*Lecture Summary Week 8*

**Intellectual Property**

The content of Week 8 lecture covers on intellectual property and patent.

First of all, what is Intellectual property. Intellectual property is the property of your mind or proprietary knowledge. Basically, the productive new ideas you create. It can be Patent, Design, Copyright, Trade secret or Trademark.

Second for Each intellectual property, it has their own protection and duration. Patent protects functionality, it can up to 20 years, the conditions to acquire are practical utility, new, Non-obvious and Eligible subject matter; Design protects appearance, its duration is around 10 – 25 years; Trademark which is a sign capable of distinguishing a trader’s good protects brands, its duration is indefinitely. Copyright is the other type of intellectual property, which protects expression of an idea, duration of Copyright can be until death+70 years. Last is the Trade secret, which protects confidential information, duration is made as long as can be kept confidential.

Then the third discussion point is Patent and who owns a patent. Patent gives the owner the right to exclude others from making, using or selling an invention, it can encourage R&D from patentee’s perspective, encourage disclosure of incremental inventions from society’s perspective besides, patent is an international obligation, therefore patent is extremely important for society, especially for the owners, who may be the inventor, employer or University. If the owner has licenses, that means no transfer of ownership, or if it is assignments, which can be regarded as transfer of ownership.

Next the fourth aspect is what can be patented & what is worth patenting. When we consider the patenting, there are three different considerations, first from technical perspective, we need to consider whether it is new, people don’t need to patent if it is obvious. From commercial perspective, costs of obtaining patent rights, market and how to enforce patent rights are essential to be considered. Then from strategic considerations, one important aspect is that how much resources your competitor patent, and government will notice the companies which patent too much, then get in trouble.

Last the fifth topic is Patent claim. In a patent or patent application, the claims define, in technical terms, of the protection conferred by a patent, or the protection sought in a patent application. There are three examples in this lecture about patent claim, they respectively are establishing cryptographic communications, diminishing cross channel interference in a data reduction process and transmitting data in a confined multipath transmission. From the three examples, I know Patent claim is the most essential and important part of the application because it is the claims that define the invention for which protection is granted, and a thorough and complete description is an absolute prerequisite.

Week 8 lecture gives me an understanding of intellectual property, exactly about what is patent and how to write a patent claim.