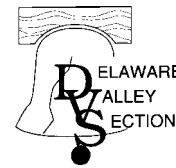




AIChE Newsletter

Delaware Valley Section



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November 2003

AIChE DVS November 11, 2003 Meeting

Green Chemistry

By Dennis C. Hendershot

It's in the news all over the place - the *Philadelphia Inquirer* and other newspapers, PBS, NPR, CNN, Fox News, Channel 17 News. In his "Chemical Security Act of 2003" (S167), Senator Corzine (D, NJ) wants to require that all chemical plants consider it. And, if you build a plant in Contra Costa County, California, there is already a local ordinance that requires an evaluation of inherently safer technology. But, what does it really mean? Is inherent safety really the magic bullet for eliminating chemical risks that some advocates seem to think? The presentation will focus on understanding what inherently safer design really means, clarifying some misconceptions about its meaning, and talking about what is going on in the regulatory and legislative arenas especially in regards to chemical processes.

Background:

"Green Chemistry" has become a major focus for development of new chemical products and manufacturing processes. While emphasis has generally been placed on environmental issues, inherent product and process plant safety are important components of the "Green Chemistry" concept. Inherent Safety is discussed in the Special Supplement of the January 2002 "Chemical Engineering Progress" entitled "An Evolution in Chemical Engineering: The Journey Ahead". The section "Refocusing Chemical Engineering" outlines that whether a facility is a large chemical commodity plant that must be operated efficiently to make a profit, or a batch scale specialty chemical (pharmaceuticals, electronic materials,

(Continued on page 4)



Dennis C. Hendershot is a Sr. Technical Fellow in the Process Hazard Assessment Department of the Rohm & Haas Engineering Div. at Croydon, PA.

Location:

Best Western - 285 Commerce Dr., Fort Washington, PA

Program: 6:00 Social;
6:30 Dinner;
7:30 Speaker

Ticket Price: Dinner \$20.

Choice of Grilled Chicken w/Rice;
Fired Flounder w/Fries; or
Vegetables in nut cream sauce w/Rice
All include Salad, dessert, coffee/tea

RSVP: by Fri Nov 7th
to Chris Gilman:
Christopher_Gilman@Merck.com
or Phone: 215-652-9158

Please leave name (spelling), number attending, meal choice, company affiliation, phone & Fax number. In the event you must cancel after the cutoff date, you will be mailed paid tickets good for any event for one year.

Chair's Chat

By William C. Youngblood, Esq.

Since I am a patent attorney, I am considered by most to be a chemical engineer who has taken a non-traditional career path. As such, it occurred to me that your chemical engineering "tool box" could be enhanced if you had a general understanding of how chemical engineering and intellectual property are related. More specifically, for example, how does an idea differ from a patent. For some, this difference is already understood. Nevertheless, I believe a portion of a chapter from a publication by the American Intellectual Property Law Association entitled, "What Kind Of Idea Do You Have?" nicely summarizes important differences between what is considered to be "merely" an idea and what constitutes intellectual property.

An idea is first the thought of one or more persons. We sometimes call a "new" thought an idea, but not all ideas are new. Many (if not most) ideas have been around for a long, long time, even though the idea may be new to the person who has just thought of it. Some ideas can be commercially exploited, and other ideas, no matter how good they are, cannot be commercially exploited. Some ideas can be protected by trade secret laws, patents, copyrights or trademarks, and others cannot. In some cases, even though an idea is protectable it may have little or no commercial value.

Let's think about your idea for a moment. First, let's think about what you as an individual can do with your idea. If you still have it in your head or in your private papers, it's still yours and yours alone. An idea can always be kept secret

(Continued on page 3)

CHEMICAL CONSULTANTS NETWORK - November 12, 2003, Meeting

Visit our web page at www.chemconsultants.org

Date & Time: Wednesday, November 12, 2003 at the Cynwyd Club, Bala Cynwyd, PA; Mixer, 5:30 PM; Dinner, 6:30 PM; Talk and Business Session, 7:30 PM.

Speaker Topic: **Speaking Skills and Using Them to Sell Your Consulting Services**
Mr. Michael Iorio of Dale Carnegie

Abstract: Successful communication skills are essential in today's consulting business climate. This presentation will discuss relevant speaking skills as they relate to selling consulting services including establishing ones credentials, identifying your client's needs and presenting your proposal for services.

Biography:

Michael Iorio is currently the Philadelphia Area Manager for Dale Carnegie and has been helping people become better communicators for many years.

Location: The Cynwyd Club, 332 Trevor Lane, Bala Cynwyd, PA 19004.

From City Line Ave. (Route # 1) drive north on Conshohocken State Road (Route # 23) about 3 long blocks. Continue north on Trevor Lane instead of following Route #23 left. At "Y" in road one block north on Trevor Lane turn left where clubhouse and parking are on the left side of the road. Please park in lot if space is available; otherwise park on Trevor Lane. If lost, call the club at 610-667-4524.

Reservation: To make or cancel a dinner reservation, e-mail CCNReservations@aol.com or call the ACS office at 215-382-1589 (leave message on voicemail if necessary). Fee, including food and beverages, is \$20 provided reservations are made before 6 PM Friday, Nov. 7th; \$25 if made subsequently by 10 AM Monday, Nov. 10th. If no reservation is made by the final deadline, food and beverages will not be available unless a cancellation occurs. No-shows will be invoiced. No reservation is required for talk only; however, we ask that you please register so that we can notify you of any change in plans.

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Chairs Chat

if you don't try to exploit it. If you choose, you can do nothing with your idea. Or, you can explore your idea, thinking about it from every angle; and you can improve it by adding ideas of others or building upon it yourself. You can use your idea in your daily life, or you can help others use it. However, if you only use your idea yourself or give the idea away to others without charge, chances are you will never profit from the idea to any great extent.

Generally speaking, in order to profit from an idea, it is necessary to receive some sort of legal protection for the idea. Different types of ideas can be protected in different ways, and some types of ideas cannot be protected at all.

Some ideas are useful in the sense that they may be incorporated into devices,

structures, machinery or other things. For example, if an idea is for a method or process of doing something, a machine, an article of manufacture, or a composition of matter, and if your idea is truly "new," you may be able to protect it by obtaining a utility patent from the United States Patent and Trademark Office (USPTO) (www.uspto.gov). Among the newer candidates for such protection are the "generic engineering", "computer software program" and "method of doing business" fields.

Other ideas are artistic or aesthetic. If you have invented a new and original ornamental design, it may be protectable by a design patent, also issued by the USPTO, or by a copyright, which may be registered with the United States Copyright Office (www.loc.gov/copyright).

Other "ideas" may be new species of plants. If you have discovered or produced a new variety of plant, it may be protected by a plant patent, utility patent or both from the USPTO or by a certificate of plant variety protection from the Department of Agriculture.

However, ideas don't have to be patentable or copyrighted to be protectable. For instance, except that practical applications thereof may be patentable, naturally occurring phenomena, laws of nature, mental steps, most printed matter, and mathematical formulas are not protectable under our patent laws. However, if an idea in one of those categories would be helpful or useful to others if known by them, you might be able to receive compensation for your ideas by disclosing it to them *in confidence* under a contract or the express understanding that, if they use the idea or disclose it to others, you will be compensated. Here you are treating your ideas as confidential information or a trade secret.

Another type of potentially exploitable idea is a slogan or fanciful name or mark suitable for use on or in connection with the sale of goods or services. Such a name or slogan can constitute a trademark or service mark. However, rights in a trademark or service mark are established by using the mark in selling goods or services under the mark, not simply by think-

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DVS November Meeting

(Continued from page 1)

biotech products) plant that must be first to the marketplace for profitability; "Inherently Safer Design" improves cost effectiveness and can be considered in on-going plant process improvements. The five (5) approaches for inherently safer plants include:

- 1) Intensification: using smaller quantities of hazardous materials;
- 2) Substitution: replacing a material with a less hazardous substance;
- 3) Attenuation: using less hazardous process conditions or a less hazardous form of a material;
- 4) Limitations of Effects: developing a process that will minimize the release of hazardous materials; and
- 5) Simplification: developing a process and equipment that will make operating errors less likely and that will be forgiving of errors that are made.

Biography:

Dennis C. Hendershot is a Senior Technical Fellow in the Process Hazard Assessment Department of the Rohm and Haas Company Engineering Division in Croydon, PA. He has been involved with the development and application of hazard analysis, risk management, and safety engineering tools, with particular emphasis in the areas of inherently safer design, process hazard analysis, and quantitative risk analysis. He received a BS in chemical engineer-

ing from Lehigh University and an MS in chemical engineering from the University of Pennsylvania. Dennis is a Fellow of the American Institute of Chemical Engineers (AIChE), and currently serves on the AIChE Board of Directors. He is a past chair of the AIChE Safety and Health Division, and the AIChE Loss Prevention Programming Committee. He serves on the editorial review boards of *Process Safety Progress*, *Chemical Engineering Progress*, and the *Journal of Loss Prevention in the Process Industries*. He has been active in the Center for Chemical Process Safety (CCPS), as a member and chair of the Risk Assessment Subcommittee, chair of the Hazard Evaluation Procedures Subcommittee, a member of the Inherently Safer Process Subcommittee, member and chair of the Undergraduate Education Subcommittee, and a member of the CCPS Managing Board. Dennis is a member of the Division of Chemical Health and Safety, and the Division of Environmental Chemistry, of the American Chemical Society.

Dennis also received the Merit Award for contributions to chemical process safety from the Mary Kay O'Connor Process Safety Center in 2000, and the William H. Doyle Award for the best paper at the AIChE Loss Prevention Symposium in 1998 and 2002. He and his wife, Connie, were named "Parents of the Year" by the Pennsylvania Association for Gifted Education in 1997.

Chairs Chat

(Continued from page 3)

ing up or "inventing" the mark. Thus, in order to obtain protection for your proposed mark, you will either have to begin using it yourself or sell the idea to someone else who will begin using the mark. In the latter case, the idea must be sold in confidence, and your rights will be purely contractual.

Although ideas *as such* are not protected by copyright law, the particular expression of an idea in a work of authorship, such as poetry, an article, a book, a painting, a musical composition, lyrics, a map, a photograph, a sculpture, or even a pictorial design, can be protected under the federal copyright laws. Copyright protection is also available for computer software programs. While a copyright exists from the instant you embody such an idea in tangible form, in order to sue for copyright infringement, the copyrighted work must be registered. Registration can be obtained for the Copyright Office of the Library of Congress.

Clearly many of your ideas as chemical engineers are valuable; however, the question remains whether those ideas are protectable. I have not covered every useful idea, but hopefully you may now be able to correctly classify many of your useful ideas and, in some cases, you may now be able to see some ways they may be protected.

In closing, I encourage each of our members of DVS-AIChE to share the insight they have gained from a career as a chemical engineer, with others in our chapter of AIChE. DVS-AIChE welcomes your insight in the form of articles – long or short – which we can consider for publication in an upcoming newsletter.

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www.AlbertusEng.com

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Directions to DVS AICHE November 11th Meeting

From the Fort Washington Exit (#26) of the Pennsylvania Turnpike, travel to the end of the exit ramp, disregarding exits for Route 309 North and South. Bear right, and follow to the first traffic light.

Turn right (onto Commerce Drive) and Follow ¼ Mile to the Fort Washington Best Western -- Use the Palace of Asia restaurant entrance to access the banquet room.

285 Commerce Drive * Ft. Washington, PA 19034 * (215) 646-2133

December DVS AICHE Meeting will be the Brew Pub Business Card Exchange.

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inside...	Nov. 11th Meeting Info.	page 1	Student Chapt. Contact List	page 5
	Chairs Chat	page 1	Nov. 11th Directions	page 5
	Chem. Consultants Network	page 2	December Meeting at Brew Pump	