IP Awareness Seminar

Presented by:
Office of Innovation & Entrepreneurship
March 3, 2014
Meet the OIE
EAS Building, Floor 2

David Peacock
DIRECTOR – IP MANAGEMENT
Building: EAS Building, Room 210
Phone: 201.216.5242
Email: dpeacock@stevens.edu

Dr. Werner Kuhr
PROFESSOR & DIRECTOR – TECHNOLOGY COMMERCIALIZATION
Building: EAS Building, Room 209
Phone: 201.216.3509
Email: werner.kuhr@stevens.edu

Dr. Christos Christodoulatos
PROFESSOR & VICE PROVOST OF INNOVATION & ENTREPRENEURSHIP
Building: EAS Building, Room 212
Phone: 201.216.5675
Email: christod@stevens.edu

Sandra Furnbach
PROGRAMS MANAGER
Building: EAS, Room 212
Phone: 201.216.8186
Email: sfurnbac@stevens.edu

Greenberg Traurig – LLP (Patent Counsel)
Office of Innovation and Entrepreneurship
“A one-stop shop for technology development, protection and commercialization”
MISSION
Office of Innovation and Entrepreneurship
Structure and Functions of the new Office of Innovation and Entrepreneurship

Provost

Office of Innovation and Entrepreneurship

Vice Provost

Education Integration of I&E in the Curriculum

Faculty /Students Entrepreneurship Support

Technology Licensing, Spin offs
Today's Lesson

Office of Innovation and Entrepreneurship
IP in the News

Office of Innovation and Entrepreneurship
Defining Intellectual Property

What is IP?

- Patents
- Copyrights
- Trademarks
- Trade Secrets

Should we publish or protect?
Where is the IP?

NEW PRODUCT INTRODUCTION

PATENTS
- Shape of chair
- Materials in chair
- Computerized back stress relief
- Method of assembly

COPYRIGHTS
- Chair marketing literature
- Chair design CAD
- Chair stress relief software

TRADE SECRETS
- Metal brazing temperature

TRADEMARKS

Chair Model No. 042940
Stress reliever ©

Office of Innovation and Entrepreneurship
Does it Pass These Requirements?

**Useful**
- Can it be used?
- (It does not have to be better)

**New**
- Was it ever done before in its entirety?
  (Search! Search! Search)

**Non-obvious**
- Is it an obvious variation of prior art?
- Does it pass the “So What Test”?
- Must develop a Value Proposition
- Clearly articulating (Layman terms)
  - Value e.g. reduce cost
  - Benefit e.g. faster, more efficient
Critical elements of a patent

- Specifications
- Drawings
- Preferred Embodiment
- Claims
Within 1 year of publication
Within 1 year of public use
Within 1 year from an “offer to sell”

IF “ready for patenting;” i.e.,
1. Reduced to practice, OR
2. Described sufficiently to allow a person skilled in the art to practice the invention

Time Restraints (For filing a Patent)

Office of Innovation and Entrepreneurship
IP/Patent Process at Stevens

Inventor Idea

Inventor

OIE – Office of Innovation & Entrep.

Patent Committee

Patent Attorney

External Feedback

2 – 4 Years US PTO

Issued Patent

Inventor Incentives

Office of Innovation and Entrepreneurship
### How much does a US Patent Cost?

<table>
<thead>
<tr>
<th>USPTO - Basic Fees</th>
<th>Avg. Approx.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Filing/Basic National Fee</td>
<td>$1,000</td>
</tr>
<tr>
<td>- Claims</td>
<td>500</td>
</tr>
<tr>
<td>- Examination</td>
<td>500</td>
</tr>
<tr>
<td>- Issue Fee</td>
<td>1,500</td>
</tr>
<tr>
<td>- Appeal Fees/Office Actions</td>
<td>4,000</td>
</tr>
<tr>
<td>- Maintenance</td>
<td></td>
</tr>
<tr>
<td>3 Year</td>
<td>1,000</td>
</tr>
<tr>
<td>7 Year</td>
<td>2,500</td>
</tr>
<tr>
<td>11 year</td>
<td>4,000</td>
</tr>
</tbody>
</table>

**Attorney Fees – Prep Appl & Prosecution**

- 10,000

**Total**

- $25,000

*Office of Innovation and Entrepreneurship*
What’s New in the USPTO:

Effective Date: March 16, 2013.

“First to File”

Vs.

“First to Invent”

America Invents Act

Office of Innovation and Entrepreneurship
What’s New: Details, Details,

1. **“First-Inventor-to-File” system**
   **Effective Date:** March 16, 2013.

2. Post-grant procedure – includes post-grant review request that may be filed with PTO within 9 months of patent’s issuance, followed by *inter partes* reexamination request that may be filed after this timeframe.
   **Effective Date:** March 16, 2013.

3. Third parties may submit prior art patents or publications, PTO or court statements by the applicant to patent examiner during pendency of patent application.
   **Effective date:** One year after enactment of the Act, and applicable to any patent application, regardless of its filing date.

4. Prior Commercial Use Defense – prior user rights would apply to any technology, with a showing of prior commercial activity.
   **Effective date:** Will apply to any patent issued on or after the date of the enactment.

5. Allows assignees (e.g., universities) to file patent applications and eliminates the current requirement that an individual inventor be listed as the applicant.
   **Effective Date:** Applies to applications filed on or after September 16, 2012.

6. Eliminates “failure to disclose the best mode” as a basis for invalidity of an issued patent.
   **Effective Date:**
   Applies to cases commenced on or after September 16, 2011.
Inventions made by student(s) belong to the student(s)

Exceptions:
- Employed by Stevens
- Research Project

Office of Innovation & Entrepreneurship (OIE) will assist/support student in seeking patent protection
- Documentation & Patent Attorney
- Preparation Invention Disclosure Form

Student may assign invention to Stevens (SIT Policy)
- Stevens Patent Committee – Accept / Reject
- Stevens pays for patent prosecution
- Inventors/students receive 33% net royalties
Stevens Invention Disclosure Form

http://www.stevens.edu/entrepreneurship/guide/forms.html

**Definition** – a written report describing an invention in sufficient detail to permit the patentability and commercial prospects of the invention to be evaluated

- Inventor Name(s)
- Date
- Title of Invention
- General Description of Invention
- Utility – useful purpose
- Novelty – difference from known uses
- Advantages
- Limitations
- Proof of Concept – experimental verification
- Prototypes/Samples
- Publications
- References
- Sponsorship
- Possible means of commercialization – markets & applications
- Potential partners / licensees
- Signatures

Stevens Invention Disclosure Form

http://www.stevens.edu/entrepreneurship/guide/forms.html

Office of Innovation and Entrepreneurship
• Google Patent Search
  http://www.google.com/patents

• United States Patent & Trademark Office - USPTO
  http://patft.uspto.gov/

• Literature and Patent Search
  http://www.scopus.com/home.url

• Frost & Sullivan – Market Research
  http://www.frost.com/prod/servlet/frost-home.pag
Disclosures to Patent Committee versus Approved for Prosecution

*Approved for Filing - AUTM Trend ~60%
Issued Patents, FY 2009 - 2014
IP Portfolio - Cumulative

- Wireless: 5
- Info. Assur./Cyber Sec.: 19
- Nanotechnology: 6
- Bio Tech (Rx, dev's, sys.): 27
- Environ. Systems: 12
- Sensing Devices/ Tech.: 17
- Mat 'ls Man. & Proc.: 21
- Communications: 4

Patents Statistics: Total IP 111, Items (45 Issued/ 66 Pending)
Top 10 Companies

2012 US Patent Recipients

International Business Machines Corp.
Samsung Electronics Co. Ltd.
Canon K.K.
Sony Corp.
Panasonic Corp.
Microsoft Corp.
Toshiba Corp.
Hon Hai Precision Industry Co., Ltd.
General Electric Co.
LG Electronics Inc.
Top 10 Universities

2011 US Patent Recipients

Office of Innovation and Entrepreneurship
SIT – IP Deals

1) Bio-medical devices
   • Back pain diagnosis
   • Endotrachial & Capnography
   • Spinal/Prosthesis/Goniometers
   • Vein Locators
   • In-Vitro Diagnostics
   • Multi-Lumen Thoracic Catheters
2) Underwater Acoustic Sensors
3) Multi-Band Radio Communication
4) Mass Spectrometry
5) AntiMicrobial Coatings

Office of Academic Entrepreneurship
SIT – IP Deals

6) Cancer Inhibitors
7) Flexible Superconductors with Graphene
8) Nano Microgels / Drug Delivery
9) Mathematical Interface / Problem Solving Solutions
10) Detecting Text Deception
Technology Commercialization

Goals
1. Identify *protected technologies* that have commercial potential
2. Find a source of *money* to create a company or license the technology
3. Find the *right people* to develop the technology commercially
4. Balance *risk/reward* to make the right connections and generate revenue and respect!
Technology Commercialization

1. Invention
   
   2. Document & Disclose
      
   3. Technical Evaluation
      
   4. Business Assessment
      
   5. Competitive Evaluation

Invention starts everything!

Academic Publication

Commercialization

Patent Process
Oliver Wendell Holmes Jr.
“ I wouldn’t give a fig for the simplicity on this side of complexity, but I would give my right arm for the simplicity on the other side”

Thomas Alva Edison
“to invent, you need a good imagination and a pile of junk”

Curtis Carlson – CEO SRI International
“innovation that happens from the bottom up tends to be chaotic but smart. Innovation that happens from the top down tends to be orderly but dumb”

Office of Innovation and Entrepreneurship