Intellectual Property Protection for Video Games
A View from the European Union

F. Willem Grosheide, Herwin Roerdink
and Karianne Thomas*

Abstract: Video games are fast becoming one of the most popular media of choice. The global market for video games is still expected to grow substantially in the upcoming years. The legal framework for protection of video games becomes more and more significant. This paper addresses a number of the intellectual property law aspects of the protection of digital video games in light of the governing EU regulation and case law. It discusses not only copyright protection of computer programs (software), databases and audiovisual or cinematographic works, but also patents on novel aspects of a video game product as well as trademark protection. The paper concludes with some observations on the enforcement of intellectual property rights in the EU.

1. Introduction
A video game is usually defined as an electronic or computerized game played by manipulating images on a video display or television screen. It is understood, that this kind of gaming can be done both offline and online. As a consequence of the referred to broad definition of a video game, within its reach fall both games, such as chess or scrabble, which were developed for and can be played in the real world as well as the digital world (off line as well as on line), and games, such as Pacman or Call of Duty, which are developed for and can be played only in a digital environment.

Since the first category of video games, as seen from an intellectual property law perspective, has no inherently specific characteristics, whereas the second category of video games has many of them, in this contribution the focus will be on that last category. Within that focus the attention will be addressed mainly to the intellectual property aspects of the developing and the playing of digital video games, i.e. copyright law, patent law, trademark law or a combination thereof. All this is done in light of the governing EU regulation and case law.

It follows that outside the picture falls a wide variety of other issues related to video games. To mention only some: developing video games by autonomous intelligent systems, preservation of video games in view of future uses, infringement of one or more intellectual property rights involved in a video game, insuring video games against intellectual property risks, potential harm related to addiction, aggression or lowered school performance of the youth, promotional games of chance, virtual money and online gambling, liability issues for instance with respect to video games used for business purposes such

* F. Willem Grosheide is emeritus professor of intellectual property law at Utrecht University and counsel at the Van Doorne law firm in Amsterdam; Herwin Roerdink and Karianne Thomas are both IP lawyers at the Van Doorne law firm.


Taking account of the fact, that, in practice, the terms electronic game and digital game are used interchangeable, in this contribution the term digital game will be the standard term, regardless of whether the gaming is done off line or on line. The term computerized game will be used in those instances that a video game is played by means of a computer. Video games are part of the larger category of digital media, meaning any type of sound and/or visual media that is in a digital format for the convenience and entertainment of consumers. See for an account of the terms virtual world or virtual space as distinguished from or opposed to the terms actual or real world and actual space or real space Lesley Gallagher, The Cultural Geographies of Videogames, www.lesleygallacher.com/Videogames.pdf, arguing that virtual worlds are themselves real worlds which are brought into being through material practices and technologies (video games as cultural geographies).

2 With regard to the first category of video games intellectual property law comes into play in relation to the digitalization of such a game, i.e. in relation to its driving software or supporting carrier, but not in relation to the game itself.
as simulation games. This includes accompanying agreements, such as those with respect to the licensing in of third party rights as well as the licensing out of the final product.

The remainder of this contribution is structured as follows: Section 2, Video Games Characteristics, describes the phenomenon of a video game more in detail, besides placing it in the actual cultural and economic context of the EU. Section 3, EU Legal Environment, offers an overview of applicable EU law and of the way in which it is implemented in the Netherlands. Section 4, IP Aspects of Video Games, this comes to the heart of the matter: it analyses in what way copyright law, patent law and trademark law and combinations thereof determine the legal status and functioning of video games. This contribution ends with Section 5 which contains some Concluding Observations and a few remarks on the enforcement of IP rights in the EU.

2. Video Games Characteristics

2.1 General

For more than thirty years now video games are amongst us. At the start being a new form of entertainment for the youth only, in no time it has grown into a medium enjoyed and used for various purposes by consumers of all ages. So it may be said that video games are fast becoming one of the most popular media of choice. Obviously, the development in video gaming is dependent on and driven by the development in digital technology. Three developments are of main importance in this respect: the introduction of new consoles, the growing use of personal computers for internet-access, and the extension of the market for handheld games (mobile phones, smart phones and tablets).

With regard to the actual economic impact of the video games industry a 2010-report by the EU, made for the purpose of estimating the video game software industry, its market potential, its value, chain organization and business models and its current line of development, so as to outline major emerging technologies and to investigate their disruptive potential, some of the noteworthy findings are the following. Producing of video games already forming a significant and growing share of the media and content industries, in 2009 France, Germany, Italy, Spain and the UK accounted for US $ 15.2 billion dollars which is equivalent to nearly 30% of the global video games market. Within this market the console game segment is the biggest component of the EU market and is now eight times the size of media and entertainment. The related cultural impact of video games production as part of the creative industries has been analyzed by the EC in 2012 in its Communication Promoting cultural and creative sectors for growth and jobs in the EU.

2.2 Platforms

A gaming platform generally is the hardware, mostly in combination with the software, on which the video game is performed. This may well be a specific gaming computer (console), a mobile phone, smart phone or tablet.

---


5 List of video game platforms and systems www.giantbomb.com/platforms.
Goals and Classifications

Video games may have different goals. A general differentiation is:

- Entertainment games: videogames played for mere pleasure of one sort (e.g. chess playing)
- Serious games or educational games: videogames primarily designed to convey information or learning experience, meant to educate oneself (e.g. training certain skills)
- Applied games: videogames aiming at spreading a message (e.g. advertising)
- Social games: videogames directed towards a certain social interaction (e.g. problem solving).

3. EU Legal Environment

3.1 General

For a start, it seems appropriate to recall that today’s Europe is divided into various supra-national communities, each of which having its own form of harmonized or unified legal regime. It is understood, that harmonization and unification refer to different levels of legal integration. In case of harmonization the community in question limits itself to harmonizing of the respective national laws, whereas by an act of unification a community creates its own legal regime.

First and foremost come the Council of Europe (CoE) and the European Convention on Human Rights (ECHR), governing a variety of legal issues in relation to fundamental rights. The ECHR forms the basis of the CoE, consisting of 47 member states.

Next should be mentioned the European Union (EU), consisting of 27 member states. The EU forms an economic and political union which has bound itself to the ECHR. Its legal basis is composed of the following treaties: the Treaty on European Union, the Treaty on the Functioning of the European Union, the EU Charter of Fundamental Rights and the Treaty of Lisbon. Within this cooperative framework the EU has developed a single market through a standardized system of Regulations and Directives. Regulations have direct legal effect within the member states; Directives have legal effect through implementation into national law. As will be seen later in this section both Regulations and Directives play a prominent role in EU intellectual property law.

With regard to the integration of European law, finally reference should be made to the European Patent Organization (EPO) and the European Patent Convention (EPC). The EPO consists of 37 member states as well as a number of states recognizing European patents upon request. The EPC is a form of issue-specific regulation.

It should be stressed, that the indicated different European legal regimes do not overlap the one with the other, e.g. not all member states of the EPO also being member states of the EU. But when in this contribution reference is made to the EU, this designation refers — if not otherwise stated — only to EU law in the strict sense of the word.

3.2 Intellectual Property Law

Speaking of EU intellectual property law, it is in place to begin with a caveat. This warning holds that in the domain of intellectual property law a distinction can be made between EU countries following the civil law tradition and those that follow the common law tradition. This distinction is of particular interest with regard to copyright law, since here the respective traditions apply different concepts, e.g. using a different originality-criterion for the protection of works of authorship. However, it is commonly hold, that the EU legislator as well as the European Court of Justice (ECJ) follow the continental approach.

---

In addition, it is worth noting that in the domain of intellectual property law the EU has reached an advanced system of legal integration, either by harmonization or unification, through Regulations and Directives.\(^7\)

For present purposes, it suffices to summarize the respective legal regimes under scrutiny here.

### 3.3 Copyright law

Harmonization is the keyword with respect to EU copyright law. That is: the EU has not introduced a Community-wide copyright. Based on the principle of territoriality, each of the EU member states has its own national copyright law. As a consequence, the EU, not having a direct competence in the field of copyright law, produces — within the framework of international law such as the Berne Convention 1886 (BC), the TRIPS Agreement 1994 (TRIPS A) and the WIPO Copyright Treaty 1996 (WCT) — Directives ex the provisions of the EC Treaty which enable it to coordinate national laws with regard to the free movement of goods and services.\(^8\) The rationale for this harmonization is in the words of Ulrich that strict observance of the difference of form between harmonization and unification, and abstention from any measure of unification are matters of direct concern for Community law.\(^9\) He continues as follows: Indeed, whatever importance the establishment of unitary, Community-wide intellectual property rights may really have for economic integration, if done with respect to copyright law it would create a new problem of competence, if not altogether one of the mode of integration. The reason is that due to the acquisition of copyright protection by the act of creation, i.e. without any requirements of registration but simply by operation of the law (ex lege), unification of copyright protection cannot, as in the areas of industrial property protection, be based on the principle of optionality. (...) Such protection would be more than a better alternative or substitute to national copyright, it would simply supersede it. Ultimately, therefore, allowing copyright unification (...) would(...) empty national copyright of all its substance, and (...) relegate it to a (...) default position.\(^10\)

The existing acquis communautaire in the field of copyright law primarily consists of eight Directives. For present purposes it suffices to mention only the Computer Programs Directive 1991 (CPD), the Databases Directive 1996 (DbD), the Information Society Directive (InfoSocD), and the Orphan Works Directive (OWD).\(^11\) It needs to be stressed with an eye on what follows in Section IV, that a most central part of copyright law which is based in the civil law tradition: the protection of moral rights or personality rights, is not harmonized under EU law.

The CPD is intended to remove differences between the laws of the member states with regard to the protection of computer programs. Later Directives were meant to operate without prejudice to the CPD but the gradual legislative activity of the EU has produced seemingly arbitrary inconsistencies in levels of protection with regard to various subject matters. This has practical consequences when such various subject matters are combined in the same phenomenon as in the case of video games. Article 1 CPD obliges the member states to protect a computer program by copyright law (any other legal regime excluded) as literary works, following the regime of prerogatives and exclusions of the BC. The CPD offers no definition of a computer program, but the Explanatory Memorandum describes it as a set of instructions the purpose of which is to cause an information processing device, a computer, to perform its functions. This includes the preparatory design material. Such a computer program shall be protected only if it is original in the sense that it is the author’s own intellectual creation (Art. 1(3)). By doing so, the CPD has harmonized the originality criterion for software. In its recent SAS-decision about the copyrightability of constituting elements of computer programs, the ECJ, interpreting Article 2(a) InfoSocD, decided that the functionality of a computer program, the programming language, and the format of data files are not a form of expression of that program and therefore not protected by copyright.\(^12\) The author of a computer program shall be the natural person or group of natural persons


\(^9\) Ulrich, note 9, p. 37.

\(^10\) Ibidem.


\(^12\) ECJ 2 May 2012, SAS Institute v. WPL, curia europa.eu (SAS).
who has created the software or, where national law permits this, the legal person designated as the right owner by that law (Article 2). Based on article 7 Dutch Copyright Act, where labor carried out by an employee consists in making certain works, the employer shall be deemed the author thereof.

The DbD comes next. Following upon court decisions in the Netherlands and the United States by which databases were excluded from copyright protection (mere economic investment), the DbD has introduced a two-tier protective regime for electronic as well as non-electronic databases. The Member states are bound to protect databases by copyright law as intellectual creations, and by a sui generis right (database right) for databases in which the producer of it has substantially invested. The sui generis right in part can compensate the EU member states, which belong to the copyright tradition. Both regimes may apply cumulatively if the respective prerequisites are met. Article 1 DbD, regarding its scope, provides that it concerns databases (1) in any form and defines a database as (2) a collection of works of authorship, independent data or other materials, arranged in a systematic or methodical way and individually accessible by electronic or other means. According to Article 3 such databases are protected by copyright if they by reason of the selection or arrangement of their contents, constitute the author's own intellectual creation. In providing so, the DbD harmonizes the originality criterion for original databases, which criterion prior to its introduction, differed between the member states due to the differences between the previously indicated copyright traditions within the EU. Article 3(3) excludes from protection the content itself. Article 7, regarding the sui generis right, provides for a right for the maker of a database which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents. Right owner is the producer of a database.

The InFoSocD ought to be summarized in particular. This Directive is meant to implement two international treaties of 1996: the WCT and the WIPO Performances and Phonograms Treaty (WPPT). Obviously, the Directive goes well beyond the obligations of the two treaties in many respects. Only the first one is of interest here. The Preamble of the InFoSocD is illustrative for its scope. It considers amongst other things that (c)opyright and related rights play an important role as they protect and stimulate the development and marketing of new products and services and the creation and exploitation of their creative content, and that, while no new concepts for the protection of intellectual property are needed, the current law on copyright and related rights should be adapted and supplemented to respond adequately to economic realities such as new forms of exploitation.

As far as the substantive law issues are concerned, it is noteworthy that the Directive focuses on rights and exceptions, introducing definitions of several technical terms. As a consequence of its adherence to both the TRIPS A and the WCT copyright protection under the InFoSocD extends to expressions and not to ideas, procedures, methods of operation or mathematical concepts as such. The InFoSocD does not define the term right holder as it is used in various of its articles, making it questionable whether this term next to for instance the term authors of works includes licensees of the same. Even more remarkable, the InFoSocD does not define the term work of authorship. In light of this, it came as a surprise that the ECJ in its Infopaq-decision of 2009, according to most commentators has unified the criterion which decides upon the protectability of works of authorship (originality criterion in relation to the work concept). For this interpretation these commentators make reference to the paragraphs 35-38 of the decision in which the ECJ decided that from sections 4, 9-11 and 20 of the Preamble to the InfoSocD referring to the CPD, the Copyright Duration Directive (CDD) and the DbD, which are linked with Art. 2(5) and (8) of the BC, it would appear that copyright in the sense of Art. 2(a) InfoSocD is liable to apply only in relation to a subject matter which is original in the sense that it is its author’s own intellectual creation (paragraph 37). Elaborating on this, it was further decided that parts of a work are not to be treated any differently to a work in its entirety. Since its Infopaq-decision this originality criterion has been applied consequently by

---

the ECJ. If harmonization of the originality criterion indeed was meant, as a consequence thereof the courts in the EU member states, such as the Dutch courts, are bound to follow the ECJ’s rulings when deciding upon the protectability of a work of authorship.15

Finally, some should be said about the OWD. Orphan works are works covered by copyright or related rights whose right holders cannot be identified or found. As a consequence, it is not possible to obtain the consent of the relevant right holders to the use of such works. This is an inconvenience for cultural institutions which are unable to use or display these works. The OWD is meant to facilitate such use and display, by way of introducing an exception to the obligation of certain users to ask permission for their intended uses. However, the OWD’s scope is limited, both in relation to the types of works that it covers and with regard to the kind of institutions that will be permitted to use or display orphan works. According to Article 1 OWD the works to which the OWD applies are: written works, cinematographic/audio-visual works and phonograms contained in the collections of publicly accessible establishments; and cinematographic/audio-visual works and phonograms produced by publicly-available broadcasting organizations up to 31 December 2002, either published or not published. The relevant institutions are, according to the same provision, publicly accessible libraries, educational establishments and museums, as well as archives, film or audio heritage institutions and public-service broadcasting organizations, established in the Member States. With reference to Section II, obviously it may well be that a cultural heritage or museum wants to produce a video game that falls into the realm of the OWD.

Last but not least, it should be observed that part of the acquis communautaire is the principle of Community-wide exhaustion of the exclusive right to distribute works in material form after they are first placed on the market, established by the ECJ in the Deutsche Grammophon- and the Musik-Vertrieb Membran-decisions.16 With respect to the exploitation of video games in the EU the recent UsedSoft v. Oracle-decision of the ECJ is of importance.17 The case concerns the licensing of software by Oracle. Under the license granted by Oracle, licensees download the software from Oracle’s website. The licensee is authorized to store that computer program permanently on a server and allow up to 25 other users to access it, downloading it onto their workstations. Oracle argued that UsedSoft’s business breached the terms of its license, as the license contractually restricts the licensee from transferring its rights to a third party, and that the provisions in the CPD did not apply to downloads.

The decision answers three questions which the German Federal Supreme Court had referred to the ECJ. First, it was held that the exhaustion of the distribution right was not limited to cases where the right holder (or someone else with his consent) distributes a copy of a computer program on a tangible medium and permits the use for an unlimited time. Second, equalizing a license agreement with a sales agreement under the factual conditions of the case, the ECJ ruled (paragraph 63) that (i) to limit the application (…) of the principle of the exhaustion of the distribution right (…) solely to copies of computer programs that are sold on a material medium would allow the copyright holder to control the resale of copies downloaded from the internet and to demand further remuneration on the occasion of each new sale, even though the first sale of the copy had already enabled the right holder to obtain an appropriate remuneration. Such a restriction of the resale of copies of computer programs downloaded from the internet would go beyond what is necessary to safeguard the specific subject-matter of the intellectual property concerned. Thirdly, the ECJ held that, as long as the first licensee c.q. acquirer deletes the software from its computer systems, it may transfer the right to make use of the software to a third party, while this third party may reinstall and even re-download the software. The Court argued that that the new download was covered by Article 5(1) InFoSoC and that the exhaustion of the distribution right had taken effect also in such a case.18

Speaking of Dutch copyright law, it suffices to stress that in the context of this contribution is of primordial importance that neither by any EC legislative act nor by any ECJ decision the work concept,

15 Such harmonization has been rejected by the English Court of Appeal in Newspaper Licensing Agency Ltd. V. Melwater Holding BV [2011] EWCA Civ 890 (Melwater).
18 Obviously, it was the ECJ’s aim to open the single market for transactions in second hand software. However, it is much debated in Dutch legal doctrine whether the ECJ, in light of the governing provisions of the respective Directives, was authorized to that aim to equalize a license agreement with a sales agreement, and to apply provisions which expressis verbis are drafted for the sale of software that is embodied in physical products, to digital transactions with respect to computer programs.
Intellectual Property Protection for Video Games: A View from the European Union

i.e. the determination of what subject matter can be protected by copyright law, has been harmonized. This leaves both the Dutch legislator and the Dutch courts free — the Dutch Copyright Act not containing an exhaustive list of protectable subject matter — in determining what categories of works may be protected. A good example of this is the protection by the Dutch Supreme Court of perfumes in its Lancôme v. Kecofa-decision.\(^\text{19}\) The Supreme Court ruled that the smell of a perfume if it represents a creative act, i.e. reflects originality, may be protected, even if the smell is only perceptible through the nose. In reaching this decision, the court first addressed whether the fleeting nature of perfume precludes copyright protection. The Supreme Court considered that while the scent itself is too fleeting and variable and dependent on the environment, to be protected by copyright law, material [liquid] that gives off the scent can be perceived through the senses and is sufficiently concrete and stable to be considered a ‘work’ under the [Dutch] Copyright Act. The court concluded that since the liquid satisfied the fixation requirement and the perfume was a creative composition, the perfume qualified as a work under the Dutch Copyright Act. The Supreme Court distinguished the scent of a perfume from its recipe or the liquid containing it, comparing the latter to the paper of a book, which is not subject matter of copyright, whereas the content of the book is. This distinction implies that a perfume that contains completely different ingredients but smells the same may be infringing, while a perfume with a similar formula but a different scent would not be. Interestingly, while France is the traditional home of fragrances, perfumes are not protected by copyright under French law.

### 3.4 Patent Law

EU patent law in the strict sense of the word does not exist, because so far the EU has not established a harmonized or unified patent regulation. As a consequence thereof, patent law within the EU is primarily national law. This is not to say that integrated Europe-wide patent law is completely absent. On the contrary, because since 1973 Europe knows of the already mentioned EPC, a multilateral treaty instituting the EPO and providing an autonomous legal system according to which European patents are granted.\(^\text{20}\) The EPC is a special agreement within the meaning of the Paris Convention 1883 (PC) and a regional patent treaty within the meaning of the Patent Cooperation Treaty 1970 (PCT). The term European patent refers to patents granted under the EPC. However, a European patent is not a unitary right but a group of independent nationally enforceable national patents. In each of the member states for which the European patent is granted, it has the effect of and is subject to the same conditions as a national patent granted by that state, unless otherwise provided in the EPC. Further, a European patent granted in one member state is effectively independent of the same European patent in each other member state, except for the opposition procedure. Applications for a European patent can be made by any natural or legal person.

With regard to substantive EPC patent law is most important the way in which it governs the patentability of inventions. To that aim Article 52(1) EPC provides: European patents shall be granted for any inventions, in all fields of technology, providing that they are new, involve an inventive step, and are susceptible of industrial application. However, there are exclusions under Articles 52(2) and (3) as well as 53. According to the EPO, Article 52(1) offers a negative, non-exhaustive list of what should not be regarded as an invention, i.e. discoveries, scientific theories, mathematical methods, aesthetic creations, schemes, rules and performing mental acts, playing of games or doing business, programs for computers and presentations of information, being excluded from patentability only to the extent that the invention relates to those areas as such. The EPO uses three unwritten legal principles for the interpretation of the EPC. Firstly, the principle of equality of all parties in a proceeding; Secondly, the narrow interpretation regarding exclusion of subject matter from patentability; Thirdly, the so called good faith principle, where the parties of the procedure shall have a reasonable legal expectation on the outcome of the proceedings.

In light of all this, Dutch patent law does not much add to what has been said so far. Substantive patent law as enacted in the Dutch Patent Act is in conformity with what is found in the international regulations to which the Netherlands adhere. There are only differences in procedure with respect to the granting of Dutch patents which have only territorial validity.

---

\(^{19}\) Supreme Court 16 June 2006, LJN: AU8940; NJ 2006, 585 m.nt. JHS; AMI 2006, 14 m.nt. AAQ; IER 2006, 54, p. 313, m.nt. FWG; AA 2006-11, p. 821-824 m.nt Pbh (Lancôme/Kecofa).

3.5 Trademark Law

Unification has been introduced in trademark law by introduction of the Community trademark. The need and justification for the introduction of an autonomous system of protection has been based on two considerations: the coexistence of the commercial activities of businesses with the Common Market rather than with national markets, and the incompatibility of the principle of national territorial protection with that single market. However, the Community trademark is offered as an option, enterprises are not obliged to use it. In fact, they may have good reasons to use their national trademark law, e.g. for reasons of language (word marks). Indeed, particularly for that reason the Netherlands together with Belgium and Luxembourg have established the BeNeLux trademark system.

The Regulation on trademarks, offering uniform protection for Community trademarks throughout the territory of the EU, establishes the necessary provisions to meet the objective of the proper functioning of the single market. It introduces rules and conditions to be complied with for the granting of Community trademarks. Any natural or legal person, including authorities established under public law, can become the owner of such a trademark by registration. A Community trademark can be registered for a period of 10 years from the date of filing the application. Renewal of registration is possible, if the conditions are met, for further periods of ten years. The trademark may consist of any signs capable of being represented graphically (particularly words, personal names, designs, letters, numerals, the shape of goods or of their packaging), provided that such signs are capable of distinguishing the goods or services of one enterprise from that of other enterprises.

The fact that the Community trademark is of unitary character means that it produces the same legal effects throughout the EU. It confers on the owner exclusive rights, which may prohibit third parties from using the following for commercial purposes:

- any sign which is identical with the Community trademark in relation to goods or services which are similar to those for which the Community trademark is registered;
- any sign where there exists a likelihood of confusion with another trademark because of its identity with, or similarity to, the Community trade mark and the identity or similarity of the goods or services covered by the Community trade mark and the sign;
- any sign which is identical with, or similar to, the Community trademark in relation to goods or services which are not similar to those for which the Community trade mark is registered, where the latter has a reputation in the Community and where use of that sign takes unfair advantage of, or is detrimental to, the distinctive character or the repute of the Community trademark. However, the owner of the Community trademark may not prohibit third parties from using the following for commercial purposes:
  - his own name or address;
  - indications concerning characteristics of goods or services such as the kind, quality or quantity;
  - the trademark where it is necessary to indicate the intended purpose of a product or service, as accessories or spare parts.

The owner of the Community trademark shall be required to make genuine use of it within the five years following registration of the trademark. If not, he may be subject to sanctions for non-use. Absent legitimate interests to oppose further commercialization by third parties, a Community trademark shall not entitle its owner to prohibit its use in relation to goods which have been put on the market in the Community under that trademark by the owner or with his consent (exhaustion of rights).

Seen from a substantive law perspective the content, i.e. its object of protection and prerogatives, of the BeNeLux trade mark law does not differ much from the Community trademark law.

---

4. IP Aspects of Video Games

Intellectual property law (ipl) aspects are everywhere in video gaming. If one takes a massive multiplayer online game (MMOG) like Minecraft, there are multiple levels at which intellectual property is being created and used. Making an inventory of the related intellectual property rights (ipr’s), owned by Mojang, the company that sells Minecraft, leads to the following.

4.1 Copyright law

Video games fall into two domains of copyright law: that of computer programs (software) and databases as well as that of audiovisual or cinematographic) works. As a consequence within the EU the four Directives previously introduced in Section III as well as their implementation in national copyright law apply.

Software being instrumental in all video gaming, the CPD and the related copyright protection of computer programs in national law is at stake.

This protection encompasses primarily the copyright in the code embedded in the medium, e.g. the DVD-ROM, the cartridge, or the file that is made available for download. This code relates to all features of the game, e.g. the code in its entirety or function-specific parts, the graphical user interface, the artwork, the music score, the spoken words. All these various copyrights may be each subject to special regimes and the copyright of a different copyright owner. It may well be that the software is specially developed for a particular game either inside the video game producer’s own firm or outside it by way of commission. In the last instance, it may be that the software is licensed instead of being owned.

Besides, in a sophisticated multiplayer virtual environment there can also be involved player-contributed copyright. For, if copyright protection is granted to the video game, it is not only for the sequence of play on file (the player's participation producing a display that is different for each play); the video game covers any variations that might result from the player’s participation.

The fact that only the particular expression of a computer program, that is, only the specific pattern and sequence of program instructions, is copyrightable can be a drawback. For, if a programmer copyrights a computer program, he is only copyrighting one of the many ways in which the program could have been written. To illustrate this, commonly reference is made to the many ways in which a number can be written, for example the number 10 (5+5, 2+8, 11-1, 2x5, 20÷2 etc.). The same counts for a computer program. In order to avoid copyright infringement, all that needs to be done is to change the software to an equivalent non-copyrighted pattern and sequence of program instructions.

So, developing a new video game obliges the producer to found out what elements of the software are protected, what are in the public domain. American court decisions require the developer of a new computer program to make an assessment of the pre-existing software, based on a consideration of the protectable elements of it as distilled from the non-protectable elements. Disputes on this aspect of videogames are not unusual and have been around for as long as there have been video games. This can be illustrated by the 1974 lawsuit filed by Magnavox against Atari over a nascent version of Pong, and that of 1984 when Universal Studies took umbrage with Nintendo’s use and naming of the character Donkey Kong. In more recent English disputes such as that between Nova Productions and Mazooma Games the courts have clearly identified that copying a substantial piece of source code is an infringement of the developer’s copyright. However, often features of a video game can be recreated without necessarily accessing or even viewing the underlying source code of the original one.

Next comes the eventual copyright protection of the audio-visual elements of video games and, when original enough, the copyright protection of the storyline of the video game. As a side-step it is worth noting that allegations holding that the copying of the audio- or visual elements of the video game will

---

23 See for an early account of copyright protection from the perspective of US law with references to early case law Theodore J. Grabowski Jr., Copyright Protection for Video Game Programs and Audio-visual Displays; and - Substantial Similarity and the Scope of Audio-visual Copyrights for Video Games, 3 Loy. L.A. Ent. L. Rev. 139 (1983), available at: http://digitalcommons.lmu.edu/elr/vol3/iss1/7.
infringe the copyright in the underlying computer program, is sometimes also made in order to overcome the difficulties with respect to the protection of the software.

The scope of the protection of the visual-elements can be illustrated by the example of the video game Battlefield 1942. No one can claim that the story of World War II is her intellectual creation; the same applies to battles fought or locations where they took place. But the way in which Battlefield 1942 represents World War II to the player, its visual-elements including the graphic art and the controls, can be protected by copyright law. All this, provided that, according to the applicable law, the requirements for protection set out in Section III, are met.

A modern trend in this respect is towards protection of realistic settings, e.g. city streets or real world locations, and real world objects, e.g. a billboard or a desk lamp. It is common practice that for the designing of the video game source material of all kind is used, either taken from a photo shop or the internet. It is advised that art teams of the video game producer install libraries of available assets that the producer owns, and also clearly record the source of each image or photograph used or in the library. Obviously, the DbD comes into play here with respect to the storing of the data in question. However, it is questioned whether video games qualify for database protection because the data within it are not searchable and as a consequence they are not individually accessible.

Realistic settings often require the use of images and photographs of for example (public or private) buildings, works of art, or people for the use of which, absent the applicability of an exception, permission is needed by any copyright owner. This is so in the case of for example the Louvre pyramid and the Amsterdam Eye. It can even apply to natural objects such as the trademarked Lone Cypress. Real world locations also may present unexpected barriers. For it may well be that the used billboard represents someone else’s trademark or is a plagiary of someone’s copyright protected product.

The audio-elements of video games have various sources: composing, performing or recording, all with related rights. It may well be that the composers are also the performing musicians as well as the ones which make the sound recordings. In all these instances different rights (copyrights and neighboring rights) will be involved. It is of note, that usually the copyrights in actual musical compositions are owned, co-owned and/or administered by music publishers. Equally, it is common practice that record companies require composers and musicians to assign their rights to the sound recordings to the record companies on a work-for-hire basis. As a consequence of several years of consolidation the major music publishers and the major record companies form big multinational conglomerates in this area (e.g. Time Warner Inc., Sony Corp.).

It should be noted that the foregoing applies also to music that is specially written for video gaming.

Finally, and again jointly with the copyright protection of the software, it is also argued that when the video game is running, that of itself is protected as an audiovisual or cinematographic work (movie, film). The actual binding international copyright regulations contain no definitions of the terms audio-visual works or cinematographic works. Acknowledging that international provisions like Article 2 BC, offer an open list of copyright-protectable works, under national copyright law video games may not be excluded as a cinematographic work. Indeed, most definitions of audiovisual or cinematographic works used under national law appear to be broad enough to encompass displays of videogames, if not these works in their entirety. So indeed is the case under Japanese copyright law, prohibiting a similar video game to be developed without consent of the right owner in the cinematographic work.

However, even in countries with a broad definition of audiovisual or cinematographic works some courts have refused to include videogames in that definition. The shift between interactivity and cinematic sequences is commonly used as an argument against calling video games cinematographic works. That is, contrary to films, in games with multiple endings or games where the player shapes the personality of the

---

28 Some not-binding legal instruments use a definition, e.g. in Article 21(1) WIPO Draft Model Provisions audio-visual works are defined as works consisting of a series of related images and accompanying sounds, if any, which are intended to be shown by appropriate devices.
29 This is also true for the EC copyright Directives, using for example the following definition of the term film in Article 2 Rental Directive: a cinematographic or audio-visual work or moving images, whether or not accompanied by sound.
characters as he plays through, he is in direct control of the outcome. When video games are cinematic, they take control from the gamer and by doing that temporarily turn into a film. So it may be said that control is the defining keyword that discerns video games from movies. Stated differently: when a film runs, it performs the same work every time, whereas when an interactive game is played it follows the instructions by its user. It is understood, that no such protection is available when the video game, like VirtualLife, merely offers a platform and the tools for interaction between the different users, and does not offer certain alternative actions.

All these considerations were at play in the already mentioned Nova Productions Limited v Mazooma Games Limited-case. The dispute involved allegations of copying of arcade pool games. An action for infringement of copyright failed before the Court of Appeal since, in conformity with the ECJ decision in the SAS-case referred to in Section III, it was held that there could be no copyright in the ideas and general principles governing the way a video game is played. Crucially, even similar visual effects could not be of themselves proof of copying when the underlying coding could not be shown to have been copied. Neither of help was the recourse to copyright protection for the artwork c.a. It was held that what inspired the defendants’ game was too general to form a substantial part of the claimant’s literary works.

Although under most national copyright law any form of registration is no legal requirement (copyright protection working automatically following from the creation of a work) the use of a copyright notice such as © (date) (name right owner) All rights reserved, is advisable for reasons of evidence.

### 4.2 Patent law

Patents can cover almost any novel aspect of a video game product, including hardware, software, game engines, methods of communicating between applications, gaming interfaces and methods of playing a game. Patentable innovations include technology such as a new way of communicating between avatars or a new hardware element incorporated into a controller. Patents can also be obtained on improvements to existing technology.

Parts of a video game that could involve patents include:
- applied algorithms
- display representation
- menu arrangement
- editing functions
- control functions
- user interface features
- compiling techniques
- program languages
- translation methods
- utilities
- formulae, controlling program execution or process data. \(^{31}\)

Patent law protection in relation to video games regards particularly the patentability of software. A software patent has been defined as being a patent on any performance of a computer realized by means of a computer program. \(^{32}\)

However, the patentability of software is an issue under intense debate, reaching from no patent protection at all to protection only under strict conditions. \(^{33}\) In Europe computer programs as such are excluded from patentability by the EPC. In accordance with this exclusion the EPO follows the policy that software is not patentable if it does not have the potential to cause a so-called further technical effect beyond the inherent technical interactions between the regarded hardware and software.

---

\(^{31}\) See for examples of video game patents [http://www.pocketgamer.co.uk/](http://www.pocketgamer.co.uk/) and [http://www.pocketgamer.co.uk/r/Multiformat/Top+5+charts/feature.asp?c=29914].

\(^{32}\) Foundation for a Free Information Infrastructure.

\(^{33}\) One aspect of the debate regards the extent to which patenting of software is a matter of public policy. In Europe the debate has focused on the proposed [European Union directive on the patentability of computer-implemented inventions](http://www.pocketgamer.co.uk/r/Multiformat/Top+5+charts/feature.asp?c=29914), also known as the CII Directive or the Software Patent Directive, which was ultimately rejected by the EU Parliament in July 2005.
Patentable technology deriving from video game development is often unrelated to the life span of a particular game. Many game companies re-use the same or similar technology for different titles or develop game technology which forms a basis for families of products. For example, a video game company may develop a game engine platform for its first-person shooter games, a graphical interface platform for racing games or a communications platform for interactive mobile games. Identifying these core technologies and obtaining patent protection that covers them can provide a significant advantage in the market.

Understandably, in order to enjoy patent law protection the software must answer to the material (novelty, non-obviousness and usefulness) and formal (registration) requirements for patenting.

4.3 Trademark law

Trademark protection of video games may first of all stem from the trademarks held by the developer and producer of a game. Developers and producers will have registered their personal and/or company names and logos (words, images, sounds) as trademarks. These trademarks are commonly displayed in splash screens during the video game’s introduction, and, eventually, within the graphical user interface of the game itself; idem with regard to the box/packaging and the (online) advertisements.

Beyond the trademarks associated with the video game itself, there may be inclusion of trademarks not directly related to the game itself, i.e. its developers and/or producers, by way of textures implemented onto in-game billboards, racing cars etc.

Some types of trademarks which can be found in video games are:
- Game name and logo
- Company name and logo
- Distinctive sounds and/or colors
- Slogans
- Attributes like weapons or cars.

Since registration is an originating condition for trademark protection within the EU it is not necessary to use a trademark notice such as ™. The notice ® may be useful to alert third parties to the fact that it concerns a trademark, but also the use of this sign has no legal merit in the EU.

5. Some Concluding Observations

In the above, we have addressed a number of the intellectual property law aspects of the protection of digital video games. All this has been done in light of the governing EU regulation and case law.

In doing so, we have discussed the protection of the software of the video game and the visual aspects through copyright law, the name of a video game through a trademark and the technique of a video game through patent law.

Needless to say, in business practice not only the protection of video games plays an important role, but also (or most of all) the exploitation of the intellectual property rights in the video games. And subsequently, especially in case of very successful video games the enforcement of intellectual property rights. On both exploitation and enforcement of intellectual property rights a separate contribution could be easily written. However, in the context of this actual contribution we restrict ourselves in this final paragraph to only some observations on the enforcement of intellectual property rights in the EU.

So the protection of intellectual property rights being an essential element for the success of the internal market within the EU, its rights-holders should be able to derive a legitimate profit from promoting creativity and innovation and improving competitiveness. According to the EU legislator, this requires effective means of enforcing its intellectual property rights, especially against piracy and counterfeiting. For this reason, the EU adopted in 2004 the Enforcement Directive to approximate legislative systems so as to ensure a high, equivalent and homogeneous level of protection in the internal market.

The Enforcement Directive (implemented in the Netherlands in 2007) provides for a wide variety of measures, procedures and remedies of intellectual property rights to rights holders, to name only a few of them.

The Directive provides for effective means of presenting, obtaining and preserving evidence. Evidence is of course of paramount importance in intellectual property rights litigation. Such measures include the detailed description, with or without the taking of samples, or the physical seizure of the infringing goods, and, in appropriate cases, the materials and implements used in the production and/or distribution of these goods and the documents relating thereto.

Another result of the Directive is the so-called 'ex parte injunction': a provisional measure for the immediate termination of (clear cut) infringements where a decision in proceedings on the merits or even summary proceedings cannot be awaited. In these proceedings a judgment can be given without the (alleged) infringer having been heard. Needless to say, that in case of an unjustified request this measure might cause damage to the accused party. Therefore, this measure is only justified in cases where delay would cause irreparable harm to the rights holder.

Next to procedural measures, the Directive introduces several corrective measures to prevent further infringements of intellectual property rights. These measures include recall of infringing products, definitive removal of those products from the market and destruction of those products and even of materials and implements used in the production or manufacture thereof.

The competent court may also order that information on the origin and distribution networks of the goods or services which infringe an intellectual property right be provided by the infringer. This information may comprise the names and addresses of the producers, manufacturers, distributors, suppliers and other (previous) holders of the goods or services, as well as the intended wholesalers and retailers and information on the quantities produced, manufactured, delivered, received or ordered, as well as the price obtained for the goods or services in question.

Finally, the injured party may request the court to have the (alleged) infringer to pay damages for the actual prejudice suffered by the rights holder as a result of the infringement, for instance the loss of profits suffered by the rights holder or as an alternative a lump sum on the basis of elements such as at least the amount of royalties which would have been due if the infringer had requested authorization to use the intellectual property right in question.

To enable the rights holder to protect its intellectual property rights, the Directive determines that reasonable and proportionate legal costs and other expenses incurred by the successful party (in general the rights holder) shall be borne by the unsuccessful party, unless equity does not allow this. Experience learns that the courts are likely to grant a lesser amount than the costs that were actually made. Evidently, this works both ways: when one loses a case it may well be ordered to pay all the costs of the other party.

All this taken into account, it may come as a surprise that in the EU generally and in the Netherlands particularly, proceedings about infringing intellectual property rights in video games seldom take place. This may well be a consequence of the fact that, irrespective of the financial interests at stake, uncertainty about the respective legal positions of claimant and accuse, as well as difficulties of delivering evidence prohibit rights holders to take legal action. So when it comes to exploitation, protection, and enforcement of intellectual property rights in video games, it's all in the game.

* * * * *