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COMMENTS

Computer Software and Copyright Law: The Growth of Intellectual Property Rights in Germany

I. Introduction

“Human genius is the source of all works of art and invention. These works are the guarantee of a life worthy of men. It is the duty of the state to protect the arts and inventions with care.”¹

The purpose of intellectual property rights is to protect the foundation of prosperity inherent in the creations of authors and artists. Among these protected interests is the author or artist's livelihood or economic benefit derived from reducing their creative thoughts into a tangible medium. Nowhere are commercial interests in personal expressions more prevalent than in the rapidly expanding and evolving industry of computer software and the Internet. Authors and publishers of computer software merit copyright protection of their products to safeguard the substantial amounts of money invested in producing their goods, as well as the enormous profits capable of being realized in the global technological market.

1. *“Nascuntur ab Humano Ingenio Omnia Artis Inventorumque Opera. Quae Opera Dignam Hominibus Vitam saepiunt. Reipublicae Studio perspiciendum est Artes Inventaque tutari.”* The canon of the World Intellectual Property Organization (WIPO). See VINCENT PORTER, *BEYOND THE BERNE CONVENTION: COPYRIGHT, BROADCASTING AND THE SINGLE EUROPEAN MARKET* 1 (1991).

Faced with the urgency to protect copyright interests in software, the European Community (EC) has developed regional laws² and reinforced the importance of international treaties³ in guarding the economic intellectual property rights in computer programs. In this setting, the status of copyright protection for computer software in Germany has been in a state of transformation. In the civil law tradition, Germany has relied on regional and national legislation to form the fundamental basis of the nation's copyright law. This trend will continue in the future. However, international law and the German courts will also play a prominent role in determining the scope of copyright law in Germany, and to what extent copyright protection is afforded to computer software.

This Comment will examine the predominant international treaties, EC directives, national legislation, and caselaw which presently govern the protection of computer software in Germany. Throughout, the economics and effectiveness of the preservation of software copyrights in Germany will be considered in relation to software piracy. Finally, the future of computer software copyright protection in Germany will be analyzed with regard to the widespread international use and abuse of the Internet system.

II. Status of Copyright Law in Germany

This section will focus on the origins of German copyright law. Various international treaties, European Community Directives, and German Federal Supreme Court decisions have combined to shape German copyright laws that offer an increasingly wider scope of protection to computer software. Further, vital sections of the new German copyright laws will be evaluated in terms of their relevance to software copyright owners and software piracy.

A. *International Treaties*

The basis of international copyright protection in Germany is rooted in the Berne Convention.⁴ The Berne Convention, in fact,

2. See Council Directive 91/250/EC of 14 May 1991 on the Legal Protection of Computer Programs, 1991 O.J. (L 122) 42 [hereinafter Council Directive]; See also Council Directive 96/9/EC of 11 Mar. 1996 on the Legal Protection of Databases, 1996 O.J. (L 77) 20.

3. See Agreement on Trade-Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods, Dec. 15, 1993, 33 I.L.M. 81 [hereinafter TRIPs].

4. Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, 102 Stat. 2853, 828 U.N.T.S. 221 [hereinafter Berne Convention].

has its origins in German authors' and publishers' associations.⁵ As revised in Stockholm and Paris, the amended Berne Convention protects authors' literary and artistic works under copyright.⁶ While the treaty is receptive to limited technological advancements, the Berne Convention did not anticipate nor provide copyright protection for computer programs.⁷ However, during the Uruguay Round of the General Agreement on Tariffs and Trade, the Agreement on Trade-Related Aspects on Intellectual Property Rights (TRIPs) established that computer software is protected as a literary work under the Berne Convention.⁸ The Berne Convention has been accepted globally,⁹ and it has been recognized that the nomenclature "literary and artistic works" has a broad meaning and encompasses computer programs within its protected mediums.¹⁰ Together, the Berne Convention and the TRIPs Agreement exhibit the intention of many nations to classify computer programs as literary works deserving expanded copyright protection.¹¹ Further, following a World Intellectual Property Organization Conference in December of 1996, computer programs on the Internet will receive a broader scope of copyright protection.¹²

The benefits of computer programs gaining protection under the Berne Convention are clear. Following the Berne Convention, the principle of national treatment will be extended to computer

5. See PORTER, *supra* note 1, at 2. The origins of the Berne Convention date to 1885, when the German authors and publishers association, *Boersen verein des Deutschen Buchandler*, helped decide at the international congress of the *Association Litteraire et Artistique Internationale*, to form a union to provide protection for their interests. *Id.*

6. Berne Convention, *supra* note 4, at art. 1.

7. The Berne Convention provides: "The expression 'literary and artistic works' shall include every production in the literary, scientific and artistic domain, whatever may be the mode or form of its expression . . ." Berne Convention, *supra* note 4, at art. 2(1).

8. Article 10 states: "Computer programs, whether in source or object code, shall be protected as literary works under the Berne Convention." TRIPs, *supra* note 3, art. 10.

9. As of 1996, 117 nations are signatories to the Berne Convention. U.S. DEP'T OF STATE, TREATIES IN FORCE 335 (1996).

10. See Michael Lehmann, *TRIPs, The Berne Convention, and Legal Hybrids*, 94 COLUM. L. REV. 2621, 2625 (1994).

11. See also Nicole Telecki, *The Role of Special 301 in the Development of International Protection on Intellectual Property Rights After the Uruguay Round*, 14 B.U. INT'L L.J. 187 (1996).

12. From December 2 through December 20, 1996, WIPO held a conference in Geneva, Switzerland to propose an update to international copyright law with respect to the Internet and computer programs. Wendy L. Acciss & Ronald S. Katz, *WIPO Treaties: Euphoria Should Wait*, COMPUTER LAW., Apr. 1997, at 1.

software.¹³ The concept of national treatment is of extreme importance in the context of software piracy. The national treatment provisions uphold the principle of nondiscrimination against foreigners; therefore, the copyright guarantees under German law must be applied equally to software originating in nations other than Germany. Accordingly, the German legislature, courts and law enforcement agencies are obligated to provide measures to protect foreign software from pirating in the same manner as nationally produced software.

Authors' rights under the Berne Convention are also of considerable significance. The treaty provides that authors of literary works have the exclusive right of authorizing the reproduction of their works, in any manner or form.¹⁴ Potentially, any unlawful reproduction of software, or pirated copies, may come under the ambit of this right. This reproduction right is beyond any moral rights an author may have in his or her work.¹⁵ Further, should an unauthorized reproduction infringe on a creator's rights, the infringing copies are liable to seizure.¹⁶ The seizure enforcement mechanism is to be implemented in accordance with German law.¹⁷ Therefore, German law must delineate seizure methods by which enforcement officials may combat the pirating of computer software.

While the Berne Convention provided certain basic rights under copyright, the EC, and Germany in particular, required additional protection for computer software. The German interest in strengthening regional and international protection of intellectual property stems from the fact that Germany generates an impressive

13. Article 5 of the Berne Convention provides:

Authors shall enjoy, in respect of works for which they are protected under this Convention, in countries of the Union other than the country of origin, the rights which their respective laws do now or may hereafter grant to their nationals, as well as the rights especially granted by this Convention.

Berne Convention, *supra* note 4, at art. 5.

14. Article 9(1) of the Berne Convention proscribes: "Authors of literary and artistic works protected by this Convention shall have the exclusive right of authorizing the reproduction of these works, in any manner or form." *Id.* at art. 9(1).

15. Article 6bis of the Berne Convention describes moral rights and the claim of authorship. *Id.* at art. 6bis.

16. Article 16(1) of the Berne Convention, states: "Infringing copies of a work shall be liable to seizure in any country of the Union where the work enjoys legal protection." *Id.* at art. 16(1).

17. Article 16(3) of the Berne Convention provides: "The seizure shall take place in accordance with the legislation of each country." *Id.* at art. 16(3).

amount of revenue from the legal sale of computer software.¹⁸ Comprehensive copyright laws serve to protect the authors and publishers of computer software who produce the ideas, technology, resources and development of the products. The enforcement of copyright law is necessary to encourage those who have produced software in the past, and potential producers, to invest the time and money necessary to create new advanced software. Germany's economic interest in promoting the innovation of computer software was a stimulus to promulgating expansive copyright laws to conserve financial rights in computer programs. Against this economic backdrop, the EC modernized copyright law through an EC directive, which necessitated an amendment to the German Copyright Act.

B. German Copyright Law Prior To 1991

Copyright law in Germany was established by the Copyright Protection Act of September 9, 1965,¹⁹ as amended by the Product Piracy Act of March 7, 1990.²⁰ According to the Copyright Protection Act, all works of literature, science and art are copyrightable²¹ if they represent the intellectual creations of the author.²² Theoretically, software may have been protected under the Copyright Protection Act as it existed. However, through 1985, the Act contained no specific regulations for the protection of software. It took rulings by the German Federal Supreme Court (*Bundesgerichtshof*) to determine whether the copyright laws applied to software.

Two seminal decisions of the Federal Supreme Court, *Inkasso-Programm*²³ and *Betriebssystem*²⁴ ruled that a high degree of originality was required for a computer program to earn copyrightability under existing German law. The decisions established what criteria were to be evaluated in deciding whether a computer program did in fact garner copyright protection. To ascertain whether the computer program possessed the necessary degree of

18. In 1994, Germany and Austria combined for \$530 million (U.S.) in business software revenues alone. SOFTWARE PUBLISHER'S ASS'N 1995 REP. ON GLOBAL SOFTWARE PIRACY, 10 (1996) [hereinafter 1995 REPORT].

19. *Gesetz über Urheberrecht und verwandte Schutzgesetze* [Copyright Protection Act], v. 9.9. 1965 (BGB1. I S.1273).

20. [Product Piracy Act], v. 7.3. 1990 (BGB1. I S.422).

21. Copyright Protection Act, *supra* note 20, at art. 1.

22. *Id.* at art. 2(2).

23. *Inkasso-Programm*, BGHZ 94, 276.

24. *Betriebssystem* BGHZ 112, 264.

originality, the Court compared the special, creative characteristics of the program with the average creative activity of an average programmer. Only a computer program that significantly exceeded such average creative originality would qualify for copyright protection.²⁵

The individual characteristics of a computer program were determinative as to whether the program received copyright protection, not the quantitative scope nor development and technical expenses inherent in the software.²⁶ Thus, the distinctions of the program had to extend beyond the skills of an average programmer, otherwise the program would not have been copyrightable. Unlike other protected works under the Copyright Protection Act, where "copyrightability" is based merely on a simple personal creation, or *kleine Munze* (small change)—a high standard of originality was required by the Supreme Court for computer programs to receive copyright protection.²⁷ Software consisting mainly of common and publicly available elements was not copyrightable.²⁸ The elevated originality standard had an adverse effect on the prosecution of software piracy in Germany. Under these landmark Supreme Court rulings, software piracy could only be prosecuted if an expert opinion proved that the form of the pirated computer program was above the average level of originality.²⁹

The amorphous concept of what constituted "originality" under the Copyright Protection Act undoubtedly created problems for the enforcement of pirated software. Subsequent to *Inkasso-Programm*, infringed parties were uncertain as to whether pirated copies of their work did in fact violate the copyrightability of their creation. A potentially infringed party would be reluctant to sue an infringer under the high standard of originality to assert their possible copyrights because the losing party in German civil litigation pays all court costs including those of the opposing party.³⁰ A leading EC computer software scholar has suggested

25. See Andreas Raubenheimer, *The New Copyright Provisions for the Protection of Computer Programs in Germany*, 4 LAW, COMPUTERS & ARTIFICIAL INTELLIGENCE 5, 7 (1995).

26. *Id.*

27. *Id.*

28. THOMAS HOEREN, COPYRIGHT SOFTWARE PROTECTION IN THE EC 73, 76-77 (Herald D.J. Jongen & Alfred P. Meijboom eds., 1993).

29. *Id.* at 77.

30. See Andreas Raubenheimer, *Copyright Protection for Computer Software Under German Law*, INT'L COMPUTER LAW., Oct. 1994, at 10, 20.

that the legal gap *Inkasso-Programm* created in German copyright law in terms of what constitutes "originality" was a primary catalyst to the EC creating a Directive to govern the copyright protection of computer software; in fact, Germany would be the Member State influenced by an EC Directive on software protection to the greatest extent.³¹

C. EC Council Directive - Protection of Computer Programs

In light of increasing software piracy in Europe and heavy economic losses in Germany,³² the EC issued the Software Directive of 1991.³³ The Directive's preamble stated the concern that computer programs were not clearly protected in all EC member states by existing legislation.³⁴ The Council promulgated the Directive to protect the development of computer programs which require considerable human, technical and financial resources.³⁵ Computer programs are viewed as playing an increasingly larger role in the EC's industrial development, and because of the ease by which software may be copied, comprehensive software legislation was essential.³⁶

The Directive provides that copyright protection will apply to the expression, in any form, of a computer program.³⁷ Further, a computer program will be protected if it is original in the sense that it is the author's own intellectual creation with no other criteria being applied to determine its eligibility for protection.³⁸ This provision dispels the *Inkasso-Programm* requirement that software possess a high standard of originality to attain copyrightability. Therefore, a simple personal creation, or *kleine Munze*, existing as a software program is able to be protected as copyrighted material.

Additional articles of the Directive are also of significant importance in regard to the enforcement against software piracy. The exclusive rights of the copyright holder include the right to the

31. HOEREN, *supra* note 28, at 73.

32. See Andreas Raubenheimer, *Implementation of the EC Software Directive in Germany - Special Provisions for Protection of Computer Programs*, 27 INT'L REV. INDUS. PROP. & COPY. L. 610 (1996).

33. Council Directive, *supra* note 2.

34. *Id.* at Recital (1).

35. *Id.* at Recital (2).

36. *Id.* at Recital (2), (3).

37. *Id.* at art. 1(2).

38. *Id.* at art. 1(3).

permanent or temporary reproduction of a computer program.³⁹ Further, creators have the exclusive right to any form of distribution to the public of the computer program.⁴⁰ The Directive provides for measures of protection to be taken against copyright infringers. Member States, through national legislation, are to implement appropriate remedies against any infringers in various situations. Any person who puts into circulation a copy of a computer program knowing, or having reason to believe, it is an infringing copy, is subject to government enforcement.⁴¹ Further, the possession, for commercial purposes of a pirated copy of software subjects the possessor to certain repercussions.⁴² A possessor of any infringing copy of a computer program is liable to seizure, the procedure for which is to be determined by the Member State.⁴³ These provisions seem to provide effective enforcement tools for German authorities in combating software piracy. Moreover, because the means to achieve the Directive's goals are in the hands of the German government, German officials have wide discretion in adopting proper enforcement measures that will be adaptable to German society. The provisions of the Software Directive were to be read into the national law of Germany,⁴⁴ in particular the Copyright Act of 1965.⁴⁵

39. The Council Directive, in Article 4(a), states that the exclusive rights of a copyright holder include:

[T]he permanent or temporary reproduction of a computer program by any means and in any form, in part or in whole. Insofar as loading, displaying, running, transmission or storage of the computer program necessitate such reproduction, such acts shall be subject to authorization by the rightholder.

Council Directive, *supra* note 2, at art. 4(a).

40. Article 4(c) asserts that the copyright holder has exclusive rights to:

[A]ny form of distribution to the public, including 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.

Council Directive, *supra* note 2, at art. 4(c).

41. *Id.* at art. 7(1)(a).

42. *Id.* at art. 7(1)(c).

43. *Id.* at art. 7(2).

44. The Directive entered into effect on June 24, 1993. See *infra* note 47.

45. Raubenheimer, *supra* note 32, at 615.

D. *New Provisions of the German Copyright Act*⁴⁶

The German Copyright Act was directly affected by the issuance of the EC Software Directive. The Directive was implemented into national German law in June 1993 by the insertion of special provisions for the protection of computer programs in the Copyright Act.⁴⁷ The Copyright Amendment Act of 1993 added the new provisions, sections 69a - 69g and 137d. These new sections⁴⁸ correspond to Articles 1, 2, 4-7, and 9 of the EC Software Directive.⁴⁹ Notable added terms are found within Sections 69a, which relates to the requirements and the scope of copyright protection; 69c which strengthens the exclusive rights of the copyright holder; and 69f which allows claims for destruction of illegally pirated software.

1. *Section 69a—Object of Protection.*—Recently added Section 69a of the German Copyright Law affords copyright protection to the expression⁵⁰ in any form of a computer program.⁵¹ Further, “[c]omputer programs will be protected if they

46. German reunification does not pose any problems to the applicability of the Copyright Protection Act. The law applies from the date of reunification to the former German Democratic Republic. However, according to the Unification Treaty, the provisions of the Copyright Protection Act retroactively apply to computer programs created in East Germany prior to reunification. Cf. *Einigungsvertrag* (Unification Treaty), Anlage (appendix) I, *Kapitel* (chapter) III, *Sachgebiet* (subject) E: industrial property rights, unfair competition, copyright, *Abschnitt* (section) II, 2., 1990 GRUR 810; See Raubenheimer, *supra* note 31, at footnote 1 and accompanying text.

47. The Second Act Amending the Copyright Protection Act, inserted the new provisions for computer programs in compliance with the EC Directive into the Copyright Protection Act effective June 24, 1993. *Zweites Gesetz zur Änderung des Urheberrechtsgesetzes* [Amended Copyright Protection Act], v. 9.6.1993 (BGB1. I S.910).

48. Note that Article 2 of the German Copyright Act was amended to include computer programs within the ambit of protected literary works.

49. Article 5 proscribes exceptions to the copyrightability of software, such as for error correction, and the making of back-up copies. Article 6 describes the decompilation exception where users may reproduce the code and translate the form of a computer program without the authorization of the rightholder to achieve the interoperability of an independently created computer program. Council Directive, *supra* note 2, at art. 5 and art. 6.

50. The Copyright Protection Act, similar to the Software Directive, does not define the meaning of the protected expression of a computer program. The distinction between an “expression” and an “idea” will be left to the German courts. See Raubenheimer, *supra* note 25, at 13.

51. The section states further, that the ideas and principles which underlie any element of a computer program, including those which underlie its interfaces, are

constitute original works in the sense that they are the result of their author's own intellectual creation. No other criteria, particularly of a qualitative or aesthetic nature, shall be applied to determine their eligibility for protection."⁵² This provision is in direct opposition to the *Inkasso-Programm* factors set out by the German Federal Supreme Court. Thus, the high originality standard followed by German courts⁵³ was, in theory, relaxed by the implementation of Section 69a. It was the stated intended purpose of the German Legislature that future infringed copyright holders will only have to substantiate the existence of "an own and intellectual creation," in the sense that a program is not a mere imitation of another's work, to earn copyright protection for their creation.⁵⁴ The consequence is that all *kleine Munze* programs would now be protected if simply a personal creation of the programmer. Additionally, following the Berne Convention provisions for the national treatment of foreign computer programs, 69a will apply uniformly to international software imported into Germany.

2. *69c—Restricted Acts.*—Section 69c delineates the exclusive rights granted to a software copyright holder.⁵⁵ He or she has the exclusive right to the permanent or temporary reproduction of a computer program by any means and in any form, in part or in whole.⁵⁶ Additionally, the owner has the sole right to any form of reproduction of the original or copies of a computer program.⁵⁷ It is clear that these two rights apply directly to the misappropriation of copyrights in the form of software piracy. These exclusive rights are vital in protecting the economic interests of the software creators from the illicit sale of pirated software and the illegal uploading of pirated programs onto the Internet.

3. *69f—Infringement Rights.*—Section 69f may prove to be a deterrent to future software pirates. Pursuant to this provision, the owners of the software copyright may require that all unlawfully

not protected. This reflects the general copyright protection concepts in the original Copyright Protection Act of 1965. Copyright Protection Act, *supra* note 19, at art. 69a(2).

52. Copyright Protection Act, *supra* note 19, at art. 69a(3).

53. The strict originality standard, in practice, excluded most programs from copyright protection. Raubenheimer, *supra* note 25, at 7.

54. *Id.* at 8.

55. Copyright Protection Act, *supra* note 19, at art. 69c.

56. *Id.* at art. 69c(1).

57. *Id.* at art. 69c(3).

manufactured or distributed copies of computer programs, or copies intended for distribution, be seized and destroyed.⁵⁸ It is important to note that the mere possession of illegal copies satisfies Section 69f, whereas the Software Directive⁵⁹ requires that the possession be for commercial purposes. Thus, a private consumer is technically subject to the destruction provision by possessing one copy of a pirated work. However, government enforcement against private consumers seems unrealistic both in terms of limited government resources and potential unlawful invasions of privacy.

E. German Caselaw in the Aftermath of the New Copyright Provisions

Despite embracing a civil law based legal system, German copyright law has been molded through decisions of the Federal Supreme Court.⁶⁰ Subsequent to the incorporation of the Software Directive into the Copyright Act, questions remained as to how certain provisions were to be interpreted. The predominant inquiry was what level of originality was necessary to qualify a software program for copyright protection under the new law. Weeks after the new provisions came into force, this question was answered by the Federal Supreme Court.

In the German Federal Supreme Court decision *Buchhaltungsprogramm*⁶¹ the court addressed the issue of originality, or level of creativity required to qualify software for copyright protection. The court recognized that, according to Section 69a of the Copyright Act and Article 1(3) of the Software Directive, the high standard of originality proscribed under *Inkasso-Programm* in fact had been relaxed.⁶² Although the court decided in favor of the plaintiff because a high level of creativity had been reached by the party, the court's dicta clarified the current state of the copyright standards. It was recognized that a reduced degree of originality existed under the new copyright law.⁶³ Therefore, the *kleine Munze* would receive copyright protection. However, the Court failed to issue criteria to be adduced when determining the low

58. *Id.* at art. 69f(1).

59. Council Directive, *supra* note 2, at art. 7(1)(b) and (1)(c).

60. *Inkasso-Programm*, BGHZ 94, 276.

61. *Buchhaltungsprogramm*, BGHZ 123, 208.

62. *Id.*

63. *Id.*

level of originality that would qualify a software program for copyright protection.⁶⁴

Consequently, in the aftermath of *Buchhaltungsprogramm*, software such as screen savers, which possess a minimal amount of creative originality, will theoretically be protected under the Copyright Act. To substantiate a copyright infringement claim, future plaintiffs will only have to show that their software evolved from their own and intellectual creation, and does not represent a mere imitation of another's work. However, it remains to be seen what criteria the Supreme Court will set forth in future decisions to determine the exact extent of the copyright law in Germany and whether protection will be afforded to software on the Internet.

F. *Exclusive Rights and Available Remedies*

As computer software creators, producers, publishers and distributors suffer severe economic losses from the sale and distribution of illegally copied programs, the available remedies constitute a vital factor in determining whether or not an infringed party will file suit to protect their interests. Having resolved that one's software is protected under the Copyright Act, an examination of what can be gained through litigation is of primary concern. Thus, it is crucial to reexamine what exclusive rights⁶⁵ and remedies are available to an infringed party.

A software programmer has exclusive rights⁶⁶ in the reproduction of his or her computer programs.⁶⁷ This right extends to the reproduction of the software using any means and in any form,

64. See Raubenheimer *supra* note 25, at 9.

65. Note that according to Article 12 of the Copyright Protection Act, the moral rights in the production of software remain with the author. The author has the right to decide whether and how his or her work is to be published. Copyright Protection Act, *supra* note 19, at art. 12(1). This moral right stems from a similar provision in Article 6 of the Berne Convention. Berne Convention, *supra* note 4, at art. 6.

66. The new copyright law does recognize certain exceptions to the exclusive rights provisions. A person who is authorized to use the program (*i.e.* purchaser or licensee) may make a reproduction or adaptation of a program if necessary for a program's use, and which is in accordance with the program's intended purpose. However, such exceptions are limited to allowing a person to make a back-up copy, art. 69d (2), to study the functioning of a program to determine the ideas and principles behind a program, art. 69d(3), and to decompile a program to achieve interoperability with another program, art. 69e. Copyright Protection Act, *supra* note 19, at art. 69d(2), art. 69d(3), and art. 69e.

67. Copyright Protection Act, *supra* note 19, at art. 69c(1).

including in a merely temporary or partial reproduction.⁶⁸ The temporary reproduction right under Section 69c of the German Copyright Law may become the impetus to claims filed by infringed parties asserting their intellectual property rights against Web site owners on the Internet that periodically offer the free downloading of software. The term reproduction also includes the storage of software programs on the hard drive of a computer.⁶⁹ Therefore, retailers who "stock" their computers for sale with free software for consumers, are violating the creator's exclusive reproduction rights.

The software copyright owner⁷⁰ also maintains exclusive rights in the distribution of software programs.⁷¹ Any form of distribution, including rental, of the original computer program or copies thereof is reserved to the copyright holder. Included is the exclusive right to distribute software or reproductions regardless of whether they have been manufactured legally or illegally. This provision plays a large role in the potential seizure and destruction of illegally copied software. The Copyright Act grants the copyright holder a claim against any person in possession of a software copy that has been unlawfully made or distributed, or is intended for unlawful distribution.⁷² The mere possession of a copy satisfies this provision. Further, a request can be made by the plaintiff during a copyright piracy trial for the surrender and destruction of the infringer's pirated copies of software.⁷³

Seizures of pirated software are possible under both the German Code of Criminal Procedure and under Civil Law provisions.⁷⁴ These enforcement mechanisms are significant with regard to the seizure of foreign pirated software entering Germany.⁷⁵ The property subject to seizure normally is governed by the criminal offenses of Article 106 of the Copyright Act.⁷⁶ Pirated software entering Germany from other nations is corres-

68. On the concept of reproduction, *see generally* Raubenheimer, *supra* note 25.

69. *Betriebssystem*, BGHZ 112, 264.

70. Referencing software copyright owners will infer creators, producers, publishers and distributors as well.

71. Copyright Protection Act, *supra* note 19, at art. 69c(3).

72. Copyright Protection Act, *supra* note 19, at art. 69f(1).

73. *See* Raubenheimer, *supra* note 25, at 15.

74. Sections 111b & 111c StPO (in connection with § 110 during criminal proceedings); Section 883 ZPO. *See infra* note 78.

75. *See* Raubenheimer, *supra* note 30, at 18.

76. *See infra* note 84 and accompanying text.

pondingly addressed in Article 111a of the Copyright Act.⁷⁷ Illegal software intercepted at a border may be subject to a frontier seizure (“*Grenzbeschlagnahme*”) on request by the copyright holder if the manufacture or distribution of reproductions infringes the holder’s rights, and the infringement is obvious. The definition of the term “obvious” has not been issued by the German Legislature or the Supreme Court. Seizures are also attainable under the German Code of Civil Procedure.⁷⁸ Illegal copies of software are subject to seizure by the bailiff during trial regardless of who owns the illegal copies. Mere possession by the defendant of the pirated copies, whether being used for commercial purposes or not, subjects the illicit duplicates to seizure. This provision places private citizens who obtain copied software from the Internet at risk of having their computers seized. Should a copyright holder file a civil claim against a Web site operator who has a list of Internet clients that downloaded illegal files from or uploaded unlawful files to the site, the bailiff may theoretically seize the users’ computers.

In accordance with Article 97(1) of the Copyright Act, copyright holders are entitled to claim cease and desist orders and damages actions in the case of copyright infringement.⁷⁹ Usually, these claims are connected with a violation of the copyright holder’s exclusive right to reproduction and distribution of software. In order for a damage claim to succeed, the plaintiff is required to show intent or negligence on behalf of the defendant.⁸⁰ Additionally, in the place of damages, the infringed party is able to obligate the infringer to surrender any profits derived from the pirating activities.⁸¹ However, no punitive damages are available for the infringed party under German copyright law.⁸²

Article 101a also provides a helpful tool for determining the extent of a pirating operation.⁸³ During a civil action which

77. Copyright Protection Act, *supra* note 19, at art. 111a.

78. Section 883 ZPO (in accordance with Article 69f of the Copyright Act).

79. Article 97(1) of the Copyright Protection Act states:

As against any person who infringes a copyright or any other right protected by this Law, the injured party may bring an action for injunctive relief requiring the wrongdoer to cease and desist if there is a danger or repetition of the acts of infringement, as well as an action for damages if the infringement was intentional or the result of negligence.

Copyright Protection Act, *supra* note 19, at art. 97(1).

80. *Id.*

81. *Id.*

82. Raubenheimer, *supra* note 30.

83. Copyright Protection Act, *supra* note 19, at art. 101a.

involves the illegal reproduction or distribution of pirated software, the infringing party may be required by the copyright holder to provide information regarding the origin and distribution channels of the software. This acquired information would be an effective means by which enforcement authorities would be able to track down extensive software pirating schemes. A software copyright holder may file a criminal complaint under Article 106 of the Copyright Protection Act.⁸⁴ The complaint must allege that the infringer reproduced or distributed pirated copies of software. The alleged guilty party may be imprisoned for up to three years or fined.⁸⁵ As mentioned earlier, any goods related to a criminal proceeding may be subject to forfeiture as well as to a seizure by the public prosecutor and the police.⁸⁶ Further, the substance of any criminal investigations by the public prosecutor can be used as evidence by a plaintiff in a civil action.⁸⁷

Copyright law in Germany underwent a drastic change to provide protection to the creators of computer intellectual property. The economic interests of computer programmers were in need of preservation in a rapidly advancing global technological market. However, to what extent the new copyright law will decrease the piracy of software in Germany remains to be seen. Will the new legislation, in practice, achieve its goal and protect the exclusive rights of software programmers? Will the pecuniary interests of software creators be properly safeguarded? The next section will address these questions by focusing on the pirating of business application software in Germany and the EC.

III. Business Application Software Piracy in Germany

Software piracy presents a troublesome situation due to the facility of duplicating computer programs. A software program is easily copied with a single mouse stroke. Any personal computer user is capable of producing thousands of copies of a program with relative ease and at little cost. Also, unlike the reproduction of videotapes or cassette tapes, there is no degradation in quality from

84. Article 106(1) provides: "Any person who, other than in a manner allowed by law and without the right holder's consent, reproduces, distributes or publicly communicates a work or an adaptation or transformation of a work shall be liable to imprisonment for up to three years or a fine." *Id.* at art. 106(1). Further, Article 106(2) states that an attempt to commit the offenses in Section 1 are similarly punishable. *Id.* at art. 106(2).

85. *Id.*

86. See Copyright Protection Act, *supra* note 19, at art. 110.

87. Raubenheimer, *supra* note 30.

one software copy to another. Perfect copies are effortlessly achievable through a basic personal computer.⁸⁸

Business application software includes fonts, screen savers, utilities, spreadsheets, word processors, statistical analysis programs and graphics packages. The pirating of business application software occurs in numerous environments. It may take place by consumer end users producing unauthorized copies of software at home, corporate copying, retailers selling counterfeit copies, computer dealers "hardloading"⁸⁹ or "unbundling"⁹⁰ illegal copies onto purchasing customers' hardware, or by Internet Bulletin Board operators offering software to Web users for illegal downloading.⁹¹ Regardless of the method, while global revenues for personal computer business application software for 1994 amounted to \$8.5 billion,⁹² piracy losses exceeded an estimated \$8 billion, a piracy rate of nearly 50 percent.⁹³ Further, a 1995 estimate places Western European revenue losses at \$3.6 billion.⁹⁴ Germany's rank in the piracy statistics will eventually detail the effectiveness of the new Copyright Law in deterring copyright infringement.

The Software Publisher's Association (SPA) estimates that in 1993, the piracy rate in Germany approached 51 percent, with revenue losses to counterfeit software nearing \$725 million.⁹⁵ This trend seemed to dissipate in 1994, as the piracy rate fell to 31

88. See 1995 REPORT, *supra* note 18, at 4.

89. Hardloading occurs when retailers copy applications onto the hard-disk drives of computers for sale. According to the Software Publisher's Association, hardloading and unbundling represent the second-largest form of piracy. See Rebecca M. Smith, *Publishers: Retailers are Part of Piracy Problem—Groups Decry Unlicensed Copying, "Unbundling"*, COMPUTER RETAIL WK., Mar. 20, 1995, at 31.

90. Bundling results when retailers disseminate software intended for sale with computer systems and then sell the software separately at close to full retail price, rather than as a discounted value-add to hardware.

91. 1995 REPORT, *supra* note 18, at 6.

92. Other reports place this figure at a much higher number. The Business Software Alliance, in its Annual Survey, reported that losses due to software theft exceeded \$15.2 billion in 1994 in the software publishing and distribution industries, with the United States, Germany, and Japan accounting for 43% of this total. See *Software Piracy: BSA's Annual Survey: The Impact of Software Piracy on the International Marketplace*, 6 EDGE: WORK-GROUP COMPUTING REP. 257 (1995).

93. 1995 REPORT, *supra* note 18, at 4, 5.

94. See SPA: *Western Europe Loses Over \$3.6 Billion to Software Piracy, Joint BSA/SPA Survey Reveals*, M2 PRESSWIRE, Oct. 24, 1996, available in LEXIS, Nexis Library, Newsletter Database [hereinafter *Joint BSA/SPA Survey*].

95. 1995 REPORT, *supra* note 18, at 5.

percent and revenue losses plummeted to just over \$230 million.⁹⁶ However, the favorable decline did not continue. In 1995, Western Europe lost \$3.6 billion in revenues to software piracy, with the United Kingdom, Germany and France shouldering \$1.7 billion of that total.⁹⁷ Moreover, Germany's piracy rate in 1995 leveled off at 42 percent, up 11 percent from 1994.⁹⁸ Obviously, these statistics suggest that either German copyright law is not persuading citizens to comply, or enforcement measures are inadequate and sporadic. Apparently, the importation of illegal software has not slowed its pace whatsoever. In 1995, German software piracy rates hovered in the neighborhood of 42 percent of all software in operation. This alarming percentage would seem to enjoin German officials to ameliorate their enforcement tactics in order to prevent the economic losses apportioned to the software industry and the repercussions felt by the entire German population in the form of higher priced licensed software.⁹⁹

The consequences of rampant software piracy in Germany, over and above the pecuniary losses to software programmers, are that counterfeiting will stagnate or even prevent the development of domestic software industries in the German market. Increased software development would produce jobs and wealth for the country. One source suggests that reducing European piracy to 35 percent would create over 50,000 jobs and add an extra \$1.4 billion in tax revenues.¹⁰⁰ In Germany, applying the same reduction in the piracy rate, the software industry would support over 93,000

96. *Id.*

97. See *Joint BSA/SPA Survey*, *supra* note 94; *Germany: Software Piracy Losses Highest in Europe*, FRANKFURTER ALLGEMEINE ZEITUNG, Oct. 24, 1996, at 24.

98. *Joint BSA/SPA Survey*, *supra* note 94.

99. *But see* INFO. WK., Oct. 30, 1995, at 6. This editorial questions the need for a crackdown on software piracy. The editor states that lost piracy revenues are greatly exaggerated because of two important factors. First, the majority of software piracy is done by people who never otherwise even look at the software. Secondly, some piracy is beneficial because it familiarizes people with certain software and consequently produces product loyalty. John Dvorak believes that the software industry's lost revenues are "hard to get excited over." The author maintains that groups such as the SPA and BSA are in a never-ending attempt to coerce the world into paying more for computer software. Dvorak attacks the statistics provided by the SPA and BSA as being merely figures calculated "out of thin air." John C. Dvorak, *The Software Piracy Bluff*, PC MAGAZINE, May 12, 1992, at 93.

100. See *Reducing European Software Piracy to U.S. Levels Could Create 87,000 New Jobs*, SOFTWARE INDUSTRY REP., Oct. 16, 1995, at 1.

new jobs and contribute an additional \$2.4 billion in tax revenues.¹⁰¹ To stimulate the economy the German government must vigorously implement the enforcement measures afforded to it under the amended Copyright Law. Software piracy will persist unless counterfeiters are wary that their "livelihoods" are in jeopardy of being seized and they may face lengthy prison sentences.

IV. Enforcement Against Software Piracy

The amended German copyright laws have provided avenues through which the government can prosecute illegal software producers with greater frequency and ease. German courts possess the substantive law by which they can punish software pirates to effectively deter future similar conduct. However, along with competent software piracy policing by the government and the judiciary, the German public must be informed to recognize that purchasing and creating illicit programs is ethically wrong and damages the German economy. These three enforcement sources must work simultaneously in order to extinguish the pirating of software.

A. *German Judicial and Governmental Enforcement*

Under the amended German Copyright Law, an infringed copyright holder of a computer program may protect his or her exclusive rights of reproduction and distribution in the software by demonstrating that their creation is not a mere imitation of another's work. To safeguard works that have earned protection under the copyright law, German courts must be willing to enjoin parties from producing pirated copies, allow stocks of counterfeit copies to be seized, and award significant damages to plaintiffs in order to deter pirating operations. The courts need to mold software pirating into an expensive business where profits are extremely speculative. However, before the German judiciary is able to hand down stiff penalties to software copyright infringers, it is essential that the government police pirating patterns and bring suspected parties before the courts.

There are signs that, in accordance with the amended Copyright Law, German government officials are beginning to intervene and halt software infringers. In 1994, German police cracked a

101. *Id.*

counterfeit computer software ring in the Saxony State. The counterfeiters were responsible for distributing thousands of bogus copies of the US-based Microsoft Corporation's computer products.¹⁰² The following year, in the fall of 1995, German prosecutors charged three Germans with multimillion dollar fraud in what was believed to be the country's largest case of software piracy.¹⁰³ The defendants were alleged to have copied various computer programs onto 300,000 disks and reproduced software manuals at printworks in the Czech Republic.¹⁰⁴ The value of the pirated programs was estimated at \$2.8 million.¹⁰⁵ Continuing government action is necessary to prevent large numbers of illicit software programs from entering the German market. Essentially, the German government must suffuse the underground illegal software market to benefit the suppliers who provide legal, licensed copies to consumers. Also, the German government ought keep a watchful eye over imported goods entering the country, and subject "obvious" infringing goods to searches and seizures. Generally, German officials need to implement measures that will impede illegal goods from reaching the marketplace, a daunting task for any democratic economy.

B. Software Organization Enforcement

The SPA and the Business Software Alliance (BSA) are organizations formed by software producers, publishers and creators to protect their interests worldwide. Members of the BSA include Apple Computer, Autodesk, Lotus Development, and Microsoft. Both entities attempt to enforce copyright laws around the world in an effort to reduce the production and distribution of illicit software.

When the BSA becomes suspicious that a firm is using illegal software, it either shares its information with national police or obtains a search-and-seizure order itself and investigates suspected offenders to examine computers for unauthorized duplicates of programs. Since its formation in 1988, the BSA has filed in excess of 600 lawsuits worldwide against suspected copyright infringement.¹⁰⁶ In 1994, the BSA nabbed an Essen, Germany based

102. *Bogus-Software Ring Smashed in Germany*, J. COM., Oct. 13, 1994, at A3.

103. *German Prosecutors Charge 3 with Software Piracy*, REUTERS WORLD SERVICE (Germany), Sept. 26, 1995.

104. *Id.*

105. *Id.*

106. *Joint BSA/SPA Survey*, *supra* note 94.

investment and processing firm for having illegal software in one of its affiliate's computer system.¹⁰⁷ The company admitted culpability and deleted the illegal software, compensated the rights holders of the programs and issued a public apology.¹⁰⁸

Other organizations exist in Germany which strive to extinguish software piracy using methods similar to those of the BSA. The *Verband der SoftwareIndustrie Deutschlands e.V.* (VSI) is a representative of the software industry in Germany. Founded in 1987 by software developers, presently VSI represents a forum of large software producing and distributing companies as well as modest sized dealers and training enterprises. The VSI works in cooperation with the SPA and BSA to organize campaigns against software piracy. VSI's aim is to expose the importance of using software legally and point out the risks of not doing so under the new legal conditions that potentially provide for increased fines and prison sentences for software pirates.¹⁰⁹

While investigations and enforcement by associations such as the BSA and VSI do accomplish some positive results for software rights holders, often the cases are settled out of court under nondisclosure terms, and the issue receives ineffectual public notice.¹¹⁰ Without the public regarding the pirating of software as a form of theft, illegal software rings will continue to have a market in which to sell their reproductions. The social attitudes of the German population play an important role in determining the extent of the distribution of copied software, specifically on the Internet.

C. *Social Attitudes of the German Population*

Conceivably, the amended Copyright Law and publicized prosecution of software piracy should make German nationals aware of the illegal computer program market. Generally, there is an increasing awareness among the German public and software users that software is indeed protected by copyright law and the infringement of the rights granted under the law are serious matters

107. See James Geary, *Piracy and Profit; European Software, Film and Music Firms are the Biggest Losers to Copycats*, TIME, Nov. 27, 1995, at 62.

108. *Id.*

109. Letter from Miriam Hohenfeldt, Project Manager, VSI - *Verband der SoftwareIndustrie Deutschlands e.V.*, to Ryan James, Associate Editor, *Dickinson Journal of International Law* (Oct. 30, 1996).

110. See Smith, *supra* note 89.

resulting in civil and criminal claims by the right holder.¹¹¹ However, with software piracy rates fluctuating between 31 and 51 percent during the period of 1993 through 1995,¹¹² it is apparent that consumers do not comprehend the consequences of software piracy and the detriment that copying programs has on publishers and the national economy in general.

One commentator suggests that a nation's culture is a crucial factor in determining the magnitude of software piracy, not the country's level of economic development.¹¹³ The ethical attitudes of a population may circumscribe the amount of commerce which exists in illicit programs.¹¹⁴ If German social attitudes permit large-scale software piracy, programming companies will not invest as much in developing new products, and jobs will be lost or never created.¹¹⁵ It is essential that software companies lobby the German government to develop an agenda to aid citizens in understanding the consequences of piracy and "encourage the evolution of a different ethic toward the practice."¹¹⁶ Consumer attitudes must support the concept of intellectual property as a tangible asset. Citizens must view copying software as stealing in the same way auto theft is stealing.¹¹⁷ Otherwise, consumers will

111. Letter from Andreas Raubenheimer, Bardehle, Pagenberg, Dost, Altenburg, Frohwitter, Geissler & Partner, to Ryan James, Associate Editor, *Dickinson Journal of International Law* (Nov. 5, 1996). Raubenheimer is a leading intellectual property attorney in Germany. He represents software producers such as Autodesk and specializes in the legal aspects of the circumvention of hardware locks affixed to computers to prevent the illegal copying of computer software.

112. See *supra* notes 95-98 and accompanying text.

113. *The Culture and Ethics of Software Piracy*, HARV. BUS. REV., Sept.-Oct. 1996, at 52.

114. *Id.*

115. It has been suggested that a certain way to dissuade the purchase of illicit software is to educate the public about piracy and enforce public "executions" of prosecuted infringers. See *Western Europe: Meeting in Cannes, Software Publishers Association Puts Flesh on Euro-Numbers - Discusses Piracy*, COMPUTERGRAM, June 14, 1995; Public executions involve humiliating counterfeiters. Public humiliation serves as a novel, yet possibly potent weapon in Germany. The German Industrial Designer's Association (VDID), frustrated by what they saw as insufficient laws and enforcement for industrial piracy, handed out awards to leading counterfeiting companies. Pirating companies are given statuettes of black gnomes with gold noses representing the traditional German saying that to "earn a golden nose" is to get rich through questionable means. These statuettes are presented at large consumer goods shows to the "prize winners." See, John Gilardi, *Germans Give "Award" to Top Counterfeiters*, REUTER BUS. REP., Feb. 19, 1995.

116. *The Culture and Ethics of Software Piracy*, *supra* note 113.

117. 1995 REPORT, *supra* note 18, at 5.

continue to obtain illegal software in complete ignorance of the German copyright laws.

V. The Internet—A Current and Future Concern

The expanding world of the Internet has developed significant problems for software owners. Copies of software are being illegally uploaded and downloaded from the Internet at an alarming rate. Due to the borderless nature of the Internet, an international solution to preventing on-line piracy is imperative. The next section will discuss piracy on the Internet and an effort to reduce illegal on-line copying through the adoption of the recent World Intellectual Property Organization Copyright Treaty.

A. *Popularity of the Internet in Germany*

The rapid growth of the Internet has raised much concern about the pirating of software on-line. With an estimated 38 million Internet users world wide in 1994, and an estimated 200 million to be using the service in the year 2000, this is an issue that must be expediently addressed.¹¹⁸ Germany alone had 350,000 Internet hosts in 1995,¹¹⁹ with this number to have potentially increased dramatically in 1996.¹²⁰ In 1996 there existed 2.5 million on-line and Internet connections in Germany.¹²¹ Software pirates use the Internet as a distribution vehicle because it is difficult to track down and prosecute on-line infringers due to the anonymity afforded by the Internet.

Counterfeiters use private Bulletin Board Services (BBS) and Internet sites to offer free or inexpensive downloading of copied computer software and encourage the uploading of programs to the Web sites. The SPA has identified more than 1,600 BBS providers that carry unauthorized copyrighted software.¹²² A BBS allows personal computer users access to a host computer through the Internet network to exchange software. The result is that consumers are able to download fully functional copies of software

118. MICHAEL L. SULLIVAN-TRAINOR, MECKLERMEDIA'S OFFICIAL INTERNET WORLD INTERNET YELLOW PAGES, THE INTERNET REVOLUTION AND WHAT IT MEANS FOR YOU xxxvi (1995).

119. *The Internet's Wide World*, INTERNET SOC'Y, Sept. 21, 1995, at 15.

120. *Germany: Market for Information Technology Should Reach Volume of DM83 Bil. in 1996 & DM89 Bil. in 1997*, FRANKFURTER ALLGEMEINE (Germany), Nov. 26, 1996.

121. *Id.*

122. *Seen in the Media; I-Way Robbery*, INFO. WK., Mar. 20, 1995, at 182.

without the consent of the copyright owner.¹²³ With potential Internet users reaching 200 million by the year 2000, lost revenue from this type of pirating could reach enormous proportions.

Industry controls such as software encryption and hardware locks have proven ineffective.¹²⁴ Therefore, enforcement rests upon the software organizations and the government. Because the Internet is a faceless medium, it is easy for providers to disappear, making enforcement a difficult task. Nevertheless, the SPA has undertaken measures to cease current and prevent future piracy on the Internet.¹²⁵ Lawsuits against possible Internet infringers appear to have the greatest potential in harnessing the increasing piracy on-line.¹²⁶

Despite organizational action, it will remain difficult for the government to discover infringing parties on the Internet and ascertain the losses attributable to their activities. Because of the anonymous manner in which information is stored and retrieved on computers hooked up to the Internet, enforcement will be an arduous task. The German Copyright Law is broad enough to cover the rights of distribution and reproduction of software on the Internet. However, enforcement measures must improve to eliminate on-line piracy before it reaches monumental figures.

Another interesting question remains: Should enforcement become an effective tool against on-line piracy, who will shoulder the liability? Potentially responsible parties include the publisher or developer of the Web site, the distributor of the Internet service, and the consumers who download the illicit software. This query will remain unanswered until a method is devised to stamp out Internet software piracy.

123. 1995 REPORT, *supra* note 18, at 7.

124. See Jay Dougherty, *Software Piracy Runs Rampant on Internet*, DEUTSCHE PRESSE-AGENTUR, June 22, 1996.

125. The SPA had targeted the Internet as a priority in 1995. *SPA to Target Internet, International Piracy in 1995; Domestic Corporate Piracy Seen Declining; Other Forms of Software Theft on Rise*, PR NEWswire, Jan. 11, 1995, available in LEXIS, Nexis Library, WIRES file; See also *SPA Files Copyright Suits Against ISP's. Individual End Users*, SOFTWARE INDUSTRY REP., Oct. 21, 1996, at 7.

126. See 1995 REPORT, *supra* note 18, at 7. On October 10, 1996, the SPA in the United States filed five civil lawsuits for copyright infringement occurring on the Internet. Three of the lawsuits were filed against Internet service providers and the remaining two were filed against individual end users. Recently, the United States SPA settled Internet Anti-Piracy suits with several companies. See *SPA Web Site* (visited 1/3/97) <<http://www.spa.org./piracy/releases/geopress.htm>>.

B. Efforts to Minimize Internet Piracy—The International Stage

The proliferation of Internet usage around the world has helped to create a widespread technological medium that recognizes no geographic boundaries. Cyberspace has been structured into a free-wheeling forum of massive amounts of information capable of being transferred to any computer user worldwide. However, despite its benefits, the free flow of information environment on which the Internet system is founded has allowed software pirates the opportunity to abuse the capabilities of the on-line market. Software pirates upload illicit software to Web sites for the benefit of Web browsers who illegally download the programs to their computers. While the Internet has enormous potential as an efficient method to legally distribute new and existing licensed software, it has not yet ensured that those who produce computer programs will realize a proper return on their investment in the software.¹²⁷

While German Copyright laws will necessarily be drafted and interpreted to adapt to technological advances such as the Internet, these laws must be bolstered by international laws enforceable in the borderless world of the Internet. Because the last international intellectual property accords, forged in 1971,¹²⁸ contain no explicit protection for computer software, let alone software appearing on the Internet, steps to update international law for the digital age are imperative to guard copyright holder's rights.¹²⁹ In this setting, during late 1996, the World Intellectual Property Organization (WIPO), an organization operating under the auspices of the United Nations and of which Germany is a member, gathered experts from 160 nations to begin to write new international treaties aimed at protecting intellectual property in a rapidly advancing technological age.¹³⁰ Among the issues addressed by the WIPO Conference was whether to adopt international rules which extend copyright law to the Internet.¹³¹ Ultimately, the

127. See Edward Whitehouse, *FT Guide To: Copyright and the Internet*, FIN. TIMES, Dec. 9, 1996, at 15.

128. Berne Convention, *supra* note 4.

129. See Peter H. Lewis, *160 Nations Meet to Weigh Revision of Copyright Law*, N.Y. TIMES, Dec. 2, 1996, at A1; Amy Harmon, *Meeting Takes Copyright Law to Digital Age*, L.A. TIMES, Dec. 2, 1996, at A1.

130. Lewis, *supra* note 129. The meetings took place December 2 through December 20 in Geneva, Switzerland. *Id.*

131. *Id.*

Conference resulted in the adoption of the WIPO Copyright Treaty¹³² which contains articles that will have a significant impact on the Internet.

WIPO provided a basic Draft Treaty proposal for the substantive provisions of a treaty concerning the protection of literary and artistic works to be considered by the diplomatic intellectual property conference.¹³³ Article 4 of the WIPO Draft Treaty confirms that computer programs are protectable under copyright as literary works within the meaning of Article 2 of the Berne Convention.¹³⁴ Further, the Draft Treaty explicitly provides that copyrightability of a computer program applies regardless of its form.¹³⁵ Article 4 of the Draft Treaty was incorporated into Article 4 of the WIPO Copyright Treaty.¹³⁶ Additionally, of significant importance, Article 7 and Article 10 of the Draft Treaty directly address the issue of Internet software piracy.

Article 7 of the Draft Treaty provides authors of literary and artistic works under Article 9(1) of the Berne Convention¹³⁷ the exclusive right to authorize the "direct and indirect reproduction of their works, whether permanent or temporary, in any manner or form."¹³⁸ Comments to proposed Article 7 state that the expression "in any manner or form" which appears in Article 9(1) of the Berne Convention and the new legislation could not be any more expansive in scope.¹³⁹ Further, the commentary provides that the Article 7 language clearly indicates that the storage of a work in any electronic medium, encompassing the uploading and downloading of a work to or from the memory of a computer, deserves copyright protection.¹⁴⁰ This interpretation would mean that any remote copying that is made possible by a communication network (on-line provider) between the original and the copy is intended to

132. World Intellectual Property Organization Copyright Treaty, Dec. 20, 1996, 36 I.L.M. 65 [hereinafter WIPO Copyright Treaty].

133. World Intellectual Property Organization, Basic Proposal for the Substantive Provisions of the Treaty on Certain Questions Concerning the Protection of Literary and Artistic Works to be Considered by the Diplomatic Conference, Draft Treaty, Aug. 30, 1996 [hereinafter WIPO Draft Treaty].

134. *Id.* Article 4 states: "Computer Programs are protected as literary works within the meaning of Article 2 of the Berne Convention. Such protection applies to the expression of a computer program in any form." *Id.*

135. *Id.* at art. 7.

136. WIPO Copyright Treaty, *supra* note 133, at art. 4.

137. Berne Convention, *supra* note 4, at art. 9(1).

138. WIPO Draft Treaty, *supra* note 133, at art. 7.

139. *Id.* at Notes on art. 7, 7.01.

140. *Id.*

come within the ambit of Article 7 and copyright law. Moreover, Article 7 would place temporary reproductions of computer programs under the authority of Article 9(1) of the Berne Convention. Therefore, any work that is stored from the Internet for however little time may be subject to copyright laws.

The effect of proposed Article 7 could be interpreted to criminalize World Wide Web browsing, because computers create a temporary copy of material each time it is transmitted over the Internet.¹⁴¹ Therefore, the passage of Article 7 would, in essence, make it a crime to use the Internet in any capacity. Internet software developers and on-line companies objected that the definitions of the Article 7 terms were too broad, and ultimately the offending language was stricken by the Conference leaving it to national courts to determine whether use of the Internet constitutes a *per se* copyright violation.¹⁴²

In the aftermath of the debate over Article 7 of the WIPO Draft Treaty, German courts will assume the duty of determining whether or not Internet use constitutes copyright infringement. However, it appears unlikely that the German courts will extend the scope of copyright protection to simple Internet utilization. A court ruling limiting Internet access would inhibit the flow of legally obtainable information available on the Cyberspace system. With an extensive number of Germans presently using the Internet¹⁴³ public interest would suffer should the availability of Internet applications be banned. Therefore, public benefit will dictate what the German courts decide, and in that vein, German courts will likely renounce the provisions proposed by Article 7 of the WIPO Draft Treaty.

Under the Berne Convention, computer programs are not clearly granted a right of communication as a literary works.¹⁴⁴ However, it is evident that computer programs are currently a

141. Harmon, *supra* note 129, at A1.

142. See Frances Williams, *Publishers and Software Groups Greet New Laws for Digital Age: Welcome for Updated Rules on Copyright*, FIN. TIMES, Dec. 23, 1996, at 3.

143. See *supra* notes 120-21 and accompanying text.

144. Article 11bis(1) of the Berne Convention does grant an exclusive right of communication to authors of literary and artistic works in certain categories. These rights are (1) the right of broadcasting, (2) the right of communication to the public by wire and the right of rebroadcasting of a broadcast, and (3) the right of public communication of the broadcast by loudspeaker, etc. Additionally, Article 11bis(1)(i) grants authors an exclusive right to authorize the broadcasting of their work or the communication thereof to the public by any other means of wireless diffusion, sounds or images. Berne Convention, *supra* note 4, at art. 11bis.

primary form of communication over networks such as the Internet. Article 10 of the Draft Treaty extends the exclusive right of communication to the public to all categories of works, including any communication by wire or wireless means.¹⁴⁵ Further, the Article explicitly provides that "communication to the public" includes making works available to the public in such a way that members of the public may access these works from a place and a time chosen by an individual.¹⁴⁶ The consequence of this provision is striking with regard to piracy liability. In the wake of Article 10 and its incorporation into the WIPO Copyright Treaty of 1996 as Article 8,¹⁴⁷ making an illicit program available on the Internet subjects the unlawful uploader to liability, not the on-line provider.

Despite the sweeping language of adopted Article 8 in the Copyright Treaty, the term "public" as it is used in the Treaty and the present provisions of Berne, remains undefined.¹⁴⁸ With regard to German copyright law, the national legislature and the federal courts will resolve what exactly "public" means in relation to a copyright infringement situation under Article 8 of the WIPO Copyright Treaty. Moreover, commentary to the Article emphasizes that the provision does not attempt to define the nature or extent of liability for infringement of an author's right of communication.¹⁴⁹ The WIPO agreement determines only the scope of the exclusive rights that will be granted to authors in respect of their works. Who will be liable for infringement, and to what extent they are liable for a violation of these rights is a matter for the German legislature and courts to conclude in accordance with the legal traditions of Germany.¹⁵⁰

145. WIPO Draft Treaty, art. 10 states:

Right of Communication. Without prejudice to the rights provided for in Articles 11(1)(ii), 11bis(1)(i), 11ter(1)(ii), 14(1)(I) and 14bis(1) of the Berne Convention, authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, including the making available to the public of their works, by wire or wireless means, in such a way that members of the public may access these works from a place and at a time individually chosen by them.

See WIPO Draft Treaty, *supra* note 133, at art. 10.

146. *Id.*

147. WIPO Copyright Treaty, *supra* note 132, at art. 8. Article 8 of the Treaty incorporates Article 10 of the Draft Treaty. *Id.*

148. See notes to Article 10 of the WIPO Draft Treaty, *supra* note 133, at 10.17.

149. *Id.* at 10.21.

150. *Id.*

Under the current German Copyright Act, the German Legislature has granted software owners expanded rights of reproduction and distribution.¹⁵¹ The recent trend of allowing a wider scope of copyright protection to programmers in Germany prescribes that the national government and judicial system will confer a broad right of communication protection to software owners. How far the right of communication will indeed expand remains in the grasp of the German Federal Government and ultimately the German Federal Supreme Court.

VI. Conclusion

Nations worldwide have had to face the challenge of adapting their respective legal systems to rapidly changing technologies and industries. Germany, one of the leading global industrial powers, has not been an exception. German copyright law has been in a state of flux, transforming into a body of law receptive to the widespread production and use of computer software and the Internet. German copyright law has evolved to protect the property rights inherent in computer software.

The German legislature and federal courts have become amenable to the notion that software creations deserve extensive copyright protection. The trend of safeguarding copyrights in computer programs is also evidenced by the recently adopted EC Directives and international treaties. This aggregation of copyright laws has served to delineate specific responsibilities for German nationals to follow under intellectual property laws. However, despite the movement towards blanket protection for computer software, certain issues remain unresolved. For example, what criteria German courts will be required to adduce when determining the exact extent of copyright law with regard to software and whether or not complete copyright protection will be afforded to software on the Internet, are issues in need of resolution. Answering these and other queries is necessary to solidify the copyright laws in Germany. Ultimately, German officials will continue to create a more precise body of copyright law, and in doing so will necessarily balance the interests of software owners' rights and the public's legitimate need to have access to information.

Ryan James

151. See *supra* notes 39-40 (discussing exclusive rights in the EC Directive incorporated into the German Copyright Act).