Secretary
Senate Select Committee on the Free Trade Agreement between
Australia and the United States of America
Suite S1.30.1
The Senate
Parliament House
Canberra ACT 2600

2004-04-23

Submission regarding Section 17
Intellectual Property Rights and Open Source Software

Dear Sir,

This letter summarises my deep concerns regarding the effect of the AUSFTA upon the use and development of open source software in Australia.

I have been a software developer and software project manager for the past 15 years. I have worked for government and private enterprise; on massive and minor projects. My current employment is with one of the world's leading Internet networks.

In the past ten years I have benefited from, and contributed to, the open source software movement. I am deeply concerned that aspects of US law which discriminate against open source software are being bought to Australia via the AUSFTA. These laws are controversial even within the United States legislature, and I am frankly astonished that Australia's negotiators agreed to extend similar legislation to Australia.

The intellectual property conditions of the AUSFTA are no minor matter. They will make illegal the possession of most DVD players purchased in the past two years.

Open source software

Open source software is the generic name for software which is gifted to the world, and which is free for others to use and modify. The term is formally defined in *The Open Source Definition*[1]. Studies show that open source software is primarily written as a hobby by experienced computing professionals seeking challenges different to those offered during their working hours; much as many commanders of naval vessels mess about in yachts on weekends.

Businesses choose to use open source software because: it costs less to purchase and to run; it is more secure; it is more reliable; it can run on a wider range of computers; and it is widely-used and supported.[2] Since 23% of profitable "server" computers are purchased for use with open source software[3], the majority of the world's largest computer and software vendors support open source software.

Open source software is the standard choice is some industries, such as the Internet industry. When

1 *The Open Source Definition.* http://www.opensource.org/docs/definition.php

2 For a full exposition of these points see Wheeler, D. *Why Open Source Software/Free Software? Look at the Numbers!* 2003. http://www.dwheeler.com/oss_fs_why.html

3 IDC. *Worldwide Client and Server Operating Environment Market Forecast and Analysis.* 2003. IDC publication 30159 (US$3,000).

you to a website then 93% of the name resolution will be done by open source software and 65% of the web sites you visit will be running on open source software[4]. Some analysts believe that the open source operating system Linux will be the most popular server operating system within three years[5].

My observation is that Australia has benefited greatly from open source software. It has prevented Australia from becoming a mere consumer of programming technology. I am deeply concerned that aspects of the AUSFTA favour the US to such an extent that Australia will be deprived of the great advantages that the choice of using open source software brings.

Australian copyright law

Australian and United States copyright laws are based on substantially different philosophies. The US *Constitution* simultaneously grants copyrights but limits their scope with the words "the Congress shall have power ... to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."[6]

Australian copyright law is based upon the broader constitutional rights of the Australian legislature. As a result there is less explicit limitation of the scope of Australian copyright law, and much less scope for aggrieved parties to seek judicial restitution. It would be prudent of the Australian legislature to take more care than their US counterparts when considering copyright law.

In this light, the simple adoption of US copyright laws, laws which are the subject of considerable constitutional litigation in the US[7], would not be wise. Australia runs the risk, should the US copyright laws be constrained by the US judiciary, of having much less freedom to make reproductions of works than in the US.

A number of members of US Congress have also questioned the continuation of the *Digital Millennium Copyright Act*, mainly because the promoters of the 1998 Act promised that the DMCA would bring forth new digitally-based technologies, products and entertainment, and five years later such gains are still not forthcoming. The DMCA introduced the concept of "anti-circumvention device".

Anti-circumvention devices

An *anti-circumvention device* is a device used to circumvent the technological restrictions that a copyright holder has placed on a digitally-encoded work.

There is no requirement in the US or in Australia for the restrictions to allow *fair dealing*, the allowed conditions of unlicensed reproduction in the *Copyright Act 1968 (Cth)* which allow criticism, review, learning and a range of other reproductions required for the operation of society.

Manufacturers of DVDs and computer games regularly use technological measures to restrict the use of games sold overseas in Australia. In the case of DVDs this allows the theatrical release of the movie to occur before any DVDs are sold. It also prevents people buying DVDs from cheaper markets (such as from the US website *www.amazon.com*, where the title may be cheaper as the movie

4 Netcraft. *Web server survey.* April 2004. *http://news.netcraft.com/archives/web_server_survey.html*

5 An example is Quandt Analytics quoted in *IBM News,* "People in the Open World: Stacey Quandt". April 2004. *http://www.ibm.com/linux/news/stacey.shtml*

6 *The Constitution of the United States of America*. Article 1, section 8.

7 As one example of many, the *Eldred v Ashcroft* litigation opposing the *Sonny Bono Copyright Term Extension Act.*

is many more months from release).

The Federal Court in *Sony v Stevens* found that using an anti-circumvention device to allow parallel importation or to allow fair dealing is not legal. Prior to this large numbers of "region free" DVD players were sold in Australia, with the full encouragement of government agencies such as the ACCC. Under the AUSFTA possession and use of those DVD players will now be illegal.

When hardware manufacturers do not release details of their hardware or when manufacturers require Non-Disclosure Agreements to allow copyrighted media to be used, then the open source community is forced to *reverse engineer* the details to use the device. It has done this on numerous occasions, allowing ethernet cards, sound cards, video cards, CD drives and DVD drives to work under Linux. The result is often a circumvention device, since the reverse engineered device has to partly implement or ignore any copyright control details that the manufacturer will not reveal.

Furthermore, since the source code is available to the public, it is also available to the unscrupulous. So the nefarious can use the open source reverse engineered code to defeat the technological protection of the copyrighted material.

To be broad, under present Australian it is the *intent* and *use* of reverse engineered code which determines if it is an anti-circumvention device. Although less so since *Sony v Stevens*.

Under the AUSFTA proposal it is the *possession* of the anti-circumvention device, even if it is intended as reverse engineering that is the offence. What's worse, a criminal offence, whereas a breach of the current anti-circumvention law is a civil offence. The equivalent laws in the US have seen the imprisonment awaiting trial of the programmer Dmitry Sklyarov who wrote what Adobe claimed was an anti-circumvention device. The software was written and sold in a country which has no anti-circumvention laws; and the company marketed the products as for allowing fair use (in this case, for automated reading of e-books to the blind). Sklyarov avoided prison only after considerable public and diplomatic pressure on US authorities. Being a criminal rather than civil complaint, the withdrawal of Adobe's claims after fears of a product boycott, left the US government, rather than the initiator of the action, with the public odium.

The reverse engineering exceptions in the current AUSFTA do not allow the reverse engineering of data formats. So a program to import a spreadsheet file could be a circumvention device. This has severe economic consequences. Over time better spreadsheet programs have replaced aging competitors; for example, Excel replaced Lotus 123, in turn Lotus 123 replaced VisiCalc. Without being able to import spreadsheet files from competitors a user cannot move from one product to another. A basic understanding of economics leads to the conclusion that new entrants to the spreadsheet market cannot compete (as users face the significant cost of re-keying all their data) and that a monopoly by an inferior product results.

Software patents

The US software patent system is broken. This view is shared by the CEOs of Intel and Microsoft. As an example, Forgent have just made a claim that a supposedly patented algorithm is used in the JPEG picture standard. This is a well-established standard used since the mid-1980s almost everything which manipulates digital photographs: cameras, web browsers, image editors, word processors, and much more.

The typical US software company must build a patent portfolio to allow cross-licensing with other companies. The quality and usefulness of the patents are not of much interest to the company,

simply having patents to cross-license with other firms is the goal.

When constructing software US companies take care *not* to examine existing software patents. Firstly, a deliberate breach carries a much more significant penalty, so it is better to demonstrate ignorance. Secondly, writing any large body of software without infringing a patent is now impossible. So economically is makes sense to only to worry about patents where owners approach you about breaches.

The same tendencies are present in the current Australian patent system. But the abuses have been less to date.

The AUSFTA is uncritical of the US patents system, despite widespread concern about software patents in the US. The enabling legislation for the AUSFTA should aim to constrain the recognition of US software patents (since most of these are trash, for the reasons described above) and should not allow a similar position to the US to develop in Australia. In this respect Australia would not be unusual, the European Parliament has voted down laws to recognise software patents.

Regards,

Glen Turner