

# SOFTWARE CONTRACTS

## A Comparative Legal Analysis on Software Transactions in Germany, the United States, South Africa, and under the Convention on Contracts for the International Sale of Goods.

Research Dissertation presented for the Approval of the Senate in fulfilment of part of the requirements for the degree of Master of Laws in approved courses and a minor dissertation. The other part of the requirement for this degree was the completion of a program of courses.

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## A. INTRODUCTION

Software<sup>1</sup> is a relatively new technology. The early software concepts are over a hundred years old, but the first significant computer programs were only written in the early 1950's. The software industry, as a separate industry, has been evolving since the mid-1980's. A decade later, it had revenues that equalled the sale of hardware. Today, computer programs are one of the foundations of information industry, which, in turn, has become a major part of the world's industry. Computers are an unavoidable part of our life. Software transactions are common in national and international markets. Increasingly businesses are becoming dependent upon the proper functioning of software programs. Home computer users, too, often depend upon software applications for personal record keeping, finances, communication, etc.. Where purchasers of software suffer damage and loss as a result of defects in the software - loss of records, consequential loss like staff-time lost rectifying the problem, meaning that productivity is adversely affected, loss of business, potential corruption of other parts of the computer system, loss occasioned by reliance on the defective software - they will certainly wish to seek redress. The form of redress depends upon within what legal regime software is dealt with.

How then should software transactions be categorised? The legal community still struggles to fit them into existing legal structures. Software transactions usually consist of the transfer of a ready-to-install computer program in exchange for money. Where software proves defective, the buyer could always sue under general tortious liability. The most likely cause of action, however, would be to sue in contract, given that it is the norm in such relationships between the buyer and the seller to have a contract setting out the obligations of each party. The existing contract laws generally categorise software contracts as for the sale of goods. However it is doubtful if software itself can fit into this scheme. Software can be mass-produced and delivered on a disc or electronically, or custom designed for a particular party. Yet it is generally not sold, but the buyer only purchases a license, granting him the right to use the software. If software is characterised as a good, then a sales law solution seems to fit. If software is seen as an immaterial good, then a licence contract solution seems more adequate. These facilities challenge traditional values and practices, including those of contract law.

The legal classification of software transactions is not simply of an academic nature. From the point of view of the purchaser it is advisable to characterise it as a tangible,

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<sup>1</sup> Software constitutes a collective term, which describes everything that is not part of the hardware, hardware being all physical units of a data processor. Software is a set of instructions that control the hardware. Simplified, software consists of 1's and 0's in a sequence of any length, a so-called object code that controls the sending of electricity to the hardware (Ravicher, 5 *Va. J. L. & Tech.* (2000) 11 at 13).

In this thesis I will interchangeably use the terms „computer program“, „computer software“, „program“ or simply „software“ to mean the same thing: instructions for a computer that are fixed in a tangible medium. Those instructions are used directly or indirectly in a computer to bring about a certain result. The most common media of storage for software are computer discs, CD-Roms, and a computer's hard drive. A hard drive is part of a computer's internal memory.

movable thing, because then the transaction can be determined a sale with which he achieves absolute power of disposition. Hence consumer protection is an important issue. The seller, on the contrary, is interested to keep the rights in the software and therefore it is advisable to classify the transaction as a license agreement, not as a sale.

The question whether software can be defined as a good, gains more significance as it is easily distributed over the Internet. Businesses and consumers from every country are using the Internet to conduct international transactions. The exchange via wire or satellite has even been defined as a second industrial revolution.<sup>2</sup> While most legal systems now agree that software delivered on a disc can be categorised as a good, the electronic delivery imposes greater problems. Since it is commonly agreed that software in itself is not tangible, it is questionable if this kind of delivery fits into the contract law requirements.

The globalisation of software transactions increases the need for a uniform interpretation of such contracts. It is essential that an item such as software that is so often subject to cross-border transactions is dealt with on a uniform basis. Currently, two revision processes are ongoing which are of particular interest for the creation of national and international rules regarding software transactions: the Uniform Computer Information Transaction Act, which implies a reform of Art. 2 UCC, and the revision of the German law of obligations in the Civil Code. Both revision processes drew comparisons to the Convention on Contracts for the International Sale of Goods. It is relevant to determine if these laws regulate software transactions sufficiently and to what extent they can help to develop new international laws.

I will examine the treatment of software under the contract laws of the United States, Germany, and South Africa. Furthermore I will analyse the existing international uniform contract law, the Vienna Convention on the International Sale of Goods. I will illustrate how the different legal structures are leading to legal uncertainty in software transactions. Some of the issues being considered include whether software should be treated the same, regardless of the mode of delivery, whether software can fit into existing legal concepts and whether there should be a new body of contract law for software, nationally and internationally. The analysis will be restricted to software transactions for the permanent use against single payment, as it is the common mode of transaction and poses the greatest difficulties. The focus will be on standard software. This term is used to describe computer programs manufactured as copies designed for a range of application for an unlimited number of users as opposed to custom designed software that is specifically designed for the needs of the customer.<sup>3</sup>

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<sup>2</sup> Diedrich, 8 *Pace Int'l L Rev* (1996), 303.

<sup>3</sup> Software can be pre-written and obtained „off-the-shelf“, the source of most computer programs today.

## B. GERMANY

There has been an intensive scholarly discussion in Germany since 1985 concerning the subsumption of software contracts under domestic law that has also found its way into judgments of the courts. German law is largely codified. The uniform Civil Code, the *Bürgerliches Gesetzbuch* (BGB)<sup>4</sup>, is the most important source of private law.<sup>5</sup> Among other things it deals with the law of obligations, which is comprised of different regulations dealing with a diversity of contracts. In search of an adequate qualification of software transactions, one should make an effort to fit it into the existing contract types. If necessary, integration can be achieved by drawing analogies. If, however, such a classification proves impossible or if the remedies are inappropriate, new specialised laws might be needed. Some progress might be involved in the reform of the law of obligations<sup>6</sup>. The German revision of the law of obligations bears a significant impact on the German legal system, because it is the first revision in over 100 years of existence of the German Civil Code. Through the *Schuldrechtsreform*, several rules in the law of obligations are changed. Whether these changes are sufficient with regard to software transactions will be analysed carefully.

### I. APPLICABLE CONTRACT TYPE

The BGB contains general and special law of obligations. The special part, contained in Book Two, Chapter Seven, deals with many types of different contracts. All contracts are classified by looking at the subject and the rights that arise from the contract.<sup>7</sup> The most important one is the contract of sale (*Kaufvertrag*). Its rules are placed at the beginning of the special part.<sup>8</sup> Then there are the contracts of donation, rent and lease, loan, and employment.<sup>9</sup> If a thing is made to order, such as a building or a ship, this will constitute a contract for works and services (*Werkvertrag*).<sup>10</sup> These special rules are supplemented by the rules in the general part of the law of obligations, Book Two, Chapter One-Six BGB. The major aim of a contract usually hints at the particular applicable rules. Practically all software transactions are called license contracts without distinguishing the applicable contract type. There is no such contract type as a “license contract” under German law. License is a term that derives from copyright and patent law. Through a license, the addressee acquires a right to use protected rights. The license does not identify the applicable law. A “license contract”

<sup>4</sup> Hereafter cited BGB. The BGB entered into force on 1 January 1900.

<sup>5</sup> Foster, p. 229.

<sup>6</sup> *Schuldrechtsreform*; the drafters' committee began its work in 1984. The reform of the law of obligations passed the Lower House of Parliament (*Bundestag*) on 11 Oct. 2001 and has been approved by the Upper House of Parliament (*Bundesrat*) on 9 Nov. 2001. It will be in force from 1 January 2002.

<sup>7</sup> Mincke, *JurPC* 1991, 932.

<sup>8</sup> § 433 ff. BGB.

<sup>9</sup> *Schenkung*, §§ 516 ff. BGB; *Miete und Pacht*, §§ 535 ff. BGB; *Leihe und Darlehen*, §§ 598 ff. BGB; *Dienstvertrag*, §§ 611 ff. BGB.

<sup>10</sup> § 631 BGB.

will always consist of a mixture of contract types.<sup>11</sup> Therefore the transactions have to be placed within the existing rules for other contract types. The applicable contract is determined by interpreting the intentions of the parties and their obligations under the contract.<sup>12</sup> If the intentions of the parties do not clearly hint at a contract type, one must take into account both their interests and balance them against each other to find a proper contract type.<sup>13</sup>

### 1. Identity of software

In order to subsume software transactions under one of the existing contract types, it is necessary to determine the identity of software. Several provisions, such as the provisions on sale and rent, require a thing as object of the transaction. The question is whether software can be classified as a thing.

There is no absolute consensus on the identity of software in the German legal community. The issue is discussed in relation to the law of sales<sup>14</sup>. The characterisation as a sale requires that the object of the sale is a thing or a right.<sup>15</sup> The problem is whether software constitutes a thing. A thing is defined as a corporeal object in § 90 BGB. It must be physically distinguishable.<sup>16</sup> Corporeal objects include a whole range of movables and land.<sup>17</sup> However the § 90 BGB definition of things is not applied very strictly in the context of the law of obligations. It is established that a thing sold could also be electricity, heat, know-how and the chance of winning a lottery.<sup>18</sup>

#### a) Software as a movable

The German Federal Supreme Court (BGH)<sup>19</sup> in 1987 made a first attempt to categorise software contracts. After considering the declarations of the parties the BGH came to the conclusion that they contracted for a sale and that the applicable remedies were appropriate. However, the court was rather reserved towards a definition of software. It declared that software is a movable as long as it is embodied on a data carrier.<sup>20</sup> The court obviously circumvented the problem of defining the nature of software in general, but approached the question of whether a software transaction is a sale from the legal consequences level. In the following decision, it stated that it is not decisive whether software is sold on a data carrier or whether it is received otherwise. Software could simply be copied

<sup>11</sup> Palandt-Heinrichs, vor § 305, n. 12

<sup>12</sup> Palandt-Putzo, Überbl. § 433, n. 3.

<sup>13</sup> Palandt-Heinrichs, § 157, n. 1.

<sup>14</sup> § 433 ff. BGB; If the sale is a commercial one, then the provisions in the Commercial Code (*Handelsgesetzbuch* (HGB)), §§ 373 ff., will also apply.

<sup>15</sup> The differentiation to a sale of rights will be discussed later under B.3.c).

<sup>16</sup> Palandt-Heinrichs, § 90 n. 1.

<sup>17</sup> Palandt-Heinrichs, Überbl. v. § 90, n. 3; Horn/Kötz/Leser, p. 120; Ebke/Finkin, p. 227.

<sup>18</sup> MK-Westermann, § 433, n. 2; Palandt-Putzo, § 433, n. 5; Horn/Kötz/Leser, p. 120; Robbers, p. 232.

<sup>19</sup> *Bundesgerichtshof*, hereafter cited BGH.

<sup>20</sup> BGHZ 102, 135 at 140.

onto the hardware so the buyer does not receive a disc with the program. The BGH argued that, in the end, there will always be a movable in the form of a copy on the hard-drive of the computer.<sup>21</sup>

Once this rule was established, the lower courts followed it.<sup>22</sup> The BGH itself upheld its decision in its later judgments.<sup>23</sup> The court again had trouble defining software as movable or immovable. It therefore decided that the software transactions ruled upon were closer connected to sales law than to the law of contracts for works and services and that its remedies were appropriate for the sale of software. Thereby the court used the legal consequence approach again in order to suit the interests of both parties.

Scholarly authors are also debating whether software is a movable or not. The majority of authors agree to treat software as a movable.<sup>24</sup> Although some do not regard software as a “normal” movable thing, because it is only a set of ideas that are not touchable, they want to treat it as if it is.<sup>25</sup> They agree with the BGH by arguing that software can always be seen as a movable good because it needs to be fixed on a hard-drive or a disc. It cannot exist by itself.<sup>26</sup> To illustrate this it is often compared to books<sup>27</sup>, CD’s, or video tapes<sup>28</sup>, which are commonly accepted as things.<sup>29</sup> The content of a book, which constitutes the ideas of the author, needs to be printed on paper to become existent and to make the ideas accessible to everyone. Similar to that, software is only able to exercise a particular control function if it is embodied somewhere. The comparison to books is problematic, as software is not attached to the medium because it can be copied from the disc and the disc can be erased. But the comparison to CD’s and video tapes is logical, as these are not necessarily attached to the medium either. However a computer program is not only played, but processes data and therefore does something on its own.

Another argument follows the economic point of view by asking for the thing that is the object of the transaction. The object of trade is unquestionably the software and not the data carrier. Computer software can easily be treated as any other object of trade. Therefore the software must be considered a “thing”.<sup>30</sup> It is pointed out that software should not be

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<sup>21</sup> BGHZ 109, 97 at 100.

<sup>22</sup> OLG Stuttgart, *NJW* 1989, 2635; LG Köln, *CR* 1996, 154; OLG Köln, *VersR* 1993, 1532; OLG Celle *NJW-RR* 1993, 432; OLG Celle, *NJW-RR* 1995, 941; LG Nürnberg-Fürth, *CR* 1992, 336 at 338; OLG Köln, *NJW* 1991, 2155; OLG Hamm, *NJW* 1991, 2155; OLG München, *CR* 1993, 367; LG München, *CR* 1993, 367; AG Ansbach, *CR* 1995, 287; OLG Karlsruhe, *NJW* 1996, 201.

<sup>23</sup> BGH, *NJW* 1990, 3011; BGH, *NJW* 1991, 1231; BGH, *NJW* 1993, 461; BGH, *NJW* 1993, 2436; BGH, *NJW* 2000, 1415.

<sup>24</sup> König, n. 254; König, *NJW* 1993, 3121; Hoeren, n. 74 ff.; Marly, fn. 107; Marly, *BB* 1991, 432 ff.; Taeger, *CR* 1996, 257; Voß, p. 65; Martinek, *JurPC* 1993, 2263; Bartsch, *CR* 1992, 393 at 395; Möglich, p. 131; Palandt-Putzo, § 433, n. 5; § 535, n. 2.

<sup>25</sup> MK-Westermann, § 433, n. 20.

<sup>26</sup> König, *NJW* 1989, 2604 at 2605; MK-Soergel, § 631, n. 80.

<sup>27</sup> König, n. 357 ff.; Marly, n. 96.

<sup>28</sup> Hoeren, n. 77 f.; Malzer, p. 83; BGH, *GRUR* 1989, 417 at 419.

<sup>29</sup> Palandt-Putzo, § 433, n. 1; OLG Stuttgart, *NJW* 1989, 2635 f..

<sup>30</sup> Marly, n. 97.

treated differently based on the means of delivery.<sup>31</sup> It cannot be defined as a movable as long as it is transferred with a data carrier and then as an immovable when there is no data carrier.

In the event that software is delivered electronically, embodiment necessarily takes place when the software has been loaded on the computer hardware. The delivery is only a technically minor transition, so that this type of delivery is to be treated the same as delivery on a data carrier. The means of delivery have been changed due to the technical progress in data transactions. This does not impose the need for a different legal qualification.<sup>32</sup> Such a view also corresponds with the layman's view. The purchaser of the program perceives and controls it in embodied form on his computer and therefore sees it as a thing.<sup>33</sup>

Only some authors want to make an exception for software that is transferred via data transmission. They do not see software as movable in this kind of delivery.<sup>34</sup>

#### b) Software as an immovable

Different to the BGH, the German Supreme Court of Finance<sup>35</sup> established that software is immovable in its decisions concerning the fiscal definition of software.<sup>36</sup> The court decided that standard software and customised software are both immaterial economic goods. The decisive aspect in a software transaction is the interest of the buyer, who wants to gain the legal and commercial power to use the program as a product with intellectual content for his business use. The ownership of the data carrier is unimportant, because it is not the primary aim of the sale.

Some commentators also define software as immovable.<sup>37</sup> Though they do accept that software embodied on a data carrier achieves the quality of a thing, they do not see software itself as a movable. The main point of the dispute is therefore if software constitutes a thing even though it is delivered via data transmission. They argue that computer programs are immaterial ideas<sup>38</sup>, and that the fixation on a data carrier is not necessary for a transaction. Some argue that a computer program is not a thing, but a language as described in § 2 Par.1 No.1 UrhG<sup>39</sup>.<sup>40</sup> Others take literature as an argument and express the view that it is not movable because of its embodiment as a book, but that the content must be seen

<sup>31</sup> Endler,/Daub, *CR* 1993, 603; Marly, , n. 95.

<sup>32</sup> Marly, n. 101; König, *NJW* 1989, 2604 f..

<sup>33</sup> Palandt-Heinrichs, § 90, n. 1.

<sup>34</sup> Hoeren, n. 75, 361; Topel, *CR* 1993, 198 f.; Ulbricht, *CR* 1990, 603; see also EuGH, *NJW* 1980, 2010 f..

<sup>35</sup> *Bundesfinanzhof*, hereafter cited BFH.

<sup>36</sup> *CR* 1987, 576; *CR* 1992, 332; *CR* 1997, 19.

<sup>37</sup> Redecker, *NJW* 1992, 1739; Junker, *NJW* 1993, 824; Müller-Hengstenberg, *NJW* 1994, 3128; Moritz, *CR* 1994, 257; Dörner, *Jura* 1993, 578; Kort, *DB* 1994, 1505; Heussen, *GRUR* 1987, 779; Schneider, *CR* 1994, 385; Köhler/Fritzsche in Lehmann, p. 516, n. 4; Haberstrumpf in Lehmann, p. 69, n. 1; Pres, p. 19; Pres, *CR* 1994, 520; Ruppelt, p. 11; Bormann/Bormann, *DB* 1991, 2642.

<sup>38</sup> Heussen, *GRUR* 1987, 779 at 781; Müller-Hengstenberg, *NJW* 1994, 3128 at 3130; Dörner, *Jura* 1993, 578; Moritz/Tybussek, n. 751; Moritz, *CR* 1994 263; Ruppelt, p. 17.

<sup>39</sup> *Urhebergesetz* (copyright law), hereafter cited UrhG.

<sup>40</sup> Heymann, *CR* 1990, 112.

solitary. When software is transferred, the delivery is the important factor and not the embodiment on a data carrier.<sup>41</sup> Furthermore the natural definition of “things”, as seen by a layman, is that computer programs are not tangible and therefore immovable, immaterial things.<sup>42</sup>

### c) Conclusion

There are a lot of arguments that are put forth and against software as a movable. It is obvious that, in the end, all views take into account the layman’s view, saying that it would support either characterisation. Hence the most important question is whether software can be seen as a movable from the point of view of a layman. The characterisation as an immovable seems to derive from seeing it as an “artificial intelligence”. But nowadays computer programs are daily items of practical use that are commonly available, so it does not fit a layman’s view to see it as “artificial intelligence”. Software can be technically controlled, even though it might not be embodied on a data carrier, i.e. it is not tangible. But the fact is that computer software is never tangible in the sense that a person could touch the program. Even if software is embodied on a disc, or on a computer, it is always only perceivable through a technical process.

In conclusion it cannot definitely be said how a layman would define software. It varies due to the different subjective interpretations of software. Since it is not possible to make a final decision on whether software constitutes a thing, it is necessary to go one step further. In order to decide upon the legal qualification of software one must look at the possible contract types and their legal consequences. As to the complex views regarding software, it is subsumed under sales law as well as the law for contracts for works and services and several mixed contract types.

## 2. Contract of Sale

The characterisation of a sale not only requires a thing, but also a “sales transaction”. Typically a thing is transferred by for the permanent use against single payment of the price. In the beginning the courts decided that the law of sale was applicable in analogy<sup>43</sup>, because they saw software as being analogous to a thing. Later they used a direct approach.<sup>44</sup> Some of the commentators that consider software as a movable propose to apply the §§ 433 ff. BGB in analogy<sup>45</sup>, others support a direct application<sup>46</sup>. Whichever way sales law is applied,

<sup>41</sup> Redecker, *NJW* 1992, 1739; Ulbricht, *CR* 1990, 603.

<sup>42</sup> Fritsche, *JuS* 1995, 497 at 498.

<sup>43</sup> BGHZ 102, 135 ff.; BGH, *NJW* 1990, 3011.

<sup>44</sup> OLG Hamm, *CR* 1995, 341; OLG Köln, *CR* 1997, 213 f.; OLG Hamburg, *CR* 1997, 87; OLG Köln, *CR* 1996, 406.

<sup>45</sup> Busse, *CR* 1996, 389 at 390; Kort, *DB* 1994, 1505 f.; Fritsche, *JuS* 1995, 499; Zahrnt, *NJW* 1996, 1798 at 1800; Zahrnt, Chapter. 8.1.1(3.6).

<sup>46</sup> Marly, n. 163; König, *NJW* 1993, 3124; Bartsch, *CR* 1992, 395; Hoeren, n. 143; v. Ohlen, p. 137.

it does not alter the legal consequences.

If, however, other obligations come into play, such as the installation, adaptation, and the change of parameters of software, the transaction does not fit neatly under the definition of a sale. It is argued that the law of contracts for works and services is more appropriate considering the character of such a performance as well as the interests of the parties.<sup>47</sup> It is important to mention that the BGH always had to decide only upon the simple transaction of standard software and not upon contracts that implied the installation, adaptation or change of parameter of software. Instead, it had to be decided by the lower courts, to what extent contracts implying the installation etc. are sales contracts.<sup>48</sup>

### 3. Contract for Works and Services<sup>49</sup>

The rules for contracts for works and services (*Werkvertrag*) are laid down in §§ 631 ff. BGB. A contract for works and services requires that the contractor promises to produce a certain result.<sup>50</sup> It is distinguished from a contract of sale by determining if the contract is dominated by the transfer, or the production of a good.<sup>51</sup>

The rules for contracts for works and services are unanimously applied for software that has been customised.<sup>52</sup> Custom designed software comprises all computer programs that are specially designed and programmed for the particular needs of the buyer.

The classification of standard software is not as clear. As was described above standard software transactions will often include installation and training. The question whether such contracts constitutes a sale or a work or a mixture of both is to be answered by determining the major duty of the contract. In cases where the service constitutes the major part, the law of contracts for works and services applies to the whole contract.<sup>53</sup> Hence, the more difficult and important the work element is for the whole contract, the more likely it is a

<sup>47</sup> Saenger, *NJW* 1997, 1945; Jaeger, *NJW* 1999, 1294 at 1297; Müller-Hengstenberg, *CR* 1997, 613; Schneider, Chapter D, n. 312; Müller-Hengstenberg, *NJW* 2000, 3545 at 3546.

<sup>48</sup> This will be discussed in the next paragraph under „Contract for Works and Services“.

<sup>49</sup> The question whether software should be classified as goods or as services under European Law has still not been answered definitely. It has been stated in the European Parliament that software is a product for the purposes of the 1985 Product Liability Directive. However, the EU E-Commerce Directive, which addresses consumer protection issues, treats electronic deliveries as a service (Art. 2). The Directive will be implemented into German Law by the beginning of 2002. Electronic software would also fall under this definition. Yet, the Directive does not serve as a uniform body of contract law for electronic software. It is more focused on protecting and providing information to the end user than establishing rules for contract law. It depends on the development of contract law in each Member State to determine the treatment of electronic software in each of them.

The delivery of software on a disc would not be considered a service. It is left to the Member States to decide upon the applicable rules. Since Germany generally treats software as a good, the Directive is not likely to have much impact on the general treatment of software.

<sup>50</sup> Palandt-Putzko, Einf. v. § 631, n. 1; Ebke/Finkin, p. 194

<sup>51</sup> Palandt-Putzko, Einf. v. § 631, n. 5.

<sup>52</sup> BGH, *NJW* 1990, 3008; BGH, *NJW* 1991, 2135; BGHZ 102, 135 at 141; BGH, *CR* 1986, 799 at 800; BGH, *NJW* 1996, 1745 f.; BGH, *CR* 1993, 681; OLG Celle, *CR* 1991, 219; Engel, *BB* 1985, 1159 at 1161; Koch, n. 555; Lutz, *GRUR* 1976, 331 at 334, Bartl, *CR* 1985, 13 ff.; Mehrings, *NJW* 1986, 1904; Marly, n. 46, fn. 88; Hoeren, n. 8; Brandi-Dohrn, p. 1; Palandt-Thomas, Einf. v. § 631, n. 12; MK-Soergel, § 631, n. 80.

<sup>53</sup> OLG Düsseldorf, *BB* 1989, Beilage 5, siehe fn. 23, Zahrnt, *NJW* 1996, 1798 at 1800.

contract of works. Yet, often works are only collateral duties within the context of a sale.<sup>54</sup>

Some courts handle the issue of installation and training generously and mostly apply sales law.<sup>55</sup> Others decided that the law of contracts for works and services is to be applied instead.<sup>56</sup> The former ones found that in general the installation of the program is not sufficient to apply the law of contracts for works and services.<sup>57</sup> The latter ones argued that if the installation requires special technical know-how or considerable amount of work, then it is a major service duty included in the contract of sale. In conclusion there are no universal rules. The determination always depends on the particular case.<sup>58</sup>

Some commentators argue that all software transactions should be seen as contracts for works and services.<sup>59</sup> They argue that the legal consequences of the contract of works and services are favourable as against the ones of a contract of sale. Different from sales law the remedies imply a right to cure.<sup>60</sup> This would correspond with the interests of the parties, who would want to cure rather than repudiate the contract or reduce the price. Also, the limitation period only starts to run with the acceptance of the performance and not, as in sales law, with the delivery.<sup>61</sup> In my view these arguments are not persuasive. Because of the many software developers there is a lot of competition in the market that forces everyone to develop better and better programs in a short time. Hence the buyers are likely to prefer to repudiate and buy a new program rather than have the “old” one repaired. The sellers would not want to cure either, for it is often more expensive than providing a new program. The different limitation period is not a good argument, either, as courts already take into account the special role of software and allow for a certain testing period before the limitation period starts to run.

A valid argument for the characterisation as a service is that both customised and standard software would legally be treated the same. Yet a contract of works and services requires that the production of the software dominates the contract. In case of standard software, the programs are not individually produced for the customer, but for a range of customers, so this contract form is not applicable.

#### 4. “License Contracts”

The ones that argue that software is immovable usually come to the conclusion that a software transaction constitutes some kind of “license contract”.

<sup>54</sup> MK-Westermann, vor § 433, n. 23.

<sup>55</sup> OLG Köln, *NJW-RR* 1993, 1140; OLG Köln, *JurPC* 1992, 607; OLG Köln, *CR* 1997, 213 f.; OLG Karlsruhe, *NJW* 1992, 1773; LG Baden-Baden, *CR* 1995, 399; Zahrnt, *NJW* 1996, 1800; Brandi-Dohrn, p. 3.

<sup>56</sup> OLG Karlsruhe, *CR* 1995, 397; OLG Köln, *NJW-RR* 1992, 1327.

<sup>57</sup> OLG Köln, *CR* 1997, 213 f.; LG Baden-Baden, *CR* 1995, 399; Zahrnt, *NJW* 1996, 1800; Palandt-Thomas, vor § 631, n. 12.

<sup>58</sup> Marly, n. 51.

<sup>59</sup> Mincke, *JurPC* 1991, 932 at 938.

<sup>60</sup> § 633 BGB.

<sup>61</sup> § 640 BGB.

a) Know-how License Contract - Analogy to Lease or Sale

Leading off from a decision by the BGH in 1981<sup>62</sup>, some commentators still support the view that the transaction of software constitutes a license contract on the use of know-how. They argue that the use of software is a use of know-how.<sup>63</sup> A know-how contract is classified as a mixed contract for which some apply the rules of lease<sup>64</sup>, others the rules of sales in analogy.<sup>65</sup> The remedies would underlie the general part of the law of obligation in §§ 323 ff. BGB.<sup>66</sup>

Defects in the program would be treated as a *positive Vertragsverletzung* and fall under the 30-years limitation period, leaving the seller with an immense financial risk. Apart from these facts there are several other arguments against such a classification. Know-how contracts require that the knowledge behind the product is sold. But with the software the buyer only acquires a program that is able to process information. He does not get the knowledge of how the information is processed, so he does not buy the know-how. It has been argued that a delivery via data transmission constitutes the creation of a new thing.<sup>67</sup> But clearly the aim of the contract is not the creation of a new thing, but the transfer of an existing thing, the software program. One has to distinguish the work of the programmer and the copy that contains the results of the programmer's ideas. The analogy to books and, in particular, CD's and videos is plausible. Hence even modern forms of transfer such as data transmission or download do not conflict with a sales classification.

Also, the buyer primarily wants the program to function, but is not interested in how it works. The transfer of the secrets of programming is not part of the contract. In my view, software transactions cannot be classified as know-how license contracts.

b) License Contract *Sui Generis*

Some state that it would be impossible to categorise software transactions under any of the existing contract regulations in the BGB and therefore support to defining them as contracts *sui generis*.<sup>68</sup> They state the contract mainly aims at the transfer of a copyright license according to § 31 UrhG. The remedies depend on the particular case. This solution is not preferable, because it is not predictable what law the court will apply to the case. A contract *sui generis* fails to support legal clarity and certainty.

<sup>62</sup> BGH, *BB* 1981, 1856.

<sup>63</sup> Kilian, *CR* 1986, 187 at 193; Heussen, *GRUR* 1987, 779 at 787 ff.; Moritz/Tybussek, n. 531 ff.

<sup>64</sup> *Pacht*, §§ 581 ff. BGB.

<sup>65</sup> MK-Voelskow, § 581, n. 14; MK-Westermann, § 433, n. 2; Palandt-Putzo, § 433, n. 5; Mincke, *JurPC* 1991, 932 at 935; Kilian, *CR* 1986, 187 at 193.

<sup>66</sup> Heussen, *GRUR* 1987 779 at 791.

<sup>67</sup> Goebel, *DVR* 1982, 155 at 160.

<sup>68</sup> Lauer, *BB* 1982, 1758 at 1759, 1763; Hackemann, *CR* 1986, 660 at 663.

c) Copyright License Contract – Sale of rights

Others see the transaction as a transfer of user rights in the software.<sup>69</sup> Rights can be objects of a sale according to § 433 BGB. They can be debts and other claims arising from obligations, mortgages, patents, trademarks, and shares in partnerships and companies.<sup>70</sup> The seller has the duty to vest the right in the buyer.<sup>71</sup> Computer programs are explicitly excluded from patent law<sup>72</sup>, but they are copyrightable<sup>73</sup>. Copyrights in a program cannot be transferred, therefore a right in a program cannot be object of a sale.<sup>74</sup> The originator of the program can transfer a license to use the program, though.<sup>75</sup>

Often software contracts include several clauses by which the purchaser is limited in his right to use the program. It is argued that, if software transactions were treated as no more than contracts for the supply of goods or services, it would lead to an insufficient assessment of the nature of software licenses. It would leave out the intellectual property or information to which the license provides access. That is why software contracts should be seen as license contracts over a legally protected copyright to use an immaterial good in terms of § 31 UrhG.<sup>76</sup> Some want to apply the remedies of lease or sale in analogy.<sup>77</sup> Others apply, depending on the case, the general rules in §§ 325 ff. BGB or the law of sale, lease, or service.<sup>78</sup>

The classification of software as a sale of a right is problematic. Computer programs consist of a series of instructions that process information and then find a solution. This process is not protected by copyright. A person does not achieve the right in the processing.<sup>79</sup> Furthermore it would not be practical to apply the different remedies depending on the case, for the remedies of the general part and sale and service differ. Software transactions need to be characterised unanimously so they all fall under the same rules.

Traditionally copyright law has been regarded as a different branch of the law from that applicable to a sale. Copyright issues do not have an influence on the law of obligations.<sup>80</sup> As was said earlier, a license gives a right to use, but does not identify the

<sup>69</sup> Kindermann, *GRUR* 1983, 150 at 152; Engel, *BB* 1985, 1159 at 1163; Müller-Hengstenberg, *CR* 1986, 441 and *NJW* 1994, 3133; Moritz, *CR* 1994, 257; Nordemann, *CR* 1996, 5; Brandi-Dohrn, *CR* 1986 63; OLG Stuttgart, *CR* 1986, 639.

<sup>70</sup> Horn/Kötz/Leser, p. 120; Palandt-Putzo, § 433, n. 2.

<sup>71</sup> Horn/Kötz/Leser, p. 120.

<sup>72</sup> § 1 par.2 no.3 *Patentgesetz* (patent law), hereafter cited PatG.

<sup>73</sup> § 1 par.1 no.1 UrhG.

<sup>74</sup> Mincke, *JurPC* 1991, 932 at 934.

<sup>75</sup> § 31 par.1 UrhG.

<sup>76</sup> LG Lüneburg, *NJW* 1988, 2476; Nordemann, *CR* 1996, 5 at 6; Moritz, *CR* 1994, 257 at 261; Müller-Hengstenberg, *NJW* 1994, 3133; Yet, the BGH once stated that software is not always protected by copyright, but only if the program exceeds the ability of an ordinary programmer (BGHZ 94, 276). Such a differentiation is not practical as it leaves open what quality a program must achieve to be copyrightable. Also it is unclear what the transaction would fall under if it is not protected by copyright. Later the BGH did not discuss the idea to classify software transactions as a sale of rights anymore.

<sup>77</sup> Moritz, *CR* 1994, 257 at 261; Nordemann, *CR* 1996, 5 at 8.

<sup>78</sup> Müller-Hengstenberg, *NJW* 1994, 3133.

<sup>79</sup> Mincke, *JurPC* 1991, 932 at 934.

<sup>80</sup> Möglich, p.133 f.; Marly, n. 91.

applicable law.<sup>81</sup> Therefore copyright issues are not constitutive for the legal interpretation of software contracts. The transfer of user rights is a necessity incorporated in the contract.<sup>82</sup> If the software is transferred for the permanent use against single payment<sup>83</sup>, the buyer automatically achieves a right to use the copyrighted program according to § 31 par.2, § 69 d par.1 UrhG. This regulation constitutes an exception to the requirement to approve of actions in § 69 c UrhG. An approval is not necessary as long as actions are in accordance with their intended use. The granting of a right to use is not needed, because the transfer of a copy includes the right to use it.<sup>84</sup> If the seller wants to limit the user rights, he can do so concerning utilisation and copying of the software.<sup>85</sup> In conclusion the copyright protection of software does not conflict with the classification of software transactions into the law of sale. It is unnecessary to construe something like a copyright license contract.

## 5. Conclusion

Because of the aforementioned arguments, software transactions are to be subsumed under the law of sales. This is emphasised by the layman's view. Laymen often usually speak of "buying" software, even though it is not sold in the traditional sense. Although, from an economic point of view, the license is an important part of the contract, because it restricts the user's rights, users are not interested in what the license says. For them it is simply important that they are able to use the software, but not to what extent they are allowed to use it.

Since copyrights do not alter ownership, there is no reason why the law of sales should not be applied to software contracts. Even those who see software as an immovable and want to apply license contract forms, often want to apply sales law remedies in analogy. Since it is possible to apply sales law to software in analogy, the regulation of a new contract form is not necessary. Still, it would be better to establish clear rules for software contracts, in order to lead to more certainty in the field.

## II. REFORM OF THE LAW OF OBLIGATIONS

As was said earlier on, the reform of the law of obligations changes several rules in the law of obligations<sup>86</sup>. There is still no explicit rule concerning software contracts. However, the new rules for obligations not only address the sale of things and rights, but also the sale

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<sup>81</sup> See C. I.

<sup>82</sup> Bartsch, *CR* 1992, 395; Pres, *CR* 1994, 520 at 521; Nordemann, *CR* 1996, 5 at 6; Lehmann, *NJW* 1993, 1822 (1825).

<sup>83</sup> BGH, *NJW* 1988, 406; BGH, *NJW* 1993, 824; Brandi-Dohrn, *CR* 1993, 473.

<sup>84</sup> Zahrnt, *NJW* 1996, 1799; Zahrnt, *CR* 1994, 455 f.; Haberstrumpf in Lehmann, n. 121; Lehmann, *NJW* 1993, 1822 at 1824; Lehmann, *CR* 1994, 277.

<sup>85</sup> Günther, *JurPC* 1994, 2488 at 2494.

<sup>86</sup> Chapter Two BGB.

of “other things”<sup>87</sup>. This is reasoned with the fact that the present rule did not imply all possible objects of a contract of sale. It is argued that the contract of sale is also suited for the permanent transfer of other assets against single payment. The new rule is intended to imply software.<sup>88</sup> By doing so, the new law implements the existing case law, in which the rules of sales are already used concerning software transactions.<sup>89</sup> Yet, since the new rules do not explicitly imply software, it is unclear whether the opponents of applying sales law to software transactions are easily convinced that it is now implemented into sales law. German courts are only bound by the law. Judges often consult commentaries and scholarly publications and take into account trade usage, i.e. customary law.<sup>90</sup> Although courts should take into account the history of a law when applying its rules, the reasoning behind the new law does not impose a burden on the courts to classify all standard software contracts as sales contracts. Hence it remains to be seen how the courts are going to handle the issue in the future.

### III. TRANSFER AND PROCUREMENT OF OWNERSHIP

A sales contract imposes obligations on the parties. According to § 433 BGB the seller must deliver the goods and transfer ownership in them, while the buyer must pay the price and take delivery of the goods. German law distinguishes between the law of obligations and the law of property. The contractual duties are to be seen strictly abstract from the transactions that fulfil them.<sup>91</sup> Thus the conclusion of a valid contract does not cause ownership to pass.

The transfer and procurement of ownership in movables is regulated in § 929 BGB. The buyer must achieve possession and the seller must lose possession in the sales object and both parties must agree on the passing of property.<sup>92</sup> Possession is characterised by physical and not necessarily legal control over a thing.<sup>93</sup> As long as one defines software itself as a movable, the transfer is not a problem. But if one sees software only as a movable in combination with a data carrier, the question of transfer is more problematic. In case the transfer takes place by electronic data transmission, the embodiment of the software takes place only when it is transferred onto the buyer’s computer-hardware.<sup>94</sup> There never is a transfer of a movable thing from the seller to the buyer. Nevertheless the courts apply sales law. They reason that the transfer relies on extended technical possibilities, which do not

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<sup>87</sup> § 435 par.1 BGB new.

<sup>88</sup> Reasoning of the *Bundestag* regarding § 433 BGB new, *BT-Drucksache* 14/6040, <http://www.lrz-muenchen.de/~lorenz/schumod/index.htm>.

<sup>89</sup> Reasoning of the *Bundestag* regarding § 453 BGB new.

<sup>90</sup> Pauly, 19 *J. L. & Com.* 221 at 241 (2000).

<sup>91</sup> Horn/Kötz/Leser, p. 118; Fisher, p. 43; Ebke/Finkin, p. 192.

<sup>92</sup> Palandt-Bassenge, § 929, n. 9.

<sup>93</sup> § 854 BGB; Ebke/Finkin, p. 233.

<sup>94</sup> König, n. 715.

alter the legal nature of the contract.<sup>95</sup> Some commentators argue similarly<sup>96</sup>, others apply sales law by interpreting the transfer and concluding that the requirement, that the seller must lose the possession in the thing by giving it to the buyer, is not essential.<sup>97</sup> It is not necessary, because he never had possession in the concrete embodiment of the software copy on the computer of the buyer.<sup>98</sup> The arguments are reasonable, so that possession is generally achieved regardless of the type of transfer.

Ownership is defined in § 903 BGB. It means to be able to use an object as one likes and exclude others from influence.<sup>99</sup> Yet, § 903 states that the owner's freedom is limited through conflicting law and the rights of third parties.<sup>100</sup> The question is whether licensing hinders the transfer of ownership so that the purchaser only achieves a copyrighted right of use as in § 31 UrhG. Because conflicting rights of third parties generally do not alter ownership<sup>101</sup>, the copyright protection of software does not result in the buyer not achieving ownership in the program.<sup>102</sup> The transfer of the software and the procurement of ownership are fulfilled by granting an automatic right to use according to § 69 d par.1 UrhG.

#### IV. LIABILITY FOR DEFECTIVE SOFTWARE ARISING FROM THE LAW OF OBLIGATIONS

Under the current law, the special remedies for defects in §§ 459 ff. BGB apply to a contract of sale. If the software transaction is categorised as analogous to a contract of sale, the rules for defects apply in analogy, too. The remedies apply for breach of promise or warranty (*Gewährleistungsrechte*). Warranty signifies a reasonable standard of fitness. According to § 459 BGB the seller must provide an object that is free from material defects.<sup>103</sup> A defect is defined as an unfavourable deviation from the normal quality of an object of the same type or from the specific purpose it was sold for.<sup>104</sup> The defect must be considerable.<sup>105</sup> It must be present in the thing at the time the risk passes, that is with the transfer of the object to the purchaser.<sup>106</sup>

What then constitutes a software defect? Software is so complex that it is almost never without defects.<sup>107</sup> If and how the software is working will often depend upon the hardware. A software engineer will never be able to foresee all defects that might occur. Since a defect must be considerable, it seems reasonable that not every limitation to the

<sup>95</sup> BGHZ 109, 97 at 100; AG Ansbach, CR 1995, 278.

<sup>96</sup> König, n. 715 ff.; Emmerich, p. 155.

<sup>97</sup> Hoeren, n. 363 f.; Busse, CR 1996, 389 at 390.

<sup>98</sup> Voß, p. 68 f.; Marly, n. 103.

<sup>99</sup> Ebke/Finkin, p. 238; Robbers, p. 263.

<sup>100</sup> Horn/Kötz/Leser, p. 172; Foster, p. 283.

<sup>101</sup> Palandt-Bassenge, § 903, n. 27; Marly, n. 165.

<sup>102</sup> Marly, n. 165; Taeger, CR 1996, 261; Voß, p. 79 f..

<sup>103</sup> The seller is also liable for the conformity of the goods with any special warranty of certain qualities ("Zusicherung") that were promised. These are cases of strict liability, § 459 par.2 BGB.

<sup>104</sup> Foster, p. 267; Palandt-Putzo, § 459, n. 8; MK-Westermann, § 459, n. 8; RGZ 135, 342; RGZ 161, 334; BGHZ 452, 51.

<sup>105</sup> § 459 par.1 sent.2 BGB.

<sup>106</sup> § 446 BGB; Robbers, p. 233.

<sup>107</sup> Junker, n. 407; Moritz/Tybussek, n. 786.

functioning of the program can be defined as a defect. The leading cases established a formula according to which non-compatible parts of a program constitute a defect. Such defects arise when the software does not harmonise with the system<sup>108</sup> or when it does not function on the hardware or with other installed programs.<sup>109</sup>

The problem is, that §§ 459 ff. BGB do not give the right to cure. A right to cure describes the right to have a defect made good. The buyer to a sales contract can only chose to claim repudiation of the contract (*Wandlung*), i.e. avoidance, or reduction of the price (*Minderung*).<sup>110</sup> He can claim damages if the seller has broken an express promise as to the characteristics of the goods or when the seller acted maliciously.<sup>111</sup> Only in the case of generic goods the buyer can demand replacement of the software.<sup>112</sup> Mere exaggerated praise of the goods like they are found in catalogues does not constitute a promise as to the characteristics of the goods.<sup>113</sup>

The lack of a possibility to cure is often considered too hard in relation to software contracts. The purchaser of a contract for works and services, in contrast, has a right to demand improved performance.<sup>114</sup> Some courts and commentators support the application of these rights and duties to cure in advance to cancellation and reduction of the price.<sup>115</sup> The BGH explicitly left this issue open.<sup>116</sup>

All these problems are solved by the implementation of the reform of the law of obligations. There will be no special rules for remedies regarding sales contracts anymore. Instead, they will underlie the general remedies in the general part of the BGB, which makes them easier to understand and apply.<sup>117</sup> The liability of the seller is stricter. The object must be free of defects, which implies that the thing must have the qualities that the manufacturer promised in advertisements or labels.<sup>118</sup> A separate warranty concerning the quality is not necessary. Since these laws are not specifically set up for software, it is still not clear when software is defective. It will still be determined by the formula developed by the courts.

Most importantly, there will be a right to cure.<sup>119</sup> The buyer can decide between repair and delivery of a new thing.<sup>120</sup> This should silence those who considered the law of contracts for services as the better alternative.<sup>121</sup> In conclusion the remedies are drawn closer to the law of contracts for works and services.

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<sup>108</sup> BGHZ 102, 135.

<sup>109</sup> OLG Saarbrücken, CR 1990, 713.

<sup>110</sup> § 462 BGB.

<sup>111</sup> § 463 BGB.

<sup>112</sup> § 480 BGB.

<sup>113</sup> Robbers, p. 233.

<sup>114</sup> § 633 par.2 BGB.

<sup>115</sup> LG Nürnberg-Fürth, CR 1992, 336; OLG Düsseldorf, CR 1990, 122 at 125; OLG Köln, CR 1992, 153; OLG Frankfurt, CR 1993, 217; Köhler/Fritsche in Lehmann, p. 553; Brandi-Dohrn, p. 37.

<sup>116</sup> BGHZ 102, 135.

<sup>117</sup> §§ 280 ff. BGB.

<sup>118</sup> § 434 par.1 BGB new.

<sup>119</sup> § 437 BGB new.

<sup>120</sup> § 439 par.1 BGB new.

<sup>121</sup> See I. 3.

## V. LIMITATIONS TO LIABILITY

The seller can limit his liability by imposing limitations. These are generally contained in the standard terms of the contract.

### 1. Content of Limitation

Usually the seller limits his liability through the implementation of certain terms and conditions. According to § 2 AGBG<sup>122</sup> standard terms and conditions only apply to a contract, if the seller notifies the buyer of the terms, if the buyer was able to take notice, and if the buyer agrees with the terms. If the standard terms only accompany the product, the notification is regarded as unusual, so they are not implemented.<sup>123</sup> The standard terms must also be understandable, that is not in a foreign language.<sup>124</sup>

It is possible to limit or exclude warranties in the standard terms. However, limitations of warranties underlie the control through the AGBG. The AGBG allows only few limitations.<sup>125</sup> It is not allowed to exclude remedies<sup>126</sup>, or to limit the remedies to a right to cure only<sup>127</sup>. But the seller can imply a right to cure in advance to the seller's rights to repudiation and price reduction. Furthermore it is not allowed to limit the warranty period.<sup>128</sup><sup>129</sup> All in all it is very difficult to limit the liability, which implies a strong and necessary protection for consumers.

### 2. Enforceability of Shrink-wrap Licenses

Another difficult issue is the enforceability of imposed standard terms by way of so-called shrink-wrap licenses. These agreements are often included inside pre-packed software packages and set forth the terms of the purchase or license of the software.<sup>130</sup> A sticker on the outside shrink-wrap of the package notifies the purchaser that the use of the software is subject to these terms contained inside. Opening the cellophane paper constitutes acceptance. However, the customer does not see the terms until after purchasing the software and opening the package.<sup>131</sup> The enforceability of such terms is debated.

If the buyer purchases the software directly from the manufacturer, the license terms will constitute a part of the standard terms of the contract of sale. In most cases, though, the

<sup>122</sup> *Gesetz der Allgemeinen Geschäftsbedingungen* (Statute for standard terms and conditions), hereafter cited AGBG.

<sup>123</sup> § 3 AGBG.

<sup>124</sup> Köhler/Fritsche in Lehmann, p. 538.

<sup>125</sup> Palandt-Heinrichs, AGBG § 9, n.4.

<sup>126</sup> § 11 No.10 a, No.11 AGBG.

<sup>127</sup> § 11 No.10 b AGBG.

<sup>128</sup> § 11 No.10 f AGBG.

<sup>129</sup> The aforesaid provisions are only applicable, if they are addressed to a consumer, § 24 par.1 AGBG. Restrictions toward non-consumers only underlie the general control rules in § 9 AGBG.

<sup>130</sup> Ravicher, 5 *Va. J. L. & Tech.* 11 at n. 40 (2000); Schneider, *CR* 1996, 657; Marly, n. 366.

<sup>131</sup> Schuhmacher, *CR* 2000, 641.

buyer purchases the software from a separate dealer. Then the license terms constitute the standard terms of a separate license contract between the manufacturer and the buyer. The license contract exists next to the contract between the dealer and the buyer. In this case, the buyer needs to accept the second contract. The problem is that the buyer usually only wants to purchase the software. Hence the buyer will lack the intention of opening the package with the legal consequence of accepting a second contract.<sup>132</sup> Such an acceptance is also not seen as commercial usage.<sup>133</sup> Even if the buyer accepts the second contract, it is doubtful, whether the standard terms of the license agreement inside the package are included. A minority states that the license terms are included.<sup>134</sup> But the majority agrees that the terms are usually not validly included.<sup>135</sup> They argue that it is necessary for the implementation to take notice of the standard terms according to § 2 par.1 AGBG. If the buyer cannot read them, their implementation would be surprising and therefore invalid according to § 3 AGBG.<sup>136</sup> Instead, the legal provisions of § 69 UrhG apply to secure the copyrights of the manufacturer. With regard to the wording in § 2 par.1 No. 2 AGBG it is clear that consumer must be able to take notice of the content of the standard provisions.<sup>137</sup> I agree that under German law, shrink-wrap licenses are not enforceable. This is the correct approach, as the consumer must be sufficiently protected against the implementation of terms that limit his rights.

### 3. Consumer Protection

Some contract provisions can be invalid, because they interfere with consumer protection laws. One of those laws, the AGBG, has already been mentioned. Furthermore there is the consumer credit act (VerbrKrG) and the law on door-to-door sales (HWiG).<sup>138</sup> An important consumer protection factor is the length of the cooling-off period in view of cancellation rights. The situation in Germany concerning the scope of the law of door-to-door selling has changed after the implementation of the European directive into the distance selling law (FernAG)<sup>139</sup>. In the course of those changes, § 361a was implemented into the BGB.<sup>140</sup> It provides the consumer with a two-week cancellation right, which can be exercised

<sup>132</sup> Schneider, *CR* 1996, 657; Köhler/Fritsche in Lehmann, p. 536; Staudinger-Dilcher, vor § 116, n. 18; Hoeren, p. 411.

<sup>133</sup> Schneider, *CR* 1996, 657 at 659; Marly, n. 381.

<sup>134</sup> Moritz/Tybussek, n. 943; Schneider, *CR* 1996, 657 at 662; OLG Stuttgart, *CR* 1989, 685 at 687.

<sup>135</sup> Köhler/Fritsche in Lehmann, n. 39, 41; Marly, n. 381; Hoeren, n. 435; Pres, p. 185.

<sup>136</sup> Köhler/Fritsche in Lehmann, p. 538; Pres, p. 181.

<sup>137</sup> This requirement does not apply for standard terms addressed to merchants, § 24 AGBG. However, it is doubtful, whether the standard terms have been implied in the contract, for the merchants must have the intention to include the standard terms. Usually the addressee will not have such an intention. In relation to merchants, the standard terms of the manufacturer often imply user limitations according to §§ 18, 20, 21 GWB. Those standard terms must be in writing and signed, § 34 GWB, § 126 BGB. Since shrink-wrap licenses usually do not contain a signature, they are invalid. (Hoeren, n. 270 ff.; Busse, *CR* 1996, 389 at 390; Marly, n. 364).

<sup>138</sup> *VerbraucherKreditgesetz*, hereafter cited VerbrKrG; and *Haustürwiderrufsgesetz*, hereafter cited HWiG.

<sup>139</sup> *Fernabsatzgesetz*, hereafter cited FernAG; implementation of the EU Distance Selling Directive, 27.06.2000.

<sup>140</sup> § 361 a BGB is referred to by § 9 VerbrKrG, § 3 FernAG and § 1 HWiG.

without giving any reasons.<sup>141</sup>

With the implementation of the law reform, several consumer protection laws, such as the HWiG<sup>142</sup>, VerbrKrG<sup>143</sup>, and AGBG<sup>144</sup> are integrated into the BGB in order to prevent further splintering of the law. The §§ 474 BGB new imply special rules for the contract between merchants and consumers. § 475 par.1 BGB new makes it virtually impossible to contractually exclude or limit warranties. As a result the consumer is strongly protected. This is positive, as standard software contracts are often concluded between vendors and private consumers. The latter ones are in a much weaker position. They cannot negotiate the terms, but can only either accept or decline to enter into the contract as proposed by the sellers.

## VI. LIMITATION PERIOD

The current short limitation period for contracts of sale is another problematic issue.<sup>145</sup> The limitation period for movable objects is six month from the time of delivery. This period was criticised, because the complex structure of software makes an examination at the time of delivery difficult. It seems more reasonable to apply the rules of contracts for works and services in § 640 BGB, which give the buyer the opportunity to examine the goods before he accepts performance.<sup>146</sup> There, the limitation period only starts to run after the performance has been accepted.

However this idea was criticised, too, for the courts already take the difficulties involved in software contracts into account. They generally agree that the limitation period does not start at delivery, but only after the buyer is made familiar with the program and testing it several times.<sup>147</sup> Hence, there is practically no difference to the rules set up in § 640 BGB. But this question is disputed and was not decided by the BGH.<sup>148</sup>

The reform of the law of obligations brings with it the long needed extension of the limitation period. The limitation period for warranties will be two years from the time of delivery of the object of the sale.<sup>149</sup> All other rights of the parties fall under the limitation period of three years.<sup>150</sup> Because three years is a long limitation period, it was necessary to change to a subjective system. Hence this limitation period only starts to run from the time that the defect occurs and the claimant knows about the circumstances that give rise to the

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<sup>141</sup> Regarding on-line contracts, the duties of the parties have been regulated in § 312 e BGB as a result of the implementation of the EU E-Commerce Directive.

<sup>142</sup> §§ 312 f. BGB new.

<sup>143</sup> §§ 491 ff. BGB new.

<sup>144</sup> §§ 305 ff. BGB new.

<sup>145</sup> §§ 477 par.1 BGB.

<sup>146</sup> OLG Düsseldorf, *CR* 1990, 122 at 125; LG Nürnberg-Fürth, *CR* 1992, 336.

<sup>147</sup> OLG Düsseldorf, *CR* 1988, 689; OLG Düsseldorf, *WM* 1989, 459; OLG Köln, *NJW-RR* 1993, 1140; OLG Hamburg, *CR* 1997, 87; OLG Hamm, *CR* 1992, 335; OLG Düsseldorf, *CR* 1991, 538; Zahrnt, *NJW* 1996, 1800; Köhler/Fritsche in Lehmann, p. 572; Marly, n. 465; Schneider, *CR* 1994, 385 at 389; Brandi-Dohrn, p. 78; Palandt-Putzo, § 477, n. 12.

<sup>148</sup> BGH, *NJW* 1993, 461 at 462.

<sup>149</sup> § 438 par.1 No.3 BGB new.

<sup>150</sup> § 438 par.3 BGB new.

claim. In conclusion, although the limitation period starts to run from the delivery, the buyer will have plenty of time to test the software within the limitation period and to put forth a claim. The dispute on applying § 640 to the sale of software is now pointless. The reform brings a better protection for the interests of the buyer.

## VII. TAXATION

As was explained earlier, the identity of software is also important for tax issues.<sup>151</sup> Software is treated differently for sales tax reasons. Sales underlie the value-added tax. Sales tax is imposed, if a merchant supplies something or renders another performance against payment.<sup>152</sup> A supply requires the delivery of a tangible thing, including electricity, whereas other performances include everything that is intangible. Concerning software it is agreed that software sold on a data-carrier is tangible, whereas software delivered electronically is intangible. This has an impact on the place of performance and on the duty to pay sales tax. Tangible things underlie sales tax, if the warehouse from which the thing is sent, is in Germany. Software that is delivered electronically does not underlie this principle. The place of performance is the place of business or residence of the buyer.<sup>153</sup> Hence the seller does not have to pay sales tax for things delivered to another country. The different classification of software for tax purposes is not preferable. It follows that the same products are treated differently, only because of the differences in delivery. For tax purposes, there should be a single solution no matter what kind of delivery.

## VIII. CONCLUSION

Although the characterisation of software contracts as sales is not unproblematic, it is not necessary to create special regulations for software transactions. It is true that software is not a tangible good as it is traditionally required for a sale of goods. But the term goods can be stretched to imply software. It is necessary to treat software the same no matter what kind of delivery is chosen. Hence it cannot matter whether software is delivered physically or electronically. It is always the same product and must always be treated the same. This evolves not only from the discussion around software as the object of a sales contract, but also from the discussion around tax purposes. As can be seen from the discussion of the legal consequences, especially with the implementation of the reform of the law of obligations, software can be sufficiently dealt with under the law of sales. New legislative efforts are neither necessary nor would they bring considerable changes. The only reason to have new laws evolves from the need for clarity in the field of software transactions. As was described above most commentators and courts do agree that the rules for sales are

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<sup>151</sup> See B.I.1.b).

<sup>152</sup> § 1 par.1 Umsatzsteuergesetz (sales tax statute).

<sup>153</sup> § 3a par.4 Umsatzsteuergesetz.

applicable. Furthermore the reasoning behind § 453 BGB new makes clear that the legislature intends to deal with software in a sales context. This makes clear that, although software is not explicitly dealt with, it can be object to a sales contract.

## C. UNITED STATES OF AMERICA

Almost 50 per cent of the world's software is created in the United States. This explains why courts often had to deal with the problem of classifying software transactions. The question how to classify software contracts was addressed as early as 1979<sup>154</sup> and has since been the focal point of intense discussion in the U.S.. The law of the different States in the U.S. has grown from English Common Law. It follows the principle of *stare decisis*, so the law is made up mainly by precedents.<sup>155</sup> Though contract law remains largely governed by common law, state and federal statutes play an increasing role. The most important statute is the Uniform Commercial Code<sup>156</sup>. It provides a standardised set of rules for many types of commercial contracts.<sup>157</sup>

By 1999 a new statute had been drafted – the Uniform Computer Information Transaction Act<sup>158</sup>. With UCITA there is a new law designed specifically for software, the information industry and the Internet. It will have a crucial influence on the classification of software. However, UCITA must be ratified by each state to come into effect. UCITA changes the law on software contracts and makes it clearer. The changes will be described and carefully weighed against the existing UCC rules.

### I. APPLICABLE CONTRACT TYPE

The UCC specifies how to interpret contracts. It defines a contract as “the total legal obligation which results from the parties’ agreement”.<sup>159</sup> The agreement is the bargain of the parties as found in their language or by implication from other circumstances.<sup>160</sup> If the parties intentions are not clear the court will have to find reasonable terms that suit the interests of both parties.<sup>161</sup> While certain commercial transactions, such as the sale of goods, are dealt with under the UCC, others, such as the sale of land or services are not covered.<sup>162</sup> These contract types are dealt with under the common law of each state.

The different contract types under the UCC have different requirements. The sale of goods, for example, requires a movable thing as the object of sale, whereas service contracts require a service to be the major factor of a contract. As mentioned earlier, software is often not sold, but licensed. The question then becomes whether the Uniform Commercial Code governs licenses of software. Furthermore it is unclear whether the UCC

<sup>154</sup> Note, 77 *Mich. L. Rev.* 1149 at 1179 (1979).

<sup>155</sup> Burnham, p. 42.

<sup>156</sup> Hereafter cited UCC. The UCC was drafted by the American Law Institute, an organisation composed of judges, lawyers and academics, and the National Conference of Commissioners on Uniform State Laws. It was completed in 1952. The complete UCC has been adopted by forty-nine states, the District of Columbia, and the U.S. Virgin Islands. Louisiana has only adopted Art. 1, 3-5.

<sup>157</sup> Morrison, p. 202.

<sup>158</sup> Hereafter cited UCITA.

<sup>159</sup> UCC 1-201 (11).

<sup>160</sup> UCC 1-201 (3), 1-205, 2-208.

<sup>161</sup> Burnham, p. 387; Morrison, p. 214.

<sup>162</sup> Burnham, p. 398.

applies if a software transaction also requires certain services. Section 2-202 UCC states that it is applicable to any transaction in goods. The starting point therefore is the identification of software as a good.

### 1. Identity of software

The identity of software is unclear. The legal community characterises it as good or as service or as something completely different from that. Art. 2 UCC deals with sales law. Art. 2-105 defines goods as “all things which are movable at the time of identification of the contract for sale...”<sup>163</sup> The term “goods” does not presuppose a tangible thing as object of the transaction. The essential elements are the movability and identification at the time of the sale. Neither Art. 2-105 (1) nor other sections expressly exclude intangible things from the UCC’s sphere of application. In former times courts held that intangibles cannot be goods, because they were viewed as personal rights incapable of delivery.<sup>163</sup> This view has long been changed and it now only depends on the movability and not on the tangibility of the thing contracted for. Courts have even said that contracts for the supply of electricity are contracts for the sale of goods, though electricity is an incorporeal, intangible thing.<sup>164</sup>

#### a) Software as a good

The prevailing opinion characterises software as a good under Art. 2 UCC. There are few decisions discussing the issue of software as a good. Most courts simply characterise software contracts as contracts for the sale of goods under Art. 2 without any dogmatic differentiation. Software is indirectly categorised as a good.<sup>165</sup> The ones that dealt with the problem decided that software is a “good” because Art. 2 UCC must be liberally interpreted for a variety of commercial transactions. Goods involve all personal property that is transferable and identifiable except those things that are expressly excluded in Art. 2. Software that is transferred on a computer-readable medium automatically becomes a good.<sup>166</sup> In analogy to recorded music, software is not a good, but when fixed on a tangible medium it becomes merchantable.<sup>167</sup> Moreover the fixed and certain uniform laws of the UCC are to be favoured over the uncoded, non-uniform, common law rules that can vary

<sup>163</sup> *Zamore v Whitten*, 395 A.2d 435 at 441 (Me. 1978); *Tomb v Lavalle*, 298 Pa. Super. 75, 444 A.2d 666 at 667 (1981); Horowitz, 65 B.U.L. Rev. (1985) 129 at 136.

<sup>164</sup> *Fickeisen v Wheeling Elec. Co.*, 67 W. Va. 335, 67 S.E. 788 (1910); *Helpfey v Wabash County REMC*, 161 Ind. App. 176 at 179, 278 N.E. 2d 608 at 610 (1972).

<sup>165</sup> *Atlas Indus. Inc. v Nat’l Cash Register Co.*, 216 Man. 213, 531 P.2d 41 (1975); *Triangle Underwriters, Inc. v Honeywell, Inc.*, 604 F.2d 737 (2<sup>nd</sup> Cir. 1979); *Applications Inc. v Hewlett-Packard Co.*, 501 F. Supp. 129 (S.D.N.Y. 1980), aff’d 672 F.2d 1076 (2<sup>nd</sup> Cir. 1982); *Arizona Retail Sys., Inc. v Software Link, Inc.*, 831 F. Supp. 759 at 763 (D. Ariz. 1993); *Colonial Life, Inc. v Electronic Data Systems Corp.*, 817 F. Supp. 235 (D.N.H. 1993); *Novell, Inc. v Network Trade Center, Inc.*, 25 F. Supp.2d 1218 (D. Utah 1997).

<sup>166</sup> *RRX Industries v Lab-Con, Inc.* 772 F.2d 543 (9<sup>th</sup> Cir. 1985); *Advent Systems Ltd. v Unisys Corp.*, 925 F.2d 670 (3<sup>rd</sup> Cir. 1991).

<sup>167</sup> *Advent Systems Ltd. v Unisys Corp.*, 925 F.2d 670 at 675 (3<sup>rd</sup> Cir. 1991).

from jurisdiction to jurisdiction.<sup>168</sup>

The fact that a computer program is copyrightable<sup>169</sup> does not alter the fact, that once in the form of a disc or other medium, the program is tangible, movable and available in the marketplace.<sup>170</sup> The underlying intellectual property right, such as a copyright, may be intangible, but software is copyrightable only if it is fixed in a tangible medium.<sup>171</sup> The transfer of property is dogmatically a completely independent issue from the contract of sale. Personal property can be tangible or intangible.<sup>172</sup> The transfer of property does not affect the initial characterisation of software as a possible object of a sales contract.<sup>173</sup>

There is a growing judicial consensus that the UCC governs standard software contracts, whether they are called “sales” or “licenses”.<sup>174</sup> Yet, some argue that Art. 2 can only be applied to software by analogy, since software purchasers generally do not purchase the software itself, but merely a license to use it.<sup>175</sup> Nevertheless they want to apply Art. 2 UCC, for it contains a reservoir of principles, which can be applied to software contracts.

#### b) Software as other than a good

In one case<sup>176</sup>, the court found that the purpose of a software license was to transfer intellectual property rights, not to transfer goods. Others similarly concluded that a software license is not a good under the UCC.<sup>177</sup> A number of commentators have argued that software should not be considered a product at all. They see it as an intangible that cannot be squeezed into the traditional sales of goods provisions under the UCC.<sup>178</sup> Others state that treating software as a good would create a “legal fiction” which places the purchaser at a disadvantage against the vendor.<sup>179</sup> The purchaser does not have the key benefit required by the UCC, as he has no opportunity to bargain, but must accept the terms set up by the seller, especially when purchasing mass-marketed software.

The download over the Internet poses a special problem. Since courts held that cable television programming signals are not a transaction in goods<sup>180</sup>, it has been concluded that electronic delivery of software cannot be a transaction in goods either.<sup>181</sup>

<sup>168</sup> *Advent Systems Ltd. v Unisys Corp.*, 925 F.2d 670 at 676 (3<sup>rd</sup> Cir. 1991).

<sup>169</sup> 17 U.S.C. § 101 (1999) explicitly states that software is copyrightable.

<sup>170</sup> *Advent Systems Ltd. v Unisys Corp.*, 925 F.2d 670 at 675 (3<sup>rd</sup> Cir. 1991).

<sup>171</sup> Philips, 50 *The Business Lawyer* 151 at 158 (1994).

<sup>172</sup> Burnham, p. 449.

<sup>173</sup> Diedrich, 8 *Pace Int'l L. Rev.* 303 at 329 (1996).

<sup>174</sup> *Triangle Underwriters, Inc. v Honeywell, Inc.*, 604 F.2d 737, 74 (2<sup>nd</sup> Cir. 1979); *Colonial Life, Inc. v Electronic Data Systems Corp.*, 817 F. Supp. 235 (D.N.H. 1993).

<sup>175</sup> Nimmer, *Wm. & Mary L. Rev.* 1337 (1994); Murray, 39 *Fordham L. Rev.* 447 (1971); Rodau, 35 *Emory L. J.* 853 at 901 (1986); *Samuel Black Co. v Burroughs Corp.* 33 U.C.C. Rep. Serv. (CBC) 954 at 962 (D. Mass. 1981).

<sup>176</sup> *Architectronics, Inc. v Control Systems, Inc.* 935 F. Supp. 425 (S.D.N.Y. 1996).

<sup>177</sup> *Berthold Types Ltd. v Adobe Systems, Inc.* 101 F. Supp.2d 697 (E.D. Ill. 2000); *Adobe Systems, Inc. v One Stop Micro*, 84 F. Supp.2d 1086 (N.D. Cal. 2000).

<sup>178</sup> Bayman, 42 *Vand. L. Rev.* 557 at 576 (1989).

<sup>179</sup> Hemnes, 71 *Denv. U. L. Rev.* 577 (1994).

<sup>180</sup> *Kaplan v Cablevision of Pennsylvania, Inc.*, 671 A.2d 716 (Pa. Super. Ct. 1996).

<sup>181</sup> Brennan, 38 *Duq. L. Rev.* 459 at 537 (2000).

### c) Conclusion

In my opinion tangibility must be interpreted widely. This is emphasised through the fact that courts even considered electricity as a good under Art. 2 UCC, even though it is intangible.<sup>182</sup> Though it is true that software itself cannot be defined as a tangible, it makes sense to see it as a good. To be able to draw a more precise conclusion it is necessary to take into account the different contract forms and remedies that are available under the UCC and under common law. It is necessary to deal with the problem of software not only in the interest of identifying it, but also in the interest of finding the best legal solution for the parties that conclude a software contract. The different contract options will be analysed in the following.

### 2. Sales Contract

As said above, sales law is dealt with under Art. 2 UCC. Though Art. 2 UCC is entitled “sales”, the text itself indicates that all transactions in goods fall under UCC Art. 2. The scope of the terms “sale” and “transaction” have never been conclusively determined. Transaction has been interpreted broadly and includes several non-sale transactions.<sup>183</sup> The fact that software contracts involve a license and not a sale does not preclude UCC coverage, as Art. 2 UCC has been applied to contracts for licenses.<sup>184</sup> As was said above computer software is mostly considered goods and is therefore dealt with under Art. 2 UCC without further discussing whether it needs to be a sales transaction.<sup>185</sup> Some conclude that Art. 2 UCC applies by analogy to the terms of a software license.<sup>186</sup>

The UCC does not distinguish between standard and custom-designed goods. In both cases, the buyer gets a ready-to-use computer program as the final product. There is no difference apart from the fact that custom-designed software contracts have “specifically designed goods” as their object. This is provided for in Art. 2-105 (1) UCC. It is not clear, however, if standard software can be classified as good when the transaction involves some service aspects, such as installation and training. This issue will be discussed in the following paragraph.

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<sup>182</sup> *Fickeisen v. Wheeling Elec. Co.* 67 W. Va. S.E. 788 (1910).

<sup>183</sup> *Glen Dick Equip. Co. v Galey Contr., Inc.* 97 Idaho 216, 541 P.2d 1184 at 1189 (1975); *Hertz Commercial Leasing Corp. v Transportation Credit Clearing House*, 59 Misc. 2d 226 at 230, 298; N.Y.S. 2d 392 at 396 (N.Y. Civ. Ct. 1969).

<sup>184</sup> *Colonial Life, Inc. v Electronic Data Sys. Corp.*, 817 F. Supp. 235 at 239 (D.N.H. 1993); Cannata, 21 *Cardozo L. Rev.* 283 at 287 (1999); Friedman 22 *Rutgers L. Rec.* 13 at 15(1998).

<sup>185</sup> *Colonial Life, Inc. v Electronic Data Sys. Corp.*, 817 F. Supp. 235 at 239 (D.N.H. 1993); *RRX Industries v Lab-Con, Inc.*, 772 F.2d 543 at 546 (9<sup>th</sup> Cir. 1985); *Data Processing Services, Inc. v L.H. Smith Oil Copr.*, 492 N.E.2d 314 at 318 (Ind. Ct. App. 1986).

<sup>186</sup> *Samuel Black Co. v Burroughs Corp.*, 33 U.C.C. Rep. Serv. (CBC) 954 at 962 (D. Mass. 1981); Alces/Book, 84 *Minn. L. Rev.* 1 at 26 (1999).

### 3. Service contract under Common Law

Service contracts and materials used in connection with the performance of service contracts are excluded from Art. 2 UCC. Service contracts are governed by individual state contract law. If they dominate the subject matter of the contract, they bring it outside of UCC coverage. The common law of contract traditionally does not recognise implied warranties.<sup>187</sup> Hence the UCC implied warranties of merchantability and fitness for a particular purpose cannot be applied to a contract for services.<sup>188</sup> Purchasers can only sue for negligence or breach of an express warranty, which requires more proof than implied warranty claims under the UCC.<sup>189</sup>

Transactions that involve a combination of goods and services are no novelty. Courts have developed a test to resolve the issue.<sup>190</sup> The so-called predominant purpose test weighs two factors in distinguishing sales from service contracts: services and the transfer of goods.<sup>191</sup> In other words, the question what law is to be applied is solved by determining which portion dominates the entire agreement. As long as a mixed contract is dominated by the sale of goods, the UCC applies.<sup>192</sup> If any additional services rendered in connection with the contract prevail over the transfer of the software, the transaction is categorised as a contract for the supply of services. The contract is not split into separate goods and services components.

Concerning customised software, some courts and commentators believe that the computer program is dominated by the service part, because the development of this software is a labour-intensive process requiring the skill and expertise of a professional.<sup>193</sup> Such contracts can be compared to contracts for the painting of a portrait or design and manufacture of a dress, which are traditionally treated as service contracts.<sup>194</sup> But more recent decisions state that under Art. 2 UCC goods can be mass-produced or custom-designed, they only have to be movable. So, they treat even customised software as a

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<sup>187</sup> The Restatement (Second) of Contracts makes no mention of implied warranties. The Restatements are promulgated by the American Law Institute to distill the general principles of law in a given area from the body of decided cases. They includes comments and illustrations of application, but can only serve as persuasive authority. The Restatement (Second) of Contracts was promulgated in 1979.

<sup>188</sup> *Milau Assoc., Inc. v North Ave. Dev. Corp.*, 42 N.Y.2d 482 at 484, 368 N.E.2d 1247, 1251, 398 N.Y.S.2d 882 at 885 (1977).

<sup>189</sup> Horovitz, 65 *B.U.L. Rev.* 129 at 141 (1985).

<sup>190</sup> *Colonial Life, Inc. v Electronic Data Sys. Corp.*, 817 F. Supp. 235 at 238 (D.N.H. 1993); *Design Data Corp. v Maryland Cas. Co.*, 503 N.W.2d 552 at 556 (Neb. 1993); *Princess Cruises, Inc. v General Elec. Co.*, 143 F.3d 828 at 832 (4<sup>th</sup> Cir. 1998).

<sup>191</sup> *Bonebrake v Cox*, 499 F.2d 951 (8<sup>th</sup> Cir. 1974); *Triangle Underwriters, Inc. v Honeywell, Inc.*, 604 F.2d 737 at 742 (2<sup>nd</sup> Cir. 1979); Nimmer, 38 *Duq. L. Rev.* (2000) 255 at 278; Cannata, 21 *Cardozo L. Rev.* 283 at 290 (1999).

<sup>192</sup> *Advent Sys., Ltd. v Unisys Corp.*, 925 F.2d 670 at 676 (3<sup>rd</sup> Cir. 1991); *RRX Indus., Inc. v Lab-Con, Inc.* 772 F.2d 543 at 546 (9<sup>th</sup> Cir. 1985); *Chatlos Sys., Inc. v Natinonal Cash Register Corp.*, 635 F.2d 1081 at 1084 (3<sup>rd</sup> Cir. 1980); *Triangle Underwriters, Inc. v Honeywell, Inc.*, 604 F.2d 737 at 742 (2<sup>nd</sup> Cir. 1979); *Carl Beasley Ford, Inc. v Burroughs Corp.*, 361 F. Supp. 325 at 333 (E.D. Pa. 1973).

<sup>193</sup> *Wharton Management Group v Sigma Consultants, Inc.* 1990 Del. Super., Lexis-Nexis 54 at 7 (Del. Super. Ct. 1990); aff'd 582 A.2d 936 (Del. 1990); *Micro-Managers, Inc. v Gregory*, 434 N.W.2d 97, 100, 7 U.C.C. Rep. Serv. 2d (Callaghan) 1375 at 1377 (Wis. Ct. App. 1988).

<sup>194</sup> Horovitz, 65 *B.U.L. Rev.* 129 at 154 (1985).

good.<sup>195</sup> Since Art. 2 UCC includes specifically designed goods, customised software should not be excluded from its scope, simply because it has been specifically designed. Art. 2 UCC should be liberally construed.<sup>196</sup>

When it comes to standard software, transactions often involve personal skills and labour, so that the contract combines aspects of both goods and services. Even though there might be no development component, there might be installation and training involved in the transaction. The question is whether they are the predominant purpose of the contract. Most courts decided that the service part did not dominate the contract<sup>197</sup>, since they are only minor duties accompanying a sale. It might be difficult sometimes to define whether the service components dominate the contract. But since recent cases treat customised software as a good, the courts will even more likely treat those contracts that only involve minor service duties as goods rather than services. If UCC Art. 2 allows for specifically designed goods, then it is clear that such contracts should rather be dealt with under the UCC. As a result the courts will not have to have lengthy discussions on whether software transactions involving certain services should rather be seen as service contracts.

#### 4. License contract under Common Law

Most cases dealing with contract licenses of information do not refer to Art. 2 UCC or reject it, but rely on common law and rules deriving from intellectual property law.<sup>198</sup> In typical licensing transactions, title to the intellectual property never passes. The intellectual components are not sold and the title to the media is not transferred. Therefore licensing of software does not resemble a typical sales transaction. In the context of software licenses some courts held that a software distribution license was not a transaction in goods, but a transaction predominantly focused on a license of rights.<sup>199</sup>

It is true that Art. 2 UCC does not address all questions arising in the area of intellectual property law. For example it gives no solution to whether a license extends to new technologies that emerge after the contract was made.<sup>200</sup> It also does not address what default rules apply when there is no designation of the uses permitted or denied.<sup>201</sup> It does not say whether exceeding the scope of a license is a breach of contract, infringement, or

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<sup>195</sup> *Advent Sys. Ltd. v Lab-Con, Inc.*, 925 F.2d 670 at 674 (3<sup>rd</sup> Cir. 1991); *Colonial Life Ins. Co. v Electronic Data Sys. Corp.*, 817 F. Supp. 235 at 239 (D.N.H. 1993); *Hospital Computer Sys., Inc. v Staten Island Hosp.*, 788 F. Supp. 1351 at 1354 (D.N.J. 1992); *Communications Groups, Inc. v Warner Communications, Inc.*, 527 N.Y.S.2d 341 at 344 (N.Y.Misc. 1988); *Data Processing Services, Inc. v L.H. Smith Oil Corp.* 492 N.E.2d 314 at 318 (Ind. Ct. App. 1986).

<sup>196</sup> UCC 2-105 (1).

<sup>197</sup> *RRX Indus., Inc. v Lab-Con, Inc.* 772 F.2d 543 (9<sup>th</sup> Cir. 1985); *NMP Corp. v Parametric Tech. Corp.*, 985 F. Supp. 1536 (N.D. Okla. 1997); *Systems Design & Management Info., Inc. v Kansas City Post Office Employees Credit Union*, 788 P.2d 878 (Kann. Ct. App. 1990).

<sup>198</sup> *DSC Communications Copr. v Pulse Communications, Inc.*, 170 F.3d 1354 (Fed. Cir. 1999).

<sup>199</sup> *Architectronics, Inc. v Control Systems, Inc.*, 935 F. Supp. 425 (S.D.N.Y. 1996).

<sup>200</sup> *National Car Rental Sys., Inc. v Computer Assocs. Int'l, Inc.*, 991 F.2d 426 (8<sup>th</sup> Cir. 1993).

<sup>201</sup> *Tingley Sys., Inc. v Norse Sys., Inc.*, 49 F.3d 93 (2<sup>nd</sup> Cir. 1995).

both.<sup>202</sup> However, in many ways a licensing transaction is the economic equivalent to a sale. The license can be granted for permanent use against a one-time fee, so that the right to use is equivalent to the title in the property received through a sale. In many ways a licensing transaction is the economic equivalent to a sale. The license can be granted for permanent use against a one-time fee, so that the right to use is equivalent to the title in the property received through a sale.

It is questionable whether software should be treated under common law rules and intellectual property rules. Art. 2 UCC and common law differ significantly from one another, especially concerning consequential damages, statutes of limitations, and warranties. This affects the rights and remedies of the contracting parties.<sup>203</sup> The UCC does permit consequential damages if the buyer could not reasonably have prevented the loss by cover or otherwise.<sup>204</sup> Common law holds the seller liable if the damages were reasonably foreseeable.<sup>205</sup> Since typically some damages are foreseeable in a software case, liability almost always arises under common law. The UCC provides a more appropriate means to determine whether consequential damages should be awarded. Also, common law of contracts traditionally does not recognise implied warranties. Buyers can only claim negligence or breach of an express warranty. They both require more proof than implied warranty terms under the UCC.<sup>206</sup> Hence Common law lacks many benefits of Art. 2 UCC. It is more favourable, from a purchaser's point of view, to apply the UCC.

UCC and common law also differ concerning the statute of limitation. While there is a four year statute of limitation under the UCC, common law generally grants six years or longer for bringing contract claims.<sup>207</sup> Here, common law is less favourable from a seller's point of view. In conclusion the UCC is the best solution for both, buyer and seller, for it provides effective rules that keep both parties interests in mind.

Common law does not provide any comprehensive rules for software either. Its rigid, formal rules are not adaptable to rapid change. There are no special provisions to deal with e-commerce. Moreover it is not uniform among the states, even within a state it is often scattered among other statutes and court decisions.

In conclusion, the option to classify software as a license contract under common law is not to the best advantage for both parties.

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<sup>202</sup> *Expeditors Int'l of Washington, Inc. v Direct Line Cargo Management Servs., Inc.* 995 F.Supp. 468 (D.N.J. 1998).

<sup>203</sup> Cannata, 21 *Cardozo L. Rev.* 283 at 308 (1999).

<sup>204</sup> UCC 2-715 (2) (a).

<sup>205</sup> *Hadley v Baxendale*, 156 Eng. Rep. 145 at 151 (1854).

<sup>206</sup> Horovitz, 65 *B.U.L. Rev.* 129 at 141 (1985).

<sup>207</sup> UCC 2-725 (1); Cannata, 21 *Cardozo L. Rev.* 283 at 310 (1999).

## 5. Conclusion

As a result of the persuasive arguments brought forward against the common law contract forms it is best to deal with software transactions under the UCC Art. 2. Even though software does not precisely fit into the definition of a good under Art. 2 UCC, it is in the best interest of both the buyer and the seller to apply it to software transactions regardless whether they involve a license or not.

## II. UCITA

Contract law in the U.S. will be undergoing a fundamental change. UCITA is the result of a ten-year discussion involving the information industry, consumer representatives, the entertainment industry and others over the rules for electronic contracts, software licensing, and Internet contracts. In the early 1990's the National Conference on Uniform State Laws (NCCUSL)<sup>208</sup> and the American Law Institute (ALI) agreed to update the UCC to include software-licensing agreements. Initially, a new UCC Article 2B was proposed. However there was a considerable resistance against Art. 2B and ALI withdrew its support. Then the NCCUSL proposed not to include the issue in the UCC and simply drafted UCITA as a stand-alone statute. It was approved by NCCUSL in July 1999 and became available for consideration in December 1999. Since then it has been enacted by Virginia<sup>209</sup> and Maryland<sup>210, 211</sup>.

UCITA applies to "computer transactions"<sup>212</sup> and covers contracts to create, modify, transfer or license computer information or informational rights in computer information.<sup>213</sup> It contains rules for Internet-related mass-market licenses, including contracts to download software, access contracts, click-wrap agreements, web-wrap agreements, and electronic data interchange. It focuses rather narrowly on the commercial traffic in information tools, such as software. It is difficult to predict how broad the scope of UCITA will be in practice.

UCITA applies to any computer information contract, regardless of whether the owner of the program specifically licenses it or whether he is silent on the scope of the license and "sells" the copy. The relationship between selling a copy of a program and retaining the underlying intellectual property rights has been defined. The Act covers contracts for both, service and goods transactions, but does not alter any rules for intellectual property.<sup>214</sup>

A contract can be made subject to UCITA, even if the transaction would be applicable

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<sup>208</sup> The NCCUSL is 110 years old and is composed of Commissioners from all 50 states and D.C., the U.S. Virgin Islands, and Puerto Rico.

<sup>209</sup> Enforced in July 2001 without making any substantive changes.

<sup>210</sup> Enforced in October 2000 with making several modifications, for example invalidation of disclaimers of implied warranties in consumer contracts.

<sup>211</sup> It is currently under consideration in Arizona, District of Columbia, Illinois, Maine, New Hampshire, New Jersey, Oregon, and Texas; see <http://www.ucitaonline.com/slhpsus.html>.

<sup>212</sup> UCITA 103 (a).

<sup>213</sup> UCITA 102 (a) (12).

<sup>214</sup> Nimmer, 38 *Duq. L. Rev.* 255 at 304 (2000).

to a sales transaction described in Art. 2 UCC. It requires that the material part of the transaction involves types of goods which contain computer information.<sup>215</sup> An exception arises concerning the medium that carries the computer information. It is treated as part of the information within UCITA, whether it is a tangible object or electronic in nature. UCITA applies to the copy, documentation, and packaging of computer information.<sup>216</sup> In other cases, such as a computer program controlling engine timing in a car, UCITA is excluded because the copy of the program is embedded in and sold as part of the car as a good.<sup>217</sup>

In cases of mixed contracts, such as a contract involving the sale of hardware and the license of software, the sales part is to be governed by UCC, whereas the license part is to be governed by UCITA.<sup>218</sup>

It remains to be seen, whether UCITA will be as successful as it is hoped for. It is under consideration in some states, but might undergo slight changes in each of them. As long as the majority of states does not accept UCITA as a new law for information contracts, the goal of uniformity is out of reach.

### III. TRANSFER AND PASSING OF TITLE

#### 1. UCC

Art. 2-301 sets forth the basic obligation of the parties to a sales contract. The seller must transfer and deliver the goods and the buyer is to accept and pay in accordance with the contract. Each party must tender performance when due.<sup>219</sup> Furthermore a sale consists of passing of title from the seller to the buyer for a price.<sup>220</sup> The precondition to pass title is that the goods are identified to the contract.<sup>221</sup> Title passes in accordance with the agreement of the parties, or, if there is no agreement, at the time and place at which the seller completes performance with reference to the physical delivery of the goods.<sup>222</sup>

Software, unlike other goods, may be delivered over the Internet without human intervention.<sup>223</sup> Delivery is never physical, but can be assumed from the point when the software is fully loaded on the buyer's computer. Since software is usually licensed, there is as a matter of federal law no transfer of copyright ownership.<sup>224</sup> With software, the buyer does not gain title in the software, but he does have title in the particular copy he receives. The fact that licensed software does not involve the passing of the title of the software does

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<sup>215</sup> UCITA 103, 104.

<sup>216</sup> UCITA 102.

<sup>217</sup> UCITA 103 (b) (1); Nimmer, 38 *Duq. L. Rev.* 255 at 313 (2000).

<sup>218</sup> UCITA 103.

<sup>219</sup> Brennan, 38 *Duq. L. J.* 459 at 497 (2000).

<sup>220</sup> UCC 2-106 (1).

<sup>221</sup> UCC 2-401 (1).

<sup>222</sup> UCC 2-401 (2).

<sup>223</sup> Rustad, 18 *J. Marshall J. Computer & Info. L.* 547 at 564.

<sup>224</sup> 17 U.S.C. § 101.

not preclude UCC coverage.<sup>225</sup> It is clear, though, that a sale involving a license does not perfectly fit under the rules set up by sales law under the UCC.

## 2. UCITA

Under UCITA ownership passes as specified by the contract. If the ownership of informational rights in software is not specified, ownership passes when the information and the informational rights are in existence and identified to the contract. Yet, transfer of a copy does not transfer ownership of informational rights. Title to a copy is determined by the license. The right to possession or control of a copy is governed by the license and does not depend on the title of the copy. If the title to the copy is transferred, involving delivery on a physical medium, title passes at the time and place at which the licensor completed his delivery obligations. If the software is delivered electronically and a first sale occurs under copyright law, title passes in the same way.<sup>226</sup>

## **IV. LIABILITY FOR DEFECTIVE SOFTWARE**

A party who has not performed by the time that performance is due has breached the contract. The other party then has the right to certain remedies.

### 1. UCC

Under the traditional sales analysis of Art.2 UCC courts have required perfect tender in the performance of a contract. Under UCC 2-602, a buyer has the right to reject non-conforming goods upon delivery. But usually the problem becomes evident much later, which is why it is almost certainly too late to exercise the rights under this “perfect tender rule”. It does not require the product to be perfect. It simply provides that the buyer need not accept goods if the goods fail in any respect to conform to the contract. Minor defects are common to software. It is unrealistic that software will comply with the standard set up by the perfect tender rule.<sup>227</sup> Because of the complex nature of software it is necessary to establish a certain level of tolerance towards minor defects. It is for the seller to specify the level of software reliability at the time of conclusion of the contract.

UCC 2-608 allows the buyer to revoke acceptance of non-conforming goods within a reasonable time if the non-conformity substantially impairs the value of the goods and the goods were accepted without discovering the non-conformity. However, again, time precludes most recovery.

The UCC contains certain implied warranties that are included in every transaction. Warranties contractually assure customers that the products they buy will perform as stated.

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<sup>225</sup> *DSC Communications Corp. v Pulse Communications, Inc.*, 170 F.3d 1354 (Fed. Cir. 1999).

<sup>226</sup> UCITA 501, 502.

<sup>227</sup> Eschrich, 4 *B. U. J. Sci. & Tech. L.* 8 at 20 (1997).

Products normally come with an implied warranty of merchantability.<sup>228</sup> This means that the merchant seller automatically promises that the product will be fit for ordinary use. The warranty attaches itself to a contract by “force of law”. Courts have been hesitant to construe the warranty in software transactions.<sup>229</sup> Commentators argue that the implied warranty of merchantability should not be used for software transactions, because it is out of step with emerging technology.<sup>230</sup> They argue that software is neither a good, nor is it “sold”, so it does not fit under Art. 2 UCC at all.<sup>231</sup> Also, the warranty cannot be applied to software because the measures of merchantability rely on comparisons between similar goods. There is no definition of ordinary purpose of software and qualitative comparisons are difficult to make.<sup>232</sup> Finally they argue that the warranty stifles innovation in the industry because there is no meaningful standard of merchantability. If there is no standard, courts might tend to give preferential treatment to consumers. Producers are forced to perfect their products to prevent liability. Thus they are forced to curtail development of new products.<sup>233</sup> For these reasons it is difficult to apply the warranty of merchantability to computer programs.

If the seller knew at the time of conclusion of the contract that the product is intended for a particular use and that the buyer is relying on the seller’s skill or judgment in his selection, a warranty for a particular purpose is also implied in the contract.<sup>234</sup> In this case the seller does not have to be a merchant. This warranty is readily applied to software transactions, because the seller controls the terms of any given fitness warranty.<sup>235</sup> It typically arises when a merchant buys specific goods that must be specifically manufactured, so it is unlikely to arise in standard contracts. If a warranty is breached by the seller the buyer can claim damages plus any incidental or consequential damages (i.e. loss of profit) caused by the breach.<sup>236</sup>

Under UCC 2-313, express warranties can be created in a variety of ways. The typical form is an oral or written affirmation made by the seller. But advertisements, samples, and models can also create a warranty.<sup>237</sup> A warranty usually involves a statement of fact or promise relating to the goods. This statement must have become part of the basis of the bargain. If the seller only expresses his opinion or commendation, it does not establish a warranty. Due to the complicated nature of software, it is difficult for the buyer to prove that a malfunction constitutes a breach of warranty.

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<sup>228</sup> UCC 2-314.

<sup>229</sup> *Franklin Computer Corp.* 57 B.R. 155 (Bankr. E.D. Pa. 1986).

<sup>230</sup> Durney, 59 *Wash. L. Rev.* 511 at 521 (1984); Gomulkiewicz, 16 *J. Marshall J. Computer & Info. L.* 393 at 399 (1997); Selman/ Chen, 31 *U.S.F. L. Rev.* 531 at 560 (1997).

<sup>231</sup> Durney, 59 *Wash. L. Rev.* 511 at 514 (1984).

<sup>232</sup> Selman/Chen, 31 *U.S.F. L. Rev.* 531 at 560 (1997); Durney, 59 *Wash. L. Rev.* 511 at 522 (1984).

<sup>233</sup> Durney, 59 *Wash. L. Rev.* 511 at 524 (1984).

<sup>234</sup> UCC 2-315.

<sup>235</sup> Selman/Chen 31 *U.S.F. L. Rev.* 531 at 546 (1997); Durney, 59 *Wash. L. Rev.* 511 at 530 (1984); *Hollingsworth v The Software House Inc.*, 513 N.E.2d 1372 (Ohio Ct. App. 1986).

<sup>236</sup> UCC 2-715.

<sup>237</sup> *Touchet Valley Grain Growers, Inc. v Opp & Seibold Gen. Constr., Inc.*, 831 P.2d 724 at 731 (Wash. 1992).

As a result the UCC is not ideal when it comes to remedies for software transactions. Not only needs the perfect tender rule be modified, it also needs to be defined what standard can be expected from software, i.e. when it is fit for the ordinary use and what kind of malfunction leads to a breach of warranty.

## 2. UCITA

The remedies that are available under UCITA depend on the agreement. If there is no agreement, the remedies stated in UCITA are applicable. UCITA adopts the common law doctrine of material breach<sup>238</sup> for all but mass-market transactions.<sup>239</sup> A breach is material if the contract so provides or if the default rules say so.<sup>240</sup> In case of a breach the aggrieved party is to be put into the same position, as it would have been in, had the other party performed as agreed. The concept of material breach allows for minor bugs in the software. This is in line with the nature of software, as it is rarely without defects.

UCITA allows a breaching party to cure, at its expense, if it gives notice to the other party and if the cure is perfected promptly.<sup>241</sup> UCITA provides the warranties of non-interference and non-infringement, express warranty, implied warranty of merchantability of a computer program, implied warranty of informational content, and the implied warranty of fitness for the licensee's purpose and system integration.<sup>242</sup> As a consequence the remedies are largely the same as under the UCC. But the requirements under UCITA are much better suited for software transactions than those under the UCC. Especially the unrealistic perfect tender rule is abolished and replaced by the concept of material breach. A buyer should not be able to cancel the contract because of a minor bug or errant line of code.

## V. LIMITATIONS TO LIABILITY

### 1. UCC

The UCC generally provides a purchaser with certain implied warranties such as the warranty of merchantability and fitness for a particular purpose. But software contracts often contain provisions that are not found in other types of contracts. These are embedded in the license or sales agreement, especially mass-marketed software licenses. They usually include limitations on the warranty period, exclusive remedy (repair or replace) provisions<sup>243</sup>, disclaimer of express and implied warranties<sup>244</sup>, exclusion of indirect and consequential

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<sup>238</sup> UCITA 601 (b) (1).

<sup>239</sup> Ring, 38 *Duq. L. Rev.* 319 at 358 (2000).

<sup>240</sup> UCITA 701.

<sup>241</sup> UCITA 703.

<sup>242</sup> UCITA 401-405.

<sup>243</sup> UCC 2-719.

<sup>244</sup> UCC 2-316.

damages provisions<sup>245</sup> and limitation on total liability.<sup>246</sup>

#### a) Content of Limitation

First of all, software agreements often limit the warranty period from thirty days up to a year. Such limitations are enforceable, unless a court finds that they are objectionable or unconscionable.<sup>247</sup> Courts have generally found them to be enforceable, though not defining what periods would be objectionable or unconscionable.<sup>248</sup>

Agreements contain the seller's right to cure or replace the software when it does not meet the contractually agreed requirements. So a supplier may escape liability because his only obligation, namely repair or replacement, has passed a reasonable period of time. Nevertheless the UCC supports such provisions<sup>249</sup> and the courts enforce them.<sup>250</sup>

The consumer usually agrees to waive implied warranties, including the warranty of merchantability and of fitness for a particular purpose. The former disclaimer must be conspicuous, in writing, and mention the word "merchantability".<sup>251</sup> Software publishers routinely disclaim the warranty of merchantability.<sup>252</sup> Additionally courts have been hesitant to construe the warranty in software transactions.<sup>253</sup> The warranty of fitness disclaimer also needs to be conspicuous and in writing, but is only a general waiver provision, which does not have to mention fitness for a particular purpose.<sup>254</sup> However, federal and state consumer protection laws can interfere with disclaimers so they become invalid.<sup>255</sup>

Express warranties cannot be disclaimed but only limited in scope, duration and remedies. For example, consequential damages can be limited or excluded unless it would be unconscionable to do so. It would be unconscionable to limit damages for injury to a person, but not to damages for commercial losses.<sup>256</sup> Hence it always depends on the kind of injury that occurs. A purchaser who is not allowed to recover consequential damages may suffer great economic loss, for the damages related to software failure can far exceed the contract price. However, it is simple enough not to make any express warranties at all. A manufacturer need only ensure making no affirmations, promises, or descriptions relating to

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<sup>245</sup> UCC 2-719.

<sup>246</sup> Perlman, 24 *Rutgers Computer & Tech. L. J.* 383 at 389 (1998); Grossman/Nesta, 18 *Rev. Litig.* 553 at 559 (1999); Horgan, 6 *Rich. J. L. & Tech.* 15 at 21 (1999/2000).

<sup>247</sup> *ProDC, Inc. v Zeidenberg*, 86 F.3d 1447 at 1449 (7<sup>th</sup> Cir. 1996).

<sup>248</sup> *NMP Corp. v Parametric Tech. Corp.*, 958 F. Supp. 1536 at 1542 (N.D. Okla. 1997).

<sup>249</sup> UCC 2-719 (1) (a).

<sup>250</sup> *ProDC, Inc. v Zeidenberg*, 86 F.3d 1447 at 1449 (7<sup>th</sup> Cir. 1996); *NMP Corp. v Parametric Tech. Corp.*, 958 F. Supp. 1536 at 1542 (N.D. Okla. 1997).

<sup>251</sup> UCC 2-316.

<sup>252</sup> Gomulkiewicz, 16 *J. Marshall J. Computer & Info. L.* 393 (1997).

<sup>253</sup> *Franklin Computer Corp.* 57 B.R. 155 (Bankr. E.D. Pa. 1986).

<sup>254</sup> UCC 2-316 (2), (3).

<sup>255</sup> Kathrein, 18 *Rev. Litig.* (1999) 487 at 505; see also infra „limitations to liability“. The Magnusson-Moss Consumer Product Warranty Act provides that a consumer who is damaged by the failure of the seller to comply with an implied warranty may bring an action for damages. This is to prohibit sellers from disclaiming or limiting the duration of an implied warranty to a period shorter than a written warranty of reasonable duration (U.S.C. 2310).

<sup>256</sup> UCC 2-719 (3); *ProDC, Inc. v Zeidenberg*, 86 F.3d 1447 at 1449 (7<sup>th</sup> Cir. 1996).

the software.<sup>257</sup>

Then, the total liability of the parties can be limited, either by setting a monetary limit or by limiting it to the cap at the total charges paid by the consumer to the supplier for the product during a certain period of time. Hence the seller can severely reduce the amount recoverable by the buyer if the product fails.<sup>258</sup>

#### b) Enforceability of Shrink-wrap Licenses

Another difficult issue is the enforceability of shrink-wrap licenses and the disclaimers they imply. The enforceability of shrink-wrap licenses is important because it will determine whether recovery under UCC warranty provisions will be permitted for transactions conducted under a shrink-wrap license. If the shrink-wrap license is an unenforceable contract, the standard UCC warranties will apply and any disclaimer will be invalid. Some courts deemed shrink-wrap licenses unenforceable as adhesion contracts, forced upon consumers by seller's with superior bargaining power.<sup>259</sup> Others argued they were unenforceable because a warranty has to be conspicuously disclaimed, that means it has to be brought to the consumer's attention prior to purchase. If such a disclaimer is not available to the customer until after the sale, it is only a proposal to modify the contract and is not part of the contract unless the customer agrees.<sup>260</sup> Recent decisions enforce shrink-wrap licenses on the pre-condition that the purchaser has the option of receiving a full refund after reviewing the standard terms inside the package.<sup>261</sup> The buyer accepts the conditions set forth in the license by performing the acts the seller proposes to treat as acceptance. The reasoning behind the decisions was that the validity of the licenses is important for the growth of the information technology industry, for they enable the seller to maintain low prices.<sup>262</sup> The different decisions show that depends upon the rules that the court selects in its analysis. A court treating post-sale terms as new or additional terms to an already formed contract may not enforce the license agreement. If the sale is seen as conditioned to assent to the license agreement, a court is likely to enforce the agreement. It is more likely that the courts will follow the recent trend and declare these licenses and their disclaimers valid. In my opinion, this is the wrong trend. It does not provide enough protection for buyers, who are not aware of the license agreement. This is not even improved through the possibility to return the product after having read the terms. Often enough consumers will not read the

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<sup>257</sup> UCC 2-313 (2).

<sup>258</sup> UCC 2-718 (1) (b); Ballman 3 *Conn. Ins. L. J.* 417 at 419 (1996/1997).

<sup>259</sup> *Vault Corp. v Quaid Software Ltd.*, 857 F.2d 255 at 269 (5<sup>th</sup> Cir. 1988); *Step-Saver Data Sys., Inc. v Wyse Tech.*, 939 F.2d 91 at 103 (3<sup>rd</sup> Cir. 1991).

<sup>260</sup> *Step-Saver Data Sys., Inc. v Wyse Tech.*, 939 F.2d 91 (3<sup>rd</sup> Cir. 1991); *Arizona Retail Systems Inc., v The Software Link, Inc.*, 831 F. Supp. 759 (D. Ariz. 1993).

<sup>261</sup> *ProCD, Inc. v Zeidenberg*, 86 F.3d 1447 at 1452 (7<sup>th</sup> Cir. 1996), but without discussing warranty disclaimers; *Hill v Gateway 2000, Inc.* 105 F.3d 1147 (7<sup>th</sup> Cir. 1997), cert. denied, 118 S.Ct. 47 (1997); *M.A. Mortenson Co., v Timberline Software Corp.*, 970 P.2d 803 at 808 (Wash. Ct. App. 1999).

<sup>262</sup> *ProDC, Inc. v Zeidenberg*, 86 F.3d 1447 at 1451 (7<sup>th</sup> Cir. 1996); Spooner, 7 *Rich. J. L. & Tech.* 27 at 30.

terms at all or only when it is too late. And then it is elaborate to return the product. The buyer should not have to carry this burden. Moreover, post-payment terms inhibit comparison shopping on-line, which would be an important benefit for customers when doing business on the Internet.

c) Consumer Protection

Consumer statutes can also invalidate disclaimers. Consumer protection legislation exists on federal and state level. It is intended to provide standards to govern the form and content of consumer warranties.<sup>263</sup> The federal consumer law is known as the Magnuson-Moss Warranty Act (MMWA).<sup>264</sup> It provides consumers with additional warranty rights beyond the UCC, for example the implied warranty of merchantability is not disclaimable<sup>265</sup>. The Act applies to written warranties on tangible personal property for personal, family or household purposes.<sup>266</sup> It is unclear if software is a tangible or intangible. Accordingly it is not clear if the MMWA applies to software transactions, but the current trend is to recognise its applicability.<sup>267</sup>

Another consumer protection law is the Federal Trade Commission rule that regulates door-to-door sales. In a door-to-door sale, the consumer can cancel the contract within three business days after it was concluded. Concerning software contracts, this cancellation opportunity serves little protection, as defects often occur much later.

Under the existing laws, software manufacturers can significantly limit, if not eliminate any liability for damage created by their software. Through the use of exculpatory clauses software sellers are successful in shielding themselves from the standard of care expected from all other manufacturers. Often the only liability contains of the replacement of defective software, or payments not to exceed the original contract price. Thus, the UCC provides insufficient remedies for commercial software purchasers who may have to expend large amounts of time and money in litigation attempting to overcome well-drafted agreements by the seller. Even then, there is little chance to have the limiting clauses invalidated by the court. Consumers need a more consistent relief from sellers.

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<sup>263</sup> Ayyappan, 69 *Fordham L. Rev.* 2471 at 2494 (2001).

<sup>264</sup> 15 U.S.C. 2301 (1994).

<sup>265</sup> MMWA 2308 (a).

<sup>266</sup> Zammit, *WL 230 PLI/PAT 99*, 106 at 151 (1986).

<sup>267</sup> *Microsoft Corp. v Manning*, 914 S.W.2d 602 (Tex. App. 1995); Daunt, 1 *Santa Clara Computer & High Tech. L. J.* 255 at 292 (1985); Kaner, *Computer Law*, May 2000 at 28; Zammit, in *PLI Course Handbook, Computer Law Institute 1986, WL 230 PLI/PAT 99*, 106 at 155; Kaner, 18 *J. Marshall J. Comp. & Info. L.* 435 at 459 (1999) .

## 2. UCITA

### a) Content of Limitation

Section 406 of UCITA governs warranty disclaimers and modifications in computer transactions. In general it is very similar to UCC 2-316. An implied warranty can be disclaimed by course of performance or usage of trade. Conspicuousness is viewed more liberally than under the UCC. UCITA allows terms not to be disclosed clearly, so that they only need to be enclosed with the product.<sup>268</sup>

### b) Enforceability of Shrink-wrap Licenses

UCITA addresses shrink-wrap licenses under the rubric of “mass-marketed licenses”. This is a standard form that is prepared for and used in a mass-market transaction. UCITA enforces shrink-wrap licenses, but only with limits. It does not depend on the parties’ knowledge of the standard terms at the time of contracting. The customer must have had an opportunity to review the license. This concept is important for determining whether a party has assented to the license. It is necessary that the terms have been made available for review. If the customer does not like the terms, the product can be returned and the licensor must bear the costs of return.<sup>269</sup> This right belongs to individual customers as well as merchants. UCITA not only allows the enforcement of post-sale terms, it also permits a continuous change of the contract terms after the contract was entered into.<sup>270</sup> It suffices if the licensor posts the changes on a web-page in order to notify the licensee.<sup>271</sup> If the change is unacceptable and the changed term is material the consumer can cancel the contract.

It can be said, that UCITA constitutes a significant piece of legislation because it clarifies the ambiguous views on shrink-wrap licenses. But in my view UCITA solves the problem in the wrong way. It might be true, that shrink-wrap licenses with post-sale terms enhance the growth of software products, but the growth cannot take place to the disadvantage of the consumer.

Furthermore, UCITA circumvents the public policy limitations imposed by copyright law, as the Copyright Act allows the public to use copyrighted material for certain purposes without any license. Since UCITA allows the enforcement of a shrink-wrap license, it gives licensors more rights than they enjoy under the Copyright Act.<sup>272</sup> Therefore UCITA recognises federal preemption as grounds for invalidating a mass-market license provision. Preemption is based on the Supremacy Clause of the U.S. Constitution, which does not

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<sup>268</sup> Ayyappan, 69 *Fordham L. Rev.* 2471 at 2505 (2001).

<sup>269</sup> UCITA 211 (b).

<sup>270</sup> Chamberlin, 13 *N.D. J. L. Ethics & Pub. Pol’y* 131 at 172 (2000).

<sup>271</sup> UCITA 304.

<sup>272</sup> Chamberlin, 13 *N.D. J. L. Ethics & Pub. Pol’y* 131 at 173 (2000).

allow state laws or regulations that conflict with federal law or federal policy.<sup>273</sup> It also provides that if a term of a contract violates fundamental public policy, a court can refuse to enforce the contract, or can enforce the remainder of the contract without the impermissible term.<sup>274</sup> The interest in enforcement must be clearly outweighed by a public policy against enforcement of that term. However, UCITA does not define the public policy grounds that can outweigh standard terms.

c) Consumer Protection

UCITA adds several new consumer protections, but is not intended to change existing consumer protection law. It is stated that consumer laws that conflict with UCITA control over UCITA.<sup>275</sup> UCITA is supplemented by trade secret and unfair competition laws.<sup>276</sup> Under UCITA a consumer is defined as “an individual who is a licensee of information or informational rights that are intended by the individual at the time of contracting to be used primarily for personal, family, or household purposes”. It is also provided that consumer does not include an “individual who is a licensee primarily for profit-making, professional, or commercial purposes, including agriculture, business management, and investment management other than management of the individual’s personal or family investments”.

However, there is some fear that UCITA does not address consumer protection. The majority of the rules in UCITA can be waived or varied by the contract. That would mean that consumer protection provisions have no impact unless they are mandatory law. Among the rules that cannot be waived are those referring to fairness, like good faith, diligence and reasonableness.<sup>277</sup> Also, limitations on enforcement imposed by unconscionability and fundamental public policy as well as any standard of care prescribed in UCITA and generally express consumer provisions cannot be waived. But these definitions are wide and it is not clear in which cases they will intervene. Therefore there should be a minimum adequate remedy if the remedy provided by the seller is, in effect, no remedy at all.

UCITA characterises software transactions as license and not as sales transactions. One of the problematic issues is whether consumer protection laws applicable to sales of goods and services may be applicable to license transactions under UCITA. So UCITA creates doubt whether software transactions are covered by the federal Magnuson-Moss Warranty Act and state laws banning unfair and deceptive practices in sales of goods and services. Some argue that, if a software transaction is defined as a license transaction, a consumer has definitely not acquired a tangible good.<sup>278</sup> Others state that UCITA cannot

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<sup>273</sup> Nimmer, 13 *Berkeley Tech. L. J.* 827 at 861 (1998).

<sup>274</sup> UCITA 105 (b).

<sup>275</sup> UCITA 105 (c).

<sup>276</sup> UCITA 114 (a).

<sup>277</sup> UCITA 104.

<sup>278</sup> Kaner, *Computer Law*, May 2000, at 28.

alter the reach of federal consumer law.<sup>279</sup> It is a federal question if the Warranty Act applies to computer information transactions. If a court were to determine that the Act applies to such transactions, then it applies irrelevant whether UCITA was enacted or not. Then again some argue that the Warranty Act was never meant to cover computer information transactions and therefore does not apply to software transactions at all.<sup>280</sup>

The ones supporting UCITA argue that the costs of additional statutory consumer protections are too hard to bear for the market. Supplementing UCITA with consumer provisions that provide stricter warranties would force sellers to sell their products at higher cost. Hence software will be inaccessible for those who cannot afford higher prices. It would also lead to a decrease in innovation and competition, as increased liability will force smaller developers out of business.

The discussion shows that this issue is far from being solved. It is left to the courts to decide upon it and it might take years of litigation and high costs to sort out the consumer questions under UCITA. It is clear that UCITA should have expressly stated what consumer legislation applies to its content and thus overrules UCITA as applicable law. Consumers' interests and expectations need to be protected with more straightforward rules. Consumers are better off under current law, which includes the common law of contract, UCC Art. 2, state and federal consumer law, and federal intellectual property law.

## VI. STATUTE OF LIMITATIONS

### 1. UCC

An action on a contract governed by the UCC must be brought within four years after the cause of action has accrued, that is, when the breach occurs.<sup>281</sup> The buyer's knowledge of the defect is irrelevant. A breach of warranty occurs when tender of delivery is made. It does not depend on the time by which the buyer acknowledges the defect.<sup>282</sup> The short limitation period is often unsuitable concerning software, for defects are hard to detect and often only occur long after statute of limitations on the contractual claim expired.

The software contract can imply a clause reducing the applicable statute of limitations to a shorter period of time, generally one year. Hence it worsens the status of the buyer even more. The statute of limitation cannot be extended.<sup>283</sup>

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<sup>279</sup> Nimmer, *Computer Law*, May 2000, at 15.

<sup>280</sup> Miller, 37 *UCC Bulletin* 1 (1999).

<sup>281</sup> UCC 2-725 (1), (2).

<sup>282</sup> Friedman, 22 *Rutgers L. Rec.* 13 at n. 50 (1998).

<sup>283</sup> UCC 2-725 (1).

## 2. UCITA

UCITA requires that a claim is brought within four years after the right of action accrues or one year after the breach was or should have been discovered, but no more than five years after the right of action accrues.<sup>284</sup> This is profitable for the buyer, as it does not depend on the time the breach occurred, but the time it has been discovered. The solution is preferable to the one under the UCC.

## VII. TAXATION

The tangibility issue of software is also important for taxation purposes. In general states charge sales tax, use tax, and personal property tax. While software has generally been classified as tangible property for sales and use tax purposes<sup>285</sup>, it is not that clear for property taxation. Tax law requires a decision whether software is tangible or intangible. Most states decided that tangible personal property is taxable and intangible intellectual property is not.<sup>286</sup> This is similar to the problem of classification of goods under the UCC.<sup>287</sup>

The question of taxability of software first arose in 1969 when IBM decided to separate the pricing of software from the pricing of hardware.<sup>288</sup> Since then, several courts held that software is tangible because it cannot exist independent from a data carrier.<sup>289</sup> The majority of courts, though, decided that software is intangible knowledge and therefore not subject to taxation.<sup>290</sup> They point out that software is a unique item and exclusively the product of intellectual effort. This is emphasised by the fact that software can be delivered by intangible means and can be used on a computer without any further contact with the original medium of transmission.

Many states have specific legislation that deals with taxability of computer software. They often distinguish between operational and application programs<sup>291</sup> or standard and custom-designed software.<sup>292</sup> But whether an operational or application program, software is merely a set of instructions expressed electronically, so the two classes should not be

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<sup>284</sup> UCITA 805.

<sup>285</sup> *Wal-Mart Stores, Inc. v City of Mobile*, 696 So.2d 290 at 291 (Ala. 1996); *South Cent. Bell Tel. Co. v Barthelemy*, 643 So.2d 1240 at 1241 (La. 1994); *Masurex Sys., Inc. v State Tax Assessor*, 490 A.2d 1195 at 1196 (Me. 1985); *Bridge Data Co. v Director of Revenue*, 794 S.W.2d 204 at 207 (Mo. 1990); *Hasbro Indus, Inc. v Norberg*, 487 A.2d 124 at 129 (R.I. 1985); *Mark O. Haroldsen, Inc. v State Tax Comm'n*, 805 P.2d 176 at 181 (Utah 1990); *Pennsylvania & W. Va. Supply Corp. v Rose*, 368 S.E.2d 101 at 105 (W.Va. 1988).

<sup>286</sup> Reinhard, 29 *St. Mary's L. J.* 871, fn. 17 (1998).

<sup>287</sup> Tunick, 13 *J. Marshall J. Computer & Info. L.* 43 at 50 (1994).

<sup>288</sup> Moge, 34 *How. L. J.* 299 at 300 (1991).

<sup>289</sup> *Comptroller of the Treasury v Equitable Trust Co.*, 296 Md. 459, 464 A.2d 248 (1983); *C Tek Software, Inc.*, 117 Bankr. 762 (D.N.H. 1990); *Pennsylvania & W. Virginia Supply Corp. v Rose*, 368 S.E.2d 101 (W.Va. 1988).

<sup>290</sup> *Northern Datacom v City of Wallingford*, 212 Conn. 639, 536 A.2d 688 (1989); *Touche Ross & Co. v State Bd. of Equalisation*, 203 Cal. App. 3d 1057, 250 Cal. Rptr. 408 (1988); *Appeal of AT&T Tech., Inc.* 242 Kann. 554, 749 P.2d 1033 (1988); *Compuserve, Inc. v Lindley*, 41 Ohio App. 3d 260, 535 N.E.2d 360 (1987); *Commerce Union Bank v Tidwell* 538 S.W.2d 405 (Tenn. 1976); *Dallas Cent. Appraisal Dist. v Tech Data Corp.*, 930 S.W.2d 119 at 121 (Tax. App. – Dallas 1996).

<sup>291</sup> California Rev. and Tax Code 1995 §§ 995, 995.2; *In re Protest of Strayer*, 716 P.2d 588 at 593 (Kann. 1986); *Compuserve Inc., v Lindley*, 535 N.E.2d 360 at 367 (Ohio Ct. App. 1987).

<sup>292</sup> *Computer Assocs. Int'l, Inc. v City of E. Providence*, 615 A.2d 467 at 469 (R.I. 1992); *Cache County v State Tax Comm'n*, 922 P.2d 758 at 768 (Utah 1996).

treated different legally. Also, custom and standard programs should not be treated differently for tax purposes. Hence a solution in the field of software taxation, unifying all software transactions, is urgently needed.

The issue of purchasing software on-line is another problem. The Internet Tax Freedom Act, passed in October 1998, put a three-year ban on Internet Commerce taxation.<sup>293</sup> In November 2001, a new law was signed that extends through November 1, 2003 the moratorium on new, special, and discriminatory Internet taxes that was originally enacted in 1998. The reasoning behind the Freedom Act is that electronic commerce must be able to grow without being driven by markets or being burdened with extensive regulation, taxation, or censorship.<sup>294</sup> Although states cannot make money through taxation on grounds of the Internet Tax Freedom Act, it is a good initiative, as it enables e-commerce to grow without putting any burdens on the consumers as the validation of shrink-wrap licenses does.

### **VIII. CONCLUSION**

In conclusion, UCITA is a good and necessary development concerning software transactions. A uniform law for software transactions has long been needed to clarify the rights and duties surrounding a software contract and to improve the law regarding remedies and limitation periods. Although UCITA lacks some rules, especially concerning consumer protection, it is advisable for all states to enact it. They might as well change or modify some of its provisions, as was done by Maryland before they enacted the Act. A more problematic issue is the validation of shrink-wrap licenses, which is not a favourable approach. But even this issue can be solved by the state enacting UCITA by changing the regulations regarding shrink-wrap licenses. The problem arising from that, however, is that the goal of uniformity is undermined, as every state would amend different parts to the original. Still, amendments are favourable because they bring clarification into the provisions of UCITA.

One thing that is pitiful is that the drafters decided not to implement UCITA into the UCC. In my view it is better to implement changes into existing laws than to establish new, independent laws. The process of splitting off more and more laws results in confusion. For the sake of clarity of the law and to make it easier to find laws, new laws should be implemented into the existing ones.

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<sup>293</sup> Internet Tax Freedom Act, Pub. L. No. 105-277, Title XI [H.R. 4328] (1998).

<sup>294</sup> Hull, 51 *Hastings L. J.* 1391 at 1411 (2000).

## D. UNITED NATIONS CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS (CISG)<sup>295</sup>

International contracts for software may become more common with the continual development of the Internet. The transactions will most likely involve standard software, although some custom options may be offered. Buying at a distance over international boundaries raises issues of the relationship between the various laws in the two jurisdictions. The general rule is that contract parties are to have freedom of choice as to the law by which the contract is to be governed. Where no such clauses exist, there may be rules contained in a relevant international convention. Alternatively the rules of private international law have to be utilised to identify the appropriate national laws by which the contract should be governed.

Assuming that the parties to a software transaction did not decide upon the proper law of the contract, the transaction might be governed by the rules of the Convention on contracts for the International Sale of Goods (CISG). It was established in 1980 in order to promote international trade and exchange of goods and to provide certainty in the rules that govern sales contracts.<sup>296</sup> It applies only to contracts for the sale of goods between parties whose places of business are in different countries.<sup>297</sup> By its own terms the Convention does not apply to service contracts. The CISG is the only body for international contract law that has been formally adopted by the international community. However, by the time of the drafting of the Convention, the countries did not anticipate the impact of the software industry or the Internet. Hence it is silent on the issue of software contracts. The question whether software transactions fall under the CISG has long been discussed and still goes on. It is important to find out whether it is suitable to govern software transactions or whether new international rules are needed.

### I. SOFTWARE AS A GOOD

The CISG does not specifically deal with software licenses. Art. 1 par.1 CISG requires the object of the contract to be “goods”. Because there is no definition for “goods”, is to be achieved by interpretation according to Art. 7 par.1 CISG.<sup>298</sup> It requires an autonomous uniform interpretation of the word that is independent of domestic laws, but fails to describe a method to achieve such an interpretation.<sup>299</sup> It is commonly agreed that it must start with a grammatical, systematic and historical interpretation of the wording, supplemented by a comparative method, considering judgments and scholarly writings from contracting

<sup>295</sup> United Nations Convention on Contracts for the International Sale of Goods, Vienna 1980. In force since Jan. 1, 1988. It is applicable to the Federal Republic of Germany only since Jan. 1, 1991. Equally authentic are the English, French, Spanish, Russian, Arabic and Chinese text of the CISG.

<sup>296</sup> Preamble of the CISG; Art. 7 CISG.

<sup>297</sup> Art. 1 CISG.

<sup>298</sup> UNCITRAL, Legal Aspects of Electronic Commerce (2001), p. 7, [www.uncitral.org/en-index.htm](http://www.uncitral.org/en-index.htm).

<sup>299</sup> Diedrich, 8 *Pace Int'l L. Rev.* 303 (309) (1996); Herber/Czerwenka, Art. 7 N. 7 f.

states.<sup>300</sup>

The different translations of the term “good” in various languages are of little guidance, for they all have more or less the same broad meaning and do not give any hint whether they include intangible things.<sup>301</sup> When approaching Art.1 of the CISG systematically one must consider the exclusion of electricity from the scope of the CISG in Art. 2. However, this exclusion was due to the unique character of electricity, because contracts for the supply of electricity are often subject to unique requirements so conflicts between domestic laws and the categorisation of electricity under the Convention were predictable.<sup>302</sup> Moreover the term “good” was intended to have a broad meaning and it can be interpreted from that, that exclusions must be dealt with in a restrictive way. Historically seen, “goods” and the application of software have never been discussed.<sup>303</sup> Thus the grammatical, systematic and historical approaches prove to be unproductive regarding computer software.

It only remains to analyse judgments and scholarly writings on the Convention in the contracting states. Foreign judgments have “persuasive authority”, so they are not binding upon other contracting states, but provide arguments and possible solutions.<sup>304</sup> There are several decisions by German courts that apply software to the CISG.<sup>305</sup> Commentators have concluded that goods under the CISG are to be defined as movable and identifiable, separate objects.<sup>306</sup> But it is disputed whether software is such an object. As described above it does not automatically fit into the traditional categories of contract law that distinguish not only between movable and immovable, tangible and intangible, but also between contracts for sale and supply of services.

The general consensus between commentators is that the transfer of software on a disc should be defined as the transfer of a good.<sup>307</sup> Since the software is embodied on the disc, it is movable and identifiable.<sup>308</sup> But even though software is movable and identifiable, it is an intangible property that can be separated from the tangible good. It is usually copied onto the hardware and then the disc is not used anymore. If the software is not transferred on a data carrier, but transferred directly from another Computer, there is nothing tangible exchanged between the parties. Therefore some authors, although agreeing that the Convention applies to software distributed on a disc, want to exclude software distributed via on-line database transaction, because they compare it to electricity, which is excluded from

<sup>300</sup> Diedrich, 8 *Pace Int'l L. Rev.* 303 (311) (1996); Larson, 5 *Tul. J. Int'l & Comp. L.* 445 at 459 (1997).

<sup>301</sup> Ferrari, 15 *Journal of Law and Commerce*, 1 (1995).

<sup>302</sup> CISG Commentary, Art. 2; Honnold, p. 406; Schlechtriem-Herber, Art. 2, n. 37.

<sup>303</sup> Honnold, 15 and 320.

<sup>304</sup> Magnus, *RabelsZ* 1989, 116.

<sup>305</sup> OLG Köln, *NJW-RR* 1995, 245 at 246, OLG Koblenz, *RIW* 1993, 934 at 936.

<sup>306</sup> Diedrich, 8 *Pace Int'l L. Rev.* 303 at 336 (1996); Primak, p. 331.

<sup>307</sup> Karollus, *Cornell Rev. of the Convention on Contracts for the International Sale of Goods* 1995, p. 51; Endler/Daub, *CR* 1993, 601; Diedrich, *RIW* 1993, 441; Ferrari, 15 *Journal of Law and Commerce* 1 (1995); Fraser, 6 *Tul. J. Int'l & Comp. L.* 183 at 208 (1998); Fakes, 3 *Software L. J.* 559 (1990); Carter, 14 *Journal of Contract Law*, 54 at 66 (1999); Schlechtriem-Herber, Art. 1, n. 21; Piltz, *NJW* 2000, 553 at 555; Witz, *L.G.D. J. Paris* 1995 n. 14, fn. 37; UNCITRAL, *Legal Aspects of E-Commerce*, p. 7.

<sup>308</sup> Cox, 4 *Vidobona Journal of Int'l Commercial L. and Arbitration* 3 at 7 (2000).

the scope of the CISG.<sup>309</sup> Nevertheless, the majority of commentators in the contracting states want to apply software to the CISG.<sup>310</sup> Software should not be treated differently from any other goods that have intangible properties incorporated in them. Insofar it is comparable to items such as compact discs, video tapes and books.<sup>311</sup> The means of transmission is irrelevant. This line of thought goes along with the goal of promoting uniformity in international trade. If electronic software would not be applied to the CISG, then a large portion of international trade would be without a uniform body of law.

Another opinion totally rejects defining software as a good.<sup>312</sup> They reason that since electricity is excluded from “goods” as defined by the CISG, software cannot be included, because, similar to electricity, it is not an embodied object. The exclusion of electricity as an intangible thing really means that all intangible products are excluded from the CISG. This analogy is problematic, because the CISG Commentary says that electricity was only excluded due to unique problems linked to electricity, which were not present with typical international sales of goods.<sup>313</sup>

The CISG was intended to have a broad scope of application to meet the different legal requirements in each country. This is an advantage also for issues such as software, which have not explicitly been resolved under the convention. The CISG can easily be applied to software, as it is not even subject to any formal requirements for the formation of a contract. This would make it easily applicable, also, to electronic software transactions. Moreover, all forms of delivery have one thing in common, they all have the same intention and the same result, that is to transmit the program onto the computer hardware. The question of tangibility fades into the background. Such a broad definition also complies with the legislative goal expressly stated in the preamble, namely, removing legal barriers to international trade and thus providing the international legal community with legal stability and predictability. In conclusion, the wider application, that includes all forms of software transactions, is the better one.

## II. SALES TRANSACTION

The CISG further requires that the transaction is a sale. It does not expressly define a sales contract, but the meaning can be established indirectly from the provisions dealing with the obligations of the seller and the buyer.<sup>314</sup> Art. 30 CISG requires the seller to deliver the goods and transfer the property in them. The transfer of the property sold, however, is solely

<sup>309</sup> Fakes, 3 *Software L. J.* 584 (1990).

<sup>310</sup> Endler/Daub, *CR* 1993,603; Schlechtriem-Herber, Art. 1, n. 21; Diedrich, *RIW* 1993, 441; Karollus, p. 21; Zumbusch, *CR* 1993, 81

<sup>311</sup> Cox, 4 *Vidobona Journal of Int'l Commercial L. and Arbitration* 3 at 8 (2000); Horovitz, 65 *B.U.L. Rev.* 129 at 150 (1985).

<sup>312</sup> Hoyer, *WBI* 1988, 70 f..

<sup>313</sup> CISG Commentary, Art. 2.

<sup>314</sup> Art. 30 and 53 CISG; van Houtte, n. 4.09; Schlechtriem-Herber, Art. 1, n. 14.

a matter of domestic law. The applicable rules are determined through the principles of private international law.<sup>315</sup>

Intellectual property rights in software are transferred by a license that is independent of the sales contract.<sup>316</sup> The CISG does not specifically deal with licenses. It is difficult to separate these issues for the purpose of a legal analysis. Art. 4 CISG does not require the passing of title, but Art. 30 requires that the seller delivers the goods and transfer the property in the goods. This could mean that licenses, which retain title in the seller, are outside the ambit of the CISG. Then again Art. 41 states that the seller must deliver goods, which are free from any right or claim of a third party, unless the buyer agreed to take the goods subject to that right or claim. Hence the buyer can agree to accept goods even though he does not receive title in them. In conclusion the CISG allows limitations concerning the passing of ownership and the right to use the program, i.e. license agreements. However, this agreement concerns only the right to use and not the contract as a whole. Therefore there is no such thing as a license contract for software transactions.

A sale must be distinguished from a supply of labour or other services that are excluded from the application in Art. 3 (2) CISG. If the service forms the preponderant part of the transactions, then the CISG is not applicable. This is generally the case when the software is specifically designed for the customer.<sup>317</sup> But contracts, which involve the delivery, installation and operation of the object of sale, are still regarded as sales contracts.<sup>318</sup> Hence the definition of sales under the CISG is rather broad and allows for several service factors to be included so long as they do not form the preponderant part of the transactions. As standard software contracts do not involve more than some service factors they must be defined as a sale.

### III. LIABILITY FOR DEFECTIVE SOFTWARE

Liability arises in case of a breach of contract. There are three basic remedies: specific performance, damages and avoidance of the contract. In addition there is the suspension of performance as a remedy less severe than avoidance, and finally the reduction of price in case of non-conforming goods. The goods must conform to the quality, quantity, and description required by the contract.<sup>319</sup> The goods must be fit for the purpose

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<sup>315</sup> Schlechtriem-Herber, Art. 4, n. 18.

<sup>316</sup> Under U.S. law a license agreement is often more important than the sales part of the transaction, which becomes clear from the fact that the whole transaction is named „license agreement“. That is why some authors do not want to apply such transactions to the CISG (Fakes, 3 *Software L. J.* (1990) 559). German and French law, for example, does not make such a distinction and sees the transaction as a sale. Therefore it cannot be decisive whether the transaction is described as a license or a sale, or a mixture. The main emphasis must lie upon the obligations of the parties.

<sup>317</sup> Schlechtriem, *Juridisk Tidskrift* 1 at 7 (1991/92); Witz, *L.G.D.J. Paris* 1995, n. 14, fn. 34; Carter, 14 *J. of Contract L.* 54 at 65 (1999); Fraser, 6 *Tul. J. Int'l & Comp. L.* 183 at 211 (1998); Larson, 5 *Tul. J. Int'l & Comp. L.* 445 at 464 (1997).

<sup>318</sup> Schlechtriem, *Juridisk Tidskrift* 1 at 8 (1991/92); OLG Celle, *RIW* 1987, 571.

<sup>319</sup> Art. 35 CISG; Piltz, *NJW* 2000, 553 at 558.

for which they are normally or specifically intended.<sup>320</sup> To receive price reduction the buyer must examine the goods shortly after they have been delivered and notify the seller of the non-conformance. Art. 25 CISG sets the standard of performance as “fundamental breach”. A breach is fundamental, if it results in a substantial detriment for the other party, unless the party in breach could not have foreseen that result.<sup>321</sup> It depends on what the aggrieved party expected and if his special interests are seriously harmed. Hence remedies are not available for minor defects, a concept suitable for the sale of software.

#### IV. LIMITATION OF LIABILITY

##### 1. Content of Limitation

The parties are free to limit their liability by including certain standard terms into the contract. The implementation of standard terms is not expressly regulated in the CISG. Art. 14 CISG generally applies to the offer of a contract and requires that the other party is notified of the terms and receives the terms.<sup>322</sup> But Art. 14 CISG also applies to the incorporation of standard terms.<sup>323</sup> Although the control of standard terms is outside the scope of the CISG<sup>324</sup>, their implementation is an element of the offer, which determines the content of the contract. The content can be supplemented by referring to general business terms.<sup>325</sup> Since Art. 14 CISG does not lay down particular requirements for the incorporation, the necessary rules are to be developed using Art. 8 CISG. Standard clauses that are drawn up unilaterally and imposed on the buyer must be interpreted in the way that an expert would understand their objective meaning.<sup>326</sup> The content of the terms underlies the applicable national law.

##### 2. Enforceability of Shrink-wrap Licenses

It is doubtful whether the CISG allows the enforcement of shrink-wrap licenses. First of all, because the Convention does not apply to sales to consumers, the effect of shrink-wrap licenses is more likely to be indirect. But software vendors also attempt to enforce their licenses on business parties. A reference to standard terms must be clear. Because the CISG offers the possibility to accept terms through conduct<sup>327</sup>, the buyer could simply accept the standard terms by opening the package. However, before accepting, the addressee must be able to understand the content, thus must have had an opportunity to read the content.<sup>328</sup>

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<sup>320</sup> van Houtte, p. 134.

<sup>321</sup> van Niekerk, p. 76; von Houtte, n. 4.20.

<sup>322</sup> Piltz, *NJW* 2000, 553 at 557.

<sup>323</sup> Holthausen, *R/W* 1989, 517; Schlechtriem-Slechtriem, Intro to Arts. 14-24, n. 9.

<sup>324</sup> Art. 4 CISG.

<sup>325</sup> Schlechtriem-Slechtriem, Art. 14, n. 16.

<sup>326</sup> Schlechtriem-Junge, Art. 8, n. 8a.

<sup>327</sup> Art. 18 CISG.

<sup>328</sup> Schlechtriem-Slechtriem, Art. 14, n. 16.

As shrink-wrap licenses do not give the buyer the possibility to read the standard terms before agreeing to them, they are not likely to be enforceable under the CISG. This is also underlined by the Convention's general principles, which imply to protect party reliance and to communicate the required information while contracting.<sup>329</sup>

### 3. Consumer Protection

The CISG is not applicable to consumer contracts. That means it is limited to commercial contracts. The reason was to avoid conflicts with national consumer protection laws.<sup>330</sup> However, the CISG can be applied to a consumer contract either by contractual choice or because the seller neither knew nor ought to have known that he contracted with a consumer. Also, some national consumer laws have different spheres of application. They might apply to commercial transactions. Therefore, consumer law provisions might interfere with the rules of the CISG. The national laws have priority over the CISG, as Art. 4 CISG provides that the CISG does not concern the validity of the contract. Whenever consumer law leads to the invalidity of an agreement or consumer credit legislation gives a right to revoke or terminate the contract, those laws must be observed, provided they apply by virtue of rules of private international law.<sup>331</sup>

The non-applicability to consumer contracts is problematic in light of software transactions. Transactions for the private use form a large part of international software contracts, especially with the increased use of downloads from the Internet. It is against the CISG's principle of uniformity to exclude consumer contracts from its sphere. Then again, the member states have very different consumer protection laws and it is not sure whether there can ever be a uniform agreement on consumer protection issues. Still, it would be better to include consumer contracts into uniform laws and to agree upon a common consumer protection policy.

## **V. LIMITATION PERIOD**

The Convention does not regulate limitation periods. When the CISG was drafted, the New York Convention on the Limitation Period in the International Sale of Goods of 1974 was adjusted to the rules of the Convention.<sup>332</sup> But the success of the Limitation Convention is questionable. Not all states enacted it. Those who did not must apply their national rules for limitation periods.<sup>333</sup>

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<sup>329</sup> Fraser, 6 *Tul. J. Int'l & Comp. L.* 183 at 217.

<sup>330</sup> Schlechtriem-Herber, Art. 2, n. 17.

<sup>331</sup> Schlechtriem-Herber, Art. 4, n. 12.

<sup>332</sup> Schlechtriem, *Juridisk Tidsskrift* 1991, 1 at 13; Schlechtriem-Herber, Art. 4, n. 21; van Niekerk, p. 81.

<sup>333</sup> Art. 4 CISG.

## **VI. CONCLUSION**

Although it would be possible to include software as goods under the CISG, there are several exclusions, which prevent a true international uniform treatment of software transactions, like the exclusion of consumer contracts. Furthermore it needs to be clarified whether electronic transactions and shrink-wrap licenses are allowed under the CISG and how they should be treated. There is also no uniform body of international contract law for services, so software that is custom-designed is not treated uniformly as opposed to standard software. The CISG lags behind technological developments, leaving businesses and consumers to contract for computer software through the uncertainties of what state law is applicable to the transaction, and what determination of the contract follows from that. Courts usually try and transfer software transactions into existing legal traditions, if only by analogy. The CISG is not capable of dealing with software transactions sufficiently. Either the CISG needs to be modified, or a new uniform contract law needs to be drafted. But since the contract principles for software are underdeveloped or untested at the domestic level, one cannot expect to find a world law applicable to computer software. Only when domestic law has become more settled will common principles be developed.

## E. SOUTH AFRICA

Software is not specifically dealt with under South African contract law. There is not even much discussion about it within the legal community. South African private law is largely formed by Roman-Dutch common law. There are only few statutes.<sup>334</sup> A software contract or a software license contract is unknown to the common law. Hence it is necessary to determine the nature of software contracts and to associate them to one of the existing contract types.

### I. APPLICABLE CONTRACT TYPE

Contract terms are divided into *essentialia*, *naturalia*, and *incidentalialia*.<sup>335</sup> The *essentialia* form the minimum part of the agreement and indicate the contract type.<sup>336</sup> There are several existing contract types known under common law, for example sales, lease, and service contracts. The *naturalia* are prescribed standard terms that apply to the contract type and determine the consequences of the contract type. They arise by operation of law. The parties can exclude certain *naturalia*.<sup>337</sup> *Incidentalialia* are specific terms that are incorporated by the parties.<sup>338</sup> If a contract does not contain the *essentialia* of a known contract type, it is innominate, meaning that the consequences depend on its specific terms.<sup>339</sup>

The classification is important, as it affects the legal remedies. Under the sale of goods, for example, latent defects give rise to Aedilition remedies. In contrast, poor service only leads to cancellation and damages.

#### 1. Identity of Software

South African law has not yet established proper rules for intangible goods. There is no common opinion on how to identify software. The discussion of software and its nature circles mainly around the question whether they can be seen as goods, as required for a sales contract, or if they must be seen as a service, as required for a service contract. One must keep in mind, that the definition of goods is very broad. It does neither require the object to be movable nor to be corporeal.<sup>340</sup>

It is agreed that software delivered on a disc fits the characterisation of a good, as it is comparable to every other good that is dealt with under a contract of sale.<sup>341</sup> When it comes to electronically delivered software, the opinions are divided. Some believe that software fixed on a disc is a good, but that software delivered on the Internet cannot be seen as a

<sup>334</sup> Van der Merwe, p. 131.

<sup>335</sup> Rensburg/Lotz/van Rhijn, n. 181 ff.; Alheit, 33 *Comparative & Int'l L.J. of Southern Africa* 26 at 31 (2000), Kahn, p.

<sup>336</sup> Rensburg/Lotz/van Rhijn, n. 182; Alheit, 33 *Comparative & Int'l L.J. of Southern Africa* 26 at 31 (2000).

<sup>337</sup> Rensburg/Lotz/van Rhijn, n. 183.

<sup>338</sup> Rensburg/Lotz/van Rhijn, n. 184.

<sup>339</sup> Rensburg/Lotz/van Rhijn, n. 183.

<sup>340</sup> Kerr, p. 8; Kahn, p. 9.

<sup>341</sup> Michalson, p. 45; van der Merwe, p. 142; Tapper, p. 181; Reed, p. 43.

good, as there is no physical medium attached to it.<sup>342</sup> They draw the book comparison and conclude that with both software and books, the major value is the idea and not the physical medium. Still, books are handled as goods and so software embodied on a physical medium is to be handled as a good.<sup>343</sup> Software delivered electronically should be seen as a service performance.<sup>344</sup>

Others state that software should always be seen as a good, no matter what kind of delivery. The method of delivery does not play a major role. Electronic delivery is not opposed to qualify software as a good.<sup>345</sup> This is the most important argument. It is not practical to divide software contracts by way of delivery and split software delivered on a disc from that delivered electronically. Both times the aim of the sale is to deliver the software and the same software is received and can be used in the same way. It makes no sense to handle electronic software as a service performance. In conclusion nothing speaks against identifying software as a good in a broad sense.

## 2. Sales Contract

Even if software can be seen as a good, it must be evaluated if a sales contract and the remedies evolving from that are best for software transactions. A sales contract requires that the seller undertakes to deliver possession of a thing in return for the purchaser's undertaking to pay the price.<sup>346</sup> The *essentialia* are the thing sold and the price.<sup>347</sup> As was said above, the thing can be movable or immovable, corporeal or incorporeal.<sup>348</sup> Therefore it seems suitable to apply the rules for sales to software transactions.

## 3. Service Contract

A service contract is one for letting and hiring of work. The *essentialia* are the piece of work that is let out by the lessor to the lessee against payment.<sup>349</sup> The main obligation of the lessor is to finish the work. It is commonly agreed that custom-made software falls under this type of contract.<sup>350</sup> It is unclear whether service factors as installation and training must be dealt with as a service contract or whether they can be included in a sales contract. It cannot be the aim of the legislator to have two contracts within one, that is one sales contract and one service contract for the minor service parts. Therefore sales contracts with minor service aspects are to be included into sales contract law.

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<sup>342</sup> Michalson, p. 45; Tapper, p. 181; Reed, p. 43.

<sup>343</sup> Tapper, p. 181; Reed, p. 43.

<sup>344</sup> Michalson, p. 45.

<sup>345</sup> Van der Merwe, p. 144.

<sup>346</sup> Kerr, p. 8.

<sup>347</sup> Alheit, 33 *Comparative & Int'l L.J. of Southern Africa* 26 at 38 (2000).

<sup>348</sup> Kerr, p. 8; Kahn, p. 9.

<sup>349</sup> Van der Merwe, p. 147.

<sup>350</sup> Van der Merwe, p. 147; Michalson, p. 45; Alheit, 33 *Comparative & Int'l L.J. of Southern Africa* 26 at 40 (2000).

#### 4. License Contract

There is no such thing as a specific license contract under South African contract law that serves as contract for both, the licensing of intellectual property rights and the “sale” of the software program. A license contract only concerns the relationship between the manufacturer and the buyer regarding the right to use the software. It does not serve as a contract for the transaction taking place between the buyer and the retailer. Nevertheless some want to fit software contracts under the term license contract. It is argued that licensing might serve as a form of purchasing.<sup>351</sup> Even though licensing might not be a direct form of acquisition, it might serve as acquisition *sui generis*.<sup>352</sup> A software transaction involving a license is innominate, implying that it has no applicable *naturalia*. Therefore it is not possible to associate it to a known contract type. It follows that there are no rules for the consequences of such a contract. This solution is not suitable. The parties to a contract deserve to have an idea of what legal rules apply to the contract and what obligations they have. In light of clarity and foreseeability it is essential to fit software transactions under one of the existing contract forms. Since it is possible to fit software transactions under the idea of a contract of sale, it is not necessary to draft a new contract form and leave the parties in doubt as to what rules apply to the transaction.

## II. TRANSFER AND PROCUREMENT OF OWNERSHIP

The common law imposes certain obligations on the parties to a contract of sale, the so-called *naturalia*. Normally, the seller must transfer the thing and the ownership in it, while the buyer must pay the purchase price.<sup>353</sup>

In case of movable property the seller must transfer the thing by transferring possession to the buyer.<sup>354</sup> This is easy as long as software can be physically handed over on a disc. It is less clear for electronically delivered software, as there is no physical element involved in the delivery. But in the end the buyer will have a copy of the program, whether on disc or on the hardware of his computer. When the common law rules of delivery were drafted, it was not foreseen to have something like electronic delivery. But the rules can be interpreted insofar, as they are aimed at the availability of the thing to the buyer, so that the way in which the thing is delivered is only of secondary importance. Software cannot be dealt with differently only because of different delivery methods. Hence the law must be stretched to fit electronic delivery into the rules for delivery.

The transfer of ownership is not part of sales law, but is regulated by the rules of the law of things.<sup>355</sup> A sales contract generally aims at the transfer of all ownership rights from

<sup>351</sup> Alheit, 33 *Comparative & Int'l L.J. of Southern Africa* 26 at 27 (2000); Maré, p. 121.

<sup>352</sup> Alheit, 33 *Comparative & Int'l L.J. of Southern Africa* 26 at 31 (2000).

<sup>353</sup> Kahn, p. 18.

<sup>354</sup> *Adler v Taylor* 1948 (3) SA 322 (T); *Conradie v Greyling Implemente Fabriek* 1955 (1) SA 433 (T).

<sup>355</sup> *Lendlease Finance (Pty) Ltd v Corporacion de Mercadeo Agrícola* 1976 (4) SA 464 (A) at 489H.

the seller to the buyer.<sup>356</sup> Ownership passes with delivery.<sup>357</sup> Regarding software transactions ownership rules collide with intellectual property rules. The software program, that is the idea, is only protected by copyright<sup>358</sup>, as it is an immaterial good that is not subject to the law of things.<sup>359</sup> A real right can traditionally only exist over corporeal things that can be physically controlled. Hence a real right can exist in the particular copy of the software program contained on a disc or CD-Rom. Although the buyer may use the software on his computer, his rights to use are usually restricted by a license, so he cannot use the software as an owner. The problem again lies within the electronic transfer of a program, for the buyer does not hold a corporeal object in his hands. Nevertheless, software can be physically controlled. It is necessary to accept the new ways of delivery and their ability to transfer possession and therewith ownership.

When it comes to the ownership in the copyright, the transfer is a little more difficult. It has to be in writing. But since only few software programmers would ever give away the title in their program, it seems unlikely that this kind of transfer will occur.

### III. LIABILITY FOR DEFECTIVE SOFTWARE

The *naturalia* include the liability of the seller for latent defects and the warranty against eviction. Moreover the seller can give certain quality guarantees. If the software does not live up to them, the contract is breached and the seller can be held liable for damages in terms of the *actio empti*.<sup>360</sup>

The seller is liable for latent defects in the thing that render the it unfit for the purpose for which is was intended.<sup>361</sup> Furthermore the buyer must be protected against eviction<sup>362</sup> by a party that has a better title than the seller, for example when the seller pretends to be the owner and then the thing is taken away by the real owner. Both remedies depend on the fault of the buyer. Latent defects give rise to the *aedilitioan* actions, namely the *actio redhibitoria* and the *actio quanti minoris*<sup>363</sup>, but not to contractual remedies.<sup>364</sup> The *actio redhibitoria* gives right to cancel the contract, under the *actio quanti minoris* the party can sue for reduction of the purchase price. Eviction gives rise to performance of the warranty, namely the payment of a compensation.<sup>365</sup>

<sup>356</sup> *Boland Bank Bpk v Joseph & another* 1977 (2) SA 82 (O) at 88pr-A.

<sup>357</sup> Kahn, p. 3.

<sup>358</sup> Copyright Act 98 of 1978 s.1 (1), amended by the Copyright Amendment Act 125 of 1998.

<sup>359</sup> Van der Merwe, p. 133.

<sup>360</sup> Van der Merwe, p. 145; Alheit, 33 *Comparative & Int'l L.J. of Southern Africa* 26 at 39 (2000).

<sup>361</sup> Mackeurtan, p. 126; De Wet & Van Wyk, p. 322-8; Kahn, p. 24; *Phame (Pty) Ltd v Paizes* 1973 (3) SA 397 (A) at 409.

<sup>362</sup> *Vrystaat Motors v Henry Blignant (Edms) Bpk* 1996 (2) SA 448 (A) at 458 I.

<sup>363</sup> *Phame (Pty) Ltd v Paizes* 1973 (3) SA 397 (A); Kerr, p. 89.

<sup>364</sup> Kahn, p. 24.

<sup>365</sup> *Par Excellence Colour Printing (Pty) Ltd v Ronnie Cox Graphic Suppliers (pty) Ltd* 1983 (1) SA 295 (A) at 306H.

Latent defects must exist at the time of sale.<sup>366</sup> A defect is defined as “an abnormal quality or attribute which destroys or substantially impairs the utility or effectiveness of the thing for the purpose it was been sold or for which it is commonly used”.<sup>367</sup> It is latent if it cannot be seen or easily discovered. As was stated earlier, software is never free of defects and they are almost always latent. Because the courts have laid down that a product only has to be as functional as can reasonably be expected from it<sup>368</sup>, it can be concluded that software has to function, but must be expected to have some minor defects. It is difficult, however, to declare what defects are minor and what are major. The *actio redhibitoria* requires that the defect is serious, whereas the *actio quanti minoris* is always available.<sup>369</sup> In conclusion the remedies are suitable for software contracts. It is for the courts to draw up a scheme to distinguish minor from major defects.

#### IV. LIMITATION TO LIABILITY

##### 1. Content of Limitation

A party can exclude or limit its liability under the contract. Software contracts usually include limited warranty and liability provisions in which the seller limits his liability to the replacement of defective software and excludes his liability concerning loss or damage arising from the use of the software.<sup>370</sup> In South Africa, exclusions and limitations are generally allowed. The liability for latent defects, for example, can be excluded.<sup>371</sup> There are only few statutory restrictions or limitations to the use of such clauses. Under common law there is the principle of public policy. A contract clause that is against public policy is invalid.<sup>372</sup> A clause is contrary to public policy if it contravenes or tends to induce contravention of a fundamental principle of justice or of statutory law or if it is against public interests.<sup>373</sup> But since the term of public policy is wide and its application unclear, it is unsure under what circumstances the courts will find a term as against public policy. It is likely that they will invalidate clauses only if they are extremely harsh on a party. As a result South African contracting parties have virtually no protection against unfair contract clauses.

The South African Law Commission (SALC) recommended the enactment of a general controlling legislation for consumer protection. It proposed a system that is not based on public policy, but on the principle of good faith.<sup>374</sup> Good faith is a principle that is

<sup>366</sup> *Lakier v Hager* 1958 (4) SA 180 (T).

<sup>367</sup> *Holmdene Brickworks (Pty) Ltd v Roberts Construction Co Ltd* 1977 (3) SA 670 (A) at 683H; *Sarembock v Medical Leasing Services (Pty) Ltd & another* 1991 (1) SA 344 (A) at 356 I.

<sup>368</sup> *Holmdene Brickworks (Pty.) Ltd. v Roberts Construction Co.* 1977 (3) SA 670 (A) at 683.

<sup>369</sup> Mackeurtan, p. 155, Kahn, p. 29.

<sup>370</sup> Alheit, 33 *Comparative & Int'l L.J. of Southern Africa* 26 at 28 (2000).

<sup>371</sup> Van der Merwe, p. 148.

<sup>372</sup> *Morrison v Angelo Deep Gold Mines Ltd.* 1905 TS 775 at 779; *Wells v SA Alumenite Co.* 1927 AD 69 at 72.

<sup>373</sup> Alheit, 33 *Comparative & Int'l L.J. of Southern Africa* 26 at 29 ff. (2000).

<sup>374</sup> Project 47.

acknowledged locally and internationally. It expresses the ethical requirement set by public policy. A specific statute should enable the courts to control misuse of contractual freedom. This change is to be welcomed, as it is necessary to ensure justice between contracting parties.

## 2. Enforceability of shrink-wrap licenses

The South African position concerning shrink-wrap licenses involving terms that are not visible from the outside is not clear.<sup>375</sup> Since there is no specific legislation, the general principles of contract law are applicable to determine the enforceability of such agreements.<sup>376</sup> In general, a contract requires offer and acceptance. Acceptance can be made by conduct.<sup>377</sup> The offeror can prescribe that the offer is accepted by opening the shrink-wrap of the package. However, a valid contract also requires “meeting of the minds”. It must be proved that the customer was able to notice the terms of the agreement.<sup>378</sup> The customer must know about the terms. That means he must be able to take notice of the terms prior to the formation of the contract.<sup>379</sup> As a result shrink-wrap licenses cannot be valid under South African law.

## 3. Consumer Protection

Limitations of liability resemble a strong bargaining position of the seller. In most cases the buyer either accepts the terms, or he will not be able to enter into a contract. This leads to exploitation of consumers. South Africa does not have any statutory provisions that invalidate limitation clauses in general. A few specific provisions require the inclusion some terms into certain types of contract in order to protect the consumer. The Credit Agreements Act protects credit receivers who buy consumer goods. It lays down minimum requirements that must be content of a contract and prohibits certain terms.<sup>380</sup> In s.6 (1) (d), for example, the Act prohibits the contractual exclusion of latent defects. Yet, it is doubtful if the Credit Agreement Act is applicable, as software is not included in the enumeration of the Act that stipulates what is covered under the Act.

South Africa also has rules for door-to-door sales that allow the consumer under certain circumstances to cancel the contract. The cooling-off period amounts to five days.<sup>381</sup> It is clear, though, that software defects will usually occur much later, so the cancellation right is of little use.

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<sup>375</sup> Van der Merwe, p. 141.

<sup>376</sup> Pistorius, 5 *SA Merc L. J.* 1 at 3 (1993).

<sup>377</sup> *Collen v Rietfontein Engineering Works* 1948 1 SA 413 (A) 429.

<sup>378</sup> Pistorius, 5 *SA Merc L. J.* 1 at 5 (1993).

<sup>379</sup> Michalson, *Francolin* 1998, 32 at Appendix H 128-9.

<sup>380</sup> Otto, n. 18.

<sup>381</sup> S. 13 Credits Agreement Act 75 of 1980.

The doctrine of freedom of contract implies that both parties must hold a position of equal bargaining strength and that they are free to accept or reject any term of the contract. In today's economy consumers are often weaker than suppliers, who hold the economic resources and knowledge and can impose oppressive terms on the consumer. The consumer of standard software must take the terms as they are or not enter the contract, so there is no bargaining. South African law does not provide sufficient protection for consumers. It is necessary to create laws that protect the consumer from being exploited by the seller, for example by creating an Act that deals with limitation clauses and their validity in general.

## **V. PRESCRIPTION OF A TIME**

The extinction of debts by prescription is regulated by the Prescription Act<sup>382</sup>. According to s.10 a debt is extinguished by prescription after the lapse of a certain period. Debts include all liabilities arising from or owing under a contract.<sup>383</sup> The prescription time begins to run when the debt is due, that is when the debtor is obliged to perform. Debts as obligations under a sales contract are not specifically dealt with under the Act, so they fall under the general three-year prescription period. This is a very reasonable period of time, which is suitable to protect the buyer of a software program who only finds out about a problem months after the sale took place.

## **VI. TAXATION**

It is not clear where software is to be placed for tax reasons. According to s.1 of the South African Value Added Tax Act<sup>384</sup> VAT is levied on the supply of goods and services by a vendor. Goods are defined as meaning "corporeal movable things, fixed property and any real right in any such thing or property". Services are defined as "any thing done or to be done...". Since software is intangible it does not fall under goods. It is not likely to fall under services either, because the transfer of standard software does usually not include a thing to be done. Therefore software could simply fall outside the scope of the VAT system.<sup>385</sup> One could argue that software embodied on a data carrier can be seen as a good for tax reasons. But software that is transferred electronically would have to be treated as a service or fall outside the VAT Act. Even if it would be treated as a service, that would imply different taxation for the same product, as imported service is treated differently from the importation of goods.<sup>386</sup> This solution is unfair. Software needs to be defined uniformly in view of taxation.

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<sup>382</sup> 68 of 1969.

<sup>383</sup> Saner, n. 142.

<sup>384</sup> 89 of 1991, hereafter the VAT Act.

<sup>385</sup> Gillooly/Legg/Urquhart, n. 202.

<sup>386</sup> Bagraim, 9 JBL 109 at 110 (2001).

## **VII. CONCLUSION**

Legislation will create certainty in this area of law as far as the liability of software vendors is concerned. Although this development could take place through common law, the slow move of South African law to stretch the common law in order to fit it new legal aspects serves as an example that this is not the best approach. Given the serious harm both financially and to the person of the potential plaintiff, such an approach is not in the best interest of the society. Therefore it is advisable to establish a new statute that specifically deals with all kinds of software transactions. Such regulations could also be amended to the new Electronic Communications Transactions Act (Bill). In creating new regulations, it is advisable to take into account the ways in which other legislations solved the problem. The least thing would be to make clear that standard software is a good that is to be dealt with under sales law. Furthermore it is necessary to make clear the South African position on shrink-wrap licenses and to improve consumer protection.

## **F. CONCLUSION**

The key problem to software transactions is that they are not expressly and sufficiently defined and regulated. What is worse is that there is no uniform regulation for it. If a South African consumer walks into a shop to “buy” a software program he will not think of the many problems that are associated with it. It will not interest him what kind of problems there are with rules and uniform laws as he believes that he simply walks in and purchases the software, the purchase being subject to South African law. But it is not as easy as that. First, it is not clear if software is sold at all or if it is another kind of transaction. Second, even though the “sale” of the program will usually be subject to South African law, the license granted by the manufacturer might subject to the law of the country where it was manufactured. A manufacturer from the United States, for example, will make his license subject to U.S. law. Hence a software transaction involves most definitely elements of a foreign law.

These problems become even more complicated when it comes to software that is delivered electronically, for example when a South African “buys” software over the Internet. The Internet allows modern storage and delivery methods, which makes distribution of software extremely quickly, at very low cost and without any regard to geographic borders. Here, the buyer will deal with suppliers from all over the world that will make their contracts subject to their national laws. So the question what rules apply to the transaction becomes even catchier. To confuse the issue, electronic delivery of software is even harder to fit under the traditional contract law rules than is software that is delivered on a disc.

The biggest and most powerful software developers are situated in the U.S and in Europe. They dominate the international market. But when it comes to software transactions, the solutions are surprisingly different. As I explained in sections B and C, Germany and the United States have different approaches towards software transactions, including very antithetic rules for contracts and their remedies, shrink-wrap licenses and consumer protection. It is unbearable to have such different approaches on an international level.

In conclusion we desperately need uniform rules in the field of software transactions. The special value of uniform law is that it eliminates the risk of having to litigate in a foreign country according to foreign law. It also lowers negotiation costs by providing terms that the parties can adopt freely. Uniform rules must define software and provide detailed rules for cross-border transactions. The question is what rules can serve as a model for a uniform approach.

In order to reach uniformity, drafters should look beyond national boundaries to seek different approaches and solutions in commercial law. If national codes are drawing comparisons to other legal systems and codes, this will contribute to the creation of a uniform international law.

As was explained in section D, the only existing uniform contract law, the CISG, cannot in its existing shape serve as a uniform law concerning software. But some national laws might serve as an example of what a uniform law could look like.

South African law is capable of dealing with software transactions, but it does not have specific rules. It does not provide a sufficient solution to the specific problems that arise from software contracts. Moreover South Africa does not belong to the leaders of software manufacturers, so it will probably not have an effect on the drafting of a uniform solution. It is advisable for South Africa to take a look at other more developed legal systems and use those rules as models for modernising its own law on software.

Since the software market is dominated by U.S and European manufacturers, the laws of those countries are likely to have the biggest influence on a uniform regulation. As was indicated in the parts on German and American law in sections B and C, the national treatment of software is in flux. But as was explained, the new rules still lack a perfect scheme under which software transactions are treated satisfactorily. Since many of the rules are contrary, it will be a challenge to arrive at an agreement.

German law cannot serve as a model, as it does not specifically deal with software and is still very focused on traditional contract law rules.

UCITA, on the other hand, is likely to have a powerful influence on domestic laws and for the process in unifying software regulations. It is doubtful, though, if UCITA will be accepted with all of its provisions. UCITA has its limitations. It is a complex regulation and its rules have not been tested so far. Hence it might be too drastic for the international community. Even U.S. State courts will have trouble handling public issues such as consumer protection and intellectual property law arising in UCITA.

UCITA's primary safeguard of public access interests comes out of federal intellectual property policy, so there is a sense in which U.S. patent and copyright law apply as principles incorporated into UCITA, as part of the structure of UCITA. Foreign courts will probably not understand this use of federal law. Either they will not even recognise the possibility that an analysis of federal law is necessary or they will be unable to conduct an analysis because they are unfamiliar with U.S. copyright and patent principles.

UCITA does not make clear how important public policy can be. Some jurisdictions may have their own public policy to deal with intellectual property protection. Yet there are a number of countries that do not have such policies.

UCITA will necessarily lead to tension in the international context, particularly concerning consumer protection. Since some countries, such as Germany and South Africa, do not enforce shrink-wrap licenses, UCITA will not be welcomed as an international template for licensing software. It must incorporate additional consumer protections. UCITA also involves provisions such as electronic self-help, which do not exist in most countries.

Countries will have difficulties to adopt such provisions.

At this point I would like to return to the CISG as a uniform contract law. It is clear that the CISG cannot serve as a uniform law for software transactions in the shape that it has now. However, it could serve as basis for a uniform treatment. This would be convenient, as the drafting process of a new law would not be necessary.

Still, the adaptation of the CISG would call for a lot of changes. It would have to be made applicable to custom-designed software, that means service contracts would have to be incorporated into the CISG. Furthermore there are such issues as shrink-wrap licenses and consumer transactions that would have to be dealt with. The CISG is largely consumer neutral and allows countries to determine their own basic provisions with their own desired level of social welfare. Because there are so many different ways of coping with consumer protection in the signatory countries, it seems impossible to decide upon a unified consumer protection policy. Hence the drafting of a uniform regulation dealing with software might have to follow the same concept.

The CISG would have to be stretched beyond its language to address the issues that come up with software transactions. This would either have to be done by the courts or by amendments. Interpretation by the courts will only create more chaos in international contract law as all countries would have to rely on international case law – a process that has proven difficult in the past, because many decisions are only in the country's native language and they are not easily accessible. As a result many courts do not take into account decisions by foreign courts. Amendments and changes are the only solution to make the CISG applicable to software transactions.

As a conclusion I suggest to take the basic rules of the CISG as a fundament for a new uniform law that is to deal specifically with software transactions and its problems. The CISG is a law that is accepted and applied internationally, so it is a good starting point. It would also be less expensive and less time-consuming to take the CISG as an example instead of drafting a completely new law.

The experiences of countries like the United States and Germany will be of major importance when it comes to specific solutions. In certain areas, such as shrink-wrap licenses and consumer protection it will be necessary to find compromises, but I am sure that a uniform solution is possible. In the interest of all parties involved it is to be hoped that a committee will be set up to deal with these questions, so that the goal of uniformity will soon be achieved.

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**Abbreviations for German Magazines**

CR	Computer und Recht
RIW	Recht der Internationalen Wirtschaft
BB	Betriebsberater
JuS	Juristische Schulung
DVR	Datenverarbeitung im Recht
GRUR	Gewerblicher Rechtsschutz und Urheberrecht
WBI	Wirtschaftliche Blätter
NJW	Neue Juristische Wochenschrift
NJW-RR	Neue Juristische Wochenschrift, Rechtsprechungs-Report
DB	Der Betrieb
RabelsZ	Rabelszeitung
WM	Wertpapier-Mitteilungen
VersR	Versicherungsrecht