Copyright in Standards: Open or Shut Case

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Abstract

This article investigates some key problems surrounding copyright in standards. It surveys two ex ante approaches, namely the management of the underlying intellectual property rights during a standard’s development stage, and creating an exemption that is incorporated in legislation, and that provides for a compulsory licence. I further suggest an ex post notice, or opt-in approach, for copyright owners, to resolve the uncertainty around when copyright permission should be sought by users.

Introduction

The significance of copyright in the information economy has emerged alongside the advent of new technologies and the challenges that companies face in protecting their products against imitation in a competitive market.2 With the rise of the “new economy”, in particular, copyright is argued to be central to either providing an incentive-based, economic inducement that will persuade companies to participate in inventive or experimental activities that they would not otherwise pursue (the ex ante justification for copyright),3 or to providing legal protection after the technology or copyright work has been created (the ex post justification for copyright). Industry or technical standards (hereafter, “standards”) are often subject to copyright protection.4 Standards are developed for a number of purposes, including to achieve minimum objectives of safety, quality or performance for a product or service (product standards).5 Standards can also apply to various processes concerning work environment (quality standards), where they specify the type of administrative processes that are supposed to lead to high quality or regulatory compliance.6

1 PhD Candidate, Monash University. My thesis will examine the governance of intellectual property rights and standardisation activities in the emerging Australian Electric Vehicle (EV) industry.
2 Paradoxically, technological advances have led to calls for the abolition or restriction of copyright itself: A. Sterling, “Current Issues: National, Regional and International Perspectives”, in B. Fitzgerald and B. Atkinson (eds), Copyright Future Copyright Freedom: Marking the 40th Anniversary of Australia’s Copyright Act 1968, Sydney University Press, Sydney 2011, at 205.
5 The Australian Competition and Consumer Commission (ACCC) is responsible for enforcing mandatory consumer product safety standards under Part XI Div 4 of the Competition and Consumer Act 2010 (Cth).
6 For example, there is a standard that specifies safety requirements and procedures for persons entering and conducting tasks in a confined space: see AS 2865–2009 Confined spaces, Standards Australia Ltd, Sydney, 2009.
Standards are widely used across a range of industries to promote and harmonise the use of certain technologies and products across the economy. Standards also ensure that inventive parties can independently develop technologies that are compatible with those currently in use. This means that competitors can more easily enter new markets and that end-users can feel confident about new products.

The development of standards can have pro-competitive as well as anti-competitive effects. Standards can be pro-competitive when they reduce information asymmetries, and when they lower barriers to entry into a market. On the other hand, anti-competitive effects may arise where one or a group of producers participating in the development of a formal standard, known as the ‘standards-setting development process’, set out individually or collaboratively to implement standards that incorporate technologies to which they hold exclusive intellectual property rights.

There seems to be no comprehensive regulatory framework for evaluating whether copyright does or should subsist in standards, particularly standards that become adopted in legislation (which are normally exempt from private copyright ownership). This is surprising, as Lawrence Cunningham points out, because the importance of standards appears to be growing across a variety of industries, including accounting, consumer product safety, energy, government contracting, insurance, medicine, telecommunications and construction. One of the aims of this article is to raise awareness concerning copyright-protected standards. Another aim is to investigate whether a workable regime exists for users of standards who are faced with the issue of proprietary interests in standards.

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12 Park (2010), at 22.

13 See s 182A of the Copyright Act 1968 (Cth). The research into how proprietary interests should be governed with respect to standards has tended to focus on the role of patents and standard-setting organisations, rather than on copyright: Mueller (2001); M. Lemley, “Ten Things To Do About Patent Holdup of Standards (And One Not To)” (2007) 48 Boston College Law Review 149; Park (2010).


15 ISO and IEC have identified “raising awareness” as the most effective method of preventing the incidence of copyright infringement of standards: ISO and IEC, Copyright, standards and the Internet, Geneva, Switzerland, at 6 (available at http://www.iec.ch/about/brochures/pdf/about_iec/iec_copyright-e.pdf).

16 The issue of standardisation, and the development of standards, have been seen as technical matters for standardisation bodies, as part of an administrative regime that is considered separate from the regulation of intellectual property rights. As a result, there has been little attention to or legal analysis of copyright in relation to the development of standards.
Copyright in standards

One of the world’s largest and most influential standard-setting organisations (SSOs), the International Organisation for Standardisation (ISO), has alleged that a significant number of users of standards are infringing copyright laws by reproducing or redistributing standards without permission. Failure to uphold the proprietary rights of owners of copyright in standards may not only result in copyright infringement, but may also deprive the developers of standards of a fair return for their endeavours. Protection of copyright in standards is thus “fundamental to the sustainability of the international standardisation system”.

Standards are often defined as comprising a document, as being established by consensus and as gaining approval through recognition from a standards organisation. Standards Australia Ltd (Standards Australia) has recently provided a working definition of a standard, as:

a published document which sets out specifications and procedures designed to ensure that a material, product, method or service is fit for its purpose and consistently performs in the way it was intended.

Standards have also been categorised on the basis of how they are developed, on the standard-setting process, or according to the standard’s “economic effect”. Further, a “de facto” or informal standard is one that has, through widespread use, acquired recognition (which may be limited to a specific industry) in the absence of being officially endorsed by an SSO. By contrast, a “de jure”, or formal, standard is developed by industry participants through a voluntary, consensus-driven process facilitated by a particular SSO, such as ISO or Standards Australia. Gary Lea and Peter Hall suggest that the lack of consensus over a formal definition of ‘standard’ is a result of the ad hoc development of standardisation bodies and processes. For the purposes of this discussion, I will use the Standards Australia definition to examine two types of standards.

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17 ISO and IEC, at 3. The ISO is made up of a network of National Standards Bodies (NSBs), including Standards Australia Ltd, on the basis of one member per country. The International Electrotechnical Commission (IEC) and International Telecommunications Union (ITU) are the other two key organisations in this field: C. Murphy and J. Yates, The International Organization for Standardization (ISO): Global governance through voluntary consensus, Routledge, London, 2009, at 11.

18 ISO and IEC, at 1.

19 ISO and IEC, at 3.

20 See, for example, the Productivity Commission Report (2006), at 6.

21 Standards Australia was established in 1922 and is recognised through a Memorandum of Understanding with the Australian Federal Government as the peak non-government standards development body in Australia.


Most formal and informal standards in Australia are developed through a voluntary process. In the former case, standards exist as published documents of specifications licensed by the primary SSO. In Australia, the primary SSO is Standards Australia. However, in 2003 Standards Australia sold its marketing, education and publishing services to SAI Global Ltd, a private company. Under a Publishing Licence Agreement, SAI Global was granted an exclusive licence to publish, distribute, market and sell Australian Standards worldwide.

One the most important purposes of a standard is to establish a common language. This, in turn, aims to foster compatibility and compliance. Standards may, for example, define safety criteria or particular building code regulations. It is common for a voluntary standard that addresses either the safety criteria or enhanced interoperability of a product to precede the development of a mandatory standard that is enforceable by law. When this is the case, governments may incorporate all or part of the voluntary standard into legislation, subordinated legislation or regulations.

As standards become more essential to commerce, industry and governments, SSOs are increasingly seeking licence fees for access to standards, on the basis that they are copyright material of which the SSO claims exclusive ownership. Anne Fitzgerald and Kylie Pappalardo claim that SSOs derive those materials from their member-contributors, who have in turn assigned their copyright in those materials to the SSO. However, this claim requires clarification in relation to the underlying rights of the contributors. A recent Guide produced by Standards Australia states, “Standards Australia recognises the right of the originator of the material to continue to reproduce that material in the form in which it was originally submitted”, but the originator is “not thereby entitled to reproduce the whole contents of the published Standard” without written permission from Standards Australia. Despite the apparent conflict between proprietary interests and the widespread adoption that results from a published standard, retaining copyright in standards reduces “transaction costs” for licensees or users, who only need to take out a single licence to obtain lawful access to the standard. In their defence, SSOs assert that the copyright protection afforded to standards is a necessary economic incentive to develop and promote better quality standards. Some commentators, however, have argued that SSOs would develop standards in any event, since they directly derive the economic benefit from licensing or selling the standards.

The copyright policies of SSOs may not explain in sufficient detail what is permitted under their licence. This calls into question the extent of legal protection being afforded to those standards. Where SSOs grant licences to users, the latter are sometimes restricted from incorporating any modifications. However, where a licence does allow for modification, it

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27 The exceptions are: cases where the idea-expression dichotomy vanishes, because there is only one way to express an idea in the standard (“merger doctrine”): K. Koelman, “An Exceptio Standardis: Do We Need An IP Exemption For Standards?” (2006) 37(7) IIC 823, at 831; Samuelson (2007), at 215; and where a standard becomes embodied in law, according to Cunningham, “facts are not eligible for copyright protection and standards embodied in law are facts”: Cunningham (2005), at 308.
28 Fitzgerald and Pappalardo (2009), at 474.
29 Standards Australia (2010), at 14.
30 Fitzgerald and Pappalardo (2009), at 475.
31 For a brief discussion on the economics of standards, see Friedman (1994), at 112ff.
32 Samuelson (2007), at 222; Cunningham (2005), at 311.
33 Fitzgerald and Pappalardo (2009), at 476.
remains uncertain whether the SSO, being the licensor rather than the creator, can assert any copyright ownership over the expression of a modified standard.

**Open standards**

Enforcing copyright in standards has arguably become more difficult with the increased access to information that computers and the internet enable.\(^{35}\) At the same time, there are disadvantages to users of copyright standards – they have to pay licence fees. A remedy to both dilemmas is for SSOs to develop “open standards”, standards that may be copied, used and distributed for no fee. Open standards are not necessarily the same proposition as “open source”, as Ken Krechmer points out.\(^{36}\) Where standards, in general, represent “common agreements that enable information transfer”, “open source” denotes a process of development whose purpose is continuous improvement.\(^{37}\) The American National Standards Institute (ANSI) claims that the term “open standards” is misleading as it may involve payment of a fee to obtain a copy of the standard, to offset the costs associated with the development process.\(^{38}\) Open source software, for example, may incorporate open standards, but the underlying purpose of the particular standard would still be to provide a common agreement on technology specifications.

In order to achieve open standards it is necessary, according to Fitzgerald and Pappalardo, to manage the underlying intellectual property rights during the development and implementation of the standards.\(^{39}\) Another more direct solution has been raised by Kamiel Koelman, who argues for an intellectual property “exemption” to be incorporated into legislation: it would prevent SSOs from accruing licence fees, and instead require them to provide a free “compulsory licence” to users if the standard included any protected subject matter.\(^{40}\) Open standards exist by default, it could be argued, where a government has incorporated a privately drafted standard into legislation.\(^{41}\)

A key disadvantage of open standards approaches (or outcomes) is that they could serve as a disincentive for SSO members to contribute to the standards development process.

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\(^{34}\) This article will only focus on the issues surrounding copyright in standards, although it is conceded that issues arising from the interoperability of technologies and procedures are equally relevant to any discussion of “open standards”. A good example of this is when governments prescribe standards that must be adopted by non-government parties who engage with the public sector as well as by government agencies: Fitzgerald and Pappalardo (2010), at 303.

\(^{35}\) See, for example, ISO and IEC, at 5.


\(^{40}\) Koelman (2006).

\(^{41}\) See sections 182A(1) and (3)(a) of the *Copyright Act 1968* (Cth). This would be the case where the standards were adopted “in full” into legislation, rather than “by passing reference”. A “passing reference” in legal materials to standards would not give rise to any copyright-destroying effects.
Some commentators have suggested that any *ex ante* regime that moves towards open standards could reduce the quality of the standards, and this would, in the long term, have a negative effect on competitive markets and innovation.\(^{42}\) On the other hand, an *ex ante* regime may encourage participants to contribute to SSOs, as the economic benefits associated with their contribution to a particular standard being widely adopted by an industry could be considerable. Moreover, it is not surprising that governments have increased their support for open standards: their adoption guarantees any future access, and ensures increased interoperability and reduced transaction costs.\(^{43}\)

I propose that the unique nature of standards may give rise to a “tolerated use” situation in relation to copyright infringement. Tolerated use, as Tim Wu has explained, is “infringing usage of a copyrighted work of which the copyright owner may be aware, yet does nothing about”.\(^{44}\) It can be a deliberate strategy by the copyright owner to create goodwill, but it more frequently results from either simple laziness or increasing enforcement costs.\(^{45}\) Copyright works that would normally fall into this category include mass-produced, low transaction cost works. I suggest that standards may fall into this category. Wu proposes an “opt-in” system, or an *ex post* notice for copyright owners towards users of copyright works.\(^{46}\) Under such a system, the copyright owner must provide notice before usage of the work becomes an infringement. Applying Wu’s work to the problem of copyright in standards, I suggest that *ex post* notice arrangements may go some way towards resolving the situation where users of standards are unaware or uncertain of when permission should be sought from the copyright owner.

**Conclusions**

Standards, in their many variants, are clearly a “special sort of intellectual creation” that warrant careful examination and distinct copyright solutions.\(^{47}\) The aims of this article have been to raise awareness concerning copyright-protected standards, and to discuss a workable copyright regime for users of standards. There are several approaches to this issue. First, copyright protection could be withheld for standards altogether. Any absence of legal enforcement need not deprive the SSOs of rights to publish or sell standards; the concern would be whether or not people would continue to contribute to the standard-development process. A second option would be to introduce a statutory exemption that permits the granting of a compulsory licence to users of standards,\(^{48}\) including for situations in which a de facto standard has evolved. Third, SSOs and governments could develop “open standards” that are available for free. As Fitzgerald and Pappalardo note, an *ex ante* regime of this nature could manage the underlying intellectual property rights during the development and implementation of the standards.\(^{49}\)

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\(^{42}\) Koelman (2006), at 840-41. Even where the cost of developing a standard is not high for the contributor, the subsequent process of developing a standard by an SSO may be: Friedman (1994), at 1122.


\(^{45}\) Wu (2008), at 3.

\(^{46}\) Wu (2008), at 5.

\(^{47}\) Friedman (1994), at 1129.

\(^{48}\) See Koelman (2006).

\(^{49}\) Fitzgerald and Pappalardo (2009), at 468.
The other option, as I have suggested, is an ex post notice, or “opt-in”, system for copyright owners. This solution may resolve the issue of users of standards being unaware or uncertain of when permission needs to be sought from the copyright owner, and would at the same time maintain the incentive-based regime which copyright offers. Ensuring the recognition of copyright in standards will require greater awareness and collaboration between rights owners, disseminators of standards, and users of standards. In the absence of such measures, the alternative, according to Adrian Sterling, will be an increase in unauthorised use, which could lead to undermining or even abolition of the right itself.

References


50 See Wu (2008), at 5.

Inside

Thompson, Should Australia Adopt a Sui Generis Right for Non-Original Databases?

Berger, Copyright in Standards: Open or Shut Case

Kevin Lindgren Prize for the Best Student Presentation on Copyright 2011