The information contained in this presentation is of a general nature. It is not legal advice and should not be construed as or in any way considered to be legal advice.
IP Management Overview

Main types of IP
I. identification
II. ownership
III. protection

Assignment and Licensing

Top 10 takeaways
What is Intellectual Property?

“intellectual”
- represents intellectual efforts and achievements:
  - writing of software, books, screen plays
  - brands, logos, product or company names
  - business plans, formulae, recipes, business processes
  - inventions, such as new drugs, electronics goods, manufacturing processes
What is Intellectual Property?

“property”

usually has commercial value

gives a bundle of rights to the owner:

right to sell a product or service

right to prevent others from doing so

right to license others to use your rights
Four pillars of intellectual property

- Copyrights
- Trademarks
- Trade secrets
- Patents

Other forms of IP

- Industrial design
- Plant breeders rights
- Integrated circuit topography
What types of IP protect software?
Copyright

• Copyright is the sole right to produce or reproduce a work, or a substantial part of a work

• Protects the expression of idea, not the ideas themselves
Copyright

- “Work” includes articles, photographs, graphic designs, study protocols, data, computer programs, website designs
Copyright

• Requirements:

  • Originality: the exercise of skill and diligence, but not necessarily creativity
  • Fixation: must be expressed to some extent at least in some material form
Copyright

Ownership

- As a general rule, the author (or creator) of a work is the first owner of copyright
- Employment is an exception to the general rule
- Freelancers or independent contractors are considered the “author” or their creations and own it
Moral Rights

- Moral rights give the author of a work the exclusive right to be associated with the work and to the integrity of the work.
- Moral rights can only belong to people.
- Moral rights cannot be assigned, only waived.
Copyright Protection

• Arises automatically
• © notices should be used
• Registration enhances rights
  • Simple and inexpensive to register
  • Registration in US is more significant
Copyright Management

- Focus on ownership and rights
- How are works developed?
- What do your contracts say about copyright?
  - Employment agreements
  - Service contracts
  - Licenses
Copyright Questions?
Trademarks

- Trademarks are used to indicate the origin of goods and services

- They can be:
  - Words
  - Designs
  - The shape of goods of their packaging
  - Combinations of colours
  - Sounds

Life is our life’s work
## Trademarks

Interbrand’s most valuable brands (2015):

<table>
<thead>
<tr>
<th>Brand</th>
<th>Value (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>$170B</td>
</tr>
<tr>
<td>Google</td>
<td>$120B</td>
</tr>
<tr>
<td>Coca-Cola</td>
<td>$78B</td>
</tr>
<tr>
<td>Microsoft</td>
<td>$67B</td>
</tr>
<tr>
<td>IBM</td>
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<td>GE</td>
<td>$42B</td>
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<tr>
<td>MCDONALD'S</td>
<td>$40B</td>
</tr>
<tr>
<td>Amazon</td>
<td>$38B</td>
</tr>
</tbody>
</table>
Trademarks

• Why are trademarks important
  • The goodwill associated with products and companies reside in their respective trademarks
  • Consumers make decisions based on trademarks
Trademarks

Ownership

• Owned by first user or person that registers the trade-mark

• Use is most important

  • Goods: “use” means on the goods, packaging or in any other manner so associated with the goods that notice of the association is given

  • Services: “use” means use or display in the performance or advertising of those services
Trademarks

A. Picking a good trademark
   I. Distinctiveness
   II. Searching and Clearance

B. Registration

C. Enforcement
A. Picking a good trademark

I. Distinctiveness

• The key to choosing an effective trademark
• The purpose is to distinguish your goods and services from competitors. To do so, it must be distinctive.

• Distinctiveness requires that your trademark:
  1. Does not describe your goods and services
  2. Is not confusingly similar to your competitors’ trademarks

• Distinctive marks: GOOGLE, APPLE (for computers)
Trademarks

Descriptiveness

• trademarks law generally prohibits obtaining rights to and registering trademarks that describe the character or quality of the goods and services with which they are used

• Reason: trademark owners should not monopolize words that describe goods or services
  • E.g. “safe” cars, “fresh” bread

• It is tempting to choose trademarks that are somewhat descriptive

• However, the more descriptive your trademark is, the less you will be able to claim rights to it and protect it
Confusion

• You are not allowed to use and register trademarks that are confusingly similar with those of your competitors because:
  • it creates confusion in the marketplace
  • It infringes the rights of others

• It is tempting to choose marks that are somewhat confusing with established marks or that contain common elements
Trademarks
II. Searching and Clearance

• Prior to choosing a trademark, search the trademarks register and marketplace to ensure that no identical or confusingly similar marks are already used, registered or applied to be registered for the same goods or services

• Tip: come up with more than one potential trademark at the start of the searching process and rank according to preference
Trademarks

• Two types of trademark rights to search for:

  • Statutory rights
    • arise from registering or applying to register a trademark
    • need to search the CIPO Trademarks Registry to find them
  
  • Common law rights
    • arise from use of a trademark in the marketplace
    • need to search the marketplace to find them
    • more limited than statutory rights
Trademarks

• Trademark search tools

• The main search tools are:
  • Knock-out searches
  • Full availability searches
  • Investigations
Knock-out Searches - US

Trademark Electronic Search System (TESS) - Microsoft Internet Explorer

WARNING: AFTER SEARCHING THE USPTO DATABASE, EVEN IF YOU THINK THE RESULTS ARE "OK," DO NOT ASSUME THAT YOUR MARK CAN BE REGISTERED AT THE USPTO. AFTER YOU FILE AN APPLICATION, THE USPTO MUST DO ITS OWN SEARCH AND OTHER REVIEW, AND MIGHT REFUSE TO REGISTER YOUR MARK.

View Search History:
- Plural and Singular
- Singular
- Live and Dead
- Live
- Dead

Search Term: 

Field: Combined Word Mark (BTIMPTU)

Result Must Contain: All Search Terms (ANC)

Submit Query  Clear Query

Logout  Please log out when you are done to release system resources allocated for you.

This New User (Basic) search form allows for searching of the most commonly searched fields: word marks, serial or registration numbers, and owners.

The Combined Word Mark is the default search field and includes the word mark and translation.
Trademarks

B. Registration

• Registration is by country (except EU)
• Canada:
  • One and a half years average for registration
  • $2,000 (no objections, oppositions)
  • 15 year renewable registration period

• Tip: prioritize countries by value of market and likelihood of sales
Trademarks

C. Enforcement

• Watch out for infringement of your rights
• Take action against infringements and potential infringements
  • Cease and desist letters
  • Litigation
  • Opposition
• Failure to act can weaken your trademark rights
Trademarks

• Pick the right trademark
  • Consider more than one potential trademark
  • Avoid trademarks that are descriptive or similar to other trademarks used in your industry
  • Search the marketplace
  • Assess risks before proceeding
• Register trademarks
• Use it or lose it
• Keep an eye out for infringers
• **Bonus tip: use fewer trademarks**
Trademark Questions?
Why IP Protection is Important

• IP can be a vital asset in corporate and financing transactions
• Provides a competitive advantage
• IP is a commercial asset (valuation/royalties)
• Protects and justifies R&D and investments
• IP portfolio as a shield
• Company Culture (“we support innovation and care about your efforts”)
Intangible Assets-Relative Value

COMPONENTS of S&P 500 MARKET VALUE

<table>
<thead>
<tr>
<th>Year</th>
<th>Tangible Assets</th>
<th>Intangible Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>68%</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>2015*</td>
<td>84%</td>
<td></td>
</tr>
</tbody>
</table>

SOURCE: OCEAN TOMO, LLC
*JANUARY 1, 2015
Do-it-yourself form of IP

Idea: By taking reasonable efforts to keep valuable information secret, you can prevent competitors from learning about and using it and thereby enjoy a competitive advantage in the marketplace.

What are trade secrets?
Advantages of Trade Secrets

• Never expire – as long as the secret remains secret
• No filings or government approval required
• Can be very successful
Some Famous Trade Secrets

Formula for Coca-Cola

The Big Mac Special Sauce

KFC Chicken Recipe

WD-40 Formula
Examples of Trade Secrets

- Business plans & strategies
- New product names
- Financial projections
- Marketing plans, unpublished promotional material
- Cost & pricing information
- Sales data
- Customer lists
- Info re: new business opportunities
- Personnel performance
Three essential legal requirements:

1. The information must be secret

2. It must have commercial value because it’s secret

3. Owner must have taken reasonable steps to keep it secret
• Under most TS regimes, you cannot have a TS unless you have taken reasonable precautions to keep the information confidential

• ‘Reasonable’ → case by case
  – reasonable security procedures
  – Non-disclosure agreements (NDA)
  – such that the information could be obtained by others only through improper means

• Importance of proper TS management program
Caution: Who owns the Trade Secret

• Trade secret (e.g. new technology or software) developed by employee …

• Trade secret developed by external contractor

To avoid disputes:

Written Agreement / Assignment of all trade secrets
COURT RELIEF if: $TS + \text{"THEFT"}$

Only theft if wrongful!

Courts will only grant relief if someone has improperly acquired, disclosed or used the information.
What is lawful?
→ Discovery of the secret by fair and honest means

1. Independent creation
   – without using illegal means or violating agreements or law
   – ≠ patent

TS protection provides no
HOW ARE TRADE SECRETS LOST OR STOLEN?
A Growing Problem. Why Does It Occur?

- Way we do business today (increased use of contractors, temporary workers, out-sourcing)
- Declining employee loyalty: more job changes
- Storage facilities (DVD, external memories, keys)
- Wireless technology / Digital information
Examples

– Reverse engineering, independent discovery
– Improper licensing
– Burglaries by professional criminals targeting specific technology
– Network attacks (hacking)
– Mobile device/laptop theft
– Inducing employees to reveal TS
80% of trade secret loss
< employees, contractors, trusted insiders!

- departing or disgruntled employees
- intentional (malicious)
- inevitable (knowledge acquired)
- by ignorance
Case
Coca-Cola Trade Secret Trial

- Prosecutors say a former Coca-Cola secretary (to Global Brand Director) took confidential documents from the beverage giant and samples of products that hadn't been launched with the aim of selling them to rival Pepsi
- Good faith—Pepsi contacted Coca-cola as soon as it was offered information
- 8 years prison sentence--conspiracy
HOW TO PROTECT YOUR TRADE SECRETS?
1. Identify Trade Secrets

Reasons for Identifying Company Trade Secrets

- Know and understand confidential assets
- Protect confidential assets consistently
- Reduces risks involving third party trade secrets
- Meet burden of proof in trade secret litigation
  - often fast track
  - little time to identify and document trade secrets
  - some problems can’t be fixed
- Is it known outside the company?
- Is it widely known by employees and others involved within the company?
- Have measures been taken to guard its secrecy?
- What is the value of the information for your company?
- What is the potential value for your competitors?
- How much effort/money spent in developing it?
- How difficult would it be for others to acquire, collect or duplicate it?
2. Develop a protection policy

Advantages of written policies and procedures

- Clarity (how to identify and protect)
- How to reveal (in-house or to outsiders)
- Demonstrates commitment to protection → important in litigation
3. Restrict Access

to only those persons having a need to know the information

→ computer system should limit each employee’s/contractor’s access to data actually utilized or needed for a project/transaction
4. Mark Documents

- Help employees recognize TS → prevents inadvertent disclosure

- Uniform system of marking documents
  - paper based
  - electronic (e.g. ‘confidential’ button on standard email screen)

[Image of a stamp labeled 'CONFIDENTIAL']
5. Maintain Computer Secrecy

- Secure online transactions, intranet, website
- Password; access control
- Mark confidential or secret (legend pop, or before and after sensitive information)
- Physically isolate and lock: computer tapes, discs, other storage media
- No external drives and USB ports
- Monitor remote access to servers
- Firewalls; anti-virus software; encryption
6. Measures for Employees

1. New employees
   • Brief on protection expectations early
   • Obligations towards former employer!
   • Assign all rights to inventions developed in the course of employment
   • NDA/CA
   • Non-compete provision
2. Current employees

- Prevent inadvertent disclosure (ignorance)
- Train and educate
- NDA for particular task

3. Departing employees

- further limit access to data
- exit interview
- letter to new employer
- treat fairly & compensate reasonably for patent work
7. Measures for Dealing with Third Parties

• Sharing for exploitation

• Consultants, financial advisors, computer programmers, website host, designers, subcontractors, joint ventures, etc.

• Confidentiality agreement, NDA
• Limit access on need-to-know basis
Trade Secret Questions?
You Have an Invention – What Next?

• Your business has an invention, i.e. “something” that makes your product or service better/cheaper/faster

• Your goal – to prevent competitors from using that “technology”
The Problem

• If you disclose your invention to the public, or wish to do so, others can use it unless…..
• You take steps to protect it
What is a Patent?

• A document that describes an invention
  • Details how to put the claimed invention into practice
• Includes claims that define the scope of the invention that is protected
Why Patent?

• Gives you the right to prevent others from making, using, selling the claimed invention.
• Lasts up to 20 years from filing date
• In exchange – you have to fully disclose your invention
What You Don’t Get With a Patent

- What doesn’t a patent grant?
  - Freedom to operate
  - Government enforcement of patent rights (only through courts)
  - You must be your own “patent police”
Steps in Obtaining a Patent

• Secrecy
• Patentability
• File Patent Application(s)
  • First Filing
  • Other (International) Filings
• Prosecute Applications
• Exploit Registered Patents
Secrecy Issues – KEEP THE SECRET!

• Public disclosure of invention prior to filing may be used against the application
• Use NDAs etc., prior to filing.
• Canada and US have a one year grace period - many countries don’t
Requirements for Patentability

- **Novelty** - the invention is “new”
- **Non-obvious** – the invention not a minor tweak on what has been done before
- **Utility** – the invention has a useful function
- **Subject Matter**
Subject Matter

• Art, Process, Machine, Manufacture or Composition of Matter

• Traditional:
  • Pharmaceuticals
  • Mechanical Devices
  • Electronics
  • Chemicals

• Less traditional:
  • Computer Software
  • Business Methods
What Cannot Be Patented?

- Scientific principles
- Pure mathematic algorithms
- Mental processes
- Data (trade secret?)
How to Obtain a Patent

- File Patent Application
- Examination
  - Search
  - Examiner’s report
  - Prosecution (responses / amendments)
- Registration
Ownership

- Individual inventor is presumed to be the owner of an invention unless:
  - (1) **Express agreement to the contrary**;
  - (2) He was employed for the purpose of inventing under a contract of service; or
  - (3) Nature of employment relationship indicates that employer was to own the invention.
Who is the Inventor?

• Person(s) who has:
  • Conceived of the invention (at least one claim);
  and
  • Reduced it to a definite and practical shape

• Patent can be invalidated if inventorship is incorrect and error reflects deceptive intent
The First Filing

• Preparing the Application
  • Work with your agent
  • Provide detailed description
  • Remember you know this area of technology better than they do

• If cost is an issue, consider a U.S. provisional application
Where to File?

• Patents are territorial, i.e. a U.S. patent only covers activities in the U.S.
• Problem: Filing in multiple jurisdictions gets very expensive (> $100,000 very quickly)
• Solution: Take advantage of treaties.
Claiming Priority

• Allows an applicant to file a first application - corresponding applications filed within 1 year can “piggy-back” off first application
• Can defer costs
• First application may be a provisional
• Allows you to make invention public after first filing
PCT Applications

• Closest thing to “world patent” application (covers most major industrial countries)
• Treated as a pending application in all selected member countries
• Still requires entry into those countries within 2 ½ years – just defers cost
US Provisional Applications

- Only serve as an initial filing for the purposes of claiming priority – never becomes a patent
- Can be less expensive than a regular application
- Useful when invention is in development
- *Need to ensure provisional adequately supports priority claim
Common Filing Strategy

First Filing e.g. U.S. 12 months PCT 30 months National Phase Entry
- CA
- Europe
- JP
- CN
- AU

Priority claim
Common Strategy

- Goal – Defer costs as much as possible while preserving rights
  - 1) File Provisional Application
  - 2) One year later, file PCT Application
  - 3) 2 ½ years from first filing, enter national phase in selected jurisdictions
- DISADVANTAGE – Delays obtaining patents
Patent Questions?
Assignments & Licensing

• Introduction
  • Intellectual property may be assigned or licensed
  • Fundamental difference: an assignment changes the ownership in the IP from the assignor to the assignee, a license does not
Assignments & Licensing

• Preferred to a license by IP purchaser, investors and acquirers
  • IP becomes an asset of the assignee
  • not affected by assignor bankruptcy

• IP owners prefer to license technology
  • IP continues to be owned by licensor
  • Greater control over IP
Assignments

- Moral rights cannot be assigned or licensed, but may be (wholly or partially) waived or asserted by the author or estate for the duration of the copyright.
- An assignment must be in writing and signed by the IP owner or authorized agent.
- An assignment of registered IP should be recorded with the appropriate registry (e.g. USPTO, CIPO).
Licenses

• License is a contract that allows a licensee to use IP on the terms specified in the license
• Few limits on possible license terms
• A license agreement may be implied, but should be in writing
 Licenses

University → MedTech Company
  ↓
  in

University ↔ MedTech Company
  ↓
  cross

MedTech Company ↔ Industry Partner
  ↓
  out

MedTech Company ↔ Other MedTech Company
  ↓
  cross
Licenses

- Agreements that include licenses:
  - End user agreements
  - Research services agreements
  - Research collaboration agreements
  - Manufacturing agreements
  - Beta agreements
  - Distribution agreements
Licenses: main provisions

- Term
- Exclusivity
- Scope of use
- Territory
- Fees
- Modifications/improvements
- Sublicensing
- Performance/anti-shelving
Licenses

• Term
  • The length of time of the license should be specified
  • Could be for duration of patent
  • Strategic considerations might come into play
    • Shorter term if licensor doubts licensee’s ability
    • Longer term if commercialization requires significant investment
  • Pitfall: know-how license term
Licenses

- Exclusivity
  - Must be in writing
  - Exclusivity represents an extra value (monopoly)
  - Only sign an exclusive license agreement if you know and trust the licensee
  - Competitive advantage vs. freedom to operate
  - Consider performance/anti-shelving provisions
Licenses

• Scope of use
  • Scope of use defines what the licensee can do with the IP
  • Different applications of IP can be licensed separately with different scopes of use
  • The scope of use needs to be clearly defined in order to avoid disputes and implied licenses
  • In general, the licensee is only entitled to use the technology for purposes that have been specified in the agreement
Licenses

• Scope of use
  • Examples:
    • Use of a medical device for diagnostics, but not treatment
    • Use of a biological compound for a particular indication, but not others
    • Use of technology for academic research, but not commercial use
Licenses

• Territory
  • Can be worldwide or limited by country, state or other geographic description
  • The breadth of a Licensee’s territory can reflect the Licensee’s ability in various regions
  • Generally speaking, the broader the Territory, the higher the price
Licenses

- Granting provision that addresses term, exclusivity, scope of use and territory:

- “Licensor hereby grants to Licensee a perpetual, exclusive, worldwide right and license to use the XBX Compound on drug-eluting coronary artery stents.”
Licenses

• Fees
  • Fixed fees
  • Milestone payments
  • Royalties
  • Shares in the capital of the licensee
  • Consider cash flow needs and risk/reward calculations to determine the right mix
Licenses

• Fees – Fixed Fees
  • Fixed fees can be paid up-front or in installments (e.g. annual fees)
  • Provide a guaranteed level of income
  • Up-front fees test the seriousness and resources of the Licensee
  • Generally speaking, greater risk on your part (i.e. deferred payment) should result in greater potential upside
Licenses

• Fees – Milestone Payments
  • Milestone payments can be paid for certain events such as:
    • Obtaining financing for a project
    • Entering into different phases of clinical trials
    • Obtaining regulatory approval
    • First commercial sale of a product
  • Milestone payments tied to product development allow the licensee to lessen the risk of a large up-front payment
  • Milestone payments are easy to determine if drafted well
Licenses

• Fees - Royalties
  • Royalties can be calculated and paid based on the licensee’s sales under the license
  • Royalties are riskier than fixed payment but allow the Licensor to get a bigger share of the commercial upside of technology
  • Require a clear calculation method
  • Audit rights are recommended

• Trap: stacking royalties
  • Consider anti-stacking clauses
Licenses

• Fees - Royalties
  • Negotiating royalties
    • Increasing or decreasing rates
    • Floors and ceilings
    • Buy outs
  • Royalty after patent expiry
Licenses

- Fees – Shares of the licensee
  - Private company:
    - valuation and liquidity risks
  - Public company:
    - Escrow considerations
    - Consolidation and share splits
- Trap: share price fluctuations
Licensees

- Modifications/improvements
  - Is the licensee entitled to modify the IP or not?
  - If modification is permitted, who owns modifications?
  - Licensors usually want to own all IP relating to the core IP
  - If licenses exist in separate territories, all parties might benefit from licensing of improvements
Licenses

• Sublicensing
  • Can licensee to sublicense its rights to one or more third parties? (e.g. manufacturers, distributors, strategic partners)
  • This could expedite commercialization
  • Licensor might want to control who can receive a sublicense
  • Licensor might want to control the form of sublicense agreement
  • Consider effect on payment provisions
    • “Reach through” or higher royalties for sublicense revenue
Licenses

• Performance requirements/anti-shelving
  • Allow licensor (and sometimes licensee) to terminate if certain milestones are not met
    • Product development
    • Regulatory approval
    • Sales
  • More important with exclusive licenses
  • Prevent licensees from “shelving” the technology
  • Consider reverting to non-exclusive
Licensing questions?
Top 10 Takeaways

1. IP Ownership is critical
   • Make sure you own it
   • Be able to prove it
2. Protect patentability
   • Do not disclose your invention w/o protections in place
3. Utilise patent treaties to defer filing costs
5. Trade secrets depend on confidentiality
   • Identify them, protect with agreements and continually monitor

6. Pick TMs that are not descriptive or confusing with others in the same field

7. Copyright works – moral rights cannot be assigned, can only be waived.
8. IP rights have to be “policed” and enforced

9. IP assets are key business assets – keep them in good order.

10. Conduct IP due diligence before any IP transaction or IP litigation.