Commercialization Procedures: Licensing, Spin-offs and Start-ups & Value of IP/Technology

Yumiko Hamano
Senior Program Officer,
WIPO University Initiative Program
Innovation and Technology Transfer Section,
Patents and Innovation Division, WIPO
Outline

- Different Ways of Commercialization
- Privately Funded Research and IP
- Licensing
- Licensing Agreement
- Licensing Negotiation
- Start-up and Spin-off
- Technology Valuation
Commercialization

What types of commercialization of research results should the university support and encourage?

- Donation, licensing or sales of IP
- Start-up and Spin-off
Based on the idea of publicly founded research, belongs to the Public.

Potential problems:

- IP may be exploited by a third party outside the country
- Commercialization may involve use of existing IP (Who pays the costs for the use of the IP?)
- Company may not invest (no exclusivity)
- No incentive to commercialize
Commercialization
<Licensing>

– A route of commercialization where an IP rights holder gives another entity the authority to exploit to make, have made, use, sell, copy, display, distribute, modify, etc.) the IP - in return, the licensee will pay royalties

– The most popular and sustainable way of commercializing IPR

– Managed through written legally bound agreements

– Agreements stipulate details of extent of rights of exploitation (key terms: subject matter, scope, exclusive or non-exclusive, fields of use, territory coverage, amount of royalties, periods of royalties, length of exploitation etc.)
Privately funded research is where the resources are supplied by private enterprises or organizations:

- **Contract research:**
  Research which is conceived and funded by industries to provide a solution to a specific problem

- **Sponsored research:**
  Where a university conceives a research project and prepare a proposal for funding and where the funding agency is not directly a beneficiary of the research results

- **Collaborative research:**
  Research collaboration between a public university and private research unit of an enterprise or private organization
Research collaborations are managed by legal agreements such as:

- Contract research agreement
- Collaborative research agreement
- Consulting/know how Agreement
- Material transfer agreement (MTA)
- Confidentiality agreement (NDA)
- Participation agreement
- Licensing agreement
Non Disclosure Agreement (NDA)

- known as “confidentiality agreement”
- Any information disclosed to another party
- NDAs prevent third parties from using the information disclosed without the permission
- NDAs are often exchanged before licensing negotiation
- Companies often request researchers to sign NDAs before entering research contracts
Non Disclosure Agreement (NDA)

NDA provisions include:

- Identification of parties
- Identification of confidential information
- Definition of purposes for which information can be used
  - E.g., solely for purposes of evaluating a licensing opportunity
- Requirements for return/destruction of confidential information
NDAs does not apply to:

- Information in the public domain
- Information already possessed by the recipient
- Information disclosed to the recipient through legitimate means
Material Transfer Agreement (MTA)

- Contracts that govern the transfer of physical assets,
- Typical materials are biological materials (reagents, cell lines, plasmids, and vectors) that are transferred for the purpose of research or commercialization
- Chemical compounds
- MTA ensure transfer of possession but not legal title
To encourage privately funded research, the institutional IP policy should provide clear provisions on:

- Approval procedures for privately sponsored research proposals
- Ownership of IP generated from privately sponsored projects
- Licensing of IP generated from privately sponsored projects
- Confidentiality issues of privately sponsored projects
Licensing Agreement

- The subject matter of the agreement: What is licensed?
- Scope of the license: What are you allowed to do with it?
- Financial Terms
- Licensing Conditions
- The licensor’s obligations
- Obligations common to both parties
Key Terms and Conditions

- Subject matter (use specification, technical description, patent No., name of the invention, trademark, standards?)
- Scope of the license (make, use, sell, make copies, distribute?)
- Field of use (technical fields?)
- Ownership
- Confidentiality
- Exclusive or non-exclusive
- Sub-licensing
- Territory
- Duration (How long? Does this depend on events?)
- Financial terms (Royalty, Lump-Sum, stock, payment method)
- Development rights
- Derivative works, improvements
- Future version of the technology
- Warranties (for risk of technology defect, defect in title, infringement)
- Dispute settlement (where settled? Who indemnifies against risk from 3rd party claims?)
Licensing Negotiation

Four Phases:
1. Preparation Phase
2. Discussion Phase
3. Proposing Phase
4. Bargaining Phase

Preparation for Negotiation

- What is the business reason for this license?
- What is the best result that can be obtained from this agreement?
- What outcome do you want to avoid?
- What leverage do you and the licensee have?
- What are your and licensee’s positions on the key issues?
- What are your and licensee’s lowest and highest limits?
- What are you willing to compromise?

Source: Kitisri Sukhapinda, United States Patent and Trademark Office
Negotiation Tips

✓ Win-Win
✓ Start with A Minor – Easy to resolve issue
✓ Best Case v. Worst Case Scenario
✓ Protect Credibility/Be Accurate
✓ Assess & Trade Variables Carefully
✓ Separate People From the Process
✓ Listen to What is Being Said & Not Said
✓ Remember - Everything is negotiable

Source: Kitisri Sukhapinda, United States Patent and Trademark Office
Licensing Negotiation

Key to successful licensing negotiation

3Ps
1) Preparation
2) Preparation
3) Preparation

Source: Kitisri Sukhapinda, United States Patent and Trademark Office
Commercialization
<Start-up and Spin-off>

Example: US in 2010

- 651 new companies were created based on new technologies generated in some 200 US universities
- 80% were based in the university’s home state
- Over 600 (15% of total US licensing) licensed to these companies
- 50% of all licensing agreements to SMEs
- 3657 start-ups still operating by the end of 2010

Source: AUTM U.S. Licensing Activity Survey FY2010
IP and Technology Valuation
The Three Classic Methods

- Determine income derived from IP
- Assess cost of recreating IP
- Compare against “IP market”
Income Method

Question to be answered

How do I quantify the benefit that I can derive from intellectual property?
Income Method
continued

Advantages

- Use readily available data
- Value is based on clear factual assumptions
Disadvantages

- Subjective assumptions about income and risk vary greatly
- Difficult to apply to new technologies
Income method
Continued

- Market introduction – “market penetration”
- Growth phase – “market expansion”
- Maturity – “market saturation”

Revenue
$

Time (years)
Next step

Adjust future income to present value by applying a chosen discount rate
Income method
continued

<table>
<thead>
<tr>
<th>Years from now</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$0.926</td>
</tr>
<tr>
<td>2</td>
<td>$0.857</td>
</tr>
<tr>
<td>3</td>
<td>$0.794</td>
</tr>
<tr>
<td>4</td>
<td>$0.735</td>
</tr>
<tr>
<td>5</td>
<td>$0.681</td>
</tr>
</tbody>
</table>

Value of $1 discounted at a rate of 8%
Income method
continued

Cash flow of $200,000 per year over 5 years
Discounted at 8% per year

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>$185,000</td>
</tr>
<tr>
<td>Year 2</td>
<td>$171,400</td>
</tr>
<tr>
<td>Year 3</td>
<td>$158,800</td>
</tr>
<tr>
<td>Year 4</td>
<td>$147,000</td>
</tr>
<tr>
<td>Year 5</td>
<td>$136,200</td>
</tr>
</tbody>
</table>

Net present value $798,400
Market Method

**Question to be answered**

What value do others apply in the same field of technology?
Market Method continued

Advantage
- Simplicity - if you have access to the right data

Difficulties
- Restriction of access to existing contracts
- Regional differences
- Incomplete knowledge of all terms of licensing contracts
Cost method

Question to be answered

What would it cost to re-create the required technology?
Cost Method
continued

Costs to be considered

- Re-creation of facilities
- Running costs
- Cost of failed efforts
- Opportunity cost – delay in getting to market
Cost Method
continued

Advantages:
- Understand of competitors’ invent-around costs
- Understand licensor’s perspective.

Disadvantages
- Difficult to assess
- Not representative of value perceived by others
Thank you for your attention