WORLD INTELLECTUAL PROPERTY ORGANIZATION

WIPO – A BUSINESS-ORIENTED OVERVIEW OF INTELLECTUAL PROPERTY FOR LAW AND MANAGEMENT STUDENTS

Topic 8  
IP as a Financial Tool for SMEs

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Geneva, 30.5.07  
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Today’s Agenda

Part I: How to value IP rights and IP business strategies
Part II: IP as a tool for accessing financing (Angels, VCs, Companies, Gov’ts, Banks)
Part III: IP in Business Plans
Three stages to any IP strategy

1 – Creation & recognition (IDENTIFY)
   (automatic through registration only)
   a) use the right experts (per country & field)
   b) audits and regular reviews

2 – Value Generation (MANAGE)
   a) Preservation
   b) Budget and accounting
   c) Revenue generation (licensing and sales)
   d) Financing considerations

3 – Enforcement (PROTECT)

   • Need to budget and plan globally
   • Need to use the right experts at each stage
   • Need to be organized internally & internationally
Traditional Thinking: IP is done at the beginning

Invention

Protection of invention

Entrepreneur

Start-up creation

Transfer of technology

Seed funding

Business plan

Proof of concept

Development of technology / product

Management/Structure of company

Strategic partnerships

Regulatory strategy & clinics

Product development

Sales & markets

More rounds of financing

Company grows

EXIT TO SUCCESS!
Now you know, IP is important throughout.

\[ \text{IP + Money} = O_2: \text{Lifeline of a small company} \]

EXIT TO SUCCESS!

- Company grows
- More rounds of financing
- Sales & markets
- Strategic partnerships
- Product development
- Management/Structure of company
- First round financing
- Development of technology / product
- Proof of concept
- Business plan
- Seed funding
- Invention
- Protection of invention
- Entrepreneur
- Start-up creation

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Privileges of Ownership

- Use (1 = Sale of products)
- Sale (2 = Assignment / M&A)
- Transfer Part of the Rights (3 = License)
- Merge (4 = JV / Alliance)
- Mortgage
- Gift

Source: Kelvin King, VALUATION CONSULTING (UK)
IP: Some General Considerations

• Early Stage Companies have no sales or infrastructure. They only have Intellectual Property assets («IP» = people, their know-how, and drive to succeed). They are difficult to value.

• Later Stage Companies are also difficult to value: Intangible assets (i.e., IP) now account for more than 50% of the value of many major multinationals (e.g., Microsoft). Tangible assets are accounted for on balance sheets, but there is no accurate system to value an IP asset. Intangible assets are typically poorly accounted for, leading to requests for reforms.

**EVEN THE EXPERTS DON’T KNOW WHAT TO DO:**

“How appropriate is our system – developed for a world in which physical assets predominated – for an economy in which value increasingly is embodied in ideas rather than tangible capital?”

Alan Greenspan April 4, 2003
Four basic approaches to Valuation

• **Transactional**: Data approach (with possible adjustments). Market approach = “fair market value”, “willing buyer & seller” based on comparables

• **Cost**: “To buy or make?” Is a replacement cost analysis (or “BATNA” analysis).

• **Income**: Intrinsic value = ability to generate cash flow (e.g., Discounted Cash Flow, “Excess Price”, “Residual Income”, “Relief From Royalty” etc.)

• **Binomial/Option**: Hi-tech of valuations, and based on detailed decision trees, with probabilities & statistics. Examples: “real options”, “binomial models”, “Monte Carlo” simulations. They assume the existence of conditional events for the IP to generate value, and try to factor them in.
Additional Methodologies to Evaluate IP

1. Historical “Costs plus” basis
2. NPVs based on projected probabilities, EBITDAs & revenues/DCF calculations
3. Benchmarking/Comparable Company analysis (Co. = IP?)
4. Rough Rules (e.g., head count, burn rate, multiples, 25% rule)
6. Investor’s “Profits minus” basis (e.g., 30% IRR)
7. Corporate criteria: market share protection, damage to competitor
8. Auctions

• Nothing “empirical”. All tools assume key variables. Need to go back to basics every time (track records, market size, market share, freedom to market, barriers to entry, scope of IP rights & their validity and enforceability). BEWARE OF “GIGO” AUTOMATED VALUATIONS!
The Approach of Paul Flignor and David Orozco

Four building blocks for a valuation: (NB: These will vary!)

**Purpose** – Why are we valuing the assets?

**Description** – What are the assets?

**Premise** – How will the assets be used?

**Standard** – Who is the target buyer of the assets or valuation?
Flignor & Orozco Blocks 1 & 4: Six Purposes & Standards

<table>
<thead>
<tr>
<th>Transaction – M&amp;A / Licensing</th>
<th>Financial Reporting</th>
<th>Bankruptcy / Reorganization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Audience:</strong></td>
<td><strong>Audience:</strong></td>
<td><strong>Audience:</strong></td>
</tr>
<tr>
<td>Management</td>
<td>Investors</td>
<td>Bankruptcy Judge</td>
</tr>
<tr>
<td>Investors</td>
<td>SEC</td>
<td>Creditors</td>
</tr>
<tr>
<td><strong>Standards:</strong></td>
<td><strong>Standards:</strong></td>
<td><strong>Standards:</strong></td>
</tr>
<tr>
<td>Company Specific</td>
<td>GAAP</td>
<td>Statute / Case law</td>
</tr>
<tr>
<td></td>
<td>FASB</td>
<td>Bank requirements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tax</th>
<th>Legal</th>
<th>Financing / Securitization</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Audience:</strong></td>
<td><strong>Audience:</strong></td>
<td><strong>Audience:</strong></td>
</tr>
<tr>
<td>IRS, Foreign Tax Authority</td>
<td>Trial court</td>
<td>Bankruptcy Judge</td>
</tr>
<tr>
<td><strong>Standards:</strong></td>
<td><strong>Standards:</strong></td>
<td>Creditors</td>
</tr>
<tr>
<td>Per Tax Code (§§ 367; 482; 350; 197; 170)</td>
<td>“Georgia Pacific”</td>
<td>Investors</td>
</tr>
<tr>
<td></td>
<td>“Panduit” Factors</td>
<td><strong>Standards:</strong></td>
</tr>
<tr>
<td></td>
<td>Statute / Case law</td>
<td>Statute / Case law</td>
</tr>
</tbody>
</table>

NB. The standards will depend on the purpose & target audience/buyer for the valuation
## Flignor & Orozco Block 2: Description of the IP assets

<table>
<thead>
<tr>
<th>Type</th>
<th>Purpose</th>
<th>Method of Creation</th>
<th>Potential Lifespan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copyrights / Authors Rights</td>
<td>Rights relating to original/creative works, including literary, dramatic, musical, artistic works (incl. software).</td>
<td>Automatic (possible fixation requ’t); ©</td>
<td>Life of author + 50-70 years</td>
</tr>
<tr>
<td>Databases (EU)</td>
<td>Additional <em>sui generis</em> rights for substantial investments in obtaining, verifying or presenting data.</td>
<td>Automatic</td>
<td>15 years from creation</td>
</tr>
<tr>
<td>Trade secrets</td>
<td>Rights given to owners of confidential information (technical or commercial) that is valuable, specific, and ascertainable, and which is treated as such.</td>
<td>Automatic, but must be continuously maintained as such</td>
<td>Indefinite</td>
</tr>
<tr>
<td>Domain Names</td>
<td>Right to a unique alpha-numeric address on the Internet, obtained from ICANN.</td>
<td>Registration only (via registrar)</td>
<td>Indefinite, if renewed</td>
</tr>
<tr>
<td>Designs / “Design Patents”</td>
<td>Rights to original appearance of the whole or a part of an industrial or handcrafted product resulting from the features of the lines, contours, colours, shape, texture, and/or materials used.</td>
<td>Mainly registration, but can be automatic (e.g., unregistered EU).</td>
<td>14 (USA) or 25 (EU) years if renewed (unreg’d EU = 3 years)</td>
</tr>
<tr>
<td>Utility Patents</td>
<td>Rights to exclude others from making, using or selling inventions that are useful, novel and non-obvious in exchange for publishing this information. The inventions must be sufficiently described to be practicable by a person of ordinary skill in the art. The claims define the scope of the right.</td>
<td>Registration only (NB. US add’l requirements of “first to invent” &amp; subjective duties)</td>
<td>20 years from date of application (if they issue)</td>
</tr>
<tr>
<td>Trademarks</td>
<td>Rights to exclusive use of words, symbols, objects, colours, sounds, smells etc., by which consumers can identify the source of products or services.</td>
<td>Use (TM) or registration (®) by classes of goods (Nice).</td>
<td>Indefinite, if registrations are renewed, and brand is used.</td>
</tr>
</tbody>
</table>
Flignor & Orozco Block 3: Possible **Premises**

Class 10: Possible Revenue-Generating Strategies Using IP

- **Sell Products**: Usually a “one-way” street, with all IP rights exhausted (internationally or domestically) (e.g., INTEL)
- **License/Rent Product**: Better to retain rights & maintain some control (e.g., transgenic mice, software: restrict access to source code & use)
- **Sale of IP**: a) Assignment of IP assets: May be simplest (e.g., 3M Post-It) b) License of IP Assets: How?
- **M&A**: Sell company including the IP in it (e.g., a holding entity)
- **Joint Ventures**: Alliances that pool their IP resources into a new company (e.g., Nanonics)
- **Franchise**: Package concept (e.g., McDonalds): what is the IP bundle (TM + © + Know-How + patents)? Quality Control and brand management issues?
- **Create Market**: Offer for free and then charge using installed base (e.g., Skype)
- **Open Source/Freeware/Shareware & then charge for improvements (e.g., .php)**
- **Covenant not to sue? (e.g., Two start-ups to avoid depleting resources)**
- **IP Holding companies? Who should hold IP?** Tax and financing issues: inter-company pricing and royalty considerations.
Additional valuation concerns: Your Competition

Although you need to remain focused, it is essential to track others:

- Attend industry meetings and hear what is being said
- Read the trade & VC journals (many free online periodicals)
- Track your competitors’ IP portfolio (e.g., do automated patent watches). Check also universities and important leaders in your space (although there is an 18 month blackout period).
- Use the Internet for Competitive Intelligence (e.g., Google Alert).
- What can you find out about them? Check also scientific publications.
- For Trademarks, this is essential! For « Freedom to Operate » also.
- Although this can become obsessive and too expensive, it is worth doing something. Freedom to Operate may change from one day to the next, and you need to be ready to react and be prepared.
- Try to maintain cordial relations with your competitors. It may be worth compiling a prior art portfolio on them (e.g., « secret disclosures » if necessary). Paradoxically, this can improve relations.
- But, be careful of Anti-Trust/Unfair Competition restrictions. (Cannot be too friendly with your competitors either: Never share pricing or divide markets).
Valuation of IP will vary over time:

E.g., A biotech drug with a potential of $600Mn/yr in sales:

<table>
<thead>
<tr>
<th>Stage</th>
<th>POL</th>
<th>NPV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discovery stage</td>
<td>&lt;5%</td>
<td>$14 M</td>
</tr>
<tr>
<td>Pre-clinical</td>
<td>&lt;10%</td>
<td>$44 M</td>
</tr>
<tr>
<td>Phase I</td>
<td>&lt;25%</td>
<td>$100 M</td>
</tr>
<tr>
<td>Phase II</td>
<td>&lt;33%</td>
<td>$136 M</td>
</tr>
<tr>
<td>Phase III</td>
<td>&lt;66%</td>
<td>$264 M</td>
</tr>
<tr>
<td>Registration</td>
<td>&lt;95%</td>
<td>$368 M</td>
</tr>
<tr>
<td>Product launch</td>
<td>100%</td>
<td>$400 M</td>
</tr>
</tbody>
</table>

POL = probability of launch  
NPV = present value of product  
All numbers are indicative only, and should not be assumed to reflect an actual valuation.
Valuation Will Vary Geographically:

Where to Register ≠ Where to Protect ≠ Where to Own Your IP

- Where are you based?
- Where is competitor based?
- What are your most important markets (by volume, by profits)?
- What are countries of threat?
- Timing and likelihood of success?
- Ease & costs of enforcement?
- Provisional applications v. formal applications?
- National + PCT (buy some time?)
- Limit utility patents (e.g., in 5 countries only) but register TMs internationally (always consider EU design rights and trademarks)
- Consider G8 (plus China and India: IP assets there are increasing in value)
- Ultimately, owner of company may determine this. It is often tax or fiscally driven (e.g., withholding taxes, dividend taxes, inter-co finance)
Synergies Affect Valuations Across the IP Spectrum

- IP rights are seldom mutually exclusive. Think of them over time and collectively. Best formula is to generate synergies (e.g., Design + TM). Some examples:
- **COPYRIGHT + KNOW-HOW (=TS)**: Almost always there. License together.
- **PATENT + TRADEMARK**: e.g., Patent only in G8 countries, but TM worldwide (all Madrid Protocol). NB: TM’s over the long term can be worth more – don’t expire!
- **DOMAIN NAME + TRADEMARK**: Recommended in (almost) 100% of cases.
- **TRADE SECRET + TRADEMARK**: Don’t disclose the secret but build up the brand (e.g., “7X”). Describe results of TS but not the “how”.
- **COPYRIGHTS + TRADE SECRET**: E.g of software: license and restrict access to source code. Program protection: have auto-delete if source code is breached.
- **COPYRIGHT + TRADEMARK**: Very common in entertainment industry. E.g., HARRY POTTER™
- **COPYRIGHT + DESIGN + UTILITY MODEL**: Very common in Europe.
- **PATENT + TRADE SECRET**: All patents start as TS, but you can still separate e.g., product (patented) from process (kept as trade secret). But be careful of US “Best Mode” issues. Also beware of invalidity that may result from “misleading” indications in patent application.
- **COPYRIGHTS + 3D TRADEMARK + BRAND NAME TRADEMARK + DESIGNS + UTILITY PATENT**: Why not? Is often done.
E.g., Patents + Trademarks

Source: David Robertson, IMD

!!The dreaded “Shark Fin” Curve!!
Litigation Strategies for Valuing IP

IP Valuations are a great source of conflicts and disputes
Every IP dispute involved valuation issues
THIS WILL BE DISCUSSED IN MORE DETAIL TOMORROW
Summary of Valuation

- There is no single correct method (or any correct method?)
- Several validated methods can give completely different results
- Using experts can help: sometimes essential
- Know **WHY** and **FOR WHOM** you are doing a valuation: answers can vary
- Will depend on **VALIDITY** and **OVERALL BUNDLE** of IP rights
- Will depend on **SIMPPLICITY** (e.g., single ownership v. multiple owners as separate stakeholders)
- Will depend on **PERCEPTIONS** of your IP
- May depend on your **MARKET SHARE** or **WHO OWNS** the IP asset
- May depend on your **CASH RESERVES & LIQUIDITY**
- Emphasis of this section is so that you can be **AWARE** of them
- Remember: **“BEAUTY IS IN THE EYE OF THE BEHOLDER”** (NB. “All children are beautiful in the eyes of their parents”!)
- Remember your **COMPETITION**
INTELLECTUAL PROPERTY AS A TOOL FOR ACCESSING FINANCING

Angels
VCs
Companies
Gov’ts
Banks
You Need to be Properly Equipped!

- Management team
- Entrepreneurial spirit
- Clear product definition addressing real markets
- Business model & strategy: with deliverable goals
- **Appropriate** Financing: \( O_2/\$$/\€€ (\geq 2 \text{ yrs burn rate}) \)

  - Where & How? Alternatives = FF&F, Angels, VCs, Industry, govt. grants etc.

- Financing: What are IP considerations for each investor?
IP & The Business Angel

- Will depend on his/her area of expertise/experience
- Typically, IP is not understood and is seen as purely technical
- BUT PERCEPTION IS 9/10ths OF REALITY: START NOW!

- Start your branding identity now: Check and protect your company name (e.g., registrar of companies, DNS)
- Logos, TMs: will start to be associated and recognized as of now. Verify your © ownership issues as of now too.
- Understand and list your key IP assets
- This will help you in future fundraising aspects
IP & Venture Capitalists

- Need to understand what VCs are and where your “VC” fits in. Valued Consultant or “Vulture Capitalist”

- Ultimately, VCs are providing investment services to their own investors, and are only motivated by their “carried interest” (i.e., Internal Rate of Return on Investment (“IRR”))

- Many VCs outsource IP due diligence to expert counsel and have little understanding of what IP really is or its importance. (e.g., “5 patents” = “5 designs” or “5 utility patent applications” or “1 application pending in 5 countries?).

- Check case-by-case and don’t assume too much: You may need to explain.

- VCs have only 2 basic concerns: (a) Freedom to operate, and (b) Strong barriers to entry.

- Patents are not the only IP asset here: Trade Secrets and standard Employment Agreements may be even more important.
Experienced VCs: IP Becoming Increasingly Important

- **Screening of Deal Flow**
  - Investment Memo
  - Reporting to Investors

- **Project in**
  - Initial screening & Assessment
  - Due Diligence
  - Terms Sheets & Closing
  - Supporting Portfolio Companies
  - Exit & Returns to Investors

**Medabitech’s Selection Criteria**
1. People & management
2. Technology & science
3. Products & revenue models
4. **Intellectual Property portfolio & strategy**
5. Unmet medical needs
6. Market size and penetration
7. Appropriate financial planning
8. Overall “Obstacle Course” and milestones
9. Attractiveness to strategic partners
10. Valuation & exit

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The Right VC Partner is Important & Can Help

- International network and exposure
- Global strategic thinking & alliances
- Business Development support
- Regulatory expertise (strategies & reimbursement)
- Product development expertise
- Intellectual property expertise
- Start-Up experience
- Staged financing for first 2 years (€ 0.5 – 5 M)
- Quality time with investors (min of 2 full days/month)

What Life Science Start-Ups need

Seed

- Hands on support
- Local network and exposure
- Offices and lab space
- Administrative assistance
- Foundation and registration

Start-Up

- Exit support
- Deep pockets for future rounds
- Corporate Finance assistance

Later Stage

Global VCs

Specialist VCs

Angels & Local VCs

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IP & Industry

- Industry will have the greatest appreciation of your IP
- Primarily concerned with validity, scope and enforceability. Will look at applications in detail (file-wrappers, inventors, etc.)
- Careful: They may see your IP as a double-edged sword
  - Potential benefit (if owned by them)
  - Potential threat (if owned by competitor or affects R&D)
- Appreciation of IP will vary within the same company. You need to sort out different departments and their interests:
  - R&D
  - Strategic Business Unit
  - Corporate HQ
  - Chief Technology Officer’s office
  - Business Development & Licensing Dept.
  - Finance/Tax
  - Corporate VC fund
Industry: Some Special Considerations

- Who is your internal champion: department and seniority?
- Track record (speed, efficiency, assistance)?
- Corporate policies & procedures on in-licensing (CDA's, procedural docs, etc? Average time to closing?)
- Internal pipeline & marketing considerations?
- Budget allocations? (NB: Can be straight jackets)
- Benchmarking / past deals reported?
- Individuals/relationships?
- NIH ("Not Invented Here") Syndrome?
- Ownership of IP (own vs. license)?
- Variety of different relationships possible:
  - R&D collaboration
  - Joint Venture
  - M&A
  - Stock participation (minority? added conditions e.g., ROFR?)
  - Simple license or distribution agreement
- Attitude: "shopping" v. "partnering"
- Willingness to share info & mentor
IP & Government Grants

• Often the easiest source of funds but ...
• Check IP policies and possible strings attached to “grants”
• Avoid unpleasant surprises: e.g., EU Framework Programs and automatic licenses (“access rights”) to background information and IP
• Ensure that future IP is yours and no obligatory licenses
• Check possible co-ownership issues (e.g., Univ. Tech Transfer office): management & control of IP
• Is it possible to take IP out of the country (restrictions on subsequent transfers?)
• Obligation to manufacture in country?
• Royalty pay-back provisions?
• Special investor/co-investor base/bi-national programs?
IP & Banks or Pools

- May be possible to get a lien or loan on registered IP assets
- May be possible to have registered securities (e.g., “Bowie Bonds”)
- May be possible to sell future patent royalty income stream (“royalty banks”)
- May be possible to leverage greater value out of IP assets by pooling with others (e.g., “Patent Trolls”)
- Not possible if IP has “claw back” provisions attached
- Not possible if SME is only a licensee and not assignee of IP rights in question.
- Finally, IP may be all that is left in case of bankruptcy.
Securitization: a New Field

“Intellectual property is just like any other. It is no different to a stock, bond, currency or derivative investment.”

Robert Kramer,
Managing partner of Altitude Capital Partners

“That said, the technical nature of intellectual property and its ambiguities make investment a complicated proposition. It requires a firm to have many different skill sets as well as a willingness to incur high due diligence costs, while monetisation strategies are fuzzy and timetables to exit are unclear. For those who understand all this, however, there are substantial opportunities.”

Source: Introduction: Welcome to the IP Century
Securitization Case Study
Cambridge Display Technologies (CDT)

- http://www.cdtltd.co.uk/
- 1987 first patent filed (light-emitting polymers)
- 1992 Cambridge co. created (seed)
- 1996 First license agreements
- 1997 US$ 10 million (series A)
- 1999 US$ 133 m + US$ 16 m R&D
- 2001 US$ 28 m (internal round)
- 2004 NASDAQ flotation “OLED” (approx 150 employees)
- July 2004 capital restructure of US$15 m in debt capital

“CDT raised cash by collateralising its IP portfolio via a credit enhancement and debt facility arranged through Lloyds TSB Bank and IPI Financial Services. In taking this route, the company has shown that it is possible for small companies with top-class intellectual property but few fixed assets to raise the money they need in order to grow. The CDT experience demonstrates that a strong IP portfolio not only can help a small or medium-sized company operate successfully in a global market, it can also be a way into the financing so necessary for continued business growth.”

Source: “Intellectual property is a shareholder issue”
Joff Wild (http://www.buildingipvalue.com/06intro/008_011.htm 2006)
Securitization: A Growing trend

• Examples of recent deals (2006-07)
  – Films (= ©) (US$ 300 Mn – 1.1 Bn)
  – Franchise (US$ 250 Mn – 1.7 Bn)
  – Trademarks (US$ 20 Mn – 1.8 Bn) (mainly apparel)
  – Patents (US$ 80 Mn – 228 Mn) (pharma only -- ltd)

Increasingly sophisticated and graded (e.g., AAA Moody’s rating, wrapped, etc)

IP IN BUSINESS PLANS
Express Why + Four Basic 4 questions:

Be clear -- What is the purpose of your IP?

Financial revenues / royalties?
Equity value generation?
Barrier to entry?
Recognition? Etc.

Four basic questions to always bear in mind (country-by-country):

1. Is there valid IP here?
2. Who does it belong to?
3. Am I free to use it? (Do I have freedom to operate?)
4. How can I protect it?
Presenting IP in Your Business Plans

1. Describe your IP culture and strategy
2. Use IP symbols (Logo, ©,™,®) – set your identity clearly
3. Don’t use “CONFIDENTIAL” on first contact document (have two versions or use annexes after CDA is signed)
4. Not too much detail: focus on benefits -- better, faster, cheaper
5. Clearly identify your IP assets and list as a portfolio/table (Clarify what is meant by “5 patents” – unless you want to be non-specific, e.g., “patent pending” can also mean US design patent)
6. If applications, address patentability issues (e.g., opinion of counsel on claims likely to issue, Search Report)
7. Address Freedom to Operate issues & closest IP (EU Opinion letters: but beware of waiver of US attorney/client privilege)
8. Discuss ability to exclude others (i.e., scope of claims)
10. Facilitate due diligence (e.g., a signed chart addressing inventorship, ownership, best mode, no 3rd party IP)
11. Use and show model HR contracts & lab notebooks policies
12. Clarify royalty stacking as % of net sales and show your IP budget
Use Trademarks: But use them correctly!

- Use the ™ sign: Start to have a consistent branding policy (e.g., for the name of your technology or products ranges) and explain you protection policy (e.g., DOLBY). If you already can use an ® (NB careful of country and should not be mislabelled), this should be listed as an IP asset. If in doubt use ™ sign.

- Always use capitals/upper case for the whole trademark (e.g., “KLEENEX”, not “Kleenex”).

- Always use as an adjective (make sure there is a noun) (e.g., “a JEEP car” not “a JEEP”).

"USE IT, USE IT RIGHT, OR YOU LOSE IT"
Davey Bowman, Becton, Dickinson & Co.

This applies to external & internal communications
Remember Costs of a Patenting Strategy (time + cost info)

**Budget Accordingly!**

1. Conception of invention
2. Sending Invention Disclosure Form to the Patent Department or your lawyer
3. Filing of “priority” patent or provisional application by patent attorney and inventor(s) (\(\text{Approx. cost} = \text{US$ 5-10,000}\)) \(\text{TIMELINE STARTS TO COUNT!}\)
4. Filing of foreign counterparts or PCT (decision = 6 months; deadline = 12 months)
5. Publication of application -- 18 months
6. Examination by granting authority to ascertain novelty, inventive step etc. Docs received: Search Report, Written Opinion, PCT International Preliminary Examination Report (Office actions = negotiations with Patent Office) (\(\text{Can be most expensive = attorneys bill/hour!}\))
7. Interference (only in U.S.A. – but need to check published applications now) (\(\text{NB. As expensive as litigation = US$ 1,000,000 or more!}\))
8. PCT national/regional phase applications are filed: (30 months from priority filing date) (\(\text{NB. Translations are expensive!}\)) (\(\text{Approximate cost} = \text{US$ 120’000 for 5 countries}\))
9. Grant (\(\text{NB. This happens country by country, even if based on PCT or EPO application}\))
10. Opposition (9 months from grant - only in EPO.) (\(\text{NB. Expensive and long!}\))
11. Annual maintenance fees over 20 years (\(\text{Approximate cost} = \text{US$ 150’000 for 5 countries}\))
12. Enforcement/attack (\(\text{USA = US$ 1-5 MN, Europe = US$ 200,000/country}\))
Patent Costs: Two Sample Estimates

Filing Fees
Translation/Recording Fees
Annuities

40 Pages
20 Claims*
USA, EPO,
Japan, Canada,
Australia and Korea

$310,000

20 Pages
5 Claims *
(EPO-designating only Italy,
France, Germany, United
Kingdom) and Japan

$85,000

* = No of claims can make a big difference e.g., Japan
5 claims = $35,000 vs. 20 claims = $ 110,000

Source D. Johnson: Mintz Levin, Boston (2001)

NB: THIS DOES NOT INCLUDE ATTORNEY FEES
Conclusion: Plan Accordingly!
Sample Annuities for a Single Biotech Patent (in US$)

FILING DATE:
09/21/95  2001  2002  2003  2004  2005  2006  2007

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TOTALS       | 3120.00| 3629.22| 4092.99| 4834.97| 5582.94| 6398.37| 7332.98

NB: Europe only: USA & Japan not included

Source D. Johnson: Mintz Levin, Boston (2001)
Example of a Budget Assessment for Trademarks

- **Product** = new high-end luxury cosmetics product
- **Which Categories?**: The NICE Classification System: [http://www.wipo.int/classifications/fulltext/nice8/enmain.htm](http://www.wipo.int/classifications/fulltext/nice8/enmain.htm)
- **Possible classes** = 3 (cosmetics), 9 (glasses), 14 (jewellery), 16 (stationery), 18 (leather bags), 25 (clothes)
- **CH search** = CHF 950
- **1st Swiss registration (6 classes)** = CHF 2,600
- **2nd International Madrid Protocol filing** = CHF 17,130
- **3rd Additional non-Madrid Countries: (ave. CHF 2,000 / country)**
  - INDIA: CHF 1’700
  - INDONESIA: CHF 2’200
  - HONG KONG: CHF 2’300
  - MALAYSIA: CHF 1’800
  - TAIWAN: CHF 2’200
  - THAILAND: CHF 2’000
  - CANADA: CHF 2’200
  - SAUDI ARABIA: CHF 4’400
  - UNITED ARAB EMIRATES: CHF 7’000
  - ISRAEL: CHF 2’300
  - OMAN: CHF 3’600
Remember Typical IP Errors That Can Prove Fatal

- Patentable ≠ Freedom to Operate (i.e., need legal opinions)
- US vs. Rest of World (different standards e.g., best mode)
- Issued patent ≠ Valid or Enforceable Patent (litigation is the test)
- Importance of File Wrappers: Scope of final claims as issued
- Strategy: “Defensive” vs. “Offensive” applications (anti-competition?)
- Check and re-check ability to design around your pending claims
- Budgeting Costs: Don’t run out of cash when you get to issuance fees!
- Enforcement issues: Never underestimate other side and be prepared.
- (Co-?) Ownership issues. Impact of inventor “inflation” or “deflation”? 3 co-ownership regimes (joint, severable, severable but share).
- Strengths of licenses or wrong IP strategies: Exclusive? Revocable? Assignable? Access Rights?
- Royalties: Stacking? Be conservative with numbers or show a range of possibilities
Overall

- No “one-size fits all” solution: you need to innovate with your IP as well
- Each strategy will be person, time and industry-specific (e.g., Intel at first ≠ Intel today)
- Think it through: costs and timing issues
- What are your most important IP rights?
- What are your cash needs?
- What are your greatest concerns (SWOT analysis)?
- What would your competitors like to know?
- What are your main trade secrets? Are they sufficiently understood and identified?
- What do you want to protect & how can this be done?
- What feels right in your local culture/industry?
- How are you communicating your IP’s value?
- Do you have the right relationship with your IP counsel? (Each SME is unique and over the course if time will know itself what is best.
- Avoid “GIGO” and constant changes
Conclusions

- Start early on a consistent IP policy
- Plan, prepare and communicate accordingly
- Know your sources of finance: who do you plan to target?
- Know your projected IP commercialization strategy
- Know your IP budget and cash needs
- Be careful when trying to set valuations on your IP
- Consider using ADR, even in the absence of disputes
Bottom Line on IP & Financing

• “Valuation is in the eye of the beholder” (e.g. its strategic needs)
• It is an Art, not a Science
• Amount received is not the most important issue
• “Value Added” of investor can be much more important
• Very complex and specialist field: expertise required
• Know who you are speaking to and what their metrics are
• Be conservative but use synergies
• Present & manage your IP according to your financing strategy.