EE/CpE 423
Senior Design
Fall 2004
Class 3 – 9/14/04
Agenda

• Status and deliverables

• Patents, copyright, trade secrets, IP and technical business ethics
Senior Design Tasks – Fall ‘04

- Identify project
- Form group
- Select advisor
- Develop project proposal
- Publish project proposal
- Develop final design report
- Submit parts list, final design report
- Oral/slide presentations
- Weekly status reports

9/1/04 10/1 11/1 12/1 1/1/05

Today
Today’s Deliverable:

http://www.ece.stevens-tech.edu/sd/material/Project_advisor_form.doc

A working project title is fine

Forming a group to commit to an idea is the first priority

Finding an advisor to work with you is your next priority

A paragraph to a page description is sufficient at this stage
# Senior Design Groups/Projects

<table>
<thead>
<tr>
<th>Group</th>
<th>Title</th>
<th>Members</th>
<th>Advisor</th>
<th>Sponsor</th>
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<tbody>
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<td>1</td>
<td>Robotic Landmine Detection</td>
<td>Mumma, Peart, Castro,</td>
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<td>Poulos, Khan</td>
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<td>O’Neill, Hetherington,</td>
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<td>Damato, DeLuca</td>
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Now that you’ve formed a group...

- Weekly reports due Monday by Noon
  - Use template provided to ensure consistent format:
  - Template is on Senior Design web site
  - Team leader is responsible for submission of weekly report
Now that you’ve formed a group…

• Group Effectiveness Survey
  – Use template provided to ensure consistent format:
  – Template is on Senior Design web site
  – EACH group member must submit survey each week
Now that you’ve formed a group...

- Each group will have a WebCT private discussion group, if you want to use it to coordinate group activity:
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- Patent
  - Describes a process, method, apparatus to perform a function that is:
    - Useful – it must *do* something
    - Novel – no one may have described it before
    - Non-obvious to “a person of ordinary skill in the art” – “I could have thought of that!”
  - 20 year protection from filing of idea with US PTO
  - Prevents others from using your ideas
  - Specification and Claims

- Copyright
  - Protects the *expression* of original work by the author, rather than the work itself
  - Normally used with literary, dramatic, musical, artistic, and some other intellectual works
  - Gives copyright owner exclusive right to distribute, perform, display, etc., work

- Trademark
  - A word, symbol, or device used in trade (business) to indicate source of product or service, to distinguish it from others.

- Trade secret
  - Unpublished ideas, documents, processes, procedures, recipes, …, used by a company in their business
Tell the world
Publication of idea may be OK
Publication of idea is a really bad idea

PATENT PROCESS

- The Idea!
- Record in notebook
- Brief write up of idea
- Send to your patent attorney
- Preliminary filing
- Final filing
- A few years
- PTO “Office Actions,” Amendments, etc.
- <=1 year
- Study of prior art, patentability
- Patent is granted
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- A few years
- Tell the world

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Protecting IP

- Employee Confidentiality Agreements:
  - “We will sue you if you talk”

- Non-Compete Agreements
  - “What you learned here stays here” – pre-nuptials for the workers

- IP Assignment Agreements:
  - “We own your every waking thought. Maybe your dreams, too”

- Non-Disclosure Agreements (NDA):
  - “Forget what we told you when you leave the building”
Technical Business Ethics

- Extrapolating from open literature
- Competitive assessment
- Probing for information at trade shows, conferences
- Reverse-engineering
- Software disassembly
- Dumpster-diving
- Hacking into competitor’s systems