EE/CpE 423
Senior Design
Fall 2014
Class 4 – 9/16/14
Agenda

• Time line
• Group Status
• IP discussion
• Other Senior Design logistics
Senior Design Tasks – Fall ‘14

- 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
- Effectiveness surveys
- Weekly status reports

Timeline:
- 8/26/14
- 10/1
- 10/14
- 11/1
- 12/1
- 12/2
- 1/1/15

Today

EE/CpE423:
Senior Design
Fall 2008
Project Status

As of September 15, 8 pm:

• 14 groups have formed (expect ~3-4 more)

• 52 students are in groups (12 more to form or join groups)
Now that you have the greatest project idea …

• How do you protect it?

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    • 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
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Publication of idea is a really bad idea
Patent is granted
Tell the world

Patent Process

The Idea!
Record in notebook
Brief write up of idea
Send to your patent attorney

Provisional filing
Final filing
A few years

Study of prior art, patentability

PTO “Office Actions,” Amendments, etc.
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Tell the world
Patent Process

- Implications for Senior Design

- What constitutes “publication?”
  - Web site
  - Class presentation
  - *Unrestricted* discussion with *anyone* other than co-inventors, attorney
  - Distribution of written materials about idea
  - Selling a product that incorporates idea

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A typical patent

• Title, inventor, number, etc.
  – Like a title page of your report

• Illustrations
  – To show graphically what is invented, because a picture is worth at least 1000 words

• Specification
  – A verbal description of what the idea is, how it can be used, how to make it
  – Enough for “a person of ordinary skill in the art” to be able to implement the ideas of the patent without undue experimentation or research

• Claims
  – Often bizarre language that describes in legal terms exactly what the inventor has claimed to have invented. Claims are the invention when it comes to deciding whether an invention is infringed (improperly used by someone else)
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”
Other things you should start thinking about

• Project web site
  – Get it up and working soon so you can refine it later when it will be graded.
  – Must include all group deliverables (but NOT group effectiveness reports)
  – Research and other information links
  – All content must be on ECE’s tiger server
  – Each group will have a login on tiger in the form “grp39”
  – If you are developing or hosting at another site, the other site must mirror tiger content (i.e., do not link the tiger site to your off-site content - we can’t archive off-site content)

• Final presentation
  – As you develop your project concept, think how you will present the idea
  – Presentations will be scheduled at the end of November/beginning of December
  – More details on presentation will be provided later – assume ~15-20 minutes; all group members must be present.
Other items

• I have not gotten responses from everyone about TG403/404 conflicts. Unless I hear otherwise by 11:50 pm 9/16, I will assume that your group can be moved to TG403/404 (three groups have already responded)

• The ME department is looking for ECE students to work with the SAE team on data analysis of the car performance

• BAE Systems will be recruiting on campus at Stevens again this year for their Engineering Leadership Development Program, with positions in electrical hardware, software, and test engineering located in New Jersey, New York, New Hampshire, and Virginia. They are hosting an information session on Thursday, September 18 at 5:00 p.m. in the Fielding Room (Howe 3rd floor). I will send out their brochure via email
If you have not submitted a project advisor form

• Stick around after we finish – it is essential that you get in a group to complete Senior Design