, OPTO, and PROFILING "results in a composite that is itself merely descriptive." *Omniome*, 2020 USPQ2d 3222, at *10. The SEC Filing states that "[f]inding the best cells requires more than just capturing a cell's genetic code, it requires the deep understanding generated by functional characterization across many parameters, **a process we call**

[51] July 24, 2020 Office Action at TSDR 19 (OXFORD ENGLISH DICTIONARY). Applicant made of record a definition of "profiling" as "the act or process of extrapolating information about a person based on known traits or tendencies consumer profiling specifically: the act of suspecting or targeting a person on the basis of observed characteristics or behavior racial profiling." November 6, 2020 Response to Office Action at TSDR 23 (MERRIAM-WEBSTER DICTIONARY). The word "profiling" in Applicant's proposed mark is not used in the context of consumer research or policing, but rather in connection with Applicant's specific goods and services, and the fact that "profiling" "may have other meanings in different contexts is not controlling." *Canine Caviar*, 126 USPQ2d at 1598. Applicant's website makes descriptive use of "profiling" (specifically "deep profiling" and "cell profiling") in the context of its goods and services, and "'[i]t is well settled that so long as any one of the meanings of a term is descriptive, the term may be considered to be merely descriptive.'" *In re Mueller Sports Med., Inc.*, 126 USPQ2d 1584, 1590 (TTAB 2018) (quoting *In re Chopper Indus.*, 222 USPQ 258, 259 (TTAB 1984)).

[52] May 18, 2021 Request for Reconsideration at TSDR 16.

**"Deep Opto Profiling**."[53] It further states that Applicant's goods and services "allow[ ] our customers to find the best cells by," among other things, "**Deep Opto Profiling** of the relevant phenotypic characteristics, at single-cell resolution over time and connecting this to the genotypic information for each cell."[54] Applicant's uses of the proposed mark to describe a "process" involving Applicant's goods and services make it clear that in combining the phrase DEEP PROFILING and the abbreviation OPTO into DEEP OPTO PROFILING, each of the individual words in Applicant's proposed mark "retains its merely descriptive significance in relation to Applicant's goods and services." *Id. Cf. Virtual Independent Paralegals*, 2019 USPQ2d 115512, at *8 ("Combining VIRTUAL PARALEGAL and INDEPENDENT PARALEGAL into VIRTUAL INDEPENDENT PARALEGAL provides no additional or changed meaning.").

[53] July 24, 2020 Office Action at TSDR 23 (emphasis added). In its reply brief, Applicant cites *In re Phoseon Tech. Inc.*, 103 USPQ2d 1822 (TTAB 2012), as a case in which the Board found descriptiveness by "primarily relying on evidence of the applicant's own repeated use of the mark [SEMICONDUCTOR LIGHT MATRIX] to describe a technology in its specimen, articles and in patent applications, as well as third-party descriptive usage of the mark on websites and in articles." 15 TTABVUE 4. Applicant argues that "[h]ere, there is no such evidence whatsoever of Applicant or any third-party descriptive usage of 'DEEP OPTO PROFILING' to describe the technology underlying Applicant's products." *Id.* Applicant's argument regarding the absence of its own "descriptive usage of 'DEEP OPTO PROFILING' to describe the technology underlying Applicant's products" ignores its use of "Deep Opto Profiling" in the SEC Filing to describe a "process" involving its goods and services. Applicant's argument regarding the absence of third-party descriptive use is correct on this record, but "the fact that Applicant may be the first user of a term does not render that term distinctive, if it otherwise meets the standards of mere descriptiveness." *Omniome*, 2020 USPQ2d 3222, at *11 (citing *KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc.*, 543 U.S. 111, 72 USPQ2d 1833, 1838 (2004) (trademark law does not countenance someone obtaining "a complete monopoly on use of a descriptive term simply by grabbing it first.")).

[54] *Id.* (emphasis added).

"[P]roof of mere descriptiveness may originate from [an applicant's] own descriptive use of its proposed mark, or portions thereof" in its materials, *Omniome*, 2020 USPQ2d 3222, at *4, and "an applicant's own website or marketing materials may be . . . 'the most damaging evidence,' in indicating how the relevant purchasing public perceives a term." *In re Mecca Grade Growers, LLC*, 125 USPQ2d 1950, 1958 (TTAB 2018) (finding that MECHANICALLY FLOOR-MALTED was both merely descriptive of and generic for "malt for brewing and distilling" and "processing of agricultural grain") (quoting *In re Gould Paper Corp.*, 834 F.2d 1017, 5 USPQ2d 1110, 1112 (Fed. Cir. 1987)). *See also Fallon*, 2020 USPQ2d 11249, at *10 (finding that "the text used on the [applicant's] snorerx.com website is the most compelling evidence of the mere descriptiveness of Applicant's proposed mark as a whole . . . ."). Applicant's SEC Filing uses the proposed mark as a whole in a manner that shows that the combination of the words DEEP, OPTO, and PROFILING "results in a composite that is itself merely descriptive." *Omniome*, 2020 USPQ2d 3222, at *10.

Applicant cannot dispute that it has explained the meaning of DEEP OPTO PROFILING in its materials, but it argues that the fact that it "has seen it necessary to explain the functions of the applied-for goods and services with detailed descriptions in [its] promotional and other materials is evidence that the mark DEEP OPTO PROFILING is suggestive, and not merely descriptive." 12 TTABVUE 12 (citing *Tumblebus Inc. v. Cranmer*, 399 F.3d 754, 73 USPQ2d 1561 (6th Cir. 2005)). Applicant argues that in *Tumblebus*, the Sixth Circuit affirmed the district court's finding that the plaintiff's TUMBLEBUS mark for mobile gymnastic instruction

services "was suggestive, not merely descriptive, based in part on 'the fact that Tumblebus Inc. has found it necessary to include explanatory phrases such as 'gym on wheels' in its advertising material . . . .'" *Id.* (quoting *Tumblebus*, 73 USPQ2d at 1567).

We are not bound by decisions of regional circuit courts of appeals, and while we have given the *Tumblebus* decision respectful consideration, we reject its analysis of mere descriptiveness to the extent that it conflicts with the analysis that we must employ under Federal Circuit law. The Sixth Circuit held in *Tumblebus* that the district court properly found that the plaintiff's TUMBLE MARK was suggestive because "many of the Tumblebus advertising materials, including those used by Tumblebus Inc., bear phrases such as 'gym on wheels,' which indicates that the term TUMBLEBUS alone has not been sufficient to convey the nature of Tumblebus Inc.'s service." *Tumblebus*, 73 USPQ2d at 1567. Under Federal Circuit law, however, we are not required to limit our descriptiveness analysis to whether Applicant's proposed mark DEEP OPTO PROFILING "alone . . . is sufficient to convey the nature of" Applicant's goods and services where its use in Applicant's own materials is probative of its descriptiveness.

In *N.C. Lottery*, the Federal Circuit rejected the applicant's arguments that the Board erred "as a matter of law by relying on the explanatory text of the specimens to supplement the meaning of the [FIRST TUESDAY] mark itself," and that "the inquiry should be limited to what a consumer with 'only general knowledge' of N.C. Lottery's goods and services, and without additional context from the explanatory

text, would immediately understand the mark to mean." *N.C. Lottery*, 123 USPQ2d at 1709 (internal citations omitted). As noted above, the court held that the Board "must consider a mark in its commercial context to determine the public's perception," *id.* (internal citations omitted), and that the Board had appropriately "consider[ed] the explanatory text of the specimens in the descriptiveness inquiry." *Id.* at 1710.

The applicant in *N.C. Lottery* additionally made virtually the same argument that Applicant makes here, namely, that "'the fact that [it] found it necessary to explain the connection between the mark and [its] goods and services shows that the mark is not descriptive.'" *Id.* (internal citations omitted). The applicant cited *Tumblebus* and *Swatch AG v. Beehive Wholesale, LLC*, 739 F.3d 150, 109 USPQ2d 1291 (4th Cir. 2014),[55] "as examples where courts have relied in part on explanatory text to find that a mark was not merely descriptive." *Id.* The Federal Circuit held that "not only are these cases not binding on this court, they are also distinguishable." *Id.* The court distinguished those cases on the ground that

> the connection between the mark FIRST TUESDAY and its reference to when new scratch-off lottery games are being offered is much closer and more straightforward than the connection between TUMBLEBUS and its reference to mobile gymnastics instruction, or the connection between SWAP and its reference to watches with interchangeable components. Understanding that FIRST TUESDAY refers to a new good or service being offered on the first Tuesday

[55] In *Swatch*, "the Fourth Circuit affirmed a finding that the mark 'SWAP'—for watches with interchangeable faces and bands—was suggestive because 'explaining the function of [defendant's] product' through promotional materials containing diagrams, arrows, and text, evidenced the need for a 'further leap.'" *N.C. Lottery*, 123 USPQ2d at 1710 (quoting *Swatch*, 109 USPQ2d at 1296).

> of a month requires much less of a mental leap than that which was required in *Tumblebus* and *Swatch*.

*Id.*

We do not read the Federal Circuit's comments in *N.C. Lottery* about the differences between the mark and advertising materials in that case and those in the *Tumblebus* and *Swatch* cases as supporting Applicant's claim that its materials show that DEEP OPTO PROFILING is suggestive. To be sure, the explanatory language regarding the meaning of DEEP OPTO PROFILING in Applicant's SEC Filing and website is far more complex than the explanatory language in the applicant's specimen in *N.C. Lottery*, which the Federal Circuit described as "not complicated" because it "simply use[d] the same two words as the mark—'first Tuesday'—along with words like 'new' and 'every month' to describe the relevant feature or characteristic of N.C. Lottery's scratch-off lottery games." *Id.* But unlike the members of the general public who purchase lottery tickets (or gymnastic training for children or watches), the relevant purchasers of Applicant's goods and services, which include "clinicians and researchers for the study and development of cellular therapeutics in the biotech and pharmaceutical fields," 12 TTABVUE 6, and "cellular-therapy researcher[s]," *id.* at 13, are by definition highly scientifically literate and thus capable of understanding the explanatory language in Applicant's materials. No "mental leap" is required for these consumers to understand that DEEP OPTO PROFILING immediately describes what Applicant itself calls a "process" that is a key function or purpose of Applicant's goods and services. *See Omniome*, 2020 USPQ2d 3222, at *10 (finding SEQUENCING BY BINDING to be merely descriptive

of the applicant's goods and services in part based on "numerous examples in Applicant's U. S. patents and patent applications . . . in which Applicant uses SEQUENCING BY BINDING (or SEQUENCING - BY - BINDING ) descriptively to refer to an invention embodiment, a reaction, a method, a procedure, a technique, a platform and a workflow," and "Applicant's own repeated explanations of its DNA sequencing technology (as identified in the Application) in its briefs using the terms 'sequencing' and 'binding' descriptively").

Contrary to Applicant's claims that "while consumers may surmise that the goods and services involve profiling of something and the involvement of optics or light, they will have to speculate as to what type of profiling is occurring and how optics or light is involved, because the term DEEP OPTO PROFILING doesn't complete the mental picture for them," 12 TTABVUE 10, and that a "cellular-therapy researcher would have to stop and think, 'What is the purpose or function of DEEP OPTO PROFILING?'," *id.* at 13, "[t]he commercial context here demonstrates that a consumer would immediately understand the intended meaning of" DEEP OPTO PROFILING, *N.C. Lottery*, 123 USPQ2d at 1710, and that "[p]rospective purchasers of Applicant's goods and services would immediately understand the descriptive significance of the proposed mark in relation to those goods and services." *Omniome*, 2020 USPQ2d 3222, at *10. On the basis of the uses of DEEP, OPTO, and PROFILING separately and together in Applicant's materials, we have no doubt that consumers of Applicant's goods and services for testing cells on a microfluidic chip would immediately understand that DEEP OPTO PROFILING describes a key

function and purpose of Applicant's chemicals and assays, namely, a self-described "process" involving the use of optofluidic technology that depends on microfluidics,[56] which Applicant's materials state enables the "deep profiling" of "the relevant phenotypic characterization, at single-cell resolution over time and connecting this to the genotypic information for each cell,"[57] and enables consumers to "[m]easure individual cells over time and over many assays, stack their performances against each other and only export the cells of interest."[58] Applicant's proposed mark DEEP OPTO PROFILING is merely descriptive of the goods and serviced identified in Applicant's application, and it is thus ineligible for registration on the Principal Register in the absence of a showing of acquired distinctiveness.

**Decision**: The refusal to register is affirmed in both classes.

[56] May 18, 2021 Request for Reconsideration at TSDR 14.

[57] July 24, 2020 Office Action at TSDR 23.

[58] *Id.* at TSDR 16.