

I

Introduction

Palgrave Macmillan is a highly respected international publisher of academic texts. But strangely, many of their books start with an apology. Open one of Palgrave's recently published books and within the first pages you may find the following statement: 'While every care has been taken to trace and acknowledge copyright, the publishers tender their apologies for any accidental infringement where copyright has proved untraceable.'¹ In theory, the publishers should always obtain permission before printing copyrighted material, but in practice this is difficult. Frequently Palgrave wishes to use some expressive material, but it is not clear who owns the rights or even if the work is protected by copyright at all. In these cases, the editors take 'every care' to get permission and avoid infringement but still sometimes accidents happen and they mistakenly print copyrighted material without authorisation. When such accidents occur, Palgrave is liable to pay damages to the intellectual property owner, and so they offer a boilerplate apology up front.

In May 2011, the University of Michigan announced it would begin to digitise out-of-print books from its library.² The project would increase worldwide access to rare books and save some works from obscurity. But the project ran into troubles. It was difficult to determine whether the works were protected by copyright and, if so, who owned the rights. To avoid this problem, the university performed a search for any potential copyright owners, published a list of the suspected ownerless works online, and called for rightsholders to come forward.³ When no copyright owners materialised, the university began to digitise the books. Imagine their surprise when the Authors Guild (a collective of American authors) later alleged the project infringed their copyrights, and began legal action to halt digitisation. Mired in a legal quagmire, the project was suspended indefinitely.⁴

¹ See for example Ralph Hall, *Applied Social Research: Planning, Designing and Conducting Real-World Research* (Macmillan Education 2008) iv; Sotirios Sarantakos, *Social Research* (4th edn, Palgrave Macmillan 2013) xxiii.

² *Authors Guild, Inc. v Hathitrust* 755 F 3d 87 (2d Cir 2014).

³ *ibid* 92.

⁴ *ibid*.

In 1999, Canadian company, Research in Motion (RIM), launched the BlackBerry Pager.⁵ The pager was an instant commercial success with business-people, celebrities, and politicians. Behind the BlackBerry's fame was its wireless email technology. No longer were emails confined to the desktop but were now easily accessible on-the-go. The founder of RIM, Mike Lazaridis, invented the technology for the BlackBerry's email function in the 1990s – or so he thought. In 2002, a company called NTP alleged that the BlackBerry infringed patents on wireless email technology that an engineer, Thomas Campana, had invented in the 1980s.⁶ The litigation came as a shock to RIM. Based in Virginia, NTP was an obscure two-person company that did not manufacture or sell any products. Meanwhile, RIM had received its own patent on the BlackBerry's email technology.⁷ As far as it was concerned, RIM had created the technology and had the patent to prove it! Yet NTP won its infringement case and secured an injunction that threatened to bring the production of BlackBerries to a halt.⁸ To avoid a complete shutdown, RIM ultimately paid NTP the hefty licence fee of \$612.5 million in 2006.⁹

A common question runs through each of these cases. The question is relevant to all areas of modern intellectual property (IP) law. It is a question that affects growth and prosperity in the twenty-first century. But it is equally a question with a long history. In various guises, the question discussed in this book has been part of private law and theory for over a century. The Industrial Revolution brought questions about who should be responsible for accidents at work. The invention of the motor car resulted in questions about responsibility for accidents on the highways. The modern market economy presented questions of responsibility for unsafe products. And today the Information Age presents the question: Who is responsible for IP accidents?

Accidents are an enduring and ever-present feature of social life. People frequently engage in activities which are beneficial for society, but which create risks of harm to others as a by-product. Sometimes those risks become reality and others get hurt, even though that is no one's desire or intention.¹⁰ A classic example is driving automobiles. Fast, simple, and reliable transportation provides significant benefits for society. However, driving is also dangerous. Whenever someone sits behind the

⁵ Jacquie McNish and Sean Silcoff, *Losing the Signal: The Untold Story Behind the Extraordinary Rise and Spectacular Fall of BlackBerry* (Flatiron Books 2015) 66–78. Later, in 2002/3, the BlackBerry would evolve into the more famous mobile cell phone.

⁶ *NTP, Inc. v Research in Motion* 261 F Supp 2d 423 (ED Va 2003).

⁷ 'Pager Maker Gets Patent for Email Delivery' *Wall St. Journal* (18 May 2001) A2.

⁸ *NTP, Inc.* (n 6).

⁹ McNish and Silcoff (n 5) 129.

¹⁰ Steven Shavell, *Economic Analysis of Accident Law* (Harvard University Press 1987) 1 ('[B]y "accidents" I mean harmful outcomes that neither injurers nor victims wished to occur – although either might have affected the likelihood or severity of the outcomes.').

wheel of a car, they risk crashing into other motorists. Sometimes those risks materialise and people suffer injuries, even though no one wants that to happen. Unfortunately, as long as people drive cars, people will cause car accidents. And, as long as there are car accidents, lawyers will be needed to resolve fights over their consequences.

This book concerns one particular type of accident: IP accidents. Creativity is a great thing. A more creative society will cure more diseases, produce more great art, and solve climate change quicker than a less creative one. Intellectual property law encourages creativity by granting creators property rights over their inventions and authorial works. But creativity is also risky. Every time someone creates a new invention or authorial work, or simply uses an old invention or work, they risk infringing the IP rights of prior creators. As the Palgrave example demonstrates, individuals and businesses frequently try to avoid such IP infringement. Palgrave does not want to copy previously published material. Unfortunately, even when people take great care to avoid such infringement, accidents happen. When accidental infringement occurs, and creators fight with one another, lawyers must decide who, if anyone, should be held responsible. Should the infringer be forced to compensate the IP owner even though they did not wish to cause harm? Or should the IP owner be expected to live with this undesirable misfortune without redress?

Intellectual property accidents are a pervasive and growing phenomenon in the Information Age. As long as IP rights have existed, individuals have accidentally infringed them. But prior to the twentieth century, the overall amount of accidental infringement was minimal.¹¹ In an economy based largely on the trade of tangible goods, comparatively few inventions and authorial works were produced. From the pool of intellectual goods that were created, even fewer were protected by IP rights. Copyrights and patents were granted to a narrow range of intellectual products. When they were granted, IP rights were clearly limited in scope and duration. Furthermore, in order to receive protection, the hopeful IP owner was required to alert the public to the existence of their rights. Copyright in the USA, for example, was granted only to works which were marked with appropriate copyright information (such as the famous © symbol).¹² As a consequence, it was much easier for the public to avoid accidentally infringing IP rights. The famous jurist Judge Learned Hand went as far as to say that without copyright's notice requirement, 'it could not be a tort to innocently copy a copyrighted work'.¹³ But the situation has changed over time. The number of IP rights has skyrocketed as technology has expanded creative capacity. The scope and duration of IP rights have swollen and become less determinate. Meanwhile, due to broader changes in the legal system, owners are no longer expected to alert the public to the existence of their IP rights. As a result,

¹¹ See Chapter 3.

¹² Copyright Act, 35 Stat 1075, §9 (1909).

¹³ *Haas v Leo Feist, Inc. et al* 234 F 105, 107 (SDNY 1916).

society today faces heightened levels of creative risk, more IP accidents than ever before, and exploding rates of IP accident litigation.

Despite their prevalence, IP accidents remain an ignored and misunderstood problem. Legal commentators write that infringement is ‘seldom accidental’¹⁴ and that ‘accidental duplication of copyrighted works is rare’.¹⁵ Of course, lawyers are aware of the University of Michigan case, the BlackBerry case, and many other similar cases. Writers refer to this type of infringement as ‘inadvertent’, ‘innocent’, or ‘unintentional’.¹⁶ But the nature of this type of infringement as *accidental* is not understood. This is unfortunate because conceptualising these infringements as accidents highlights the conceptual features that make this type of infringement distinctive. The Michigan case, BlackBerry case, and the experiences of Palgrave, are connected in a significant way: the cases all involve the unintended materialisation of creative risk. The infringements are the by-products of activities that enhance the common good. Furthermore, once these cases are understood as accidents, one realises how many contemporary policy debates in IP law are ultimately about accidents. Issues as diverse as orphan works, patent trolls, independent invention, and more, are all emanations of the IP accident problem. Luckily, the law of accidents – a core component of modern tort law – shows society how to deal with this problem. Lawyers from Oliver Wendell Holmes Jr, to Judge Learned Hand, to Guido Calabresi (to name just a few) have considered who, if anyone, ought to be held responsible in law for accidents.¹⁷ Society can use the insights contained in accident law to help craft a comprehensive and normatively justifiable response to the IP accidents problem of the twenty-first century.

This book argues that IP law should be reformed around a negligence liability rule. Because creativity imposes risks of harm on others, individuals who engage in creativity assume a legal duty of care. When creating new intellectual goods, or using pre-existing intellectual goods in creative ways, users ought to act carefully and try to avoid IP accidents. For efficiency, equity, and fairness reasons, society should expect creators to adopt a reasonable level of care to avoid accidental infringements (or the care that a ‘reasonable person’ would in the circumstances). What will qualify

¹⁴ Stephen E Margolis, ‘Law and Economics of Copyright Remedies’, in Richard Watt (ed), *Handbook on the Economics of Copyright* (Elgar 2014) 246.

¹⁵ William M Landes and Richard A Posner, ‘An Economic Analysis of Copyright Analysis of Copyright’ (1989) 18 J Legal Stud 325, 345.

¹⁶ See for example R Anthony Reece, ‘Innocent Infringement in U.S. Copyright Law: A History (2007) 30 Colum J L & Arts 133; Christopher M Holman, ‘Bowman v Monsanto Co.: A Bellwether for the Emerging Issues of Patentable Self-Replicating Technologies and Inadvertent Infringement’ (2015) 80 Mo L Rev 665. Alan Latman and William S Tager, ‘Study No 25: Liability of Innocent Infringers of Copyrights’ (1958) Copyright Law Revision Studies.

¹⁷ Oliver Wendell Holmes, Jr, *The Common Law* (London Macmillan 1882) 77–129 (Lecture III. – Trespass and Negligence). *United States v Carroll Towing Co.* 159 F.2d 169, 173 (2d Cir. 1947). Guido Calabresi, *The Costs of Accidents* (Yale University Press 1970).

as reasonable care will depend on the facts and the context of the case. But as a general matter, this will typically involve searching for any IP owners, checking various patent and copyright registers, and inspecting any physical goods for IP information. If a user breaches their duty, and fails to behave with all due care, they ought to be legally responsible for the infringement and liable to the IP owner. In these cases, the user should be subject to the normal remedies of IP law (i.e. monetary and injunctive relief). On the other hand, if the user has met their duty, and adopted all due care in the circumstances, they ought not to be responsible in law for the infringement. In these cases, no liability ought to attach to the user. The user should not be forced to pay monetary relief nor should the use of the intellectual good be subject to an injunction. Thus, the outcome of the *Palgrave* example, or the *University of Michigan* and *BlackBerry* cases, ought to depend on whether the accidents were the result of the users' negligence.

Introducing a negligence liability rule will change the current liability structure of IP law. As the law stands, one who uses creative material is subject to a very demanding requirement. The individual's duty is not a duty to act carefully, or to behave like a reasonable person, but a duty to prevent infringement altogether. When an infringement of an IP right occurs, liability is strictly imposed upon the user.¹⁸ Under this strict standard, the user is automatically viewed as the party responsible for the accidental infringement. Parties like *Palgrave* are accordingly subject to damage awards and injunctions even when they behaved carefully. But this strict liability standard was not built for the challenges of the Information Age. The strict liability standard was a product of the nineteenth century, when accidents were relatively few and avoiding them was comparatively easy. But the growth of IP accidents in the twenty-first century requires society to re-evaluate the strict liability standard. In a world characterised by significant numbers of hidden IP rights, it is inefficient, inequitable, and unfair to expect users to prevent all IP accidents.

Negligence liability in IP law is justified on economic grounds.¹⁹ Intellectual property rights play an important role in the economy. Intellectual property law grants creators time-limited monopolies over their inventions and works. When others in society wish to use those intellectual goods, they must first receive the owner's permission and pay a licence fee. This system ensures that creators receive a financial incentive to supply the market with valuable new works and inventions. When accidents occur, the user does not obtain permission *ex ante*, and the IP owner misses out on a licence fee. As a result, systematic and widespread accidental infringement can depress the incentives for creativity that IP seeks to generate. Therefore, as a general matter, individuals in society ought to take care to prevent such accidents. But, on the other hand, expecting users to take excessive care to

¹⁸ See for example *Shapiro, Bernstein & Co. v H.L. Green Co.* 316 F.2d 304, 308 (2d Cir 1963). *Hilton Davis Chem. Co. v Warner Jenkinson Co.* 62 F 3d 1512, 1527 (Fed Cir 1995). *Warner-Lambert Company LLC v Generics (UK) Ltd t/a Myland and Another* [2018] UKSC 56, per Lord Sumption [67].

¹⁹ See Chapter 4.

prevent all infringement is inefficient and not conducive to society's wealth or welfare. Consider Palgrave once more. When faced with a work that plausibly incorporates copyrighted material, and no copyright owner to be found, Palgrave could comply with their duty by simply not publishing the work at all. However, declining to publish the material would deprive the public of a valuable new work, and thus is likely to do more harm than good overall. Society does not expect car owners to stop driving in order to prevent car accidents, and nor should society expect users to forgo creativity in order to prevent IP infringement. In both cases, the right balance is created when the law requires parties to adopt reasonable, not excessive, care to avoid IP accidents.

Negligence liability is equally justified on the grounds of equity and fairness. The current strict liability standard allocates the burden of creative risk inequitably. While users are under an almost unqualified duty to prevent infringement, owners are not expected to do likewise. When an accident occurs, the law always holds the user responsible, and never the owner. This is unfair from a moral perspective and leads to an unjust and unattractive culture. The allocation of responsibility is unfair because owners can also be morally responsible for IP accidents.²⁰ Intellectual property owners frequently cause IP accidents by failing to publicly register their rights, by failing to appropriately mark their goods, and by failing to alert users to the presence of their rights. The allocation leads to a poorer culture because the lopsided allocation of responsibility makes it harder for some creators – particularly less wealthy creators – to participate in the world of creativity.²¹ Both concerns can be illustrated by the University of Michigan case. In this case, the copyright owners had not renewed their copyright claims with the US Copyright Office, had not attached appropriate copyright information to their works, and did not respond to the University of Michigan's public call for information. The resulting accident could have been avoided if the copyright owners had performed any of these steps. Despite the fact that the copyright owners shared responsibility for causing the accident, strict liability meant the university was the solely responsible party in the eyes of the law. This is not only unfair, but it had the consequence of barring a non-profit university from effectively engaging in the world of creativity. The nature of IP rights as proprietary rights does not change this fact. When someone accidentally drives a motor car into another motorist, the injurer will be absolved of liability if they have taken reasonable care. The same result is equitable and fair in IP accident cases.

In January 2019, the University of Cambridge hosted a conference on the role of *mens rea* in IP law.²² At this event, a prominent philosopher of tort law outlined his

²⁰ See Chapter 5.

²¹ See Chapter 4.

²² Centre for Intellectual Property and Information Law, Spring Conference, 'Mens Rea in IP: Knowledge, Intent and Infringement of Intellectual Property Rights' (9 March 2019) <https://bit.ly/3iuZp9p> accessed 20 December 2020.

view that tort law has little to teach IP lawyers. This book disagrees. Tort law has something very significant to offer to IP lawyers. Tort law and theory helps society decide who, if anyone, should bear legal responsibility for IP accidents. Over the following chapters, this monograph will introduce the concept of accidental IP infringement and will answer the normative question of who ought to bear responsibility for accidental infringement of IP rights.

The book continues in six parts. Chapter 2 introduces the concept of IP accidents. This chapter draws out the conceptual features that makes this type of infringement distinctive and in need of a unique legal response. Chapter 3 delves into the history of IP accidents. It explores the forces that have caused the IP accident problem today. The bulk of normative analysis comes in Chapters 4 and 5. These chapters analyse the question of responsibility for IP accidents through the lenses of economic efficiency, equitable distribution of creative risk, and fairness. Chapter 6 turns to solutions. It considers a variety of responses to today's accident problem, including the introduction of stricter formality requirements for obtaining IP protection, imposing compulsory licences in situations of risk, and tinkering with remedies in cases of accidental infringement. The chapter argues that introducing a negligence liability rule is the best way to solve the IP accident problem and that courts have the power to adopt such a rule. The chapter also demonstrates the value of negligence by applying the proposed regime to a number of thorny policy issues currently plaguing IP law (namely orphan works, independent invention, strategic behaviour, and IP triangles). Lastly, Chapter 7 concludes by considering the role of property and tort law in IP.

But first, some notes on scope and terminology are required. Although accidental infringement can be found in all areas of modern IP law, this book focuses on copyright and patent rights only. This decision is made partly due to space constraints, but also because copyright and patent share broadly similar normative justifications; these rights can therefore be discussed together coherently in a way that would not be possible if the book's focus was broader and included additional rights (such as trademarks). Furthermore, most of the examples used in this book come from the USA and UK. The problem of IP accidents is relevant to all jurisdictions, and the recommendations this work makes are applicable globally, but space constraints mean that the book can only examine how the problem presents itself in a handful of countries. Regarding terminology, the book adopts the term 'intellectual goods' to refer generically to the subject matter of copyright and patent, that is inventions and authorial works. Although the term 'creativity' is traditionally associated primarily with copyright (while 'inventiveness' is associated with patent), where authorial works and inventions are discussed in tandem, the book refers to the 'creation' of those goods, or the 'creativity' needed to produce them. Likewise, the term IP 'user' designates the defendant or the infringer in an accidental infringement case.

Lastly, this book is the product of many years of thought and reflection. In some instances, prior writing has been directly incorporated into this work (and the footnotes indicate where this occurs). In some instances, the current monograph departs from conclusions presented in prior articles. Where there is a disparity between recommendations made here and made earlier, the current work should be viewed as final and definitive. And although the book has been many years in the making, the argument and analysis is presented in a concise, succinct, and (hopefully) readable way.

2

Accidents

Consider a computer programmer. While working on a new piece of software, the programmer found some helpful source code online that had been made freely available to the public through an open-source licence. After the programmer included the code in their software, it later transpired that the open-source code contained a string of copyright-protected code produced by an earlier software engineer. By copying the open-source code, the programmer also copied the protected code and infringed the copyright therein. If the programmer had been aware that the open-source code was tainted and knowingly copied it anyway, then it would be easy to agree that they should be held responsible for their actions. But, this case is not so easy. In this case, the programmer was not aware of the protected code and the infringement was entirely accidental. As this chapter demonstrates, accidental infringement is a unique category of IP infringement and, when it comes to allocation of legal responsibility, ought to be treated differently to other types of infringement. After exploring the distinctive conceptual characteristics of IP accidents, the chapter summarises the academic literature that has so far considered what form of liability rule ought to govern IP infringement.

A THE ANATOMY OF IP ACCIDENTS

The essential conceptual attribute of IP accidents is the presence of *ex ante* risk. An infringement is accidental if, at the time of acting, the user of the intellectual good could reasonably foresee only a risk that their conduct would result in an IP infringement. Such risky situations arise because of imperfect information. Consider the programmer example above. At the time they decided to use the open-source code, the programmer could only foresee a chance that such use might infringe an IP right. The probability of infringement was not as high as 100 per cent but nor was there no risk at all. This situation of risk arose because the programmer had less than perfect information. If the programmer knew that the open-source code was tainted, that the copied code was protected by copyright, the identity of the

owner, and that the owner would object to the unauthorised use of the code, then the programmer could have bargained with the owner for copyright permission. In these circumstances, failure to obtain permission prior to use would be an act of intentional infringement. But without such information, the programmer could only perceive a risk that using the code might result in an infringement. Faced with situations of risk, users of intellectual goods are forced to decide how to act. The programmer's decision to use the code in this case was not an act of intentional infringement. Infringement was not a valued outcome. The programmer's desire was to create a completely new program. Nevertheless, in using the code in these circumstances, the programmer took a risk. Using the code under conditions of risk necessarily entailed a chance of infringement as a by-product of the activity.

Understanding the conceptual features of IP accidents highlights their structural similarity to other types of accidental injury. Injuries to persons or tangible property (found commonly in the law of torts) are equally accidental when they occur under conditions of risk.¹ Consider a driver who made a U-turn on a public highway and who crashed into an oncoming vehicle. If the driver had perfect information, including knowledge of the other motorist and the likelihood of collision, then the driver could have foreseen a certainty of injury. But without such information (for example, because something was blocking their view), the driver could only have foreseen a risk of injury, at most. In a hypothetical world of perfect information, the driver could at this point contact other nearby motorists and ask for permission to make this risky manoeuvre. But in the real world, where drivers cannot bargain easily, the driver must decide how to act.² In these circumstances, the driver's decision to make the U-turn is not a deliberate attempt to hurt others, but they have still risked that outcome. In both the IP and the driving example, the risk has materialised and someone else has suffered harm as a result. In both situations, society is faced with a normative question: How ought the defendant in this risky situation to have acted? What is the appropriate way to behave in the presence of risk? And what is the law's role in encouraging good, or in redressing bad, behaviour?

At times, it can be difficult to distinguish accidental and intentional IP infringement. Absolute certainties in life are rare. Even someone who made a verbatim copy of an in-print copyrighted novel bearing a recent copyright notice might argue that there was some miniscule probability that the IP owner would not object and hence that the injury was not certain to follow. But this does not mean that all infringements are accidental. A pragmatic line must be drawn between cases where the probability of injury is high enough to be treated as a practical certainty from cases

¹ Steven Shavell, *Economic Analysis of Accident Law* (Harvard University Press 1987) 5 (modelling accidents probabilistically). Jules Coleman, *Risks and Wrongs* (Oxford University Press 2002) 197–211 (discussing accident law as allocation of risk).

² Robert Cooter and Thomas Ulen, *Law and Economics* (6th edn, 2016) 189 (describing tort law as setting norms when transaction cost prevents bargaining). Coleman (n 1) 203 (summarising instrumentalist interpretations of tort as a system of allocating risk when transaction costs prevent bargaining).