

Guidebook of IP/Technology Transfer

Track 1

Entry-level Tech Transfer Professional

Topic 1.12.4

License Terms and the Value-Capture Envelope

License as “Value-capture/Risk-share System”

- The license has various mechanisms for allocating the share of risk and reward between the parties
- **The ideal balance equilibrates for:**
 - the potential market-value of the technology,
 - the risk it may not achieve that value,
 - the investment risk the licensee must make,
 - the value of the IP (inventiveness),
 - the IP owner’s “opportunity cost”

Building the Value-Capture/Risk-share System

Consider all these as “moving parts” in a fine-tuned
“value capture/risk-sharing” device:

- Scope of the license (field of use, geography)

- License fee

- Royalty on sales

- Milestone payments

- Minimum annual royalty

- Sublicensing rights and revenue sharing

- Future IP

- IP costs

- IP enforcement

- Transfer of License to 3rd parties

The License as Value-capture/Risk-Share System:

Various mechanisms allow balance

- Scope of the license
what are you handing over?
- License fee
“guaranteed compensation”
- Royalty on sales
the marketplace determines value
- Milestone payments
assures diligence & shares risk
- Minimum annual royalty
the price of exclusivity

Various mechanisms allow balance

- Sublicensing rights and revenue sharing
powerful mechanism in exclusive licenses
- Future IP
could be very significant
- IP costs
critical for Public Sector TTOs
- IP enforcement
ultimately essential
- Transfer of License to 3rd parties
can have significant impact

Various mechanisms allow balance

- All the components should be integrated
- The Tech Transfer Professional as
“license designer”
- The license components are integrated and
function like a Swiss watch

Building the Value-Capture/Risk-share System

- Create multiple value-capture/risk-share mechanisms
 - Upfront fees, milestone payments, exclusivity payments
 - Royalty on sales
 - Sub-license revenue sharing
 - equipment, other in-kind
- Establish valuation assumptions, justify them, be prepared to modify them in the professional dialogue
- Consider alternative benefits (e.g. cross-licensing, technical and/or business linkages)
- “front-loaded” vs. “back-loaded” value capture

Technology Valuation: some basics

- No one can accurately predict the true (market-based) value of a new technology
- The license should be designed so that both parties realize tech/IP value
- Remember the risk the commercial partner is taking
- The commercial partner probably understands their industry and business assumptions better than youask questions....
listen and respect their knowledge

License as Value-capture/Risk-sharing System

“Front-loading” vs “Back-loading”

Front-loading

- capturing more value in early stages of license
- higher license fees/lower royalty shifts risk to licensee
- Maybe less value capture in the long term

Back-loading

- Lower license fees/higher royalty, higher later minimums and milestones
- Lower early return, maybe more value capture in long term

Creating a Value-Capture/Risk-sharing System

Invention valued at \$250k NPV

\$250k up-front, no minimums, 2% royalty

.....or

\$100k up-front, (3) \$50K annual payments, 2%
royalty.....or

\$50k up-front, (4) \$50k annual payments, 3%
royalty.....or

\$25k up-front, (5) \$45k annual payments, 5%
royalty.....or

Be flexible and creative in creating the value-capture
envelope

Parties defined

Whereas clauses

(no legal power; provide context)

Definitions

(where the action is)

IP defined (ownership & scope)

(precisely defined; territory; also bioproperty)

Grant of rights

(type, territory, field-of-use, exclusivity)

License fees

(amount & schedule, usually non-refundable)

Royalty

(structure & amount)

Minimum royalty & milestones

(timing, event-based, other)

.....continued

Reporting & accounting

Term (duration) & Termination

Managing liability risk

Future inventions

Infringements by 3rd parties

R&D collaboration

Legal boilerplate language

Structuring License Financial Terms

License Fee

(typically upfront, lump sum, non-refundable,
but, can be phased:

over time, or

events (a favorite!)

generally linked to value of the opportunity

Royalty

(usually linked to sales, industry standards)

Minimum royalties & Milestone Payments

(assures diligence, shares risk)

Amounts & schedule

Ongoing cost sharing

(patents, R&D, bioproperty, etc)

License Fee: the factors

Inventiveness of the technology

(uniqueness & superiority)

scope & value of the IP

market and product

demand

investment to date and future

cash flow needs

market size & characteristics

competition

opportunity cost

exclusivity

development status

The License as Value-capture/Risk-sharing System

Establishing a License Fee

- A pre-negotiation valuation: NPV, Cost, Comparables, etc.
- Opportunity cost
- Scope of rights granted
- Earnest money (depends some on company size)
- Investment is at its riskiest

this can make for difficult negotiations since the sides may not agree on risk level and/or potential market value of technology

- Upfront vs. spread out (time or event-based)
risk sharing, especially if event based

Factors in determining up-fronts and milestones

Based on eventual revenue generation

(market size, sales, etc.)

Risk factors

Cost-to-develop

Are there other who want it?

the “Buyer/Seller” negotiation

License as Value-capture/Risk-sharing System

Establishing a License Fee: Example

- NPV = \$500,000
- Lumpsum upfront = \$500,000 due on signing
- Scheduled (time-based):
 - \$100,000 due on signing
 - \$100,000 each year for next 4 license years
- Scheduled (event-based)
 - \$100,00 due on signing
 - \$100,000 due on first prototype
 - \$150,000 due on 1st sale
 - \$150,000 due on anniversary of 1st sale

Setting a Royalty: the factors

Gross Profit of enabled product as basis

$\text{sales price} - \text{COGS} = \text{Gross Profit}$

Industry standard range

Goldschieder's "25% Rule"

Royalty: the factors

What is the “Goldscheider 25% Rule”?

The owner of a patent that **fully enables** a product deserves 25% of the Gross Profit of the sale of the product

- “fully enables” = patent covers entire product
car versus windshield wiper analogy
- Gross Profit = Sales Price – COGS
(Cost-of-Goods Sold)
- Only a “rule of thumb” – usually not ideal

Royalty: the factors

Industry standard range

Goldschieder's "25% Rule"

business model of licensee

market characteristics (i.e., typical margins)

COGS and pricing

Value and scope of technology & IP

royalty stacking (3rd parties)

Setting a Royalty

Royalty (typically tied to sales)

- The standard: % of Net Sales (not fixed)
 - both parties share market risk
 - linked to sales and profit margins
- Ideally based on business reality
 - COGS vs pricing: gross profit margins
- Excellent means of getting the parties on same page
(important for building the partnership)
- Industry standards (use as guide, not absolute)
- Remember: it is in licensor's and licensee's best interest
that the licensee will be able to sell profitably

Setting a Royalty Rate

- Use industry standards as a guide (ranges)
- The “25% Rule as *starting point*:

The Rule: the owner of the patent that fully (100%) enables the product deserves 25% of the gross profit on sale of the enabled product.

Example of a patent that fully enables the product:

\$200 sale price

\$100 Cost of Goods Sold (COGS)

= \$100 Gross Profit

Patent owner share: $0.25 \times \$100 = \25

Royalty = $\$25 / \$200 = 12.5\%$

Setting a Royalty rate

Using the “25% Rule” & Enabling Factor

For a product with a \$100 Gross Profit
on sale of \$200

Patent 100% enables product: royalty = 12.5%

Patent 75% enables product: royalty = 9.4%

Patent 50% enables product: royalty = 6.25%

Patent 10% enables product: royalty = 1.25%

Setting a Royalty rate

The “25% Rule”

- Provides a starting point
- Adjusted according to “enabling value” (%)
- Typically, after analysis of manufacturing cost, market pricing dynamics, value-add by licensee....
- The parties agree to a simpler approximation
5% not 4.85%
8% not 7.89%
- 25% Rule is a good starting point but almost never the final royalty rate agreed-to

Royalty rate variations

Royalty % can:

- Remain constant over life of the license
or
- increase over time
or
- decrease over time
or
- Some creative combination

Scope of the license

- Exclusive vs. non-Exclusive, co-Exclusive, time-limited
- Field-of-use
- Territory
- All commercial-use rights, mfg only, sales only, etc.

Royalty – some variations

- Per “seat” or per “site” royalty
- Fixed with periodic, pre-agreed adjustments
- Technology value-add in market application
- Pick an industry standard

Milestone Payments

- Should be based on business and technology reality
- Parties should agree on development plan and timeline, understanding hurdles and their risks
- At key de-risk events, a payment to be made
- Time-based milestones can also useful

Minimums & Milestones

- One of the most powerful tools for:
 - value capture
 - risk sharing
 - licensor control
- Typically linked to product development schedule
 - Time-based
 - Event-based

Minimum Annual Royalty

- Should be based on business and technology reality
- Based on Parties' agreement on development plan and timeline
- Based on sales projections (timing and amounts) of Licensee
- Economic “teeth” of duty of commercial diligence
- Protects the public interest by economically penalizing failure to commercialize
- Ongoing leverage by university to assure development

License as Value-capture/Risk-sharing System

Minimum Annual Royalty: how it works

- The parties agree on sales projections
- Royalty projections are based on sales projections
- Consider giving licensee a “forgiveness cushion” of 25%-35%
- Licensee pays minimum at BEGINNING of license year
- At end of license year, royalty owed is calculated and minimum already paid is deducted
- Licensee either:
 - met sales projections (no more royalty owed),
 - exceeded sales projections (more royalty owed),
 - or didn't meet projection (paid royalty without sales)

Sublicensing rights and revenue sharing

- A value to be negotiated not given away lightly
- Licensee/licensor can share sublicense revenue in any manner they negotiate
- Mandatory sublicensing clauses can be used
- Incentives for sublicensing can be used
(assures widespread dissemination)
may be integrated with milestones or
minimums owed

Future Inventions/IP

- A value to be negotiated not given away lightly
- Ownership and disposition
based on trust-filled relationship
(and focus on success of IP/technology)
- Try to find solution that is in best interest of both parties

IP costs & Enforcement

- IP is usually a significant expense
- Related to scope (exclusive vs. non-exclusive)
- Who pays is a matter of philosophy, policy, negotiation, and a practical matter
- For universities with limited IP budgets, sustainable operation points to the (exclusive) licensee paying;
can be a factor in setting other financial terms

Building the Value Capture/Risk-sharing System

- Create multiple value-capture mechanisms
 - Upfront fees, milestone payments, exclusivity payments
 - Royalty on sales
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 - equipment, other in-kind
- Establish valuation assumptions, justify them, be prepared to modify them in the professional dialogue
- Consider alternative benefits (e.g. research support) philanthropic/ humanitarian issues?
- “front-loaded” vs. “back-loaded” value capture

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