Summer 1996


Jaap H. Spoor

Follow this and additional works at: http://repository.jmls.edu/jitpl

Part of the Computer Law Commons, Intellectual Property Law Commons, Internet Law Commons, Privacy Law Commons, and the Science and Technology Law Commons

Recommended Citation

http://repository.jmls.edu/jitpl/vol14/iss4/6

This Article is brought to you for free and open access by The John Marshall Institutional Repository. It has been accepted for inclusion in The John Marshall Journal of Information Technology & Privacy Law by an authorized administrator of The John Marshall Institutional Repository.
COMPUTER SOFTWARE PROTECTION
IN THE NETHERLANDS

by JAAP H. SPOOR†

I. INTRODUCTION

The Netherlands, land of Vermeer and Grotius, is a West-European country with a population of fifteen million and a highly developed economy, featuring inter alia Rotterdam, the world's largest harbour, and Philips, the company which invented both the compact cassette and the compact disc. The national language is Dutch, but most people have a fair to good working knowledge of English.

The legal system is rooted in the continental European civil law tradition. Jurisdiction is administered by nineteen district courts, five courts of appeal and a supreme court (Hoge Raad). Attorneys are qualified to represent their clients throughout the country. Legal procedure is mostly in writing, except in summary proceedings.

The Netherlands is a member of the European Community (EC), and during the past few decades the influence of EC law is increasing, through, inter alia, through several directives, including the Council Directive of May 14, 1991 on the legal protection of computer programs ("the Software Directive"). Additionally, the Netherlands cooperates closely with its neighbours Belgium and Luxembourg in the Benelux Economic Union, as is demonstrated by uniform Benelux trademark and design protection laws which cover the territory of these three countries.

Copyright is the most important vehicle for software protection in the Netherlands. Accordingly, this article will primarily discuss copyrights. Other topics discussed, albeit briefly, are patents, trade secrets, and semiconductor chip protection.

† Jaap H. Spoor is professor of Intellectual Property Law, Vrije Universiteit, Amsterdam, The Netherlands, and of Counsel to the major Dutch law firm Trenitë Van Doorne. He specializes in Copyright, Computer Law, Trademark Law and other Intellectual Property Law subjects. He co-authored the leading Dutch treatise on copyright law and published several other books and numerous articles concerning copyright, industrial property and computer law.

The author may be contacted at Trenitë Van Doorne (phone +31 20 6789 123, fax +31 20 6789 589) or at the Vrije Universiteit Law Faculty (e-mail: j.h.spoor@rechten.vu.nl).
II. COPYRIGHT

A. SOURCES OF SOFTWARE COPYRIGHT LAW

The Netherlands has been a party to the Berne Convention since 1912, and to the Universal Copyright Convention since 1967. The Copyright Act of 1912 was profoundly revised in 1973 and, to a lesser extent, several times afterwards. In 1994, the Act was amended in order to implement the changes prescribed by the Software Directive. Until that time, the Act did not make any specific reference to software. However, some thirty reported earlier lower and appellate court decisions, although none from the Supreme Court, had already established that computer programs may qualify for copyright protection. Finally, there is no official governmental office dealing with copyright matters in the Netherlands, such as a Copyright Office.

B. PROTECTABLE SUBJECT MATTER

1. The Originality Requirement

Copyright protects original literary, artistic or scientific works. The originality requirement is not set forth in the Act, but has been accepted by doctrine and jurisprudence. The traditionally required level of originality is believed to satisfy the condition laid down in Section 1, third paragraph of the Software Directive; that “[a] computer program shall be protected if it is original in the sense that it is the author’s own intellectual creation.”

Although the threshold is low, creative authorship remains mandatory. Originality requires at least a minimum amount of personal expression by a human author. Consequently, a certain freedom of creative choice is a prerequisite for originality.

Dutch copyright law traditionally makes one exception to the originality criterion: “writings” may even be protected if they are devoid of any originality, provided that they have been published or are destined for publication. Here, we have in fact what one might call “sweat of the brow” protection. This doctrine was believed also to apply to computer programs, but its application to such programs was expressly excluded in the Act to implement the Software Directive. Computer programs therefore must meet the originality requirement.

2. **Source and Object Code**

The reported cases show that protection covers source code as well as object code, and that the language in which the program was written is immaterial, as is the method of fixation, including fixation on ROM semiconductor chips. BIOS-software is also believed to be protected.

In the earlier software protection cases, originality was a much debated issue. After a number of cases were tried, it was clear that computer programs will, as a rule, satisfy the originality requirement, although views still differ as to the likelihood of originality in smaller or simpler programs or parts of programs. Today, courts are more readily inclined to accept a prima facie claim that a software program is original, not only in clear-cut infringement cases, but in other situations as well.

3. **Preparatory Stages**

Early programming stages may be protected as such, although the question may remain as to whether the final product still sufficiently reflects those stages to remain tributary to the copyright therein.

On a more fundamental level, protection is also afforded to underlying concepts. In *Atari v. Philips*, the overall game concept of the Pac-Man video game was considered protected by copyright. Similarly, in *JPM v. Krijco*, the game specification of a gambling hall device was afforded protection. Intermediate programming stages, such as flow charts, have also been found protectable, as have data in separate pro-

---


4. **Program Documentation**

Any documentation, such as user manuals or program development documentation, is protected, provided that the general conditions for copyright protection are met.

5. **User Interfaces**

User interfaces can also be considered protectable. In *Slasoft v. Digi*, the user interface was not considered to form an independent copyrighted work. Nevertheless, the defendant’s program which contained an identical user interface was considered infringing, although the interfaces accounted for no more than some two or three percent of total program size. Protection of the general look and feel also came under discussion in *Miniware v. Van Luijt*, but on that occasion the issue remained undecided.

6. **Program Outputs**

Whether program outputs can be protected as such is not certain. Although copyright requires human authorship, the author, of course, may use tools such as a computer so long as he leaves his personal mark on the final result. Therefore, computer output will be protected if it can be demonstrated that although the author used the computer as a tool, he nevertheless caused the product to be original. Products which are entirely computer-generated, however, may remain unprotected.

7. **Printed Circuit Boards**

On two occasions copyright protection was granted to printed circuit boards or the underlying technical drawings. In *Psion v. Cheap Chip*, however, the question as to whether the electrical wiring diagram can be protected as such, apart from the print lay-out, was considered highly debatable, and therefore not to be decided in summary proceedings.

---


C. Ownership and Transfer of Copyright and Licensing

1. Ownership

Section 2 of the Software Directive does not attempt to harmonize the subject of ownership; Section 2 only addresses the subject of ownership. Consequently, the traditional ownership rules apply. Therefore, the general principle is that the copyright is vested in the author.

When a work is produced by cooperation, usually the co-authors jointly own the copyright. However, according to Section 6, if a joint author has the full authority and the professional competence to direct or adapt his co-authors' contributions, then he will own the entire copyright.

The author also owns the copyright in commissioned works for which he is hired to produce; the principal who commissioned the works does not share ownership rights with the author of the work. However, the principal and the author can enter into a contract which gives the principal ownership of the copyright.16

There are two important exceptions to this general rule:

(1) Copyright in employees' works is vested in the employer by virtue of Section 7.17 "The labor of the employee must consist in the making of certain works," which means that the employee's duties under the employment contract must include creating such works. The duties may even be defined implicitly. In Van Gunsteren v. Lips,18 the defendant company's general manager created certain software and documentation without any formal instruction from the company. The court held that the employer owned the copyrights. In Navalconsult v. Van den Hondel, two employees claimed that they owned the copyright in software that they began to develop in their spare time before their employer asked them to further develop as a condition of employment. The court rejected the employees' claim.19

(2) Section 8 provides that a company or organization owns the copyright in a work that it has legally published if the author withholds his name from the work. This provision will often apply to software, since introduction screens and manuals for software usually mention a com-

---

16. Thus, in De Wild v. Van Genk, Breda District Court 2 September 1994, CR 254 (1991), copyright in a tailor-made program was found to vest in the developer. The customer, however, was considered entitled to a copy of the source code. Id.
17. The text of § 7 states that "the employer is considered to be the author." Most learned authors consider this to imply that the employee cannot even claim moral rights in such works. See infra text on moral rights below.
pany, instead of an author, as the developer of the software.20

2. **Transfer of copyright**

Copyright ownership may be inherited. Owners can also assign their copyrights to others, with the exception of moral rights, which the author may only waive in some instances. Assignment of a copyright is subject to some conditions and restrictions:

1. The assignment requires a written document that expresses the intent of the parties to transfer the copyright.21

2. The assignment must expressly mention the parts of the copyright which the parties are transferring. Some commentators argue that this provision limits the transfer to those parts of the copyright which the acquiring person intends to use, thereby excluding transfer of the entire copyright. However, the prevailing view is that if the parties so desire, they may assign the entire copyright; full assignment of copyrights is common in the Netherlands.

Yet partial assignment of a software copyright is also frequently practiced. The owner may limit the assignee's use of the work or the duration of the assignment. The Copyright Act contains no other provisions on the subject of assignments, and no courts have refused any limitations imposed on an assignment.22 Nevertheless, the parties are best advised not to go too far in slicing up a copyright; also, in the case of multiple partial transfers of the same copyright, parties should very carefully consider the effect of each of these transfers and their mutual compatibility.

3. The assignment of a copyright in a work not yet created at the time of assignment is invalid, unless that work has been sufficiently defined. Therefore, the author often provides for an additional assignment in the contract “inasmuch as necessary” to take place after the work has been completed, as well as an exclusive license to cover the time in between.

3. **Licenses**

The freedom to license a copyright is almost unlimited; there is no statutory regulation of copyright licenses. Of course, the normal rules of contract law apply, such as the rule that the parties must come to an agreement about a specific contract provisions. No signature or docu-

---


21. Cf. *De Wild v. Van Genk*, Breda District Court 2 September 1994, CR 254 (1994) where the copyright was found to remain with the developer because the wording of the contract was considered insufficiently clear.

22. European Community antitrust law, however, does impose certain limitations.
ment is required for a valid contract, although the parties should set out their agreements in writing.

The law is still uncertain as to whether shrink-wrap licenses are binding. In a recent unreported case, the court considered a shrink-wrap license ineffective; the court could not establish that the buyer was aware that he entered a license agreement by opening a package.\(^{23}\) Therefore, copyright owners and buyers cannot consider shrink-wrap licenses a secure way to protect their rights.

The contractual freedom of the parties includes the freedom to choose which law will apply. Even contracts between Dutch citizens which are usually carried out in the Netherlands can be subject to foreign law should the parties so decide.\(^{24}\)

D. Economic Rights and User's Prerogatives

1. Reproduction

Copying a work on a material support is considered reproduction, including the temporary storage of the software in the computer's internal (RAM) memory. Therefore, when the use of a computer program requires such storage, the use of that program is subject to the reproduction right, thereby requiring the copyright holder's consent. Back up copies are also subject to the reproduction right. However, according to the Software Directive, legitimate users are entitled by law and cannot be prevented by contract to reproduce the program if reproduction is necessary for the intended purpose of the program.\(^{25}\)

2. Distribution

The distribution right is distinct from the reproduction right, and covers the offer of sale, as well as the first distribution, of any copy. This right is subject to a first sale (exhaustion) doctrine—once the copyright holder or a licensee has transferred a tangible copy of the software product, the transferee may freely transfer the product to others. In fact, this provision precisely explains the need to provide specific software users' rights in the Act; otherwise, users of rightfully marketed software products would need a license, or their use would be infringing.

The Copyright Act does not address the issue of whether the exhaustion doctrine applies regardless of the country where the software products were first put on the market, or whether the doctrine remains limited to products which were first sold within the European Commu-

\(^{23}\) Amsterdam District Court 24 May 1995.

\(^{24}\) To the extent that the contract must be applied in The Netherlands, such law cannot always override imperative provisions of Dutch law.

nity. However, in Novell v. America Direct, the court held that Section 4(c) of the Software Directive provides for community exhaustion only, and that the Dutch Copyright Act should be interpreted accordingly. Consequently, the marketing of software imported from the U.S. was considered a copyright infringement.

3. Rental and lending

Software rental is subject to the copyright holder's permission. Public lending is also subject to the copyright holder's permission, except for ancillary software in information products (searching software on CD-ROM's); this distinction was introduced by parliament and enables public libraries to continue their existing practice of lending CD-ROMs to the public, while putting a stop to the lending of computer programs.

4. Adaptation

In general, adaptation of a computer program will require the copyright holder's permission. However, program error correction is expressly permitted and cannot be prohibited by contract.

Adaptation of software to another platform (porting) has repeatedly given rise to conflicts. In the absence of contractual limitations, porting may be permissible for the intended purpose of the program within the meaning of Section 45j, but contracts often limit the permitted use of the program and, thereby, exclude porting. In Bull v. Vomar, the court held porting to be an infringement. In Siemens v. Gemini, Gemini licensed its program UniCom, which enabled the licensees to use programs in Business Basic under the Unix operating system. Siemens' Comet program was also a Business Basic program which could only be used under Siemens' proprietary operating system, Niros (and, of course, only on Siemens hardware). The court held that Gemini did not infringe

---

26. Section 4 reads, in pertinent part, as follows:

[The exclusive rights of the rightholder ... shall include the right to do or to authorize: ... (c) any form of distribution to the public, including the rental, of the original computer program or of copies thereof. The first sale in the community of a copy of a program by the rightholder or with his consent shall exhaust the distribution right within the community of that copy, with the exception of the right to control further rental of the program or a copy thereof (emphasis added).]


29. Id. § 15c.

30. Id. § 45j; see also Lensen v. Palm, Amsterdam Court of Appeal 13 April 1989, CR 215 (1989), where de-bugging undertaken at the user's request by a third party was considered non-infringing.

Siemen's copyrights in Comet, except where Gemini allowed their customers to copy Comet onto other hardware.  

5. Reverse Engineering

Section 45m contains an elaborate provision on decompilation for inter-operability purposes, which is in line with Section 6 of the Software Directive. The courts have decided no cases on the subject to date.

One can argue that decompilation is permissible to the extent that reverse engineering is necessary for error correction. However, the Act does not provide for the use of reverse engineering in order to establish whether a program is an infringement.

For the rest, reverse engineering must be considered inadmissible, even if it merely serves to identify the functions which a compatible program should perform. All that Section 45j allows in order to identify such functions is "to observe, study or test the functioning of the program," which of course would also be non-infringing without explicit legal provision to allow it.

6. Public Performance or Display

In general, except for the user interface, software is not normally performed or displayed. However, the right of public performance or display also applies if software is made accessible to the public by broadcasting, or through networks, such as the Internet.

The concept of public communication does not require actual demand for the program; the mere fact that the public may access the software will be sufficient. For example, in Bridgesoft v. Lenior, a computer program had been uploaded to a BBS by a third party, whereupon it was made accessible to the public by the BBS operator, who thereby was considered also to have infringed the copyright in the program. A communication is considered public unless it is restricted to a group which merely consists of friends or relatives.

---

36. Of course, software may be displayed for educational purposes, which are permitted by virtue of § 12, ¶ 3.
37. Rotterdam District Court 24 August 1995 (as yet unpublished).
7. Exceptions to Economic Rights

The Copyright Act contains a number of exceptions to copyright, such as a right of quotation, a right of reproduction for educational purposes, and permitted uses of government publications. Use of copyrighted materials through one of these exceptions generally subjects a user to further detailed conditions and perhaps equitable remuneration. The general concept of Fair Use is unknown in Dutch copyright law, however much of it has been codified in the aforementioned exceptions.\textsuperscript{38}

The exceptions to copyright used to be considered limited to those expressly mentioned in the Copyright Act. Quite recently, however, the Supreme Court ruled that non-statutory exceptions may also apply, especially in situations that the legislative bodies could not have reasonably foreseen when enacting the relevant provisions.\textsuperscript{39}

E. Moral rights

Dutch copyright law recognizes several moral rights.\textsuperscript{40} At first, the potential application of such rights to software was a cause for concern among critics of software copyright. The very thought that a programmer should be entitled to oppose adaptation of his "creation" was considered ridiculous by some and a threat to software development by others. As yet, however, neither concern has materialized.\textsuperscript{41}

\textsuperscript{38} The application of § 16b, which to some extent permits the making of a few copies for private use, is expressly excluded where computer software is concerned.

\textsuperscript{39} Dior\textemdash Euora, Supreme Court 20 October 1995, IER 223 (1995).

\textsuperscript{40} Section 25 of the Act essentially mentions the following moral rights:

\textit{Right to claim authorship.} The author can require that his name is mentioned in connection with his work. This right can be waived; but even then, the author may always oppose someone else being mentioned as the author.

\textit{Right to oppose modification of the work.} An author may oppose any modification, unless such opposition is unreasonable. Again, this right can be waived, which in practice is done frequently.

\textit{Right to oppose mutilation or distortion, i.e.} such changes as severely distort or negatively affect his work and can thereby be expected to affect his professional or personal reputation. In contrast to the right to oppose "neutral" modifications, this right cannot be waived. Later changes in a computer program will, however, only in the rarest of cases affect the reputation of the original maker of that program.

\textit{Right to insist on modification of the work}, provided that such modifications can be considered generally acceptable. This right applies especially to error correction and to updating for new editions.

\textsuperscript{41} It can be noted, though, that in France several cases have been reported in which moral rights of software developers were recognized. Cf. inter alia H. de P./Framatome, Nanterre District Court 13 January 1993, Expertises 1993, p. 193, where changing a program's name after the copyright had been transferred was held to infringe moral rights; Bodin v. l'Agospap, Paris District Court 20 January, 1993, Expertises 1993, p. 187, where changes in a computer program by a licensee were not only found to infringe the license, but the programmer's moral rights as well.
As mentioned above, the prevailing view is that employees are not entitled to moral rights in works which they made under the employment contract. Thus, in Gorter v. PTT,\(^4\) the court held that the plaintiffs, two former employees of the defendant, had no right to have their names mentioned on a software product which they had developed during their employment.\(^4\)

F. INFRINGEMENT OF COPYRIGHT IN COMPUTER SOFTWARE

1. Elements of Infringement

i. Generally

For an individual to be held guilty of an infringement, that individual must have committed, without authorization, and without an exception to copyright being applicable, one of the protected acts mentioned above. A commercial purpose is not required to find a copyright infringement. In this regard the customary expression “exploitation rights” (which is not used in the Act) is misleading, because copyright covers non-profit use of a work as well.

Infringing acts must concern the protected work or an adaptation thereof. The mere act of adaptation, without further reproduction or publication having taken place, may also be an infringement. However, independent creation of a similar work remains free. The mere taking of factual or other unprotected subject matter from a protected work does not constitute infringement.

ii. Copying

To prove copying, one must demonstrate that the likeness between the two works cannot have been accidental.\(^4\) It is not necessary to prove that the defendant had access to the copyright work, although it can certainly be useful. On the other hand, mere proof of access is not enough; one may be required to prove that the identical or similar parts or aspects in the two works were original creations of the plaintiff.

In principle, regardless of how minute, only that which has been taken from the copyrighted work counts, not the proportion between derived and new parts in the defendant’s work. Therefore, the copying of one original module from a large program into an otherwise different and equally large software program will still constitute infringement.


\(^{43}\) Id.

\(^{44}\) In Vertimart v. De Schipper, Alkmaar District Court 21 February 1990, CR 140,4037 (1990) 4073 lines of code from the plaintiff’s 9581-line Dentocard program were found back in the defendant’s JDS program, which according to an expert witness could not possibly have resulted from independent development.
iii. Intent

Intent to infringe is not required. The defendant may have honestly believed that the work was in the public domain or was otherwise unprotected. The infringer may even have copied it without realizing he was doing so, e.g. from memory after having seen it long before.45 In Bridge-soft v. Lenior,46 where a protected computer program had been uploaded to a BBS by a third party, and the BBS operator subsequently made it accessible to the public (by adjusting the Title Allocation Table), the BBS operator was found to be liable for copyright infringement. The court held as such even though the BBS was not aware that the uploader was infringing the copyright in the program.

Innocent intent may form a bar to liability for damages, but not to an injunction being granted.

2. Standing to Sue

Any copyright owner, including individual owners of a joint copyright, may bring legal proceedings in case of infringement. Moreover, even after transfer of his copyright the original author may claim damages under Section 27, or take action under Section 25 if his moral rights are infringed.

G. Remedies

Injunctive relief can be obtained in full as well as summary proceedings. Summary proceedings are quite customary, as they offer rather quick results at moderate cost. Their main limitation lies in the fact that the case must not be too complex. In general, one hearing should be sufficient to set forth the case, although the judge may then order expert testimony. In summary proceedings one can claim only an advance on damages, which will at best be granted to a moderate amount.

In recent years, Dutch courts have developed a practice of granting so-called trans-border injunctions (injunctions which extend to infringement in countries other than the Netherlands). Such injunctions may be granted if the case is sufficiently linked to The Netherlands and it is established that there is infringement (or a serious threat thereof) in one

45. In Ansems v. Robijn, Almelo District Court 25 March 1987 and 11 June 1987, CR 253 (1987), the defendants unsuccessfully pleaded that such similarities as existed between the respective programs were explained by the fact that they had been developed by the same software engineer, who had been employed by the plaintiff before switching jobs and entering their service where he created a program of the same function. See also Navalconsult v. Van den Hondel, Rotterdam District Court 23 December 1988 and 20 March 1989, CR 149 (1989).
46. Rotterdam District Court 24 August 1995 (as yet unpublished).
or more other countries, according to the laws of those countries. Attachment of infringing products is possible upon an ex parte application. However, their destruction can only be ordered in full proceedings.

Full damages can be claimed only in full proceedings. In principle they will not exceed the real damages that have been suffered, although the infringer may also be required to turn over all profits derived from the infringement. The court will also award costs to the successful party, but the awarded amount will rarely cover more than a modest part of the attorneys' fees. However, the court may impose heavy fines on a party who violates an injunction.

III. PATENTS

A. GENERALLY

Patents for The Netherlands can be obtained by way of a national patent application or, under the European Patent Convention (EPC), through a European application at the European Patent Office.

Today, the European application is by far the most common. Consequently, the number of national patent applications dwindled to a level where it was no longer possible to maintain a system of substantive examination. For that reason, under the Patent Act of 1995, which repealed the Patent Act of 1910, patents are granted without substantive examination, except, in most cases, as to novelty.

B. SOFTWARE AS PATENTABLE SUBJECT MATTER

1. The 1910 Patent Act

Obviously, software was not mentioned in the 1910 Patent Act. Beginning in 1970 software patents were refused by the Patent Office, on the ground that software does not bring about a change in physical nature, which is one of the requirements for patentability. This position was last reconfirmed in 1983.


In its decision of 12 September 1985, however, the Patent Office ruled that software could be patented if it is fixed on a directly addressable computer memory, and in a decision of 11 May 1987, this new policy was confirmed and further expanded. On that occasion, a patent was granted for a method of computerised information processing alone, without regard to the kind of hardware on which it was to be used. The Patent Office ruled that, when such a method is applied to computerised information processing, it does bring about some change in physical nature, since computerised processing involves changes being made in the contents of the computer memory, and thus in physical nature. This line of reasoning has never been tested in court.

2. European Patents

Section 52 of the EPC states that computer programs are not patentable. However, the EPO granted a patent for a method for digitally processing satellite signals in its Vicom decision. According to the EPO, a mathematical method can be patentable if it is used in a technical process and by some technical means, e.g., by a computer. This decision was confirmed in Koch and Sterzel, but in later decisions the EPO retreated to a more restrictive position. It was then held that the inventive part of the application must, as such, be of a technical nature.


The 1995 Patent Act changed granting procedures. Furthermore, changes were implemented in order to bring the Dutch national system more in line with European practice. These changes concern the statutory scope of what is considered to be patentable subject matter. In line

52. It is doubtful whether the current Patent Office position was compatible with the leading Supreme Court decision of 20 January 1950, Nederlandse Jurisprudentie (NJ) 1950, 274, which required patentable inventions to bring about a change in physical nature, but the authority of that precedent is uncertain in view of its age.
56. Cf., e.g., EPO (Technical Board of Appeal) 14 February 1989, European Patents Sourcefinder (EPS) T/550 (abstract only) (In Re IBM Word Processing); 14 March 1989, EPS T/567 (abstract only) (In Re IBM Spell Checking).
with Section 52 EPC, Section 2 of the 1995 Act now states that computer programs are not patentable.

As yet there is no reported case law with respect to this provision. However, it can be expected to be interpreted in conformity with EPO practice.

C. ADDITIONAL REQUIREMENTS OF PATENTABILITY

The most important requirements of patentability are novelty and non-obviousness (inventivity). An additional requirement that must be met is the utility demand. This demand is satisfied when sufficient disclosure of the invention enables third parties to apply the invention.

D. EMPLOYEE INVENTIONS

Entitlement to a patent generally attaches to inventors. However, according to Section 12 of the 1995 Patent Act, if research employees make inventions within the sphere of their employment, the employer is entitled to the patent. Nevertheless, parties may contractually agree otherwise. If the invention is of greater value than the kind of invention which someone in the employee's position might reasonably be expected to make, the employee has a mandatory claim to additional remuneration for his contribution.

E. SUMMARY OF THE PATENT APPLICATION PROCESS

1. European Patents

Substantive examination takes place ex officio. If the application is considered admissible, often in adapted form as a result of EPO objections to the initial application, the patent will be granted. Upon granting, opposition can be brought during a nine months period.

2. National patents under the 1995 Patents Act

Patent applications must be filed with the Bureau for Industrial Property and are open to public inspection no longer than after eighteen months after filing.

Within thirteen months after the filing or priority date the applicant may apply for a novelty search. The patent is granted two months after the results of the search have been communicated to the applicant. This patent lasts for a term of up to twenty years from the filing date.

If no request for a novelty search has been made within the thirteen month period, or if the applicant declares he will not make such a request, the patent will be issued immediately. However, the absence of a novelty search limits the patent period to a term of up to six years from the filing.
It remains unclear whether such patents will be of much use. Unlike "old style" Dutch patents (many of which are still in force), or European patents, both of which by virtue of the thorough examination process carry a distinct authority, especially in infringement proceedings, the new patents will need to be sustained by evidence that the invention does indeed satisfy all statutory requirements.

F. PATENT INFRINGEMENT

The scope of protection is not limited to the literal wording of the patent, which must be interpreted so as to "combine a fair amount of protection for the patentee with reasonable certainty for third parties." In practice, the interpretation by the courts tended to be rather broad, but recent cases show a tendency towards a more restrictive interpretation. Essentially, the patentee has the sole right to produce and sell the patented products or to apply the patented process commercially.

In the event an infringement action should arise, the patentee may obtain an injunction, obtain an accounting of profits made by the infringer, and obtain payment of damages. Damages can be claimed for such infringing acts, including contributory infringement, committed after formal notice of infringement has been served on the infringer. Contributory infringement is also actionable. Expert evidence may be necessary, and can be ordered by the court.

An injunction may be obtained in summary proceedings, even in complex cases. If the patent is still open for opposition (in the case of European patents) or if it is asserted in defense that the patent is void, the court may refuse the injunction if it considers that the patent stands a reasonable chance of being revoked.

No infringement cases concerning computer software related inventions have been reported.

IV. TRADE SECRETS

A. GENERAL

Under Dutch law, trade secrets may be protected, but trade secret protection is less developed than in the U.S. or other common law countries. The applicable rules can be found in various sources and do not together form a well-defined area of law.

B. Sources

Under Section 272 of the Criminal Code, it is a criminal offence for professionals or public servants to intentionally divulge secret information. Section 273 contains a similar provision regarding the divulgence by an employee of a company's confidential information, but only if he had expressly been ordered to keep it secret.

Ultimately, protection must be found in contracts and in the general law of torts, as set out in a number of court decisions.

C. Employees

As mentioned above, employees or former employees may not divulge any secret information which they were ordered to keep confidential. However, this doctrine does not forbid the mere use of such information by former employees, even if this would enable them to compete with their former employer. In principle, former employees are free to profit from the information they possess, except in the following situations:

(1) If the information clearly was of a confidential nature;
(2) If the former employee is bound by contractual confidentiality and non-competition obligations. Such clauses are quite common in employment contracts, but are often lacking. Although these obligations may be imposed by agreement separately after the employment has commenced, this often proves difficult to negotiate; or,
(3) If the former employee has used unfair competition methods, such as starting to prepare his competitive activities before the termination of his employment. Several cases treat situations where software engineers have already been preparing their future business plans while still in the service of the company.\(^{58}\)

D. Contract partners

Confidentiality can, of course, be imposed by contract. In practice, the main problems lie in the definition of the information which is deemed confidential under the contract. This includes information already known to the other party before it was disclosed under the contract, or that later became available from other sources.

Furthermore, the mere fact that information is supplied under a confidentiality agreement does not automatically impose a secrecy obligation on the receiving party's employees or its subcontractors. Therefore, the contract should provide that the receiving party may disclose

\(^{58}\) Haarlem District Court 29 August 1986, CR 254 (1988). Conflicts of this type are rather common, but it should be noted that in most cases, including this one, the focus was essentially on the copyright issue.
information only to persons who have themselves accepted similar confidentiality obligations.

E. Third Parties

Third parties are not barred from using trade secrets which should not have been divulged to them. However, this will certainly be the case if they elicited the unlawful disclosure. It remains unclear whether such behavior—merely profiting from such indiscretions—without actively eliciting them is a tort. The answer will largely depend on further circumstances.

V. Semiconductor Chip Protection

Under the Semiconductor Chips Protection Act 1987, protection can be obtained for original topographies of semiconductor products. Protection is acquired without any formalities, but according to Section 7, the right will lapse unless a request for registration has been filed within two years after the first day of rightful exploitation of a copy of the topography or of a semiconductor product incorporating it, either within or outside The Netherlands. Moreover, a topography notice is not required.

According to Section 3, the rights in topographies which have been made by employees are owned by their employer, unless otherwise agreed.

The right to the topography includes the right to reproduce or adapt the topography, to produce semiconductor products embodying it, and to exploit such products. However, reverse engineering is permitted. By virtue of Section 25, topographies designed after the Act came into force (7 November 1987) are excluded from copyright protection, except insofar as the topography includes (part of) an earlier copyrighted topography.

Until now, only few topographies have been registered. No infringement cases have been reported.

VI. Trademarks

Protection is obtained by filing for registration and is comparatively inexpensive. Trademarks must be commercially used within three years after filing. Foreign companies are strongly advised to provide for early registration of their foreign trademarks in the Benelux, as it may be difficult to overcome earlier third party registrations, even if these were secured by applicants who probably were well aware of the foreign trademark's existence.

The Uniform Benelux Trademark Act offers a broad protection to al-
most any kind of distinctive sign. Such protection encompasses publicity slogans, colors and even product forms, unless they are dictated by the product's function or contribute significantly to the product's intrinsic value.

The Benelux countries are a party to the Madrid Trademark Convention; protection can therefore also be obtained by international registration, based upon prior registration in at least one Madrid Union member country.

Trademark owners may not only oppose any use of a similar trademark for similar goods or services, but virtually any other use thereof, if such use may be prejudicial to their interests. Such prejudicial interests may include the use of the trademark for non-similar goods, if such use may damage the trademark's reputation, as well as its use in comparative or other advertising. Even the use of a trademark for reference, in connection with the sale of compatible spare parts or supplies (although admissible in principle) has repeatedly been considered infringing for being potentially misleading or simply not modest enough. Furthermore, the trademark owner may oppose the resale of his products if these have been in any way modified, even if this was done in order to satisfy local statutory requirements.

On January 1, 1996, amendments to the Benelux Trademark Act came into force, in order to comply with the EC Trademark Directive. Perhaps the most important change as regards software concerns the introduction of mere EC exhaustion instead of the earlier world-wide


65. First Council Directive of 21 December 1988 to approximate the laws of the member states relating to trade marks (89/104/EEC). The Benelux Countries were very late; the amendments should already have been implemented three years earlier, on January 1, 1993.
VII. CONCLUSION

This brief survey of software protection in The Netherlands shows that copyright has developed into the most important protection vehicle in actual use, at least as regards third party protection. Yet copyright cannot offer full coverage of all software features that need protection. Underlying ideas must be protected by patents or as trade secrets. Costly and time-consuming as the patent system may be, and in spite of its limitations, the patent system's potential in the domain of software protection is often underestimated.

Finally, one should remain aware that software protection requires various measures of a technical, commercial and organizational nature. In addition, software protection must also satisfy all legal criteria. Anti-copying devices may form a first barrier to infringement. Timely implemented hidden code, superfluous routines and unique package numbers will help in providing evidence if legal action becomes unavoidable. Contracts should be made-to-measure. At the same time, reasonable pricing, adequate customer support and a regular supply of new versions or releases will often offer even better and more stimulating incentives for customer fidelity and non-infringing behavior.

66. Section 13A, ¶ 8 Benelux Trademark Act; cf. also ¶ II.4.b., supra, with respect to the concept of exhaustion in software copyright law.