The Resilience of Music Copyrights:
Technological Innovation, Copyright Disputes and Legal Amendments Concerning the Distribution of Music

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Abstract

The introduction of the Internet and the convenient, although often illicit, file-sharing of copyrighted artistic products which it made possible has put Intellectual Property Right/IPR laws under stress. It is not the first and possibly not the last time that this phenomenon has occurred in connection with a technological shift. This paper contains a short history of the fundamentals of the processes which led to the incorporation of new means of distribution of artistic products in the Intellectual Property Rights regulations. It starts with music printing technology in Venice around the year 1500. It takes a leap to the recording devices of four centuries later. Via the introduction of broadcast devices, it ends with the blank media levies. The paper describes the events in the countries that created the first legal documents for these four types of technological inventions. Arguments pro and con IPR law differ but stakeholder positions remain the same.

Keywords: Music copyright, intellectual property rights, technological shifts, cultural economics.
Introduction

The means of distribution of music have varied over time according to the mechanism Joseph Schumpeter (1942/2010) labelled ‘creative destruction’. For music scores the first Gutenberg printing press was, at least to a large extent, succeeded by lithography in the nineteenth century. The analogue vinyl LP of the 1950s and 1960s has now been succeeded by the digital CD, which in turn is being challenged by internet downloading and streaming. However, when it comes to what is distributed, i.e. the content, the situation is radically different. The music of both old and new masters has been distributed over time by different technological means depending on which of them were available and in demand. Artistic products are not necessarily subject to ‘creative destruction’ even though most do not cope with ageing. Some reach a status of perennial classics. Hence, Intellectual Property Rights (IPRs) covering artistic works are amended with each new technology to grant extended protection for artistic works already covered in earlier IPR laws.

This paper contains a short history of the fundamentals of the processes which led to the incorporation of new means of distribution of artistic products in the IPR regulations. It starts with the music printing technology in Venice around the year 1500. It takes a leap to the recording devices of four centuries later. Via the introduction of broadcast devices it ends with blank media levies. The paper describes the events in the countries that created the first legal documents for these four types of technological inventions. The source material used is mainly directly connected to parliamentary and judiciary debate.

The processes will be analysed in relation to the notion of ‘creative destruction’. The general assumption is that such destruction is a factor which has less bearing on the responses to copyright law or technological evolution than on the impact that technological shifts have had on patent law. What is covered by copyright is not new technologies per se but that which is distributed by them.

The positions of different stakeholders on copyright issues will be discussed in relation to the question of new distribution technologies. Composers obviously want their music to be distributed but they also seek some monetary compensation in order to be able to concentrate their efforts on their chosen profession. Technological innovators generally strive to, at least, cover their investment costs. Members of the audience wish for enhanced artistic experiences as cheaply as possible. These primary interests are constant. They have collided whenever new technologies have been introduced. The general assumption here is that stakeholders’ positions on copyright issues have remained the same regardless of which new technology that has been discussed.

This issue will be developed below based on questions such as:

• Who are the stakeholders?
What are their interests in the new technology, e.g. as producers of artistic content, producers or vendors of the means of distribution, consumers of the artistic experience or producers of derivative works?

What threats or possibilities can the various stakeholders identify?

What arguments are being used to further stakeholders’ positions?

I will use the term IPR consistently, if somewhat anachronistically, in this article. The advantage of this modern term, and possibly the need for it is that, as well as patents and trademarks, it includes both the Anglo-American notion of common law ‘copyright’ and the Continental European civil law concept of ‘authors’ right’. The concern of the former is the object, i.e. The ‘work’; whether this is tangibly manifest or not. The focus of the latter is the rights which accrue to the subject (Albinsson 2013a: 15-17).

Ulrik Volgsten recognises the active role of the listener in the creation of value in a piece of music:

The musical work requires the subjective listener as guarantor of its originality, objectivity and special commodity character. The listener contributes a testimony to the objective qualities of the work and, ultimately, of the originality and outstanding creative force of the (self-pollinating) composer genius. (Volgsten 2012: 195)

IPR law covers both monetary and non-monetary aspects of the value concept. The former is a droit pécuniaire (economic right) and the latter is a droit moral (moral right). Both are, as Volgsten describes, based on the value which the consumer/listener attribute to the musical work. A non-monetary value which is placed on a piece may enhance the reputation of its originator and lead to subsequent monetary benefits such as, for instance, commissions, being connected to other kinds of products in PR campaigns or well-paid positions in neighbouring professions (Albinsson 2013b).

The Internet and the convenient, although often illicit, file-sharing of copyrightied artistic products which it made possible has put the IPR laws under stress. It is not the first and possibly not the last time that this phenomenon has occurred in connection with a technological shift. The narrative here comprises information on how new technologies have influenced music production, commodification and distribution. The main focus has been placed, however, on the legal debates and processes regarding the IPR issue. When comparing the events which took place as responses to each new technological innovation the pro and con IPR amendment arguments will be discussed. Were they similar for every new incident? Were the same kinds of arguments advocated by the same kind of stakeholders after each new development?

With regard to the current digital file-sharing debate I suggest that such arguments could be summarised as follows:
Music distributors, mainly publishers and record companies, who have invested in obsolete technologies should theoretically have the most to lose from new technological shifts. However, the existence of new technology may also imply negative consequences for the originators of artistic content – composers and musicians in our case. The interests of distributors have largely made them oppose the implementation of new technology. The originators of what is in focus of copyright law, i.e. the ‘work’, however, often view it as yet another means to distribute music to consumers. Simultaneously they wish for the means of distribution to provide sufficient income. The prerequisite for such an outcome is legal coverage of the new technology. The inventors of the new technology will, of course, try to benefit financially as much as possible from the implementation of the new means of distribution. This will probably lead them to adopt arguments which favour few obstacles to that distribution. The first impulse from vendors, producers of derivative work and consumers will most likely be to oppose any obstruction to the use of new technologies. The interests of ‘society at large’ are seen as more long-term. They should be voiced by politicians and could include the safe-guarding of not only culture-related but also business-related interests. Prospering artistic industries result in employment and, thus, tax revenues for general welfare purposes. Are these assumptions relevant when compared to what has actually happened in historic IPR debates?

The following stakeholders in IPR debates may be identified:

1. Originators of artistic content
2. Performers
3. Technology providers
4. Distributors
5. Vendors
6. Producers of derivative work
7. Consumers
8. Society at large
Technological Shifts, IPRs and Aesthetic Possibilities

Although, for instance, Karl Marx and Werner Sombart had previously described the same kind of processes, it is to Joseph Schumpeter (1942/2010) that the ‘creative destruction’ concept is generally attributed. Schumpeter wrote in ‘Capitalism, Socialism, and Democracy’ that the essential question is not how capitalism administers existing structures, but how it creates and destroys them. Schumpeter described innovation in several ways. The kinds of new combinations that generate economic development encompass the following: (1) a new good or new quality of good, (2) a new method of production, (3) a new market, (4) a new source of supply, and (5) a new organization of industry. Over time the power of new combinations evaporates. What was ‘new’ becomes part of the ‘old’.

J. David Bolter and Richard Grusin (2000: 19) maintain that ‘media technologies constitute networks or hybrids that can be expressed in physical, social, aesthetic, and economic terms’. Thus, when a new technology is introduced not only the economic conditions alter. New possibilities for aesthetic creation are also presented.

![Figure 1. The creative destruction system within patents](image)

The patent provides the holder with an input monopoly regarding a kind of technology, in a broad sense, which is used in the production of an item. It is not primarily an output monopoly. The patent can, and often does, result in an output monopoly (Granstrand 1999: 49). However, nothing prohibits producers from marketing the same kind of product if they use other input technologies.

The durations of patents are much more restricted than copyright durations. There seems to be no need for longer patent durations than the standard 20 years, as the patented input technologies are mostly creatively destroyed by competitors within this time frame. Older products become obsolete and are replaced by improved products. The process can be described as in Figure 1. There is no market for new items produced by an obsolete and inferior technology. When it comes to products which are covered by copyright and other IPRs related to artistic content, the situation is different. Whereas patents cover the IPRs of the means of distribution, copyrights, performing rights, mechanical rights, and blank media levies
cover IPRs pertaining to what is distributed. This process, contrary to the patent process, can be described, as in Figure 2.

For every new music distribution invention, new stakeholders have appeared. The distribution ‘market’ has been fundamentally destabilised. New kinds of IPR principles have been introduced by legislators who have tried to strike a balance between the interests of various stakeholders. In many countries not only pecuniary rights have been implemented. Various moral rights have been introduced as well to clarify the extent of the property right.

The development in distribution media for music; e.g. the score, the record, the radio and the web, has not only meant a continuous evolution of faster, more easy-to-use, more accurate and cheaper ways to duplicate and incarnate the composer’s ‘message’. Bolter and Grusin (2000: 30) described how technological evolution strives for an increasing satisfaction of the human desire for ‘transparent immediacy’. We want the mediated artistic experience to be like the actual ‘work’ itself. The Daniel Barenboim and Staatskapelle Berlin CD version of Beethoven’s Fifth is much more transparently immediate than the composer’s autographed score for most of us, although the work is the same. Owing to enhanced recording technologies, the Barenboim version is also more transparently immediate than the Wilhelm Furtwängler war-time analogue rendering of the same symphony, even though Barenboim is obviously very influenced by Furtwängler.

In addition, the media have had profound influence on the qualitative evolution of music. Music is now created which is not possible to manifest without the use of a certain medium. The technological inventions in Figure 2 provide new aesthetic possibilities. Bolter and Grusin (2000: 31) describe how the fascination with media has a cultural logic of its own, namely ‘hypermediacy’:

If the logic of immediacy leads one either to erase or to render automatic the act of representation, the logic of hypermediacy acknowledges multiple acts of representation and makes them visible [...] the logic of hypermediacy multiplies the signs of mediation and in this way tries to reproduce the rich sensorium of human experience (2003: 33 f.).
The evolution of recording techniques not only enhanced the quality of the LPs and CDs. It also changed the nature of live performances. Today staged presentations, especially of rock music, are highly ‘mediated’.

Bolter and Grusin (2000: 45), furthermore, ‘call the representation of one medium in another remediation, and [they] argue that remediation is a defining characteristic of the new digital media’. Also, they claim that the digital media will ‘function in a constant dialectic with earlier media, precisely as each earlier medium functioned when it was introduced[...] What is new about digital media lies in their particular strategies for remediating television, film, photography, and painting’ (Bolter & Grusin 2000: 50).

The Printing Technology

Music notation occurred long before the printing press. Already in the 10th century AD Gregorian chant was notated on vellum with primitive signs, ‘neums’, indicating which direction the melody was supposed to take – up or down. Two centuries later paper technology was imported from China to Europe. The Gutenbergian printing press from the mid-15th century meant a giant technological leap from earlier manual copying. Although aspects of both economic and moral IPRs had been discussed in ancient Greece and Rome (de la Durantaye 2006: 22-30), it was not until the new printing press technology that a written codification was perceived as needed.

IPR laws treat literature and music similarly when it comes to printing and publishing. Authors write literature and composers ‘write’ music. Specifications regarding the inclusion of music are rare in early IPR laws. Thus, it is proper to begin the narrative here with some early events which accrue to authors, printers and publishers of literature as they somewhat preceded the application of the printing technology to music.

The very first publicly declared copyright was decided by the rulers of Venice in 1469, a short time after Master Johannes von Speyer established a printing shop there. Master Johannes was actually granted much more than simply a right to copy; he was given a five-year monopoly to print. In modern terms this was a typical example of ‘infant industry protection’. It was motivated by arguments that

[...such an innovation, unique and particular to our age and entirely unknown to those ancients, must be supported and nourished with all our goodwill and resources and [...] the same Master Johannes, who suffers under the great expense of his household and the wages of his craftsmen, must be provided with the means so that he may continue in better spirits and consider his art of printing something to be expanded rather than something to be abandoned, in the same manner as usual in other arts, even much smaller ones. (Johannes of Speyer’s Printing Monopoly 1469)]

There is no reference to moral issues in this document, only to pecuniary matters. Thus, from the outset the legislative concern was focused on, pro primo, safe-
guarding the producer’s income in order for him, pro secundo, to be able to provide the public and the consumers with what they desired. There is little point in the *droits pécuniaires* elements of copyright regulation if they do not promote that double aim. In the language of economics, the realisation of the goals will provide commercially viable music based on consumers’ willingness to pay and music which can be described as a ‘merit good’. Later moral issues were intertwined with the economic concerns.

Martin Luther fiercely defended his originator’s rights. In his famous ‘Warning to the printers’ of 1545, Luther complains about greedy people reprinting his translated Bible carelessly:

> Avarice now strikes and plays this knavish trick on our printers whereby others are instantly reprinting our translation and are thus depriving us of our work and expenses to their profit, which is a downright public robbery and will surely be punished by God and which is unworthy of any honest Christian [...]. But this I must lament about avarice, that these greedy and rapacious pirate printers are handling our work carelessly. For, seeking only their own profit, they don’t care much about the accuracy of what they are reprinting, [...] (Luther’s ‘Warning to the Printers’ 1545)

This might represent the first printed use of the word ‘pirate’ to refer to one who copies another person’s work without permission. 150 years later Daniel Defoe discussed literary piracy in similar terms:

> Twould be unaccountably severe, to make a Man answerable for the Miscarriages of a thing which he shall not reap the benefit of if well perform’d; there is no Law so much wanting in the Nation, relating to Trade and Civil Property, as this, nor is there a greater Abuse in any Civil Employment, than the printing of other Mens Copies, every jot as unjust as lying with their Wives, and breaking-up their Houses. (Defoe’s Essay on the Press 1704: 28)

The strife of Defoe and others for better legal coverage of the interests of authors against illegal copying bore fruit in the form of the Statute of Anne of 1709/10. Through the statute, copyright ownership was assigned to the author rather than to the publisher or printer. The author-printer copyright was granted after the item had been listed on the Stationers’ Register for a period of 14 years. After this period it was up to the author to decide whether the book should be copyrighted for another 14 years. The two-fold aim apparent in the von Speyer Decree above is also seen in the Statute of Anne: (1) the concern for the revenues of the author and the printer, and (2) the good that the author conveys to the enhancement of society. The second concern was evidenced in the duty to provide the libraries of nine major universities in England and Scotland with a copy each of all published items. Ronan Deazley has commented that the legislators:

> secured the continued production of useful books through the striking of a culturally significant societal bargain, a trade-off involving, not the bookseller and censorial state, but the author, the bookseller and the reading public. It was the free market of ideas, not the marketplace of the bookseller, which provided the central focus for the Statute of Anne. (Deazley 2008: 7)
The previous Tudor system of censorship via the Stationers Register was now not at all as far-reaching as before albeit also the new law required the same kind of listing. Thus, in the development of IPR laws related to the printing press technology we find that society in the form of the legislatures of Venice and the United Kingdom monitored the public interest according to the idea that authors convey goods that are merited as betterments to society. The pecuniary interests of authors and publishers were accepted for a period of, at the most, 28 years. Consumer interests were also considered valid as, after these 28 years, the copyright was lifted and the artistic good was transferred to the public domain.

The use of movable type in the printing of music was developed primarily by the Venetian printer Ottaviano dei Petrucci. His technology was the most advanced during the sixteenth century. In 1498 the magistrate of Venice granted him a privilege for twenty years, by which he held ‘the sole privilege of printing music in many parts, for singing, organ, and lute […] he had with great labour and expense executed what many before him, in Italy and elsewhere, had long attempted in vain’. His first publication appeared in 1501: the Harmonice Musices Odhecaton. Petrucci obtained, from Pope Leo X, a privilege for the sole printing of figured music for fifteen years (Cummings 1885, Tiersot 1925).

Johann Gottlob Immanuel Breitkopf, around 1750, upgraded the movable type technology by using some 230 small sets, each a fraction of an item of notation and each capable of being used in several combinations. However, Breitkopf initially obtained more honour than advantage from his invention. He did use his new method when printing, but most of what he published and sold was produced by a great number of copyists (Chrysander 1877).

Hans Lenneberg places the introduction of the engraving method in music-printing in Italy at the end of the sixteenth century. Gradually the use of engraved copper or pewter plates became predominant, creating better copies of pieces of increasing complexity. Engraving made it possible to ‘publish on demand’ in small quantities. Furthermore, Lenneberg cites earlier research which found that the cost for the hand-made paper represented 70% of production costs and, thus, ‘the use of engraving must have almost instantly become a major incentive’ (Lenneberg 2003: 51).

The lithographic printing method was used by its inventor, Alois Senefelder, for music prints in the early nineteenth century. The subsequent choice of printing method was based on qualitative ambitions and cost-benefit analyses based on, I suggest:

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<th>Costs</th>
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<td>Costs sunk in first specimen</td>
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Typesetting was somewhat cheaper, but for large quantities at least, Breitkopf & Härtel preferred the use of engraving for the better quality of the sold product (Hase 1968: 398). Printing was also compared with the cost of hand-copying. Usually the latter was done by freelance copyists, most of whom were low-ranked musicians. The time taken to hand-copy a piece of music was substantially shorter than the time needed for the preparation of a printed edition. If the potential demand for a piece of music was small the advantage leaned towards hand-copying. In fact, many customers preferred hand-copied music and many publishers maintained lists of hand-copied music until the first decades of the nineteenth century (Lenneberg 2003: 74-84).

The suggestions to composers from publishers, often explicitly and to the chagrin of the former, were for simple new sonatas, duets or songs. The demand for pieces for performance at home by amateurs was huge. The market for symphonies was much smaller. Even the great Beethoven accepted this and for his first symphony he suggested the same fee as for a single solo sonata from a publisher in Leipzig.

Hans Lenneberg (2003: 25) touches on the crucial issue of whether new technologies not only remediate music in new ways but also change the nature of music composition: ‘Scholars must consider, for example, whether Salonmusik in the nineteenth century caused the enormous proliferation of sheet music or whether the relatively inexpensive printing methods caused the increase in Salonmusik’.

Beethoven’s Missa Solemnis needs 31 individual parts of which the five string parts and the chorus parts in turn must have a sufficient number of exact copies to provide for the multitude of musicians/singers. The composer let copyists prepare the material for the first performance. Beethoven’s bill for the manual copying of this piece and Symphony no. 9, which was premiered in the same 1824 concert, was 800 Gulden W.W. (Moore 1987: 217). Copies, probably of the score only, were hand-prepared for ten special subscription patrons at a cost of 60 Gulden each and sold at a price of 50 Gulden. One reason for their lower cost was the musical ignorance of the patrons. The accuracy needed in the performance was lost on the patrons and their copies often had lots of errors. The printing permit was eventually obtained by Schott in Mainz.

**The Berne Convention of 1886**

The Association Littéraire et Artistique Internationale, founded in Paris 1878 on Victor Hugo’s initiative, had the objective of creating an international convention for the protection of the rights of ‘writers and artists’. Hugo’s efforts were successful in that 10 nations on 5 September 1887 ratified the treaty that had been finished a year earlier. As the initiative was French, the convention was heavily influenced by the French *droit d’auteur* with its inclusion of *droit moral* rather than by Anglo-Saxon ‘copyright’ which was more focused on economic matters.
only. The convention had as its main objective to broaden the domestic rights of
the participating countries into internationally reciprocal rights. Signatory coun-
tries had obliged themselves in a long range of bilateral treaties which were made
redundant by the new convention. Many bilateral treaties were maintained with
countries which did not sign the convention.

One important legislative feature introduced in the Berne Convention was that
it did not demand, as before, a registration of or application for copyright. As soon
as, in our case, a piece of music was ‘fixed’ physically on a sheet of paper or on a
record the composer should be entitled to all forms of copyright protection in all
the signatory countries. Thus Article IX declares that ‘the public representation of
dramatic or dramatico-musical works’ are covered by the convention ‘whether
such works be published or not’. The same applies ‘equally to the public perfor-
mane of unpublished musical works’ (Putnam 1896: 291). The signatory coun-
tries were: France, Germany, UK, Belgium, Spain, Italy, Switzerland, Haiti, Libe-
ria and Tunisia. Absent from the list is, primarily, the US, which finally signed the
treaty only in 1989. Furthermore, no Scandinavian country signed. Neither did
Russia or the Austrian Empire. The UK (at the time Great Britain and Ireland)
excluded its major overseas possessions like India, Canada, Australia, South Afri-
can and New Zealand but included all minor protectorates. The US, Russia and
Austria chose to remain outside the treaty as they were all large importers of cop-
yrighted goods in the form of unauthorised translations printed by domestic pub-
lishers.

The Berne Convention did not concern itself with how domestic creators were
treated in the signatory countries. It only safeguarded the rights of creators from
other treaty countries. In that, it laid a legislative foundation which all participat-
ing countries should ratify.

The Gramophone and the Beginning of Mechanical Rights

The pro and con IPR arguments were tested again as part of the introduction of
performing rights in France in the mid-nineteenth century. This right did not,
however, occur as a result of technological innovations regarding the distribution
of music, but rather as a consequence of general economic growth. This, in turn,
brought with it a growth of the music business itself and of businesses which used
music to enhance their own interests, e.g. restaurants and cafés. In fact, the stake-
holders and the pro and con arguments listed in the introduction above also ap-
peared in the Paris of 1847-1851 when the first performing rights debate took
place (Albinsson 2012). Instead, the next major technological innovation relevant
for the distribution of music was the flat, spinning disk invented by Emile Berliner
in the 1890s.
Obviously, the Bolter and Grusin ‘remediation’ concept is applicable to this entirely new form of music experience. Now sounding music was mediated in a fixed form which could be represented in exactly the same way many times. Adorno claimed that the specific feature of the phonogram is that it recalls the music from live performance and absorbs the time which has passed and disappeared. The music is ossified on the phonogram which, thus, manages to capture and retain time (Adorno cited by Volgsten 2012: 184).

Prior to Berliner, Thomas Edison, in 1878, had been granted a patent for the phonograph with rolling cylinders (Gitelman 1997, 2008). Edison described his pioneering invention in fanciful terms by comparing it with the ancient hieroglyphs of Assyria and Babylon. There, authors wrote their cuneiform on cylinders of baked clay. However, the difference, according to Edison, was that the owner of a phonograph did not have to wait so many centuries until his dumb wax cylinders could be deciphered. Edison held tight to his own phonograph patent but fought hard for his use of composers’ works freely without regard for copyright. The copyright did not extend to the new medium, Edison claimed, as 1. he had purchased the scores and thus paid for the copyrights and 2. it is not possible, as with a score, to read the phonograph roll with one’s eyes. He showed that two recordings of the spoken letter ‘a’ had completely different tracks on phonograph cylinders and that the letter could not therefore be ‘read’ unambiguously. In legal cases, in both the US and Europe, Edison and his lawyers referred not only to the legislation concerning actual copyrights but also to freedom of the press with its different national legal versions. The crux was whether phonograph cylinders and later gramophone records were ‘written’ and could be ‘read’.

In an initial court ruling, in the case of White-Smith Music Publishing Co. v. Apollo Co. of 1908, it was decided that rolls for mechanical pianos were not ‘copies’ but ‘performances’. Judge Holmes of the Supreme Court was not satisfied with this although, on the basis of the contemporary legislation, he felt compelled to agree to the verdict. He argued that ‘On principle anything that mechanically reproduces the [original] collocation of sounds ought to be held a copy, or if the statute is too narrow ought to be made so by a further act’. All, except those who manufactured equipment and rolls/records/sheets, were now intent on separating the concepts ‘write’ and ‘read’ in a new way. When Congress debated the bill for a new copyright law, adopted in 1909, Edison’s parable of the Assyrian cuneiform rolls was turned against him and other producers of similar equipment. The congressmen recognised that the complementary activities of ‘writing’ and ‘reading’ could obviously, in the cuneiform rolls example, be separated by many decades and even centuries. Phonograph cylinders could be read, although you did not actually understand what you read! The machine was man’s help in reading. The stakeholder role that Edison took on was that of a combined technology provider, publisher and distributor. He not only invented the phonograph and, later, used Berliner’s invention. He also monitored its commercialisation through companies
of his own. These were normally based on patents which were secured in all major national markets of North America, Europe and elsewhere. His primary concern seems not to have been the originators of the music. His concern for the consumers was obviously targeted on their role as buyers of his products. Furthermore, Edison was an early exponent of the freedom of the press argument. His interpretation of that ‘freedom’ was, it seems, that whatever had been published in the press, including musical scores, could be used freely. This resembles the current argument between consumers and producer of derivative works that digital files contain ‘information’ which should be possible to use for new, second step purposes under a general ‘freedom of information’ regime. The interests of originators, consumers and society at large have been upheld by the US courts and Congress.

The Berne Convention was revised in Paris 1896 and in Berlin 1908. The revisions were largely intended to extend the Convention to include the ‘fixation’ in the form of (Article 12 of the version from 1908) ‘instruments that can reproduce the work mechanically’ (including public performances by means of such mechanical media), and Article 14, cinematographic representations.

**Broadcasting Rights**

Radio broadcasting was established immediately after the First World War. Most early broadcasters resided in the United States. The first entertainment programme was, however, broadcast in Argentina in August 1920. The diffusion of the new medium was swift. In only 3-4 years radio stations had been established in most countries.

In North America, broadcasters consisted mainly of radio vendors and publishers who wanted to advertise their printed newspapers. The phenomenon of ‘remediation’ became a factor in this. Printed newspaper articles were read at least in part by human voices. Live music was broadcast. Later, recorded music was transmitted through the medium of radio.

The debates and legal disputes were characterised by this relationship. Initially there were problems with a phrase in the United States Copyright Act of 1909. The copyright owner’s permission was required for ‘public performance for profit’. ASCAP (the American Society of Composers, Authors and Publishers, founded in 1919) argued from the outset that a radio broadcast was exactly a public performance for profit interests. The US Supreme Court had earlier, in Herbert v. Stanley Co., determined that a restaurant that did not charge customers for the live music entertainment still had to pay copyright owners:

> it is true that the music is not the sole object, but neither is the food, which probably could be got cheaper elsewhere [...] if music did not pay it would be given up. If it pays it pays out of the public’s pocket (Herbert v. Shanley Co. 1917).
Before the same principle was accepted also for the new radio technology, a lower court reasoned, in the Remick & Co v. General Electric Co. case, as to whether a radio broadcast could be compared with someone opening a window from a room where someone else was playing. Hardly something that could be regarded as an ‘active’ violation of the law, the radio station in question claimed. Furthermore, it was argued that radio media should not pay any additional copyright remuneration. The long deliberation of the court ended with:

if [...] the public had been excluded from the public ballroom of the hotel while the orchestra continued to play and the broadcaster to broadcast, he would have contributed to the infringement while the public was absent; but the presence or absence of an audience in the hotel cannot change the character of his acts of contributory infringement. (Remick & Co. v. General Electric Co. 1926).

The Court of Appeal judge, in the Remick v. American Automobile Accessories Co. case, a year earlier found that ‘the artist is consciously addressing a great, though unseen and widely scattered, audience and is therefore participating in a public performance [...] it is immaterial in our judgment, whether that commercial use be such as to secure direct payment for the performance by each listener, or indirect payment [...]’. (Remick v. American Automobile Accessoriees Co. 1925). Obviously, as in the case of the gramophone mentioned above, those who commercialised the new radio medium and used it for their own purposes opposed the extra cost that an application of IPR principles would incur. By now the originators had organised an IPR fee collecting society, the ASCAP, through which they voiced their interests. The radio medium broadcasts both live performances and recorded music. As mentioned above in the Edison case, record companies were at first generally reluctant to accept IPR fees for their use of music. However, when their products were used by broadcasters they joined composers and musicians in their claim for a fair share of the broadcaster’s income. Thus, radio technology was neutral or even fundamentally positive when it came to the interests of consumers and society at large. The part of IPR laws relevant to the radio medium was the performing right. Thus major legal amendments were not necessary. The direct stakeholders in the music and broadcast businesses negotiated new performing rights agreements. Broadcasters, whether of live performances or recorded music, paid performing right fees via the same channel as concert producers, to composers, and through a new set of collective broadcast fee collecting societies with musicians as members.

In Sweden, as described by Rasmus Fleischer (2012: 135), public radio was introduced on 1 January 1925. At first the management of the musicians’ union only saw positive results from the new medium. Their expectation was that the radio medium would become ‘a useful tool in the process of striving for a higher level of music culture and for the holding back of vulgarising jazz music’ (Gösta Lemon in Musikern, cited by Fleisher). Soon, however, the union’s magazine Musikern reported that concert halls had become depopulated as a consequence of
broadcasts. Thus, they claimed, the public service Radiotjänst ought to compensate musicians for its detrimental pecuniary side effects. After the broadcaster had refused the demand for a 50% mark-up on their reimbursements the musicians’ union banned participation in broadcasts by its members. This action forced Radiotjänst to start to broadcast recorded music in June 1926. The newly founded performing rights society STIM was chaired by composer Kurt Atterberg who in 1927, put forward plans for what has now become a reality; namely a pay-per-listening system which could be made possible if broadcasts were to be distributed through the telephone wires (Fleischer 2012: 136).

Only a few years later, sound films made their entry onto the Swedish market. Musicians in the silent film cinemas were made redundant. Of course, the musicians’ union made a new thrust for compensation for the reduced labour market. The union failed to engage the STIM in its struggle. In fact STIM took the adverse position. Eric Westberg, the general manager of the STIM, rather saw a problem in the abundance of substandard musicians. Only a small number of professional musicians could be regarded as genuine artists while the vast majority were merely to be considered as musical artisans. Westberg hoped that sound film would contribute to the ‘cutting off of the current weaknesses’ (Fleischer 2012: 160). The STIM demanded composer remunerations, regardless of whether their music was played live or in recorded versions. Cinemas were to become the most profitable sources of income for the STIM during the 1930s, the 1940s and the 1950s (Fleischer 2012: 163).

The main purpose of the audit of the Berne Convention in Rome in 1928 was precisely the integration of the radio medium in the treaty. The TV medium, which was introduced a few decades thereafter, regards copyright in principle in the same way as radio but, obviously, with both picture and sound.

The Blank Media Levy

Turning to the issue of blank media, we find means of distribution which in many ways resemble the internet. So let us dwell a little on this issue and dig somewhat deeper in regard to earlier technologies.

The wire recording machine was invented by the Dane Valdemar Poulsen in the late 1890s. In the 1940s the tape recorder began to make its way into the households of the Western world. In 1963 Philips introduced the cassette tape. It soon became the industry norm. The new technological shift made it possible not only to copy legally purchased LPs onto a cassette tape for private use but also to copy from LPs belonging to others and to record radio transmission and, thus, to circumvent the established copyright fee system. Whether this was an act of piracy or not was widely debated. The entertainment industry successfully lobbied for
a blank media levy to be put on all cassette tapes. Levies were first introduced in Germany in 1965 and internationally in the 1970s (Gaita & Christie 2003).

The levy is in some countries commonly referred to as a ‘tax’. But as the customer fee is transferred directly to a collecting society and from that to IPR owners, it is not, formally, a tax. A tax, in strict terms, is collected by the state or a community for unspecified purposes.²

According to § 15 section 2 of the Urheberrecht an Werken der Literatur und der Tonkunst (the Act on Copyright in Works of Literature and Music) of 19 June 1901 - LUG (RGBl. 1901: 227-239), the reproduction of works of literature, visual art and music for personal use without the consent of the originator was accepted. By decision of 18 May 1955 – in BGHZ 17, 266 – the Bundesrat (the Federal Court), however, proclaimed that the exception for personal use was not applicable when it came to tape recordings of protected works. It was accepted that the legislature could not, when LUG was issued at the turn of the century, have anticipated the potential impact of the exploitation of protected works from the new recording machines. Basic principles of copyright had to be upheld also when new technologies were introduced (Reschke 2010: 48-50).

A government draft of the Copyright Act of 23 March 1962 (Bundestag 1962) suggested that the exemption regarding the use of tape recorders should be removed. The private copying for personal use should be considered irrespective of the type of reproduction process used. However, the bill also suggested that originators should be able to claim compensation. The Bundesrat/ Federal Council rejected this proposal on the grounds that a compensation claim directed towards private use of tape recorders could not be enforced in practice. Furthermore, there were doubts whether the remuneration could be made in accordance with cultural policy considerations.

The revised Gesetzes über Urheberrecht und verwandte Schutzrechte of 9 September 1965 (Urheberrechtsgesetz 1965) included a section on the compensation claim by the originators against manufacturers of devices that are suitable for private copying of protected works. A ‘constitutional complaint’ from ‘Firma U.’ was directed against this paragraph. In the Bundesverfassungsgericht/ Federal Constitutional Court verdict delivered 7 July 1971, it is stated that

After detailed deliberations and consultations with experts, the Judicial Committee of the Bundestag/Federal Parliament, after some initial concerns, accepted the view that it is within the aim of the new law to improve the legal protection of copyright and, thus, it is not compatible to exempt private tape recordings from the law […]. With the invention of tape recorders a development has been initiated that will lead to a shift toward increasing commercial reproduction in the private sector. A few years from now low-cost devices for home recording of television programs are to be expected, which will undoubtedly be used widely. If the unrestricted freedom to reproduce for personal use is retained, this development could bring about a serious erosion of copyright revenues. (Tonbandvervielfältigungen 1971)
The Judicial Committee, in accordance with the opinion of the Federal Government in the proposed draft of 1962 (above), advocated compensation claims which in principle should be targeted against the device users. As this was regarded impractical, the committee instead proposed to provide the originators with a compensation claim against the manufacturers of devices suitable for private copying. It seems that the Bundesgerichtshof/Federal Court, in a decision of 29 May 1964 (BGHZ 42: 118), mapped out a system where purchases of tape recorders should only be accepted with registrations of personal identities in order to personalise compensation claims. The Bundestag/ Federal Parliament, however, turned down this solution, considering it a severe trespass into the private sphere of the device user.

The Bundesverfassungsgericht verdict of July 1971 (above) finally established that the originator of copyrighted works is entitled to payment of a fee from the sale of devices which are capable of making copies of broadcasts or of audio recordings. The right should be exercised only through a collecting society. The society created for this purpose is ZPU (Zentralstelle für private Überspielungsrechte/Central Office for Private Copying Rights).

The verdict was not incorporated in the Urheberrechtsgesetz/Copyright Act until the 1985 revision as §54 Vergütungspflicht/payment obligation. It demanded ‘angenommenen Vergütung/ reasonable compensation or, alternatively, equitable remuneration’ from the manufacturers of devices to originators of copyrighted works. In the 2008 revision, the text explicitly mentions storage media for digital files apart from the earlier tape/video recorders.

The debate regarding the blank media levy system has been revitalised by the internet explosion and the extensive file-sharing that it made possible. In principle the copyright issues regarding the internet are much the same as regarding the cassette tape. The former analogue copying, however, meant a noticeable loss of sound quality. The copy was not identical to the original in this respect. The ‘transparent immediacy’ was reduced for each copy of a copy. Furthermore, the copying of a piece of music took as much time as the duration of that piece and the labour was somewhat more manual than in the case of copying of a digital file. Nevertheless, the cassette copying debate was a preamble to the current internet file-sharing debate. In the German case, the first issue was to decide whether the tape copying was already covered by the 1901 LUG right to replicate a bought item for private use. As the cassette tape could also easily be used for the copying of records belonging to others and broadcast music the LUG was regarded as insufficient. The music industry’s position was, fundamentally, the same as in the present internet debate. Cassette copying was detrimental for originators, musicians and record producers. The legislature, as an exponent of society at large, accepted this view. Consumers in the developed Western countries expressed most of the arguments they now express in the current file-share debate. The main opposition evolved around a fact which is discussed also regarding digital storage.
media. Namely, that cassettes could be used for other purposes than copying. But since cassette copy-sharing was not a big issue, the consumers’ case was not defended as loudly as it is today.

It was not until the new file-share debate in the 2000s that the economic, legal and moral grounds for IPR laws were questioned and opposed by the Piracy movement. This movement advocates the abolition of all or most IPR laws. That stance was more or less unheard of when the cassette levy was introduced. Some organisations, like the Collective Performing Right Licensing Society STIM in Sweden, have suggested that Internet Service Providers [ISPs] should be included in the levy system as they facilitate peer-to-peer copying of copyrighted material. There is, however, a counterargument in the fact that many content providers do not seek financial compensation but put their works freely on the internet to reach the widest possible audience. As with performing rights, it is possible to dispose of the right to be compensated. If you do not register your song with a collective licensing agency there will be no remuneration if it is played. The agencies, however, do not differentiate between registered or unregistered music towards licensees, who pay flat, blanket rates. The licensees, in this case, pay for music which should be free of charge and the composers are not granted their fair share. In some countries the levy collectors are under an obligation to allocate part of what they collect for cultural policy purposes. Maybe it is possible to argue that this is the part of the collected remuneration which could be claimed by those who do not bother to register works. Digital storage media can be used for many purposes apart from keeping private copies of copyrighted music, films or computer software. They are also used widely to store documents, private photos/videos and statistical data. Compared to the position with cassette tapes, this predicament is even more substantial in digital media.

The levy system is practised in many countries with the major exception of the UK, which does not need a blank media levy system as copying for private use is not allowed. The levy principles do not differ much among nations, but the items included in the system do. In Germany there are fees on PCs, printers, copying machines, CD burners and portable digital memories, apart from cassettes, CDs and DVDs. In Sweden only the latter items were part of the levy system until 1 September 2011, when also the portable digital memories were included. At least this was what the levy collector Copyswede intended. It is still, as of spring 2013, not fully accepted by the producers and vendors.

Both the bases for the levies and the fees charged differ substantially between countries. In 2009, the levy revenues per capita in EU countries with levy systems ranged from €0.02 in Romania to €2.60 in France (Kretschmer 2011: 14). The blank media levy system has shown a strong resilience. New kinds of media have been included in national levy laws after their market introductions. At least one country, Belgium, equates mobile phones with mp3/mp4 audio players (Moniteur Belge 2009: 80498). Will more countries recognise this ‘possibility’ in the future?
The tariffs are usually based on a percentage of sales prices. Technological advances have made storage capacity relatively cheaper over time. Thus, the compensation to content providers has diminished in value.

**Discussion**

Whenever new media which exploit artistic products have been presented they have stirred up heated debates involving copyright holders, inventors, manufacturers, users, consumers, courts of law and the legislatures. New arguments pro or con IPR protection were created for every new distribution medium.

The Edison and Berliner inventions did not result in a total ‘creative destruction’ of the printing press technology for the distribution of music. Live amateur home-performances for the entertainment of individuals, families and guests were gradually replaced by the gramophone and, later, by the radio. Nevertheless, musicians had to play on the recordings and they regularly needed printed music. Printed music is still in demand for other purposes than recorded music. The radio medium did not destroy earlier means of music distribution. While the gramophone was preferable if you wanted to play a favourite song an indefinite amount of times, the radio presented a variety of music which it was not possible for the listener to decide on. The radio needed both printed music and recorded music to perform its task. It, therefore, was clearly a complementary means of distribution rather than something which creatively destructs scores and records in the Schumpetarian sense. Both the gramophone and the radio were technologies which remediated music in new formats.

Therefore, the stances of the stakeholders listed on p. 3 have been more or less static despite the technological shifts discussed. However, the arguments they promote in these and other IPR debates have been more situation and technology specific. For instance, in the current file-sharing debate, some consumer advocates claim that free copying of digital files should be accepted as these should be regarded as marketing vehicles for the promotion of live performances. Conversely, in the 1880s, in the debate in Britain regarding the introduction of the French performing right system, the consumer opposition claimed that there should be no IPR fees for live concerts as the function of these was to promote the sale of music prints, i.e. the tangible and copyable item (Albinsson 2012). The positions that various stakeholders seem to have taken in the processes described in this article are listed in table 1.

The position of consumers has mostly been negative regarding efforts to make IPRs cover the consequences of technological innovations. Of course, such amendments increase prices somewhat to the immediate discomfort of consumers. However, many consumers most likely recognise the need for composers, musicians and innovators to be sufficiently compensated for desirable music to be put
on the market. Once new IPR laws have been implemented, the prior consumer arguments more or less rest in silence until a new innovation occurs. Although piracy, in action, may be continuously and widely present, it is often claimed that the vast majority of consumers will most likely accept, both in principle and in practice, the new terms of trade provided by IPR laws. However, this claim is unsubstantiated and needs further research.

As seen in the Edison case above, inventors and manufacturers have a strong interest in patents covering their own pecuniary interests while they leave the interests of originators aside. Composers and musicians are left to fight for their own interests. In the present file-sharing debate Internet Service Providers, at least in the Swedish case, are strongly negative about an IPR levy being placed on their services for consumers.

It seems that copyright holders have, generally, not regarded new technological means of distribution negatively. Rather, they have tried to embrace them as new sources of income streams. In the Swedish case, the collective licensing agency STIM has declared a neutral stance towards various old and new forms of music distribution. The STIM has not sprung to the defence of record companies in the current file-sharing situation. Instead it has now successfully negotiated a fee system with Spotify. Thus, the STIM, and its composer and lyricist members, seem to have accepted the Schumpeter ‘creative destruction’ concept (Strömberg 2012).

Judiciary systems of various countries have been forced to intervene when they have been confronted by IPR owners. Both common and civil law frameworks favour the idea of reliance on precedent. The common law stare decisis is in this respect what jurisprudence constante is in civil law. In the case of the piano rolls mentioned above, Judge Holmes of the US Supreme Court issued a verdict based on old IPR law and its precedents and, in addition, suggested amendments to better cover the new situation created by the invention. The role of courts, however, is that of interpreters and not creators of laws. Thus, courts, in principle, should have a neutral vantage point when confronted with the IPR issues of new inventions. It seems that this has been the case in all the disputes related above.

Obviously, the choice of a positive, negative or a neutral attitude towards IPR amendments as the result of technological inventions is a mirror of the potential monetary effect for each category. However, in the case of those involved in political decision-making the positive attitude reflects a wish to strike a productive balance between producers and consumers so that the IPR protection will bring goods that had otherwise not been produced to society and to consumers. The negative attitude of other stakeholders, in this case, is regarded as counter-productive by the legislatures. What consumers demand will not be produced if the artists are left uncompensated. Furthermore, it is likely that legislatures regard IPRs as positive for the creation of artistic industries with the potential for large scale employment, tax revenues and, at least in some cases, contributions to national pride and unity.
The preceding political processes before new laws have been enacted have had lengthy durations and have been filled with hearings, investigations and reports. As new technological means of music distribution in all cases have, eventually, been granted IPR coverage the position of the legislature must be regarded as IPR positive. The focus of this study has been on legal processes. It is likely that many of the arguments in the more public debates which preceded them have also appeared in court proceedings.

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Table 1. General status of stakeholder attitudes toward IPR protection of new music distribution technology

Business disputes and media debates, for instance, may include other arguments and, perhaps, more colourful and pithy formulations of stances than the polished legal documents. Thus, further research into that vast area of source material would be of great interest for an even better understanding of the matters discussed here.

The file-sharing debate, which has brought the Swedish Pirate Party into the European Parliament, is not yet history. However, if the pattern of earlier technological shifts applies also to the current process new IPR amendments will be issued or, at least, current IPR laws will be interpreted to cover the internet. Most consumers will, eventually, accept the idea of originator compensation and, thus, prefer distributive services for which they pay fees. At least, they will do it for fear of litigation. The Piracy movement will, most likely, suffer from this consumer adaption to legal requirements. However, its ideas will remain a kind of ideological sediment which will be stirred up again at the next technological shift.
Staffan Albinsson has returned to academia after more than thirty years as concert producer, orchestra manager, county music director and concert hall manager for Rikskonserter, The Norrland Opera, The Helsingborg Symphony Orchestra, Musik i Väst (The Western Sweden Music Foundation) and The Vara Concert Hall. In 2010 he added a MA in Economic History to his BA from Lund University and his education at the Malmö School of Music in the 1970s. His PhD thesis “Nothing New under the Sun: Essays on the Economic History of Intellectual Property Rights in Music” was accepted in May 2013 at the School of Business, Economics and Law of the University of Gothenburg. The articles it contained are published in scientific journals. Staffan is now active with a research project which has the economic history of a number of European opera companies in focus. E-mail: staffan.albinsson@econhist.gu.se

Notes
1 Some were introduced in legal texts as a bi-product of the introduction of another music-related IPR, the performing right, in the mid-nineteenth century.
2 In Sweden the common use of the word ‘kassettskatt’ (cassette tax) is a lingering reminiscence from the first decade of blank media legislation. The ‘Law 1982:691 concerning tax on certain cassette tapes’ expired at the end of 1992. Thereafter, the matter has been an integral part of the Law (1960:729) ‘concerning copyright [stricter translation: originator right] for literary and artistic works’ as a section concerning ‘compensation accruing to the production and import of devices for the recording of sound and images’. The §§ 26 k-n provide the legal base for the separate blank media levy collecting society, Copyswede.
3 My personal recollection is that most of us who copied actually regarded that act as morally dubious and nothing to boast of in public.
4 According to the STIM CEO, Kenth Muldin, in conversation.

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