

Portál al Mercado

"Door to the Marketplace"

Volume II (Spring 2004)

Message from the President

Welcome to the newsletter from the Science & Technology Corporation @ UNM (STC), the technology commercialization arm of the University of New Mexico. This issue contains information about STC, its services and events, as well as educational material about intellectual property and its management.

STC has implemented several services to make it easier for the UNM community to learn and participate in commercialization activities. STC inventors can now log into STC's database to access information about the patent and commercialization activities for their inventions. Faculty who are unsure of the commercial potential of a discovery can now submit a draft manuscript or grant application to STC electronically for preliminary evaluation. Information about both of these new features is contained in this issue of the newsletter.

A series of outreach events is scheduled for the spring semester to educate interested UNM community members about intellectual property matters, commercialization topics and entrepreneurial activities. This newsletter contains a listing of the spring events.

For those interested in learning more about the patent process, two articles in this issue are pertinent. If you have an interest in conducting a preliminary patent search on the US Patent and Trademark Office web site, learn how to do so in the article "How To Do a Patent Search." Additionally, Kevin Pontius, a former USPTO Patent Examiner and patent attorney, has authored an article in this issue entitled "Publish With Care."

We are pleased to announce that a new staff member joined STC in January 2004. A profile of Jane Fedor, Director of Life Sciences Licensing, is contained in this issue.

We have included an interview with STC's only UNM freshman inventor, Neil Sabol, as inspiration for students to consider pursuing commercialization of their ideas!

Please feel free to contact me or other STC staff listed below if you would like to discuss new ideas for commercial potential. As the name of our newsletter indicates, we consider STC to be the **Portál al Mercado**, or the Door to the Market!

Lisa Kuuttilla, President & CEO (kuuttilla@unm.edu / 272-7905)

Patents Issued to UNM Inventors (7-1-03 – 12-31-03)

Cascadable Semiconductor Nitride-Based Structures
Patent No. 6,593,589 issued 7/15/03
Eliseev, Peter G.; Osinski, Marek A.

Thin Film Product and Method of Forming
Patent No. 6,596,377 issued 7/22/03
Brueck, Steven; Hersee, Stephen D.; Zaidi, Saleem H.; Zubia, David

Stimuli-Responsive Hybrid Materials Containing Molecular Actuators and Their Applications
Patent No. 6,615,855 issued 9/09/03
Lopez, Gabriel P.; Gaparaju, Venkata Rama; Atanassov, Plamen B.; Chilkoli, Ashutosh

Peptide Inhibitor of LFA-1/ICAM-1 Interaction
Patent No. 6,630,447 issued 10/07/03
Larson, Richard

5-HT3 Receptor Assay Using Transgenic Mammal
Patent No. 6,630,612 issued 10/07/03
Allan, Andrea; Engel, Sharon; Lyons, Clifford R.

Plug-Flow Cytometry for High-Throughput Screening & Drug Discovery
Patent No. 6,638,481 issued 10/28/03
Sklar, Larry A.; Edwards, Bruce S.; Kuckuck, Frederick W.

Inhibitors of Cholesterol Esterase
Patent Nos. 0975617, 0975617B1 issued 11/05/03
Deck, Lorraine M.; Vander Jagt, David L.

Bi-Directional Short Pulse Ring Laser
Patent No. 6,650,682 issued 11/18/03
Bohn, Matthew J.; Diels, Jean-Claude M.; Dang, Thien Trang Thi

Welcome to STC, Jane!

STC announced the addition of Jane Fedor to its staff as Director of Licensing, Life Sciences, effective January 5, 2004.

Ms. Fedor has worked in the biotech/ biomedical field in the San Francisco Bay Area for 20 years in positions of science, business development and technology transfer. Her employment includes Inhale Therapeutic Systems, Onyx Pharmaceuticals, Applied Biosystems, Hoefer Scientific Instruments and the University of California San Francisco Technology Management Office. Jane holds a BA in Chemistry, MS in Molecular Biology from Washington University and an MBA.

Lisa Kuuttilla, President and CEO of STC, said, "Jane will be a valuable addition to STC and brings scientific expertise, industry business development and university technology commercialization experience to the position."

You can reach Ms. Fedor at 505-272-7908 or jfedor@unm.edu. ■



Publish With Care

Article by Kevin L. Pontius, Robert, Abokhair & Mardula, LLC

“Publish or perish” is a well worn slogan in the academy. Patent attorneys, observing the consequences of the drive to present papers and publish articles as prolifically as possible, have modified that slogan to “publish *and* perish”—perish the international patent rights, that is. Publication of a technical write-up before filing it with the Patent Office can mean death to any patent rights overseas.

U.S. law gives inventors some wiggle room. After publicly disclosing her work (e.g., presenting a paper at a conference, publishing, releasing a commercial advertisement), an inventor has up to one year to file for domestic patent protection. However, that protection will be limited to what U.S. law alone can provide.

Outside the U.S., the rules are harsher. With only some narrow exceptions, the rest of the world insists that the patent filing happen first, *then* the publication; otherwise, patent rights are forfeited. This rigid approach is known as the “absolute novelty” requirement. On the bright side, it is not necessary to file simultaneously in the patent offices of all the countries in which protection is desired; almost all countries give an inventor a whole year from a filing in her home country to claim priority from that home country filing. But, that gesture of reciprocity is cold comfort if the foreign patent rights would be dead-on-arrival because the absolute novelty requirement had been violated.

Of course, none of this is a concern if there is no need to obtain patent rights; nor is it a concern if the only patent rights of interest are those provided by U.S. law alone. Often, though, the inventor has no idea at an early stage of events if that is the case. An invention with commercial potential may be difficult to recognize early on. Even if the commercial potential is spotted, the true scope of the market (domestic only? world-wide?) may not be readily apparent. In these unclear cases it is careless to simply assume that foreign patent protection is of no value.

This presents researchers with a difficult dilemma. The research community has a strong tradition of disseminating new knowledge through early publication. Additionally, as commercial considerations weigh increasingly on researchers, the pressure is heightened to quickly publish to help sell a new discovery. But, these quick disclosure pressures (both traditional and commercial) can cause legal mischief if

careful steps are not first taken.

Simply being more slow and deliberate about publishing is not necessarily a satisfactory solution. Obviously, the longer the inventor sits on her discovery, the greater her risk that a competitor will publish first and grab the glory. On top of that risk, there is also a legal downside to waiting that arises out of *another* difference between the laws of the U.S. and every other country in the world.

“**Now an inventor is free to quickly send that manuscript to the publisher of his choice while managing to preserve worldwide patent rights.**”

The rest of the world has a “first-to-file” system. This means that the first person to file the patent application papers is the person awarded the patent. Other countries reward the first person that rushes to claim their rights. It is a mistake to think that other countries will do as the U.S. Patent Office does and make an inquiry as to who really was the first to invent. The rest of the world *does not care about that little detail*—only which inventor got papers on file first.

The good news is that the “careful steps” prior to public disclosure need not be an impediment to early and prolific publication. Changes to the law in recent years have created a mechanism for dealing with the challenge of how to be both agile and careful about publication. Congress created something they call a “provisional” patent application that can be filed without all the laborious fuss of an old fashioned utility patent application. Now an inventor is free to quickly send that manuscript to the publisher of his choice while managing to preserve worldwide patent rights.

How does this provisional patent application work? Is it just a “poor man’s” patent application? Not at all. It has the legal force and affect of a regular patent application (they are both authorized by Congress) in that it has the potential to result in a grant of patent rights. But, by law, it has a life of only one year, at which time it must be either transformed into a regular patent application or abandoned. That year buys time to figure out: whether the invention is likely patentable, whether (and where) there will be a market for the invention, and to raise money.

Most importantly, a provisional patent application lets an inventor get papers on file in a hurry because of certain characteristics:

- Relaxed formal requirements as compared to a regular patent application
- Claims are not required (although recommended if a future filing in Europe is contemplated)
- The government filing fee is very small

The result is a quick-and-easy way to get a disclosure on file in the Patent Office without spending all the time and resources necessary to meet all the standards of a regular patent application. The provisional application by itself provides for no enforceable protection, but its filing date can be used as a priority date for a later-filed regular patent application, as well as patent applications in other countries.

A warning: Do not scrimp on the technical details. A provisional application need not be pretty, but it certainly should be complete. A thin technical disclosure makes for a lousy priority document to corroborate any later attempt to prove that the inventor really was in possession of the complete invention. At a minimum, the provisional application needs to teach enough about the invention to enable persons of ordinary skill in the relevant art to reproduce the results.

Thus, the age-old advice to “contact the lawyers before you send out that manuscript” need not strike dread into the hearts of researchers. It is a new century and getting the patent attorneys involved in the process no longer means gumming up the works. ■

STC Website Features

Draft Manuscript/ Grant Application Upload

(<http://stc.unm.edu/inventors>)

Upload your draft manuscript or grant application today for STC to review. We will advise you concerning the patentability of your invention for free.

“My Technologies”

(<http://stc.unm.edu/inventors/portal>)

Log in today and check your inventions’ patent status! See activity as it occurs and help us help you. View the marketing efforts being pursued on your inventions in real-time!

How To Do a Patent Search

If you are interested in conducting your own prior art searches before filing an invention disclosure form (IDF) with UNM's Patent Administration Office, this article is for you.

The purpose of a prior art search is to identify existing technologies that are similar to the invention in question. This prior art plays a major role in the patentability of the invention. Note that it is important to consider as much information as possible. Therefore, in addition to a review of intellectual property, a good prior art search will cover journal articles, trade publications, product announcements, etc.

With respect to the intellectual property component, basic patent searches can be conducted free of charge at the U.S. Patent & Trademark Office Web site (<http://www.uspto.gov>). The "Advanced Search" tool (<http://patft.uspto.gov/netahtml/search-adv.htm>) is the best place to start. The tool allows full-text searches of all patents issued since 1976. As a first step, we recommend searching for keywords in the *title* field, but you may also search *abstracts*, *claims*, and a number of other fields. The Web site provides numerous help pages offering examples and instructions for different kinds of searches. (One quick tip: although nearly every other search engine uses the asterisk as a "wildcard," the Patent & Trademark Office uses the dollar sign.)

By reviewing the abstract and claims of the patents identified by these keyword searches, you can gauge how close each patent is to the invention in question. You may need to try several different combinations of keywords to focus the search. You can keep track of the patents that seem relevant to your invention by simply jotting down the patent number or by printing out the individual patent records.

As you identify meaningful patents, pay attention to the International Patent Classification code (IPC), which will be listed as the "International Class" on the individual patent record. IPC codes are used to sort patents into specific technology categories. Most patent offices use their own classification systems, too, but these systems cannot be easily compared. However, all countries use the IPC system, enabling a truly global patent comparison.

If the key word search consistently identifies patents from the same IPC code, STC can then search for foreign patents that have been placed into that category. (This type of international search can't be done at the USPTO's Web site, but STC has tools to do it in-house.) The IPC system is administered by the World Intellectual Property Organization. See http://www.wipo.int/classifications/fulltext/new_ipc/index.htm for more information.

For the non-intellectual property component of the prior art search, we recommend using any of the general Internet search engines, such as Google. Lexis-Nexis, available online via UNM, is also a terrific resource. ■

Q&A with Freshman Inventor

Neil Sabol is an undergraduate mechanical engineering major who just completed his first semester at UNM. He came to UNM from Socorro. A true entrepreneurial spirit, Neil found time between his studies to submit two invention disclosures to STC. His "Skateboard Ground Lighting System" is a technology for lighting the underside of skateboards. The "Double Stick Compensator" is a drum stick device designed for disabled musicians.

How did you hit upon the ideas for your inventions?

I have been a skater for several years and within the last two years also acquired an interest in automobile modification (namely neon lighting systems and other special effects). When my 12th grade Government and Economics teacher mentioned entrepreneurship during a lecture, it occurred to me that I could tie lighting systems into skateboarding and possibly acquire some "walking-around money."

I devised the Double Stick Compensator (DSC) a few months later. I was observing/judging a talent show, in which there were no drum performances, ironically. I considered ways that one could twirl a stick with one hand and hammer out an incredibly complicated/fast pattern on multiple drums with the other. I had to construct several prototypes to accommodate different "intensities" of drumming, and hence destroyed several DSCs. I am pleased to say that it is all good now.

How did you find out about STC?

I attended a freshman orientation back in June of 2003, and while touring the campus, noticed a sign for the Patent Administration Office. I had been looking for a means to patent for months, so upon returning home, I researched the PAO on the Internet and filled it out the IDF.

Do you think you'll submit more disclosure forms to us?

I hope so. It was unusual, in my opinion, to be hit by two unique ideas in less than three months, so the next ideas will undoubtedly be more spread out.

How was your first semester?

By my standards, it went relatively well. It took approximately half of the semester to really get into everything, but after that it was all good. On average, the attendance at UNM football games was three to four times the entire population of Socorro, so coming here was an adjustment.

What was your favorite class(es) and why?

Typically, I go for classes that are geared more towards hand-on exploration. ME 160L (Introduction to Mechanical Engineering) and Chem 121L (Chemistry 121 Lab) were both incredibly enjoyable and informative. I think it was beneficial to actually construct engineering drawings in ME and observe chemical reactions in Chem rather than merely reading about them.

What would be your dream job after you graduate?

My dream job would be retirement...nah, actually I would like to form my own company or something of that nature. I would like to produce merchandise that is beneficial and amusing to the consumer (as opposed to simply providing a service). However, I will more realistically work as a mechanical engineer for an existing company. ■

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Upcoming Events

Intellectual Property Seminars

What's New in Life Science Patent Practice

Presented by Henry D. Coleman, Ph.D. (Coleman Sudol Sapone, P.C.)
February 26, 2004 / 3:30pm
Cancer Research Facility, Conf. Room 204, UNM North Campus

How the U.S. Patent Office Reviews Patent Applications: A View from a Former Patent Examiner

Presented by Kevin L. Pontius (Robert, Abokhair & Mardula, LLC)
March 25, 2004 / 3:30pm
Student Union Building, Cherry/Silver Room (Third Floor), UNM Main Campus

Entrepreneurs Forum Series

A Primer on Understanding Investors

Presented by John Ciannemea (Academy Funds)
January 29, 2004 / 3:30pm
Cancer Research Facility, Conf. Room 204, UNM North Campus

Raising Capital in New Mexico Today

Presented by Trevor Loy (Flywheel Ventures, Inc.)
February 12, 2004 / 3:30pm
Cancer Research Facility, Conf. Room 204, UNM North Campus

Academic Entrepreneur: Lessons from N = 3

Presented by Garland Marshall, Ph.D. (Washington University School of Medicine)
March 4, 2004 / 3:30pm
Cancer Research Facility, Conf. Room 204, UNM North Campus

Starting and Sustaining New University-Based Ventures in Challenging Times

Presented by George F. Murphy (Taraval Associates, LLC)
March 11, 2004 / 3:30pm
Cancer Research Facility, Conf. Room 204, UNM North Campus

Gaming the Exit Strategy for a Start-Up

Presented by Len Rand (Granite Ventures, LLC)
April 8, 2004 / 3:30pm
Student Union Building, Cherry/Silver Room (Third Floor), UNM Main Campus

Visit our website at <http://stc.unm.edu/news/events.php> to register for any of these events!



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The technology commercialization arm of the University of New Mexico