THIS DISPOSITION IS
CITABLE AS
PRECEDENT OF THE TTAB

Hearing:
November 10, 2005

Mailed:
March 6, 2006

UNITED STATES PATENT AND TRADEMARK OFFICE

Trademark Trial and Appeal Board

In re Westlake Plastics Company

Serial No. 76310516

Charles N. Quinn of Fox, Rothschild LLP for Westlake Plastics Company.

Carol Spils, Trademark Examining Attorney, Law Office 105 (Thomas G. Howell, Managing Attorney).

Before Holtzman, Rogers and Walsh, Administrative Trademark Judges.

Opinion by Holtzman, Administrative Trademark Judge:

An application has been filed by Westlake Plastics Company (applicant) to register the mark FM4910 for goods ultimately amended to "flame retardant fluoropolymer plastic material for the semiconductor industry sold in sheets, rods, and other preformed shapes" in International Class 17.[1]

[1] Application Serial No. 76310516, filed September 10, 2001, based on an allegation of a bona fide intention to use the mark in commerce.

The trademark examining attorney refused registration on the ground that the mark is merely descriptive of the goods under Section 2(e)(1) of the Trademark Act.

When the refusal was made final, applicant appealed. Applicant and the examining attorney have filed briefs. An oral hearing was held.

The examining attorney argues that FM4910 designates a widely known standard for measuring the clean room flammability of plastic materials, and that the term merely describes a feature or characteristic of applicant's plastic materials, namely that the materials "meet or are represented to meet the FM4910 flammability test protocol." Brief at 3. In support of her position, the examining attorney has submitted excerpts of articles from the Nexis database and portions of third-party websites which, according to the examining attorney, show use and recognition of FM4910 in the industry as a flammability test protocol.

It is applicant's position that FM4910 is not even suggestive of its goods let alone descriptive. Applicant argues that FM4910 refers to a third-party clean room flammability test protocol used in the insurance industry that does not describe a characteristic or feature of applicant's goods. Brief at 4. Maintaining that "speed, indeed blinding, lightning-like speed, is an integral, essential component of the descriptiveness test"

(Brief at 12), applicant argues that its mark does not immediately bring to mind any characteristic or feature of its goods without the use of multiple mental steps and without reference to the third-party flammability test protocol number, "apparently [used] for underwriting purposes," and "which happens to be the same as [applicant's] FM4910 mark." Brief at 9 and Reply Brief at 3. Applicant describes this multi-step reasoning process as follows:

> ...a person seeing Westlake Plastics' mark would some how [sic] associate applicant's mark with an obscure alphanumeric designator used to identify a clean room flammability test protocol. Once having made that association, the examiner would then have the third party observer make some association between the clean room flammability test protocol and Westlake Plastics' goods and would further have such observer to associate such clean room flammability test protocol with Westlake Plastics' goods...." Brief at 9-10.

In addition, applicant argues that the evidence submitted by the examining attorney does not show that the designation FM4910 is widely known in the industry because, according to applicant, the total of eight excerpts, "are nearly all sentence fragments and phrases taken out of context." It is also applicant's contention that whether or not the designation is widely known in the industry is irrelevant because the designation "does not equate to having a material property immediately come to mind...." Reply Brief at 3.

A term is merely descriptive within the meaning of Section 2(e)(1) if it immediately conveys knowledge of a significant quality, characteristic, function, feature or purpose of the goods with which it is used, or intended to be used. In re Gyulay, 820 F.2d 1216, 3 USPQ2d 1009 (Fed. Cir. 1987); and In re Abcor Development Corp., 588 F.2d 811, 200 USPQ 215 (CCPA 1978). The question of whether a particular term is merely descriptive must be determined not in the abstract or on the basis of guesswork, but in relation to the goods for which registration is sought, the context in which the term is used, or is intended to be used, and the impact that it is likely to make on the average purchaser of such goods. In re Abcor Development Corp., supra; and In re Remacle, 66 USPQ2d 1222 (TTAB 2002).

Applicant produces flame retardant plastic materials in sheets and other preformed shapes for the semiconductor industry. We agree with the examining attorney that the designation FM4910 immediately describes a key characteristic or feature of those plastic materials, namely that the materials meet a prescribed standard of fire safety. The evidence shows, and there is no dispute, that FM4910 refers to a fire safety test protocol developed by a third party, FM Global, a commercial and

industrial property insurance and risk management company.[2] As explained on FM Global's website, *www.fmglobal.com*, semiconductor fabrication plants (which produce such devices as computer chips and integrated circuits),[3] require a "clean room" environment to protect against contamination. The clean room equipment used in those plants must be constructed of specialized plastic materials, and a critical property of such plastic materials is their fire resistant quality. As noted on the website of Risk Logic Inc. (*www.risklogic.com*), another property loss control company, the risk of fire associated with plastic materials used in the construction of clean room equipment such as "wet benches" (the workstations on which computer chips are manufactured[4]), "has been known to the fire protection, property insurance and semiconductor industries for some time now." FM Global discusses the potential for severe economic loss from clean room fires and their development of the FM4910 fire testing protocol in response to the semiconductor industry's demand for less flammable plastics. Under the heading, "Factory Mutual Research Clean Room

[2] FM Global identifies itself as "one of the world's largest commercial and industrial property insurance and risk management organizations specializing in property protection." *www.fmglobal.com*.

[3] We take judicial notice of the definition of "semiconductor" from *The American Heritage Dictionary of the English Language* (4th ed. 2000) as meaning "an integrated circuit or other electronic component containing a semiconductor as a base material."

[4] See *www.fmglobal.com*.

Materials Flammability Test Protocol (Class 4910)," FM Global explains:

> ... because computer chips are so susceptible to even the tiniest speck of dust, clean rooms have historically been difficult and critical areas for industry to protect from fires. Contamination from a fire, no matter how small, could potentially put a chip maker out of business for weeks, if not permanently.
>
> In the past, clean rooms and wet benches (plastic or stainless steel workstations upon which computer chips are manufactured) often needed to be protected by sprinklers... But, by the time a clean room fire propagated and triggered a sprinkler..., damage could already have occurred in the rest of the clean room.
>
> Driven by rising insurance costs and potential lost earnings, chip makers have taken matters into their own hands. They are requiring that their suppliers use new materials in wet bench fabrication, materials like advanced polymer blends that are less flammable and therefore don't need additional-and costly-fire protection systems installed. In other words, the wet benches will be inherently safe when they arrive in the clean room.
>
> The companies who are developing these wet benches are turning to Factory Mutual Research to help them analyze and screen appropriate engineered plastics candidates. In response, we have developed revolutionary clean room materials testing technology, the Flammability Test Apparatus, that determines which engineered plastic materials can best reduce property loss in the event of fire.
>
> The Clean Room Materials Flammability Test Protocol (Class 4910) contains the protocol for conducting tests. Now, wet bench manufacturers and users can apply the clean room protocol to develop plastic materials and equipment capable of resisting fire, ...
>
> Materials passing the clean room protocol subsequently can be listed in the Factory Mutual Research Approval Guide.

FM4910 Listed Materials ...

...

FM4910 Listed Resins

...

Applicant's plastic materials will be used in the construction of clean room workstations and other clean room structures that will ultimately be used in semiconductor fabrication plants.[5] It is clear that the FM4910 protocol, indicating that plastics meet an approved level of fire resistance, is a critical means for designating that those plastic materials are suitable for use in the construction of equipment used in clean rooms for manufacturing semiconductors. It is also clear the designation would be understood by both "wet bench manufacturers and users." Unquestionably, applicant's use of this designation in connection with its own plastic materials signifies or is intended to signify to purchasers that its materials have been approved under or meet the requirements of the FM4910 fire safety protocol. The examining attorney asserted this in refusing registration and the applicant did not contest the assertion in any way. Under the circumstances, applicant's silence can only be interpreted to mean that its flame retardant products will meet the standard. Furthermore, purchasers would immediately understand that meaning of the designation used in

[5] Applicant clarified during the oral hearing that the purchasers for applicant's plastic materials are manufacturers who machine the materials into other products. Applicant further explained that its

association with applicant's plastic materials. Compliance with the FM4910 standard would make applicant's plastic materials more desirable and marketable to purchasers than materials that have not been shown to meet the FM4910 standard.

The FM4910 protocol is a relatively recent development, but it is far from "obscure," as applicant contends. In fact, the evidence demonstrates that FM4910 is one of the accepted industry-wide standards for fire safety. FM Global's "Approval Guide" that lists FM4910 approved materials is identified in one article as "a globally-accepted industry publication listing." (See *Business Wire*, October 22, 1997). Another article states that "at least 60 percent of domestic [plastics] producers have adopted the FM4910 materials." (See excerpt from *Plastics News,* September 24, 2001, supra.) The website of *www.risklogic.com* notes that until the development of the UL 2360 fire test (by Underwriters Laboratories and Risk Logic Inc.), FM4910 was the only test for evaluating the flammability of plastics in clean rooms. Portions of additional articles, reproduced below, indicate that a growing number of plastics manufacturers, including applicant, have submitted their products for testing and compliance with the FM4910 standard (emphasis added):

---

goods are used to produce trays or carriers that will be used by semiconductor fabricators to support movement of the parts.

- HEADLINE: SEMICONDUCTOR FABS SEEKING FR POLYMERS
  ...
  BODY: ...[Factory Mutual] Corp....added three Westlake polyvinylidene fluorides to its list of sheet materials meeting the stringent limits of protocol **FM 4910** on fire propagation, smoke damage and corrosion damage. The protocol applies to a clean room's wet benches, tools,...
  ...
  In July 1997, Factory Mutual listed two polymers passing **FM4910** criteria. They are a modified rigid PVC from Takiron Co. Ltd. of Osaka, Japan, and a flame-retardant polypropylene from Compression Polymers of Moosic. ... *Plastics News* (July 13, 1998).

- ATOFINA CHEMICALS
  WHAT'S NEW
  ELF ATOCEHM HIGHLIGHTS FLAME RESISTANT, HIGH PURITY COMPONENTS AT SEMICON WEST
  Philadelphia, PA –July 12, 1999
  Elf Atochem North America, Inc., a leading supplier of fluoropolymers used in the manufacture of high-purity, flame resistant fluid handling systems, demonstrated a wide variety of component parts made from Kynar®...resins at Semicon West in San Francisco. Also shown for the first time was a new video, "Flame and Smoke," which highlights the excellent flame and smoke resistant characteristics of the highly versatile Kynar resins. As a man with a flame-thrower torches a collection of various pieces of sheet and piping made of Kynar® PVDF, the...video...demonstrate[s] how Kynar PVDF has passed a multitude of critical and demanding flame and smoke tests – including the recent Factory Mutual (**FM**) **4910** testing criteria for wet bench clean room materials. ... Now, with the advent of "fire safe" materials for wet benches, flame, smoke and corrosively resistance [sic] have become equally valuable to semiconductor manufacturers.
  ...
  In the **FM 4910** test, sheet made of Kynar ... resins ... registered impressive flame...,damage results. ...
  www.atofinachemicals.com

- HEADLINE: SEMICONDUCTOR SESSION KINDLES FAB TALK: FIRMS LOOKING TO REDUCE RISKS OF COMBUSTIBILITY
  ...

Benson said Factory Mutual's research arm has listed six polymers under its flammability test protocol, **FM4910** since last year and is working on adding more. *Plastics News* (July 27, 1998).

- Factory Mutual Research Corp. of Norwood, Mass., has listed Corzan CPVC under flammability protocol **FM4910** and is now considering other Corzan compounds for ducting and piping systems. ... *Plastics News* (September 6, 1999).

- HPG said it will be the exclusive North American sales agent for Takiron PVC sheet that meets **FM4910** status for semiconductor and clean room equipment applications. Such materials must meet stringent requirements for fire retardancy and smoke generation. ... *Plastics News* (October 18, 1999).

- ...Factory Mutual Research listed Empire's Bultaron post-chlorinated PVC 4225 industrial sheet under flammability protocol **FM4910** on Sept. 25... *Plastics News* (November 27, 2000).

- HEADLINE: Clean rooms getting cleaner
  ...
  BODY: ...choice of materials is growing, and fab [semiconductor] operators more readily are accepting the expensive, mostly high-temperature thermoplastics listed under the **FM4910** flammability test protocol. ...[Heron Peterkin, a semiconductor engineering specialist with FM Global] estimates that at least 60 percent of domestic producers have adopted the **FM4910** materials,... *Plastics News* (September 24, 2001).

As further evidence of the awareness and recognition of FM4910 in the industry, plastics manufacturers and suppliers promote the fire resistant quality of their products for clean room use by touting their compliance with the FM4910 protocol:

- Pure Guard SS has the best flame performance-the only FM Approved duct that did not ignite in the **FM4910** (Clean Room Protocol) battery of tests. ... **FM 4910** Approved for Clean Room Use. *www.compositesusa.com.*

- All MICROVOID® fume hoods are designed to the customer's exact specifications to operate efficiently and safely for many years, while meeting all applicable OSHA and safety codes including SEFA, ASHRAE 110-1995, **FM-4910**, Fed Std. 209E, and UL. ... *www.aircontrol-inc.com.*

- Flametec CP7-D flame retardant polypropylene sheet is listed by Factory Mutual as a plastic designed to meet the **FM 4910** Clean Room Fire Safe Protocol,.... *www.portplastics.com.*

- Factory Mutual Testing: BF Goodrich CORZAN® CPVC piping compound has been evaluated in accordance with Factory Mutual Test Protocol 4910 and has met the requirements of **FM-4910**. *www.plastinetics.com.*

- Product Description: Technic introduces SEMCON 2000, the latest generation of dependable, wet-bench style, multiprocessing electroplating tools. ... SEMCON 2000 modules are constructed of white polypropylene and are equipped with all the necessary hardware and utilities, ... Optional features and services include: **FM-4910** specifications,.... *www.photonics.com.*

Although the FM4910 protocol may have been developed by an insurance company, it clearly is a term that is recognized and used outside the insurance industry, contrary to applicant's contention. The Nexis and Internet evidence noted above and the additional references that follow, make it clear that the plastics manufacturing industry and semiconductor manufacturing industries, the intended purchasers and end users of applicant's goods, are well-acquainted with the need for fire resistant materials in clean room structures and the assurance of fire safety that FM4910 testing and approval provides.

- FMRC has agreed to share a 21-page document, The FMRC Clean Room Materials Flammability Test Protocol (Class

4910), with the insurance, plastics and semiconductor industries. *Business Wire* (October 22, 1997).

- ...chip makers have taken matters into their own hands. They are requiring that their suppliers use new materials in wet bench [workstation] fabrication, materials like advanced polymer blends that are less flammable..."
  ...
  The companies who are developing these wet benches [i.e., the plastics industry] are turning to Factory Mutual Research to help them analyze and screen appropriate engineered plastics candidates. ...
  ...
  The Clean Room Materials Flammability Test Protocol (Class 4910) contains the protocol for conducting tests. Now, wet bench manufacturers and users can apply the clean room protocol to develop plastic materials and equipment capable of resisting fire."
  www.fmglobal.com.

Contrary to applicant's contention, knowledge that a third party developed the FM4910 protocol is not a factor in assessing the meaning or significance of the term in relation to applicant's goods. The point is that prospective purchasers of applicant's plastic materials for use in manufacturing clean room equipment would, without any guesswork or the exercise of any imagination, immediately recognize FM4910 as signifying an approved class of plastic materials, and they will rely on that representation in making their purchasing decisions.

Decision: The refusal to register under Section 2(e)(1) of the Trademark Act is affirmed.