FRANKLIN PIERCE LAW CENTER
GERMESHAUSEN CENTER NEWSLETTER • *Summer 2002*

INSIDE THIS ISSUE:

PIERCE LAW
FRANKLIN PIERCE LAW CENTER

U.S. NEWS & WORLD REPORT RANKS PIERCE LAW IN TOP FIVE FOR IP LAW FOR 11TH CONSECUTIVE YEAR

U.S. NEWS & WORLD REPORT again ranked Pierce Law among the top five law schools in the nation for the study of IP law today in its latest edition of "America's Best Graduate Schools 2002." This marks the 11th consecutive year that Pierce Law has been named among the top five for the study of IP in the magazine's annual rankings. Pierce Law maintained its number three position in the IP specialty category, and moved up from the fourth tier to the third in the overall ratings.

"We have been very successful in maintaining our enviable position in intellectual property over the past decade, and are gratified to have moved up in the overall ratings," says Pierce Law Dean John Hutson.

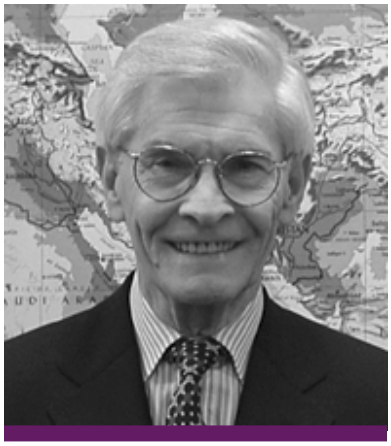
PORTRAIT: DR. GERD F. KUNZE

"THE FATHER OF THE TRADEMARK TREATY"

BY LAURA NELSON (JD '04)

DR. GERD F. KUNZE has been an adjunct professor at Pierce Law since 1995. Dr. Kunze returned in March to instruct a two-week mini course, International and Comparative Trademark Law and will return to Pierce Law later this summer. He is currently of Counsel at Walder Wyss & Partners, Zürich, Switzerland and sits as the current President of the International Association for the Protection of Intellectual Property (AIPPI). Dr. Kunze first came to Pierce Law at the request of Professor Karl Jorda shortly after retiring from Nestlé.

I had the distinct pleasure of meeting Dr. Kunze during his recent visit to Pierce Law. I was so intrigued by his vast array of experiences that one meeting was simply not enough. We spoke on several occasions and I was truly impressed and inspired by each event.



DR. GERD KUNZE

Dr. Kunze received his law degree from the University of Heidelberg in 1960 and his Doctor at Law from the University of Heidelberg (magna cum laude) and passed his Second State Examination (which in Germany is a condition for becoming an attorney or a judge) in 1963. He began his professional career as an Assistant Professor at the Institute for Commercial Law, University of Heidelberg in 1964. This experience gave him the opportunity to work with his mentor, Professor Hefermehl, editor of the leading German notebooks on unfair competition and trademark law, and to gain a new perspective on his work. He later

See KUNZE, page 2

IP FACULTY ACTIVITIES

Professor **Nermien Al-Ali** presented a program entitled "Where Are You on the Intellectual Capital Continuum (IC): a Tool for Organizations to Assess Their Intellectual Capital Management Programs" at the Fifth World Congress on Intellectual Capital Management held this past January in Hamilton, Ontario. She also presented a seminar on "Strategic Intellectual Assets Management" at Intertech's High Performance and Functional Pigments Conference 2002 in Delray Beach, FL this past January.

Professor **Bill Hennessey** participated in the Advisory Council of the World Intellectual Property Organization's (WIPO) Worldwide Academy in Geneva, Switzerland on February 6. He also delivered a paper and moderated a panel on "Protection of Traditional Knowledge and Folklore" at the WIPO Caribbean Regional Symposium in Port-of-Spain, Trinidad, on February 27. Furthermore, he joined a team from the USPTO and US Department of Justice from April 12-21 to discuss "enforcement of intellectual property rights" with Chinese attorneys, law enforcement, trade, and customs officials in the cities of Shanghai, Nanjing and Dalian, China.

On June 7, Professors **Bill Hennessey and John Orcutt** conducted a seminar on IP and capital markets in Shanghai and Hangzhou, China. They also began teaching in the Pierce Law-Tsinghua University Intellectual Property Summer Institute (CHIPSI) on June 10-July 12. Twenty-four American law students are participating in the program.

Professor **Craig Jepson** attended a symposium on "Patenting Genetic Products" presented by the Center for Interdisciplinary Studies, Washington University at St. Louis School of Law with Professor Richard Epstein and author Horace Freeland Judson on April 12-13, 2002.

Professor **Karl Jorda** spoke at the WIPO/UNITAR Academy on "Intellectual Property Rights for Diplomats" at the United Nations in New York City on March 25. He also presented a talk as part of a workshop on "How to Develop University-Industry Cooperation" at the LES International 2002 Annual Conference held in Osaka, Japan on April 7-10. ■

GERMESHAUSEN CENTER NEWSLETTER

Published by the Kenneth J. Germeshausen Center for the Law of Innovation and Entrepreneurship

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Created in 1985 through the generosity of Kenneth J. and Pauline Germeshausen, the Germeshausen Center is the umbrella organization for Pierce Law 's specialization and policy studies in the legal protection, management, and transfer of intellectual property, especially relating to the commercialization of technology. The Germeshausen Center Newsletter is published three times a year for alumni/ae, students and friends of Pierce Law.

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Graphic Design & Typography:
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■ KUNZE, from page 1

was admitted to the bar in Frankfurt, Germany, and served as a member of the legal staff of the German Nestlé group and served as Chief Trademark Counsel at Nestlé's headquarters in Switzerland from 1976 through 1991, later serving as an Intellectual Property Consultant with Nestlé. Dr. Kunze has also been an Adjunct Professor at the John Marshal Law School, Center for Intellectual Property Law, in Chicago since 1995.

Dr. Kunze is fluent in German, French, and English, and has a good knowledge of Spanish. He conducts seminars and regularly speaks on intellectual property and related issues throughout the world.

Dr. Kunze is active as advisor and as representative of NGOs at the World Intellectual Property Organization (WIPO) in Geneva and sits as a Panelist at the WIPO Arbitration Center. He began his work with WIPO as an industry representative while working for Nestlé in the early 1970's. Dr. Kunze has made enormous contributions to the field of intellectual property throughout the world. It is this work which he is most proud. His long term efforts and cutting-edge theories paved the way for the development of the Trademark Law Treaty which was ratified in 1994 and has since been sanctioned and implemented by many countries world-wide. What a tremendous legacy to leave within an industry which he has actively participated and served as a change agent for nearly

See KUNZE, page 7

NOTABLE HAPPENINGS…

SCHOLARSHIP AWARD

Professor Bill Hennessey announced this past winter that Pierce Law received a gift of $30,000 in support of a scholarship for graduate students engaged in the teaching of IP law from the William F. Sibley Foundation in Chicago.

VISITING DELEGATION TO PIERCE LAW

A delegation of government officials and media representatives from 25 nations and regions visited Pierce Law on March 7, sponsored by the Phelpes Stokes Fund of the US Department of State. The visit was part of a three-week itinerary to the major industries and technology sectors in the US for which strong IP protection is critically important. After a warm welcome from Dean Hutson to brush away the snowy chill of New Hampshire in early March, Pierce Law faculty members Tom Field, Jon Garon, Bill Hennessey, Karl Jorda and Susan Richey met with the delegation as part of the day-long program. Topics covered included patent term, trade dress protection, teaching IP and "Hollywood Law." There was also a wide-ranging round table session for the visitors, representing Algeria, Armenia, Ghana, Indonesia, Israel, Jordan, Latvia, Lithuania, Malaysia, Morocco, Namibia, Nepal, Philippines, Russia, Senegal, Singapore, Thailand, Uruguay, and the West Bank. The program is part of ongoing cooperation between the US government and Pierce Law to increase international awareness of the importance of IP protection to economic development.

IP MALL: WHAT'S NEW

Contributions by Professors Field, Hennessey and Jorda have been added. Professor Eugene Quinn ('95) invited Pierce Law to create a mirror site to his many publications. Sumant Akram Khan ('02) offers pieces dealing with his Internship at the World Intellectual Property Organization (WIPO) Division as well as his paper "Cooperation and Coercion: The Protection of Intellectual Property in Developing Countries."

To visit any of these sites select "IP MALL Hosted Resources" in the IP Mall: http://www.ipmall.piercelaw.edu.

A DELEGATION OF GOVERNMENT OFFICIALS AND MEDIA REPRESENTATIVES FROM 25 NATIONS AND REGIONS VISIT PIERCE LAW.

4TH PCT SEMINAR HELD AT PIERCE LAW.

4TH BASIC PATENT COOPERATION TREATY (PCT) SEMINAR

Pierce Law held this seminar April 26-27 in cooperation with WIPO. This year's speakers were Louis Maassel, Consultant, PCT Legal Division, WIPO and David Reed, Section Head, International Patent Division, Procter & Gamble Company, Cincinnati, OH. The well-attended (150) seminar provided participants with in-depth knowledge and understanding of the PCT.

VISITING SCHOLAR

Ms. Margi Patel, the Director of the Institute of IP Studies (IIPS), Shri Vile Parle Kelavani Mandal (SVKM), A.J. College of Commerce & Economics, Mumbai (Bombay), and a similar one in Hyderabad, India visited Pierce Law for one month to explore cooperation between Pierce Law and her institutes.

SINGAPORE DELEGATION VISIT

A delegation of the Intellectual Property Office of Singapore (IPOS) visited Pierce Law on July 2 in connection with plans to establish an IP Academy in Singapore. Their delegation included the IPOS Chairman, Professor Hang; the IPOS Director-General, Ms. Liew; the Assistant Director, Ministry of Law, Mr. Poon and Ms. Ramli, Manager, IPOS Knowledge Development Department, Business Development Group. They wanted to visit and meet us for "some exchange of ideas."

WHO INVENTED THAT JOINT INVENTION?

BY VINCE MACRI (LLM '03)

IN THE WINTER '02 ISSUE, novice lawyer F. (Fictitious) Allniter (then under cloak of anonymity) struggled to prepare for a last minute assignment to an IAM (intellectual asset management) project. This spring, Allniter confronts the "…exact parameters of what constitutes joint inventorship…. It is one of the muddiest concepts in the muddy metaphysics of the patent law." *Mueller Brass Co. v. Reading Industries*, 352 F. Supp. 1357, 176 U.S.P.Q.(BNA) 372 (D.C. PA 1972).

We fall in stride with Allniter three days before a first vacation from professional practice. This short period of intrigue is spent in association with no less than two sane scientists, a furtive computer programmer "X" (and 'advisor'), a new and commanding R&D Director, one overreaching company VP and his wife's marginal nephew, two laboratorians, one from Tokyo the other Vienna, a competent computer scientist and loyal assistant, a consulting salesperson, one mysterious night worker at R&D and an overabundance of facts, eponymous names, places, documents, motives and personalities that need (as usual) to be sorted out, or in. Allniter's lawyering will be predominantly fact-based (or based on alleged facts, as we shall see), however an overview of some of the law will be useful.

As a rule lawyers are trained to apply the law to the facts. When the law is statutory, the cardinal rules of construction are that the legislature is deemed to have used no superfluous words and that courts ascribe plain meaning to all the words. Allniter keeps those rules in mind while sorting out who (natural persons) are the joint inventors of a new, useful and non-obvious invention 35 U.S.C. §§ 101-103 (1994), and *ipso facto* what is inventorship.

The time frame for determining inventors is generally a no-brainer, i.e. between the dates of the innovators' conclusive notebook entries (or invention disclosure documentation) and filing an application for a patent.

Determining qualifications for inventorship (not ownership) is less mechanical and more subtle. Discovering a problem or implementing a solution are alone insufficient qualifications. Explaining the state of the art or introducing a component or product to be used in the invention also fall short of inventorship. At the same time, the cartoon character's symbolic overhead light bulb of insight or a flash of genius without something more is likely to be deemed simply an unqualifying flash in the pan. Allniter knows that inventorship hinges on the original use of conceptual faculties linked to a definite/permanent description of the innovation so that anyone skilled in the art could reduce the teaching to practice. Joint inventors must have collaborated in this kind of conception and teaching.

The decision-maker for designating inventors is a natural person, but not (excepting pro se representation) the inventor or inventors. Designation is a high stakes move in the patent gambit with no less than patent validity at stake. How is patent validity at stake? Allniter is certain that at this stage of lawyering, validity depends on the truthful and accurate designation of inventors. Sections 35 U.S.C. 102, 111, 115, and 116 (1994) are interrelated requirements of a statutory gateway that opens for what may later (for additional reasons) become a valid U.S. patent. The patent statute provides:

§ 102 "A person shall be entitled to a patent unless…(f) he did not himself invent the subject matter sought to be patented,…"

§ 111 "(1) Written Application…for patent shall be made…by the inventor…"

§ 115 "The Applicant shall make oath that he believes himself to be the original and first inventor of the [invention]…for which he solicits a patent."

§ 116 "When an invention is made by two or more persons jointly, they shall apply for patent jointly…."

35 U.S.C. §§ 102, 111, 115, 116 (1994).

Regarding the foregoing statutory commands, "shall be," "shall be," "shall make," and "shall apply," §§ 102, 111, 115 and 116 respectively, Allniter recalls a presentation by Carol T. Carr, Esq., Associate I.P. Counsel, Massachusetts Institute of Technology. That presentation sparked Allniter's thought that both positive and negative successes are needed in getting named inventors right. Positive success flows from strict compliance with at least the foregoing sections of 35 U.S.C. Negative success flows from avoiding the kinds of pitfalls outlined in Attorney Carr's "Common Misconceptions:"

> "Authorship is equivalent to inventorship. Someone who works on an invention deserves to be an inventor. The heads of the company, lab, institute, (etc.) should be named as an inventor. Knowledge derived in the course of proving an invention entitles one to be an inventor."
>
> Presentation by C.T. Carr, Esq. at Franklin Pierce Law Center, June 16, 2000.

With this outline of when (initially) inventorship is decided, the qualifications and collaboration required of joint inventors, who makes the decision to designate inventors and common misconceptions regarding inventorship in mind, we join Allniter during three days of intrigue. What is in store for Allniter? If identification of joint inventors (and by implication inventorship) is a matter of federal statutory compliance and the case law is dependably consistent (which it is) why then does Allniter face a challenge?

On the 362nd morning after Allniter's first day as a patent lawyer, reporting to work is especially uplifting. It's Wednesday, July 12 and Friday will be finish up and off to the islands for several weeks of vacation. Your (Allniter's) expectation is for a fairly relaxed, few days. The company patent department or, as the case may be, law firm partners and other associates are all off on annual "retreat," leaving you, Allniter, alone and solely in charge.

See JOINT INVENTION, page 5

JOINT INVENTION, from page 4

The office telephone is ringing as you enter at 7:45 a.m. "Attorney Allniter," says the caller, a voice you recognize as that of the new R&D Division Director, Dr. Acton Aplomb, "have you read the fax and e-mail we sent to you yesterday?" "No," you reply, "when was that?" They were sent about 11 p.m. and we need some answers right away," grunts Director Aplomb. After promising a return call within minutes, you ring off and read the messages.

"O.K.," you say to yourself, they've come up with a method, a clinical laboratory blood test method to detect a patient's probability of carrying any one of a currently unmanifested cluster of human genetic disorders. They believe it's patentable subject matter. Not unusual as that's their mission, to invent. This discovery, if it gets as far as a patent application, will be prepared by your colleagues after you've gone off on vacation. You will start by collecting the invention disclosures from the relevant scientists, take a look at their laboratory notebooks and prepare an initial memorandum for your patent attorney colleagues to work from. Independent prior art searches (and/or those already gathered by the scientists) could take days to review. Drafting claims in concert with the inventors and working back into preparing specifications disclosing the problem(s) solved by the invention and the best mode could easily stretch over weeks of work. If this laboratory method has the markings of a fundamental invention a great deal of attention from many different levels of business and legal quarters will be paid to it. It all won't happen now, in three quiet mid-July days, while everyone's away and your vacation is about to begin. But then...

Your return call to Dr. Aplomb compliments him on the findings of the laboratory method and his R&D Division's description of the results. "Of course, Attorney Allniter," Dr. Aplomb replies, "these are limited findings based on our few in-house human samples

See JOINT INVENTION, page 6

SATELLITE RADIO BENEFITS CONSUMERS AND RECORDING INDUSTRY

BY LESLIE C. ADAMS (JD '03)

FRUSTRATION from constantly pushing the seek button on car stereos and wanting to pull off the road during a road trip to hear the last few lyrics of a favorite song are not uncommon occurrences for drivers who are about to lose yet another local radio station as they travel in and out of short broadcasting ranges. With the introduction of digital satellite radio, drivers can now drive from Florida to California without ever losing their favorite channel.

In November 2001, XM Satellite Radio ("XM") was the first to launch its satellite radio service nationwide and operates by digitally transmitting 100 channels of music, news and entertainment from its Washington, D.C. based studios to two geostationary satellites, "Rock" and "Roll." The satellites send powerful, encrypted nationwide signals back to Earth. Subscribers pay $9.99 a month for the service, which can be received by small car antennas. To support the satellites in areas where reception may be blocked, XM has installed 1,000 "repeater" towers to rebroadcast the signals. The result is virtually uninterrupted, digital-quality radio programming throughout the United States with little or no commercial interruptions.

Chief Programming Officer Lee Abrams of XM is quoted on XM's Web site as saying, "We're blowin' up the rule book and starting over…. It's the only way to create something completely new and adventurous." <http://www.xmradio.com/how_it_works/programming.html> (accessed Jan. 1, 2002) That being said, current copyright rules have survived this new innovation, requiring XM music service to license the copyright owners' exclusive rights to perform the work publicly and to publicly perform the sound recording by digital audio transmissions.

A major difference between traditional analog radio and digital satellite radio is what it means for licensors. As a result, not only will composers and music publishers receive money for licensing their public performance rights in musical compositions, but record companies and artists, who usually only receive non-financial benefit from radio broadcasting as a means to promote record sales, will also benefit financially from the digital audio transmission of the sound recording due to statutory licensing provisions in the Copyright Act.

All radio broadcasting falls within the copyright owners' exclusive rights to perform the copyrighted work publicly. A public performance can be transmitted "by any device or process where by images or sounds are received beyond the place from which they are sent." 17 U.S.C. § 101 (2000). Congress intended for this to encompass future broadcasting technologies not known at the time. H.R. Rpt. 94-1476, 94th Cong., 2d Sess. 64-65 (1976). As long as the transmission reaches the public, regardless of form, it is a public performance.

Thus, regardless of whether the transmission of a copyrighted work is sent to a satellite in outer space before it reaches the public, it is still subject to licensing from performing rights societies such as ASCAP, BMI or SESAC, which negotiate on behalf of composers and music publishers.

Additionally, companies like XM that are subject to statutory licensing provisions regarding the digital audio transmission of the sound recording, will have to pay record companies as well for licenses obtained through the Recording Industry Association of America (RIAA), which is acting as a performing rights society for the recording industry.

See SATELLITE RADIO, page 15

JOINT INVENTION, from page 5

and we are awaiting final experimental test results and 'outcomes' from the field." "The field?" you ask. "Yes," says Dr. Aplomb, "we of course sent this out for clinical trials and results are coming in from Dr. M. Kokubo's laboratory in Tokyo and Dr. A. Ruppel's laboratory in Vienna." "And this is entirely experimental?" you ask. "Oh, yes," replies Aplomb, "exported under experimental device exemption with written assay protocols and a description of the method. We charged them for only our cost to put test kits together, plus a little overhead of course. We do have a budget to worry about you know."

"You described the invention and sold them, Kokubo and Ruppel, in Tokyo and Vienna, test kits," you say out loud (it being unclear whether you are talking to yourself or to Dr. Aplomb) and, you continue, "did either of these international lab directors sign confidentiality agreements or contribute to the method?" "Well yes and no," says Dr. Aplomb, "for the most part they used our kits 'as is' to test, and charged their patients only nominal amounts. Each of them did make suggestions, which we incorporated into second and then third generations of the assay, this third generation being what we would like you to put into a patent application. As to confidentiality no, neither was asked to sign such an agreement, we are all scientists you know." "Dr. Aplomb," you ask, while struggling for air, "when, that is, when, did you first sell these kits and disclose descriptions of use of the invention to anyone in Tokyo, Vienna or anywhere else in the world?" "Just a moment," after keeping you on hold for several minutes, Aplomb confirms that the earliest sale date was last year, July15th and R&D simultaneously informed Kokubo and Ruppel how to construct and operate the lab method in case anything went awry so far away. Stunned, you mumble that you'll drive over to Aplomb's office immediately and hang up. A wave of numbness passes through your corporeal personal property. Reflexively, you look at the calendar. Today is July 12th, you knew it was.

Of course you have to check into the facts at R&D first hand, but thanks to Professor Karl F. Jorda's mentoring the issue lights are flashing one year on-sale bar to patentability, inventorship and joint inventors, employee agreements, assignment of ownership, and the dreaded, 'patent invalidity.' And, this is just for analytical openers. You cell-phone home while driving (a poor practice) and leave a late day return message. It's 8:00 a.m., and you know where all your back-up is: gone. You ponder whether it's possible that you have only about 63 hours to prepare and file a patent application on a potentially blockbuster invention. Who to call for experience? Again on the cell phone, Carol Ruh answers that Professor Jorda has lots of experience with desperately truncated time frames for filing, but he's off giving a talk to 300+ patent lawyers in Vladivostock. Your car nearly swerves off the road.

Word of your imminent arrival at the R&D lab has gotten around and you are greeted with expectant glances, excited expressions and a general atmosphere of financial harvesting. The R&D personnel have known for a time, almost a year for some, that this particular lab method could be something big and the international test results have confirmed their expectations. You are introduced to two scientists, Dr. R. Green and Dr. E. Marco, who "put this whole thing together," you are told by Director Aplomb. What you hear, however, are whispered echoes of 'conception,' 'collaboration,' 'reduction to practice' and 'diligence.' "These are the inventors," says a backslapping Aplomb, " and I'd like you to list me (Acton Aplomb) and Drs. Kokubo and Ruppel, as well, on the patent application, because they made several key suggestions which improved the method." You thank Aplomb and make notes thinking maybe, but in any event the designation of inventors is your professional responsibility.

You study and interview, through the daylight hours. The invention disclosures and laboratory notebooks of Drs. Green and Marco (there are no other R&D scientists involved) show that these two scientists jointly collaborated, in the same general time frame to formulate and disclose a complete conception of a new, useful and non-obvious innovation, each contributing different types and amounts of input, which together sets forth a solution to a problem. Both scientists, a bio-chemist and molecular biologist, confirm that working together they came up with the concept of testing for levels of certain substances in human blood, the presence and proportions of which, in combination with other patient data, would be indicative of the probability that a tested patient could develop one or more of a range of genetic disorders. They cannot say exactly how much each has contributed to the concept of this method, but offer assurances that each has jointly contributed. Their bound notebooks, describing an assay methodology, have been corroborated by knowledgeable colleagues signing and dating each page of each notebook. Their invention disclosures (Green's and Marco's) point to the likelihood of drafting quite broad claims.

You question Drs. Green and Marco about other R&D personnel, or any others, making contributions and they answer "no, only us, we came up with the idea and did some initial assay development in our lab, no one else at R&D was involved." As to the Tokyo and Vienna scientists, Green and Marco tell you that Kokubo discovered that adding certain buffers to the assay for targeted biochemical markers enhances the assay's robustness and Ruppel found that preparing the specimens at 18-20 degrees centigrade, before assaying, yields more precise quantification. This will take more work on your part, but you suspect that Kokubo and Ruppel are more than likely contributors to the reduction to practice of the invention, are "skilled in the art" and not likely to be inventors of this invention. Indicating that you will need some night hours to look over the documentation, Green and Marco leave the conference room.

Furtively, a 25-30 year-old (software programmer "X") enters through the back door of the conference room without knocking. Facing you from the opposing side of the

See JOINT INVENTION, page 8

KUNZE, from page 2

three decades. This legacy certainly entitles him to be considered the "Father of the Trademark Treaty."

Dr. Kunze's long-term efforts have also helped in the development of the Madrid System for the International Registration of Marks, which has gained acceptance worldwide. When speaking with Dr. Kunze about his related interests and hobbies he perked up and laughed in a peculiar manner. "I love to work. It is truly rewarding to continue to work with the interests of the world." He is energized through his work with young people, which has compelled him to continue to teach. Dr. Kunze also enjoys gardening, playing tennis, and downhill skiing when his knees are in agreement.

I could not help but ask Dr. Kunze to share his lifelong secret for success. He explained that it was quite simple. His work with his mentor in Germany helped him to "develop an analytical approach to looking at legal problems" which he carried forth in practice. He believes this approach has given him an advantage over his colleagues in industry and has attributed to his success. "This systematic approach has always helped me." Obviously Dr. Kunze was wise in his early years and sought the benefits of a mentor early in his career, which proved to be a decision that impacted him throughout his career.

Dr. Kunze is the author of numerous publications relative to European and international unfair competition and trademark law including: *The Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks, Introduction to Trademark Law and Practice: a WIPO Training Manual, The Madrid System for the International Registration of Marks as Applied under the Protocol, The Trademark Law Treaty: Managing Intellectual Property, Improving the Protection of Well-Known Marks: Introduction to the new WIPO Provisions*, and numerous other articles, books, and publications.

Dr. Kunze is the current President and Member of Honor of the International Association for the Protection of Intellectual

See KUNZE, page 13

TRADEMARKS AND THE FIRST AMMENDMENT: THE HYBRID NATURE OF INTERNET DOMAIN NAMES

BY BRYAN ERICKSON (JD '03)

DISPUTES OVER Internet domain names have become a prominent new issue for civil litigation since 1995. New laws and systems have arisen specifically to address domain name disputes as a category of their own. The Anticybersquatting Consumer Protection Act (ACPA) was passed in November 1999 to deal with cases of cybersquatting, or trafficking in a domain name with the "bad faith intent to profit" at the expense of someone with a trademark interest in the terms used in the domain name (15 U.S.C. § 1125 (d)). Many domain name disputes are now being dealt with in the regularized alternative dispute resolution system known as the Uniform Dispute Resolution Policy (UDRP), organized by the Internet Corporation for Assigned Names and Numbers (ICANN), the non-profit corporation responsible for technical coordination of the Internet around the globe.

However, a domain name dispute in a U.S. court, not involving a cybersquatter, does not take advantage of either of these recent legal innovations. The more traditional and settled law applying to these cases comes from two tried-and-true areas: First Amendment law and trademark law. The U.S. Senate made this clear by providing in the ACPA that "Nothing in [the ACPA] shall affect any defense available to a defendant under the Trademark Act …or a person's right of free speech or expression under the first amendment…" (106. P.L. 113 S. 1948, § 3008).

First Amendment law protects freedom of expression, while trademark law protects the ability of the public to identify the source of a product or service. A domain name might just as easily qualify as an organizational source identifier (commercial or otherwise), or as a forum of expression. The basic goals of these two doctrines often conflict, since trademark protection places targeted limits on speech. These limits on speech apply under certain specific circumstances, such as to prevent infringement of a trademark. (See generally 15 U.S.C. §§ 1114, 1125.) This tension between trademark law and First Amendment law existed long before the Internet, so domain name disputes can benefit from precedent in other settings that considered the "dual interest…in not being misled and…also…in enjoying the results of the author's freedom of expression." (*Rogers v. Grimaldi*, 875 F.2d 994 (2d. Cir. 1989) (discussing the dual interest of trademark law and First Amendment law in the title of a movie, one analogous setting to an Internet domain name)).

Along with the similarities of domain names to more traditional settings for this dual nature, there are also important differences in how domain names lend themselves to trademark law and First Amendment law. A domain name has no special claim to strength as a trademark. It qualifies for trademark protection only by complying with the same criteria as any other mark in commerce, i.e. strong public recognition and the capability of federal registration. Typically, a domain name only achieves wide recognition as a trademark if it is promoted in the same way as any other trademark, and it functions successfully as a source identifier. This requires that the trademark be distinctive. A domain name is subject to the same scrutiny for distinctiveness as are other potential trademarks. There are four general levels of distinctiveness suitable for trademark protection: (1) generic, (2) descriptive, (3) suggestive, and (4) arbitrary or fanciful, in order from weakest to strongest. (See generally *Abercrombie & Fitch v. Hunting World*, 537 F.2d 4 (2d. Cir. 1976)).

See DOMAIN NAMES, page 8

JOINT INVENTION, from page 6

conference table, X leans forward and says, "you know Attorney Allniter, I've been following this profitable discovery for about a year and since it looks so profitable I'd like to say that I did the computer programming for the multi-variate analysis that the testing calls for and I really think I'm a co-inventor of this profitable discovery and I really, really think of myself as a conceptual digital inventor and since I'm a co-inventor, my sister's boyfriend, who is a second year law student (not at Pierce Law) says, that under 35 U.S.C. 262 (1994), I may be entitled to a profitable undivided interest in the entire invention, that is to say I can independently sell or license the invention for a lot of money since I was not hired to invent but I did invent and no one can sue for infringement of this invention without my participation as a plaintiff because I am an inventor (therefore, I control exclusively) and I have not assigned my rights to the company or Green or Marco and am I, and can I, and how much?" Amazed, you guess that what X just said is the longest run-on sentence in the history of human speech. Putting that aside you inform programmer X that you have a duty to your client, the company, and cannot give X legal advice. You suggest that the law student contact you and give X your business card. To X's parting comment that you can expect a phone call very soon, you do not reply.

Night worker Zilber peeks inside the conference room to introduce himself. You are glad to meet Zilber, but busy and must keep working.

Next to uninvitedly enter the conference room are Kris, an R&D lab assistant, and Pat, a computer scientist. Both, apparently with design, have overheard programmer X. They inform you that they too believe the lab method discovery is "very big business" but refute programmer X's claim to co-invention. Kris and Pat show you their uncorroborated diaries in which there are notations proving that they collaboratively implemented the computer programming to "crunch" the numbers derived from the test protocol's multi-variables. They ask to be named as co-inventors since the lab invention doesn't work commercially, i.e. on large volumes of throughput of human specimens, without the computer program. Kris and Pat suggest that programmer X is quite furtive and subordinate, has worked only as directed by Pat to make minor programming changes and has been with the company only six months. The computer programs, they prove, are older than that. They leave and you call home again to say you'll be very, very late.

See JOINT INVENTION, page 9

DOMAIN NAMES, from page 7

Some of the *Abercrombie* test may be applied to domain names in general, as a special category of source identifiers. Doing so leads us to two broad conclusions about the potential for domain names to serve as source identifiers or trademarks. Both conclusions suggest a special ability of domain names to escape the fate of the weakest source identifiers, beginning life with a head start on the *Abercrombie* ladder.

First, it is very difficult for a domain name to be generic. In an *Abercrombie* analysis, a generic source identifier has no potential to gain strength as a trademark. (*Id.* at 9.) The mark "apples" for the sale of apples could never achieve trademark protection. The same applies to a Middle Eastern restaurant on the southern corner of Massachusetts Avenue and Brookline Street in Cambridge, Massachusetts, whose signs read "Middle East Restaurant" as the only identifier of the establishment. Its owners would never be able to exclude another Middle Eastern restaurant from promoting itself under the generic mark "Middle East Restaurant."

However, since a website is such an inherently unique service or format for service, there are few conceivable domain names that could generically describe their subject. The website "internet.com," which features news about the Internet, may be the best example of a generic domain name. Another example is the website "website.com," which reviews websites. Further examples are the websites "web.com" and "webpage.com," which are Internet hosting sites.

On the other hand, a domain name that generically describes the subject matter discussed in the website cannot be generic. For instance, "apples.com" is a website with links to apple-growing organizations. The name of the website generically describes the subject matter discussed in the site, whose aim is to educate the public about apples and to promote their consumption. But such an aim is a step above selling apples under the mark "apples." Since the website is not itself a bushel of apples, the domain name is elevated to descriptive status rather than generic. The same follows for almost any mundanely named website.

The second reason domain names function as effective source identifiers is that each one must be unique. The Internet requires that no two websites anywhere in the world can share the same domain name at the same time. This contrasts starkly with the case of traditional source identifiers, whose chances for trademark strength are often ruined by the number of other products or companies using an identical mark. Such wide usage by several businesses causes the mark to become diluted, and therefore incapable of trademark protection for any of the companies using it. Professor Thomas Field counted 27 different companies using the mark "Granite State" in the Concord,

See DOMAIN NAMES, page 10

JOINT INVENTION, from page 8

Night worker Zilber peeks inside the conference room and volunteers help. You thankfully decline assistance.

After interviewing Dr. Aplomb it is irrefutable that the assay was sold and disclosed to Kokubo and Ruppel on July 15th of last year, 363 days ago. Dr. Aplomb is informed of the on-sale bar rule, 35 U.S.C. § 102, and that you must prepare to file an application for a patent on or before the end of two days hence, Friday July 14th. Aplomb asks if this on-sale bar thing is a new rule and "what's the big rush," to which you rejoin that on-sale bar has been the law since about 1836 and applies to thinner actions than those taken by Aplomb. For example, if (for one year) a product has been the subject of a contract to supply (public use) and is described in drawings or specifications sufficiently disclosive to "enable someone skilled in the art to practice the invention," the on-sale bar rule can be enforced to bar patentability, *Pfaff v. Wells Elec. Inc.* 525 U.S. 55, 48 U.S.P.Q. 2d. (BNA) 1641 (1998).

You suggest to Aplomb that the scientists, Green and Marco, computer scientist Pat, lab assistant Kris, programmer X and all others at R&D be asked not to leave the building without seeing you first and reiterate that there is a lot of work to do very quickly on the patent application.

A salesman/consultant's phone call is put through to you in the conference room. He is announced as Mr. R.U. Real, changed from Leal, as he explains, "for business purposes." You politely explain that selling chemicals to the R&D Division and giving advice on running immuno-assays does not qualify one as an inventor. Real rings off saying, "really, well, if the method flies my commission will be enough."

Kokubo from Tokyo and Ruppel from Vienna both send e-mails indicating that they've heard of company plans to patent the laboratory method. Each claims to be a co-inventor. Aplomb's superior, Division Vice-President, Dr. Iam Formidable phones

See JOINT INVENTION, page 12

PROTECTION OF TRADITIONAL KNOWLEDGE UNDER THE MODERN INTELLECTUAL PROPERTY LAWS

BY ANNICK TCHOKONTE (LLM '02)

THE CONVENTION on Biological Diversity (CBD) has estimated that the market for herbal medicines therapies, including herbal products and raw materials, has reached $43,000 million with an annual growth rate between 5-15 percent. It has been estimated that the vast majority of plant genetic resources and other forms of biodiversity are found in, or originate from, developing countries. As traditional and alternative medicine plays an increasingly important role in healthcare and the health sector globally, it has become critical to reconcile protection of the intellectual property rights between holders of traditional knowledge to those of modern technologies. Often in most situations, knowledge of traditional medicine is patented and filed by scientists of developing countries, with little or no compensation to the custodians of this knowledge and without their prior consent.

Associated with these forms of exploitation is a serious concern that developing countries, especially traditional knowledge holders, may be exploited. Some advocates point out that a conscientious use of crucial resources must exist among various partners to maintain the diversity of medicinal plants. Increased use of medicinal plants, inappropriate harvesting methods, commercialization, and a growing demand on the markets are all factors that threaten the sustainability of biodiversity (*International Development Research Centre, News Release 2001*). In recent years, a worldwide controversy has been raging over the grant of intellectual property rights over biological diversity under the current Trade Related Aspects of Intellectual Property Rights Agreement (TRIPS). Some critics have argued that crucial differences in rationale exist between the CBD and the TRIPS Agreement. The TRIPS Agreement is said to favor the commercial interests of large companies, at the expense of the conservation of natural resources. (*Letter of the Africa Faith and Justice Network and the Washington Office on Africa to the Office of the US Trade Representative, September 15, 2000*). Acknowledging the increasing importance of this issue, in 1998, the World of Intellectual Property Organization (WIPO) conducted nine fact-finding missions in order to identify the intellectual property needs and expectations of holders of traditional knowledge. The results were published in a report entitled "Intellectual Property Needs and Expectations of Traditional knowledge Holders: WIPO Report on Fact Findings Missions (1998-1999)." Later in January 2002, an international forum was organized by WIPO in cooperation with the Sultanate of Oman entitled "Intellectual Property and Traditional Knowledge: Our Identity, Our Future." The forum focused on the growing need to protect expressions of folklore and traditional knowledge. Participants expressed their concerns as to the protection of the intellectual property rights of traditional knowledge holders under the existing system.

Characteristically, traditional knowledge is not mass produced, but created in accordance with individual or community needs. Furthermore, traditional knowledge is orally transmitted from generation to generation and thus remains largely undocumented. (*WIPO International Bureau, Muscat, January 21-22 2002*). The forum agreed on the implementation of a pilot project on collective acquisition, management and enforcement of intellectual property of traditional knowledge. In light of WIPO's exploratory work conducted in 1998 and 1999, the forum further agreed on the necessity for the 2000-2001 work program to move beyond issue-identification and into a phase of testing practical solutions for the protection of traditional knowledge. However, such initiatives do not resolve the current

See KNOWLEDGE, page 16

DOMAIN NAMES, from page 8

New Hampshire phone book. (Thomas Field, "Trademarks and Business Goodwill," http://www.piercelaw.edu/tfield/trademk.htm). A monument to trademark failure can be seen in Salt Lake City, where two entirely unrelated businesses both named "Dynatec" have their corporate headquarters across Bangerter Highway from each other. They practice a frequent ritual of directing misguided deliveries across the street to each other (or did until November 2001, when one of them filed for bankruptcy).

Domain names are saved from the possibility of this sort of confusing duplication of marks in commerce. Their inherent uniqueness is, however, a double-edged sword. The global uniqueness of domain names also means that a trademark holder cannot duplicate an independently owned domain name incorporating its trademark. Congress became concerned about "the use of deceptive Internet addresses taken by those who are choosing marks that are associated with the products and reputations of others," in the words of Senator Patrick Leahy (D-VT) (as cited by the court in the seminal cybersquatting case *Panavision Int'l. L.P. v. Toeppen*, 945 F. Supp. 1296, 1302, referring to a new trademark dilution statute). Such abusive domain name registrants are what became known as cybersquatters. Just as a squatter is someone who occupies real property belonging to another, a cybersquatter occupies a position in cyberspace that according to trademark law is the intellectual property of another. The gap in legal protection available to trademark owners in the novel legal setting of cybersquatting led to the creation of the ACPA.

Many domain name disputes, though, involve two entities with a genuine interest in a trademark embodied in the domain name for which they are competing. The American Bar Association, for example, was unable to register the domain name "aba.com" because it had already been taken by the American Bankers Association, while "aba.org" was already taken by the American Birding Association. (Jane C. Ginsburg et al., Trademark and Unfair Competition Law, p. 509.) In another example, Nissan Motor Company could not register the domain name "nissan.com." It had already been taken by an apparently innocent prior user, Nissan Computer Corporation, whose founder and president's surname is Nissan. Nissan Computer Corporation has been doing business in one form or another under the trademark "Nissan" since before Nissan Motor Company began using that mark in the U.S. (See *Nissan Motor Co., Ltd. v. Nissan Computer Corp.*, 2000 U.S. App. LEXIS 33937 (9th. Cir. 2000), (remanded, litigation ongoing; see also generally www.nissan.com).

As for First Amendment law, there has been significant judicial uncertainty over whether a domain name itself serves as a valid forum of expression (Planned Parenthood Fed'n. of Am. v. Bucci, 1997 U.S. Dist. LEXIS 3338, 35 (S.D.N.Y. 1997) (holding that the domain name served only as a source identifier and not as communicative speech); *Bally Total Fitness Holding Corp. v. Faber*, 29 F.Supp.2d 1161, 1167 (C.D.Cal. 1998) (holding that the domain name constituted speech protected by the first amendment); *Name.Space, Inc. v. Network Solutions, Inc.*, 202 F.3d 573, 585 (2d. Cir. 2000) (suggesting in dicta that domain names might be a forum of expressive speech); *National A-1 Advertising, Inc. v. Network Solutions, Inc.*, 121 F.Supp.2d 156 (D.N.H. 2000) (holding that the domain name is not a valid forum for speech)).

Such cases have consistently danced around but avoided the crucial question of whether forum validity or invalidity should be the initial presumption. In other words, is a novel potential forum of expression presumed valid and protectable under the First Amendment unless shown invalid, or should it be presumed invalid and not protectable unless shown valid? *National A-1* went the furthest of these cases in denying the forum validity of domain names. In doing so, it drew criticism from First Amendment activists such as the Freedom Forum (www.freedomforum.org). The doctrine of forum invalidity as a curb on First Amendment rights arose in special case forums such as private property and potential riots (See e.g. *Feiner v. New York*, 340 U.S. 315 (1951)). It's hard to see how those special cases can be extended to domain names, let alone to create a presumption of invalidity for any novel forum of expression. The First Amendment is not to be tossed lightly aside.

Many of these cases also suggested that domain name disputes would disappear from the U.S. courts as quickly as they had arrived because of the establishment of the UDRP by ICANN—coincidentally, in November 1999, the same time as the passage of the ACPA. *National A-1*, for instance, envisioned domain name disputes shifting over exclusively to UDRP proceedings. However, this enthusiasm to slough off domain name disputes was misplaced. On one hand, UDRP is much quicker and less expensive than litigation in U.S. federal court. However, UDRP proceedings do "not have binding effect other than on the registrar… and [do] not foreclose the possibility to submit the case to national courts in a competent jurisdiction." (Dr. Annette Kur, *UDRP*, A Study by the Max Planck Institute for Foreign and International Patent, Copyright and Competition Law, Munich, Germany, 2001.) Therefore, a UDRP decision does not subject a dispute to *res judicata*, and creates the uncertainty of leaving the dispute open to future litigation. (John E. Ottaviani, *It's Not Over 'Til It's Over: Domain Name Holders Who Lose UDRP Proceedings Have Redress Under the Anticybersquatting Consumer Protection Act*, Intellectual Property Today 36, March 2002).

In fact, two very recent cases confirm that U.S. courts are willing to ignore completely a prior UDRP proceeding and start from scratch (*Sallen v. Corinthians Licensciomentos LTDA*, 273 F.3d 14 (1st. Cir. 2001); *Barcelona.com, Inc. v. Excelentisimo Ayuntamiento de Barcelona*, Civil Action 00-1412-A (E.D.Vir. Feb. 22, 2002)). In *Corinthians*, the First Circuit overruled the

See DOMAIN NAMES, page 11

DOMAIN NAMES, from page 10

prior decision of the UDRP. In *Barcelona*, the Eastern District of Virginia held in favor of the same party who won the UDRP proceeding, but along the way held that the U.S. Trademark Act "contains no language which would dictate that a district court must give any deference to the [UDRP] arbiter's ruling…the [UDRP] panel ruling should be given no weight…" (*Barcelona* slip opinion at 5.)

Corinthians and *Barcelona* are also notable because in both cases, no party was native to the U.S. In *Corinthians*, both sides of the dispute were Brazilian; in *Barcelona*, both parties were from Spain. Regardless of this, the U.S. courts accepted jurisdiction of the cases because the ACPA extends trademark protection under U.S. law to any "owner of a mark" against any "person" (15 U.S.C. § 1125(d)(1)(A)). This *in rem* jurisdiction over domain name disputes between any parties around the world persists because domain names must still be registered in the U.S. *Corinthians* and *Barcelona* have sent a clear message: the U.S. federal courts remain the World Court for Domain Name Disputes, ICANN and UDRP notwithstanding.

Because of their novelty, domain name disputes are driving new interpretations of trademark and First Amendment law, particularly due to new legal mechanisms such as the ACPA. As the recent surprises in *Corinthians* and *Barcelona* amply show, this body of law is still in the formative stages. This leaves a lot of room for creativity to an attorney representing a party in a dispute over an Internet domain name.

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JURISDICTION AND THE INTERNET

BY NANCY B. DELAIN (JD '03)

"THE INTERNET has no territorial boundaries. To paraphrase Gertrude Stein, as far as the Internet is concerned, not only is there perhaps 'no there there,' the 'there' is everywhere where there is Internet access." *Digital Equipment Corp. v. AltaVista Technology, Inc.*, 960 F. Supp. 456, 462 (D. Mass. 1997), quoted in "International Jurisdiction in Cyberspace: Which States May Regulate the Internet?" by Stephan Wilske and Teresa Schiller, 50 Fed. Comm. L.J. 117, 161 (1997).

The internet has no boundaries; it is "everywhere where there is Internet access," *Id.* Hence, the question of personal jurisdiction of a lawsuit based on harm caused in cyberspace becomes entangled in a morass of long-arm statutes, both in the United States and abroad. In the United States, it is becoming entrenched in caselaw.

PERSONAL JURISDICTION AS TO INTERNATIONAL INTERNET DISPUTES

It is as easy for an Internet "surfer" to visit a website whose files are physically located in a computer halfway around the world as it is to visit a website whose files are physically located within the same jurisdiction as that within which the "surfer" sits. For example, Yahoo! runs a website in the United States; users can access that website by simply typing "http:// www.yahoo.com" into their browser software's locator field. Yahoo! also runs a website in the UK, just as easily accessed from the United States by typing "http:// www.yahoo.co.uk." Is the UK website vulnerable to personal jurisdiction in the United States simply because a user in the U.S. (or anywhere else in the world) can access the website?

The Restatement (3rd) of the Foreign Relations Law of the U.S. describes jurisdiction to adjudicate as:

(1) A state may exercise jurisdiction through its courts to adjudicate with respect to a person or thing if the relationship of the state to the person or thing is such as to make the exercise of jurisdiction reasonable. Restatement (Third) of the Foreign Relations Law of the U.S. 401 cmt. a (1987) at 421(1).

This standard applies to both civil and criminal adjudications, with the proviso that the connection between the forum state and the cause of action must be sufficient or reasonable. Reasonableness in the international forum is defined when jurisdiction is asserted. The international reasonableness standard is significantly different from the United States' minimum contacts standard for jurisdiction; transient presence in the forum, for example, is insufficient grounds for jurisdiction internationally. If the international internet case is a criminal one, the presence of the defendant is generally required for jurisdiction; in civil cases, the plaintiff generally must sue in the defendant's forum. There are very few international internet-related cases; most of the litigation regarding the internet has been within the United States. I therefore concentrate the remainder of this article on the United States.

PERSONAL JURISDICTION AS TO INTERNET DISPUTES WITHIN THE U.S.

Traditional personal jurisdiction is firmly rooted in the concept of finite jurisdictional borders. When a plaintiff wishes to sue a defendant outside of the forum where the defendant would normally expect to be sued, the plaintiff must establish that the jurisdiction of the court would comport with "traditional notions of fair play and substantial justice." *Milliken v. Meyer*, 311 U.S. 457, 463 (1940). The presence of the internet has not changed this basic concept. Traditionally, two types of personal jurisdiction exist within the U.S.: general and specific.

See JURISDICTION, page 18

JOINT INVENTION, from page 9

to suggest that "it would be nice" to see his wife's nephew (Iam Clenly), who is employed in the R&D lab to wash beakers and test tubes, have his (Clenly's) name on the patent and that "it would look good on his resume." You make a written note to discuss this suggestion with your chief patent counsel and, if necessary, the company's energetic general counsel, P. Pepi, and quick-witted President, J. Pepi.

Night worker Zilber again peeks inside the conference room to volunteer assistance. You again politely demur.

After perusing the documents and prior art again, you conclude that there is patentable subject matter in the lab method. You check again and sure enough, the on-sale bar rule provides for a one-year grace period (to file a patent application) from the time a product (here test kits) is the subject of a disclosure and/or commercial offer for sale. There is no escape. Dr. Aplomb and the documentation have confirmed the public use date as initially July 15th of last year. Your deadline arrives midnight July 14th. You haven't thought of vacation all day.

For a trusted dialogue, you phone your law school colleagues Mills and Onello. They graciously brainstorm with you. Several 'bottom lines' are developed. Inventorship is a knotty subject, deriving its legitimacy from the fact of conception. Who conceived of the invention and what conception means are the issues. Joint inventorship has its own rules, which obviously subsume inventorship criteria and go further to give guidance for filing as a plurality of inventors. Mills and Onello remind you of the less than recent (1897), but still solid *Merenthaler* decision:

> The conception of the invention consists in the complete performance of the mental part of the inventive act. All that remains to be accomplished, in order to perfect the act or instrument, belongs to the department of construction, not invention. It is therefore the formation, in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is thereafter to be applied in practice, that constitutes an available conception, within the meaning of the patent law.

Merenthaler v. Scudder, 11 App. D.C. 264, 276, (D.C. Cir.1897) adopted in *Gunter v. Stream,* 573 F. 2d 77, 80, 197 U.S.P.Q. (BNA) 482, 484 (C.C.P.A. 1978); *Coleman v. Dines*, 754 F.2d. 353,359, 224 U.S.P.Q.(BNA) 857, 862 (Fed. Cir. 1985)." Please see also *Burroughs Wellcome Co. v. Barr Lab, Inc.* 40 F.3d 1223, 32 U.S.P.Q 2d (BNA)1915 (Fed. Cir. 1994), *Collar Co. v. Van Dusen*, 90 U.S. (23 Wall) 530, 563-64 (1874).

In general, co-inventors (two or more) need not physically work together, they may make different types or amounts of contributions and they need not have made contributions to all of the claims (no longer an all-claims rule) of the patent. There is no specific quantum of inventive contribution required of each co-inventor and no guide as to how many inventors may be jointly engaged (*Canon v. Nukote*, 134 F.3d 1085 U.S.P.Q. 2d (BNA) 1355 (9th Cir 1998) where sixteen inventors were named on an ink jet invention), but each must have contributed significantly to the conception of the invention and each will have an undivided interest in the entire patent notwithstanding contribution of, for example, 4 of 55 claims, *Ethicon, Inc. v. United States Surgical Corp.,* 135 F.3d 1456, 45 U.S.P.Q. 2d (BNA) 1545 (2d Cir.1998).

Under 35 U.S.C. § 116, as Allniter noted earlier, co-inventors "shall" apply for a patent jointly. Invalidity can be based on misjoinder or non-joinder with deceptive intent. Standing to bring infringement actions can be jettisoned by improper joinder. 'Jointly', is not surplusage, it is central to filing a patent application by co-inventors and to validity and enforcement by co-patentees or their assigns.

Given all the claimants to joint inventorship encountered by Allniter thus far, Green, Marco, Aplomb, Programmer X, the sales-person/consultant, computer scientist Pat, lab assistant Kris, Iam Clenly, and who knows who else, Allniter re-reviews § 116 to find that joint inventors may qualify as such even though: they did not physically work together at the same time, each did not make the same type or amount of contribution, or each did not make a contribution to the subject matter of every claim of the patent (the death knell to the older all-claims rule). 35 U.S.C. § 116.

Section 116 was amended in 1984 to foster co-researcher collaboration, which in a modern, technologically driven economy is responsible public policy. However, this legislated policy has not made life easier for the patent lawyer bearing responsibility for naming the true inventors on a patent application. What § 116 giveth, defense counsel for alleged infringers may taketh away, with the help of judicial construction determining 'joint inventors' to mean precisely what it says, i.e. the right ones, not misjoined or non-joined inventors and, vitally, not with deceptive intent. If deception is involved, even the curative, correctability value of 35 U.S.C. 256 (1994) will be lost.

The patent attorney bears initial responsibility for determining who is an inventor and in extreme cases, where an attorney causes a false oath of inventorship to be filed, criminal convictions may ensue under 18 U.S.C. § 1001 (2000).

Collaboration means that the invention is conceived by two or more persons during a common period of developmental work. The supportive sets of dates cannot be facially inconsistent to qualify for co-inventorship.

Inventors, taking collaboration and conception as a unified whole, will not lose their rights by using the services and ideas of others. Those that merely identify problems or, on the other hand, improve the solution are not using inventive faculties, nor are those supplying inventors with well-known principles, or state of the art improvements, *Chirichillo v. Prasser,* 30 F. Supp. 2d 1132, 49 U.S.P.Q. 2d (BNA) 1437 (E.D. WI 1998).

You suggest and Mills and Onello confirm that in *Seawall v. Walters* 21 F. 3d 411, 30 U.S.P.Q. 2d (BNA) 1356 (Fed. Cir. 1994),

See JOINT INVENTION, page 14

KUNZE, from page 7

Property (AIPPI) and regularly represents AIPPI in meetings of WIPO-Expert Committees in Geneva. The AIPPI is a world-wide nonprofit organization, consisting of 65 national groups and over 8000 members in over 100 countries, devoted to improving and promoting the protection of intellectual property on both an international and national basis. The organization works to achieve this objective by working for the development, expansion and improvement of international and regional treaties and agreements and also of national laws relating to intellectual property.

As President of AIPPI, Dr. Kunze will oversee the next Executive Committee meeting in Lisbon, Portugal from June 17-21, 2002. The XXXIX World Intellectual Property Congress will convene in Geneva, Switzerland, June 19-24, 2004, and Dr. Kunze will then relinquish his Presidency. Boston will serve as host to the XXXXI World Intellectual Property Congress in September 2008, and Dr. Kunze will certainly play a vital role in the conference.

In addition to Dr. Kunze's numerous contributions to the world of intellectual property, he is also past member of the Board of Directors and past Secretary and International Officer of the International Trademark Association (INTA), member of the European Communities Trade Mark Association (ECTA), and member of the Swiss Arbitration Association.

Dr. Kunze's experience and insight into the global market are exceptional and unique components of his classroom environment and to the learning experiences available in intellectual property at Pierce Law. Dr. Kunze found a mentor early in his career and utilized the experience as a valuable learning tool. Perhaps you too will be as fortunate as Dr. Kunze and will find inspiration and learning tools that will last a lifetime as well. ■

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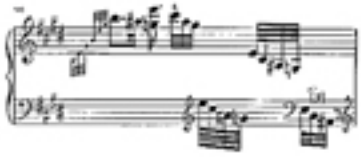
FUZZY MATH SOLVED IN THE GREAT E-FLAT MAJOR SONATA OF FRANZ JOSEPH HAYDN (1732-1809)

BY ELIZABETH HOCHBERG (JD '03)

ACCORDING TO the surviving autographed manuscript, Sonata No. 62 in E-Flat (Hob. XVI:52) (The Great E-flat Major) was dedicated to the pianist Therese Jansen Bartolozzi, a pupil of Clementi, in 1794. Miss Jansen's name appears on a list of pianists Haydn met in London, and Haydn composed his last three Piano Sonatas (Nos. 60-62; XVI: 50-52) in 1794 and later three Piano Trios for her.

Miss Jansen arrived in Vienna in 1799 to find all of one of her sonatas (No. 61) and part of another (No. 60) published and doing quite well. Because she had chosen not to publish her three sonatas in England, it is not known where the publishing house Artaria received its engraver's manuscript, for neither Haydn nor Miss Jansen sent any copies to them. Miss Jansen acted quickly with the news, arranging for the manuscript of No. 62 to be delivered to Longman & Broderip, who first engraved the Sonata No. 62.

Any modern composer—well, any copyright student, too—would cry out if in today's world a composition was published and making money for the publisher without any kind of arrangement or written consent from the composer. Lawsuits would be filed and major damages would probably be awarded. Unfortunately, composers like Haydn and his contemporaries did not have control over their works as musicians do today. It was not until major Romantic composers like Schumann, Liszt, and Brahms put up a fight in the mid-nineteenth century that composers finally were able to enforce any kind of copyright in their music.



EX. 1: HAYDN – "ADAGIO" FROM SONATA NO. 62 IN E-FLAT, MEAS. 48, *HENLE* EDITION

A big sonata in every sense of the word, Sonata No. 62 requires power, dexterity, and expression. (A. Peter Brown, *Joseph Haydn's Keyboard Music: Sources and Style* 361 (Indiana Univ. Press 1986)). It has been described as a work that is a fulfillment of the classical sonata that points the way to the future. The renowned musicologist H.C. Robbins Landon asserts that this sonata falls into a group with Mozart's C minor Sonata (K. 457) of 1784 and Beethoven's "Pathetique" Sonata, Op. 13, of 1799 as the most influential piano sonatas of the late eighteenth century. (H.C. Robbins Landon, *Haydn Chronicle of Works: Haydn in England, 1791-1795* vol. 3, 452 (Thames and Hudson 1976)).

Aside from the many interesting aspects of style and theoretical advancements presented by this sonata, what endears the piece to me is a rather small but significant rhythmic discrepancy I found while learning it for my Master's Recital. I knew that in the pre-1780 sonatas arpeggios were written out only at thematically significant moments. However, in the second movement of this piece, a monothematic *Adagio*, Haydn chose to include very precise arpeggiated notation. In the *Adagio,* independent arpeggios were written for both the right and left hands in a new concert-style type of movement. (Laszlo Somfai, *The Keyboard Sonatas of Joseph Haydn* 97 (U. Chi. Press 1995)).

Imagine my surprise to find a mathematical discrepancy at measure 48 of the German *Henle* edition. The modern 1974 *Henle* edition I was studying from was considered to be the most accurate, and was set from the *Schirmer* edition of 1897. The *Schirmer* edition was set from the original Longman & Broderip engraving. I noticed that the manuscript still bears the red crayon marks and other notes from Longman's engraver.

The rhythmic problem lies in the first half of beat two of measure 48, where *Henle* has printed a sixteenth note on high G (ex. 1).

See FUZZY MATH, page 18

JOINT INVENTION, from page 12

the court explains that conception exists when a definite and permanent idea of an operative invention, including every feature of the subject matter sought to be patented is known. Conception is complete when one of ordinary skill in the art could implement the method or construct the apparatus, without unduly extensive research or experimentation.

Mills and Onello are thanked profusely for the brainstorming session. Then you prepare to clear the decks of all non-inventors.

Night worker Zilber again peeks inside the conference room offering to help. Again you politely decline the gesture.

At 10 p.m. on July 12th, you reach Division Vice-President Iam Formidable at his country club. After some delay and over the din of uproarious background noise, you point out that the VP's wife's nephew, Iam Clenly, does not qualify as an inventor and will not be designated as such. You explain conception, solution, contribution to claims and joint inventorship and close by complimenting the VP on nephew Clenly's work on the beakers and test tubes. Formidable meekly rings off.

At 10:30 p.m. Dr. Aplomb is diplomatically informed that he (Dr. Aplomb) is in nephew Clenly's non-inventorship category, without using those words. Aplomb is also complimented on the condition of the beakers and test tubes and he accepts your accolade as a testimonial to his commanding management of R&D.

At 11 p.m. Drs. Kokubo and Ruppel are advised of the U.S. law in *Seawall* and *Chirichillo*. They respond in their respective languages.

Furtive programmer X is conferenced at 11:30 p.m. and informed that having worked as one skilled in software art, the programming contribution went to the implementation of an already conceptualized invention and did not require the use of inventive faculties. Furtive programmer X replies, "no problem, I'll just take the overtime pay for staying this late." Chewing gum loudly, X leaves the conference room.

Kris and Pat are called in past midnight and informed that their work diaries disclosed that they were acting within the scope of the invention as explained by scientists Green and Marco and that they (Kris and Pat) had excelled in providing computer apparatus/software support, but are most likely reduction to practice personnel not co-inventors. They leave co-muttering.

Finally, Green and Marco meet with you after 1 a.m. You inform them that the inventorship decks seem to be cleared and in less than 48 hours a patent application must be filed (electronically) with the USPTO. (You are waiting to hear from Professor Jorda on the dismal outlook for whether this invention can be protected internationally). "There's just one question I have," you, a puzzled Allniter, ask, "as scientists with biochemistry and biology Ph.D.'s, how did you know to incorporate Bayes' Theorem in your probability algorithms?" Simultaneously, each points to the other and says, "oh, you did it." You exhaustedly investigate for the answer to who made the Bayes probability contribution and determine that neither Green nor Marco had contributed this piece of computer/statistical input and neither knew who had. You call home to ask if a fresh change of clothes, etc. could please be brought to the company R&D lab at dawn.

Allniter keeps digging and finds that company night worker (Zilber) had contributed unsolicited computer/statistical expertise to Green and Marco by amending the common text of the disclosure of the invention appearing on Green's and Marco's computer terminals. Zilber is a heretofore, undisclosed collaborator. He is an intellectually gifted, nighttime worker, inconspicuously dressed in blue jeans and black Knapp shoes. Zilber's contribution, which could be a fact pattern for a movie, was completely unsuspected and unheralded. This joint inventor is a blue-collar, mathematical/computer genius working as a manual laborer. Who could have guessed Zilber would have conceived of the apparatus, algorithms and computer software programs to combine the assay results with other variables?

Allniter is spending another all-nighter putting the co-inventorship, conception and collaboration pieces together and has less than 48 hours in which to draft claims and specifications before one year expires. Allniter maintains goodwill at the R&D lab while hunting for all the answers, facts and technical data needed to support a valid patent application. By 11:45 p.m. Friday July 14th the application is filed electronically. The inventors are Green, Marco and Zilber. Allniter assembles the files, writes several memoranda (noting future continuation in part and divisional issues) and leaves for home while the birds are chirping in a new day (the first day of vacation). ■

Vince Macri (LLM '03) received his law degree from the University of Virginia. He practiced law for more than 20 years and worked as a business executive for over 10 years before returning to law school at Pierce Law as an LLM candidate.

SATELLITE RADIO, from page 5

In 1998, the Digital Millennium Copyright Act amended the scope of copyright owners' exclusive rights in sound recordings to bring other digital audio transmissions under the statutory licensing provisions, which included pre-existing satellite digital audio radio services such as XM.

Interestingly, voluntary negotiations to determine the statutory rates and terms for licenses ended with no agreement. Since then, XM and its competitor Sirius Satellite Radio ("Sirius"), along with the RIAA have petitioned the Librarian of Congress requesting that the statutory license rates and terms for pre-existing satellite digital audio radio services be determined by a Copyright Arbitration Royalty Panel (CARP).

After several years, it is still unsettled as to how much companies like XM will have to pay to record companies for licenses, and it is likely that in-car entertainment will continue to develop and may one day become interactive. Mercedes Benz prototype cars have already been conceived with the idea of having car stereos that allow drivers to hit a "buy now" button and purchase the song while driving. While this type of technology is still speculative at best, it would not fall into statutory licensing provisions. Instead of paying licensing fees to the RIAA, when established, individual licenses would need to be obtained and royalties would have to be paid to each individual copyright owner unless more changes are made to the Copyright Act.

Although consumers love the fact that XM Satellite Radio offers them variety rather than stale, redundant radio programming dictated by advertisers, there is nothing interactive about XM; the control over the programming remains in the Washington, D.C. based studios. This makes XM capable of obtaining licenses to bring music to listeners in an innovative way while remaining within the digital performance provisions of the Copyright Act.

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SECURE DIGITAL MUSIC INITIATIVE (SDMI)

BY LEON TYNES (JD '03)

THE "SWISS CHEESE" SOLUTION OF SDMI

A CHASM OF MONUMENTAL PROPORTIONS has been created by the digital music industry, pitting consumer against artist. During the Grammy Awards program aired on February 27, 2002, the Recording Industry Association of America (RIAA) and the National Academy of Recording Arts and Sciences (NARAS) joined together to express its repugnance and anger over the downloading of "ripped" MP3 files from the Internet. The response from the audience, comprised primarily of music industry professionals, was lukewarm at best. NARAS made the allegation that artists that are new to the industry would suffer financially because consumers will divert profits through free or low-cost downloads. Nevertheless, many artists have successfully secured recording contracts and have received notoriety, critical acclaim and financial success through offering their music via the Web. Also, record sales continue to increase despite the popularity of peer file exchange over the Internet. In response to this dilemma, the Secure Digital Music Initiative (SDMI) was introduced in *A&M Records v. Napster* as the solution to ensure compliance with copyright laws.

DESCRIPTION

Record labels ignored the emergence of compressed digital formats until the successful release of the Diamond Rio MP3 Player during the Christmas season of 1998. Instead of utilizing traditional business methods to gain control of digital music distribution and exchange, the labels panicked and initially sought to litigate. The SDMI is a forum of over 160 companies and organizations whose unifying purpose is to develop technology requirements to protect copyrights, ensure royalties to artists and unite technology and record companies in developing standards to prevent unauthorized duplication and distribution of music.

REQUIRED TECHNOLOGY

The SDMI proposes the utilization of encryption and watermarking as its forms of digital management technology to prevent abuses of copyrights. Encryption utilizes encoding files that require "keys" such as hardware serial numbers to access content. Watermarking is a process whereby inaudible signatures are implanted into electronic media so that SDMI compliant devices and software will be able to recognize their presence and control duplication appropriately. Companies such as Muzak frequently used audible watermarks in the past, but the modern consumer market requires that the mark be inaudible to ensure the artistic nature of the music.

The effectiveness of encryption and watermarking are severely impaired because current software and hardware devices lack the ability to query media to determine the legitimacy of a copy. Another major weakness of the SDMI proposal is the prominence of software "cracks" and "plug-ins" to circumvent or strip programs of their ability to authenticate copies.

SUPPLEMENTARY LEGISLATION

The SDMI was formed in the wake of several legislative attempts to strengthen copyright laws given and in response to the emergence of and increasing popularity of digital technology and distribution. The first was the Audio Home Recording Act of 1992 (AHRA), which covers technologies such as digital audio cassette players, minidisc players and digital audio tape players (DAT). The act specifies that manufacturers of such devices must register with the Copyright office, pay statutory royalties on devices and media, and

See SDMI, page 23

KNOWLEDGE, from page 9

conflict between existing international agreements. The CBD and the TRIPS have been found to have contrasting effects on access to genetic resources and benefit sharing. Experts have suggested a revision of parts of the TRIPS Agreement to allow the exclusion or relaxation of standards of intellectual property rights relating to environmentally sound technologies, and to technologies that relate to the use of biodiversity (*Third National Network Statement to the 2nd meeting of the Panel of Experts on Access and Benefit Sharing, Montreal, 19-22 March 2001*). However, it is becoming apparent that current measures of the respective national authorities are inadequate to enable the implementation of benefit sharing and collaboration among nations.

Thus, examination of the current legal framework is necessary to perform a useful analysis of the issue at hand. One must identify the nature of traditional knowledge and its significance in traditional communities, then examine the international initiatives as well as the current agreements to establish whether or not traditional knowledge is adapted to modern intellectual property.

WHAT IS ENCOMPASSED IN TRADITIONAL KNOWLEDGE?

According to WIPO, traditional knowledge may be defined as a multifaceted concept that encompasses several components. What characterizes traditional knowledge is the fact that, in general, it is not produced systematically, but rather in response to individual or collective creators' needs and interactions with their cultural environment. Traditional knowledge is "traditional" only to the extent that its creation and use are part of the cultural traditions of communities. "Traditional" does not necessarily mean that the knowledge is ancient. "Traditional knowledge" is created every day and evolves as to the needs of the community. In its use traditional knowledge is a contemporary knowledge (*International Bureau of WIPO, Information Note on Traditional knowledge, Muscat, January 21 and 22, 2002*).

For such reasons, existing intellectual property systems which traditionally favor trade relationships may not fully respond to the essential nature of traditional knowledge. Thus, holders of traditional knowledge have increasingly complained that developed countries with little or no compensation have appropriated knowledge of traditional medicine. Pharmaceutical companies regularly finance expeditions into remote areas to exploit traditional knowledge genetic resources that can be used to develop profitable drugs. Such actions are legally justifiable under in the principles of the TRIPS Agreement. Advocates of developing countries' rights have argued that the TRIPS Agreement fails to protect traditional knowledge against companies seeking proprietary rights over collective knowledge for the sake of the private gain. As a result, TRIPS restricts and denies developing countries access to the technologies needed for their economic development and renders it difficult to compete in the global economy. Under TRIPS, there are no existing provisions for the patent holder on claims involving biological resources or related knowledge to share benefits with the state or communities of origin. In fact, the country of origin has no resources to enforce its benefits sharing rights (as recognized by CBD) if a person or a company was to obtain a patent based on traditional knowledge. Also, international patent law as well as most domestic patent laws require novelty and inventive steps that are not applicable to traditional knowledge and biodiversity. As an illustration, there are no protections under current patent laws for manual or spiritual therapies. Additionally, without a comprehensive database of all medicinal plants used in various countries and continents, it is very difficult to identify the founder. As a result, the need for the implementation of an adequate legal system for the protection of traditional knowledge has become increasingly apparent.

INTERNATIONAL INITIATIVES AND CURRENT AGREEMENTS

Currently, only three protectable subject matters qualify for a pharmaceutical products patent under conventional patent law: patents for discovering new chemical components, patents for know-how in producing products, and patents for the trademark. Herbal medicine as defined by several World Health Organization (WHO) guidelines include crude plants such as leaves, flowers, fruits, and seeds. Therefore, products to which chemically defined active substances have been added are not considered herbal medicine. Thus, it would be impossible to obtain patent protection for herbal medicines through the discovery of new chemical components.

At the request of its members' states, the WIPO General Assembly (26th session, Geneva from September 25 to October 3, 20000) established an intergovernmental Committee on Intellectual Property and Genetics Resources, Traditional Knowledge and Folklore (the Committee"). With regards to traditional knowledge, the members' states identified four primary issues:

Terminological and conceptual issues. WIPO currently use the word traditional knowledge to refer to tradition-based literary, artistic or scientific works; performances; inventions and creations resulting from intellectual activity in the industrial, scientific, literary or artistic fields. The current issues in regard to traditional knowledge include the selection of appropriate terms to describe the subject matter for which the protection is sought; study of customary laws and regulatory systems that apply to traditional knowledge in local and traditional communities.

Standards concerning the availability, scope and use of intellectual property rights in traditional knowledge. Such issues include, facilitating the access to the intellectual property system to enable traditional knowledge holders to acquire and use intellectual property rights available under current standards. Additionally, in the longer term, possible development of new standards to protect traditional knowledge under current intellectual property tools.

Certain criteria for the application of technical elements of standards, namely legal criteria for the definition of prior art and administrative and procedural issues related to the examination of patents applications.

The enforcement of rights in traditional knowledge. This involves facilitating access

See KNOWLEDGE, page 17

KNOWLEDGE, from page 16

to the intellectual property system, to enable traditional knowledge holders to use and enforce rights under the intellectual property system. (*WIPO General Assembly, 26th Session, Geneva, September 25 to October 3, 2000)*

In light of these issues, some countries such as India, Kenya and Madagascar have taken important steps by updating their legal systems and national patent laws in order to protect the knowledge of traditional medicine. Taking in account the divergence between traditional knowledge holders, this article recommends the implementation of a regional agency under the auspices of the WIPO. Such agency will record customary laws and related cultural understandings relevant for traditional knowledge protection, and establish accordingly an intellectual property system that will recognize and use customary laws to manage relationships with the traditional knowledge holders. Furthermore, this agency would address the issue of collective acquisition, administration and enforcement of intellectual property by traditional knowledge holder's associations. Such associations would acquire, exercise and enforce intellectual property rights on behalf of the traditional knowledge holders.

CONCLUSION

It is inherently difficult to protect traditional knowledge under modern intellectual property laws, which tends to favor individuals as well as large companies. Taking in account the disparate treatment in the laws of developing countries on one hand, and those of developed nations on the other, this article propose a regional solution instead of an international one. ■

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STUDENT PORTRAIT: DESIRE ("DEZ") RUBADIRI

BY NANCY B. DELAIN (JD '03)

DESIRE ("DEZ") RUBADIRI was born in England and obtained his elementary education in the East African countries of Uganda and Kenya before moving south to Botswana. He received his university education at the University of Botswana, first earning a B.A in Humanities (English and African Literature, Language, History with a French minor), following this with an LL.B (the US J.D. equivalent). He then crossed the Atlantic to earn his LL.M. at the Washington College of Law, American University (AU) in Washington D.C.

DESIRE RUBADIRI

At AU, he studied international trade, business transactions, international environmental law, international human rights and refugee protection, and intellectual property. He says his reason for this array of courses was to free himself from the "territorial confines of traditional legal practice," giving him the ability to practice as he does, as an international legal adviser. His transnational educational background is apparent in his thinking and is further echoed in his publications and presentations, including:

"Globalization, the WTO and The Southern African Development Community," given at a Regional Workshop on Strengthening Africa's Participation in the WTO in Nairobi, Kenya;

"A Long Walk to Freedom" presented in Addis Ababa, Ethiopia (1998);

"Africa's Biosafety Who Cares?" presented in Harare, Zimbabwe (1999);

"Is Environmentally Sustainable Development an African Concern?" presented in Accra, Ghana (2000);

"Globalization the WTO, and SADC" presented in Nairobi, Kenya at a regional workshop on Strengthening Africa's participation in the World Trade Organization organized by ACTS/ IDRC (2000);

"Capacity building…What of the African International Trade Lawyer?" submitted for Regional Meeting on Research and Training Needs in International Trade in Africa, Port Louis, Mauritius 3-5 October 2001 organized by UNDP/UNCTAD/AERC;

"The TRIPS Agreement, Traditional knowledge, Genetic resources and Folklore- A Human Rights Perspective, a paper presented at the University of Venda for Science and Technology, Thohoyandu, 5-8th December 2001;

"An Introduction to the core principles of Environmental Law and Sustainable Development in respect of Transboundary Natural Resource Management presented at an IUCN Workshop in Cape Town, S. Africa 12-13th December 2001 on Conflict Management and Resolution in Transboundary Natural Resource Management.

Desire spreads his abilities between being an attorney, a notary public and conveyancer and an international law adviser, working on consultancies around a wide area of legal issues pertinent to Africa. His studies at Pierce Law as a student in the Diploma in

See PORTRAIT, page 24

■ JURISDICTION, from page 11

GENERAL PERSONAL JURISDICTION

"General jurisdiction permits a court to exercise personal jurisdiction over a non-resident defendant for non-forum related activities when the defendant has engaged in "systematic and continuous" activities in the forum state. [citations omitted]" *Zippo Manufacturing v. Zippo Dot Com*, 952 F.Supp. 1119, 1122 (W.D.Pa.1997). The vast majority of internet-based cases involve not general, but specific, personal jurisdiction.

SPECIFIC PERSONAL JURISDICTION

"[S]pecific jurisdiction permits a court to exercise personal jurisdiction over a non-resident defendant for forum-related activities where the "relationship between the defendant and the forum falls within the 'minimum contacts' framework" of *International Shoe Co. v. Washington* [326 U.S. 310, 316, 66 S.Ct. 154, 90 L.Ed. 95 (1945)]."

The U.S. Supreme Court noted in 1958 that "[a]s technological progress has increased the flow of commerce between States, the need for jurisdiction has undergone a similar increase." *Hanson v. Denckla*, 357 U.S. 235, 250-51 (1958). In 1985, some 27 years later, the Court further held that much modern business is conducted without either party entering the forum of the other. *Burger King Corp. v. Rudzewicz*, 471 U.S. 462, 476 (1985). The U.S. Supreme Court has not heard a case specifically dealing with jurisdiction over the internet, but the Western District of Pennsylvania's *Zippo Manufacturing* decision presented a "sliding scale" analysis for determining whether personal jurisdiction in an internet case comports with the 14th Amendment requirements of due process that is currently followed extensively. The *Zippo* court stated:

> "[T]he likelihood that personal jurisdiction can be constitutionally exercised is directly proportionate to the nature and quality of commercial activity that an entity conducts over the Internet. This sliding scale is consistent with well-developed personal jurisdiction principles. At one end of the spectrum are situations where a defendant clearly does business over the Internet. If the defendant enters into contracts with residents of a foreign jurisdiction that involve the knowing and repeated transmission of computer files over the Internet, personal jurisdiction is proper. E.g. *CompuServe, Inc. v. Patterson*, 89 F.3d 1257 (6th Cir.1996) . At the opposite end are situations where a defendant has simply posted information on an Internet Web site which is accessible to users in foreign jurisdictions. A passive Web site that does little more than make information available to those who are interested in it is not grounds for the exercise personal jurisdiction. E.g. *Bensusan Restaurant Corp., v. King*, 937 F.Supp. 295 (S.D.N.Y.1996). The middle ground is occupied by interactive Web sites where a user can exchange information with the host computer. In these cases, the exercise of jurisdiction is determined by examining the level of interactivity and commercial nature of the exchange of information that occurs on the Web site. E.g. *Maritz, Inc. v. Cybergold, Inc.*, 947 F.Supp. 1328 (E.D.Mo.1996)." *Zippo* at 1124.

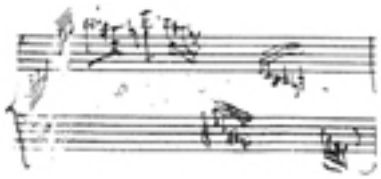
This test has been widely applied throughout the federal circuit courts. In the First Circuit, the District Court of New Hampshire (Barbadoro, CJ) found lack of personal jurisdiction based on the passive website developed and maintained by a hotel and accessible from the Internet in New Hampshire. *Dagesse v. Plant Hotel N.V.*, 113 F.Supp.2d 211 (D.N.H., 2000). The Third

See JURSIDICTION, page 19

■ FUZZY MATH, from page 13

This is perplexing, because Haydn and his contemporaries were perfectionists. A sixteenth note at that position causes the entire measure to be short a quarter of a beat. When asked about this problem, my professors did the math, gave up, and told me "Haydn must have slipped up and missed a beat. It's surprising that he even wrote out the arpeggios anyway." I remained skeptical. In music from the Classical era (1750-1825), two plus two always equals four. There was often such "fuzzy math" during the Romantic era (1825-1900) when two plus two might equal five, but not during the Classical era. I decided to investigate.

As it turns out, the Library of Congress has the original manuscript. While I was home in D.C. during Winter Break I requested to see the manuscript and was in disbelief



EX. 2: HAYDN – "ADAGIO" FROM SONATA NO. 62 IN E-FLAT, MEAS. 48, MANUSCRIPT

when the music librarians brought it up from the stacks. They even allowed me to leaf through it as long as I wore plastic gloves. I placed the manuscript in front of me and the Henle edition above it and proceeded to compare them measure-by-measure. Looking at measure 48 of the manuscript the beat was indeed filled by an eighth note. The eighth note mathematically fulfills the measure's three beats (ex. 2) in contrast to the sixteenth note printed in my Henle edition.

Apparently, Longman & Broderip made a few errors in their haste to get the score to press. Modern publications still carry the now 200-year old mistake. Though this finding is extremely minute and detail-oriented, it is nonetheless significant to me. This discovery built my confidence as a music scholar, for I trusted my instincts and was able to find the source of a problem that went unnoticed for over 200 years. ■

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JURISDICTION, from page 18

Circuit has said, "the mere posting of information or advertisements on an Internet website does not confer nationwide personal jurisdiction." *Remick v. Manfredy*, 238 F.3d 248, 259, (E.D. Pa., 2001). The Fourth Circuit District Court (Chambers, J), in determining whether to grant personal jurisdiction in an internet case, looked widely through the circuits to find caselaw to uphold its decision. It stated, "Most courts to consider the effect that a defendant's a website has on that defendant's purposeful contacts with a forum state have adopted the "sliding scale approach" from *Zippo Mfg. Co. v. Zippo Dot Com*, Inc., 952 F.Supp. 1119 (W.D.Pa.1997). [citations omitted]" *Jeffers v. Wal-Mart Stores, Inc.*, 152 F.Supp.2d 913 (S.D.W.Va., 2001).

Many other federal courts in the U.S. have also utilized the *Zippo* test. The Fifth Circuit adopted it in *Mink v. AAAA Dev. LLC*, 190 F.3d 333, 336 (5th Cir., 1999), and the Ninth Circuit adopted it in *Cybersell, Inc. v. Cybersell, Inc.*, 130 F.3d 414, 419 (9th Cir., 1997). District courts in Maryland, South Carolina, and the Eastern District of Virginia have also adopted the test.

CONCLUSION

The "sliding scale" analysis of *Zippo Manufacturing v. Zippo Dot Com* has gained wide popularity in the federal circuit courts in the United States simply because it allows traditional personal jurisdiction to be applied to cases at the cutting edge of technology. The international arena has yet to clearly decide how countries outside the US will handle the personal jurisdictional issues that will inevitably arise more and more as the internet becomes more and more ubiquitous. ■

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From the Editor

COLOR ME CONFUSED, CONFOUNDED

WITH THE GROWING importance of Intellectual Property Rights (IPRs), evidenced by damage awards for infringement and annual royalty income reaching 10-digit figures, "leveraging" and "monetizing" IPRs have become buzzwords. A veritable cottage industry of web-based third-party service providers has sprung up in short order to "extract value" from IPRs. The big five accounting firms, and Arthur Andersen, in particular, seem to have initiated and spearheaded the "new wave" or, I would say, "new craze." To name but a few: Aurigin, Ascent Financial, Delphion, Epache, INTX, ipCapital Group, IP.com, IPNetwork.com, IP Vision, IP Value Management, Invention Machine, Licent Capital, M-Cann, PatEX, Pl-xTRRU, ThinkFire, Value Extraction, Yet2.com, etc.

Some of these outfits have generated a lot of hype and hoopla about producing "patents on demand" in "patent factories" and valuing a patent "in a matter of minutes."

The example of TRRU (Technology Risk/Reward Unit) Metrics, which "adapts the same Nobel Prize winning equation (The Black-Scholes Formula) used in determining the value of call options," because "a patent is a 'call option' on technology," is especially interesting and revealing. It is touted as providing "almost instant, market-driven calculation" of IP value. Ernst & Young is full of praise: "It used to take us weeks to provide a valuation estimate to a client. Now we can determine the value of a patent in *several minutes* and have the security of knowing that its result is based on actual market data." (Emphasis added.) According to a stunned eyewitness of a demonstration, a light-flashing computer spewed out a figure in a few minutes, indeed—and a figure in the millions, of course. And their software program is available for a "mere" $60,000. Is this snake-oil salesmanship or what?!

Speakers at the Winter Meeting of the Association of Corporate Patent Counsel (ACPC) in Phoenix, Arizona last January had this to say: These service providers are much too expensive for what they deliver, they haven't done much for companies using them, they are "solutions in search of needs," Aurigin already went belly-up and filed under Chapter 11 (which makes "Rembrandts in the Attic," published by Aurigin, of dubious relevance) and there are "other dead bodies" around. One speaker was "sheepish" (his term) about having had a role in Arthur Andersen's "Edison in the Boardroom."

Can patents, as advertising of these outfits would want one to believe, be produced "on demand" in "patent factories" and can their value be determined "in a matter of minutes?" Is the underlying premise correct that a patent is a patent is a patent and by definition is a "Rembrandt in the Attic?" Does the patentee have the upper hand, by virtue of having a valuable patent, and hence can he/she charge what the traffic will bear? Is licensing, selling or donating patents the best way to extract value? Is licensing-out the "only game in town"? The answers to these questions are a resounding no for numerous reasons, which appear to be overlooked and ignored in this IP valuation and monetization hype and hoopla. We need to remind ourselves therefore of the fundamentals of patent and licensing law and practice.

1. First of all, there are many, what I call, *attrition factors* for patents, affecting their incidence, validity and value, such as:

See CONFUSED, page 20

CONFUSED, from page 19

- Creativity and inventiveness reaching the patentability level (in terms of novelty and unobviousness) are very rare qualities. Intellectual property cannot be treated as a "given." (Professor Jay Dratler).
- Many R&D scientists and engineers, like analytical chemists, work in areas less conducive to inventing.
- Patentable inventions are often overlooked because R&D staffs don't "think patents," being too preoccupied pursuing their R&D projects and believing that their developments or improvements are not patentable.
- Corporations and institutions are quite selective in choosing inventions for patent coverage if they are not within the corporate franchise and R&D plans and budgets, trade secret maintenance or defensive publications are preferred, and a shortage of patent practitioners and high PTO fees militate against extensive filings.
- Patentability is doubtful due to close prior art, statutory bars or other patent-defeating grounds.
- Inventorship and ownership problems can raise their ugly heads.
- Patent applications are often narrowed in scope, finally rejected by the PTO, or lost on appeals.
- Getting a patent and getting an enforceable patent are two different things—a patent is a slender reed, threatened with three dozens of invalidity grounds.
- "Only about 5% of a large patent portfolio" have commercial value (Emmett Murtha), i.e. the rest are mere paper patents, and hence hardly licensable for big money.
- The average effective economic life of a patent is "only about five years" (Emmett Murtha).
- Enforcing patents is a daunting and frustrating as well as an expensive and time-consuming task.
- For many patents, no or only limited coverage is obtained in foreign countries.
- Focusing on patents as measures of innovation or vehicles for technology transfer ignores the fact that they are often valueless or inadequate for commercializing viable products, absent associated, collateral know-how protected by trade secrets.

2. In corporate and institutional settings, and because patents do not "grow on trees," a more effective and reliable, promising and proven patent management practice to "harvest inventions" involves the following elements and steps:

- A simple, easy Invention Disclosure system (policy, procedure and forms),
- Close rapport with inventors—"hand-holding,"
- A MBW practice (Management by Wandering Around—Harvard Business Review),
- Periodic trips to R&D sites,
- Presentations on IPR topics to R&D personnel to create IP awareness,
- Distribution of IP bulletins to R&D personnel,
- Regular perusal of R&D's technical reports,
- Attendance at R&D meetings,
- Written procedures for cooperation between R&D and IP Departments,
- Placement of patent liaison people at R&D sites,
- A reasonable employment/ invention agreement with all R& D personnel,
- Review of invention disclosures in patent committee meetings,
- An inventor award or incentive system.

3. As regards the value of patents, there are many factors or considerations that play an important role in any valuation. Vastly different values may reside in broad, basic or pioneering patents versus narrow improvement or picture patents, that it is easy to design around. For competitive reasons, patent applications are filed very early after conception and reduction to practice and hence have little experimental support and cover technology in a mere embryonic stage. That is entirely different from a patent that covers a successful commercial product or process. This goes also for paper patents. Moreover, there is a significant difference in value between a patent that is strong and enforceable and a patent that is weak and of questionable enforceability. And of course values may vary widely from industry to industry. Also, in most patent transactions a package of patents (issued patents, pending applications, rights to apply for patents) is the merchandise, but the purchase price or royalty is not cumulative. Furthermore, a patent that has been upheld in court as valid, will significantly gain in value. And rare or non-existent in the advertisements and literature of the valuation and monetization service providers, are references to the indispensable exercise of due diligence in IP transactions which may take weeks or months and without which one may "buy a lawsuit" rather than an asset.

4. In a licensing context—and licensing out is what the value extraction and monetization mania is all about—the valuation or royalty-setting fundamentals can likewise not be ignored.

Contrary to common assumptions and misconceptions, it is not true that licensors can charge what the traffic will bear, licensors can recoup their R&D expenses, the cost of the development of a technology is a big factor, there are royalty standards within each industry to go by, etc. Indeed, there is a limit to what a licensor can charge and most often it is the licensee's economics, not the licensor's, that controls the royalty determination (Gordon Smith). And isn't there a 25/75% rule? Isn't licensee entitled to the lion's share because of the greater risk he/she carries, especially with less-than-fully developed technology? And above all, when it comes to royalties less is more and greed never pays off. In my corporate experience, several agreements turned sour because the royalties were too high, the profitability was not there and the deals could not be sustained in the end. On several other occasions, agreements had to be renegotiated for lower royalties for the same reasons. In other words, they were not viable win/win license agreements to begin with.

Actually, the cost to licensor of the development of the technology is not a factor at all.

See CONFUSED, page 21

CONFUSED, from page 20

The R&D costs of developing the technology are sunken expenses expended by the patentee/licensor whether or not it is licensed and, therefore, should not be considered in arriving at a suitable royalty. That is to say, the public's interest in buying a product is essentially unrelated to the cost of developing it (Tom Arnold, Martin Landis, Gordon Smith).

Anent royalty standards in industry and the figures often being bandied about as industry averages, John Romary called industry average royalty rates "folklore" and "suspect as a royalty-rate guide." He pointed out, for example, that "a 5% running royalty for a non-exclusive license helps very little in evaluating an exclusive license on different, but related technology and a 1.5% running royalty on technology that can be effectively designed around is equally unavailing in pegging the value of a pioneer patent critical to the competitor."

However, Romary allows as how such averages, though expressed as ranges, may provide additional data points, and he lists for consumer products 1-2%, chemicals and electronics 1-5%, computers 3-5%, pharmaceuticals 4-15%, with an overall range of less than 0.05% to over 20%. He also states that these figures are based on the net sales price of a non-exclusive license and that a "20 to 50 per cent premium" and "as much as a 300 per cent premium…in the pharmaceutical field" may be a reasonable average for an exclusive license.

Furthermore, we should not lose sight of Tom Arnold's "100 Factors Involved in Pricing the Technology License," tabulated and discussed in the "1988 Licensing Law Handbook." This is a handy checklist, even though not all factors play a role in a given technology license. He groups them under the rubrics of intrinsic quality, protection and threats of protection, values brought to the table by the licensee, IP portfolios and markets, competitive, risk, legal and regulatory considerations, and it is clear from his discussion that among the most important and weighty factors are: a) the stage of development of the subject technology (embryonic, early stage and untested v. tested and commercial); b) the strength of the IPRs (solid v. weak, easy to design around *vel non*); and c) the degree of exclusivity (exclusive v. non-exclusive).

Even in patent infringement litigation, the courts are guided in the damages phase by many factors that would have been considered relevant by the parties in a "hypothetical license negotiation." Witness the 15 Georgia-Pacific and 17 Honeywell/Minolta factors.

And the fact that many other operative clauses in a technology license have economic weight, as for example, payment structures and schedules, most-favored-licensee clauses, representations and warranties, etc. (according to Gordon Smith), needs to be kept in mind, so that royalty setting is not the first task in licensing negotiations but the last one, one to be tackled only after all the terms have fallen into place.

And would IP valuation and monetization gurus ever contemplate a royalty-free license that in my experience can also be much more beneficial and profitable in terms of goodwill and increased rate of purchasing of supplies and goods than exacting paltry royalties under a patent license?

5. As stated above, preachers of the gospel of value extraction and monetization focus on licensing IPRs for obvious reasons, overlooking however that much, much greater gains and profits can be achieved by protection of, and exclusivity for, a company's products and processes. Exploitation of IPRs through manufacturing and sales can be much more beneficial and lucrative than licensing-out.

Market exclusivity under IP protection is by far the primary and most important objective for all but a few of the biggest corporations. Entrepreneurs, start-ups, small and middle-sized companies would not last very long absent IP protection and market exclusivity. That is to say, such companies are completely dependent on IPRs for their technologies for continued survival in the market place. Licensing their IPRs would set up competitors and this is a valid reason behind the general reluctance to license-out. And pharmaceutical and biotech companies need IPRs and market exclusivity to protect their enormous R&D investments. A recent survey in the UK revealed that 80% of pharmaceutical companies and 88% of technology companies think that protecting their products against competition is vital and this reinforced the fact that patent protection lies at the heart of the development of new drugs and technologies (Marks and Clerk Newsletter, No. 1, 2002). Undoubtedly this is likewise true elsewhere.

As is well known, licensing normally carries little risk but also little reward. Royalty income at prevailing rates amount to at best a small percentage of net sales of licensed product, while markups on products sold under IP protection and market exclusivity could be much, much higher, by multiples, and may even reach a 1000% or more. And this is another reason for the innate reluctance to license-out IPRs. Interestingly, 97% of all patents are not licensed for this reason or because the technology they cover is not useful, feasible or marketable (Emmett Murtha).

6. The value extraction and monetization advocates can also be faulted for not factoring trade secrets into their calculations. Over 90% of all new technology is covered by trade secrets and over 80% of all license and technology transfer agreements cover proprietary know-how, i.e. trade secrets, or constitute hybrid agreements relating to patents and trade secrets.

As a practical matter, licenses under patents without access to associated, collateral know-how are often not enough to use patented technology, because patents rarely disclose the ultimate scaled-up commercial embodiments of products and processes. According to Homer Blair, "in many cases, particularly in chemical technology, the know-how is the most important part of a technology transfer agreement."

See CONFUSED, page 22

CONFUSED, from page 21

And Robert Ebish advises: "Acquire not just the patents but the rights to the know-how. Access to experts and records, lab notebooks, and reports on pilot-scale operations, including data on markets and potential users of the technology are crucial." This is good advice because very few patents cover fully developed technology and hence are easily licensable. Moreover, according to Melvin Jager, "Trade secrets are a component of almost every technology license…(and) can increase the value of a license…up to 3 to 10 times the value of the deal if no trade secrets are involved."

Yet it is even harder to value trade secrets, since it is difficult, if not impossible, to know when or if such a trade secret will be destroyed.

In this context it should be bemoaned that there is an unfortunate and unhelpful misconception about the interface between patents and trade secrets. Many a talk has been given at LES and other programs about the choice of patents versus trade secrets. For example, the series of LES Technology Transfer Seminars deal, *inter alia*, with the question: "When should I apply for a patent versus trade secret protection?" But patent and trade secrets are not incompatible and mutually exclusive but actually highly complementary and mutually reinforcing; in fact, they dovetail and can be integrated for optimal protection of innovation. There is no need to choose between them; notwithstanding the best mode and enablement requirements.

Patents can protect significant product inventions and trade secrets can cover volumes of associated, collateral know-how that does not belong in a patent specification and/or was developed after filing and can serve as a fall back position. Witness the recent decision in *C&F Packing v. Pizza Hut*, where the C&F patents on a manufacturing process for pizza sausage toppings were held invalid on summary judgement on on-sale bar grounds but their trade secrets on this process were held enforceable after trial and Pizza Hut had to pay $10.9 million for misappropriation.

7. IBM's and TI's royalty stream in excess of $1 billion annually under their open licensing policies is frequently held up as an example of how successful licensing can be. IBM, as is well known, was forced into open licensing by a consent decree with the Justice Department. I submit however that these are special cases that don't apply to entrepreneurs, start-ups, middle-sized companies and the biotech, chemical and pharmaceutical industries that are rooted in the empirical sciences, where a "patent factory" approach with invention disclosure output "on demand" and subsequent constructive reduction to practice by filing is not possible. Months and years of experimental work may be required in these industries and often conception doesn't exist until reduction to practice is accomplished, both being then simultaneous.

The value extraction outfits complain, and thereby rationalize their existence, that "business decisions end up being made by patent attorneys who may not understand the long-term commercial ramifications." However, what is really deplorable is that these outfits ignore the fundamentals of patent licensing law and practice.

Reprise: Color me confused, confounded —but also very dubious, incredulous and skeptical!

Karl F. Jorda
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SDMI, from page 15

apply copyright management technology to prevent reproduction. The Digital Performance Right in Sound Recordings Act of 1995 (DPRA) followed conferring rights of copyright owners to authorize the digital transmission of their works. The Digital Millennium Copyright Act of 1996 (DMCA) prohibits the distribution and manufacture of electronic equipment designed to circumvent technology whose purpose is to protect duplication of copyrighted works. Most recently, the No Electronic Theft Law (NET Act) states that sound recording infringements may be criminally prosecuted regardless of the matriculation of profits or commercial gain.

INDUSTRY CRITICISM

Dr. Leonardo Chiariglione, executive director of the SDMI, challenged an article by technology correspondent Eric Scheirer in November of 1999 that spawned mass criticism of the organization. Technology journalists believe that membership to the SDMI was accepted under duress in order to avoid costly litigation threatened by the well funded major label conglomerate if the manufacturers failed to comply. In addition, many analysts believe that the companies involved are determined to pull out of SDMI once the anti-piracy measures are instituted. As time goes by, the surmounting dues become nothing more than a temporary insurance policy for the companies involved. To delay litigation, these software and hardware manufacturers complied with the group's demands, knowing any security standards would take time to build and then be ratified among the membership. In the meantime, pre-security enabled units continued to be manufactured and distributed.

RECENT DEVELOPMENTS

The SDMI made the mistake of devising a contest whereby the general Net population was invited to "hack" into the recording industry's watermarking system and win $10,000. On October 12, 2000, Salon.Com reported that the SDMI's security system had been breached. A spokesperson for SDMI denied the reports, but according to sources, not one watermark resisted attack.

Dr. Chiariglione has since resigned from his position with the SDMI, and their website is no longer available. As he tapers his responsibilities, the SDMI is actively seeking a replacement. In the interim, the group continues to fall apart with more defection approaching. Recently, the leading manufacturer of processor chips for MP3 players severed ties with the organization.

APPARENT WEAKNESSES

The weaknesses of the SDMI system are commonplace within the technological and consumer markets. MP3Musicwire.net has reported the demise of the SDMI's efforts, and Business 2.0 continually predicts the failure of record company funded pay digital services such as Pressplay and MusicNet. In the *Felten v. RIAA* case, Professor Felten wanted to publish SDMI weaknesses at a USENIX conference, but the RIAA threatened litigation under the DMCA to silence him. However, competitive services such as Morpheus, Audiogalaxy and LimeWire continue to popularize peer-to-peer music services despite Napster's centralized server configuration.

STRATEGIC POSITIONING

No major labels have devised a proactive approach in planning for the future of digital music transmission and exchange. One of the major players, Sony, has invested a substantial portion of its research and development budget on its MP3 based technologies such as the CLIÉ PDA and the portable MiniDisc with downloading capabilities. Sony's latent promotion of the use and conversion of digital audio formats is a contradiction to their collective efforts to aggressively restrict the reliance on the technology. America Online has only recently become a major player in the RIAA because of its merger with Time/Warner. With combined efforts between its business units, AOL could seamlessly configure MP3 capabilities within its user interface by developing a business model that provides for the accounting of digital exchange among its millions of subscribers.

A progressive record company will defy the RIAA conglomerate and offer consumers MP3 files within the compact disc or as a download option. Computers, portable compact disc players, DVD players, and car stereos are examples of devices available to consumers to decode the compressed format. Record companies may have to offer the "pure" version of the music files to the consumers and let the chips fall where they may. If they successfully embed their identification through the utilization of a digital watermark or signature, the transmission and exchange will be traceable in the future.

CONCLUSION

Although the SDMI's efforts appear to be doomed, similar methods and programs are sure to develop in a desperate and reactive attempt to prevent copying. Music duplication has flourished since the introduction of consumer reel to reel tape recorders; however, cassette tapes and digital formats have only made the process more convenient and portable. In order for record companies to gain control of music file exchanges, they must create synergies with programmers, enhance their offerings to consumers, and offer incentives to comply with duplication restrictions.

Leon Tynes (JD '03) is from Oakland, CA. He has a BM in music from the University of Memphis and a MBA in Marketing and E-commerce from JFK University. He will pursue a career in the Music and Media Industry upon graduation.

PORTRAIT, from page 17

Intellectual Property program is very much a part of his drive to equip himself with the best education possible for his chosen area of service. His course selection at Pierce Law includes International Comparative Copyright and Trademark Law, Securities Regulation, Law and Biotechnology, Trademark and Deceptive Practices, Law of Motion Pictures, and an independent study with Professor Bill Henessey in traditional knowledge, genetic resources and folklore. This independent study concentrates in the area, which is the next frontier in global international intellectual property. He believes that with Pierce Law's reputation in intellectual property, it should be among the first law schools in the world to offer such a course.

Desire is a member of the Botswana Law Society, the Southern African Development Community Law Association, the African Society of International and Comparative Lawyers and is Legal Consultant for AU in Southern Africa. He resides in Botswana with his wife and four children. Asked what he thinks of the winter in Concord he says, "it is good for the books." We wish him well in his studies and work at and beyond Pierce Law.

Nancy B. Delain (JD '03) is from New York. She has an AB in Biological Sciences from Smith College and a MS in Technical Writing from Renselaer Polytechnic Institute. She plans to practice IP law upon graduation.

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