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The Commercialization of Nanotechnology, Attorney Barbara Yuill discusses the implications of the recent Supreme Court ruling on KSR vs. TELEFEX.....

Jim Mason, Executive Director of the Oklahoma Nanotechnology Initiative talks about a new round of funding for nanotechnology commercialization in Oklahoma.....

What's New at NBMI?

The NanoNewsLine is a quarterly publication of XetaComp, LLC. Submission of news releases and research articles are invited. Send your submissions as a Word Document and photos in jpeg format to donaldson@xetacomp.com

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To Our Friends & Associates

The big news is we have launched our first **sunVextm** retail product! We are setting the stage for our *new generation of skin care products*. The commercialization launch was announced with an open house at the Lawton, OK facility that included presentations at Great Plains Technology Center, and a walk-through of the facility. Our **sunVextm** broad spectrum UVA/UVB skin care product, in an anti-aging formulation is set to be test marketed in Lawton and Southwest Oklahoma in September and October. The naturally derived formulation incorporates anti-aging components along with our **sunVextm** sunscreen, a coated nanoscale titanium dioxide in an aloe vera base. The unique formulation was accomplished in collaboration with Cosmetic Specialty Labs in Lawton. If you would like to try **sunVextm** sunscreen formulations, a limited amount is available through our web site. Simply click [here](#) to go to our **sunVextm** web page.

Also in this issue, attorney Barbara Yuill discusses KSR vs. TELEFLEX and why this Supreme Court case is making it more difficult to obtain and defend a patent. Jim Mason, Executive Director of the Oklahoma Nanotechnology Initiative, says we can look forward to a second round of funding through the Oklahoma Nanotechnology Applications Project (ONAP). XetaComp was one of the five companies awarded ONAP funding in 2007.

Charles Seeney and Dr. Jim Klostergaard attended the BIO 2007 Venture Forum East in Montreal. They presented a progress report on the NBMI/ M.D. Anderson collaboration, creating new interest among some major multinational companies.

The future looks so bright, we're all going to need sunscreen!

Dennis Donaldson, VP, Corporate Communications

Effect of KSR v. TELEFLEX on Research-Based Companies

Barbara K. Yuill, Attorney at Law
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The patent system was designed to encourage innovation by exposing new ideas, through the publication process, in exchange for granting a short term monopoly to the patent holder. This monopoly gives the inventor an opportunity window to recover the

investment costs associated with development of his or her invention. However, it is often difficult for small start-up companies to cover the legal costs of patenting and ultimately enforcing that patent. Now, the recent Supreme Court case *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. (2007), may have made it even more difficult for inventors and small research-based companies to obtain and defend a patent position for their technology.

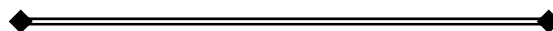
In order to receive a U.S. patent for your invention, the claimed invention must not only be new, but it must be non-obvious from what was known before. Section 103 of the Patent Act declares that a patent may not be obtained "if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains."

Consistent legal determination of what is "obvious" and "non-obvious" is not always apparent. It is particularly difficult for the many inventions that take various existing technology elements and combine them in a new way. For example, would a patent claim that requires elements A, B, C, and D, be obvious from an earlier patent with elements A and B, and another earlier reference teaching elements C and D? For many years the courts and the Patent Office have used the **teaching-suggestion-motivation test** ("TSM test") as a benchmark for determining obviousness under Section 103. The TSM test required that, in order to support a finding of obviousness, there must be some teaching, suggestion or motivation in the references, or in the knowledge of one of ordinary skill in the art, to

modify or combine the references. In some instances, the teaching, suggestion or motivation must also address the precise problem that the patentee is trying to solve. And obviousness could not be established by merely claiming that the combination of elements was "obvious to try."

In *KSR v. Teleflex*, the Supreme Court modified these tests and hurdles, noting first that the Court of Appeals erred in focusing only on the specific problem the inventor was trying to solve. Instead "any need or problem known in the field of endeavor at the time of the invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." Secondly, the Court of Appeals erred by assuming that a "person of ordinary skill attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem." Actually, "common sense" teaches that "familiar items may have obvious uses beyond their purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle." Thirdly, the Supreme Court tells us that it is possible to conclude a patent claim is obvious merely by showing that the combination of elements was obvious to try. Finally, while it is right to be cautious of "hindsight bias" the Court warns this does not mean that common sense should be ignored.

Although the full impact of this Supreme Court decision remains to be seen, there is no doubt that the ruling has lowered the burden for challenging a patent claim on the basis of obviousness. While "common sense" may be a better test than the "old" TSM test, it is troublesome not knowing exactly *whose* common sense will be determinative. Patentees should establish "common sense" differences between the claimed invention and the prior art early on. It will be even more important now for patentees to show unexpected and surprising results of their invention compared to prior art. And finally, research-based companies and patentees should expect and plan for future infringement defendants to more vigorously attack the validity of their patent using an obviousness argument.



Oklahoma Nanotechnology Initiative Has A Great Year; Looks Forward To 07-08

Jim Mason, Executive Director
The Oklahoma Nanotechnology Initiative



This past year was a great building block for applications of nanotech in Oklahoma.

The Oklahoma Nanotech Initiative (ONI) is very enthusiastic about the new year that started July 1st. The implementation of The Oklahoma Nanotechnology Sharing Incentive Act '06

(which is believed to be the nation's first state nanotech commercialization incentive program) was a great starting point in 2007. Five Oklahoma companies were awarded funding to utilize nanotechnology to create a new commercial product or make significant improvements to an existing product.

The legislature again included approximately \$2 million in the Oklahoma Center for the Advancement of Science and Technology (OCAST) budget for applications of nanotechnology for the coming year. As the first five companies are making great progress toward fulfilling their goals of bringing new nano products to market; the ONI is eager to work with OCAST, the Oklahoma Manufacturing Alliance, and i2E to see the second round of funding via OCAST's Oklahoma Nanotechnology Applications Project (ONAP) be implemented. Over 40 Oklahoma companies have indicated an interest in the ONAP program and are eager to move forward.

In 2008, the ONI will continue to work to bring regional nanotechnology collaboration efforts together as was evidenced by our Regional Nanotechnology Roundtable that was a part of our NanoFocus Conference in 2007. Representatives participated from Arkansas, Kansas, Colorado, New Mexico, Oklahoma and Texas. Our Regional Nanotechnology Undergraduate Symposium held during the 2007 Oklahoma EPSCoR Conference was also very successful with undergraduate students from universities in Arkansas, Kansas,

Oklahoma and Texas.

The ONI will continue to be active on nanotechnology issues at the national level where in 2007 we participated in the NanoBusiness National Nanotechnology Policy Tour in Washington D.C., the U.S. Chamber Committee on Nanotechnology Issues, the National Nanotechnology Initiative Public Participation Conference, and the American Bar Association's Teleconference on Nanotech and the Clean Air Act.

Nationally, the FY '08 budget for the National Nanotechnology Initiative is projected at nearly \$1.5 billion, more than triple the \$464 million spent in 2001. The ONI would like to see this trend of increased funding for nanotechnology research to continue. (This figure is often referred to as the "NNI budget," which reflects the sum of estimated Federal agency investments in nanotechnology.) This growth in nanotechnology research and development (R&D) investments across the Federal government over the past seven years reflects the consistent, strong support of the Administration and Congress for this program, based on its potential to expand our fundamental knowledge and to make important contributions to national priorities such as economic competitiveness, homeland and national security, and public health.

The ONI serves as the nanotechnology information clearinghouse for the academic, business, industrial and financial communities of Oklahoma primarily through our website www.oknano.com. In 2007 our website had 267,981 hits and should become even more popular with recent additions to the site. Some of the new additions include: "Nano for Students" with links to interesting new websites, lesson plans, nano games and much more; a "Nano Products" section which will soon have a virtual Nano Products Showcase, and expanded information on "Nano Research" which includes more: nano company listings, nano researchers listing, and info on the Oklahoma NanoNet.

In 2007, the ONI presented 48 nanotechnology

awareness programs throughout Oklahoma and we anticipate even more presentations in 2008. In 2008, the ONI will help man booths at NanoTx, NanoTech and at the BIO conference as we did in 2007.

The ONI will continue its efforts as a liaison to the Oklahoma Legislature to share information from our recent "Benchmarking Survey of Nano Initiatives

Across America", about the success of the Oklahoma Nanotechnology Sharing Incentive Act, and work to create more awareness about nanotechnology, and more specifically the applications of nanotechnology by Oklahoma companies.

A 2007 ONI Annual Report has been published and is available from the ONI.



Open House Inaugurates XetaComp's Lawton Facility

XetaComp officially opened its Lawton production facility with a public open house on Thursday, June 14. Preceding a walk-through of the facility were presentations and a luncheon hosted by Jim Nisbett, Superintendent of Lawton's Great Plains Technology Center.



Jim Mason, Executive Director of the Oklahoma Nanotechnology Initiative, gave an overview of new products on the market employing nanotechnology. Lawton Councilwoman Janice Drewry stressed the importance of nanotechnology and the impact it will have on the Lawton community. These presentations were followed by Charles Seeney, XetaComp's CEO, who outlined the company's business plan and what it will mean to Lawton and Comanche County in terms of employment

and income.

In attendance were former State Senator Gilmer Capps, principal author of the resolution creating the Oklahoma Nanotechnology Initiative, Comanche County Commissioner Ron Kirby, Lawton City Manager Larry Mitchell, and Jennifer Ellis and Phil Farrell from Cosmetic Specialty Labs.

The open house coincided with the release of the company's sunVex Body Lotion, a skincare product composed of naturally derived ingredients and featuring XetaComp's coated nanoscale titanium dioxide sunscreen which will be produced at the Lawton facility.

"This open house was our first opportunity to acquaint the public with our facility and our product," says Earl Herring, XetaComp's General Manager. "The public had the opportunity to see the layout of the facility and learn about the many applications of our nanoscale titanium dioxide."

XetaComp, which is a wholly owned subsidiary of NanoBioMagnetics, Inc., will initially occupy 15,000 square feet of space and is planning to eventually construct a 30,000 square foot facility on the 6-acre tract. The company is projecting a staff of 50 within 5 years and a gross annual income of \$40 to \$50 million.

"We are creating highly skilled jobs that will have an average salary of approximately \$50,000 per year," says Herring. "We are already in discussion with Great Plains Technology Center on the development of a comprehensive training program. Having a training center, as well as formulation and distribution resources within a few miles of the facility is going to go a long way in ensuring the overall success of the company."

In the News:**Dr. Pamela New Joins NBMI:**

NanoBioMagnetics, Inc. (NBMI) recently announced that Dr. Pam New has joined the technical staff to support and conduct research in the functionalization of magnetically responsive nanoparticles.

Prior to NBMI, New served as an Associate Professor of Chemistry at the University of Central Oklahoma (UCO) where she taught courses in general chemistry. She received a B.S. in Chemistry, Magna Cum Laude, from Baker University, and her Masters in Chemistry and Ph.D. in Inorganic Chemistry from Washington University.

Dr. New was nominated for the Neely Excellence in Teaching Award at UCO in 2000, 2002 and 2003 and was a semifinalist for Educator of the Year Award at Northeast Missouri State University in 1994 and 1995.

In her position at NBMI, Dr. New will assist the company's scientific staff in the development of nanoparticle constructs for vectored delivery of chemotherapeutics.

Seeney, Klostergaard Present at Montreal Venture Forum

NanoBioMagnetics, Inc. (NBMI) presented its business program at the 2007 BIO VentureForum East in Montreal, Canada. The presentation was given jointly by Charles Seeney, NBMI's President and CEO, and Jim Klostergaard, Ph.D., Professor of Molecular and Cellular Oncology at The University of Texas M. D. Anderson Cancer Center, and NBMI's Chief Science Advisor.

The presentation focused on NBMI's magnetic vectoring technology for the site-specific delivery of chemotherapeutics. Dr. Klostergaard presented data on the efficacy of the technology in targeting and penetrating tumors in ovarian and breast cancer models.

"The majority of companies representing the United States were from the East Coast," says Seeney. "It was an honor and a privilege to be the only company representing Oklahoma and the Southwest at the BIO VentureForum."

The Biotechnology Industry Organization (BIO), in partnership with 14 state biotechnology associations and BIOTECCanada brings venture capitalists together with promising seed, early- and late-stage private biotechnology product and platform companies from the East Coast. The showcased individual company presentations were made to leading North American venture capital firms in the life sciences field. An advisory board made up of 30 equity capital leaders review and evaluate the corporate profiles of companies through an application process.

Let's Go Racing!

Look for the *sunVextm* logo on the ASCS Modified Sprint Car owned by Herring Racing. The car, driven by Robert Sellers, is a favorite in the Sooner Region and races on tracks in Oklahoma and Texas. The car has consistently finished in the top 5 and has won several feature races. This past year, it finished in the Top 10 in the Sooner Region.



Safe Harbor Statement

Certain statement included in this press release may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements relate to, among other things, plans and timing for the introduction or enhancement of products and services, statements about future market conditions, supply and demand conditions, and other expectations, intentions and plans contained in this press release that are not historical fact and involve risks and uncertainties. The company's expectations regarding future revenues are dependent upon the ability to develop and supply products and services that meet defined specifications. When used in this press release, the words "plan," "expect," "believe," and similar expressions are generally considered forward-looking statements. These statements reflect current expectations.