

AUTM Technology Valuation Course



Webinar Speaker



Steve Ferguson, CLP
National Institutes of Health
sf8h@nih.gov



Disclaimer

The following presentation is not to be construed as representing the policies of the National Institutes of Health or the Association of University Technology Managers. The content is solely for purposes of discussion and illustration and is not to be considered legal advice.



AUTM Course Outline:



Creating Value Measuring Value **Sharing Value** Start-ups and Value **Valuation Case Study**

Creating Value

A collaboration between licensor and licensee



Creating Value Topics

Long Tail of IP Value

Value of IP to the University

Value of IP to the Licensee

What to Know Before you Negotiate a License

Factors that Affect Value of a Potential License

Startup or Established Company?

Running Royalties

Royalty Base



An IP license has many clauses.

Which one will have the biggest impact on the value of the license?



An IP license has many clauses.

Which one will have the biggest impact on the value of the license?

The name of the licensee.



A colleague from another university TTO calls you:

"One of our researchers is spinning out a company. He's spoken to VCs who like his idea. He wants to license his IP. He asked me for a Term Sheet."

"I quoted 5% equity and 6% royalty. The VCs say I'm way above what your university asks for. Is that true?"



A colleague from another university TTO calls you:

"One of our researchers is spinning out a company. He's spoken to VCs who like his idea. He wants to license his IP. He asked me for a Term Sheet."

"I quoted 5% equity and 6% royalty. The VCs say I'm way above what your university asks for. Is that true?"

Your method should be consistent, but every deal is different.

A colleague from another university TTO calls you:

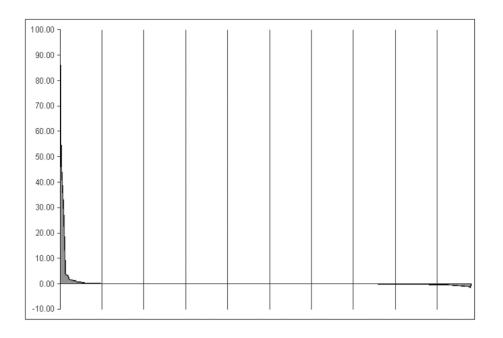
"One of our researchers is spinning out a company. He's spoken to VCs who like his idea. He wants to license his IP. He asked me for a Term Sheet."

"I quoted 5% equity and 6% royalty. The VCs say I'm way above what your university asks for. Is that true?"

Your method should be consistent, but every deal is different.

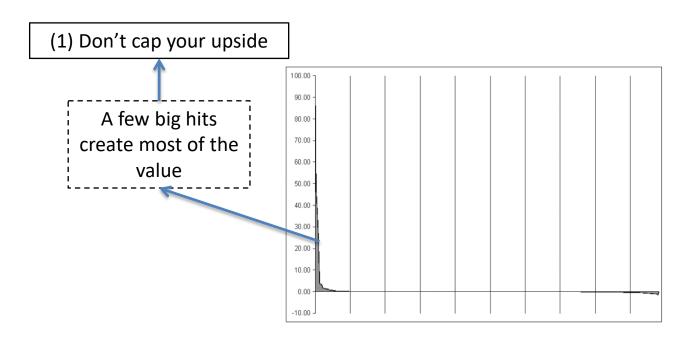
First, qualify the licensee; then, understand their business model; then propose terms.





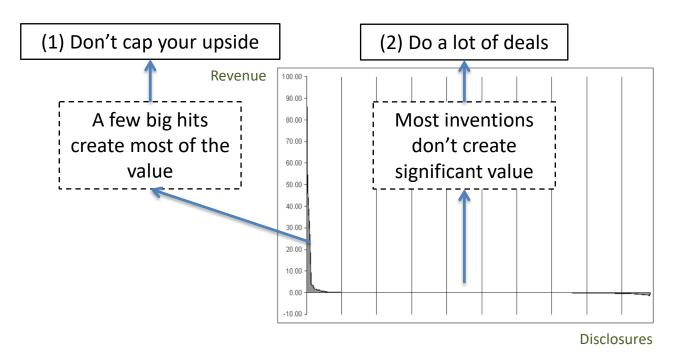
McMaster University FY97 to FY06, Net Revenues/Disclosure over Disclosures, Max revenue=100





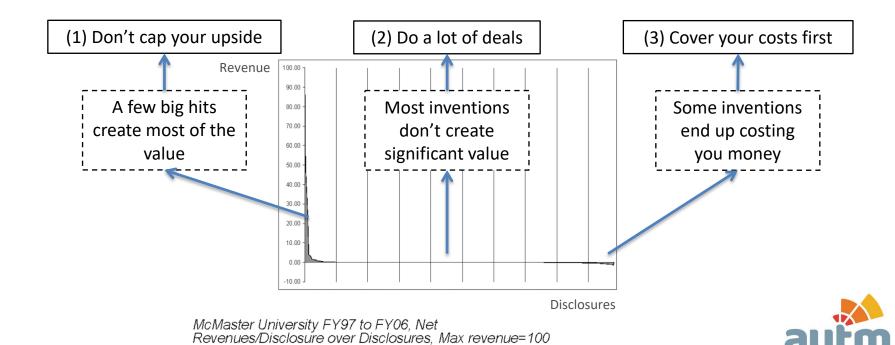
McMaster University FY97 to FY06, Net Revenues/Disclosure over Disclosures, Max revenue=100





McMaster University FY97 to FY06, Net Revenues/Disclosure over Disclosures, Max revenue=100





Creating Value

- How do you come up with IP valuation terms?
 - Mainly royalty rate, but also other terms
- Why is a "fair royalty" important for university licenses?
- Why does technology valuation matter?
 - or -
- Why do you need a good, consistent process/methodology for valuing your technology (IP)?

What kind of license terms?

Consider the best "exit" for your technology

Exclusive or non-excl.? Time-limited exclusivity, co-exclusive, conversion from exclusive to non-exclusive

Field-specific licenses, territorial licenses, global access

License with/without sublicense – is licensee going to "flip" the license, who will sell the product, differences between sub-licensee and distributor



Why a good, consistent technology valuation process matters

- Professional credibility/training
- Office credibility
- "Ground truth" for your technology
 - Must do analysis to uncover what royalty rate the financials will support a "fair" royalty range.
- Earn more in license income for your TLO
- "CYA" -
 - Legal Kaswan v. UGa., UC-Berkeley case
 - Professional At some point, supervisor will ask for it



Why a good, consistent technology valuation process matters

- Responsible management of (initially) Gov. assets
 - Focus needs to be on finding a fair valuation (fair royalty rate)
 - Possible U.S. Gov. march-in rights triggered if terms are unreasonable
 - Market feedback
 - GAO audit, NIST "green paper" more Gov. oversight?

"because of the enormous amounts of taxpayer dollars invested each year in federally-funded R&D, either we will continue to improve our system, or, at some point, the long arm of government will do it for us. If that ever happens, it won't bode well for the continuation of decentralized TC, free from bureaucratic micromanagement."

- Joe Allen Feb., 2019



As you start off on a license negotiation...

- What is the Product? New product, new market, disruptive?
- How is value added? New use, product feature, lower cost, blocking competition?
- What is the business model for revenue generation?
- What is the market and competition (existing and emerging)?
- What and how much value does your IP bring to the business?
 (incl. materials, software, know-how, etc.)
- What kind of IP asset(s) do you have?
- How is the business going to be financed?
- Is it an existing licensee or a new venture?



Value of University IP – To the University:

- Helps achieve the public impact of university inventions
- Attracts research sponsors
- Secures freedom to continue research
- Attracts entrepreneurial faculty and students
- Attracts employers for graduating students
- May serve regional development charter
- Oh yes... also makes money for the university?



Value of University IP – to the Licensee

- IP blocks competition can improve market share, product features, cost
- Proof-of-concept by University reduces risk and development time
- Future support from university researchers
- The university's name adds prestige and credibility
- Training and collaboration for licensee's staff
- Often a key to raising money for startups



Before You Negotiate the License

Six steps to understand the licensee's business model

- 1. Understand the product in the way the licensee's customer does
- 2. Understand the market and competition
- 3. Understand the business model
 - How is the licensee going to finance the business?
 - What is the product value and how will the licensee capture it?
- 4. How important is this business to the licensee?
- 5. How important is your IP to the business? For what?
 - Customer value or blocking competition?
 - New product, new market, new product feature, lower cost?
- 6. What are the planned success milestones?
 - (= accomplishments that reduce future business risk)



What affects value in *patent litigation*? The Georgia Pacific Factors*

- 1. Royalties previously received by licensor for similar IP.
- 2. Royalties previously paid by licensee for similar IP.
- 3. Exclusivity and other field restrictions.
- 4. Licensor's choice of licensees to preserve monopoly.
- 5. Relationship between parties (competitors vs. partners).
- 6. Convoyed sales.
- 7. Duration and terms of license.

- 8. Profitability, commercial success of product.
- 9. Value of IP over prior solution.
- 10. Contribution of IP to the value of the product.
- 11. Extent of infringement.
- 12. Customary profit or selling price in that business.
- 13. Unique contributions of licensee.
- 14. Expert opinion.
- 15. Likely friendly license terms.



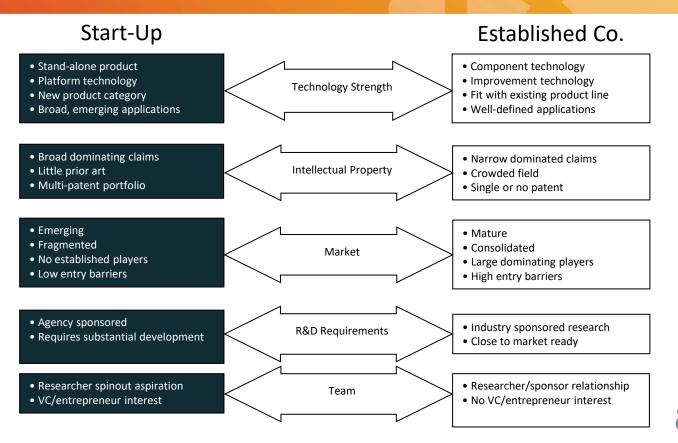
^{*}Federal Court patent infringement decision in Georgia-Pacific Corp. v. United States Plywood Corp. (SDNY 1970)

Many factors affect the value of a potential license

- Stage of Development (conceptual, prototype, in vitro/vivo, clinical)
- Plans for continued internal development
- Sponsor interests
- Ownership status
- Stand-alone IP, platform or portfolio
- Identifiable product opportunity
- Licensability of the technology:
 - Business opportunity
 - Enforceable patent
 - Availability of licensing support from research team



License Pathway: Start-Up or Established Company?





Running Royalties

Running royalties = Royalty Rate x Royalty base What should your "royalty base" be?

Your IP is a formula to make an industrial chemical.

Licensee will sell the chemical and also sell products manufactured using the chemical.

Licensee wants the royalty base to be the manufacturing cost of the chemical that they produce.

Running Royalties

Running royalties = Royalty Rate x Royalty base What should your "royalty base" be?

Your IP is a formula to make an industrial chemical.

Licensee will sell the chemical and also sell products manufactured using the chemical.

Licensee wants the royalty base to be the manufacturing cost of the chemical that they produce.

Your royalty base should be the value that your licensee's customer receives

Running Royalties

Royalty base:

Value that your licensee's customer receives:

Licensee's Net Sales (\$) is usually the best measure – what the licensee's customer is willing to pay for the value delivered.

Unit Sales or other proxies are sometimes used as Royalty Base.

How about licensee profit? Costs?

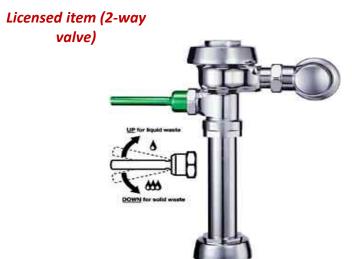
Sales of the "portion that includes the licensor's IP"?

Adjustments for "Combination products"?



Royalty Base: Are these "Combination Products"?

Sloan Valve vs. Zurn Industries:



Plantronics vs. Aliph:

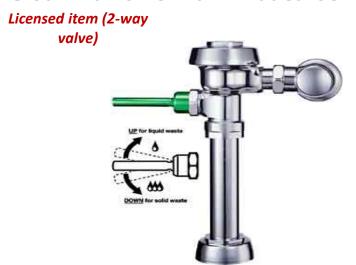
Licensed item (earbud)





Royalty Base: Are these "Combination Products"?

Sloan Valve vs. Zurn Industries:



2-way valve is an additional, optional feature. Main unit <u>should not</u> be included in Royalty Base

Plantronics vs. Aliph:

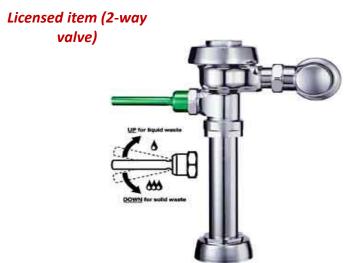
Licensed item (earbud)





Royalty Base: Are these "Combination Products"?

Sloan Valve vs. Zurn Industries:



2-way valve is an additional, optional feature. Main unit <u>should not</u> be included in Royalty Base

Plantronics vs. Aliph:

Licensed item (earbud)



Bluetooth module has no utility by itself. It should be included in Royalty Base



A collaborative, value-creating valuation process

- 1. Qualify the licensee;
- 2. Agree on revenue and profit model;
- 3. Agree on critical success factors (Diligence);
- 4. Agree on contribution of the IP to the value delivered by the licensee;
- 5. Propose & negotiate terms that share the agreed value.



AUTM Course Outline:



Creating Value Measuring Value **Sharing Value** Start-ups and Value **Valuation Case Study**

Meet Your San Diego Course Instructors



Steve Ferguson
National Institutes of
Health



Ruben Flores



Michael Sharer



Gayatri Varma AstraZeneca



Debbie Stewart InvotexIP



Questions?

