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Venture Capital and Patent Law: Practical Strategies for Patenting an Innovation

April 16, 2014
3:00 PM ET

Moderator

▶ **Andrew DiMeo, Sr, PhD**



Assistant Professor of the Practice &
Director of Industrial Relations
UNC/NCSU Joint Department of
Biomedical Engineering

Announcements

- ▶ The archived recording, presentation slides and resources will be available a few days after the webinar at:
<http://bmes.org/elearning>
- ▶ You may submit questions throughout the webinar by using the online chat function. Your submitted questions will be addressed after the speaker presentations.
- ▶ Please take a few minutes to complete the brief survey following the webinar to provide us with your feedback.



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Polling Questions

- ▶ Which of the following best describes you?
 - Student
 - Postdoctoral fellow
 - Faculty
 - Industry professional
 - Other

- ▶ How much experience do you have with patents?
 - Expert
 - Very familiar (have drafted and/or analyzed patents)
 - Somewhat familiar (have reviewed patents)
 - Limited experience
 - None

- ▶ Which best describes your interest in patents?
 - I would like to protect my inventions
 - I would like to start or grow a company based on patentable inventions
 - I would like to grow my existing patent portfolio
 - I am worried about patents held by others
 - I would just like to learn more about patents/patent law

Speaker

▶ **Clark Wilson, JD**



Partner, Gardner Groff
Greenwald & Villanueva PC

VENTURE CAPITAL AND PATENT LAW: PRACTICAL STRATEGIES FOR PATENTING AN INNOVATION

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Clark A.D. Wilson - Background



- Partner – Gardner Groff Greenwald & Villanueva PC (Atlanta, Ga)
- Previously In-house Patent Counsel for Novartis AG
- Focus practice on patent application prosecution and strategic opinions
- Technical focus on medical device innovations
- *M.Eng.* in Bioengineering, U. of Maryland in 2013
- Author of MedicalDevicePatentCounsel.com blog
- Board Certified in IP Law by the Florida Bar Association
- Georgia *SuperLawyers*® Rising Star in IP Law, 2013 and 2014

Patents: The Basics 101

A patent IS:

- A right to exclude others from making, using, offering for sale, or selling the invention throughout the USA or importing the invention into the USA
- Limited to enforcement within its jurisdiction (e.g., USA patent for USA)

A patent is NOT:

- A right for the inventor to make, use, or sell your invention.

The different types of patents include:

- Utility – Functional: apparatus, composition, method, system
- Design – Ornamental: how it looks

A patent lasts for:

- 20 years from application filing (Utility); or 14 years from grant (Design)

First-Inventor-To-File: the new standard under the AIA

Patents: Patent Pending?

Patent Pending

- Describes a patent application that is not abandoned , and not yet issued
- No rights to enforce until issuance into a patent
- Right to file continuation applications, CIP's and divisionals

Non-Provisional Patent Applications include:

- Detailed description of the invention preferred embodiment; Drawings
 - Show that the invention is enabled and reduced to practice at filing
- Claims: the elements that are patentable; these determine infringement
 - Must be Novel + Not Obvious
- Will be published 18 months after filing, and is examined by Examiner

Limitation: must file an application within 12 month Grace Period (US only)

Patents: Provisional Patent Application

Provisional Patent Applications:

- 12 months *PATENT PENDING*; Less expensive up-front cost
- Informal: no claims, no required format, not examined
 - Include as much detail as understood or anticipated
 - Cover sheet provisional? Scientific paper with PTO cover sheet
- Early priority filing date for later formal patent application if sufficient
 - Must support eventual allowed claims in issued Non-prov
- Good option for quick early filing to ensure First-Inventor-To-File
- Never examined, so cannot become issued patent without Non-prov

Patents: Costs

USPTO filing fees

- About \$1000 for Non-prov; \$260 for Provisional
- 50% discount for small entity (<500 employees)
- 75% Micro-entity Discount:
 - Small entity; and
 - Named on 4 or less patent applications & less than ~\$150k/yr; or
 - Applicant who's employer is an "institute of higher learning"

Attorney Fees

- Varies depending on experience/size/location

Patents: Invention, Conception and What's Next

... I think I invented something. What should I do first?

- Preliminary Patent Searching: USPTO.gov, Google Patents, FreePatentsOnline.com, or just Google
 - Identify patents/applications/public disclosures that describe similar technology
 - Try to identify structural/functional distinctions between your invention and the patents/applications
 - Perhaps make a chart explaining how yours is different (see below).

USPN No. 7,654,321	My Invention
Shows and describes A and B removably coupled to one another	A and C permanently mount to one another
Shows and describes X and Y being movable along a linear rail	X and Y are movable along/within a circular channel
Describes X and Y being constructed only from magnetically-attracted materials	X and Y are formed from stainless steel

Patents: Invention, Conception and What's Next (cont'd)

If you think there is enough to pursue a patent, consider:

- Preparing a provisional patent application yourself; OR
- Contacting a patent attorney to help with:
 - Performing a formal professional patent search; and/or
 - Preparing a patent application (provisional or non-prov)

What does a Patent Attorney need from me?

- Details about your invention
 - How/why you came up with this invention?
 - What currently exists in the industry and why it is lacking
 - Detail about the structure and function of your invention
 - If you performed a search already, explain distinctions between your invention and the search references.

Patents: Invention, Conception and What's Next (cont'd)

Not Patent Pending yet. Can I publish?

- Reminder: 12 month grace period for US filing under AIA:
 - Publication ok if: the disclosure was made by the inventor or joint inventor or by another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor, OR
 - The subject matter disclosed had, before such disclosure, been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor.
- Public disclosure prior to filing application will bar international patent filing.
- Thus, if international protection is desired, then: Invent → File Provisional Application → Publically Disclose → File International Application
- If no international, then make sure you file a patent application within 12 months from first publication

Patents: Application Examination 101

- Parts of Application
 - Specification + Drawings
 - Claims
- Application reviewed by a designated Patent Examiner
 - At minimum one year process
 - Most receive at least one Rejection
 - At least one opportunity to amend or argue
 - Can appeal to PTO Patent Appeal Board
- If allowed → Registration
 - If utility then 3 maintenance fees: 3, 7 and 11 year



THANK YOU!

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Speaker

▶ **Rick Shoop, JD, PhD**



**Patent Counsel
Partner, ShayGlenn LLP**

Part II: Patent Strategy

Rick Shoop, JD, PhD.

Partner, ShayGlenn LLP

Rick@Shayglenn.com

Rick Shoop - Background

- * Partner – ShayGlenn, LLP, San Francisco Bay Area
- * Education: University of California, Berkeley (JD), University California, San Diego (Ph.D, Neuroscience), University of Virginia (MSE, Biomedical Engineering), Duke University (BSE, Biomedical and Electrical Engineering)
- * Patent prosecutor, specializing in formulating and executing strategic patent strategies for start-up and mid-size medical device and biotechnology companies.
- * Recent Accolades: Top Attorney – Northern California’s Outstanding Young Attorney (2013), “Super Lawyers” – Rising Star 2013

Patents are Assets

* Good reasons to get a patent

- * Intellectual property *is* property
- * Advantage over competition
- * Create transferrable asset

* Bad reasons to patent

- * Patents don't give you freedom to make/use/sell
- * Patents are “negative rights”

* Match your patent strategy to your needs

- * As an individual, a start-up company, or as a licensor

Determining the Type of Protection You Need

- * Utility Patents, Design Patents, Copyright and Trade Secrets
 - * Consider the best fit to your technology
 - * Provisional Patent first?
 - * Multiple Patents or a single patent?
 - * International coverage – PCT or direct?
- * Special considerations for Medical and Biomedical Fields

Patents are Regional

- * **Filing Globally**

- * Patent Cooperation Treaty (“PCT”) filings
- * Direct national Filings

- * **Considerations**

- * Market
- * Competitors
- * Investors
- * Manufacturing

- * **Popular Countries for Medical Devices**

- * US, EU (Germany, UK, France), JP
- * BRIC countries

Timelines

- * When Should you file your patent application?
 - * File as soon as possible and before public disclosure
- * How long does it take to get a patent issued?
 - * “Typical” utility patent timeline – 3-4 years in the US
 - * Patents can be expedited in the US and in other countries
 - * Patent term
- * Special notes on Provisional Patent Applications

Cost of Patenting

* Total Price of Patent

- * Lifetime cost estimate \$20-50K(+) per US patent
- * Assume equivalent cost per country

* Patent Expenses are tranced

- * US Costs: preparation, filing, prosecution, maintenance
- * Costs of PCT: filing, limited responses
- * Prosecution costs (US and outside of the US): filing, prosecution, annuities

* Enforcement costs

Enforcement of Patents

- * Patent Marking
 - * “Patent Pending” and “Patented”
 - * virtual marking
- * Monitoring for infringement
- * Dealing with Infringers
 - * In the US
 - * Outside of the US

Conclusion and Thanks!

- * Patents are Assets
- * Have a patent strategy and match your patent strategy to your goals

Contact information

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QUESTIONS?

BMES Activities and Events

▶ 2014 Professional Development Webinars

<http://bmes.org/elearning>

- Lobbying for BME: July 2014
- Technology in the Classroom: November 2014

▶ BMES Regional Events

<http://bmes.org/northeastconference>

- BMES Northeast BME Career Conference:
 - April 25, 2014 at Northeastern University, Boston, MA

▶ BMES 2014 Annual Meeting

<http://bmes.org/annualmeeting>

- BMES Annual Meeting: October 22–25, 2014 in San Antonio, TX
- Abstract Submissions Deadline: April 23, 2014