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Mike Lasinski is the Executive Director for the Center for Applied Innovation. Mike has managed numerous engagements focused on helping clients extract value from their intellectual property portfolios. These have included both valuation and strategy assignments. In the valuation area, Mike has valued intellectual property and businesses in the context of licensing, sale, purchase (purchase price allocation), corporate spin-outs, joint ventures, litigation (reasonable royalty and economic damage analyses) and tax-related transactions. He has spoken on the topics of IP valuation, IP licensing and IP tax strategies throughout the U.S. as well as internationally.

In the strategy area, Mike has helped his clients establish intellectual property management subsidiaries, licensing departments and intellectual asset management groups. He has also performed inventories of company IP (including patents, trademarks, software, trade secrets and other IP). In fulfilling such responsibilities, Mike has developed strategies for clients surrounding licensing, sale, donation and abandonment of IP.

Mike is currently the Treasurer and a former co-chair of the Valuation and Taxation Committee of the Licensing Executives Society (LES). He is the current Vice Chair of the Valuation and Taxation Committee of the Intellectual Property Owners Organization. He holds both a B.S.E. in Electrical Engineering (Summa Cum Laude) and a M.B.A. (with High Honors) from The University of Michigan. Prior to the Center for Applied Innovation, Mike worked for InteCap, a subsidiary of Charles River Associates, Coopers & Lybrand (now PriceWaterhouseCoopers) and Ford Motor Company.

**Franklin Pierce Law Center**  
***Advanced Licensing Institute***

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**Intellectual Property Valuation**

**July 14, 2005**

# Agenda

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- Introduction
- IP valuation theory: Cost, market, income, other
- Price v. value
- Pre-valuation due diligence
- IP valuation: Income approach example
- Deal structure discussion
- Disclaimer

## Introduction: An IRS Definition of Fair Market Value

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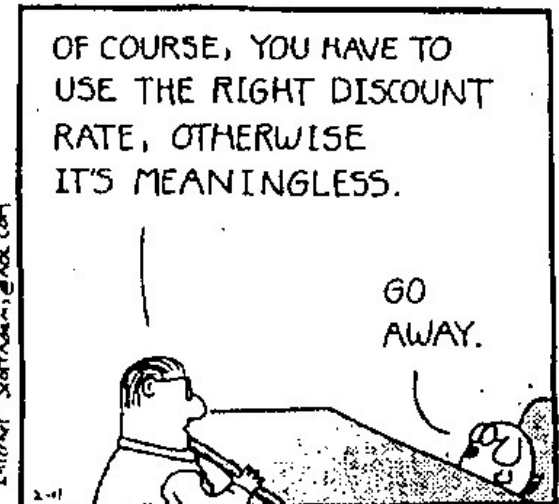
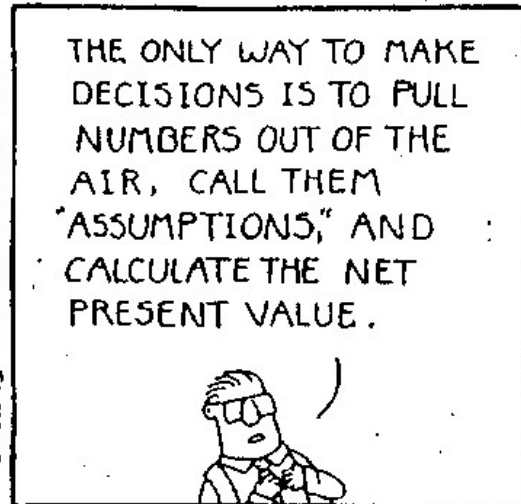
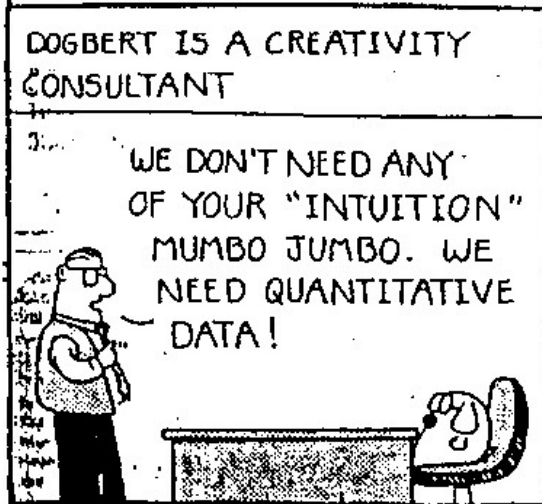
*Fair Market Value is defined as the price at which property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or to sell, and both having reasonable knowledge of relevant facts (Estate Tax Regs., Sec. 20.2031-1(b); Rev. Rul. 59-60, 1959-1 C.B. 237).*



# Introduction: Dilbert Understands Valuation

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Dilbert / By Scott Adams



# Introduction: The Courts Understand Damages

<b>Parties</b>	<b>Award</b>	<b>Date</b>	<b>Source</b>	<b>Court</b>
1 Polaroid v. Eastman Kodak	\$873,158,971	Jan-91	17 USPQ2d 1771	D. Massachusetts
2 Michelson v. Medtronic Sofamor Danek	\$529,000,000	Oct-04	National Law Journal	W.D. Tennessee
3 Eolas Technologies v. Microsoft	\$521,000,000	Aug-03	Wall Street Journal	N.D. Illinois
4 City of Hope Medical v. Genentech	\$500,100,000	Jun-02	New York Times	Sup. Ct. California
5 Johnson & Johnson v. Guidant	\$425,000,000	Sep-03	National Law Journal	Arbitration Panel
6 Johnson & Johnson v. Medtronic	\$270,000,000	Sep-03	National Law Journal	CAFC
7 Haworth v. Steelcase	\$211,499,731	Dec-96	43 USPQ2d 1223	W.D. Michigan
8 Hughes Tool v. Smith International	\$204,810,349	Mar-86	229 USPQ 81	C.D. California
9 Procter & Gamble v. Paragon Trade	\$178,400,000	Jan-98	Press Release	D. Delaware
10 Exxon Chemical v. Mobil Oil	\$171,000,000	Aug-98	Wall Street Journal	S.D. Texas
11 Guidant v. Medtronic AVE	\$166,681,773	May-02	Judgement	Arbitration Panel
12 Viskase v. American National Can	\$164,900,000	Jul-99	Press Release	N.D. Illinois
13 Masimo v. Nellcor	\$164,000,000	Aug-04	CBS MarketWatch	C.D. California
14 Hughes Aircraft v. United States	\$154,000,000	Jun-94	Wall Street Journal	Federal Claims
15 Intergraph v. Intel	\$150,000,000	Oct-02	Wall Street Journal	E.D. Texas
16 3M v. Johnson & Johnson	\$129,000,000	Dec-92	Dow Jones Newswire	CAFC
17 Fonar v. General Electric	\$128,705,766	Feb-97	Final Judgement	CAFC
18 Mobil Oil v. Amoco Chemical	\$120,000,000	Aug-98	Press Release	D. Delaware
19 Stac Electronics v. Microsoft	\$120,000,000	Feb-94	National Law Journal	C.D. California
20 Internet Magic v. Netfax	\$114,000,000	Feb-02	National Law Journal	Sup. Ct. California

Source: IP Litigation: Assessing and Managing The Risks, James R. Sobieraj  
Brinks, Hofer Intellectual Property Seminar

## Introduction: Some Statistics and Information

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- Global licensing revenue is greater than \$150 billion and is growing at 25% to 35% per year
- IBM collected more than \$1.5 billion in royalties last year (and donated 500 patents for open source)
- Microsoft paid more than \$1.4 billion in royalties last year (and is looking to cross license with the 30-40 top technology companies)
- Intellectual Ventures raised more than \$350 million to execute its strategy of acquiring patents for license/assertion

## Introduction: Commerce One Auction

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- Commerce One sells patent portfolio out of bankruptcy for \$15.5 million in December 2004 to JGR Acquisition, Inc.
- Patent portfolio consisted of 39 patents/applications and was sold via an auction
- JGR Acquisition, Inc. is later identified as Novell, Inc.; purchase is made for defensive purposes
- The runner-up was Intellectual Ventures which bid \$14.9 million: Intellectual Ventures is considered by many to be a “patent troll”



# Cost Approach

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- Value: Cost to replace or recreate the asset
- Theory: Licensee is willing to pay as much as it would cost to develop the asset on its own but no more
- What types of costs should be included in a cost approach calculation?
- What are the strengths of this approach?
- What are its weaknesses?

## Cost Approach: More detail

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- Key terms to remember:
  - Functional obsolescence
  - Technological obsolescence
  - Economic obsolescence

- Some formula's to remember:

$$\begin{array}{rcccl} \text{Reproduction} & & \text{Curable} & & \text{Replacement} \\ \text{Cost New} & - & \text{Functional \&} & = & \text{Cost} \\ & & \text{Technological} & & \text{New} \\ & & \text{Obsolescence} & & \\ \hline \text{Replacement} & - & \text{Economic} & - & \text{Incurable} & = & \text{IP} \\ \text{Cost New} & & \text{Obsolescence} & & \text{Func. \&} & & \text{Value} \\ & & & & \text{Tech.} & & \\ & & & & \text{Obsolescence} & & \end{array}$$

## Market Approach

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- Value: Arm's-length price paid in comparable transactions
- Theory: Licensee is willing to pay as much as others have paid for the asset but no more
- What constitutes a comparable transaction?
- What are the strengths of this approach?
- What are its weaknesses?

## Market Approach: Analyzing comparables

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- Specific rights conveyed in transaction
- Arm's-length transaction
- Special financing terms available
- Economic conditions at time of transaction
- Inclusion of non-IP assets in the transaction
- Functional characteristics of the guideline IP
- Technological characteristics of the guideline IP (Stage of development)
- Economic characteristics of the guideline IP
- Legal characteristics of the guideline IP
- Other factors

# Market Approach: Sources of comparable transactions

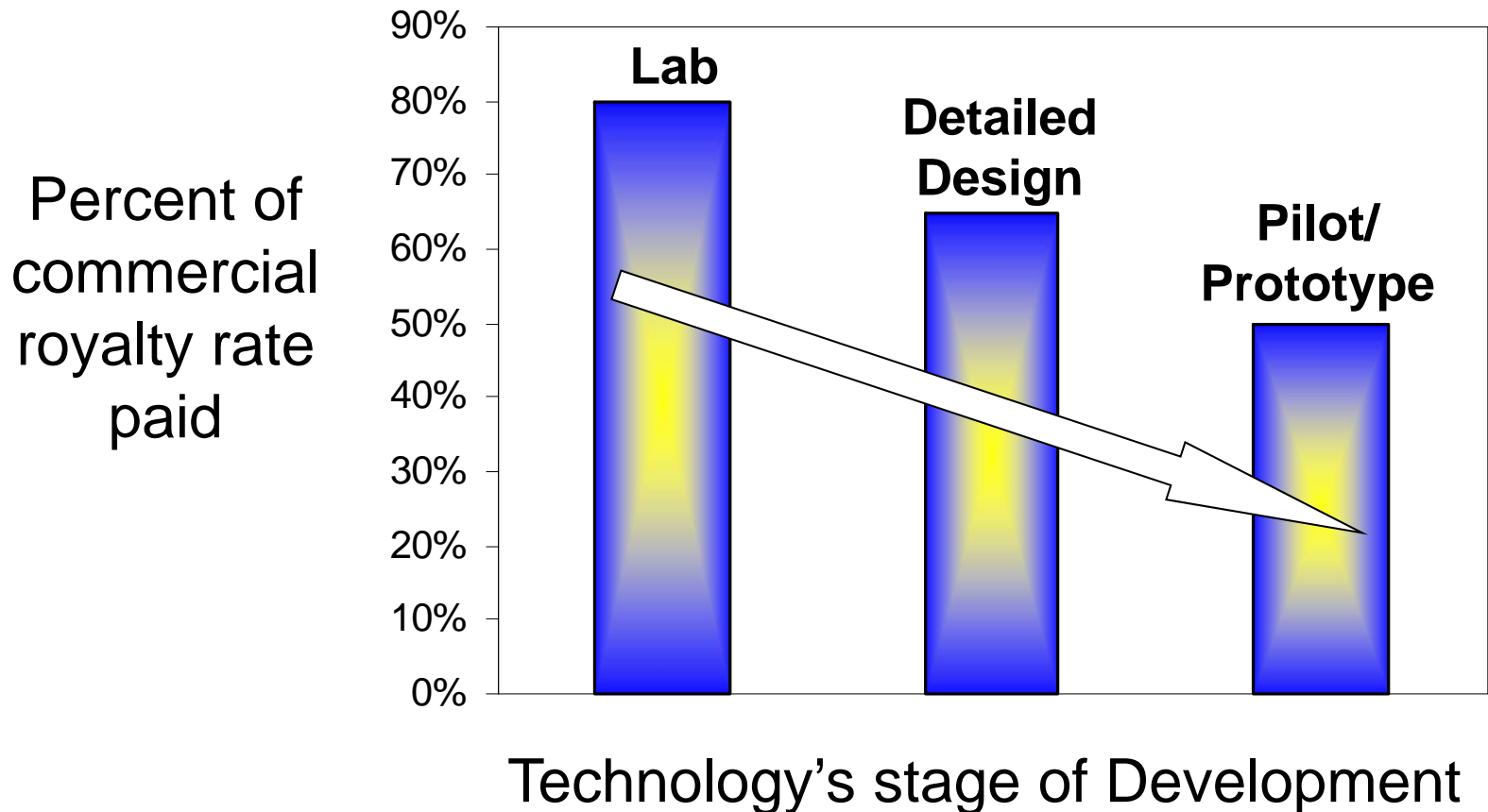
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- SEC
- Recombinant Capital (Recap.com)
- Royaltysource.com
- Windhover Information (Windover.com)
- Court records
- Licensing Economics Review (LER)
- Licensing Executives Society publications (*les Nouvelles*)
- Industry presentations
- Licensing experts

# Market Approach: Analyzing comparables

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## Discount Increases for Early Stage IP



## Income Approach

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- Value: Present value of the expected cash flows from the subject intellectual property or expected increase in business value due to the intellectual property
- Theory: Licensee is willing to pay some portion of its economic gain from using the intellectual property
- What portion of the cash flows should be shared with the licensee?
- What are the strengths of this approach?
- What are its weaknesses?

## Income Approach: Key calculations

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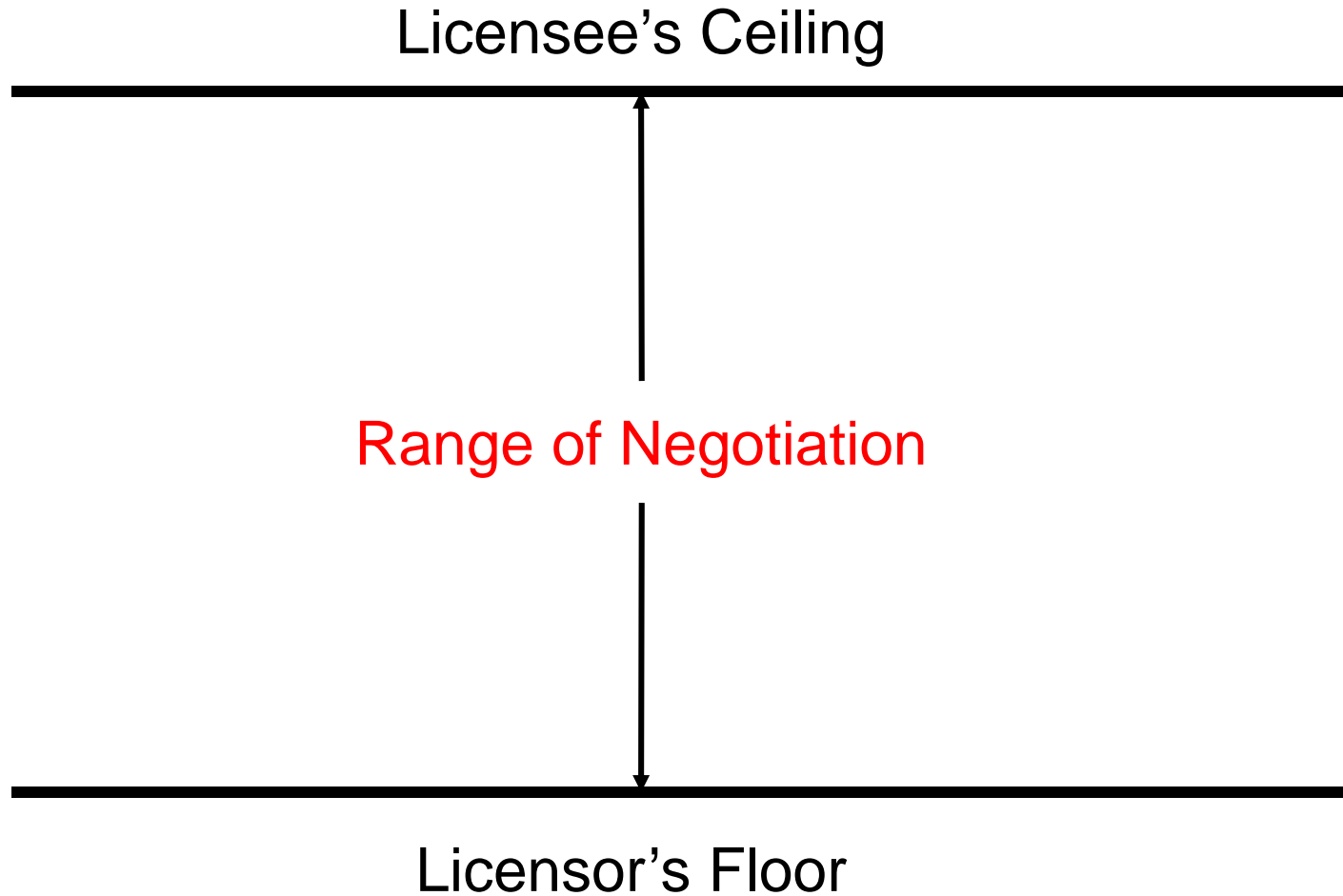
- Calculate incremental revenues due to IP
- Calculate incremental cost savings due to IP
- Calculate relief from hypothetical royalty or lease payments
- Methods that calculate the overall business enterprise or similar economic unit as a result of owning the intellectual property versus one that does not own the intellectual property
- Appropriate discount rate calculation/estimation





## Price v. Value

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# IP pre-valuation due diligence: legal considerations

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- Ownership analysis
- Maintenance records
- Completeness analysis
- Prior-art research
- Infringement/litigation analysis
- Encumbrance analysis (cross-licenses)
- Employee/consultant records
- Freedom-to-operate issues
- Other



Determine existence, ownership and control

# IP pre-valuation due diligence: business considerations


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- Next best alternative
- Cost to design around
- Benefits of design around
- Comparable transactions
- Gross revenues
- Gross/incremental profit
- Pre-tax profit
- Cost savings
- Incremental revenues
- Accounting for risk
- Other



Determine economic, strategic and potential infringement value

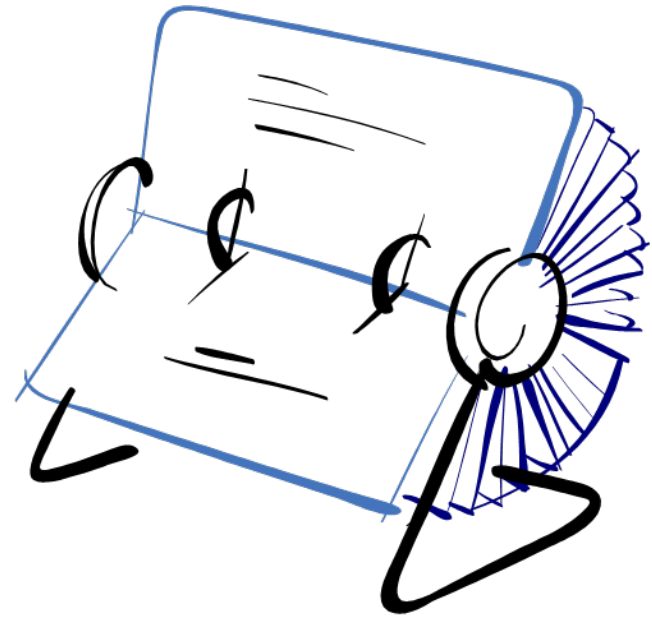
# IP valuation: Income approach example

	<b>Economic Life</b> 			
	2005	2006	2007	2008
Total Market Revenue	\$50,000,000	\$52,500,000	\$55,125,000	\$57,881,250
Expected Market Share	5%	10%	20%	30%
Royalty Base	\$2,500,000	<b>Income Attributable to IP Assets</b>		\$17,364,375
Royalty Rate	5%			5%
Estimated Royalties	\$125,000	\$262,500	\$551,250	\$868,219
X (1 - Tax Rate of 35%)	65%	65%	65%	65%
After-Tax Present Value	\$81,250	\$170,625	\$358,313	\$564,342
Discount Factor	0.9129	<b>Risk</b>		0.5283
<b>Present Value</b>	<b>\$74,171</b>	<b>\$227,148</b>	<b>\$298,132</b>	
<b>Net Present Value of the IP</b>	<b>\$1,000,000</b>			

## IP valuation: Total market revenue & market share


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- Market reports
- Business plans
- Market experts
- Primary research
- Government industry reports
- SEC documents/filings
- Historical sales data
- Industry/trade group data
- Other



Determine sales of product that embody the IP as well as collateral sales

# IP valuation: Income approach example

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After-Tax Present Value	\$81,250	\$170,625	\$358,313	\$564,342
Discount Factor	0.9129	0.6339	0.6339	0.5283
Present Value	\$74,171	\$227,148	\$227,148	\$298,132
<b>Net Present Value of the IP</b>	<b>\$1,000,000</b>			

**Income  
Attributable to  
IP Assets**

**Risk**

## IP valuation: Royalty rate (value apportionment)


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- Rules of thumb (25% rule)
- Industry standards
- Excess earnings
- Cost savings
- Incremental sales
- Price premiums
- Comparable royalty rates
- Other



Determine the appropriate amount of economic gain to share with the IP owner

# IP valuation: Income approach example

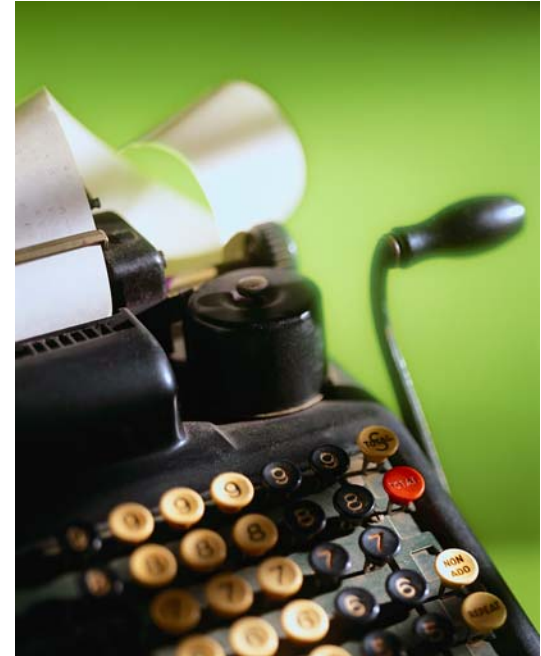
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## IP valuation: Discount rate & other factors


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- Risk free rate
- Interest rates
- WACC (+ appropriate risk premia)
- Return on equity capital
- Hurdle rates
- VC rates of return
- Capitalization rates
- Probability of success
- Other



Determine the appropriate discount rate based on projections

# IP valuation: Income approach example

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**Income  
Attributable  
to  
IP Assets**

**Risk**