3 June 2016

Intellectual Property Arrangements
Productivity Commission
GPO Box 1428
Canberra City ACT 2601

Dear Sir/Madam,

This submission responds to the Productivity Commission’s Draft Report on Intellectual Property Arrangements of 29 April 2016.

iSignthis thanks the Commission for the opportunity to comment on the Draft Report.

This submission responds primarily to the matters raised in Chapter 8 of the Draft Report.

iSignthis

This submission is provided by iSignthis Ltd, a company listed on the Australian Stock Exchange (code ISX), and currently valued at around $200M, valued primarily on the earning potential of our intellectual property, comprising “software patents”. iSignthis operates in a number of jurisdictions, principally in Europe currently, but also North America and the developed markets in Asia.

iSignthis is a global leader in online, dynamic verification of identity and financial transactions via regulated e-payment instrument authentication. The automated, online identification of persons remote to the transaction is made possible via a patented electronic verification method, and is available to more than 3 billion customer accounts across more than 200 countries.

We provide the legal basis for compliance to meet customer identification requirements for AML/CTF obligated entities, as well as operational benefits for any online business looking to reducing customer on-boarding friction, mitigating CNP fraud, monitoring transactions and streamlining operations.
The iSignthis services are consistent with the requirements of key international regulatory supervisors including the European Banking Authority's Recommendations for the Security of Internet Payments.

iSignthis conforms with the EU Data Protection Directive, and is registered with both the Dutch Data Protection Agency and the United Kingdom's Information Commissioner.

iSignthis is also a Level 1 PCI DSS certified payment processor, and provides a Strong Customer Authentication platform that provides the basis for Payment Service Providers to conform with the requirements of the European Banking Authority's ‘Recommendation for the Security of Internet Payments’\(^1\).

iSignthis has a number of patents in Australia\(^2\), the EU\(^3\), the USA\(^4\) and other countries\(^5\), and has others pending. Each of these could best be described as Software patents within the terms of the Draft Report.

The intellectual property of iSignthis is protected principally, to the exclusion of almost any other basis, by patents, and we rely upon the Patent Convention Treaty (PCT) framework for the prosecution of patents. Our intellectual property would be relatively easy to replicate and “pirate”, and we rely upon the protections afforded to us under patent regimes in each country.

iSignthis is in the position where it has been granted software patents in jurisdictions that have more stringent requirements than Australia\(^6\), demonstrating that world class invention is possible in Australia, despite the many significant disadvantages Australian technology companies face.

The inventions which underpin our patents, and the research and development for, them has been conducted entirely in Australia. A key basis for conducting the R&D in Australia has been its access to the PCT, and its software patent regime.

Further, without the benefit of an Australian software patent protection regime, iSignthis contends that Australia’s position as a technology or innovation centre would be significantly weakened.

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\(^1\) EBA-GL-2014-12 (Guidelines on the security of internet payments)
\(^2\) eg 2010100533
\(^3\) eg 2010100533 in Portugal
\(^4\) eg US 8,620,810
\(^5\) eg 183509 in Singapore
\(^6\) see footnotes 3, 4 & 5
Australia already suffers from a number of negative competitive factors with regards to its international peers when considering software development, including low innovation due in part to:

- a generally uncompetitive tax regime;
- ineffective or overly complex government assistance for commercialising inventions;
- almost no tax concessions for companies that export Australian innovation
- a relative dearth of Science, Technology, Engineering and Maths professionals;
- high costs of labour; and
- slow internet speeds at high cost.

The World Economic Forum ranks Australia at 21st Place, after Saudi Arabia and the United Arab Emirates. Once of our key strengths in the WEF CGI7 report is our high score in intellectual property protection. As a so called “innovation economy”, the loss of IP protection would likely diminish Australia’s overall competitiveness, due to the factors noted above.

**Summary**

The Commission's findings are, in general, reasonable and proportionate. Australia has however very recently amended its Patent Act, and has “raised the bar” with regards to patentable subject matter and patentability. In that regard, some of the data and arguments put forward by the commission appear to be skewed towards patents granted prior to the “raising of the bar”.

To the extent that the Draft Report recommends a more stringent, and principles based approach to granting patents (and other intellectual property) iSignthis is supportive.

iSignthis submits that the Commission's conclusions about Software patents are at odds with the conclusions of the Commission generally, and are not supported by the principles based approach adopted by the Draft Report more generally.

iSignthis also considers that the Draft Report’s conclusions on Software patents is at odds with the patent regime adopted in three of the larger jurisdiction's with whom Australia trade, being the USA, the EU and China. It is also at odds with international treaty obligations undertaken by Australia.

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The approach suggested by the Draft Report has the potential to drive out key innovations, including intellectual, inventive software development in Australia. Intellectual capital, like financial capital, is highly mobile and will only become more mobile if it is not protected by a strong patent regime.

iSignthis does not expect that taxpayers will subsidise its business, but it will not continue to conduct research and development in a jurisdiction where the property developed does not have the protection it will have in the world's three largest markets, and other PCT jurisdictions.

**General**

The Terms of Reference for the Commission’s Inquiry note that Australia’s current laws are consistent with a range of treaties to which Australia is bound, including treaties under the auspices of the World Trade Organisation, the World Intellectual Property Organisation and the World Health Organisation.

In this submission iSignthis contends that the Commission's recommendations should give more weight to this fact, and to the fact that the three largest economies and patent offices all recognise software patents as legitimate forms of intellectual property, properly protected by patent law.

The Draft Report finds that “[r]aising the thresholds required for granting IP rights (such as increasing the inventive step required for a patent) above those applied in other countries risks innovations developed overseas not being made available in Australia.”

iSignthis submits that the proposal to exclude absolutely the classes of patent known as software patents would have precisely this effect.

The Draft Reports recommends that “[i]deally, the patent system would only grant patents to socially valuable innovations that would not otherwise occur. The granting of rights — and the strength of those rights — would strike a balance between incentives to innovate and the costs of patent protection.”

iSignthis supports this recommendation. We note that simply dissolving a class of patents does not give life to this recommendation, but rather makes no attempt to strike such a balance.

The Commission refers on pages 9 of the Draft Report to there being no likely benefit to Australia having a lower obviousness test than other countries. The
European Union and the USA are specifically referenced. iSignthis agrees with this statement, but notes that the reverse is also true; there is no obvious benefit to Australia having a higher obviousness test than our economic competitors.

Moreover, there is a significant detriment to companies such as iSignthis from Australia simply dissolving a class of patent outside the principles otherwise articulated by the Draft Report.

On page 10 of the Draft Report, the Commission, correctly in our submission, notes that because there is a balancing of rights and benefits in granting a patent, the assessment of patent applications should be made on the basis of good and complete information.

iSignthis agrees wholeheartedly with this conclusion. However, this conclusion is not a basis to dissolve a class of patents. It is a basis to require better and more complete information in assessing a patent.

iSignthis supports the Draft Report’s positive assessment of the EU patent assessment process, noting that iSignthis has granted and pending patents in the EU process, covering the same innovations protected by our Australian patents. As we have noted above, iSignthis has granted patents in jurisdictions which the Commission has found have more stringent standards than Australia.

In this regard, we refer the Commission to the Innovation Patent the Australian Patent Office (IP Australia) granted Kogan Technologies for its “software process”. This process was subsequently rejected under examination by the US Patent Office. The USPO rejected the Kogan application in part based on prior art in an existing Australian Patent. This patent is held by iSignthis.

The US patent office examination report was in our view, thorough, detailed and well reasoned. Unfortunately, the process for granting an Innovation Patent in Australia does not have the same rigour. It should be noted that as the US does not have a process akin to the Innovation Patent process, the Kogan application was assessed as a standard patent application.

Responding to the issues raised by an Innovation Patent in circumstances such as those above, including assessing the patent’s coverage and making submissions which would likely not be necessary if a full assessment had been conducted, can be considerable. This can of course be added to substantially if

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8 see footnotes 2 through 6
9 Refer to 10/7/2015 Examiners report for Kogan Technologies Pty Ltd US application : 13942564
proceedings are bought by the holder of either a granted Innovation Patent or a patent holder of the prior art.

The Commission’ Draft Report concludes, for a range of reasons, that Innovation Patents should be abolished.

iSignthis supports this recommendation, noting that the key logic of the Commission on this issue is in line with the general thrust of the Commission’s Draft Report; namely that Innovation Patents do not meet the higher standard for patents which the Draft Report generally supports.

On page 16 of the Draft Report, the Commission notes that “[b]roader changes to patents, particularly around the inventive step and abandoning innovation patents, may knock out a large share of BM&S patents.” iSignthis submits that if there are issues identified with Software patents, the principles based, broader change are the most, and indeed only principled, means to address these issues.

iSignthis does not seek to make a specific submission on the continued existence of Business Process patents, but in principle cannot see any logical reason this class of patents should be responded to differently from the response we advocate for Software patents.

iSignthis would also like to respond to the suggestion repeated in a number of places in the Draft Report\(^\text{10}\) that, as Australia is a net importer of IP value, Australia should reduce the protections offered to IP owners generally, and abolish patent protection for the owners of IP in software patents particularly.

This a dangerously self-serving and self-interested approach that will rebound on Australia if replicated in other arenas where Australia is a net exporter. It is unprincipled, and places Australia in a very poor light as a global citizen.

Furthermore, it effectively punishes innovative enterprises, such as iSignthis, for the lack of innovation shown by Australian industry generally.

**Specific Question on Chapter 8 of the Draft Report**

The Draft Report poses the following questions from Chapter 8 for further information:

> What approaches or tests could be used to differentiate between inventions where the contribution of embedded software is trivial and inventions where

\(^{10}\) pages 2,5, 6, 234, 235
the contribution of embedded software is genuinely deserving of patent protection? Should such tests be implemented in law or patent examination practices?

At the highest level, iSignthis submits that the principles articulated by the Commission generally throughout the Draft Report are the correct tests and approaches to answering the first question. We submit that these are generally a matter which are better implemented in law, as this gives more certainty to all parties, be they patent holders, applicants, objectors or the community generally.

In our submission, the approach of the European Union to the area of Software patents would be a useful and sensible guide.

In the EU, Software patents are known as Computer Implemented Inventions. As a combination of software, firmware and hardware, or parts thereof, they nevertheless require the same standard of inventiveness and novelty as any other patent. They protect the significant time and intellectual effort required to not only invent, but commercialise property created by intellectual effort.

The European Patent Office website provides the following outline of Computer-implemented inventions:\(^\text{11}\):

"The term "software" is considered to be ambiguous, because it may refer to a program listing written in a programming language to implement an algorithm, but also to binary code loaded in a computer-based apparatus, and it may also encompass the accompanying documentation. So in place of this ambiguous term the concept of a computer-implemented invention has been introduced.

A computer-implemented invention is one which involves the use of a computer, computer network or other programmable apparatus, where one or more features are realised wholly or partly by means of a computer program.

Under the [European Patent Convention], a computer program claimed "as such" is not a patentable invention (Article 52(2)(c) and (3) EPC). Patents are not granted merely for program listings. Program listings as such are protected by copyright. For a patent to be granted for a computer-implemented invention, a technical problem has to be solved in a novel and non-obvious manner."

\(^{11}\) https://www.epo.org/news-issues/issues/software.html
Rather than seeking to exclude software as patentable subject matter, the Commission could consider recommending the European approach, both as a more stringent one and as one already adapted to the place of software in modern commerce.

**General Comments on Chapter 8**

iSignthis has submissions on a number of matters raised by the Commission in its Draft Report, and not already addressed above:

1. The Commission notes on page 241 that:

   Rather than patenting, software developers tend to protect their innovation by relying on non–IP protection, opt not to protect their innovation at all, or use other forms of IP protection. In fact, very few innovators actually use patents in the fields most commonly associated with BM.

iSignthis contends that this position is not accurate, and that the iSignthis business relies upon the protections afforded by the patent regime. We are aware that a number of parties have infringed or considered infringing our patents in key USA and other markets, and that the patent regime has dissuaded them from using our intellectual property. Copyright protection is a very weak protection, when the invention provides a ‘real world’ effect that solves a specific problem which can be implement by any number of software coding approached.

As the patent system is not proposed to be abolished, the above statement merely supports the proposition that software innovation has multiple, valid means of protection.

It may be, and is not tested by the Draft Report, that only a small number of software IP is protected by patent, because only a small proportion meets the requirements of patentability. This in and of itself is no argument for the abolition of patentability for software innovation that does already meet the requirements of patentability, but rather supports the position that software patents already have a high barrier to patentability.

2. Public Benefit
There is also a public benefit to invention. A recent example is the application\textsuperscript{12} by the Australian Payments Clearing Association to the Australian Competition & Consumer Commission requesting a mandate of 3D Secure across the cards payment sector.

If put in place, such mandate was estimated by the application as having a prospective cost of $393M to Australian industry, with a prospective saving of $60M per year\textsuperscript{13}.

iSignthis offers a direct competitive alternative to the foreign patented software technology that the APCA sought to have mandated across industry. The Australian patent regime has allowed iSignthis to develop a competitive technology, that is being exported to the EU, Asia and North America, and is cited by the USPTO as “state of the art” in authentication technology\textsuperscript{14}.

iSignthis is also of prospective benefit to the Australian public, in that it provides a competitive alternative to the US owned technology proposed by the APCA, lowering overall costs to industry whilst also providing the benefits sought by APCA by means of fraud reduction. Card fraud costs the Australian public more than $387million\textsuperscript{15} per annum, which is passed on to the public as an indirect cost by banks and merchants.

Yours faithfully,

N J Karantzis,
B.E. LL.M M.Ent FIEAust C Muir, LL.B
Managing Director General Counsel

\textsuperscript{12} http://registers.accc.gov.au/content/index.phtml/itemId/1192122/fromItemId/565475
\textsuperscript{13} paragraph 178 of the ACCC Draft Determination.
\textsuperscript{14} Cited by the USPTO as prior art invalidating novelty and inventive step against Kogan Technologies Pty Ltd US patent application 13/942,564, as well as prior art to NEC Corporation Japan US patent application US13643336