

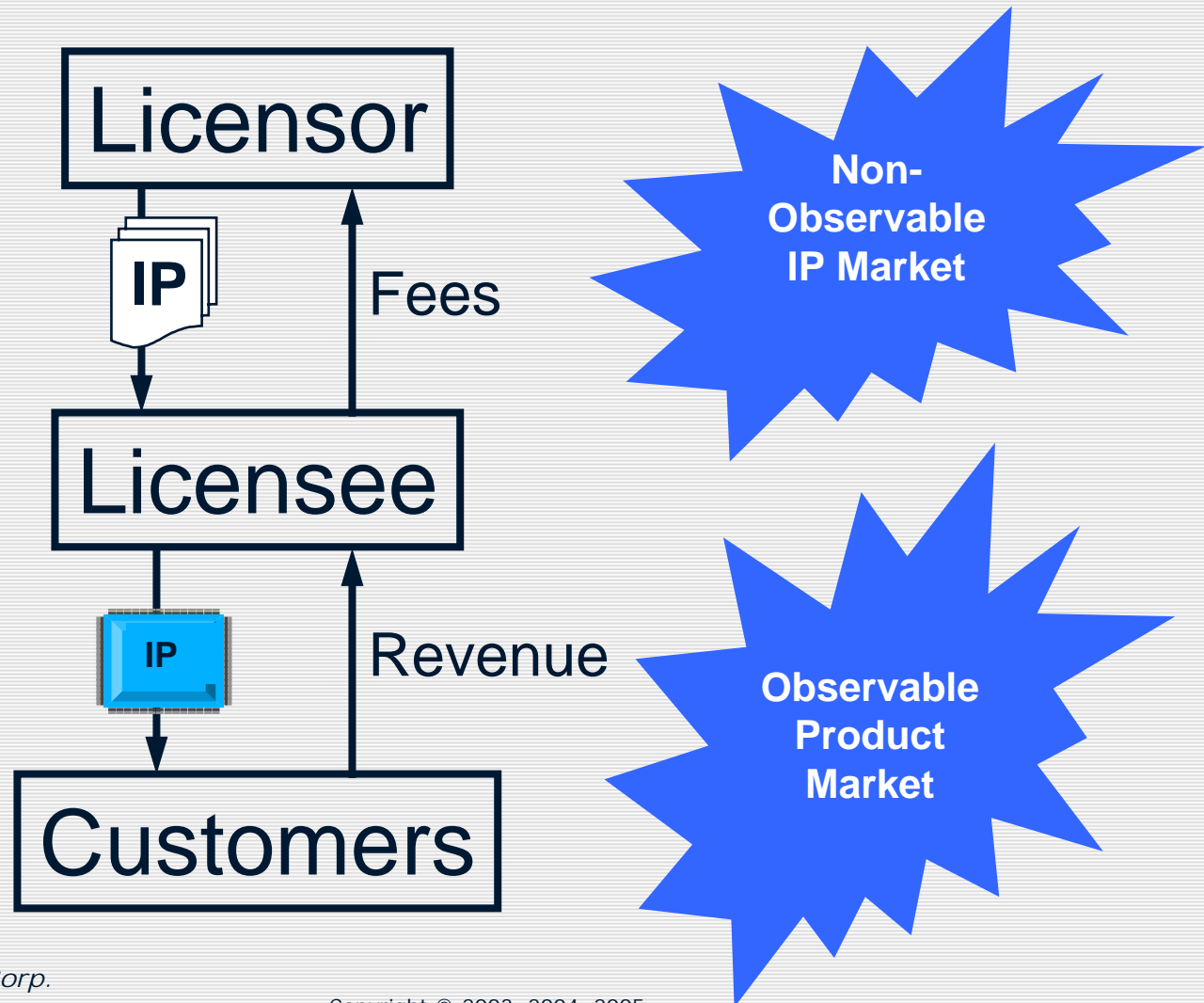
# Valuing Patents

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**Calculated Risks.**

# The IP Value Chain



# IP Value Chain $\neq$ Product Value Chain

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- ◆ The market for IP as patents is private and non-observable
  - ◆ Licensors want payment for each future use of their patent rights
    - Assuming all cases except total purchase
    - Analogous to payment for each current unit of a delivered product
  - ◆ Traditional deal structures...
    - ...reflect the private and non-observable IP market
    - ...are based on emotion and haggling

# Two Views of the License Agreement



	<b>Licensor's Viewpoint</b>	<b>Licensee's Viewpoint</b>
<b>IP licensee's development costs</b>	Not observable	Based on known internal cost structure
<b>IP licensor's costs</b>	Based on known internal cost structure	Not observable
<b>Contingent license payments</b>	Dependent on IP license terms and conditions	Dependent on IP license terms and conditions
<b>Gross profit from all shipments with embedded IP</b>	Must rely on business intelligence to estimate licensee's gross profit	Best able to estimate

# An Alternative IP Licensing Strategy

- ◆ Focus on the observable market for products using the IP rather than the non-observable IP market
- ◆ Assess the value of the IP in terms of realizable gain to the licensee
- ◆ There is no “correct” value for a patent!

# Theories of Value

## ◆ Value in Context

- ❑ A buyer or licensor of the patent portfolio will pay only a fraction of its estimated total Gross Profit from its Share of Market with covered products
- ❑ This value includes avoided losses from litigation or markets

## ◆ Competitive Value

- ❑ Subjectivity will drive buyers to use various previously known, similar patent transactions to place purchase price within limits

## ◆ Both theories should be considered as feasible

# Some Core Questions

- ◆ What is the scope of the claims?
- ◆ What is Prob{ unlicensed designer will infringe the patents }? Why?
- ◆ In which market segments will the patents be needed?
- ◆ Which kinds of designs are covered?
- ◆ What kinds of designs can be blocked by absence of license to the patents? Which segments?
- ◆ Are there any synergies in a set of patents?
- ◆ What is the barter value with other firms' patents? Cross-license value?
- ◆ What is the relative value of the most feasible alternative design approaches?

# Simple case: the “enabling” portfolio

- ◆ Covers very wide range of design approaches for same system goal
- ◆ Seller argues for a high probability that all designs will infringe
  - ❑ Coverage enables products to be generated without infringement
  - ❑ No coverage opens firm to large threat of economic loss
- ◆ **Impact: Owner can assert**
  - ❑ All profits from this technology are covered by the patents
  - ❑ Without this technology, profit will not accrue

# Economic model for “enabling portfolio”

- ◆ Build a model for total industry profits gained by using enabling technology in question
- ◆ Capture major beliefs and assumptions about technologies, prices and shipments
  - Use model to derive value from interplay
- ◆ Use as a negotiation tool

# Subjectivity Rules!

- ◆ **Seller must consider these unknowns about Buyer's future:**
  - ❑ Shipments and prices
  - ❑ Internal technology developments
  - ❑ Competitive strategies
  - ❑ Standards process
  - ❑ Discount rates
  - ❑ Willingness to accept infringement risks
- ◆ **Strategic Strategy Generation**
  - ❑ Capture Key Assumptions and determine their Impact!

# Apply Strategic Strategy Generation

- ◆ Set Time Horizon
- ◆ Create 3 Scenarios for market growth
- ◆ Assign a subjective probability to each scenario
- ◆ In each scenario, Capture
  - Growth rates
  - Initial shipments
  - Initial ASP
  - Price deflator (as function of design features and competition)
  - Gross margin
  - Other crucial assumptions

# Discount rate and Risk

- ◆ The discount rate by definition incorporates one's beliefs about financial risk in future cash flows
- ◆ In conventional analyses, one uses a large discount rate to capture all risk, but you also use only one forecast
- ◆ In SBVC's analysis, we use a discount rate close to risk-free for a firm (prime), but capture risk in the Scenarios with their subjective probabilities
- ◆ Thus, discount rate needn't be a variable in the model—but probabilities must be, to capture your or your Prospects' assumptions about future
  - This approach ensures alignment among team members

# Comparables

- ◆ Buyers will use comparable deals to argue for their purchase price
- ◆ If comparables are much lower than asking price
  - Be ready to argue!
- ◆ You can ask/bid for whatever you want...just be able to tell a compelling story about it!