Property Rights in the MP3 Era

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Abstract

In the last year, as a consequence of the diffusion of the MP3 standard, a very important discussion concerning property rights protection on the net has begun. The music industry is concerned about the increase in illegal exchange of protected material. Researching the most effective way of protecting intellectual rights has involved legal authorities at different levels: international agencies as well as local authorities have tried to find out the proper method to solve the problem.
We can identify two different approaches to the problem. One is mainly concerned with the protection of the rights by declaring use of MP3 formats illegal. The second method is more supportive of the diffusion of MP3 format by rethinking the property rights protection system. This is achieved by understanding the effect the new standard has on the process of exchanging, delivering and thus commercializing the audio file. In this paper we will compare the two methods to better understand which is the more powerful to face the problem of property right elusion in digital settings.

Keywords: Intellectual Property, MP3 files, Value chain

BRT Keywords: AB, AM, BB

Introduction

Since the day MP3 files made their appearance on the Internet, in the beginning if 1998, it has become the second most popular query to the search engines on the net. The origin of the technology and the name comes from the attempts to develop international digital television standards. The origin of anagram comes from the name Motion Picture Group-1/Level 3. The technology enables audio files to be compressed up to 10 times. This is the reason for the increased interest in it. The average file size of a song recorded in the normal standard compression of a compact disc is 40 Mb. Using MP3 format this size can be decreased down to 4 Mb. Transferring files of this size becomes much easier. It is possible to download a song from the net, to listen to it and then to send it around again. It is also possible to store it on the HD without occupying all the available memory. Is although possible to transfer ten ordinary CDs on to one in compressed MP3 format and thus listen to all this music without having to carry ten discs.

Obviously, all these actions are against copyright law. When copying, exchanging and listening to MP3s users are not respecting the protection the law has established for intellectual production. Accordingly, MP3 has become *the* end-of-millennium nightmare for the music publishing industry. In Scandinavia, as in the US, where the Internet

diffusion is among the highest in the world, the diffusion of illegal use of MP3 files is going to be huge. It has been estimated that in the USA, 75% of students connected to the Internet are already not paying for the music they are listening to. They are listening to, and exchanging, MP3 files eluding paying via the copyright system! Music publishers are becoming seriously alarmed at this development.

Considering the dimension of the problem, both for the authors of the music and for the producers, it is obvious that a large interest as been developed around the problem. Lawyers and law enforcement authorities have begun to react.

There have been suggestions to change copyright law to better suit the situation today. A different approach has been proposed and is being implemented as a test by the Italian Society of Authors and Publishers (S.I.A.E.). It addresses the problem from a different point of view. Instead of limiting the delivery of protected goods and the net, the Italians are encouraging the legal exchange introducing a fix fee for delivering digital products via the WWW. This system has the added advantage of lessening the need for online supervision and legal actions against any and all who would infringe copyright.

In the following sections we will compare the two philosophies to better understand their impact on the intellectual copyright protection.

The traditional approach

There have been many attempts to control the spread of the fruits of intellectual production. The reasons for this need to protect have also varied. A famous example of this is Allegri's *"Miserere"*. Until the 1770s if you wanted to hear this music you had to travel to the Vatican since it could only be performed in the Sistine Chapel. The reasons for prohibiting the spread of this music was that to own the piece and to be able to perform it impressed upon those fortunate enough to be present the importance and power of their host. Legend has it that Mozart heard this piece once at the age of fourteen and wrote it down after he left the Vatican and thus aided the spread of this piece of music. The fact remains that the music spread over Europe and not even the threat of excommunication was enough to prevent it.

The printing press, the rise of literacy and the industrial revolution where important factors which resulted in the first copyright law (enacted in 1709). The problem with copyright law is that since laws are national they cannot be enforced outside the borders of the country that implemented them. The growth of international treaties as a means of controlling copyright was an attempt to counteract this problem.

The most important international copyright treaty is the Berne Convention which was signed on the 9th September, 1886. This treaty has undergone many revisions but is still the most important copyright document and the basic concepts of intellectual property protection remain intact.

Basic Copyright Law

The basic concepts behind copyright legislation are powerfully simple. Material becomes protected by copyright as soon as it is recorded in tangible form. In fact when considering what may be protected by the Berne Convention the result may be paraphrased as almost all forms of original expression fixed in a tangible medium. For the musician this means that the work is protected as soon as it is recorded in any fashion. The reason why the music must be recorded in any fashion is to simplify the complex discussion of proving

when the idea originated. This means that the melody in the composers' head is not protected but the notes jotted down on a slip of paper are protected. The protection implies that the material cannot be reproduced in any form without express permission from the author. The term express permission is often discussed and with the advent of the Internet the intensity of this discussion has grown. The Internet is based on a cut and paste attitude. Most home pages, Usenet postings and discussion groups commonly recycle information, in the best case the original authors are attributed but more often than not no such courtesy is shown. This attitude is so common on the Internet that most users erroneously believe that there behavior is in line with copyright legislation. Unfortunately this is not true, copyright rules do not allow any reproduction (this includes attributed quotations) without the authors consent. There are situations where consent is not required, these are the so-called, fair use rules while these are important in the copyright discussion they are not relevant for this article.

Applying copyright rules to MP3 files is not a complex legal issue. Simply stated anyone wishing to play, copy or post music recorded in MP3 format must first acquire the composers express permission.

What is the purpose of copyright?

The music industry argues that copyright is there to reward the musicians. This argument builds on the tradition of intellectual property law since it attempts to create a monopoly for the creator, a reward for his sharing his composition with the world. (Gilbert & Schapiro1990; Scotchmer & Green1990)

This system is based upon a traditional method of delivery where the music is stored on a physical medium before being delivered to the end user. This method of delivery has two salient points. First, the physical delivery method allows a greater method of control than the digital. Second, the physical delivery method makes the control of the number of listeners compared with the digital medium. This is because one of the main advantages of the digital medium is that it allows multiple users to access the music totally independent and oblivious of each other.

The MP3, on the other hand, is independent of the physical delivery system. The music can be delivered to the end user at no cost. The cost for creating a physical copy of the music or creating a version that may be stored for a longer time span is transferred to the end user.

What happens when the two worlds meet?

Using copyright to protect the composer of music is still a possibility in the digital world. The negative side is that the costs for administrating the payments and policing the net to ensure that those who infringe copyrights are either punished or pay for their use of the composers' music are growing alarmingly. They have already reached the point where most of the incomes gathered from copyright goes to the music producers and to the music guilds that protect musicians rights.

While copyright legislation is supposed to support the creative process by enabling the composers to profit from their music the situation today is different as a result of the digital delivery method.

Four modern cases of copyright use

The most active users of copyright legislation are not the people the legislation was set up to protect. In fact the most aggressive users of copyright legislation are the large music corporations who claim to be defending the musicians interests by attacking any and all who would infringe on the rights of "their" copyright holders.

Example 1

The Recording Industry Association of America (RIAA at http://www.riaa.com/) filed a lawsuit in 1998 to enjoin the release of RIO, a portable MP3 player. The RIAA claims that the device violates the Audio Home Recording Act. The court granted RIAA's motion, suspending distribution of the RIO for 10 days. On Oct. 26, however, the court denied RIAA's motion for a preliminary injunction which means that Rio can again be sold. In December of the same year Diamond, the manufacturer of RIO, filed a countersuit[1] against the RIAA. Diamond claims that the RIAA is conspiring with record companies to restrain trade in portable MP3 devices, in violation of American antitrust law.[2]

Example 2

The International Lyrics Server (http://www.lyrics.ch/) was a popular web site which contained the lyrics of over 100 000 songs was closed down in the beginning of January 1999. The lyrics were all added to the site by music aficionados. The Swiss police whom were acting on a complaint lodged by the National Music Publishers Association (http://www.nmpa.org/) closed the site. This closure is yet another example of the music industries increased attempts to control the spread of copyrighted material on the Internet.

Example 3

Sweden has recently enacted a law that taxes the importers and manufacturers of blank recordable magnetic tapes, cassettes, compact discs, mini discs, etc. This type of tax is not unusual and has been enforced in Belgium, Denmark, Finland, France, Greece, Italy, The Netherlands, Portugal, Spain, Germany, Austria, Switzerland, Island, Norway, Rumania, Hungary, Australia and Japan. Within the EU there are discussions in progress to harmonize these taxes on a pan-European level.

The purpose behind this tax is the realization that these goods are being used in recording, legally or illegally, copyrighted material and this leads to the possibility that some authors are being deprived of income. Thus this tax is used to collect funds to pay the authors who may or may not have been affected. Since the technology involved can be used to record everything from text to moving pictures all types of creators are involved.

Example 4

The latest example of the music industries attempts to control the MP3 situation can be seen when the International Federation of the Phonographic Industry (IFPI at http://www.ifpi.org/) together with the RIAA have taken legal action against the Lycos search engine and its software partners FAST for violation of copyright law. The charges

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[1] http://www.diamondmm.com/company/public/PressRelease.CFM?ID=237 (last read 990320)

[2] Alderman, J. Rio Debut Back on Track http://www.wired.com/news/news/culture/story/15847.html (last read 990319)

against the Lycos MP3 search engine are for contributory copyright infringement. For this charge to be effective proof must be provided that Lycos/FAST (http://www.lycos.com/ and http://www.fast.no/) knew of direct copyright infringement and that they substantially contributed in the infringement. The impact of such a trail could be staggering. If the search engines could be found liable for the content of the link then the liabilities for Internet search engines would be endless. Such a result would change the shape of the WWW.

The Italian Philosophy

Since the purpose of the S.I.A.E. is to protect their members' rights and to collect and distribute royalties. Faced with the problem of property right elusion on the net they have clearly understood the fact that music is a digital good. They realize that digital goods have particular characteristics in relation to property rights protection. The economic, distribution and marketing system are rather different from the one we find when dealing with physical goods exchanged on an electronic platform (Cordella, 1998). The S.I.A.E. seems to have clearly understood this problem and are acting according to their interests: the protection of the authors rights, it has intervened to regulate the problem while maintaining a clear focus on its main interest: to protect the authors intellectual property.

The MP3 standard is a technology that from the authors' point of view can present some advantages. Considering the value-added chain that characterizes the music industry, from the author to the customer via the producer and the intermediaries, it is easy to highlight how it can be advantageous for the author to reduce the passages in the chain. Reducing the passages in the chain, the author can receive added benefits. Thanks to information technology, it is possible to reduce the length of the value chain, increasing the relationship between producer and customers and thus increasing the benefits for both of them (Benjamin and Wigand 1995, Cordella 1998).

Based upon a solid grasp of this, and disregarding the protection of the interests of the music publishers, the Italian authority has studied the problem of the property rights protection in the MP3 "era". The main goal of the authority is the protection of the music authors rights, without being interested in the protection of the economic interest diffused along the traditional value chain of the industry, they have implemented a solution that seams to satisfy this goal.

The Licensing system proposed by the Italian authority has begun testing in beginning of the 1999 and is addressing the problem as follows: The internet users, under the payment of a fee are allowed to store, and thus exchange and sell music and songs that are protected by the S.I.A.E., on the internet server provider (ISP) data base. In this case, the user is the owner of the license, the ISP is not involved in the process at all.

Different licenses are available, depending on the type of use the music the licenser is interested in. The licenser can be allowed to store and thus provide, but without downloading option, other users with demo or full version. In the first case he/she has to pay a monthly fix fee of 100 ECU, wile in the second the fix fee is quantified in 150 ECU. In both the cases the diffusion must be for free. In the case the diffusion is subordinated to payment buy the users, the fix fee amounts to 200 ECU.

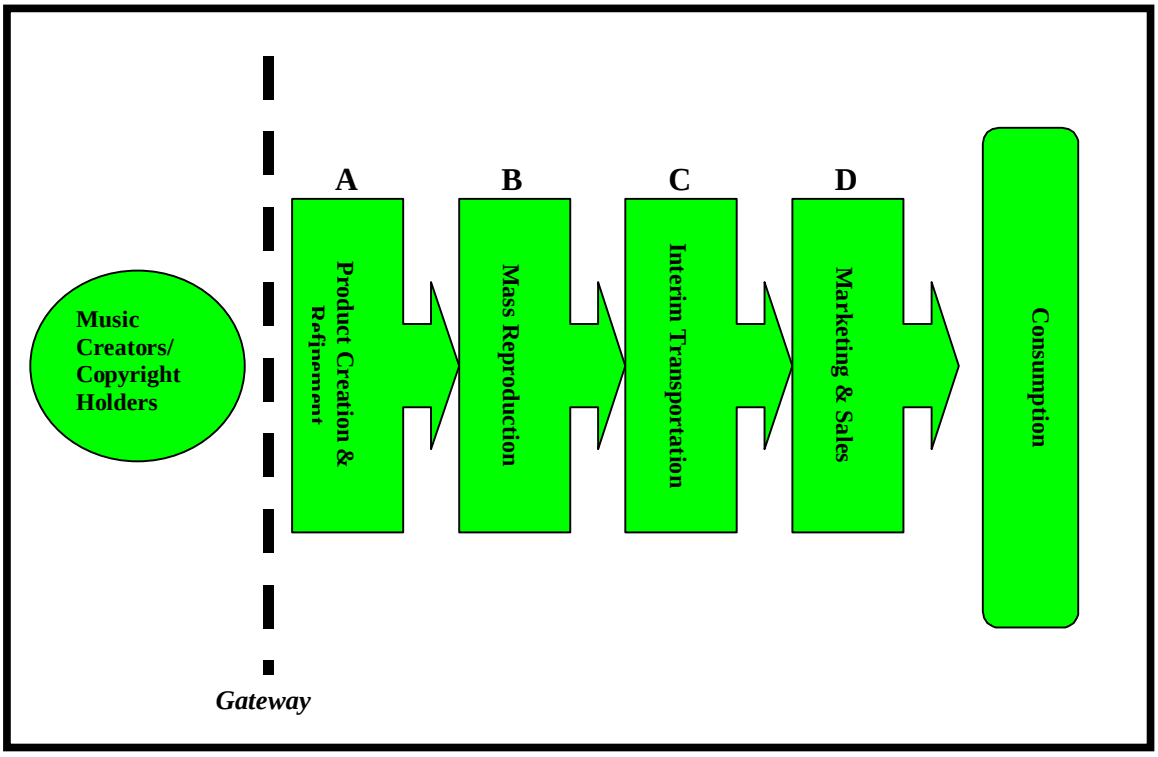
If the files are downloadable the S.I.A.E. is taking into consideration two different scenarios: the download is for free or it is under payment. In the first case it has to be paid an extra fee of 0.04 ECU per song, in the second case the fee is related to the price to which the song is sold. The seller has to pay 7.40% of the price to the authority.

Obviously, in the license there is a well-defined control requirement, the monitoring and the monthly information the authority requires of the licensers. Using this license system the Italian authority is able to collect the necessarily amount of money to pay the authors rights. The protection is maybe not as strong as the one that is guaranteeing through other copyright solutions. Otherwise the S.I.A.E. is facing the problem form the right angle. The technology is changing the commercial environment. The basic legal solutions have to be taken into consideration. To reinforce the system developed in a non-technological environment can lead to a situation where the interested parties that were supposed to be protected are instead jeopardized.

Effects on the Value Chain

It is often said that a chain can never be stronger than its weakest link. This is true even of the effects of the new compression technology on the value chain. Figure 1 shows a model of the value chain for the music industry.

Figure 1: The Music Industry Value Chain



On the left hand side of the figure are the product creators, in this case they are the musicians whose products are the basis of the whole value chain. The musicians are also the copyright holders and therefore the owners of all rights to the intellectual products. While the musicians may sign away their rights to the music industry they still retain the nominal rights to their production. The sections A through D can either be controlled by one company or several independent actors. This paper will not explore this difference but will refer to them *en masse* as the music industry. Whether or not A-D represent one player or several has very little effect on the relationship between the musician and the consumer.

The first important obstacle in the music industry is the represented by the

gateway. This gateway represents the music industries power to control new entries to the marketplace. Without industry backing the musicians will be unable to reach the broader audience required by musicians to enable sustainable development of their craft.

On the other side of the gateway the musicians encounter a phase of product creation and refinement. The main part of this is the collaborative effect between the producers and the musicians improving the content and presentation of the product. While the effort is a cooperation the end product is still seen as being the sole property of the musicians.

The second stage is in the hands of the music industry and involves taking the final product of the first stage and mechanically reproducing it. Using previous technology this process involved the maintaining of an original and making copies from it. The changes in technology and the advance of digital recording the differences between copy and original have been eradicated. The previous concept of a copy was that it was inferior to the original, but digital technology makes the whole discussion of original and copy irrelevant. The next stages are the transportation phase followed by marketing and sales. These stages outside the copyright holders control. They have been essential to the delivery of any product. The advance of information technology, in particular Internet technology, have had an incredible impact on these stages.

The greatest effect of MP3 technology on the value chain lies in the fact that the musicians no longer need to rely on the music industry for selection (the gateway), refinement and reproduction. This means that the music industry is being effected by the new technology. The music industries reaction has been to actively protect the segments of the value chain that they feel they have a proprietary interest in. Their alternate reactions could be to seek out their true core competence which is unaffected by the advance of MP3 technology. The music industry has a long tradition in marketing and product development.

The advances of MP3 technology removes sections A through D are removed from the diagram (Rayport and Sviokla, 1995). The removal of several middlemen is not an utopian dream but has been implemented. Examples of this development can be found online at sites like www.mp3.com or www.hungrybands.com. These sites provide music in compressed MP3 format supplied by the musicians downloadable at no cost. Examples of more commercial sites can be found at www.goodnoise.com which sells downloadable music for less than a dollar per file and includes musicians such as the late Frank Zappa.

Discussion

As shown in the previous paragraphs the traditional approach is trying to fix the problems with property right elusion by limiting the circulation of the protected good. To do so, it is trying to control the technological development by actively pursuing and punishing any who attempt to use the better digital formats. There is also a movement for the creation of a secure digital standard (for example: Secure Digital Music Interactive – SDMI) or digital copyright methods (for example: Digital Transmission Content Protection – DTCP) suggestions for creating secure digital formats. While these may prevent easy copying and listening, the secure formats have the disadvantages of being larger, and therefore less efficient, than the current MP3 standard. While the music industry procrastinates and spends its efforts chasing MP3 dealers they are missing the opportunity of participating in what has already become the de facto standard of audio files on the Internet. The different examples we have presented show the typical strategy

of the music publishing industry. These solutions seem to follow a philosophy of improvisation: If something new appears on the scene, whether tool or technological innovation, an ad hoc solution has to be found as soon as possible. It does not matter if the solution will be suitable or not for other similar problems. The goal is to stop the diffusion of the innovation. All these actions are done in the name of the protection of the authors' rights. The solutions that are based on the traditional approach seem thus to misunderstand the problem. The copyright law has been enacted to increase the exchange of human activity production, not to enforce restrictions to its diffusion.

It is our opinion that these effects are the consequences of the fact that the enforcement pushed by the producers' association is not primarily focused on the protection of the rights. It is mainly concerned with the protection of the economic gains arising in the value chain. They try to reinforce solutions, in the name of the copyright law, whose justification can only be found in the protection of others interests. To sue the RIO or Lycos for the MP3 search engine (see above) instead of looking at potential solutions which can reinforce the protection of intellectual rights (as the Italian authority does) is an efficient solution to attempt to save the profits the producers have on the music distribution. Otherwise, analyzing it from the property right point of view, it is a sub-optimal solution. It reduces the amount of copies distributed and thus the gain for the author that receives a fix amount every copy exchanged.

Accordingly, the Italian solution is fulfilling the main goal of the copyright law. It reinforces the authors' rights and interests pushing the diffusion through the new digital platform. It does not protect the producers' interests nor does it intend to. It does not put fees on blank recordable material. Which therefore avoids the serious question: why should the user have to pay a fee for a hypothetical violation of the copyright law when he is not in violating it? There is an old Latin term often used in criminal law *nulla peona, sine lege* this is one of the basic tenants of all modern legal systems and it has come to mean that there cannot be a punishment without a crime. The tax on empty cassettes is a punishment for all whether they commit the crime or not. Users are punished for storing privately manufactured data on empty discs.

The philosophy that stays behind the Italian approach is to avoid this kind of legal strongarm tactics by facing the problem from the right point of view. They are interested in defending the author interests, increasing the diffusion of his/her music. They are not representing mixed interest policies where it is unclear what is protecting what.

The main background difference that is effecting the overall impact of the two approaches is that in the traditional case the problem is faced from an unclear perspective: it is not evident which interest is going to be protected. Although it is not clear if the digital characteristic of music in the MP3 has been really. For example the fix fee on the virgin recordable material seems to clearly show that the digital goods characteristic of the music has not being understood. The MP3 files are mainly exchanged via the Net, this solution is thus effecting the problem not at all.

The solution proposed in the Italian approach is instead fulfilling its goals because it addresses the problem considering MP3 music files as digital goods and because it designed to protect the interest that it is really supposed: the author intellectual property rights.

Conclusion

Property is defined by the exclusive rights the owner has in the goods in question. These rights protect the owner from the demands other make on his merchandise allowing him to defend himself from others illegitimate use of the goods. While physical property can be stolen intellectual property can not be. Theft of physical goods implies that these goods cannot be used by their original owner any more. Digital goods have changed this situation completely. The example of MP3 files is a good example of this since they multiple copies can be made by several users at the same time without degrading the original. Digital technology has enabled merchandise previously protected by copyright legislation to be transferred at almost no cost.

The purpose of copyright legislation was to ensure an adequate stock of knowledge was made available to society by awarding a temporary monopoly to the author. With the dawn of the information society the ground rules are changing. Information is becoming more readily available and the system of copyright protection needs to be reformed. The problem is that there is a staunch resistance towards reforming a system which has been built and strengthened several times during the last century. The resistance comes from those who stand to loose the most. The music industry, and especially the music publishers, livelihood depends upon the preservation of a system which seems to dying.

The present situation can be likened to the Vatican's attempts to control the spread of the *Misere*, the example also shows that information wants to be free. Attempts at preventing the spread of information by attempting to control the form in which it is transferred are bound to fail. Therefore it is important to promote the spread of information while at the same time rewarding the authors for sharing their work with society.

The new technology is forcing the music industry to re-examine its core competency. At the same time the changes may also effect the way we look at the ownership of intellectual property rights. An interesting example is the pioneering work of the music band *The Grateful Dead* which have throughout their long and successful career encouraged their fans to record and spread their concerts. The band understood that their core competence lay in the live delivery of music.

The new situation allows bands to reach a wider audience without needing to rely on acceptance of the music industry. The music industry will eventually be forced to take a more promotional than a creational role. At the point technology and society have reached thus far there is little risk that the industry will not survive this attack but without a metamorphoses the industry will decline beyond repair.

The response thus far from the industry and legislative point of view have been to maintain the conservative stand by using any and all force available. These attempts are doomed to fail. If history has shown one thing is has shown that attempting to force back the tide of development to maintain status quo has never been successful.

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