

Portál al Mercado

"Door to the Marketplace"

Volume I (Sept. 2003)

Message from the President

This is the inaugural issue of a newsletter from Science & Technology Corporation @ UNM. Our plan is to distribute the newsletter twice a year, one issue in the fall semester and one in the spring semester.

I have recently joined STC, having started in June 2003. I have met a number of STC's constituents and look forward to continuing that process. I thought I would begin this first newsletter by telling you a bit about STC's FY2003 results and the plans for FY2004.

In FY2003, which ended June 30, 2003, STC received 46 disclosures of ideas, or potential intellectual property via the UNM Patent Administration Office. Twenty-nine of these were in the Physical Sciences area and 17 in Life Sciences. STC filed 22 new patent applications, and 23 patents issued last year. A listing of the patents issued this past year is contained in this newsletter. Nine option or license agreements were

signed in FY2003 and one new start-up company was formed based on UNM technology.

Our plans for FY2004 include a number of initiatives to better inform the UNM community and in particular, STC inventors, about the status of their individual inventions. Inventors can now log into the STC database to directly view information about their patent, marketing and agreement status. A series of outreach events are planned for the fall to educate interested UNM community members about intellectual property matters, commercialization and entrepreneurial activities. This newsletter contains a listing of the fall events.

Please feel free to contact me or others at STC 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—the "Door to the Marketplace!"

*Lisa Kuuttila, President & CEO (kuuttila@unm.edu/272-7905)
http://stc.unm.edu/*

Patents Issued to UNM Inventors for FY2003

Bayesian Belief Networks for Industrial Processes

Patent No. 6,415,276 issued 7/2/2002

Aradhye, Hrishikesh; Heger, A. Sharif

Per Kilo Doser

Patent No. 6,413,241 issued 7/2/2002

Slushman, Sam H.

Rio Mamore Hantavirus Nucleocapsid Protein and Diagnostic Methods Employing Said Protein

Patent No. 6,416,761 B1 issued 7/9/2002

Hjelle, Brian L.; Torrez-Martinez, Norah

Apparatus and Method for High Bandwidth Laser-Based Data Communication

Patent No. 6,421,154 B1 issued 7/16/2002

Diels, Jean-Claude M.

Enhanced Agent Misting Extinguisher Design for Fire Fighting

Patent No. 6,422,320 issued 7/23/2002

Lifke, Joseph; Mather, Joseph; Moore, Ted

Technique for Fabrication of a Poled Electro-Optic Fiber Segment

European Patent No. 0 848 835 issued 7/24/2002

Brueck, Steven; Jain, Ravinder K.; Long, Xiangcun

MUX-Based ROM Using N-Bit Subfunction Encoding

Patent No. 6,434,037 issued 8/13/2002

Whitaker, Sterling R.

Purified Heat Shock Protein Complexes

Patent No. 6,433,141 issued 8/13/2002

Moseley, Pope L.; Roigas, Jan; Wallen, Erik S.

Large Photosensitivity in Lead Silicate Glass

Patent No. 6,436,857 issued 8/20/2002

Brueck, Steven; Long, Xiangcun

Resistive Stabilization of the Electrospray Ionization (ESI) Process

Patent No. 6,452,166 issued 9/17/2002

Enke, Christie G.; Jackson, George

Method for Using Heat Shock Proteins

Patent No. 6,455,493 B1 issued 9/24/2002

Moseley, Pope L.; Wallen, Erik S.

Prototyping of Patterned Functional Nanostructures

Patent No. 6,471,761 issued 10/29/2002

Lopez, Gabriel P.; Brinker, C. Jeffrey; Fan, Hongyou; Lu, Yen-feng

What is a Patent?

Article by William J. Sapone, Coleman Sudol Sapone, P.C., Bridgeport, CT

History

The patent system has been with us since the first days of the United States. Patent rights are derived from the U.S. Constitution, Article I, Section 8, which states: “the Congress shall have power ... to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries...”

The first Patent Act was passed in 1790 and this body of knowledge has been building for over 200 years.

What is a Patent?

A patent is a grant by the Government to an inventor of the right to exclude others from making, using or selling their claimed invention for a limited period, to reward the person who invests time and labor in developing new products or processes. By excluding others, it was thought the inventor could recoup her investment and receive sufficient support to continue her inventive efforts. But the price for obtaining the patent was a complete disclosure of how to make and use the invention. This seems contradictory, as the right to exclude begins when that complete disclosure is published in the patent, which is an invitation to an imitator to copy the invention.

The reasoning is quite simple. If there were no period of exclusive patent protection, an imitator would have the competitive advantage over an innovator. An imitator would not have to fund any research or development or need to recoup development costs. He only needs to copy what is published in the patent. Without the right to exclude, there would be little incentive to obtain a patent. But since the governmental purpose is to promote further innovation, there must be a complete disclosure of what the invention is and how to practice it, so others can try to improve and build on it. Only when the patent grant expires is everyone free to

practice the invention for commercial purposes. In the meantime, everyone is also free to experiment with and find ways to use the patents’ information to identify new discoveries.

The patent grant is defined as the right to exclude others, and a patentee is not granted an absolute right to make, use and sell the invention. If one has a patent on a two-prong widget, and another person patents a three-prong widget, that person cannot make, use or sell the three prong widget without permission, as the first patentee has a right to exclude someone from producing a widget with two or more prongs. The corollary is that the first patentee could not make the three prong widget without permission of the second patentee, in view of the second patentees right to exclude.

This is an important principle to understand. If you invent a new or improved product or process, you must be sure that the use of the invention does not infringe someone else’s patent. This is done by searching in the field of the invention for unexpired patents before commercializing a product or process. This is typically called a Right to Use or Freedom to Operate search.

The patent must contain a description of the invention, in such clear, concise and exact terms to enable one skilled in the art to practice the invention. An inventor must also describe the best mode contemplated for practicing the invention. If there are several alternative ways to practice the invention, an inventor cannot “hide” the best one, or hold it in reserve, as this violates the bargain made with the government. Complete disclosure is required.

A patent typically includes drawings and examples, and concludes with claims. It is the claims which determine the scope of the patent monop-

oly. Each claim is a “deed” to the intellectual property carved out by the invention. It is the claim language which defines the bounds of the invention.

Bars to Patentability

There are statutory requirements to obtaining a patent. If not met, these will create statutory bars to obtaining a patent. These include:

1. If the invention was on sale or in public use more than one year before filing the application, no patent can be obtained;
2. If the invention was described in a printed publication more than one year before the filing date of the application, no patent can be obtained;
3. If the person who is seeking the patent is not in fact the inventor of the subject matter of the invention, then he cannot obtain a patent;
4. If the invention was known or used by others before the person seeking a patent conceived of the invention, no patent can be obtained;
5. If the invention would have been obvious to one skilled in the art at the time the invention was made, based on the prior art, i.e., patents, publications and generally known knowledge, no patent can be obtained; and
6. If the person who applies for the patent knew that he was not the inventor or that the invention was on sale or in public use, or was known and used by others before filing for an application, and this was concealed from the patent office, then any patent obtained would be obtained by fraud and the patent would be unenforceable.

These require legal not technical analysis and should be left for review by a patent coordinator or patent attorney familiar with these issues. However, an inventor has a duty to disclose facts relevant to these issues to the persons

preparing a patent application.

What is Patentable?

Any new and useful process, machine (combination of elements), article of manufacture or composition of matter is considered patentable subject matter.

A composition of matter is typically a chemical compound, but this may also be in the form of a combination of elements, such as when the compound is combined with a carrier.

While composition claims are the most valuable in terms of scope of protec-

tion, process claims, which includes method of treatment claims, can be of significant value, particularly when a new use of a known compound is discovered, and compound claims are simply not available. ■

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The status of your inventions online.

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Patents Issued to UNM Inventors for FY2003 (continued)

Method for Induction of L-Selectin Shedding
Patent No. 6,498,189 issued 12/24/2002
Sklar, Larry A.; Bennett, Teresa; Rogelj, Snezna

Ion Mirror
Patent No. 6,518,569 issued 2/11/2003
Zhang, Jun; Enke, Christie G.; Gardner, Benjamin

Tunable Bragg Gratings and Devices Employing the Same
Patent No. 6,534,248 issued 3/18/2003
Jain, Ravinder K.; Srinivasan, Balaji

Inorganic Dual-Layer Microporous Supported Membranes
Patent No. 6,536,604 B1 issued 3/25/2003
Brinker, C. Jeffrey; Lu, Yunfeng; Tsai, Chung-Yi

Method for Efficient Coupling of Laser Beams into Waveguides
Patent No. 6,542,664 issued 4/1/2003
Jain, Ravinder K.; Srinivasan, Balaji; Tafoya, Jason

Apparatus and Method for Analyzing Functional Failures in Integrated Circuits
Patent No. 6,549,022 B1 issued 4/15/2003
Cole, Edward Isaac; Tangyunyong, Paiboon; Hawkins, Charles Fredrick; Bruce, Victoria Jean; Ring, Rosalinda Mendoza; Bruce, Michael Richard

Synthesis of Attrition Resistant Heterogeneous Catalysts Using Spray-Dried Mesoporous Silica
Patent No. 6,548,440 issued 4/15/2003
Datye, Abhaya K.; Pham, Hien N.

In Situ Denitrification Process
Patent No. 6,551,815 issued 4/22/2003
Nuttall, H. Eric; Lu, Yongming

Precisely Wavelength-Tunable and Wavelength-Switchable Narrow Linewidth Lasers
Patent No. 6,570,893 issued 5/27/2003
Jain, Ravinder K.; Libatique, Nathaniel C.; Pulaski, Paul David

Conflict Free Radiation Tolerant Storage Cell
Patent No. 6,573,773 issued 6/3/2003
Hass, Kenneth (Joe) J.; Maki, Gary K.; Shi, Quan; Murguia, James

Radiation Tolerant Back Biased CMOS VLSI
Patent No. 6,583,470 issued 6/24/2003
Gambles, Jody W.; Hass, Kenneth (Joe) J.; Maki, Gary K.

Upcoming Events

SPECIAL EVENT

Creating and Commercializing UNM Intellectual Property: Bringing UNM Innovations to the Marketplace
October 15, 2003 / 8:30am—3:30pm / Student Union Building, Ballroom C, University of New Mexico Main Campus

Sponsored by:

The University of New Mexico

School of Medicine, School of Engineering, and Science & Technology Corporation @ UNM

Intellectual Property Seminars

New Developments in Life Science Patents

Presented by Victoria Sandberg (Mueeting, Raasch & Gebhardt)
October 16, 2003 / 3:30pm
HSSB Classroom, #105, UNM North Campus

New Developments in Physical Science, Engineering, and Software Patents

Presented by Steve Lundberg (Schwegmann, Lundberg, Woessner & Kluth)
November 20, 2003 / 3:30pm
Bobo Room, Hodgkin Hall, 3rd Floor, UNM Main Campus

Check our website at <http://stc.unm.edu/news> to register!

Entrepreneurs Forum Series

How to Build the Start-Up Team: Do's and Don'ts

Presented by Todd Hand, Founder & Executive Managing Director (Talent Capital Group)
October 9, 2003 / 3:30pm
Scholes Hall, Room 100, UNM Main Campus

Financing University-Based Start-Ups with Venture Capital

Presented by Lyle Hohnke, General Partner (Tullis-Dickerson & Co., Inc.)
November 11, 2003 / 3:30pm
HSC, Family Practice Center, Room 340 (2400 Tucker, NE)

Starting a Technology-Based Company: Lessons Learned

Presented by Dr. Waneta Tuttle, President & CEO (Exagen Corporation)
December 9, 2003 / 3:30pm
HSC, Family Practice Center, Room 340 (2400 Tucker, NE)



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