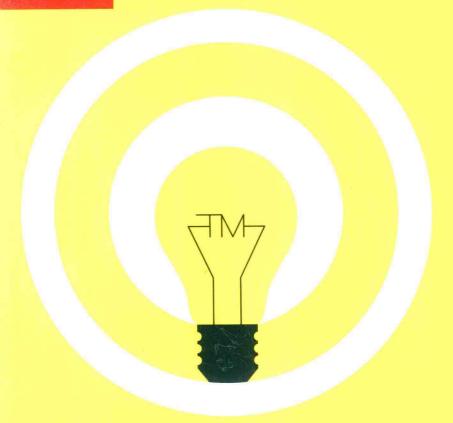
The Economist



Guide to INTELLECTUAL PROPERTY

What it is, how to protect it, how to exploit it

STEPHEN JOHNSON



GUIDE TO INTELLECTUAL PROPERTY

What it is, how to protect it, how to exploit it

Stephen Johnson 常州大学山书训 **滅 书** 章



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Preface

I HAVE WORKED IN INTELLECTUAL PROPERTY LAW for over 30 years, initially at Bird & Bird in London and then at Kirkland & Ellis LLP in Chicago, New York and San Francisco. I now work with a not-for-profit organisation focusing on IP's role as an incentive for research.

The idea behind this book was to write a guide for business people and investors explaining the strengths and weaknesses of patents as collateral (security) for loans. That was over six years ago and there was a huge lack of communication between the worlds of finance and IP. Today, patents are increasingly being used as collateral and a market for patents is developing. However, IP remains an opaque area for many business people. The scope of the book has expanded, but the idea is to try to shed some practical, business-focused light on IP.

After starting my career in London, I arrived in the US at the end of 1982, which marked the founding of a new specialist patent appeals court, the Court of Appeals for the Federal Circuit, and the beginning of a new appreciation of the economic importance of strong intellectual property rights, initially in the US, then in Europe and the rest of the world. As a result, patents emerged from an obscure backwater and now play a central role in many industries. During the same period, the rise of the personal computer and the expansion of international brands led to the growth of industries based on copyright and trademarks, and IP assumed huge business importance throughout the world.

Today, however, the function of patents in stimulating innovation has been called into question by the mass of patent litigation in

the smartphone industry and the activities of businesses that acquire existing patents simply to enforce them. The trend towards strengthening patent rights in the US has started reversing.

Legal mechanisms have also failed to cope well with the rampant piracy enabled through technology and the internet, and the balance of rights between the owners of intellectual property such as films and television shows and users of the internet remains a national political and international diplomatic issue. The law remains in constant movement and fundamental questions remain to be answered, or if answered in the past, are subject to review and revision.

Despite this uncertainty, an international IP strategy can still be developed, largely thanks to the legal frameworks established comparatively early in the history of industrialisation by such treaties as the Berne Convention on copyright in 1886. These treaties set out an international order for patents, trademarks, designs and copyrights, resulting in a degree of uniformity of general principles. This process of convergence continued in the 20th century globally and notably within the European Union, where, for example, UK IP law now relies heavily on European concepts.

Although an international IP strategy can be developed, it has to be implemented locally in major markets throughout the world. Considerable differences in IP law remain at a national level, even within the EU, and thus there may be differing results in individual countries.

In attempting to cover what is now a huge field (and to keep it a manageable size), this book is painted in parts with a broad brush, with an emphasis on the US, followed by the UK and Europe. However, Asia and especially China have become much more important with regard to IP. China is often characterised as a haven for copyists, but the reality is that the Chinese government and Chinese businesses are highly focused on filing for IP rights. Western businesses that ignore China in their IP strategy may well regret that decision in the future. In 2014 the first patent case addressing important issues on patents on industry standards reached the European Court of Justice. Tellingly, that case was not between US or European companies but between two Chinese groups, Huawei and ZTE.

The book focuses on the issues and principles that matter in

running a business, and for those seeking a quick guide, the main points to note and strategic considerations are listed chapter by chapter in an executive summary at the back of the book. There is also a section containing useful information and resources for readers who may wish to track future changes in the law, which is in a constant and rapid state of flux. Extensive further references can also be found at www.profilebooks.com/stephen-johnson. However, as well as the rapidly changing state of the law, each IP issue depends on the facts and the specific country in question. This book is not intended to offer legal advice as to any country and in all situations a lawyer should be consulted.

I owe thanks first to Christopher Rees, a long-time friend and a partner at Taylor Wessing in London, who generously reviewed my manuscript from a UK and European perspective; to David Tenenbaum of Global Economics Group, who reviewed and contributed to the chapter on valuing IP; to Stephen Brough and Penny Williams and the team at Profile Books for their editing; to Andrew Clark, who checked facts and citations and made useful suggestions; and to my research assistant, Megumi Yukie. More generally, I owe thanks to all my colleagues and clients, who over the years have provided such interesting work as well as their friendship. However, please note that the content of (and mistakes in) this book are entirely my own, and that the views expressed are mine and do not reflect those of my current or former clients, or my current or former colleagues or employers. Lastly, thanks to my wife, Kimberly, who so generously encouraged and enabled this effort and to my children, Graham and Violet, who have lived through its long gestation.

> Stephen Johnson April 2015

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An introduction to intellectual property

INTELLECTUAL PROPERTY (IP) is worth an enormous amount of money. A crude calculation of the value of intangible assets, including IP, held by public companies can be made by subtracting the value of financial and tangible assets from their market capitalisation. According to a survey by Ocean Tomo, an IP merchant bank, the implied share of intangible assets as a percentage of the value of the S&P 500 was 80% in 2010.¹ Although a portion of the intangible assets of corporations comprises goodwill (an accounting entry which addresses, for example, the value of an acquired business not attributable to identifiable assets), a substantial amount is attributable to IP, such as patents, designs, trademarks, domain names, copyrights, databases, trade secrets and know-how.

By default, investors in most publicly quoted companies are investing in intellectual property. Each year BrandZ, a global brand equity database, determines the world's most valuable brands. The leader in 2014 was Google, with a calculated brand value of over \$158 billion.² According to the *Wall Street Journal*³ and other sources, an actual transaction transferring the IKEA brand from a parent to a subsidiary company in 2012 valued the IKEA brand at \$11 billion. A year earlier \$4.5 billion was paid for the portfolio of patents owned by Nortel Networks, a bankrupt Canadian telecommunications company.

IP affects countries' economies. In March 2013, the US Bureau of

For a quick summary of points to note and strategic considerations, go to page 280

Economic Analysis announced that it was changing the calculation of gross domestic product (GDP) to capture output based on IP and to recognise a new group of "intellectual property products" by capitalising research and development (R&D) spending and treating it as a balance-sheet asset, rather than treating it as an expense on the income statement, and adding to GDP a category of creative works, such as long-lasting television programmes. These and other technical changes in GDP calculation had the effect of increasing US GDP by 3%.

The US and Canada lead the world in viewing intellectual property as an investment asset in itself. For example, Intellectual Ventures was established in Seattle in 2000 by Nathan Myhrvold, formerly of Microsoft, and later Peter Detkin, formerly of Intel, to assemble a portfolio of patents acquired from third parties to be licensed to corporations, as well as to develop new intellectual property. And it is in Canada and the US that private equity funds have been established to focus on the acquisition of royalties arising under pharmaceutical or biotechnology licences. The idea of investing in "pure-play" IP has now spread to Europe and can be seen in the success of companies such as IP Group.

Individuals and organisations in the US have made a point of acquiring patents with a view to profiting from their enforcement. The large sums awarded in damages for patent infringement in the US (according to Lex Machina, a company providing statistical analysis of US IP litigation, the median amount for such awards was approximately \$1.26 million in 2013, but with a much higher average amount of over \$34 million as a result of some large awards),4 together with the costs and uncertainties of litigation, have fostered an industry of professional plaintiffs that purchase patents for enforcement. They are often referred to in derogatory terms as "patent trolls", or more recently "non-practising entities" or "patent assertion entities" (PAEs), and some of them are publicly quoted. This type of patent enforcement, where the sole purpose is to obtain a financial reward, has, because of the costs imposed on the technology industry, become a political issue; it has also spurred patent reform legislation in the US that targets PAE litigation practices but arguably may weaken patent rights in general. Barack Obama addressed these

issues in February 2013 and subsequently has taken action aimed at trying to counter some of the perceived ills of PAEs:5

The folks that you're talking about are a classic example; they don't actually produce anything themselves. They're just trying to essentially leverage and hijack somebody else's idea and see if they can extort some money out of them.

However, research by historians of the patent system shows that an active market in patents and the involvement of investors is nothing new. B. Zorina Khan, a professor at Bowdoin College in the US, points to the *Railway Times* of 1870, which reported that in the US railroad industry:

[There is] a ring of patent speculators, who with plenty of capital, brains, legal talent and impudence, have already succeeded in levying heavy sums upon every considerable railway company in the land. This case is not an isolated one, there are hundreds of them, and the railway company that made up its mind to insist upon its rights had to keep a large legal force, a corps of mechanical experts, and other expensive accessories, in order to secure that end.

IP may be property, and valuable property at that, but it is very different from a tangible asset in the way that it is valued and treated for accounting purposes. IP developed internally may be invisible on an organisation's balance sheet because it is not recognised under generally accepted accounting principles (as *The Economist* stated in August 2014, "if it's intangible, bean-counters won't touch it""). Methods of valuing IP remain, if not in their infancy, certainly still in adolescence. The same applies to markets for buying and selling IP. Legal aspects are far from settled. For example, the remedies available to owners of patents used in critical technical standards in the telecoms industry are only in the process of being clarified.

The market impact of successful patent challenges in the pharmaceutical industry, where patents on blockbuster drugs may be invalidated and generic medicines allowed onto the market, reveals that IP is an asset class where legal challenges and the scope of legal