

Technology Innovation Challenge

UNIVERSITY OF
Massachusetts Amherst

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presented by

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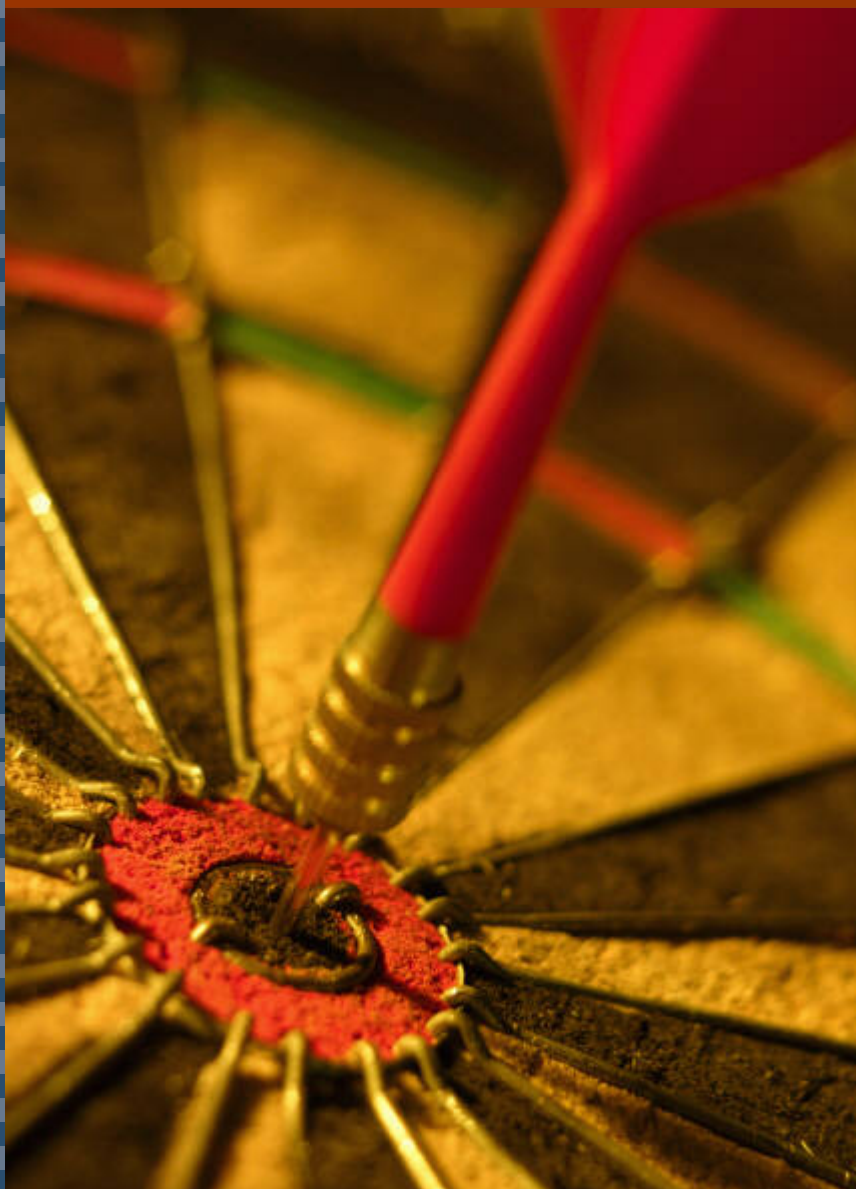
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Desired Outcomes for Today



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- **Intellectual Property Overview**
- **Building an Intellectual Property Toolkit**
- **Reducing Risks**
- **IP for Start-Ups**
- **Wrap up**

Intellectual Property Overview



Overview



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- **Intellectual Property (IP) rights**
 - “Intellectual” = inventions and other thoughts, ideas or intangible creations
 - “Property” = legal right to control
 - i.e. exclude others from using

Overview *(cont)*



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- **Why this matters:**
 - IP rights allow *control* over what differentiates one technology-focused company from another
 - Hardware designs
 - Software
 - Marketing image
 - Ability to get things done

Intellectual Property Tools



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- **Most common IP tools**
 - Patents, copyrights, trademarks, and trade secrets
- **Each tool gives the right to *exclude***
 - **Patent:** *exclude* use of an invention
 - **Copyright:** *exclude* use of a creative work
 - **Trademark:** *exclude* use of a “mark” in way likely to confuse customers
 - **Trade secrets:** *exclude* use of secret ideas or other business information wrongfully obtained

Common Misconception

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- **Right to *exclude* does not mean that you have the right to *use***
- **Most IP strategies have an offensive and a defensive component**

Ways to Use IP



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- **Offensive**

- Leverage Innovation*

- **Block competition in product sales**
- **Support joint ventures or other cooperative arrangements**
- **License or sell IP**
- **Marketing advantage**
- **Increase corporate value for buyout, spinouts or investments**

Ways to Use IP

- **Defensive**

- Freedom to Innovate*

- **Cross license**
 - **Formal**
 - **Informal**
- **Blocking others from patenting**
- **Promote awareness of IP risks**
- **Increase corporate value for buyout, spinouts or investments**



Building Your IP Tool Box



Building Your IP Toolbox



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- **Costs**
 - Direct monetary costs
 - Indirect costs (e.g. opportunity cost of diverting creative individuals)
 - Vary widely among different types of tools
- **Timing**
 - Cannot create property right in an idea in public domain
 - IP tools must be created before needed
 - Can be critical for securing protection

Building Your IP Toolbox – Patents



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- **Patents**
 - **Procedure**
 - **Application**
 - **Examination by Patent Office**
 - **Issue**
 - **Maintenance**
 - **Direct costs: \$25K+ over patent's life (20 years)**
 - **Patent Office fees**
 - **Attorney fees**
 - **Indirect costs**
 - **“Portfolio management”**
 - **Inventors should work with patent attorney**

Building Your IP Toolbox – Patents *(cont)*



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- **Patents**
 - **Timing**
 - **Application must be filed before idea becomes part of public domain**
 - **Public Domain (as defined in Patent Law)**
 - **Relative to time of invention**
 - » **Invented by someone else**
 - » **Publicly known or used**
 - **Relative to filing of patent application (1 year grace period for US patents)**
 - » **Published**
 - » **Sold or offered for sale**

Building Your IP Toolbox – Copyrights



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- **Copyrights**
 - **Procedure**
 - **Rights arise when “work” is “fixed” in a tangible medium**
 - **Registration required to enforce copyright**
 - **Registration increases chance of recovery**
 - **Direct costs**
 - **Typically < \$1,000**
 - **Registration fees**
 - **Attorney fees**

Building Your IP Toolbox – Copyrights *(cont)*



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- **Copyrights *(cont)***
 - **Indirect Costs**
 - **“Portfolio management”**
 - **Timing**
 - **Registration can take place at any time**
 - Advantages if registration completed before infringement begins

Building Your IP Toolbox – Trademarks



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- **Trademarks**
 - **Procedure**
 - **Rights can be created through use of mark**
 - **Registration can create rights before use**
 - **Registration is required to enforce mark in federal court, but not state courts**
 - **Direct costs**
 - **Registration costs on the order of \$1,000 if unopposed**

Building Your IP Toolbox – Trademarks *(cont)*



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- **Trademarks**
 - **Indirect costs**
 - **Pick distinctive name**
 - **Must use trademark consistently to avoid waiving rights**
 - **Timing**
 - **Registration can be made at any time after forming intent to use mark as trademark**

Building Your IP Toolbox – Trade Secrets



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- **Trade secrets**
 - **Procedure**
 - Physical measures to preserve secrecy
 - Legal measures to preserve secrecy
 - **Direct costs**
 - Very low – no registration
 - **Indirect costs**
 - Ongoing costs of physical and legal security
 - Administrative costs in tracking who received trade secrets
 - Loss of opportunities

Building Your IP Toolbox – Trade Secrets *(cont)*



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- **Trade secrets *(cont)***
 - **Timing**
 - **Must start efforts while information is secret**
 - **Must maintain efforts for so long as information remains secret**

Reducing Risks



Reducing Risks – Patents



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- **Damage awards for patent infringement can be millions of dollars**
- **Patents may be infringed unknowingly**
 - “Patent clearances” can reduce risk
 - Clearances should be conducted early enough to allow product design changes
- **Additional penalties for willful infringement**
 - Reduce risk through competent opinions of counsel

Reducing Risks – Patents *(cont)*



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- **“Challenges” to patents are possible**
 - Document invalidity
 - Reexamination
 - Declaratory judgment litigation

Reducing Risks – Copyrights



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- **Damages can be substantial, particularly for infringement of copyright in software or products widely distributed**
- **Copyright infringement requires affirmative act (copying)**
 - **Reduce risk through training and awareness**

Reducing Risks – Copyrights

(cont)



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- **Risky scenarios**
 - **Information on web**
 - **Determining whether permission has been given to copy**
 - **Software compatibility and interoperability**
 - **Line between expressive work and functional attributes blurred**
 - **Interfaces required for compatibility or operation not usually protected by copyright**
 - **Limited, but ambiguous, license**

Reducing Risks – Trademarks



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- **Damages can be significant**
 - If you are found to infringe, you must prove profits from sales of products bearing infringing mark were not result of infringement
- **Trademark clearances**
 - Identify similar marks already in use
 - Registered marks
 - Common law marks
 - Risk assessment
 - Likelihood use will be “confusingly similar”
 - Likelihood use will dilute “famous mark”

Reducing Risks – Trademarks

(cont)



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- **Register marks when you form intent to use**
- **Use marks of others appropriately**

Reducing Risks – Trade Secrets



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- **Reduce situations in which you agree to obligation of confidentiality**
 - Do not accept confidential information if not needed
 - Only sign non-disclosure agreements if reasonable
 - Use confidentiality clauses sparingly
- **Define scope of obligation**
 - What information is subject to obligation
 - What actions are permitted/prohibited

Reducing Risks – Trade Secrets *(cont)*



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- **Develop proof**
 - **Document and track confidential information you receive**
 - **Limit number of people with access to confidential information**
 - **Train people with access to prevent inadvertent use of information**
 - **Do not expose product developers/creative staff to outside confidential information**
 - **Document independent development**

IP For Start-Ups



Startup Life Cycle

Conception

Development

Launch

Funding

Liquidity
Event



Conception

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- **Fewest resources to devote to IP tools, but time when much IP is being generated**
- **Most investment is ahead of you**
 - **Important time to know if you have the right to use ideas**

IP on a Limited Budget

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- **Limit scope based on non-legal factors**
 - Existing competitors
 - Approaches that were tried and failed
- **Use lower cost IP tools**
 - Trade secrets
- **Be selective**
 - **Offensive**
 - Focus on what is new and key to your business
 - **Defensive**
 - Focus on those most likely to be disrupted

Be Selective



US005107620A

United States Patent [19]
Mahan

[11] **Patent Number:** 5,107,620
 [45] **Date of Patent:** * Apr. 28, 1992

- [54] **ELECTRIFIED TABLE CLOTH**
- [76] Inventor: **Richard E. Mahan**, 14027
 Brownwood St., #3, Houston, Tex.
 77015
- [*] Notice: The portion of the term of this patent
 subsequent to May 9, 2006 has been
 disclaimed.
- [21] Appl. No.: **518,429**
- [22] Filed: **May 3, 1990**
- [51] Int. Cl.³ **H05C 3/00**
- [52] U.S. Cl. **43/112; 43/98**
- [58] Field of Search 43/112, 98, 107, 121;
 361/232
- [56] **References Cited**
- U.S. PATENT DOCUMENTS**
- 4,756,116 7/1988 Cutter 43/112
- 4,827,874 5/1989 Mahan 119/61
- 4,869,015 9/1989 Murakami 43/112
- 4,949,216 8/1990 Djukastein 361/232
- FOREIGN PATENT DOCUMENTS**
- WO8803754 6/1988 PCT Int'l Appl. 43/112
- 597751 4/1978 Switzerland 43/112

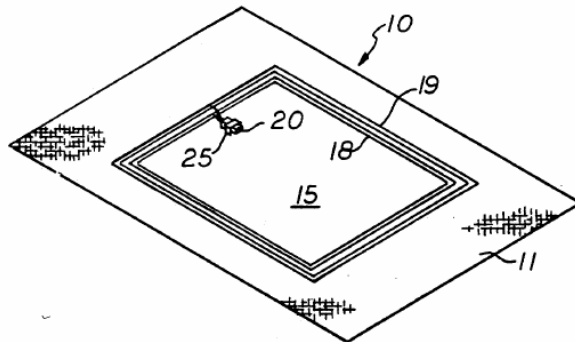
Primary Examiner—Richard K. Siedel

Assistant Examiner—Chuck Y. Mah
 Attorney, Agent, or Firm—Neal J. Mosely

[57] **ABSTRACT**

An electrified table cloth for preventing crawling insects from gaining access to the consumer's food or drink comprises a cloth formed of electrically insulated material which has at least one pair of parallel electrically conductive strips secured to the edge or border of the cloth to completely encircle the cloth and which are connected to a low voltage DC battery also secured to the cloth. The strips of electrical conductive material are spaced apart sufficiently to normally prevent completion of a circuit across the strips and for completion of a circuit across said strips through an insect's body as the insect attempts to traverse the strips when crawling across the edge of the cloth. The current passing through the insect's body is sufficient to produce a sensation which will discourage further travel across the edge of the cloth. A consumer who may come into contact with the strips will usually not feel the current and, even if the consumer is wet, the current will produce only a slight tingling sensation. The electrical apparatus may also be provided in kit form to be installed on table cloths by the consumer.

9 Claims, 1 Drawing Sheet



Electrified Table Cloth

(not every innovation is worth protecting)

Provisional Patents

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- **Different than an ordinary patent**
 - Not examined
 - Claims not required
 - No special format required
 - Expires in 1 year
- **Benefits**
 - Establishes a filing date
 - Can be lower cost
- **Drawbacks**
 - Only establishes a filing date for what is fairly described

Do It Yourself?

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- **Permissible**
- **Benefits**
 - Lower cost
- **Drawbacks**
 - Opportunity cost
 - Quality
- **Half and Half**
 - Effective working relationship with professional advisors may allow you to provide inputs that reduce, but not eliminate need for professional services

IP is an Art and a Science

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Development

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- **May hire employees or consultants**
 - Employment agreements to take ownership of IP and ensure confidentiality
 - Consulting agreements – may be even more important than employee agreements
- **May generate more IP**
- **May need to disclose ideas**
 - File patent applications, at least provisionals
 - Before disclosure is better
 - U.S. has one year grace period, so after is possible
 - Use NDA's, if appropriate
 - What about investors?

Launch

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- **Definite disclosure of ideas**
 - Should have offensive IP strategy in place
 - Trade secrets may lose effectiveness
- **May be first opportunity for competitors to evaluate your product for infringement**
 - Should have ideas about defensive strategy
 - Key point for “willfulness”

Funding

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- **Investors care about:**
 - **Likelihood that you have a sustainable advantage**
 - Intellectual Property is a good indicator
 - **Risk that their money will be wasted fighting over infringement of IP**
- **Degree of certainty required depends on amount and characteristic of investment**
 - **Smaller dollars and higher overall risk, less rigid**
 - **Often will accept plan and process being followed, without requiring protection**

Funding *(cont)*

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- **Amount done before funding versus done after can affect:**
 - Length and cost of diligence period
 - Percentage of ownership you give away

Liquidity Event

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- **Competitors will take notice**
 - **Defensive IP strategy should be in place**
- **Greater opportunity to fund IP: Backfill**
 - **Convert provisionals to ordinary applications**
 - **File patents on inventions disclosed within the grace period**
 - **Patent new insights: picket fence approach**

Wrap-Up



Wrap Up



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