









Delivering a world leading IP system

Does trade mark cluttering exist in Australia?

IP Australia Economic Research Paper 07

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June 2019



Executive summary

When cluttering of the trade mark register becomes significant, it has the potential to undermine competition and stifle innovative entrepreneurship. The Productivity Commission's 2016 Inquiry Report, *Intellectual Property Arrangements* (PC 2016), identified trade mark cluttering as a possible problem to be addressed in order to ensure the effectiveness of the trade mark system in Australia. However, the PC report did not provide sufficient evidence in support of this claim. This paper explores more extensively whether there is any evidence indicating trade mark cluttering in Australia and assesses how significantly it has been affecting the register.

We find that overall the extent of trade mark cluttering in Australia is not unduly serious on the evidence of two key indicators: less than 0.1 per cent of registered trade marks have been removed annually by a third party via the non-use removal procedures; while about 0.5 per cent of trade marks in force may be blocking other applications while they are not in use. Relative to the total number of trade marks on the register, these small proportions do not seem to be cause for concern.

Nevertheless, potential sources of trade mark cluttering have been increasing in Australia: the first renewal rate has decreased from about 70 per cent in the 1980s to 50 per cent in the 2000s, and an increasing number of trade marks remain on the register for an average of an extra four to five years after their owners deregister their businesses. A comparison of the average number of classes per trade mark between Australia and some countries and priority pairs between Australia and the United States indicates that the per-class-based fee system and proof-of-use requirement have played a positive role in reducing the extent to which non-use trade marks and overly broad non-use classes remain on a register.

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1. Introduction

Trade marks identify a unique product and serve to distinguish a business's goods and services from those of competitors. The mark can be a symbol, letter, number, word, phrase, sound, smell, shape, logo, picture and/or an aspect of packaging. In the case of word marks, studies have found that the most competitively effective trade marks for businesses are unique and concise, with short common words generally working better than neologisms (Beebe and Fromer, 2018).

Consumers often know little about the characteristics of the goods or services they are considering purchasing and there are numerous unobservable differences in the quality of goods and services. Trade marks therefore play an important role in bridging the information asymmetries between producers and consumers. For consumers, a unique trade mark helps them to identify their desired product by associating it with various attributes that serve to establish its quality and reputation. For producers, a registered trade mark gives the owner the exclusive right to use and authorise other people to use the trade mark.

With clarity in trade marks, producers and sellers can create concise identifiers for specific goods and services, thereby facilitating market transactions. Therefore, clarity in the Trade Marks Register serves to provide transparency to other potential traders and enable them to easily identify where market opportunities do, or do not, exist and enabling them to target gaps in the market.

Trade marks are by far the most widely used intellectual property (IP) right because they are not specific to an invention, like patents or design rights, but to the broader identity of a business. Trade marks are the legal underpinning of a business's brand and the two concepts are closely related but often confused. A brand is an intangible asset that makes up a significant share of a company's value, and branding is a key arm of a company's business strategy. Branding is also integral to a business's innovation strategy, as it reflects the business's attempts to define and position itself in the marketplace. Maintaining a business's brand reputation is an ongoing work that involves continual refinement of its strategy and investment in response to the dynamics of changing markets and consumer tastes. A strong brand helps a business build customer loyalty

¹ In the United States (US), branding expenditures as a percentage of GDP exceed business spending on research and development (WIPO 2013). Branding expenditures are not limited to advertising. WIPO (2013), *World Intellectual Property Report 2013: Brands – Reputation and Image in the Global Marketplace*, World Intellectual Property Organization, Geneva.

and obtain a price premium for its products, increasing its revenues and profits. Trade marks are important for the protection of a business's brand reputation.

Trade mark cluttering refers to a phenomenon suspected to be a problem for many trade mark registers around the world: it occurs when a large number of unused trade marks or overly broad trade marks (including unused classes) remain on a register that block others' use of the same or similar marks. This clutter substantially increases the costs to other applicants of creating and registering new trade marks (Graevenitz et al. 2012). These costs are an obvious burden for new entrants to a market, but they can also affect existing businesses trying to create new trade marks. Trade mark cluttering can undermine the effectiveness and the efficiency of the trade mark system by making it more difficult and expensive for new applicants to establish their brands, resulting in unfair advantages for incumbent firms over new entrants (Greenhalgh and Webster 2015). Consequently, it weakens the role of the trade mark system in promoting fair competition (Carter 1990) and increases the cost to consumers of searching and identifying their desired products in the market. Trade mark cluttering also has a negative impact on trade mark offices in terms of their wasted efforts administering unused trade marks and searching inflated trade mark registers.

Closely related to trade mark cluttering are problems of trade mark depletion and congestion; these have been closely examined in the US by Beebe and Fromer (2018). Trade mark depletion occurs when a decreasing number of available words, signs, or their combinations remain unclaimed by any trade mark owner. Implicitly, depletion assumes the supply of trade marks is finite, contrary to an assumption that has long prevailed in economic thinking about trade marks (c.f. Posner and Landes, 1989) and governed policymaking. By contrast, trade mark congestion happens when, for any given mark that has already been claimed, that mark is claimed by an increasing number of trade mark owners. This can occur when a trade mark is assigned to multiple owners but in different classes of goods and services, as allowed under the Nice classification system administered by the World Intellectual Property Organization (WIPO).²

The problems associated with trade mark cluttering may be exacerbated and become systemic if growing numbers of applicants try to register trade marks but with no intention of future use, whether for defensive or other reasons (Graevenitz et al. 2012).

² http://www.wipo.int/classifications/nice/en/preface.html, accessed 6 March 2018.

The Productivity Commission's 2016 Inquiry Report, *Intellectual Property Arrangements* (PC 2016), identified trade mark cluttering as a potential problem that needs to be addressed in order to ensure the effectiveness of the trade mark system in Australia. The Commission's assessment was based on two main indicators of trade mark cluttering:

- Rapid growth in the number of applications and registrations of trade marks in Australia in recent decades.
- ii. An increasing success rate of oppositions to trade mark applications on the grounds that the provisions of a mark were too similar to an existing mark (s. 44 of the *Trade Marks Act* (1995)) or that another similar mark already has achieved a reputation in Australia (s. 60).

The Commission's report largely attributed the cluttering to the introduction of the presumption of registrability in the *Act*, and suggested that this has swung the balance too far in favour of trade mark owners. IP Australia observed that the presumption of registrability was introduced in response to concerns that the previous legislation was too strict and prevented registration of marks that should have been registrable. It argued that "the increased likelihood of a trade mark application being registered is not in itself evidence that the register is cluttered" (IP Australia 2016). While the Commission's report suggested Australia's trade mark system is "lax" in encouraging businesses to seek rights as broadly as possible, it did not conclusively demonstrate the existence of significant cluttering in Australia as it did not provide evidence on non-use of trade marks on the register.

In its submission to the Commission's inquiry, IP Australia agreed that the trade mark system should not encourage applicants to seek registration of their trade marks without any intention to use them or for more goods or services than they need. IP Australia also suggested that this is an area in which more work should be done in order to identify the nature and extent of the problem (IP Australia 2016).³ It is against this policy background that the Office of the Chief Economist at IP Australia initiated its own investigation into the potential existence of trade mark cluttering in Australia, with the aim of providing an evidence base to support IP policymaking by the Australian Government.

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2. Global growth of trade mark registers

The causes of trade mark cluttering are not fully known but may be directly related to the crowding of trade mark registers. Total trade mark applications filed in the world increased from 959 500 in 1985 to 9 106 000 in 2016. Applications have more than doubled since 2008, with average annual growth of 10.6 per cent (Figure 1). Overwhelmingly, world trade mark applications have been driven by the extraordinary growth in filings in China, which increased from 149 410 in 1996 to 5.7 million in 2017. To the extent that trade mark cluttering is an issue, it is one for registers and the world's registered trade marks have also grown strongly, from 2.5 million in 2008 to 5.4 million in 2017.⁴

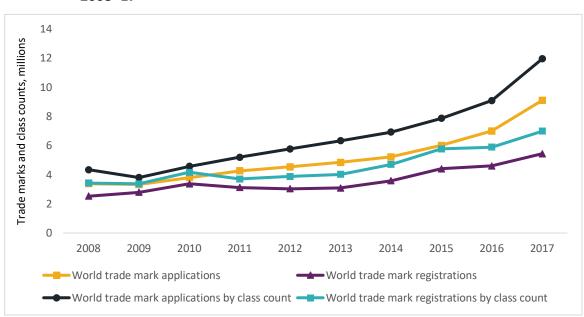


Figure 1: World trade mark applications and registrations, and application class counts, 2008–17

Source: WIPO IP Statistics Data Center (December 2018 update); Trademark; Indicator: "Indicator: 1 - Total trademark applications (direct and via the Madrid system)", Report type: "Total count by filing office"; Select office: "World"; https://www.wipo.int/ipstats/index.htm?tab=trademark, retrieved 5 June 2019.

Trade mark systems are not directly comparable, and the case of China is problematic as until 2014 it had a single class filing system which inflates applications when compared with a multi-class filing system used by Australia, the US and other countries. World trade mark application

⁴ Annual Development Report on China's Trademark Strategy <u>2017</u> (Chinese), by the Trademark Office of the National Intellectual Property Administration, PRC, http://sbj.saic.gov.cn/sbtj/201805/t20180510_274101.html, accessed 7 June 2019.

⁵ In 2014, China revised its trade mark law and allowed multi-class trademark applications, but it continues to charge all fees on a per class basis. The change appears to have had minimal effect as the majority of trademark applications in China are still single-class.

class counts allow a better comparison and WIPO data for China is available up to 2017.

Application class counts have also grown strongly, up to 12.0 million classes in 2017 (an increase since 2008 of 175 per cent), while there were 5.9 million classes specified in world trade mark registrations (an increase of 104 per cent).

3. Current status of the Australian trade mark register

In Australia, the total number of trade marks applications increased from 13 567 in 1980 to 79 490 in 2018. The data show a steadily increasing trend in annual trade mark applications and registrations over the past two decades, based on the trade mark application year (Figure 2).

80,000 - 70,000 - 60,000 - 50,000 - 20,000 - 20,000 - 20,000 - 10,

Figure 2: Annual number of trade marks filed and registered by filing year, 1996-2016

Source: IP Government Open Data (IPGOD 2018), https://data.gov.au/dataset/intellectual-property-government-open-data-2018.

⁶ WIPO IP Statistics Data Center and Australian Intellectual Property Report 2019, p. 16.

⁷ Note that due to the examination time between filing and registration, the annual number of registrations of those filed in each year is not complete, especially for those filed in 2015 and 2016, about 900 and 9 000 trade marks filed in 2015 and 2016 respectively were still under examination when this research was carried out in early 2018.

Trade marks can stay on the register indefinitely, as long as applicants pay the renewal fees and meet certain requirements, so the stock of registered marks in Australia has grown bigger and bigger. This, too, is a worldwide phenomenon. The number of trade marks in force around the world trebled from 11.4 million in 2005 to 43.2 million in 2017, while in Australia it increased 62 per cent over this period to 635 355 (Figure 3).

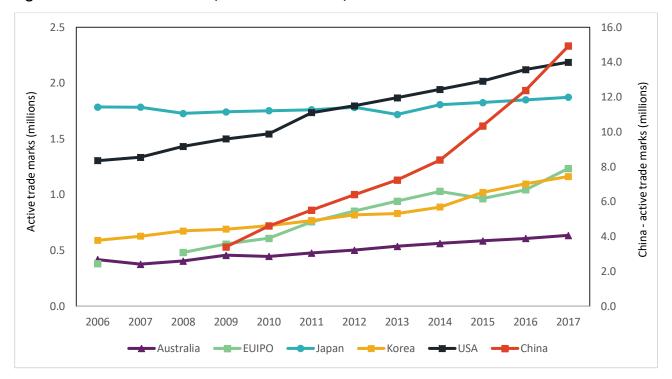


Figure 3: Active trade marks, selected countries, 2006–17

Source: WIPO IP Statistics Data Center, https://www.wipo.int/ipstats/index.htm?tab=trademark, retrieved 3 June 2019.

After so many years' accumulation of trade marks, and in light of the PC (2016) report recommendations, our starting question was to determine how difficult it is to create a new trade mark and get it registered at IP Australia. However, this is a difficult question to answer due to the various uncontrollable elements that need to be considered. For example, how good a trade mark is can be a subjective judgment, and hence it is hard to measure how difficult it was to create the mark. Inspired by Beebe and Fromer (2018), we tested the proportion of the most frequently used English words identically matched with single-word trade marks at IP Australia and compared our results with the authors' findings for the US.

There are several advantages of using single-word matching registrations to check the availability of trade marks. First, it has a one-to-one matching relationship. Second, single-word marks have

broader exclusivity than multi-word registrations. And third, single words are easier to remember than multiple words strung together and hence are more attractive to businesses for trade mark purposes. We acknowledge that this method only hints at the extent of the availability of marks or the trade mark cluttering problem as it only shows one aspect of the registration of single-word marks. Nonetheless, it adds value to our understanding of how severe trade mark depletion and congestion may be in Australia.

Table 1 lists the proportions of different sets of the most frequently used English words matching active single-word marks at IP Australia and compares them with what Beebe and Fromer (2018) find for the United States Patent and Trademark Office (USPTO). The analysis finds that among the top 1 000 most frequently used words, 55.6 per cent are actively registered as single-word trade marks at IP Australia⁸ – 26 percentage points less than in the USPTO. Similar differences can also be found for the top 5 000 and 10 000 most frequently used English words. This indicates that the situation of the availability of marks in Australia is a little better than in the US.

⁸ Data source: IP Government Open Data (IPGOD 2018), https://data.gov.au/dataset/intellectual-property-government-open-data-2018.

Table 1: Proportion of most frequently used words matching active single-word marks

Trade mark office	Number of most frequent words	Per cent matched as single-word marks
IP Australia	1,000	55.6%
USPTO	1 000	81.3%
IP Australia	F 000	47.0%
USPTO	5 000	69.4%
IP Australia	10 000	40.9%
USPTO	10 000	61.9%
IP Australia	53 698	18.0%
USPTO	86 408	23.5%

Source: The most frequently used English words were obtained from https://www.wordfrequency.info/. We kept only unique words by deleting duplicated words and then matched them with the trade mark names in IPGOD 2018. For example, account can be a noun or a verb. We obtained a total of 53 698 unique single words.

On checking the proportions of the most frequently used English words ever registered as singleword marks, the percentages increased to 69.7 per cent for the top 1 000 words, 58.4 per cent for the top 5 000, and 50.8 per cent for the top 10 000 in Australia. Among the top 1 000 words, only 223 words have never been filed for single-word trade marks in Australia. On closer inspection, we found that most of these 223 words would not be likely to be chosen as a trade mark. For example, they may carry negative connotations (DIE, DISEASE, FAILURE, LIE, LOSS, MISTAKE, POOR, PRISON), or questionable sales appeal (ARGUE, AVOID, CONCERNED, CRY, DIFFICULT, IGNORE, LATE, PRESSURE). Similar results were also found in USPTO data by Beebe and Fromer (2018), with 187 of the top 1 000 words remaining unclaimed.

Table 1 indicates how difficult it might be for new applicants to claim frequently used English words that no other applicants are using in an economy. However, trade mark applications may often be allowed for a parallel use of an identical word for different goods and services (such as in different Nice classes) if the marks are not causing confusion among consumers. ⁹ This means that, in theory, the same word mark may be registered in all Nice classes by different applicants as long

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⁹ The Nice Classification (NCL) is an international classification of goods and services applied for the registration of marks. http://www.wipo.int/classifications/nice/en/.

as they are unlikely to cause confusion among consumers. To test this, we checked the proportions of the most frequently used English words registered as single-word marks in each class of goods and services and grouped their class coverage by the total number of classes. This identified a larger potential for extended availability of trade marks by classes. However, it is worth mentioning that, as also pointed out by Beebe and Fromer (2018:953), "although parallel uses of same or similar marks may not confuse consumers as to source... each use destroys the uniqueness and blurs the distinctiveness of the other, particularly for newer entrants. They also increase consumer search costs." By comparing our Australian results with what Beebe and Fromer (2018:984) find for the proportions of all word usage consisting of words identically matching with single-word trade marks by Nice classes in the US, we find that the Australian trade mark register is less congested in all Nice classes than the US register is, in terms of the registration ratio of the most frequently used English words. This analysis is shown in greater detail in Appendix 1.

Looking historically at the average number of words used in a trade mark, grouped by trade mark filing year from 1906 to 2017, shows that until the 1970s applicants could more freely choose how many words to include in a trade mark (Figure 4). On average the number of words was between one and two, with the overall trend decreasing as applicants prefer relatively short and catchy words to be their trade marks. However, as more and more such words have been registered as trade marks, new applicants have had to file more words on average for their marks and in the process have made marks more complex, as seen from the trend of the increasing average number of words per trade mark since the 1970s.

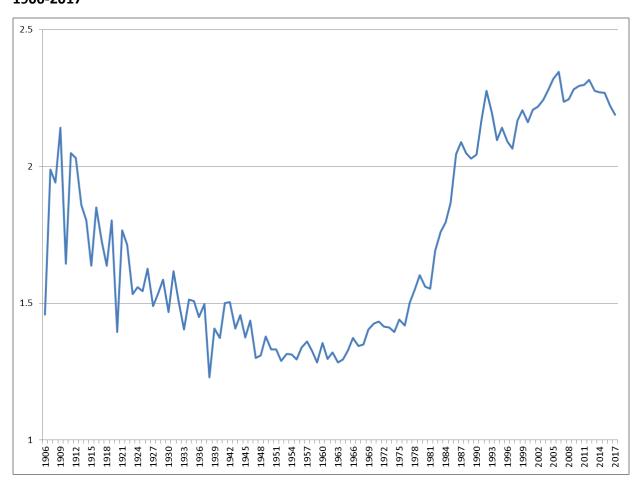


Figure 4: Average number of words used in a trade mark, grouped by trade mark filing year, 1906-2017

Source: IP Government Open Data (IPGOD 2018), https://data.gov.au/dataset/intellectual-property-government-open-data-2018.

Our analysis above indicates that with the continuing increase of registered marks in Australia, the availability of short and catchy words for registering as marks in Australia is diminishing, although it might still be a little bit easier for entrants to claim such words as trade marks in Australia than in the US.

4. Measuring trade mark cluttering

Measuring trade mark cluttering can be challenging as it is hard to know whether or not a trade mark is still under use and whether it is unjustifiably blocking the use by others of a trade mark that is similar or the same. Previous studies have tried different approaches to measuring trade mark cluttering.

An exploratory study of trade mark cluttering in the United Kingdom (von Graevenitz et al. 2012) used the average annual number of Nice classes per trade mark as an indicator for trade mark

cluttering. While this may hint at the extent of trade mark cluttering, it cannot determine whether the increase in the number of Nice classes per trade mark is caused by more Nice classes not in use (a source of cluttering) or if it is due to increased product diversification that is under legitimate use (and therefore not a source of cluttering). If a trade mark application is blocked by an existing mark that is valid and still in use, this does not constitute trade mark cluttering.

Von Graevenitz et al. (2015) expanded their previous research by comparing the length of goods and services declarations registered at the UK Intellectual Property Office (UKIPO), the Office of Harmonisation in the Internal Market (OHIM)¹⁰, and the USPTO. Different countries, however, may have different requirements for describing the goods and services list of a trade mark. Using the length of a goods and services list to compare the scope of trade marks or measure the extent of trade mark cluttering has limited accuracy, as acknowledged by the authors.

The PC (2016) report examined the successful rates of published oppositions held by IP Australia from 1999 to 2015, and found that between 2010 and 2015 the oppositions under Sections 44 or 60 were more likely to be successful than between 2004 and 2009 and between 1999 and 2003. ¹¹ The Commission considered this evidence indicated "greater difficulties in checking the stock of existing marks" and that "the trade mark register could be becoming more cluttered" (2016: 380). However, if a trade mark application is overturned at the opposition stage on the grounds that it is too similar to existing marks that are still in use, this is not an indication of cluttering.

A more direct indicator of trade mark cluttering is the number of trade marks removed by a third party due to non-use. ¹² Such non-use marks cause substantial costs for other applicants seeking to create and register the same or similar marks, a situation which neatly defines trade mark cluttering. By measuring the proportion of non-used marks among the total registered marks on a register, we are able to show to what extent a trade mark register is cluttered.

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¹⁰ OHIM was renamed the European Union Intellectual Property Office in 2016. https://en.wikipedia.org/wiki/European Union Intellectual Property Office, accessed on 8 February 2018.

¹¹ Section 44 of the *Trade Marks Act 1995* (Commonwealth) ("the Act") requires an applicant's trade mark to be not "substantially identical" or "deceptively similar" to an existing trade mark (or one seeking registration with an earlier application date), while Section 60 of the *Act* prevents registration where a mark applied for already has a reputation in Australia.

¹² Section 92(4)(b) of the *Trade Marks Act 1995* provides that an application may be made by a third party to have a trade mark removed from the Register if the trade mark has been registered for a period of three years and, during that time, has not been used in relation to the goods and/or services. Furthermore, an application for removal cannot be made until five years after the filing date of the application (s93(2)).

4.1 Trade marks removed due to non-use

Most countries allow trade marks to remain on a register without being used for a prescribed period of time before they are able to be challenged and removed if certain conditions are met. If successfully removed, this is a clear indication of trade mark cluttering because the unused marks have blocked other applicants' marks, creating a cost for new users. For example, Australian trade mark law allows a third party to challenge and remove a mark five years after its filing date, where the mark has been registered for a continuous period of three years without being used. A registered trade mark in Australia can also be challenged for removal by a third party if the registered owner cannot demonstrate, on its filing date or any time afterwards, an intention or good faith to use the trade mark in Australia. A

Figure 5 demonstrates the trend of the annual number of Australian trade marks removed due to non-use and its scale against the total number of trade marks in force in the same year between 2006 and 2016. A total of 219 trade marks were removed due to non-use in 2006, accounting for about 0.05 per cent of the total trade marks in force in 2006. In 2016, 437 trade marks were removed due to non-use, which was about 0.07 per cent of the total marks in force in that year. Although the absolute annual number of marks removed due to non-use doubled in 10 years from 2006 to 2016, their numbers represent less than 0.1 per cent of the total marks in force in the relevant year.

¹³ Section 93(2) and section 92(4)(b) in Trade Marks Act 1995,

https://pit.timebase.com.au/IPAust/index.cfm?fuseaction=Content.Main&id=2400&date=2017-12-07, accessed 8 February 2018.

¹⁴ Section 92(4)(a) in Trade Marks Act 1995,

https://pit.timebase.com.au/IPAust/index.cfm?fuseaction=Content.Main&id=2400&date=2017-12-07, accessed 8 February 2018.

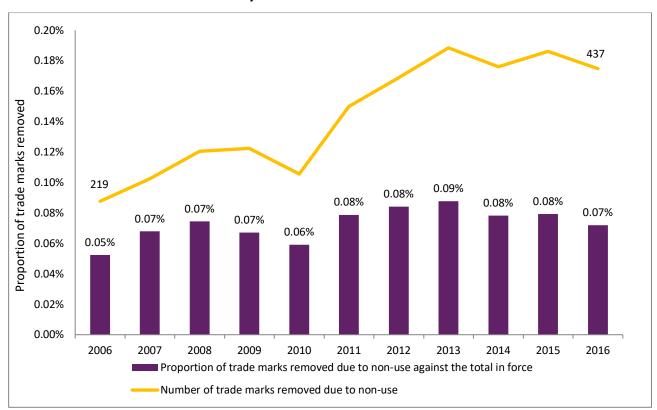


Figure 5: Annual number of trade marks removed due to non-use and their proportions against the total marks in force in the same year from 2006 to 2016

Source: IP Government Open Data (IPGOD 2018), https://data.gov.au/dataset/intellectual-property-government-open-data-2018.

There are costs associated with challenging and removing non-use trade marks, such as the official application fee of \$250 per trade mark in Australia. Other associated costs of removing non-use trade marks may include legal fees and the time costs of delay in using the marks. But the cost for a trade mark attorney to remove a mark from the register may be low if neither the trade mark owner nor anyone else opposes the removal, requiring approximately 15 minutes of work to file and submit an electronic form to IP Australia and pay the relevant fees. The average annual success rate of all removals due to non-use is about 70 per cent. It takes about half a year to fully remove non-use marks on average. In some cases, it may take longer if applicants go through court litigation procedures. And these litigation costs are greater for the parties involved.

Generally speaking, though, the overall cost related to the removal of non-use marks is estimated to be low, due to the small number of removals each year.

The analysis so far indicates there is some cluttering of the Australian trade mark register, but overall the cluttering situation does not appear to be particularly serious.

4.2 Non-use marks blocking others

In addition to trade marks challenged and removed by a third party due to non-use, there are a number of marks remaining on the register that are not in use which despite being unchallenged could prevent other applications from being registered. For example, some trade mark applications may receive Section 44 (s44) objections during examination due to their similarity to existing marks. Not all of these applicants who receive s44 objections will choose to contest the existing marks cited for raising s44 objections. Instead they may try to persuade trade mark examiners that their marks are different from the existing ones, or seek permission for using their marks from the existing users, allowing existing and new marks to coexist, or they may make substantial changes to get registered. This is a second indicator of trade mark cluttering. The marks are desired by others but cannot be obtained because they are blocked by non-use marks or by the additional costs required to overcome the barriers to registration.

In practice, Section 44 of the *Trade Marks Act 1995* deals with trade marks which are substantially identical or deceptively similar to any valid prior-filed trade marks in respect of similar goods or closely related services. Examining the annual numbers and percentages of trade mark applications receiving a s44 objection provides an indication of the number of new marks that may be blocked by existing marks and the extent to which this occurs. IP Australia has flagged the s44 objection on trade mark applications in its data system since 2015, limiting the extent of this analysis.

We checked the available trade mark applications filed from 2015 to 2017. In 2015, about 9 539 trade mark applications received a s44 objection during their examination, accounting for about 13 per cent of the total filings in 2015. In 2016, 12 560 applications received a s44 objection, about 18 per cent of total filings for the year. And in 2017, 11 019 applications received a s44 objection which was about 14 per cent of total applications.

Table 2 reports the current status, as at 30 January 2018, of the trade mark applications filed from 2015 to 2017. From a total of 9 539 s44-flagged applications filed in 2015, 40 per cent were not registered, while 50 per cent were registered either via amendment or by gaining consent from existing right holders. The remaining 10 per cent are still under examination. Of a total 12 560 s44-flagged applications filed in 2016, 30 per cent were not registered, 30 per cent got registered, and 40 per cent are still under examination. As the data were extracted in January 2018, most

applications filed in 2017 were still under examination and only 10 per cent of them had been registered.

Table 2: Trade mark applications that received a s44 objection, 2015-17

Filing year	Number of applications that received a s44 objection	% registered	% failed	% uncertain
2015	9 539 (13% of the annual filing total)	50%	40%	10%
2016	12 560 (18% of the annual filing total)	30%	30%	40%
2017	11 019 (14% of the annual filing total)	10%	0%	90%

Source: IP Government Open Data (IPGOD 2018), https://data.gov.au/dataset/intellectual-property-governmentopen-data-2018.

It is important to note that if a trade mark application is turned down due to being substantially identical or deceptively similar to a mark still in use, this does not indicate trade mark cluttering. It is simply how the trade mark system works. It only becomes a cluttering issue if the blocking mark is not being used and creates significant costs in time and effort for others to be registered.

Table 3 reports the current status, as at 30 January 2018, of the marks cited for raising a s44 objection for those filed in 2016. A total of 18 209 marks were cited for raising a s44 objection for those filed in 2016. Among them, approximately 80 per cent were registered, five per cent were removed due to non-renewal, and 1.4 per cent were removed due to non-use. The remaining 15 per cent were either still under examination or rejected. These 18 209 cited marks were filed in a wide range of years from 1906 to 2016 – with about 60 per cent filed in the last decade (2007-2016). 15 The key to identifying a cluttering issue is to know whether the s44 cited marks were in use or not when they were cited. This information is not directly available from IP Australia's data.

To overcome this difficulty, we checked the status of marks filed in 2006 that were cited for raising a s44 objection in 2016 – when they were reaching their renewal deadline. If their status in January 2018 was "removed due to non-renewal", they were very likely to be not in use in 2016 when they were cited for raising a s44 objection. This analysis found that approximately 44 per cent of the total 963 cited marks filed in 2006 were removed due to non-renewal. This is much higher than the overall five per cent non-renewal rate for all cited marks.

¹⁵ For details, refer to Table 2.1 in Appendix 2.

Table 3: Trade marks cited for raising a s44 objection in 2016

Cited marks	Total number	% registered	% not renewed
All cited marks	18 209	80%	5%
Those only filed in 2006	963	54%	44%
Those only filed in 1996	213	70%	30%
Those only filed in 1986	72	65%	17%
Those only filed in 1976	16	75%	13%

Source: IP Government Open Data (IPGOD 2018), https://data.gov.au/dataset/intellectual-property-government-open-data-2018.

We similarly checked the status of s44 cited marks filed in 1996, 1986, and 1976 that had a renewal deadline in 2016. If their status in January 2018 was "removed due to non-renewal", they were likely to have not been in use when cited for s44 objection. The non-renewal rates for those filed in 1996, 1986, and 1976 were 30 per cent, 17 per cent and 13 per cent respectively.

Using their non-renewal rates as the calculation basis for estimating the annual ratio for those s44 cited marks not in use, we assume a constant 10 per cent annual decreasing rate for each year's cited marks that are not in use under a 10-year framework. For example, if approximately 44 per cent of cited marks filed in 2006 are estimated to be not in use in 2016 and 39.6 per cent of cited marks filed in 2007 are estimated to be not in use in 2016 (=44-4.4), we can continue this estimation until only 4.4 per cent of cited marks filed in 2015 are estimated to be not in use in 2016. We then add up the estimated annual number of s44 cited marks filed between 2006 and 2015 that were likely not in use when they were cited, a total of 2,451. A similar estimation method is applied to each 10-year period of 1996-2005, 1986-1995, and 1976-1985. The total number of s44 cited marks that are estimated to be not in use when they were cited in 2016 is 3 087, ¹⁶ accounting for about one sixth of the all cited marks in 2016 and about 0.5 per cent of the total trade mark stock in 2016. For further details, refer to Table 2.1 in Appendix 2.

¹⁶ For those cited marks filed before 1976, we assume that they were all under use when they were cited because their absolute numbers are very small and the non-renewal rates are also very small. For those cited marks filed after 2015, mainly in 2016, we assume that they were also all in use when they were cited since they had just been filed.

4.3 Potential sources of trade mark cluttering

It is hard to know whether a trade mark is in use by simply checking the available data at a trade mark office. However, some trade mark statistics may hint at the extent of such potential sources of non-use trade marks. For example, in Australia, once trade marks are registered they are automatically valid for the first ten years and can be renewed every ten years as long as a renewal fee is paid. The office does not require proof of use, unlike the practice in the United States. The number of trade marks not renewed after 10 years in Australia may indicate a potential source of non-use trade marks, although it is impossible to know exactly when the non-renewal marks stopped being used or even whether they have ever been used.

Figure 6 shows the first renewal rate based on the trade mark filing year from 1980 to 2006. Marks filed after 2006 are not included because they may have not reached the due date for their first renewal. Between 1980 and 1990, the first renewal rate was around 70 per cent, but the rate drops to approximately 50 per cent in the 2000s. While the annual number of trade marks filed and registered from 1980 to 2006 had been increasing, the number of non-renewal marks was also increasing but at a faster rate. If the number of non-use trade marks remaining on the register in their first 10 years has been increasing, this has likely contributed to trade mark cluttering in Australia.

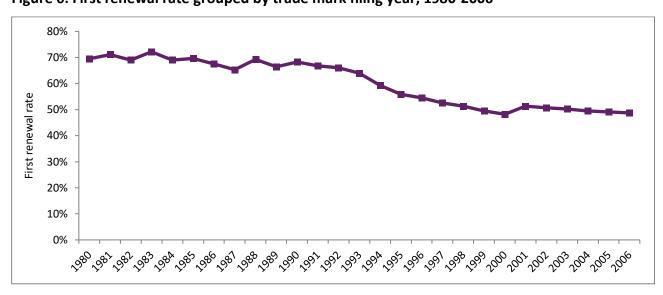


Figure 6: First renewal rate grouped by trade mark filing year, 1980-2006

Source: IP Government Open Data (IPGOD 2018), https://data.gov.au/dataset/intellectual-property-government-open-data-2018.

A more accurate way to determine non-use marks is to look at those still valid but owned by deregistered Australian businesses. These marks are more likely to not be in use, but there is a

low possibility that the marks have been transferred to another party without this being known by IP Australia.

A deregistered business is identified when its Australian Business Number (ABN) is cancelled. Figure 7 shows the number of trade marks owned by deregistered firms and the average time taken for them to be removed between firm deregistration and first renewal deadline. For trade marks filed in 1998, only 231 trade marks were owned by firms that became deregistered while the marks were still in their first 10 years. This more than tripled in 2006 to 720. Although such growth is faster than that of trade mark applications from 1998 to 2006, the scale of deregistered businesses has been relatively small — one to two per cent of the total marks registered annually. Moreover, it takes approximately four to five years on average to remove those marks, from firm deregistration date to first renewal deadline. Coincidentally, the USPTO has a requirement for all registered marks to submit proof of use at their sixth year after registration. This seems to be an effective way of cleaning the register by getting rid of such marks at their sixth year after registration.

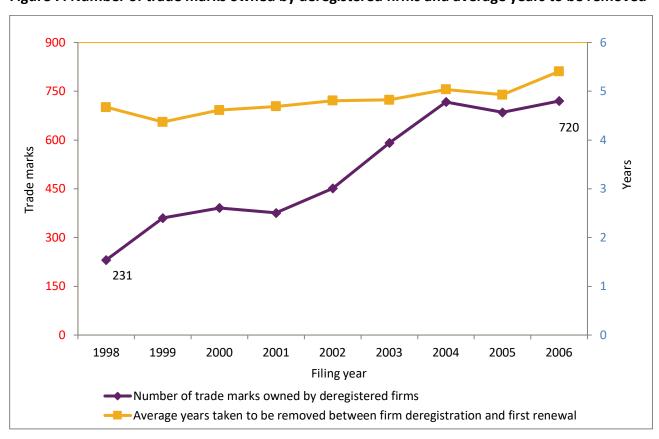


Figure 7: Number of trade marks owned by deregistered firms and average years to be removed

Source: IP Government Open Data (IPGOD 2018), https://data.gov.au/dataset/intellectual-property-government-open-data-2018.

The increasing trend of non-use marks owned by deregistered businesses remaining on the trade mark register reinforces the impression that more non-use marks have accumulated on the Australian register.

4.4 Checking trade mark classes

Another potential source of trade mark cluttering is the use of overly broad classes to register a mark within. An applicant may choose to register in a broad number of classes because of the low cost of doing so.

For some countries or regions, the fee mechanism is not based on the classes filed. Canada currently charges \$250 per trade mark for an online application and \$200 for the issuance of a certificate of registration of the trade mark no matter how many classes are included in the trade mark, ¹⁷ but is considering changing this fee mechanism to a fee-per-Nice-class system in its *Fee-for-Service Proposal*. ¹⁸ The trade mark fee system at the European Union Intellectual Property Office (EM) has changed from a basic fee that covered up to three classes of a trade mark to a "pay-per-class" system put into place as of 23 March 2016. ¹⁹

Figure 8 compares the average number of classes per trade mark across some countries and regions from 2004 to 2016. Canada (CA) and the EM have an average number of classes per trade mark close to three, higher than other countries. The world average (WD) has been around 1.5 classes per trade mark. The United Kingdom (GB), New Zealand (NZ) and Australia (AU) have been above the world average, while the United States (US) and China (CN) have been below the world average. Apart from CA and EM adopting a per-trademark fee system from 2004 to 2015, the other six countries in the chart have adopted a per-class fee system. It is worth noting that the average number of classes per trade mark only hints at the extent of overly broad marks on a register. A number of reasons beyond the trade mark fee system could be behind a higher or a lower average number of classes per trade mark. Moreover, we still do not know whether the larger average number of classes per trade mark is caused by non-use classes or not.

¹⁷ https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h wr02003.html, accessed 8 February 2018.

¹⁸ https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/wr03940.html, accessed 8/ February 2018.

¹⁹ https://euipo.europa.eu/ohimportal/en/eu-trade-mark-regulation-fees, accessed 8 February 2018.

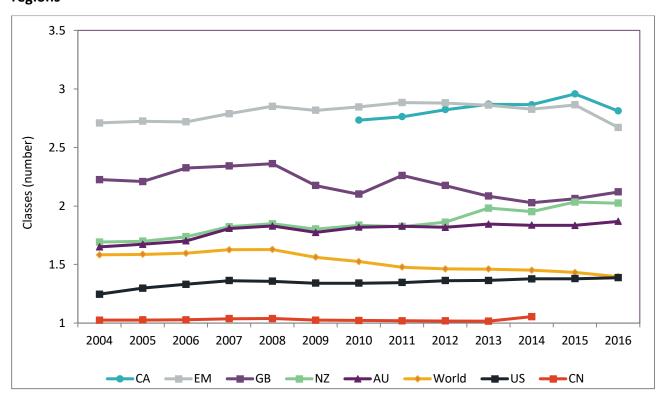


Figure 8: Comparing average number of classes per trade mark for selected countries and regions

Source: WIPO IP Statistics Data Center, https://www3.wipo.int/ipstats/index.htm?tab=trademark.

In further examining whether there are any clutter issues for Nice classes of trade marks receiving non-use removal in Australia, we find that some classes have received more non-use removal requests than others. But these classes also received more trade mark applications, such as Class 25 (apparel goods), Class 9 (electronic goods), Class 30 (beverage goods), Class 5 (pharmaceutical goods), Class 3 (cleaning goods), Class 41 (education and entertainment services), Class 42 (food and drink services), and Class 35 (general business services).

When these are normalised by the total number of filings in each class, the ratios of non-use removal against the total filings are very small, and there is no clear trend showing any particular class having a continuously higher non-use removal ratio. Thus, we do not find strong evidence of trade mark cluttering in any particular class in Australia. This may only mean that those classes have more non-use applications lodged because they have more marks in them, indicating they are relatively more crowded. Therefore, it is consistent with our overall finding that trade mark cluttering is not especially serious in the Australian trade mark register, nor for any particular class. For details, refer to Appendix 3.

4.5 AU and US priority pairs

Australia does not have a requirement for providing proof of use upon registration and throughout the life of a trade mark. Comparing data for Australia with the United States, which has a proof-of-use system throughout the life of a trade mark, may provide an important source of evidence for trade mark cluttering.

In this subsection, we seek to identify the priority pairs between AU and US trade marks and find out whether marks would remain on the AU register longer than their counterparts in the US. The Paris Convention priority arrangements require these priority pairs to be of the same mark, to have some or all goods and services in common, to be filed within six months after its first filing and to have the same ownership. The pairs are essentially the same marks filed in the two countries and owned by same owners.

There can be many reasons why a trade mark owner has ended a priority-pair trade mark earlier in one country than the other. It may be because only one country's business using that trade mark is still continuing, while the business in the other country has ceased. They might also be removed by a third party due to non-use, because they did not renew, or by the USPTO because they did not supply evidence of use on their sixth year. However, it is very unlikely that a trade mark owner will voluntarily cancel a mark when it is no longer being used, but rather wait until it is removed by a register.

By checking both AU and US priority pairs, we expect to minimise other impacts on the differences in their remaining days on the registers rather than the key difference in the two trade mark systems that is the proof-of-use mechanism. For example, a trade mark tends to remain longer in its home country than its priority counterpart in the other country because it is unlikely that the goods and services with the trade mark come to be only produced in the exporting country instead of the home country.

If we get similar results for both AU and US priority pairs, that is the AU marks remain longer than their US counterparts for both pairs, it is more likely to be caused by the key difference between the two trade mark systems of the US's proof-of-use mechanism. Upon registration and on the sixth year after registration, and every 10 years after registration for renewal, it is expected that US based trade marks will have a relatively shorter life compared with their priority counterparts in Australia since they can be removed earlier if they are no longer in use.

Linking the USPTO trademark case files dataset²⁰ with IPGOD from IP Australia enables priority pairs to be identified based on their priority numbers. For this analysis, we kept only those priority pairs where both marks were registered in both countries and were removed from both registers during the period from 1996 to 2016.

Table 5 summarises the key findings from the comparison. For AU priority pairs, a total of 1 003 pairs were identified that were registered after application in both countries and were removed from both registers during the period from 1996 to 2016. On average, the AU marks remain registered 479 days longer on the register than their US counterparts. The ratio of AU marks remaining longer on its register than their US counterparts is by a factor of five. Specifically, 843 pairs remained longer on the AU register than on the US before becoming invalid, while only 160 pairs stayed shorter on the AU register.

Similar stories can be found for the US priority pairs based on US priority. A total of 3 951 pairs were identified. On average, the AU marks had remained 318 more days than their US counterparts. The ratio of AU marks remaining longer than their US counterparts is by a factor of three. Specifically, 2 894 pairs remained longer on the AU register, while 1 057 pairs remained on the AU register for a shorter time than in the US. These results reinforce the impression that the requirement of proof-of-use throughout a trade mark's life is helpful in cleaning the register more frequently.

Table 5: AU and US priority pairs

	Total number	Average additional days of AU marks on register	Ratio of AU marks remaining longer than US counterparts
AU Priority Pairs	1 003	479	5
US Priority Pairs	3 951	318	3

Source: IP Government Open Data (IPGOD 2018), https://data.gov.au/dataset/intellectual-property-government-open-data-2018 and USPTO trademark case files dataset, https://www.uspto.gov/learning-and-resources/electronic-data-products/trademark-case-files-dataset-0.

²⁰ For details, refer to https://www.uspto.gov/learning-and-resources/electronic-data-products/trademark-case-files-dataset-0, accessed 8/2/2018.

5. Conclusion

Trade mark cluttering occurs if a large number of unused trade marks have remained on a register and substantially increased the costs of creating and registering new trade marks for other applicants.

We first examined the current status of the Australian trade mark register and the availability of trade marks in Australia with the continuously increasing stock of registered marks, finding it becomes increasingly more difficult for new applicants to use relatively short and catchy words as marks. The overall situation of trade mark depletion and congestion in Australia seems less serious than that in the United States, as indicated by its relatively smaller percentages of the most frequently used English words registered as single-word trade marks.

In addition, we find that the number of trade marks removed due to non-use has been increasing over the years, from 219 in 2006 to 437 in 2016, growing at about 10 per cent annually. However, the total number of trade marks removed due to non-use accounts for less than 0.1 per cent of the total marks in force in the same year. With an estimated 0.5 per cent of registered marks not in use but blocking others who are trying to get registered, the overall trade mark cluttering situation in Australia does not appear to be severe.

The potential sources of trade mark cluttering, such as non-use marks remaining on the register although no one has tried to remove them, have been increasing in Australia, indicated by the decreasing first renewal rate from 70 per cent for those filed in the 1980s to 50 per cent in the 2000s. A sub group of such trade marks owned by deregistered businesses has also been increasing, although it only account for approximately one to two per cent of total registered marks. On average, marks have remained four to five years on the register after their owners became deregistered (via their Australian Business Numbers).

A trade mark fee system based on a fee per trade mark not per class of a trade mark has led to generally broader classes per trade mark than normally needed. But considering the factors that may contribute to the actual choice of the number of classes of a trade mark, such as the nature of the goods and services of businesses and their use requirements, we find that Australia has a slightly larger number of classes per trade mark than the world average, although Australia has a per class fee system.

Non-use trade marks have been appearing more frequently in certain traditional classes, such as Classes 25, 30, 9, 5, and 3, and have also emerged in some service industries in more recent years,

such as Classes 41, 42 and 35, but those classes have more trade mark filings and registrations as well. We have not found any particular class exhibiting clear trade mark cluttering on the Australian Trade Mark Register.

And by comparing US and AU priority pairs, we have found that for the US and AU priority pairs, the marks on the Australian Trade Mark Register are more likely to remain longer on the register than their US counterparts mainly because the US has a proof-of-use mechanism for removing those non-use marks more frequently than in Australia.

Trade mark cluttering has the potential to be a barrier to market competition and innovative entrepreneurship. In this research, we have found that the evidence does not show this to be the case: the overall situation of trade mark cluttering in Australia is not particularly severe, as the current mechanisms for removing non-use marks that block other traders are working effectively. However, the number of "cluttering marks" has been increasing, although their ratio against the entire trade mark stock is still small. Adding more drastic non-use provisions, such as a proof-of-use mechanism, would need to be carefully considered to weigh up the cost of additional red tape for all trade mark owners against the statistically small number of marks that could be blocking other traders.

Our evidence supports Recommendation 12.1(a) of the Productivity Commission's report to reduce the grace period from five to three years before new registrations can be challenged for non-use, which the Australian Government supported in its response to the Commission's report²¹ In this way, the trade mark system does not add extra red-tape cost to applicants, but reduces the time frame for new trade mark applicants to challenge non-use marks remaining on the register.

^{2.}

https://www.industry.gov.au/sites/g/files/net3906/f/June%202018/document/pdf/government_response_to_pc_inquiry_into_ip_august_2017.pdf, accessed 4 June 2019.

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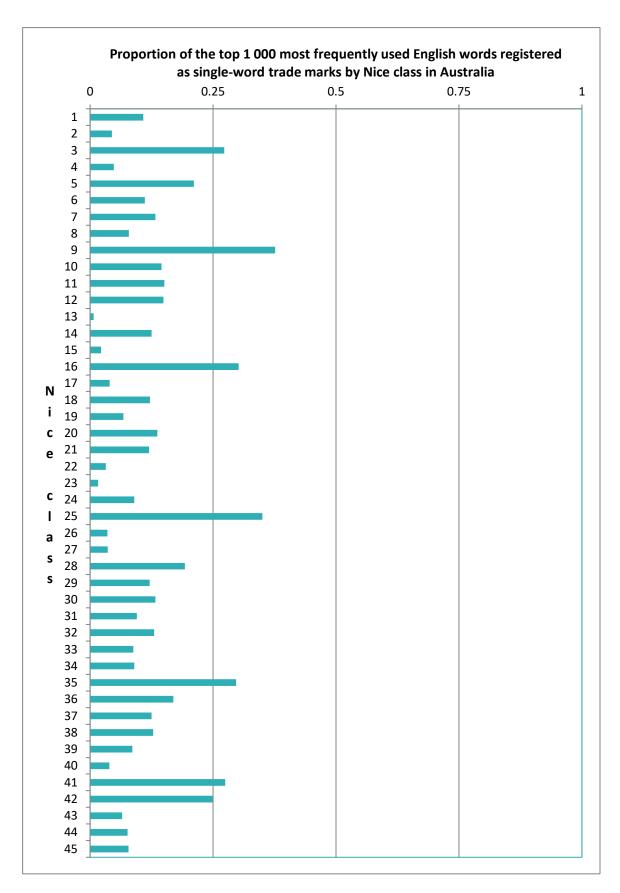
Productivity Commission 2016. *Intellectual Property Arrangements,* Inquiry Report No. 78, Canberra.

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Appendix 1: Class-by-class word usage

Figure 1.1 shows, for each Nice class of goods and services, the proportions of the top 1 000 most frequently used English words registered as single-word trade marks in each class in Australia. The overall proportions across all classes are small, indicating that there is still ample potential for registering most frequently used English words as single-word marks in Australia in almost all classes. The top 6 six classes with the largest proportions ranging between 25% and 40% are Class 9 (electronic goods), Class 25 (apparel goods), Class 16 (Paper and printing goods), Class 3 (laundry and cleaning goods), Class 35 (general business services), and Class 41 (education and entertainment services). It may indicate that these classes are relatively more crowded than others since they also receive the most trade mark applications. When we compare them with what Beebe and Fromer (2018) find for the proportions of all word usage consisting of words identically matching with single-word trade marks by Nice classes in the US (p.984), we find that the US trade mark register is overall more congested in all Nice classes than in Australia and it shares the similarly most crowded classes.

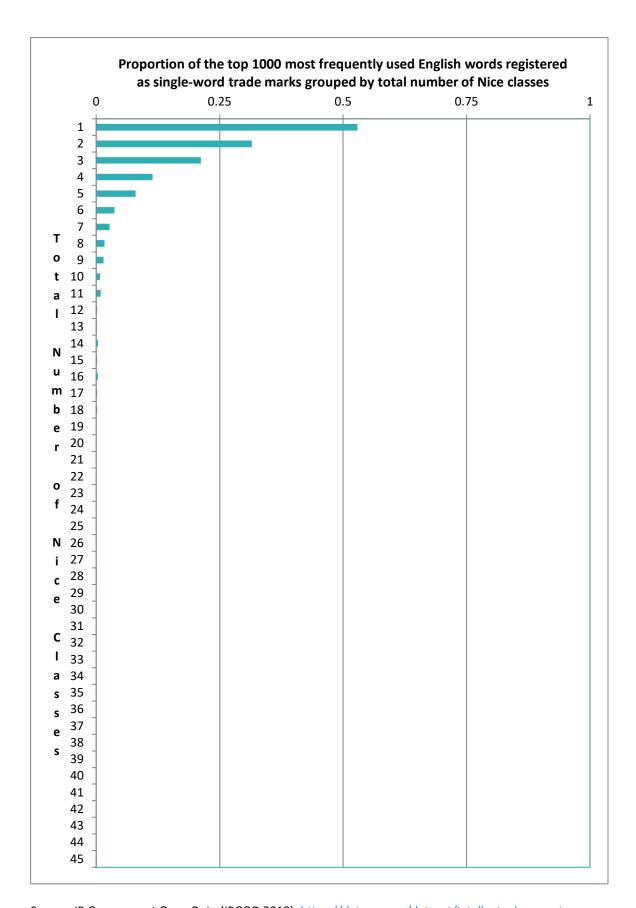
Figure 1.1: Proportion of the top 1 000 most frequently used English words registered as singleword trade marks by each Nice class in Australia



Source: IP Government Open Data (IPGOD 2018), https://data.gov.au/dataset/intellectual-property-government-open-data-2018 and approximation from Beebe and Fromer (2018).

Figure 1.2 shows the proportions of the top 1 000 most frequently used English words registered as single-word trade marks by total number of classes. For example, 52.9 per cent of the top 1 000 English words were registered as single-word trade marks only in one class, while 31.5 per cent were registered in two classes. This proportion quickly shrinks to less than 10 per cent for those with at least five classes and drops to almost zero for those with more than nine classes. This is not surprising, as fewer marks are registered in more than four classes in Australia since the average number of classes per trade mark has generally been less than two. It indicates there is still considerable potential for the extended availability of trade marks in different Nice classes.

Figure 1.2: Proportion of the top 1000 most frequently used English words registered as singleword trade marks grouped by total number of Nice classes



Source: IP Government Open Data (IPGOD 2018), https://data.gov.au/dataset/intellectual-property-government-open-data-2018 and approximation from Beebe and Fromer (2018).

Appendix 2: Full table of s44 cited marks for those filed in 2016 and their estimated percentage and number that were not in use when they were cited

Table 2.1: Estimated number of s44 cited marks that were likely not in use when they were cited

Filing year	Number of cited marks	Estimated percentage of cited marks not in use	Estimated number of cited marks not in use
1906	17	0%	0
1907	3	0%	0
1908	2	0%	0
1909	1	0%	0
1910	2	0%	0
1911	1	0%	0
1912	1	0%	0
1913	1	0%	0
1914	2	0%	0
1915	1	0%	0
1919	1	0%	0
1921	3	0%	0
1925	3	0%	0
1927	1	0%	0
1928	2	0%	0
1930	2	0%	0
1932	2	0%	0
1933	2	0%	0
1934	1	0%	0
1935	3	0%	0
1936	4	0%	0
1937	4	0%	0
1938	2	0%	0
1940	1	0%	0
1941	1	0%	0
1942	1	0%	0
1943	1	0%	0
1946	2	0%	0
1947	3	0%	0

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1948	1	0%	0
1949	4	0%	0
1950	7	0%	0
1952	6	0%	0
1953	5	0%	0
1954	2	0%	0
1955	5	0%	0
1956	6	0%	0
1957	3	0%	0
1958	6	0%	0
1959	7	0%	0
1960	15	0%	0
1961	11	0%	0
1962	9	0%	0
1963	16	0%	0
1964	12	0%	0
1965	10	0%	0
1966	16	0%	0
1967	8	0%	0
1968	10	0%	0
1969	19	0%	0
1970	17	0%	0
1971	14	0%	0
1972	19	0%	0
1973	21	0%	0
1974	21	0%	0
1975	18	0%	0
1976	16	13%	2
1977	27	12%	3
1978	25	10%	3
1979	39	9%	4
1980	34	8%	3
1981	42	7%	3
1982	32	5%	2
1983	22	4%	1
1984	44	3%	1
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1005		101	
1985	56	1%	1
1986	72	17%	12
1987	59	15%	9
1988	114	14%	16
1989	87	12%	10
1990	101	10%	10
1991	79	8%	7
1992	83	7%	6
1993	108	5%	6
1994	135	3%	5
1995	147	2%	2
1996	210	29%	61
1997	267	27%	72
1998	308	24%	74
1999	342	21%	73
2000	365	18%	66
2001	364	15%	55
2002	372	12%	45
2003	397	9%	36
2004	511	6%	31
2005	537	3%	16
2006	954	44%	420
2007	1 043	40%	413
2008	1 002	35%	353
2009	931	31%	287
2010	936	26%	247
2011	941	22%	207
2012	933	18%	164
2013	996	13%	131
2014	1 301	9%	114
2015	2 158	4%	95
2016	1 642	0%	0
2017	5	0%	0
Unknown	14	0%	0
Total	18 209		3 062

 $Source: IP\ Government\ Open\ Data\ (IPGOD\ 2018),\ \underline{https://data.gov.au/dataset/intellectual-property-government-open-data-2018}.$

Appendix 3: Class-by-class analysis of non-use removal

Table 3.1 reports the yearly top five classes that were lodged against for non-use removal requests based on non-use application filing year from 1996 to 2016. Class 25 (apparel goods), Class 9 (electronic goods), Class 30 (beverage goods), Class 5 (pharmaceutical goods) and Class 3 (cleaning goods) have traditionally received more non-use removal requests, while since 2005 service industries such as Class 41 (education and entertainment services), Class 42 (food and drink services), and Class 35 (general business services) have become more and more competitive for valuable marks. ²² It is also worth mentioning that the Nice classification, established in 1957, has been changing constantly, roughly every five years. The current (11th) edition of the Nice Classification came into force on 1 January 2017.

Table 3.1: Top 5 classes in which most non-use applications were filed, 1996 to 2016

Year/Ranking of class	First	Second	Third	Fourth	Fifth
1996	25	3	30	9	5
1997	25	9	5	3	30
1998	9	25	30	5	36
1999	25	9	29	5	3
2000	30	25	9	3	5
2001	9	25	16	30	3
2002	25	9	5	30	3
2003	25	9	30	5	16
2004	25	9	30	16	42
2005	9	25	3	42	35
2006	9	25	42	41	16
2007	25	9	30	35	42
2008	25	9	42	16	35
2009	9	25	35	42	41
2010	25	9	32	35	16
2011	35	25	9	41	42
2012	35	25	9	41	42

²² For details, refer to http://www.wipo.int/classifications/nice/en/, accessed 8 February 2018.

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2013	9	25	35	41	42
2014	9	35	25	41	3
2015	9	35	25	42	41
2016	9	35	42	25	41

Source: IP Government Open Data (IPGOD 2018), https://data.gov.au/dataset/intellectual-property-government-open-data-2018.

As we have shown, the total annual number of non-use applications has not been very large in Australia, accounting for less than one per cent of the total registered yearly, and the total numbers for those popular classes are also not large. Moreover, if we normalise them by the total number of registrations in each class, we do not find the clear trend seen above. This means that those classes have more non-use applications because they have more marks in them. Thus, we do not find strong evidence of trade mark cluttering in any particular class. This is consistent with our overall finding that trade mark cluttering is not unduly serious in the Australian trade mark register, nor for any particular class.