Patentability
Policy and a few things to look out for

- ODU IP policy requires inventions developed through substantial use of ODU property, or in the course of employment at ODU, prior to public disclosure
  - Disclose early, disclose often.

- Some of the most common ways to lose rights
  - Offering for sale
  - Public disclosure
    - Disclosing to anyone who is not a University/Company employee, or an outside person who is not covered by an NDA
  - Collaborating with outside people without a collaboration agreement
PROCEDURE

- What happens?
  - David Einfeldt+Khaled Abul-Hassan review disclosure
  - We will have a meeting to discuss the state of the art, make sure we have a good understanding and together with inventor perform a prior-art search
  - We will make a determination regarding a likelihood of patentability
    - If likely to obtain a patent we will file application
    - If not likely to obtain a patent we will not pursue.
Intellectual Property

- Patents
  - Invention

- Trademarks ™
  - What you call it, your company or product name,
  - protects the reputation of your products and the public's expectations of quality when buying your products

- Copyright ©
  - Creative works, sculptures, songs, paintings

- Trade Secrets
  - Not patentable, but provide a competitive advantage
Patent - what is it?

- The right to EXCLUDE others from making, using, offering for sale, or selling the invention in the United States, or importing the invention into the United States.

- No such thing as an international patent, a patent only protects you in the jurisdiction which grants the patent.
  - There are treaties which allow for reduces application cost, but once reviewed under a treaty each country must be individually sought and application/grant fees paid for the particular jurisdiction.
Patent – Different Types of Applications

- **Design Patent**
  - 14 years or patented
  - Only products the exact look of a design
  - Very narrow

- **Plant Patent**
  - 20 years
  - No naturally occurring plants, only for asexually created hybrid plants
  - Very narrow

- **Utility Patent**
  - 20 years of enforceability
  - Broader protection on principles of utility, how something operates, can be as broad as the written claims will allow.
Utility Patents Two types

- Two types (Provisional, non-provisional)
  - Provisional (cheap, easy to prepare, and provide “Patent Pending” status)
    - Really only a place holder, only save a date for you for what is contained in the disclosure
    - Only last one year, as an application, never grant, only meant to be something to claim priority to in a full application
    - Never reviewed or examined
    - No formality requirements
  - Non-Provisional Utility (Expensive, require significant effort to prepare)
    - Full patent application
    - Will be examined
    - Formal claims can ultimately be issued into an enforceable patent
    - Application provides “Patent pending” status, granted patent provides “Patented” status which can be enforceable in court
Non-Provisional Utility Standards for allowance

- Must be directed toward a patentable Statutory category
  - processes, machines, manufactures and compositions of matter
  - Not be directed toward a judicial exception
- Have Utility
  - Solve a problem
- Be New/Novel
  - Exact same thing must not be out there already
  - What you invented is defined by the claims in the application
- Be Non-obvious
  - This is the difficult standard to define and the most difficult to overcome
  - The patent office can take pieces from multiple references and articulate a reasonable motivation to combine them to arrive at your claimed invention
    - It will then be our responsibility to explain why the invention is not obvious
Statutory Categories defined by USC 101

- Processes
- Machines
- Manufactures
- Compositions of matter
- Any Improvement Thereof
- No Judicial Exceptions
  - Laws of nature
  - Natural phenomena
    - Living things (actually can patent living things that are artificially made "anything under the sun made by man"); but not if they occur naturally
      - Claim the methods of manufacturing, using, etc. try to stay away from claiming the living thing itself
  - Products of nature
  - Scientific principles
  - Disembodied concepts
  - Disembodied mathematical algorithms and formulas
  - Business Models
Judicial Exceptions

- Just because something involves an exception does not render it unpatentable, but must rise above the unpatentable exception alone
  - A method with additional steps above just applying an algorithm
  - Claim as a whole must amount to significantly more than the exception itself

- Must not preempt the use of the principle.
Abstract Ideas

- Patents do not cover results, they cover the “how” or method of achieving the results or the features of a machine or thing which can be utilized to achieve particular results.

- Can often be explained by reciting a result without the “how”

- Alice Corp. Pty. Ltd. v. CLS Bank Int’l,
  - A mere instruction to implement an abstract idea on a computer "cannot impart patent eligibility."
  - "[T]he mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention."
  - "Stating an abstract idea ‘while adding the words "apply it"’ is not enough for patent eligibility."
  - "Nor is limiting the use of an abstract idea to a particular technological environment" sufficient for patent eligibility."
Non-obvious

- Subjective
  - KSR v Teleflex allows examiners to state any reason as a motivation for combining references, no longer need to find explicit stated reasons

- High standards
  - More than a simple logical leap based on what is already known
  - More than a mere combination of known things or steps which were/are utilized to obtain an expected result

- Typical arguments
  - No teaching or motivation
  - The examiner hasn’t shown an element
  - The motivation recited by the examiner doesn’t make sense, or would destroy the function of one of the references in the combination
  - One of the teaching references actually teaches away from doing what the Examiner is trying to combine and motivate
Enablement

- The constitutions gives congress the power **To promote the Progress of Science and useful Arts**, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.

- Patents represent a bargained for right in exchange for teaching the public, so that in the future, science can utilize human ingenuity for advancement rather than reinventing the wheel.

- 35 USC 112 requires “enablement”. As the purpose of patents is to give a temporary monopoly in exchange for full disclosure. This provision essentially requires you to disclose sufficiently that a person having skill in the art could use your disclosure to re-create the invention.
  - Can’t hold anything back
Claims

- Claims are painfully specific
- Set the boundaries of what the invention “is”
  - Requires some context
  - Must contain what differentiates your invention from what already exists
So what happens?

- ODU decides to file for protection
  - Office of research oversees preparation of a patent application (myself or outside counsel)
  - Submit formal non-provisional, either claiming to provisional, or formal initial filing
  - Wait until the patent office picks it up
  - Overcome any issues, formality/obviousness/ make any required arguments.
    - Depends on the research agreement and field of invention, may be outside company pursuing, outside counsel, or myself (David Einfeldt)