

Unlocking the Hidden Value of Patents

DECORATIVE, FUNCTIONAL ELEMENT
IN THE CONSTRUCTION AND THE LIKE

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3,229,439 1/1966 Strobil
3,617,336 11/1971 Gilard
4,133,132 1/1979 Penrose
4,303,644 3/1985 Coutu, Sr.

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ABSTRACT

As an article of manufacture, a construction typically in a square configuration for its cap

REMBRANDTS IN THE ATTIC

KEVIN G. RIVETTE AND DAVID KLINE

REMBRANDTS --- IN THE ATTIC

*Unlocking the Hidden
Value of Patents*

KEVIN G. RIVETTE
DAVID KLINE

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"*Rembrandts in the Attic* is a seminal book about a vital but often forgotten topic. Read it, and you'll never again think about patents in the same way."

—*Gil Amelio, Founder, AmTech, LLC; former CEO, Apple Computer and National Semiconductor*

"Intellectual capital, such as patents, is the fuel that powers innovation. *Rembrandts in the Attic* is a must-read for any CEO interested in innovation and intellectual capital."

—*Bob Howe, CEO, Scient*

"Like it or not, patents have become a major force in business. Rivette and Kline illustrate the importance of senior-level management's involvement in the intellectual property strategy of a successful corporation, and present a road map to a solid patent strategy."

—*Rich Belgard, Columnist, "PatentWatch"*

"*Rembrandts in the Attic* is prerequisite reading for investors and managers of high-technology companies. Rivette and Kline present a convincing case for why managing patents will become increasingly important with the growth of knowledge-based economies."

—*Bob Barrett, Founding Partner, Battery Venture*

"Fully 76 percent of the Fortune 100's total market capitalization is represented by intangible assets, such as patents, copyrights, and trademarks. Yet corporations still focus their attention on tangibles. *Rembrandts in the Attic* provides deep and actionable insight into how leading corporations are managing and extracting value from the most tangible of the intangibles—patents."

—*Peter J. King, Managing Partner, Arthur Andersen's Intellectual Property Asset Management Practice*

REMBRANDTS --- IN THE ATTIC

*To Dorothy, for always believing in me,
And with special love to Spencer, Elizabeth, and Lisa.*

Kevin G. Rivette

*To Sarah, whose patient love has reawakened me to life's
sweet and spicy possibilities,*

*And to my son Daniel, whose cool wit and warm heart
inspire me.*

David Kline

PREFACE

What did the ex-patent lawyer say to the ex-war correspondent?

No, this is not another lawyer joke. It's actually the very first question I asked Kevin Rivette on that blustery winter day in January 1998 when I sat across a Silicon Valley lunch table from him and listened to his proposal.

"I'm sorry—what did you say?" were my exact words, if I recall. "You want me to help you write a book about *what?*?"

"Patents," Kevin nodded eagerly.

Frankly, I found it difficult to share his enthusiasm. As a former war correspondent who spent ten years hiking into war zones, I had come to expect a little high-stakes excitement, a certain dramatic heft, to the stories I wrote about. Even after I finally figured out (genius that I am) that maybe I ought to find something safer to do—I switched "beats" in 1992 from the battlefields of war to those of business—I still took pride in my ability to tell a good war story, even if it now involved opposing companies instead of armies. So you can imagine my reaction at being asked to devote the next two years of my life to co-writing a book about a subject that most people (myself included) considered to be quite possibly the most boring on earth.

I turned him down flat. And then two more times over the next few months as well—Kevin Rivette is nothing if not persistent—I turned him down again. But as anyone who knows Kevin can attest, he is unstoppable when motivated by a vision. And in this case, not only did he have a vision, he also had no intention of letting my initial obstinacy get in the way of me ultimately helping him realize that vision.

So with a patient dedication to softening me up that reminded me of a dog with a bone, Kevin started chewing away at my resistance. We had several meetings, during which he told me his story. Before becoming an entrepreneur, he explained, he had been a patent attorney and had come to appreciate the rich mother lode of intelligence that a company could glean about its competitors' strategies from publicly available patent filings. But most businesses ignored this gold mine of patent data—"the greatest source of competitive intelligence on earth," he called it—in part because they failed to grasp just how valuable intellectual property had become as financial assets and competitive weapons in today's knowledge economy. This corporate neglect of the *business* (as opposed to strictly legal) uses of patents also stemmed from the enormous cost and difficulty that had always been associated with trying to mine patent data for competitive advantage.

Only a few years ago, in fact, a company might have spent six to nine months laboriously pouring over reams of paper documents just trying to "patent map" one competitor's product development plans and capabilities. But now, new data-mining and visualization technologies made it possible for this same firm to accomplish the task in days or even hours—and then to develop patent strategies of its own to outflank and block that competitor, solidify its own proprietary market advantage, safeguard its future technology leadership, and enhance its overall commercial success.

Think of it, Kevin suggested, like those World War II-era

advances in long-range bomber and aircraft carrier design that enabled nations for the first time to project their air power anywhere on earth. (And a crafty suggestion it was, too, for he had discovered that we shared a mutual lifelong interest in World War II military history.) Just as those new bomber and carrier designs had transformed air power from a merely tactical into a truly strategic weapon of war, so had today's new data-mining and visualization tools enabled patents and other intellectual property to be systematically deployed for the first time as strategic weapons of business competition—if, that is, you knew how to do so.

And therein lay Kevin Rivette's vision: he wanted us to write the first popular business book that actually showed CEOs and other senior managers how to develop and deploy patent strategies for competitive advantage.

The book, he said, should be a primer on the next great corporate challenge: developing new tactics, new strategies, for the new competitive battlefields of the knowledge economy. Patents would be the "smart" bombs of tomorrow's business wars. And together we could show companies precisely how to aim them to achieve competitive victory.

Like I said, I'm a sucker for a good war story.

David Kline
September 1, 1999

ACKNOWLEDGMENTS

All books are collaborative efforts, but this one is especially so. Indeed, to even attempt to write a book that breaks ground in an entirely new frontier of corporate strategy development requires much more in the way of advice and counsel, criticism, and support than the casual reader might suppose.

Among the many chief executives, senior managers, corporate counsels, entrepreneurs, business strategy consultants, industry analysts, investment bankers, venture capitalists, journalists, technologists, software designers, patent experts, policy makers, and economists who gave so generously of their time and wisdom to this project, we wish to thank in particular (and in alphabetical order) the following:

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We thank also the many people at Aurigin Systems, Inc., whose editorial input and support greatly strengthened this book, including Luke Hohmann (an author himself), Dan'l Lewin, Larry Caddy, Irving Rappaport, Paul Germeraad, Steve Dobbs, and Chris Benham. Special thanks to Scott Malcolm for designing the charts and other graphic visualizations of competitive patent analysis that make this book so useful and unique.

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We come now to the one individual without whose help we can quite safely say this book would not exist. Elisabeth Feldman's extraordinary contributions defy easy classification: she was both researcher and muse, critic and therapist, devil's advocate and beta tester of many of the most compelling conceptual

breakthroughs in this book. In a just world, her name would be featured on the jacket alongside ours.

Finally, we want to thank our families and friends for their patient support during our arduous two-year-long effort to write this book. We offer our special love and appreciation to our mothers, Patricia Rivette and Ruth Rothman, because God knows mothers never really get the thanks they deserve, do they?

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1

THE NEW COMPETITIVE BATTLEFIELD

This book is about intellectual property (IP), once considered the most boring subject in the world. Until very recently, in fact, simply mentioning the words *patents* or *intellectual property* at a social gathering was guaranteed to invite blank stares, followed by an awkward shuffling of feet as everyone suddenly spotted dear old friends that he or she simply *had* to go talk to. Today, patent lawyers attract small crowds at parties—rather like astrologers used to and plastic surgeons still do—and find themselves peppered with questions such as whether that wonderful idea for a bird diaper is patentable (the answer is yes—it was issued Patent No. 2,882,858).

What changed? Quite simply, the world did. The old industrial era has been supplanted by a new knowledge-based economy in which ideas and innovation rather than land or natural resources have become the principal

wellsprings of economic growth and competitive business advantage. And because the economic forces that structure our daily lives are so different today than they were even a generation ago, it is only natural that we perceive the sources and nature of value very differently as well.

Remember when ideas were a dime a dozen—indeed, “no better than dreams,” said Emerson, unless forged by “the arms of good and brave men” into something tangible? And who can

forget the tragedy of *Death of a Salesman*’s Willy Loman, desperately chasing his elusive “one-million-dollar idea”?

Today, however, the *Wall Street Journal* features stories such as “Big Idea Turns Priceline’s Founder into a Billionaire,”

which profiles the entrepreneur Jay

Walker—a “collector of ideas,” the paper called him approvingly—whose business consists for the most part simply of thinking up *ideas* for new businesses.¹ And all across America, inventors who once tried to build better mousetraps today nurture the hope simply of coming up with an idea for one.

In an age when ideas themselves command enormous value, it is hardly surprising that the rights to ownership of these ideas have now become a matter of intense policy debate, legal argument, and competitive jockeying by businesses. While this book will touch on some of the legal and policy debates surrounding patents, for the most part we have restricted our discussion to their actual role and uses in the world of business today. We have concentrated, in other words, on the world as it *is*, not as it (perhaps) ought to be.

And in the world as it is, observes the *New York Times*, “Intellectual property [has been] transformed from a sleepy area of law and business to one of the driving engines of a high-technology economy.”² Indeed, the competitive battles once

**Without patents, the
future of your business
may be owned by
someone else.**

fought for control of markets and raw materials are now increasingly being waged over the exclusive rights to new ideas and inventions. Whereas executives once feared that competitors might outproduce or outmarket them, today they worry that rivals—especially in the booming e-commerce industries of the Internet—may secure the patent rights to the essential technologies or even to the fundamental business concepts that they need in order to be in business in the first place.

As one commentator warned, “Companies that don’t claim their stake in the future will wake up and discover that their competitors own all the patents they need to be on the Web.”³

To be sure, only a minority of American businesses even have an intellectual property strategy, and they are usually reluctant to talk about it for fear of letting rivals in on what they consider to be their secret weapon. But we’ve managed to pierce the veil of secrecy shrouding the use of patents in business today. We’ll show how some of the world’s most successful companies—market leaders such as Intel and Microsoft, Lucent and Xerox, IBM and Web start-up Priceline.com—have begun using their patents as competitive weapons to capture and defend markets, outflank rivals, and increase revenue. These firms regard patent strategy as a new core competency of the modern enterprise and an important factor in their success.

The vast majority of companies, however, are simply unaware of the often-enormous economic and competitive values that lie untapped within their patent portfolios. In fact, some firms are opposed to the competitive use of patents altogether, fearing an IP arms race that only the biggest corporations can afford to win. We address this concern later in this chapter.

Whatever your view of patents, this much is clear: firms ignore their growing power in business today only at their peril.

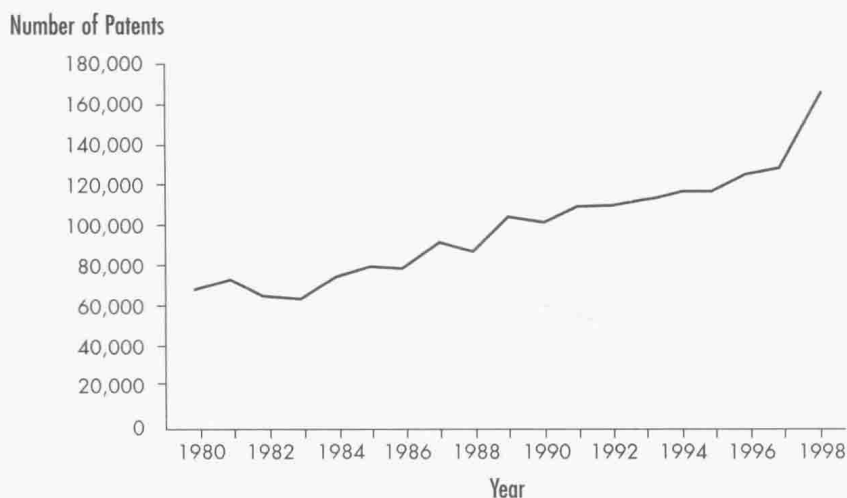
Welcome to the new competitive battlefield: intellectual property.

THE PATENT RACE IS ON

“Open a newspaper, surf the Web, patent disputes and agreements are everywhere,” observes *Forbes* magazine. “If ever there were a field with financial opportunity written all over it, it would have to be the fusty musty world of patents.”⁴

Indeed, patent activity is mushrooming across virtually every sector of the U.S. economy as companies seek to gain a proprietary market advantage, an exclusive hold over a new technology, or an opportunity to tap new revenues. The number of new U.S. patents issued in 1998 reached nearly 155,000—a 33 percent increase over 1997, and more than two and one-half times the level that prevailed throughout most of this century (see Figure 1-1a). A decade ago, Microsoft had one patent; today it has close to 800. Sun, Oracle, Novell, Dell, and Intel have likewise boosted the size of their patent portfolios by more than 500 percent just in the last few years (see Figure 1-1b).

FIGURE 1-1a NEW PATENTS ISSUED ANNUALLY, 1980–1998



Source: Courtesy of Aurigin Systems, Inc.