When engineers meet lawyers

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Why engineers need to meet IP lawyers?

- Shift in manufacturing and production to low cost areas.
- Change in emphasis in company structure.
- Companies increasingly aware of protecting their assets.
- UK Spec 2004 explicitly sets standards of IP competence and awareness.
- Vital for tomorrows engineers and entrepreneurs

Curriculum and syllabus development

- several sources of pressure to keep the curriculum developing, many of which are external to the academic group, including
- Need to compete in the market for home and overseas students
- Government expectations
- Regulation & Compliance
- Emergence of new technologies
- Employers, industry, professional bodies and accrediting institutions

- Common strands for lawyers and engineers:
- Management and Strategy
- National and International policy
- Alternative regimes
- Ethics

What do students need to know?

- Developing Designers require capability in business, legal, IPR and good engineering or design skills
- What are copyrights, patents, trademarks?
- Where do I find relevant information?
- When do I call in an expert?
- How to communicate with an expert
- How to carry out independent research and work across disciplines

The IPR content

 Within undergraduate programmes this is found in a variety of units such as:

Professional Design Issues
 Yr 2 Product Design

Engineering Management
 Yr 2 Design Engineering

- These units aim to provide students with a knowledge and understanding of the principles and application of the law and how it relates to intellectual property rights, product liability, contracts and product design.
- This is taken further in final year projects

Delivering law beyond the law school - questions?

- Why teach it?
- What constitutes the syllabus?
- Who should be teaching it?
- When should it be taught?
- Which resources should be available?
- How should it be taught?

Traditional encounters

- New engineer:
- how to describe IP needs?
- Mystique surrounding legal requirements
- Uncertain about costs, timing of advice

- New IP Lawyer:
- What questions to ask?
- How to find most appropriate advice
- How to present advice in the best way for client?



Can we help new lawyers and engineers prepare for the encounter?

Modern Encounters

 The encounter between the engineer and the lawyer would be much improved if each has had the opportunity during their studies to simulate the client and adviser experience

- How to 'teach' the client adviser experience?
- Create the opportunity for the lawyers and engineers to manage the learning experience for themselves.

Not taught – but self managed

- Course designers (mainly Engineers) recognised from the outset we needed to include IPR in an already crowded curriculum –and work with the experts!
- The approaches used are
 - Case study method
 - Problem solving using the students own designs
 - Actually going through the process of filing a patent for the students own project
 - The IP Advice letter
 - Master class with practising IP lawyers and Designers

The IP Advice Letter

- LLB IPP Level H students have an assignment that involves:
- Advising a DEC Level H student on the IP in their final year
- Producing a letter of advice which is useful to the DEC student client
- Producing an appendix of legal authority
- Their work is summatively assessed

- DEC BSc Product Design Level H engineers are paired with an IPP student and have to
- Send the IPP student details of their project
- Respond to the IPP student's questions
- Think of questions for their adviser
- Their work is formatively assessed

The Master Class

- Both law and engineering design students are invited to a master class
- Presentations from a practising IP lawyer and a professional product designer
- Also a presentation from a retailer with case studies of legal action and infringement
- An opportunity for the "client" and "advisor" to meet and make initial contact

Hiccups and wrinkles

- Doing the admin to match students from two different Schools
- Getting their contact details in place
- Doing the admin to get the project going in good time
- Encouraging both student groups to be in touch in a timely fashion
- Can't guarantee the quality of either adviser or client student
- Some clients and some advisers let their partner down by not making contact or appearing

But when it works well...

extracts from an email exchange

Natasha (IPP Law)

- Colin (BSc Product Design)
- "I am designing a sensory table for wine bars, activated by the user" (colin)
- "I understand that have a joint Workshop and wondered whether you would be able to meet up afterwards" (natasha)
- "Client confirmed following:
- i. His product will be controlled by sound levels... 4 electromagnets will control the rippling effect in the ferrofluid EFH1 ii. he is not aware of any similar or identical products on the market iii. He is designing a logo for the product (natasha)
- "I've attached a logo for you to see. I'm going to call it 'skimming stone' (colin)

When it works well continued

- "I have been looking at your trade mark and on searching the Patent Office website it doesn't appear that anyone else has registered "skimming stone" as a TM, nor as a domain name. In terms of your logo, I note that one of the squares contains a ripple effect. I wondered whether this is a drawing you have produced yourself, or whether you have copied it? (natasha)
- "With regard to the logo, I did use a copied picture which I manipulated a bit. However, I will be making my own version of a ripple for that square for my design show (colin)
- Natasha asks about|: software, hardware, ripple visual effect, and
 Colin's relationship with the bar that is interested in 'skimming stone'
- Colin responds to the questions, and explains that he has not been commissioned to make 'skimming stone' but is allowed to use the bar's logo

A typical example of a student project



Grow your own light!

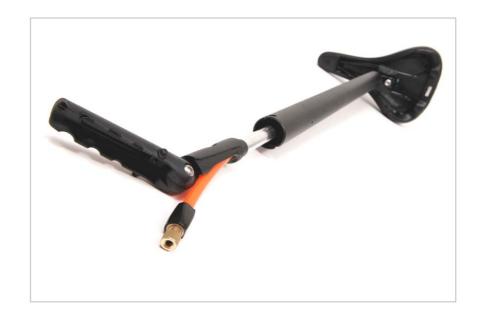
Pick a stem!





Phil Robinson with the "Post Pump"





Self managed learning opportunities from useful web resources

IP in the Research Context:

http://ibal3.bmth.ac.uk/ip/start.html

H.E.A. Engineering Subject Centre

http://www.engsc.ac.uk/resources/ipminiproj/index.asp

UK Intellectual Property Office: www.ipo.gov.uk

Espacenet: European Patent Office database http://gb.espacenet.com/

World Intellectual Property Organisation case studies: http://www.wipo.int/sme/en/case_studies/index.htm