

# Copyright and Multimedia Products

*A Comparative Analysis*

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Irini A. Stamatoudi



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# 1 Placing multimedia products within the scope of copyright

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## 1.1 GENERAL INTRODUCTORY COMMENTS

A book dealing with multimedia can only reach a certain level of scientific accuracy in relation to new technology products. The reason is obvious. 'Multimedia' is a newly evolved term, which brings with it the imponderables every newly evolved term brings: vagueness and uncertainty.

Multimedia products have introduced new forms of expression by combining the existing ones with new technologies, thus creating a new concept. Many experts in the field state that multimedia has signified the commencement of a new era in relation to communications. Its essential ingredient is not solely interactivity, as one would expect (although interactivity still is the key feature for this kind of communication), but the amount of data multimedia products carry. Information as such has become extremely important. The more information you possess, the more power you have. The possession of information is the key to the successful creation and marketing of a multimedia product. The information contained in it is the crucial factor when consumers decide to purchase. The need for a free flow of information around the world is the ultimate reason for the financing of communication industries. The ability to distribute such information is the parameter by which financial success in the international market is measured. Information has to do with development, evolution, culture, civilisation and state power. Interactivity is valuable in so far as it facilitates the manipulation of information and responds to the needs of the user with regard to that particular information.

In the present era multimedia is bound to be at the centre of developments because the advantages of multimedia applications are so great. The public's access to information and its concept of communication will change the face of communication as a whole. There will also be an impact on inter-human relations and on social structures. Space and time will become more readily available and accurate and comprehensive information will become a possible target. Creators will be afforded more opportunities to create as a result of the great demand for creative content

in the new technology products. Communication and intellectual property industries will be given more opportunities for exploitation and thus the convergence of existing technologies will lead to the emergence of a new breed of product. This will provide a substantial push for technology. Boundaries will be pushed out. Cultures and ideas will work more closely together. It is time we started seeking solutions at an international rather than at a national level.

If we want to put the fast-growing commercial importance of multimedia products on the European market in figures, we should refer to those most recently available. In 1989 the multimedia market had a global turnover of US \$3 billion. This turnover increased fivefold in 1995 and 1996.<sup>1</sup> Other statistics show that the multimedia market, excluding video games, was worth US \$1.4 billion in 1989, whilst in 1997 it was expected to reach US \$23.9 billion.<sup>2</sup> Multimedia products in CD-ROMs, which is the most popular form of distribution, have increased their market turnover forty-five times between 1990 and 1995, with the USA and Europe being market leaders. The statistics show that the USA led the pace until 1993, when Europe seems to have taken over. Of course part of the reason why these statistics look impressive is that the spread of the new technology took place mainly in this period. Before then this form of computer technology was not widely available, and, even if it was, the cost was in most cases prohibitive. By now most households in the developed world will have become equipped with CD-ROM devices and will have subscribed to an on-line service, either for domestic or for professional use. After the 'big bang' of this period, increases in market figures will stop being so dramatic. However, multimedia products will still occupy a substantial part of the market. People who have already bought the relevant equipment will become regular clients of the technology industry.

Apart from the trends in technology and information culture, law is bound to play one of the most important roles in the area. The obvious regime for the protection of these works is intellectual property. Works which possess any kind of creativity, originality and intellectual effort come within the scope of the national intellectual property laws and international treaties in this area. At some time in the past the law, apart from regulating the social and technological evolutions that had already

<sup>1</sup> See G. Vercken, *Guide pratique du droit d'auteur pour les producteurs de multimédia*, commissioned by the European Communities, DG XIII (Translic) from AIDAA, 1994, at 16ff.

<sup>2</sup> M. Radcliffe, 'Legal issues in new media: multimedia for publishers' in D. Campbell and S. Cotter (eds.), *International intellectual property law. New developments*, J. Wiley & Sons, Chichester, 1995, at 181.

taken place, also had an educative role, foreseeing developments and problems and introducing legal solutions even before the occurrence of such problems. Nowadays, it is evident that the law has long been left behind, especially in the area of technology. That is partly due to the fact that lawyers are not always so familiar with technical issues, much less high-tech issues, and that they prefer those kinds of problems to find their natural solutions in their natural environment. It seems in this sense that as well as the natural law in legal history and theory, there may also be a natural law in the self-rescuing sense in technology. Later in this book, we will see that perhaps this is not always very far from the truth.

Although multimedia products are of such great economic importance, there is no direct legislation to protect them. That, of course, does not mean that there is no protection whatsoever in relation to these products. The protection afforded to them is essentially an amalgam of the existing regimes of protection for other similar intellectual property works, and they are the subject of protection in other branches of law, such as contract and tort, etc. There is also some part of the literature which claims that in fact no differentiation is to be found in terms of protection between the traditional categories of intellectual property works and the new technology products. Yet many initiatives have taken place on both a national and an international level, not directly relating to multimedia products, but to digital rights and rights in databases. Here, and especially in the recent EU Directive on databases, the introduction along with copyright protection of a *sui generis* regime of protection for compilations of data is indicative of the need for separate treatment of the intellectual property products of the new generation.

With regard to intellectual property the regime of protection which seems more appropriate for multimedia works is that of copyright protection. Multimedia works, though sometimes functional and utilitarian, are in most cases considered to be works within the scope of the Berne Convention and therefore of most of the national laws of states. Moreover, there are only rare cases where they can also be covered by other regimes, for example patent protection. We will consider this possibility in section 1.3.

In the course of analysing the copyright protection of multimedia products we will examine issues such as the legal definition of multimedia products, their regime of protection under current national, European and international laws, clearing rights in contents and competition issues. We will also propose the most convenient solutions from the point of view of the author.

Before we get into the main body of this book, it is important to make clear that we will deal with multimedia products essentially from the point

of view of copyright. The fact that we refer to them more as products and less as works might already look peculiar. This, however, accords with the latest changes in the area of intellectual property. The immediate question is whether 'works' and 'products' are interchangeable concepts. In general they are not, but in this book it is considered that they are by reason of the fact that intellectual property today encompasses works in which the functional aspect is prevalent rather than the creative one. In such a situation the concept of product rather than work is more appropriate. But this is not the main reason since in order for a work to qualify as such, it has also to come within the scope of the definition. If the work is merely of a functional and utilitarian nature this definition is bound not to cover it, apart from certain cases in common law countries. The essential reason for calling multimedia works 'products' is the fact that the actual focus of their creation is economic. Multimedia works acquire their significance partly from their creation and the new methods of communication they represent but substantially more from the market value they command. They are basically commodities and are treated as such. Any intellectual property right protection is aiming at this target. This is, of course, not very different from the existing traditional intellectual property works. But in the latter case their market value is less considerable than that of multimedia products. Perhaps less relevant are rights other than economic rights. Because of this new intellectual property platform immediate legal solutions are needed.

The key approach of this book is less to describe what the situation is at present, rather more to look into the future, albeit short term. Are the existing intellectual property laws capable of accommodating multimedia products? If not, what is required: transformations in the existing regimes of protection or *sui generis* legislation? How well has copyright survived the test of time and technology? Where are we heading in this respect if present and forthcoming developments in the area are bound to change the face of copyright?

## 1.2 HISTORY OF COPYRIGHT AND REDEFINITION OF THE TERM

Intellectual property provides a clear case where law follows developments. Its function is post-regulative rather than one forming the rights and obligations in relation to intellectual property products. The history of technological change shows that new forms of expression have invariably led to new types of creative works.<sup>3</sup> The invention of the printing

<sup>3</sup> M. Turner, 'Do the old legal categories fit the new multimedia products? A multimedia CD-ROM as a film' [1995] 3 *EIPR* 107.

press technique by Gutenberg was an essential push to the emergence of copyright law. Then the photograph, film, radio and television appeared.<sup>4</sup> It took quite some time for these forms of expression to be considered media in their own right, with an independent regime of protection adjusted to their own needs. It was not until 1956, for example, that a separate regime for protecting films was introduced into the UK's Copyright Act.

Today we are facing the same process of inventing multimedia. We have both the general feeling that we know what it is all about and the strange feeling that we are still not completely familiar with the full technology and reality. This is due to the following reasons. First, the more multimedia products enter our lives, the more we familiarise ourselves with them and gain the feeling we understand them. Secondly, it is too early to trace and understand the full set of problems multimedia products are bound to present. In this respect we are blinded by our past. We can only appreciate things and problems with the knowledge we possess, which is inevitably restricted to the problems traditional intellectual property works present. Foreseeing the future with regard to this is not easy. The technology progresses so quickly that any solutions are outdated before people even become familiar with them.

Existing intellectual property rights present an advantage. They are established worldwide rights, long practised and well known. Lawyers can deal more easily with a situation where they know both the ally and the enemy. It is hard to admit that new rights are called for because any new right or development creates uncertainty and awkward situations.

All the above explain the different reactions of people to new technologies, depending on which angle they view them from. 'Book people see talking books. TV people see interactive game shows. Movie people see either choose-your-own-ending movies or a way to film some cut scenes or set-ups and slap in an arcade action sequence.'<sup>5</sup> Yet, the technological evolution has already called, if not for *sui generis* solutions in the area of intellectual property law, then at least for substantial transformations.

It is evident that, since copyright is supposed to be the intellectual property law closest to multimedia products, its stretching to include new technologies has touched on its original concept. Copyright works

<sup>4</sup> At first people tried to fit the new phenomena into existing categories. For example, films were treated as talking books and sets of pictures. They were only given protection in their own right once their commercial exploitation became sizeable enough to demand proper protection to avoid losses from copying.

<sup>5</sup> R. Lehrberg, 'Blind men and the elephant: what does multimedia really mean?', ICC Conference on *New technologies and their influence on international audiovisual law*, Cannes, 1994, Proceedings, at 9.

were always held to be works which involved some kind of creativity (mostly for continental law countries) or some kind of original effort (for common law countries). Copyright, as a substantial and concrete form of protection, has been stretched to cover a large variety of works which were not originally considered as coming explicitly within the scope of international conventions and national legislation. A recent example is databases, which have up to now only been explicitly covered by the TRIPs Agreement and recently by the WIPO Copyright Treaty. By using copyright protection to protect works other than the ones which were originally considered to be literary or artistic, the essential components of copyright have been stretched.

One of the ways in which copyright has been revised is by the inclusion of new works which are at most works of a functional and utilitarian nature and by reason of this particular nature involve only a low degree of originality, if any. Secondly, until recently any work required some kind of fixation on a material support with a degree of permanence in order to be protected. Now, however, copyright protection has been extended to intellectual property services or to works which are not fixed or not fixed permanently on a material support, as for example the memory of a computer. It also covers works with a life of some seconds while being transmitted through the cable of a network. These changes have placed the importance on the work as such, as an immaterial good, and less on what it looks like. Moreover, the works which copyright has been extended to cover are not the outcome of the effort of a single person or of a limited number of persons. Usually there is a sizeable team of persons involved in their production. Thus, there are also many individual works included in such a work. These works are regarded as information rather than the artistic creation or expression of the personality of the authors. The aim of the new intellectual property works is not to entertain an audience. It is more to educate an audience in the sense of informing it. These works are essentially of an informative nature with the direct aim of being comprehensive, efficient and functional, rather than original, different or new.

Thus works of this kind are less often considered works in the original sense of the word. Technology sets its own rules. These kinds of works are approached from their commercial point of view. They are commoditised and mainly called products. It is not only the technological reality, however, that makes the rules. There is a more immediate force leading technology. This is the market reality. No matter how important something may be from an educational or technological point of view, if it cannot be marketed successfully, or if there is no market at all for it, it is bound not to survive. Multimedia products are important and pose

important questions of law because of their market success and their influence on communications. Of course, what we are almost saying is that the market successfully accommodates only useful and worthy products, but because the market can be somewhat unpredictable and does not respond to such simplistic evaluations this cannot be the case.

Thus, the notion of copyright has been partially adapted to the new reality. In common law countries such as the United Kingdom there has been no great transformation. Copyright there was rather more economically orientated from the start. The degree of originality is also very low, involving only skill and labour. In other words, works which are not merely copied and involve the previously mentioned prerequisites are copyrightable. The common law countries' approach is a limited one compared to the rest of Europe where copyright has become increasingly market orientated and any alleged moral right infringement is decided on the grounds of the types of work involved. Reasons to justify strong copyright protection are sometimes lacking.

If we are to describe the latest trends in copyright we could say that it has become more utilitarian in nature. The originality criterion appears to have been lowered. The forms seem to have dematerialised. Information has taken the place of works and the author's role has been redefined. It is no longer purely creative. But even in the original creative model, the author's role should not be allowed to impede the evolution that is taking place in this area. Either way that evolution should be accommodated, albeit not automatically. As with any transformation, it has many repercussions. The moral rights of authors will be revised and competition law will be relaxed to allow co-operation of industries which would be forbidden in another context. Clearing rights techniques will call for collective administration and remuneration, and the rightholders will essentially be rewarded through the payment of a lump sum. How far the evolution will go is unpredictable. For example, will compulsory licences be introduced? Will multimedia products come within the scope of copyright with the same term of protection and the same bundle of exclusive rights or will a *sui generis* regime of protection be introduced? How much are we to expect from intellectual property law? As a substantial part of the literature suggests, where technology sets problems it is technology in most cases which has to find the solutions as well.<sup>6</sup> Yet, the imposition or facilitation of these solutions might be an issue for intellectual property law.

<sup>6</sup> C. Clark, 'The answer to the machine is the machine' in B. Hugenholtz (ed.), *The future of copyright in a digital environment*, Kluwer Law International, The Hague, London, Boston, 1996, at 139.

### 1.3 THE CHOICE BETWEEN PATENT AND COPYRIGHT PROTECTION

If we are to limit their protection to the ambit of intellectual property protection, multimedia works, by reason of their hybrid nature, can form the subject matter of protection of many intellectual property rights. The categorisation and the choice of regime of protection are subject to the following issues: first, it depends which part of a multimedia product we are seeking to protect, and secondly, it depends on the structure and the whole manufacturing process of this particular product. In other words, it depends on whether this product is linked and in what sense it is linked to its operating computer program and whether it meets the requirements of more than one set of intellectual property rights.

For the purposes of this book we will make the distinction between the various parts of a multimedia product and we will distinguish any rights on the operating software of this product from the multimedia work itself. The multimedia work will be defined as a compilation of pre-existing or commissioned works or other data. We will also point out that this kind of distinction, though logical and coherent at this stage of technological evolution, cannot be considered to be watertight for the future. If more and more technical devices incorporate more and more technical functions, it is very likely that we will end up with comprehensive regimes of protection for the full device, whether this is a computer program or anything else.

As intellectual property stands today, both at national and international level, it is essentially a bipolar system. This means it is divided into the two broad categories of industrial property (mainly regulated by the Paris Convention for the Protection of Industrial Property, 1883) and literary and artistic property (mainly regulated by the Berne Convention for the Protection of Literary and Artistic Works, 1886).<sup>7</sup> The dominant paradigms in these two regimes of protection are patents and copyright respectively.

Although the rationales behind these two intellectual property rights seem at first glance diametrically opposite, serving different functions and therefore bringing with them different economic and social premises in relation to the works protected, more and more deviant cases arise which blur the borderline between industrial property protection and copyright. This underlines the need for a different regulation (which is neither patent

<sup>7</sup> TRIPs (1994), in the context of GATT and the World Trade Organisation, also plays a very important regulative role both for industrial and for literary and artistic property, as does the WIPO Copyright Treaty (hereinafter WCT) which essentially brings international copyright up to date with recent technological developments.

nor copyright) or a mixed regulation (which is both patent and copyright) or a hybrid regulation (which generates a *sui generis* right encompassing basic characteristics of both types of protection). These products are almost entirely new technology products which combine technical devices with traditional design of works, as identified in the Berne Convention. The debate as to whether certain kinds of new technology products come within the scope of one or other regime of protection, or if they require a *sui generis* treatment, is also not a new one. It essentially started when the discussion about the protection of computer programs began in the 1980s.<sup>8</sup>

If we are first to examine the issue of how close multimedia products are to patents, we have to see to what extent multimedia meets the criteria for qualifying for this regime of protection. TRIPs, which clarified and improved upon the Paris Convention in respect of the criteria for patentability, provides that an invention is patentable when it is new, involves an inventive step and is capable of industrial application.<sup>9</sup> In relation to a multimedia work, as long as we are dealing with the compilation of information as such, irrespective of the technical devices that have manufactured it and that run it, there is nothing to advocate inventive step or industrial application. Even the notion of an invention itself is non-existent in this case. Invention is linked to the idea of a technical device. The multimedia work is not a device but a work and from this point of view it seems to come closer to the definition of the specific subject matter in the Berne Convention.

Even if we were to consider the multimedia work in conjunction with its operating program, the software tool that runs the application, and if we were to consider that the latter is the dominant part which has to be protected and whose protection covers the protection of the whole compilation, the multimedia work would still not, in most cases, qualify for patentability. TRIPs, in article 10.1, provides that computer programs, whether in source or object form, shall be protected as literary works under the Berne Convention.<sup>10</sup> This, of course, does not exclude cases where computer programs can constitute the subject matter of

<sup>8</sup> See also J. Reichman, 'Legal hybrids between the patent and copyright paradigms' (1994) 94 *Col LR* 2432.

<sup>9</sup> Art. 27(1). A footnote in this article indicates that '[f]or the purposes of this article, the terms "inventive step" and "capable of industrial application" may be deemed by a Member to be synonymous with the terms "non-obvious" and "useful" respectively'. Thus, the wording of TRIPs covers also the wording of the requirements of the US patent law which provide for novelty, utility and non-obviousness. 35 USC §§ 101-3, 271 (1988).

<sup>10</sup> See also the European Patent Convention at art. 52.2c, s. 1(2)(c) of the English Patents Act 1977 and art. 5 of the WCT.

patent protection. However, these cases have to be a computer program and something else which goes beyond the computer program itself. A possible example of such a case would be a computer-program-related invention.<sup>11</sup>

Applying this train of thought to multimedia, it is perhaps clear up to now that even the assimilation of the multimedia work into its operating software would not be enough to make it qualify for a patent protection. But if what we are dealing with is an invention run by some kind of software which functions interactively, or which has a multimedia application closely relating to the invention as one of its functions, then the whole invention is very likely to qualify as a patent. However, if we can still distinguish the multimedia work as an independent part of the invention, holding its separate and distinctive value, then this multimedia work is not patentable. Although these cases may at present look extreme and rather unlikely, there is nothing to prevent inventors in the future from coming up with such kinds of inventions, especially in the area of robotics. The rule at present though remains that multimedia products, as well as software, are outside the scope of patents.

The area which seems to fit better with multimedia is copyright. Multimedia products do not come explicitly within the scope of works under any international or national legal instrument relating to copyright protection. This, however, is not due to the fact that they constitute subject matter which is excluded from the scope of copyright. It is rather due to the fact that, firstly, this kind of work could not have been foreseen at the time that most international instruments were drafted, and, secondly, it is too novel for the legal literature to decide where to put it. Thus, any legal solution relating to multimedia is necessarily the outcome of treatment analogous to existing regimes of protection.

The notion of a 'work' under the Berne Convention is quite loose. It includes a large number of works which, if they possess some kind of originality and are expressed in one or other form, qualify for copyright protection as literary and artistic works. Copyright seems to be the most appropriate regime of protection for many reasons. First, although multimedia works are not as such protected by copyright they come very close to traditional copyrightable works such as compilations, films, computer programs, etc. Secondly, if multimedia works possess something it is more likely to be originality rather than any kind of novelty or inventive step. Although they are meant to be marketed, they are not meant to be industrially applicable and confer on their rightholder any kind of

<sup>11</sup> E.g. *IBM's application* [1999] RPC 563. See C. Reed and J. Angel (eds.), *Computer law*, 4th edn, Blackstone Press Ltd, London, 2000, at 115ff.

absolute exclusive patent-like rights which will justify the investment that has to be undertaken for their creation.

The economic and social premises which underlie patents are essentially different from those relating to copyright. The former confer a kind of protection on the rightholder that will permit him, for a limited period in time, to exploit exclusively not only the functional expression of his invention but also the idea itself, so as to have the incentive to produce it commercially and possibly invent further devices in the future. From this point of view, patent protection, though shorter in time, is stronger. This is also the very reason why many companies producing new technology products strive for the patentability of their products more than for any kind of copyright protection. Copyright is by definition a looser right, as it aims to prevent the copying of the whole or a substantial part of the work. The idea as such is not protected; only its expression is protected. In the end the idea itself can be as precious as its expression in the market of new technology products, especially if the products at issue come close enough to functional and utilitarian works possessing the minimum requirements for copyright protection.

An issue which arises here is how much the scope of copyright can be extended to accommodate new technology works, especially when these works depart substantially from copyright's traditional requirements. First, the notion of dematerialisation outweighs any notion of fixation, especially in permanent form. Secondly, the originality criterion is defined on the grounds of structure and arrangement rather than of the originality of the work itself. We mentioned that structure and arrangement are also subject to the use and presentation by the user of the compilation on his screen, an issue which points to how absurd and ill-defined such a criterion can sometimes be. Moreover, the importance of the originality criterion as such comes substantially down the list. The more the new works involve data and the more they involve it in a comprehensive way, the more these works become functional and utilitarian. The problem is where are we to draw the line of originality in order to accommodate these products? We run the risk of either affording more protection than is needed to certain works, or not affording adequate protection to others. Even the design of a *sui generis* regime presents difficulties in so far as it derogates from the common established and known principles of the traditional intellectual property laws. But it is also a decision of policy whether we will continue to stretch a notion such as that of copyright so far as to, in fact, revise it. The question remains as to what extent this is advisable. Multimedia constitutes a characteristic example of such a situation. This book will consider to what degree the existing legislation is capable of providing such products with an adequate level of protection.

## 1.4 NOTIONS RELATING TO MULTIMEDIA

As will be explained in more detail in chapter 2, multimedia is held to be a term which includes anything from enterprises to networks and means of distribution, from sources to material supports and from products to services. This, however, is likely to cause confusion not only about what we mean when we refer to the notion of multimedia, but also to what degree this notion is the same as or related to notions such as the Internet, the information superhighway, virtual reality, hypermedia, hypertext and so on. For the sake of clarification it is perhaps advisable to define the scope of these terms.

The information superhighway and the Internet are somewhat interchangeable terms. An information superhighway is an international digital network into which interactive multimedia networks serving the interests and needs of multiple users and services are integrated. The Internet is today's version of the information superhighway. It is an (unstructured) interconnection of a vast unknown number of computers worldwide. It is in fact a network, which is accessible by any computer linked to it at any place or time. The Internet was initially set up in 1969 as a system of networked computers (originally four) of the US Department of Defence, known as ARPANET. It was designed in such a way so as to withstand the loss of numerous key computers and interconnections and still function in the event of war. The Internet can serve today as a means of distributing multimedia services, in the same sense as any other on-line distribution service.

One form of distribution of multimedia is virtual reality. Virtual reality is a 3-D multimedia product or service. It is a way of enabling users to interact in real time with a computer-simulated environment by entering this environment with their own human senses by means of special equipment, i.e. gloves, helmets, glasses, etc. A computer is used to map their body and senses directly into the digital world. Virtual reality, though still at a primitive stage, presents the most advanced form of multimedia applications and is used in entertainment, health and science. The creation of 3-D computer-generated environments is limited only by the multimedia software designed to generate them and the computer processing power available to bring them to life.<sup>12</sup> Virtual reality requires immensely fast and powerful computing and apparently also poses metaphysical questions in addition to questions of technology and law.

Hypertext is an underlying structure in multimedia design. It is an 'interlinkedness' between different elements of information which allows

<sup>12</sup> For further details see T. Feldman, *Multimedia in the 1990s. BNB Research Fund Report*, British Library, 1991.

the users to follow pathways in order to access that information, in the order in which they wish to do so. 'Hypertext' makes this non-sequential approach to information possible by offering the very connections needed to jump instantly to other locations in a database or at any other site where one finds related information of interest. The multimedia version of this technical concept is called hypermedia. Here the information elements may be text, sound, images or a combination of the three. Hypermedia really amounts to an environment of interconnected multimedia elements. However, in practice the terms 'hypertext' and 'hypermedia' are used interchangeably.

Common to all the above notions, whether these are underlying multimedia technologies or distribution systems, is that they are only able to function in a digital environment, that they combine more than one different kind of expression and that they provide interactive services. A lot more could be said about technical notions and technology. It is submitted though that this brief outline of the environment in which multimedia operates is sufficient for the purposes of this book.