


# INTELLECTUAL PROPERTY

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## LICENSING AND JOINT VENTURE PROFIT STRATEGIES

**THIRD EDITION**

GORDON V. SMITH  
RUSSELL L. PARR



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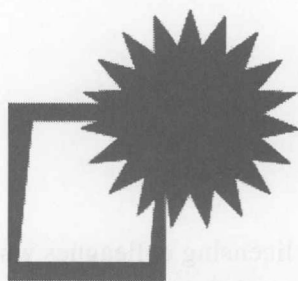
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For my licensing colleagues who help  
the world's innovators turn ideas into money—GVS

For my beautiful wife, Jane—RLP



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His books published by IPRA, Inc. include: *Royalty Rates for Pharmaceuticals and Biotechnology, Fifth Edition*; *Royalty Rates for Technology, Third Edition*; and *Royalty Rates for Trademarks and Copyrights, 2nd Edition*.

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**John Jarosz** and **Carla Mulhern** are principals in Analysis Group/*Economics*, a consultancy and litigation support firm. Along with Robert Goldscheider, they have provided, in Chapter 7, a long-needed study showing the reliability of the 40-year-old 25% rule of thumb. Mr. Jarosz and Ms. Mulhern would like to thank the following individuals for their hard work and useful comments on their chapter: Jaime Baim, Laura Boothman, Jeff Kinrich, Jennifer Price, Chris Vellturo, and Robert Vigil. The views expressed in their chapter are their own and do not necessarily represent those of others at the International Licensing Network or Analysis Group/*Economics*.

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# PREFACE

The U.S. economy is powerful because of our intellectual property. Very few companies are successful without it. Commodity products are manufactured more cheaply in developing nations, and consequently we cannot compete in the commodity arena. Our intellectual property is the defining characteristic of our success. This book is about licensing and joint ventures the finances and profits of intellectual property. It includes theoretical models that can be used to define negotiations and adds real-world information and insight from actual deals. We live in exciting times and are proud to provide this text for those who are structuring deals that center on the foundation of our economic success. In this book you will find:

Chapter 1, "Emergence of Intellectual Property Exploitation Strategies," introduces the concepts and ideas that will be featured throughout the rest of this book.

Chapter 2, "Introduction to Exploitation Strategies," introduces the business enterprise model and investment principles that will be utilized throughout the book. We also begin the discussion of intellectual property exploitation strategies.

Chapter 3, "Introduction to the History and Economics of Legal Limits on Licensing Intellectual Property Rights," by John W. Schlicher, presents a wonderful history of the economics legal characteristics that have evolved around intellectual property.

Chapter 4, "Creating Industry Standards," explains that sometimes the most profitable way to manage intellectual property is to give it to industry participants for free.

Chapter 5, "Economic Analysis of Exploitation—An Underlying Theory," discusses the underlying economic theories of intellectual property exploitation and utilizes examples to guide the reader in their use.

Chapter 6, "Economic Contributions of Intellectual Property," discusses the economic sources of the intellectual property contribution to business enterprise profits and introduces the very important discounted cash flow tools that are used repeatedly throughout this book.

Chapter 7, "Use of the 25% Rule in Valuing Intellectual Property," by Robert Goldscheider, John Jarosz, and Carla Mulhern, presents a study by the authors that shows the current reliability of this 40-year-old rule of thumb.

Chapter 8, "Determining a Royalty Rate—An Example," presents a thorough analysis of a hypothetical patented technology to show how different techniques can be used to determine an appropriate royalty rate.

Chapter 9, "An Infringement Damages Analysis for Determining a Royalty Rate," considers the insight provided by the courts with regard to royalty rates. For licensing, royalty rates quantify the economic benefits that the creators of intellectual property enjoy. Setting royalty rates often is a significant part of negotiating licenses and includes both art and science. The art comes from experienced negotiators. The science comes from the quantitative analyses that are described. Additional guidance beyond art and science can be found in the techniques used by courts in intellectual property infringement lawsuits.

Chapter 10, "Risks of Exploitation." The risks associated with the commercialization of intellectual property are extremely important elements in the valuation of intellectual property and are critical considerations in developing a successful exploitation strategy. This chapter discusses the significant elements of risk and their effects on the exploitation process.

Chapter 11, "Licensing Economics and Royalty Rates," covers these critical aspects of a license, which are some of the most difficult areas to deal with. In this chapter, we discuss the factors that influence royalty rates and suggest some investment rate of return-based techniques for their development.

Chapter 12, "Dealing with Early-Stage Intellectual Property," focuses on one of the most difficult tasks facing the licensing executive. This chapter discusses some important aspects of evaluating early-stage intellectual property and extends the use of the investment rate of return tools to that situation.

Chapter 13, "Trademark Licensing," presents some unique aspects, due to the inherent differences between trademark rights and technology. It is important to understand these differences in the licensing of trademark rights and in other forms of exploitation. Increasingly, trademark rights are being bundled with patented and unpatented technology, and it is important to understand the various factors that influence the trademark side of such transactions.

Chapter 14, "Licensing Internet Assets," presents a discussion of the Internet and the unique licensing opportunities it presents. We describe the nature of web sites and their business characteristics as well as their assets—some unique, some not so unique. The dot-com bubble may have burst, but the Internet is still going to be a powerful force in the future of business.

Chapter 15, "Licensing Negotiations and Agreements," integrates many of the lessons learned in prior chapters into one comprehensive discussion.

Chapter 16, "Another View of Licensing Strategies," discusses new trends in intellectual property-based business strategies. Some are driven by a corporate desire to conduct business on the Internet. Other licensing strategies are driven by the desire to maximize income from intellectual property. In the past, corporations looked to unused technology as a means to enjoy some additional revenue. Most recently this same unused technology is seen as a means by which companies can participate in new businesses. In some cases, royalty income is no longer enough.

Chapter 17, "Joint Venture," uses a hypothetical story to illustrate the different economic advantages that can be enjoyed by creating a joint venture. Many valuable elements of intellectual property are associated with cost savings, time savings, and risk reduction. This chapter shows how to quantify each element.

Chapter 18, "Corporate Acquisition as an Exploitation Strategy," discusses mergers and acquisitions as they relate to intellectual property. There is a growing tendency for corporate acquisitions to be focused on intellectual property. Substantial premiums are being paid for businesses, especially those with valuable intellectual property. These acquisitions can represent the embodiment of complex strategies to obtain control of essential "gap-filling" technologies or to open new markets.

Chapter 19, "University Technology Transfer," addresses the fact that universities always have been a fertile source for new technology. We illuminate this special facet of the licensing process, mindful of the special circumstances facing universities. Nonprofit organizations want their inventions to broadly benefit humankind, and corporations want exclusive use of inventions primarily in order to increase shareholder wealth. Special considerations are needed when negotiating in such an environment.

Chapter 20, "Global Exploitation Potential," covers an area that is being recognized more and more by licensing executives. Thus it is important to understand some of the accounting, cultural, and taxation issues that may affect cross-border exploitation of intellectual property.

Chapter 21, "Organizing for the Future," explores the analysis needed to find out where one is and where one needs to be in the future. The gap analysis practiced by DuPont is discussed.

Chapter 22, "Understanding the Business and Risks of Licensing," by Kathleen M. Kedrowski and Maria S. Lehman, looks at the business of transactions after they have been completed. The authors talk about the importance of conducting licensing audits and the things that can be learned from them for negotiating a better deal next time.

Appendix A, "Investment Rate of Return Requirements," provides the basic theory of risk and return. Examples of how to estimate an appropriate rate of return to associate with intellectual property investments are included.

Appendix B, "Financial and Business Information Sources," provides a collection of resources that we use for basic information in valuing and pricing intellectual property. It is not exhaustive, just the stuff we most often use.

Appendix C, "Licensing Transaction Examples and Royalty Rates," provides real-world examples of intellectual property licensing and the royalty rates that resulted from the actual transactions. This information often is used as guidance for negotiation royalty rates. It also is used as part of the process for determining a lump-sum value for intellectual property. In addition, expert witnesses rely on some of this information for making presentations in court about infringement damages. We have obtained a selection of information from many different sources in order to provide the reader with a feel for the different levels of royalty rates for different industries. This information has been selected from different sources including: *Licensing Economics Review*; *Royalty Rates for Pharmaceuticals and Biotechnology*, 5th edition; *Royalty Rates for Technology*, 2nd edition; *Royalty Rates for Copyrights and Trademarks*, 2nd edition; Security and Exchange Commission 10-K filings; and Royalty Source®.

March 2003

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