

Reflections on Intellectual Property Rights

John H Terpstra, CTO, PrimaStasys Inc., August 4, 2004

There is much preoccupation with so called intellectual property laws. There are businesses that are eager to pursue litigation almost as soon as new laws are passed. Safe-guards in the form of patent laws, copyright agreements, service mark and trade mark laws are being used to achieve special interest goals that were perhaps not considered by those who passed these laws into being, but may well have been considered by those who crafted them. Intellectual property laws are designed to limit the use of concepts and are potentially injurious to creativity and innovation.

This article reflects on vital aspects of the intellectual property debate. We have a responsibility towards future generations to resist the abuse of power or privilege. The use of intellectual property constraints as weapons of business can rapidly degenerate to little more than the selfish initiative of a special interest group in an activity that is hostile towards society as a whole. The application of such force against another business or against consumers effectively equates to protectionism and interventionist activity. In so far that intellectual property laws can be used to constrain competition the final effect is to force consumers to pay a higher price than if free market competition had triumphed. In effect the intellectual property debate significantly challenges the freedom of a nations' citizens. There is a better way, we must follow it.

Intellectual Property Pursuit is Self-Interest-Serving

The American dream¹ was once driven by a vision in which men and women set out with deliberate intent to build a society of independent and free individuals, each set to create a better world. The world of this vision was built on a hierarchy of responsibilities.

There was structure and order in the old world. Foundation priorities expressed in older literature held that foremost in priority is the Supreme Being who endows us with inalienable rights and to whom total subservience is due. The constitution of the United States of America reflects such ideals. To such as held this view, second in priority is one's own family, and third in importance is one's fellow man out of which emerges a great social responsibility.

Perhaps it is delusion to think that there was a time when American society held a high and ordered regard for one's neighbor. If such perceptions indeed were prominent in society at large, it may be argued that much has changed; today there is a prevalence of self-interest-serving activity.

My research on the subject of intellectual property, a modern concept, has turned up starkly contrasting facets of the old world. When examining the past through the looking glass of time, it is a challenge to sort fact from fiction.

It is not possible to do justice to those who preceded us in life if we do not acknowledge the tension between cause and effect, between minority forces of good that paved the way to our day, as well as the forces that have created much of what we may be prone to criticize today. It would be a tragedy if there can be no alternative but to choose one extreme over another, or to take sides without consideration of the net balance that existed.

¹ "The point is that what makes America a new thing in history is the dedication to both the idea and the ideal that we can have a constitutional republic based on the principle of democracy. It's multi-religious, multi-ethnic, there's tremendous diversity, at the same time have enough unity to ensure that to the maximum degree humanly possible everyone has the freedom to pursue their own dreams. That's the American dream." - <http://www.achievement.org/autodoc/steps/amd?index=60>

We are able to criticize evil and the generation that bore it, but of necessity a nation that has self-respect will pay tribute to the intelligent fore-thought and the courageous acts of earlier generations. If we can not learn from the past we will pioneer and chart a new course without the benefit of hindsight to cast light on a dark road.

Not everyone consciously strives to preserve the old vision. Likewise, very few are consciously intent on destroying our world. Those who are consciously working to undermine the assets of a free world ought to be pitied and must be taken seriously. Society today must stem the tide of aggressive self-interest and the priorities of special interest groups above the needs of a healthy social balance. If we fail to do this future generations will hold us to account.

Reality must of necessity lie somewhere between extremes², mostly in a state of tension between opposing forces and within the bounds of public norms. There has always been a small minority that have sought to pursue personal interests at the expense of society as a whole. It would appear that the degree to which a society will tolerate the wanton pursuit³ of personal gain, to that extent society as a whole must bear a burden of consequential damages. In the long run we best serve our own interests by helping our neighbor to prosper both personally as well as in business.

Constant personal vigilance is the price of freedom⁴. It is the effect of this phenomena en-mass that either gives future generations a better world, or in its absence robs it of the assets it needs.

Creativity is Intellectual Property

To better understand the issues we could consider the ancient origins⁵ of property laws and how they may apply to product of our minds. Intellectual property can be nothing more than the product of thinking men and women; thinking that has creative results.

Intellectual property is a conceptual term that describes the intangible products of applied creative thinking. It encompasses knowledge, research skills, as well as applied expertise in a particular field of endeavor. Rights attached to creative and productive thinking have been an integral part of British Common Law since Alfred the Great⁶, King of England. The protection of tangible, physical assets is fully covered by laws against stealing.

When a tangible physical object is stolen the owner is deprived of the use of that object. The same can not be said of products of the mind. Great ideas and concepts can be reimplemented or used by others without physical loss to the originator. The very point of open source software is the potential for every concept to benefit the largest audience that can effectively be reached. Each benefactor has the ability to improve on the concept and its implementation.

This introduces the problem at the heart of the intellectual property debate. Taken to its logical conclusion, intellectual property laws seek to limit the use of concepts. And since concepts lie at the

2 The Argument Culture: Stopping America's War of Words, Deborah Tannen, ISBN: 0345407512, Ballentine Books, New York.

3 WashPost, 9/12/98, When Pride Turns to Hubris Washington, Like Ancient Greece, Is Littered With Victims, by Ken Ringle. <http://members.fortunecity.com/jonhays/hubris.htm>

4 "The price of freedom is eternal vigilance." - Thomas Jefferson, <http://www.quotedb.com/quotes/2283>

5 For example, a Roman was entitled by law to make a will as he wished, but, if he did not leave his children at least 25 percent of his property, the magistrate would grant them an action to have the will declared invalid as an "irresponsible testament." - <http://www.crystalinks.com/romelaw.html>

6 <http://www.newadvent.org/cathen/09068a.htm>

core of activity of the mind, what controls and limitations might be pursued next to limit one's thinking?

Alfred's laws stopped short of an attempt to control the thoughts of men. The pursuit and torture of the reformers in England in the sixteenth and seventeenth centuries, stepped well over the line of what can be tolerated in a free world. Men and women were burned at the stake⁷ for what they may have thought. Are we in danger of repeating this assault against integrity in the name of protecting the expression and use of concepts?

Property in General

Ancient civilizations have records and laws regarding personal property as well as rights pertaining to land ownership. Hammurabi⁸ of ancient Babylon codified laws covering property. Bible records show that Abraham bought land so he could bury his wife⁹. Land title in such cases was perpetual and generations considered the land as a family possession.

Personal property is a chattel like money, clothes, tools, etc. Chattels can be used, lost, sold, donated, or traded. They are portable; land is mostly fixed in place and thus is not capable of being moved.

In 1066 the Norman, William the Conqueror, defeated Danish King Harold at the battle of Hastings. To assure the future safety of England, William introduced the feudal¹⁰ system. The feudal system was designed to guarantee the King of sufficient forces to defend the realm. He appointed Baron land owners who were made responsible to supply an army. Barons appointed knights and so on, down to the serfs who worked the land. All land was considered Royal (Real) estate that could be held through grant of title. It is from laws that originate from William, that today we refer to *Real Estate*, or Royal Estate¹¹; property that exists under title by decree of the Crown or the Parliament.

We must answer one key question: In what way is the product of a persons' mind like chattels and/or like real estate? Many people will argue that there can be no similarity and that any attempt to codify, or to assert classification of, mental products as property has many attendant dangers. When we consider the abuses of mind control through history we would be foolish to ignore the nature of mankind by passing into law controls that are readily open to abuse. Have we already gone too far? If so, what course is being charted today?

A History of Patents

From the fourteenth century the English Crown granted monopolies in exchange for payment of a fee. Monopolies were granted for trade in commodities as well as for some luxury items. Many monopoly holders were corrupt and records show that bribery and corruption became a significant problem. Additionally, the monopolies led to price increases¹² that affected the entire supply chain for goods.

7 Anne Askew was burnt at the stake for refusing to recant her beliefs. - The Reformation in England, Vol. 2, J.H. Merle d'Aubigne, The Banner of Truth Trust, ISBN: 0851514871, pp. 471. Note: Many were martyred between 1500 and 1700 for what they believed. Also see Foxes Book of Martyrs.

8 The Code of Hammurabi - <http://www.wsu.edu/~dee/MESO/CODE.HTM>

9 The Bible, Genesis 23:1-20 (NET;KJV)

10 http://nc.essortment.com/feudalismmiddle_rgjn.ht

11 http://en.wikipedia.org/wiki/Real_Estate

12 <http://www.nwlink.com/~scotlass/jamesvi.htm>

By the fifteenth century the city states of Venice and Florence granted monopolies¹³ for new inventions.

At the time of James the first of England, in 1623, the Statute of Monopolies was passed into law. It restricted the rights of the Crown to grant monopolies¹⁴ solely to new methods of manufacture. The new monopolies were called *litterae patentes*, or letters patent. These grants were made accessible to the public. Since that time, a patent is a contract (or bargain) between the assignee (inventor) and the Crown. The inventor (assignee) was required to reveal all secrets involved in the method of manufacture in return for which the Crown would grant or permit protection to restrict others (unlicensed practitioners) from imitating (copying) the (invented) method of manufacture for a 20 year period. It was reasoned that the inventor would recoup costs and make a healthy profit from the invention within that time frame.

The argument in favor of such patents¹⁵ (monopolies) was that at the conclusion of the 20 year period of validity anyone could benefit by common use of the manufacturing method. In this way the Crown could claim that the greater public good was being served by permitting such monopolies.

Significantly, the first two patents issued in Britain covered a glass blowing method and a weaving method that were being practiced in Belgium. The issue of these patents served to restrict free trade, not to protect the inventors. Intelligent people perform regular audits. In business, processes and procedures are audited: those that work as promised are kept and improved, those that fail to deliver the promise of the sales pitch get thrown out. Has the use and application of patents been given the treatment it deserves?

Patents for methods of manufacture are exclusive in that the assignees' permission is required before use. Patent holders can charge a fee for permission to make use of the patented process. Therein lies the value of the monopoly; the ability to gain income. That value is asserted by the government sanctioned right to prosecute. Prosecution is a negative sanction.

In what way do manufacturing process methods compare to computer algorithms? How can one compare a software process, or set of instructions, with a manufacturing process? Before you rush into saying, "Yes! That's it! Computer software is like a manufacturing method.", consider the fact that intellectual property laws are not globally consistent. In fact, some countries do not respect such laws at all.

Given the lack of uniformity of the disposition of some nations towards this subject, one should question the wisdom of creation of laws and statutes that lie at the edge where enforcement may trespass into the realm of mind control by placing constraint on what one may think and do. Certainly, such laws¹⁶ will impact how one may make use of conceptual ways of solving a problem in business or in life.

Patents can be used to restrict access to the inventors methods of manufacture, thus the ability to exercise control is extremely attractive. The patent is a lawful mechanism by which an assignee can protect his income and by which he may intervene in the ability of another person to gain income from the invention.

13 <http://www.patentmatics.com/pub2004/pub3d.htm>,
<http://mars.acnet.wnec.edu/~grempel/courses/wc1/lectures/24guilds.html>

14 <http://www.patentmatics.com/pub2004/pub3d.htm>

15 <http://212.147.28.117/~fr/intellectual-poverty/ip-2002-12-13.pdf>

16 http://www.wordiq.com/definition/Intellectual_property

It should be realized therefore, that the pursuit of patents for trivial inventions may permit abuse of the patent system. Patents are abused when used in the exercise of lawful power against the necessary freedom of another person. If the history of mankind does not cause one to fear abuse of lawful power, nothing can stop such person who is deliberately intent on mischievous abuse. Could it be that software patents create potential for menace?

Protectionism and Interventionism

Protectionism¹⁷ is the practice, system, or theory that applies tariffs¹⁸ or quotas to limit or to impede the flow of foreign goods and services into the local economy with the purported intent of helping local (domestic) producers. When passed into national law, tariffs are a measure that is presented to the consumer as a means of protecting the commonweal (public well being).

It is often thought of as a modern practice, though its roots go well back in time. The British practiced protectionism in that all trade between colonies had to pass via England so that such trade could be taxed and regulated. By 1783 America had broken free from England, but the freedom was short-lived. In 1789 the American Congress passed its first tariff act. In 1816 and 1824 Congress added protectionist measures to its tariff act. Then in 1828 she passed the Tariff of Abominations that extorted up to 49% duty on certain items. America felt it had to protect its northern businesses against the dumping of goods from Europe. While this may have helped the New England states, it undermined the economies of the Southern states.

In his analysis of the effectiveness of tariff protection measures, Taussig¹⁹ says: "*The intrinsic soundness of the argument for protection to young industries therefore can not be touched by the conclusions drawn from the history of its trial in the United States, which shows only that the intentional protective tariffs of 1816, 1824, and 1828 had little effect.*" It is well recognized today, that the tariffs of this period forced the Southern states to purchase manufactured goods from the northern states rather than import cheaper overseas goods that were subject to punitive import duties (tariffs). This was one significant factor in the lead up to the Civil War of 1861-1865. Clearly, tariff protection did not serve the United States well - it created bitter tensions between north and south.

One would think that the lesson of the history of tariffs would have been well learned. Sadly, this was not the case as not 70 years later the same saga was due for a repeat performance. According to the USA Department of State²⁰: "*The Smoot-Hawley Tariff Act of June 1930 raised U.S. tariffs to historically high levels. The original intention behind the legislation was to increase the protection afforded domestic farmers against foreign agricultural imports. ... The Smoot-Hawley Tariff was more a consequence of the onset of the Great Depression than an initial cause. But while the tariff might not have caused the Depression, it certainly did not make it any better. It provoked a storm of foreign retaliatory measures and came to stand as a symbol of the 'beggar-thy-neighbor' policies (policies designed to improve one's own lot at the expense of that of others) of the 1930s. Such policies contributed to a drastic decline in international trade.*"

In its 2002 Annual Report²¹ the Federal Reserve Bank of Dallas states: "... *Smoot-Hawley taught us*

17 <http://www.webster-dictionary.org/definition/protectionism>

18 <http://www.webster-dictionary.org/definition/tariff>

19 The Tariff History of the United States, 8th Edition, (New York: G.P. Putnam's 1931), pp.63.

20 <http://www.state.gov/r/pa/ho/time/id/17606.htm>

21 Exhibit 14.

trade's lesson the hard way - protect and destroy. Today we're learning it the right way - compete and prosper." Ludwig von Mises²², an economist said: *"The history of mankind is a long record of obstacles placed in the way of the more efficient for the benefit of the less efficient."*

As we review the track record of protectionism and interventionism it is quite apparent that society refuses, to its own detriment, to accept the fact that every attempt at interference in the free economy causes hardship and potential economic ruin to the weakest elements of society. I regard software patents in the same genre as tariffs, but with potentially more devastating consequences.

The history of protectionism and interventionism should cause us to question with great angst the motives of those who pursue software patents. Even the pursuit of copyright claims requires great care, for even in this can great harm be inflicted upon society. We are in dire danger of crippling the engine of innovation in a once proud world.

The consequences of intellectual property action

In his paper²³, "The Eagle has Landed - While America works to protect intellectual property, everyone else is innovating", Thomas Goetz makes stunningly lucid observations regarding the drift of intellectual property pursuit. Everyone who is involved in the information technology world ought to read his article. He warns: *"The US is in danger of repeating the mistake, this time with intellectual property. In the face of new technologies and competition, the US is toughening patent and copyright protections. It's leaning on other countries - and its own citizens - to play by ever tighter rules. But if it's not careful, the US will drive its intellectual property offshore into a shadow world that, like shipping, is replete with piracy and rogue states."*

In February 2004, Mr. Alan Greenspan, in his address at the Stanford Institute for Economic Policy Research Economic Summit, Stanford, California, said: *"Rationalizing the differences between intellectual property rights as defined and enforced in the United States and those of our trading partners has emerged as a seminal issue in our trade negotiations."* He had begun his speech with these words: *"Market economies require a rule of law. A society without state protection of individual rights, especially the right to own property, would not build private long-term assets, a key ingredient of a growing modern economy."*

Long-term businesses are well aware of the necessity to build long term assets. Clearly, the intellectual property question is at the top of the agenda for many business executives. Goetz is correct though, there is a distinct state of tension between innovation and protectionism. The pursuit of intellectual property by way of litigation is no way to solve the problem where a business is no longer able to innovate, to invent and to create better business solutions.

A business that witnesses the erosion of profits at the hand of competition will act out of self preservation and may seek the protection of its business assets. That does not make it right for a government effectively to help the business to remain inefficient. Instead of providing protection, clarification should be sought to identify precisely what must be protected as well as the specific constitutional reasons for so doing. Such a discovery process may expose the real problem for which a less draconian solution may suffice.

22 <http://www.ncpa.org/oped/dupont/pro.html>

23 http://course1.winona.edu/ppaulson/DIS492/Presentations/CurrentNews/US_IP_Overprotection.htm

Profits - the business challenge

The taking of a stand in opposition to intellectual property litigation, and abuse thereof, does not imply a disposition against commercial business activity. Businesses must operate with the ability to be profitable. This is in no manner at variance with the health of society as a whole. In fact, a healthy society implies necessity of profitable trade so that each member of that society can exchange the products created, and services provided using each persons particular skills. Any attempt to limit the profitability of a business would be a most undesirable interventionist activity.

Interventionism is the policy and practice of interfering in the affairs of another sovereign jurisdiction. The foreign jurisdiction can be another family, town, state, or country and includes use of government power to control or influence an economy.

When governments interfere in businesses there is a loss of creativity and innovation, efficiency declines and society ultimately pays an unacceptably high price. The financial failure of the old Soviet Union and the ideologies that drove it are a classic example of the failure of government intervention in business.

Much of the hubris in support of intellectual property litigation asserts the dependence of business profitability on sustainable intellectual property. In this debate it is also asserted that simple algorithms implemented in software must be protected, and that whoever thought to obtain a software patent that covers it, or whoever thought of claiming copyright over the expression of the idea that is implemented in the algorithm has the right to seek royalties apparently without bounds.

The assertion, "apparently without bounds" is necessary given the fact that those who have resorted to litigation are willing to seek court approval to obtain evidence of an infraction against their property even where available evidence and due cause for suspicion may be very limited. In the fullness of time the facts surrounding these issues will be determined by the courts, however this is a process that causes considerable public alarm and is a costly pursuit for all involved.

As society advances and competitive forces catch up with a business, would it not make more sense to invest precious financial resources in a way that will create more opportunity for the business to find and satisfy customer needs

Customer needs satisfaction

The core purpose for which a customer buys a product or a service is to meet a particular need. For example, the purpose of a power drill is to enable the owner to create the right hole in the right place at the right time. Someone who purchases a power drill is in effect buying holes. Likewise, the purpose of all information technology products is to improve business efficiency and effectiveness. Every process that is solved using a computer can be done manually, or using older and presumably less efficient methods. The point of stating this is to amplify the fact that information technology consumers do not usually set out to buy a license to use intellectual property per se.

Businesses that understand their customers needs and that satisfy them efficiently stand the highest chance of being profitable, particularly if they can sustain the process. Customer needs satisfaction requires much more than simply supplying a product. Software in particular requires user training, a support infrastructure to handle customer concerns, etc. Even these are not sufficient to keep customers happy. Smart businesses maintain constant interaction with their customers. They communicate frequently so as to reinforce the value proposition. Customer satisfaction results from the persistent and clever use of communication though all aspects of the total business environment.

When considered and applied as a whole, the business will sell products and services as part of a total package. The business will have strategies for product development, for service enhancement, it will have strategies for differentiating its solutions offering from competitors. Smart businesses build sustainable differentiation into every facet of business operation, and will constantly refine them to maximize the customers satisfaction level. Marketing theory, practice and research has shown that when every aspect of the product mix meets customer needs a lower priced competitive offer usually is not sufficient to swing the business to a competitor.

In 1987 a chemical company that desperately wanted to capture increased market share offered competitively held accounts a higher level of service as well as a 40% reduction in product costs. After 6 months they succeeded in gaining very few competitive accounts. Prospective customers simply said that they were happy with the solution they were buying and that even a 40% reduction in price was not sufficient inducement to affect a change in supplier. Purchasers will pay a premium if the perceived value of a purchase choice is high enough. If the perceived barrier to change is too high even a much lower price may not induce a change of supplier.

Competition is necessary in a healthy market because it gives a consumer choice. There will be little real motivation to change supplier when a consumer has been able to choose from alternative suppliers, and has found satisfaction of its business needs. Competition provides alternatives that help consumers to make a more persistent choice.

When customers believe they have only the choice of a single solution there is a tendency to continually re-evaluate the solution offering. It is invalid to say that there was no choice; a choice of one solution implies the ability to reject that solution and to permit the problem to persist. My point is this: when choice is limited the practice of due diligence demands greater review and evaluation. As a result, there remains a latent desire to consider further alternatives as they are presented.

Schools of business have spent the last four decades teaching graduates how to balance what is called the marketing mix (products, price, promotion, distribution) so as to give the business maximum leverage in its markets. Monopoly is a poor differentiator and creates a chasm of potential dissatisfaction.

Physical products can be copied, often with great ease. A company's business strategies, the way it plans to respond to competitive and market forces, are much more difficult to imitate or to predict. This is where the real intellectual property of a business should be built. These factors are far more sustainable than a functional algorithm in a computer software program.

Questions abound: Why would a business want to eliminate or reduce competition through intellectual property controls? Is it remotely possible that the information technology world has forgotten how to satisfy customer wants and needs? Has the entire industry perhaps forgotten customer needs?

I believe it is more profitable for a business to focus on getting its product mix and its business hygiene right rather than seek to eliminate competitors through mechanisms that may seriously undermine a free society. Intellectual property litigation is an affront to sound business operation, it is not a wise strategy given an objective look at history, and is a potential mine-field for every business: a mine-field that can blow up and destroy an industry.

What you can do?

You can help stop the questionable pursuit of intellectual property by spreading the message that there are better ways to make a business more profitable. We must all encourage every business we deal

with or purchase from to be more customer needs focused. In our buying practices we ought to be deliberate about rewarding those businesses that deserve the purchases we make, and with-hold a purchase from a business that fails to meet our needs.

When you refuse to purchase a product because it, or its producer, failed to meet your needs do write that company to make them aware why they have failed to win your support. It takes only a half dozen notes like this to get a company to pay greater attention to its consumers. The entertainment industry could not ignore the fact of a few thousand letters advising them that consumers will no longer purchase their wares under the licensing terms provided. A one month public moratorium on all purchases could bring the industry to its knees!

The solution to the problem of monopolization of software intellectual property is the creation and specification of open public royalty-free standards for all software.

A private conference is being held in Phoenix, Arizona, in September to address this issue. At this I hope to participate in the launch the Open Standards Alliance. Anyone interested in participating in founding of the Open Standards Alliance should write to: osa@primastasys.com

Only when technology can operate on a level playing field can competition abound. Consumers need competition to keep prices down and to achieve the environment necessary for better needs satisfaction.

The history of mankind is a trail of minority action that often triggers events with catastrophic long-term consequences. Despite this history and the lessons we ought to learn from it, the present preoccupation with protection of intellectual property in software, if not checked in its course, will potentially destroy the American information technology industry. Protectionism and interventionism stand at odds with a free market and a profitable business climate. A software business that can satisfy the needs of its customers in a sustainable manner without use of coercive forces will not be driven to seek intellectual property protection.

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He is a member of the formation committee of the Desktop Linux Consortium, a long term member of the Samba-Team (a major Open Source project), a well known contributor and visionary in the open source community with a very active commercial focus. He is a member of the Open Source Software Institute Advisory Board. He has worked with the LSB, Li18nux (now OpenI18N.Org), The LPI, and is a best selling author of :

- The Official Samba-3 HOWTO & Reference Guide, ISBN: 0131453556

- Samba-3 by Example, ISBN: 0131472216
- Hardening Linux, ISBN: 0072254971
- OpenLDAP by Example, ISBN: 0131488732

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John has worked with The SCO Group (previously Caldera Inc.), TurboLinux Inc., in VP level positions. Prior to moving to the USA in 1999, John founded and managed Aquasoft Pty Ltd (Aust.) for 10 years. He has a Graduate Diploma in Marketing (with Credit), UTS Aust. and an Applied Science Certificate in Chemistry, QUT (Aust.).