

Copyright Software Protection in the EC

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PART 1. COPYRIGHT PROTECTION IN LUXEMBOURG

1.1. Introduction

Until recently, legal protection of software did not arouse much interest in Luxembourg because of little motivity of creation in information systems. This, of course, neglected the fact that protection is designed for all software utilized within Luxembourg, whatever its origin.

The Luxembourg legislation was, however, not unaware of the difficulties arising from the reservation of software products and other new values of information. As early as 1972, the preparatory works of the law on copyright did raise the question of formulating a 'legal status' for software or telecommunications by satellite.¹

In the absence of pressure from economic agents, however, Parliament decided not to act.

Recently, with the reform of the Patent Law, members of Parliament did affirm that 'protection could result from the law on copyright, from legislation of illegal competition and secrets of fabrication and from the Patent Law.' And, in the event that these systems did not provide the appropriate protection, it was not up to Luxembourg to innovate in this domain.²

The state of inaction would not have bothered anyone had not several particular questions been raised in Parliament reviving the issue. The Ministers of Economy and Justice were obliged to explain their positions. Their answers were not very explicit but are, nonetheless, the only indications we have up to the present.

To the absence of precise laws and succinct indications given by the Administration must be added the virtual lack of any doctrine or legal precedent.³

To the best of our knowledge, no litigation related to software has ever been brought before a Luxembourg court.

1. Copyright Act of 29 March 1972, *Doc.parl.* 1377-3, p. 11.

2. *Doc.parl.* 3011.

3. N. Wagener, 'La Protection Juridique du Software,' *Letzeburger Land*, 21 March 1986; G. Arendt, 'La Protection Juridique du Software,' *Diagonales à travers le droit luxembourgeois*, Luxembourg, 1986, p. 27.

1.2. Copyright Protection(General)

The first Luxemburg law on copyright dates back to 10 May 1898. It has evolved continuously ever since, because of Luxemburg's membership of the Union established by the Berne Convention of 9 September 1886, ensuring the protection of literary and artistic works, and the ratification of the International Convention on Copyright.⁴

In the 1970s, a rewording of the 1898 text, nonetheless, became necessary because of the process of international harmonization and the influence of the French Law of 11 March 1957.⁵ The reform was finally consecrated by the Law of 29 March 1972.⁶ In addition to the general provisions common to other foreign legislation, some distinctive rules were established because of the small size of the country and its specific socio-economic situation.

At that time copyright was also designated to protect information produced by software and data communications. The Luxemburg legislator was aware of the problem.⁷ It did, however, not take the initiative to create a special regime for these new values in 1972. The following developments are meant to appreciate if the existing law on copyright is flexible enough to adopt and solve the problems as they arise in the requirements of an efficient protection of software.

1.3. Protection of Software

Can computer programs be protected by the Law of 29 March 1972? Under which conditions would real protection then be obtained?

1.3.1. Scope of application

Copyright relates only to intellectual creation as reflected by its expression. Only the form of the work and not its contents is protected. This distinction results from the system of intellectual ownership and the place of copyright within this system.

The form versus content dichotomy applied to software implies several conclusions:

First, whatever the beauty or utility of a line of argument, it is never taken into consideration by copyright. The protection of intellectual construction falls within the scope of legislation on Patent Laws. If a rule or method does not

4. Signed in Paris on 6 September 1952 and approved by the Law of 19 November 1974, *Mém.* 1974, p. 1674.

5. *Doc.parl.* 1377-3, p. 3.

6. *Mém.* 1972, p. 810.

7. *Doc.parl.* 1377-3, p. 1.

comply with the patent conditions, it cannot pretend to be protected by copyright.

Progress excludes an appropriation of mere ideas. These have to remain 'free' in order to be beneficial to the entire community. The abstract idea remains distinct from its expression and stays thus out of the scope of the Law of 1972.

How can content and its formal expression be separated in a computer program? At first sight, a computer program can be defined as a method capable of solving countless identical applications. The algorithm which leads to the desired aim, obviously, does not fall within the scope of copyright. Can we distinguish, aside from the arithmetic rule, an expression likely to be protected? The answer is, yes. Excluding a few simplistic applications, computer programs contain an internal architecture which is independent of algorithms.

A need for a structure distinct from the rule of logic should, however, not be exaggerated. The Law of 1972 is well adapted to a work of compilation where the autonomy of creation is dependent on the choice and arrangement of the subject matter. Copyright in this case applies more or less directly to the theme of the work.

Second, in its first article the Law of 1972 protects the production of literary, scientific and artistic works irrespective of means or form of expression.

The Luxemburg legislator did not require that the work be permanently fixed on a material support.⁸ The computer program is thus protected even when it exists only momentarily in the memory of the computer.

The quality of an artistic work is acquired by the sole intervention of a language of whatever nature. It is of no importance whether this language is obscure, coded or written in a new system of notation. The artistic work expresses itself through words, numbers or other verbal or numerical symbols. The computer program is a written expression and has to be assimilated to an artistic work, in the sense of copyright.

Expression is deemed to exist from the moment the creation can be perceived. The objection that software is not directly accessible to the senses has to be rejected. By comparing programs to musical compositions, French legal precedent has established that works are protected even when they cannot be understood by everyone which require certain technical skills.

Likewise, in the Luxemburg law, no confusion exists between perception and comprehension. The communicated work is attributed to its author from the moment it is expressed. The interpretation of the person perceiving it, depends on his intelligence and sensitivity.

The need for a computer to accede to the program is not an obstacle for its protection. Has anyone ever sought to refuse protection to a musical work under the argument that a CD player is necessary for it to be heard?

8. Article 2(2) Berne Convention.

In summary, whatever the form under which it is presented: 'code source' or 'code object,' the computer program is an expression which qualifies for protection.

The Luxemburg courts have not yet had an opportunity to rule on the application of the Law of 1972 to computer programs. The question has, however, been put to the Government.⁹ The Minister of Economy has stated that the present text is broad enough to enable the judge to apply it to the protection of computer programs.¹⁰

1.3.2. Conditions of protection

The protection granted by the Law of 1972 does not automatically apply to software. To consider the computer program as a literary work in scientific terms simply implies that it is called to be protected. For this to happen, however, the software is required to be new and original.

1.3.2.1. Novelty

As a first step, the notion of 'intellectual creation' assumes that the work must be new. According to the logic of copyright, this novelty has to be appraised in terms of expression and not in relation to the underlying idea. In the words of the French Professor M. Vivant, 'this means novelty in the world of forms.'

In the traditional subjective definition of copyright, creation and its novelty are seen as an expression of the personality of the author. The extension of artistic and literary ownership to scientific productions requires a new and more objective conception of these notions which have to be distinguished from the original work.

All forms of expression not included in the common fund of culture are thus open to appropriation. As a result, the immaterial property which is a part of the public domain in literary and artistic creation cannot be privately reserved.

The idea of a common software heritage has translated into the emergence of 'freeware' and 'shareware.'

1.3.2.2. Originality

The birth of intellectual ownership assumes, in addition to the novelty of the work, a certain degree of originality. Copyright is not meant to be used for trite creations or productions of pure routine. Two conceptions of originality, one

subjective and the other objective, have been formulated by foreign doctrine. Simplified to the extreme, the first requires the personal mark of the author's personality, the second an 'individual intellectual effort.'

The evolution of copyright is not adaptable to the subjective approach. It only allows to exclude the most obvious expressions from copyright protection.

The logic of intellectual ownership merely requires that the creation be of an individualized nature. In this sense, originality is but a superior degree of novelty. The work is protected when it differs from what is known, its novelty, and from what it derives directly, its individuality.

Individuality of expression is a necessary but sufficient condition for reservation as private property.

1.3.2.3. Criteria applied by courts

These imperatives are often neglected by the courts. Indeed, the Law of 1972 has been applied to works without requiring that the author produces an intellectually original conception.¹¹ Except for the rule that the merits of a work are not a necessary prerequisite for its protection these precedents go against the spirit of the principle of copyright.

In contrast to neighbouring countries, Luxemburg courts have not yet been confronted with software forgeries. This raises the following question. Will Luxemburg adopt the German view which reserves the right of exclusivity to special computer programs, or will it follow the more tolerant interpretation for instance of the French courts?

Apparently, the Parliamentary discussions underlying the Law of 1972 tend to lean towards the French conception. This is an obvious advantage because it will allow the Luxemburg courts to refer to French case law when difficulties of interpretation arise.¹² Based on this attitude, all computer programs created with real intellectual contribution would be protected.

The design of the flow chart and/or writing of the instructions reflects the individuality of the expression. All forms of the program may then be protected, including the code-objects.

1.3.2.4. Software copyright

The author of a new and original computer program enjoys intellectual ownership thereof by virtue of his creation. To benefit from copyright protection does not require compliance with any advertising or registration formalities. This 'immediate' nature of the protection was laid down by the courts at the begin-

9. Question Parlementaire n° 40 de Madame le Député C. Flesch au Ministère de la Justice du 7 novembre 1986.

10. Réponse Ministérielle du 19 novembre 1986.

11. Luxemburg Court of Appeal 4 June 1973, *Pasicrisie* t. XXII, p. 334; Tribunal d'Arrondissement 15 January 1986, BIB 80/86, not published.

12. *Doc.parl.* 1377-3, p. 3.

ning of the century. The Luxemburg Court of Appeals affirmed. It is not necessary that an author expressly states in his titles and works that their reproduction or public performance is forbidden.¹³

Devoid of usefulness in the territory of the Grand Duchy, the presence of the reference 'copyright' or its notice © is however important and necessary to qualify for protection in several formalistic countries such as the U.S.A.¹⁴

1.3.2.5. Status of foreign software

The creator's nationality is of no importance in Luxemburg, as foreigners are granted the same rights as Luxemburg citizens (Law of 1972, Article 47). Luxemburg law ensures a perfect assimilation, independent of international directives. A foreign author is then protected in Luxemburg, even if his home country has not ratified the Berne Convention.¹⁵

In addition, no reciprocity of national laws is needed for a foreigner to benefit from the Law of 1972.

1.4. Protection for Whom

Literary ownership does not only belong to the original holder but also to third parties, who may exercise certain prerogatives.

1.4.1. Independent creations

One has to determine whether the work emanates from one or more authors. Attributing the ownership of a software conceived and written by one computer scientist alone does not raise any problem, provided that one knows who this person is.

The Law of 1972 simplifies the proof by presuming that the author is the person whose name is indicted as such on the work itself (Article 5). This rule is, however, valid only as a presumption and evidence to the contrary is always possible.

Luxemburg law gives a very restrictive definition of a 'joint work.' A creation merits this qualification only when the contribution of the different authors is inseparable (Article 6).

In the word of the legislator, 'an opera or operette, as well as a ballet' consists of two separate works, where each component, the choreography and music, reach the public by two autonomous channels.

The definition of a 'joint work' is applied only when the contributions are very intimately linked, for example novels written by two authors, films realized in co-production between two producers. In other words, a joint work is the fruit of the combination of works of the same genre.¹⁶

What are the inseparable contributions that one can distinguish in the realization of a computer program? Are the links between the functional analysis, the flow chart design, the programming, the writing of the auxiliary documents strict enough to justify the indivision of certain tasks? The question can be examined first in relation to custom-made creations.

A corporation is tempted to appropriate the computer program developed by a special service and engineering company when it participates in the definition of its own needs. In our opinion, the assistance furnished in respect of the contract does not grant the corporation co-authorship in the program's copyright.

The strict definition of a 'joint work' adopted by Luxemburg law excludes the links between functional analysis and program writing.

The writing of auxiliary documents could, however, justify the granting of a specific copyright protection. But the specific nature of this work distinguishes it from the other contributions. The integration of the documentation in the program itself via application of the 'help' function does not bring their dissociation into question.

In contrast, close links exist between the flow chart and programming designs. These tasks, which correspond to the two separate phases of software creation, are of an analogical sort. In cases where they are developed by two different people, the ownership of copyright would be shared.

The Law of 1972 has not laid down rules for the exploitation of 'joint works' but reverts in such cases to contractual freedom (Article 7). In the absence of any agreement, none of the co-authors is entitled to exercise his personal rights individually. In France, the independence of co-authors is, however, possible.

In Luxemburg, it is only when a third party impairs copyright that an individual action of a co-author is justified, in compensation for personal injury (Article 8).

1.4.2. Exercise of copyright by third parties

Two aspects require to be analyzed.

1.4.2.1. The author's representation

When the author's identity is not established, the publisher of the work is presumed to represent him towards third parties (Article 8). The representation ends when the author himself or any other rightful owner appears. Aside from

13. Court of Appeal, 13 July 1901, *Pasicrisie* t. VI, p. 33.

14. Article 3 Universal Copyright Convention, Geneva 9 September 1952.

15. Tribunal d'Arrondissement, 21 February 1901, *Pasicrisie* t. VI, p. 36.

16. *Doc.parl.* 1377-3, p. 5.

these two extremes, the Law of 1972 takes into account the case of the companies collecting copyright royalties and which administrate the copyright of several authors (Article 48).

The aim of Luxemburg legislation was to establish a solid body of rules in order to supervise the foreign companies exercising an oligopoly on Luxemburg territory.

Article 48 of the Law of 1972 was the subject of heated debate during its preparation but it is today in perfect conformity with the Berne Convention. Foreign and Luxemburg authors receive the same treatment. Furthermore, the obligations imposed on the companies collecting copyright royalties do not influence the original author's rights.¹⁷ This legal equality does not, however, mask the real intentions of the Luxemburg legislator which was to monitor the foreign companies.

Is this situation compatible with the principles laid down by the Treaty of Rome in relation to the single European market establishing the free movement of people and services?

The provisions of Article 48 of Law of 1972 are applicable to all computer and software distributors and should for this reason be described in greater detail.¹⁸

The companies collecting copyright royalties require an official license. This is only granted to companies with solid warranties, essential to their efficient operation. The morality and standing of their managers are closely controlled. If the company is officially established in a foreign country, it has to appoint a general agent domiciled in Luxemburg. Government permission is compulsory and the authorization is issued for a three year period, renewable. It can, however, be revoked at any time. Illegal exercise implies foreclosure of any action. Penalties are, however, only attached to the lack of authorization or approval but not to the non-registration in the National Trade Register.¹⁹ The domicile of the general agent does give assignment of jurisdiction for all actions (in conformity of course with the legal texts) related to copyright contracts concluded on Luxemburg territory. This applies to the inhabitants of Luxemburg and to the corporations established there (Article 48(II)(2) 2).

At a European level, this rational rule could be in contradiction to the principles of the Convention concerning legal competence and execution of civil and commercial decisions signed in Brussels on 27 September 1968. The exclusive competence of the Luxemburg courts automatically excludes the alternative competence of the defender's home country and the place where the litigious obligation has to be executed. It is true that Article 1 of the Protocol annexed to the Convention authorizes each person domiciled in Luxemburg and summoned to appear before the court of another contracting state the opportunity not to accept the latter's competence.

17. *Doc.parl.* 1377-3, p. 5.

18. *Mém.* 1972, p. 1495.

19. Court of Appeal 18 January 1984, not published.

Does this tolerance allow the automatic dispossession of the foreign court?

The Law of 1972 established another rule of Private International Law for companies collecting copyright royalties. All agreements concluded with a user living in Luxemburg or established here are subject to Luxemburg law. The election of another law is void. This solution could, however, be refused by foreign courts as being in contradiction with the principles of contractual freedom. A foreign judge could decide to apply a conventionally established law rather than that of the place where the contract is to be executed (Articles 48 III and 48 IV).

The companies collecting copyright royalties are required to keep an up-to-date list of all the authors they represent. This list must be freely accessible to the authors they represent as well as to the entertainment agents and, in general, to all persons having a special interest.

The companies established abroad are exempt from keeping a list with their general agent provided that the foreign list can be consulted in Luxemburg. This obligation is no doubt extremely useful to the users and enables the companies collecting copyright royalties to easily prove that they represent a given author.²⁰

The Law of 1972 requires these companies to establish schedules for the different categories of user. A preliminary consultation as well as the opinion of an independent commission are compulsory. The companies collecting copyright royalties are prohibited from asking for a higher payment.

In theory, Article 48 of the Law of 1972 may be applied to all persons commercializing the works of other people in a professional way, i.e. a software distributor. The special regime of Article 48 is, however, not appropriate in this case. One may, therefore, consider that the distribution of software, no more than the distribution of most literary works, does not fall within the scope of Article 48, as far as it was without doubt not the intention of the legislator to restrict this activity.

1.4.2.2. *Devolution of copyright*

The intangible ownership of software originates in the patrimony of its author and an indissociable link between the author and his creation.

This does not prevent the different rights of the creation from circulating because they represent an economic value. The transfer of course only concerns the patrimonial prerogatives. The moral right, closely linked to the author's personality, cannot be transferred (Article 9).

The different situations of total or partial devolution of these operating rights are extremely diversified.

20. Court of Appeal 18 January 1984, *op.cit.* (note 19).

Software is, in fact, normally commercialized on the basis of a publishing agreement under which the author transfers the right to reproduce the program and to present it to the public to the publisher.

The development of custom-made programs necessarily implies a transfer of all the operating rights. The author can grant his client such an exclusive benefit of the program by giving up all prerogatives on his work, with the exception of his moral rights.

The devolution of the copyright by an employee-author is generally clearly stipulated in the work contract or in separate arrangements.

The Law of 1972 does not organize the transfer of copyright but refers to the common law on contracts. The lack of any contractual stipulations naturally complicates all concrete interpretations of the relationship.

The difficulty is even more obvious in the case of creations developed by employees because of their generally subordinated position towards their employer. The natural right of appropriation of a computer program created by an employee during his working hours runs against the legitimate claim of the employer for having financially supported the creation. Indeed, the Law of 1972 does not provide for the automatic transfer of ownership of a commissioned creation as does the Patent Law. The devolution of the operating right depends on the sole wishes of the parties concerned.

It is to the interest of the employer to reserve, from the outset, ownership of the programs created by his employee in the work contract. The appropriation then depends on the accurate determination of the employee's function. Luxemburg law is in this respect less protective of the author's interests than are foreign laws. The total transfer of the future work, for instance, is not expressly forbidden by the Law of 1972.

In the absence of any contractual stipulation, can the transfer of commissioned computer programs be presumed? The implicit content of a work contract can indeed be interpreted according to the theory of reason. In fact, the real intentions of the parties must be checked out in every case.

1.5. Protection for What Purpose

1.5.1. The degree of protection

The formulation of a computer program starts with functional analysis. Designed to run the computer system, the operating software and services follow preestablished targets. The needs of future users are different in the case of customized computer programs and packages.

Functional analysis means the description of the examined problem in natural language completed by a graphic representation. The architecture of the program is developed with the help of a series of diagrams and flow charts.

In summary, it can be said that these are literary and graphic expressions which do not differ much from the traditional objectives of copyright. The

functional analysis can thus be appropriated by the person who has formulated it.

The resolution of an equation laid down by functional analysis can only be obtained with the aid of a set of calculating rules. Algorithm is defined as being a succession of instructions leading to the desired result based on an input data.

These methods and rules do not, however, fall within the scope of literary ownership. Copyright only covers the form and not the content of an expression. Consequently, algorithm is not protected by the Law of 1972. However, one can always try to appropriate the symbolic or graphic representation in itself. This would detach it from the content and allow a special reservation.

The programming is not limited to the sole transcription of the algorithm into computer language. The script of a 'code source' depends on the intelligence and imagination of the creator. This is proved by the fact that computer programs written by several computer-scientists on the basis of the same analysis show substantial differences in their architecture, names and storage areas. The internal structure of a work is not the result of a pure logical sequence of algorithmic propositions. It also reflects the style and choices made by the author himself.

The use of a coded language does not exclude the idea of creation. The expression thus finds its natural reward in copyright protection.

The execution of a program by a computer assumes the transformation of the 'source code' into 'object code.' The compilation and interpretation of the language 'source' is achieved with the help of specific programs and does not, in principle, require human intervention. The form 'object' also benefits from private reservation and thus based on the principle that we are in the presence of a diverted form of the original writing. In this way, it qualifies for the same protection.

Computer programs generally include auxiliary documents to facilitate their use. Traditionally they take the form of printed books but can today be integrated into the program by the 'help' function. Whatever their medium, these documents are entitled to copyright protection.

1.5.2. Rights on software

1.5.2.1. Contents of the rights

The author of a literary or artistic work has an exclusive intangible ownership right on the work which is opposable to all (Article 1(1)). Luxemburg and French legislators have adopted the intellectual conception of copyright, which is no doubt the more orthodox standpoint.

This right includes intellectual, moral and patrimonial attributes (Article 1(2)).

a. *The moral rights of the author*

What do moral rights entail?

Several prerogatives are attached to the moral right: the right to claim authorship, the right to the respect of the work and its disclosure.

The author can oppose any distortion, mutilation or modification of the work (. . .) or any other attack which would impair his honour or reputation. Article 9 of the Law of 1972 is in this respect an exact copy of Article 6bis of the Berne Convention.

The attack is illegal only when it publicly discredits the author. A private user who changes a computer program is only guilty if third parties have access to the modification. Theoretically, updating a program or adapting it to new needs does not impair the honour or reputation of the author.

To the prerogatives listed in Article 9 of the Law of 1972 should be added the right of disclosure (Article 82) which means the right of exhibiting or reproducing the work.²¹ The decision to commercialize the software or not rests with the author alone.

b. *Characteristics of the moral rights*

Closely linked to the author's personality, the extra-patrimonial prerogatives are not transferable, negotiable or distrainable. They fall outside the scope of what can be legally traded. The moral prerogatives are exhausted only 50 years after the death of the author. After his death, they are exercised by his heirs or a specially appointed third party (Article 9(2)).

c. *The patrimonial right of the author*

This right includes the right to reproduce a work, to exhibit it to the public by whatever means and to authorize its disclosure.

— *Exhibition.* According to Parliamentary debate, exhibition can actually be carried out by a 'public presentation, public projection or distribution by any means (. . .).' This comprehensive and broad definition is designed to include the hypothesis of the teletransmission of a computer program.

— *Reproduction.* A computer program is reproduced each time it is copied by any means, on diskettes, magnetic tapes, hard disks, CD-ROM, etc. The start-up of a program which implies a transfer of certain executable files in the RAM memory of the computer may eventually also be considered as a public disclosure for the purposes of a counterfeiting action.

— *Limits to the patrimonial right.* The author of a disclosed work may not oppose to quotations in the original on a translated language of his work as long as such quotations remain *bona fide* and are justified by their aim (Article 13(1)). For software this exception remains merely theoretical. The use of the work can also be authorized for educational purposes but the law only tolerates sound or visual recordings in this case (Article 13(2)). As the exceptions must be interpreted restrictively, there is a risk that copies

on magnetic discs would be prohibited while those on optic discs would be allowed.

In reality, these restrictions of copyright protection are often purely theoretical in relation to computer software.

In contrast to foreign legislation, Luxemburg law does not specifically authorize the copy for purely private use. One may, however, consider that a copy for back-up purposes does not infringe copyright on a computer program.

— *Characteristics of the patrimonial right.* In contrast to the moral prerogatives, the patrimonial right is transferable and distrainable. The Luxemburg legislator preferred not to regulate contracts related to copyright. Article 3(2) of the Law of 1972 indeed refers to common law in this respect.

Legal precedent is, here, virtually non-existent. Only one judgment has been published concerning the right of fixing a musical work on a sound track. The Court of Appeals decided that the transfer of the right did not necessarily imply the right to publicly perform the work.²²

1.5.2.2. *Sanctions*

a. *Counterfeiting*

The material aspect has to be analyzed first. Any harmful or fraudulent attack of copyright constitutes a misdemeanour of counterfeit. The comprehensive definition given in Article 29, paragraph 1 applies both to the moral as well as the material prerogatives.

As regards violation of the patrimonial right: anyone who exhibits, performs or reproduces unlawfully a protected software or who reaps a commercial benefit from the forged program is guilty of counterfeit (Article 29(2)).

Exhibition or performance are realized by means of public broadcasting. All communication involves two players (or two groups of players): the person emitting the message and the person receiving it. The criminal prohibition applies without a doubt to the emitter, but what happens to the receiving person? Let us again take the example of the teletransmission of a computer program by a general-public telematic server.

Does the user who activates his terminal and loads a communication program in order to have access to the service commit a counterfeit? Article 29, paragraph 1 punishes 'any harmful or fraudulent attack of copyright.'

This text applies to all acts and consequently to all the players who participate in the communication.²³ In a case pertaining to the radio broadcast of a musical work, the Luxemburg Cour de Cassation brought the following decision:

22. Court of Appeal, 25 January 1956, *Pasicrisie* t. XVI, p. 430.

23. Tribunal d'Arrondissement, 29 June 1902, *Pasicrisie*, t. VI, p. 521.

21. *Doc.parl.* 1377, p. 3.

'A radio broadcast is made from the broadcasting studio (. . .). The fact that the radio program can thereby be heard on a receiving set does not constitute a new performance of the work, even if this would allow different listeners in different places to perceive the work.'²⁴

In other words, the fact of switching on a receiving set cannot be considered as an infringement of copyright.

Applied to our examples, this solution would render the receiver of a transmission of software not guilty of counterfeit.

Copyright is, however, evidently infringed when software is copied or circulated in its original form. This does not only apply in the case of a perfect copy.

Infringement also exists when the characteristic features of the original work can be found in the forged version. The copy of a program remains illegal even when the counterfeiter adds some personal touches.

In contrast, the literary plagiarism of the substance of a work is not illegal in terms of copyright so long as the form of the expression is not reproduced. The programmer who takes inspiration from an existing program without, however, copying its internal structure or instruction does not infringe the law. In practice, however, experts would be hard put to distinguish between a prohibited reproduction and an authorized plagiarism. The standardization of computer programs through new work environments makes this task even more difficult.

Is the violation of moral right criminally punishable? Foreign doctrine is divided on this question. But in Luxemburg Law the general significance of 'any attack on copyright' makes the controversy non-existent. In addition to the common penalties covering the moral and intellectual prerogatives, the Law of 1972 provides for a more severe sanction for fraud of paternity right: imprisonment and a fine. Identical penalties are applied in the case of business undertaken with the aim of counterfeit (Articles 32 and 33).

The moral aspect also needs to be analyzed. An act of counterfeit supposes a 'criminal intention.' The infringement is established when the breaking of copyright is 'harmful and fraudulent.'

In their first decisions, the judges held that an attack is 'harmful' when the act was exercised with the intention to harm the artistic reputation. The attack is 'fraudulent' when the accused tried in *mala fide* to derive benefit from the breach of copyright.²⁵

With time, case law has adopted a broader and more tolerant definition of 'criminal intention.' Fraud consists in the fact that the work of others is exploited publicly and without the necessary authorization. One no longer has to distinguish whether the counterfeiter acted in the intention of gaining advan-

tage or not.²⁶ The courts have, moreover, affirmed that the harmful and fraudulent aspects of the intention of infringement can be punished individually and separately.

The guilty intention arises normally from the material fact. The presumption of *mala fide* is attached to the act of counterfeiting.²⁷ In order to be exonerated from all criminal liability, the presumed counterfeiter must prove his *bona fide*.

b. The remedies for counterfeiting

The chronology of the whole process should be examined more closely.

— *The preventive seizures.* The scope of the seizure is intended to facilitate proof that the offense has been committed and to prevent the disappearance of the litigious works. In order to avoid any evil or negative consequences, this speedy and expeditious procedure is submitted to judicial control. The owner of copyright who deems that he is victim of a counterfeiting action first has to acquire a distraint-order from the presiding judge of the court (Article 37).

The judge can appoint one or more experts who will proceed to describe/examine the computer program purported to be forged. The parties who want to be present during this operation need a special authorization from the presiding judge (Article 40). The expert then has to send a copy of his report to all the parties as rapidly as possible (Article 42).

The judge can deem it necessary to order the person in possession of the counterfeit software not to surrender it. A guardian or warden can be appointed but such a seizure does not prevent the possessor from using a copy of the distrained original. The pretending legal owner has to file a subpoena within a period of eight days after the receipt of the expert's report. Otherwise, the order would cease to produce any effects (Article 43).

— *Remedy-action stricto-sensu.* Counterfeiting is a civil and criminal offense. Public action begins, in principle, only when the accusation is lodged by the victim himself or his legal representatives (Article 34). It is only in the presence of a false name or a distinctive sign that the public prosecutor can institute proceedings (Article 32).

The criminal offense is punished by a fine of 2,501 to 100,000 Flux. A person violating the paternity right of a work is liable to a prison term of three months to two years and a fine of 2,501 to 20,000 Flux.

Civil action can only be filed with a civil court. The summary procedure is applied by the presiding judge of the court.

The indemnification for damages complies with the rules of common law. In addition to financial reparation, civil law allows the general '*droit de suite*' of forged objects.

24. Cour de Cassation, 29 July 1938, *Pasicrisie* t. XIV, p. 327.

25. Cour de Cassation 6 December 1901, *Pasicrisie* t. VI, p. 36, Court of Appeal 5 June 1915, *Pasicrisie* t. IX, p. 296; Tribunal d'Arrondissement Luxemburg, 21 February 1901, *Pasicrisie* t. VI, p. 33.

26. Court of Appeal, 4 June 1973, *Pasicrisie* t. XXII, p. 334.

27. Court of Appeal, 4 June 1973, *loc.cit.*

1.6. Term of Protection

'Copyright continues 50 years after the death of the author for the benefit of his heirs or rightful owners' (Article 2). For works of 'artistic applications,' however, the protection period starts with the day of their creation (Article 4). This limitation applies to computer programs. One has to indeed determine the exact date/moment that the program was developed.²⁸

Whatever the starting point of the reservation period, 50 years are far too long for a computer program. The length of protection should take into account the extremely rapid obsolescence of such programs.

1.7. Conclusion

As one may have noticed, the 1972 Luxemburg Copyright Act is strongly influenced by the French Law of 11 March 1957. Apart from a few distinctive rules dictated by the specific socio-economic situation of the Grand Duchy, the Luxemburg legislation is in many aspects almost identical to the French regime before its amendment in 1985.

One may, therefore, consider that even if, to the best of our opinion, no case law exists on the subject, the Copyright Act of 1972 procures a frame for an adequate protection of software authors and owners.

PART 2. IMPLEMENTATION OF THE EC DIRECTIVE

A precise status is on the way to be defined by the Luxemburg legislator who plans to amend the Law of 1972 in order to take into account the Directive of the European Council of 14 May 1991 on Software Protection. At present, however, no proposal has been made by the Government. Unofficial sources confirm that a text is being prepared and will be submitted to the Chamber of Deputies by the end of the year.