

LITIGATION RELATING TO DEFECTIVE SOFTWARE UNDER HONG KONG LAW — OLD BOTTLES FOR NEW WINE?

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In contrast to the abundance of similar litigation in other common law jurisdictions, software-related litigation has been relatively infrequent in Hong Kong. This article considers the different kinds of litigation in relation to defective software that are possible under Hong Kong law. It also evaluates the adequacy of the current legal framework in dealing with software contracts, and considers how the existing legal framework can be improved, drawing on the experience of other countries. It concludes that while defective software may not have produced a significant amount of litigation locally, a host of issues will soon have to be addressed by the Hong Kong courts. In addition, the need for new legislation for software liability may have to be addressed by the legislature.

Introduction

On 8th February 2000, the first day of trading after the lunar new year holidays, the computer system of the Hong Kong Stock Exchange failed to work for twenty minutes, causing a turnover loss of 18.6 billion Hong Kong dollars.¹ Two years ago, when the new airport at Chek Lap Kok was opened, problems with the computer systems caused flight delays, lost luggage and a massive disruption of air-cargo shipments.² These incidents demonstrate that if computer systems break down, serious economic and social consequences will follow.

One common cause of computer problems is defective software. In other common law countries such as the UK and US, much litigation has ensued in relation to defective software. With the passage of the Electronic Transactions Ordinance³ and the rapid development of 'e-commerce',⁴ litigation in relation to defective software is likely to increase in Hong Kong. This article considers the different kinds of litigation in relation to defective software that are possible

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¹ 'Hong Kong stock exchange computers knocked out by power surge', Deutsche Presse-Agentur, 8th February 2000.

² 'More Teething Problems Plague HK Airport', Dow Jones International News, 7th July 1998.

³ Ordinance No 1 of 2000. See R. Wu, 'Electronic Transactions Ordinance — Building a Legal Framework for E-commerce in Hong Kong', 2000(1) *The Journal of Information, Law and Technology*, available at <<http://www.law.warwick.ac.uk/jilt/00-1/wu.html>>

⁴ It is estimated that the total value of e-commerce of Hong Kong will rise from US\$60 million in 1998 to US\$2.4 billion by 2003. See Irene Ip, 'Electronic Signature Recognition Bill Opens Door for e-commerce', *Hong Kong Standard*, 6th January 2000.

under Hong Kong law. These include common law claims based on contract and tort, and statutory claims based on a range of Hong Kong ordinances. It also considers two main legal defences, that afforded by the 'shrinkwrap licences', and those under limitations legislation. Finally, it evaluates the adequacy of the existing legal framework in dealing with software contracts and considers how the existing legal framework can be improved, drawing on the experience of other countries.

Possible causes of action in relation to defective software under Hong Kong law

Unlike other countries, there is no single piece of legislation dealing exclusively with software in Hong Kong.⁵ Therefore, a number of ordinances as well as the common law must be examined in order to determine the possible causes of action in relation to defective software under Hong Kong law.

Common law claims

The most common cause of action relating to defective software under common law is a contractual claim based on breach of express warranty. In the unreported English decision of *MacKenzie Patten & Co v British Olivetti Ltd*,⁶ the plaintiff, a solicitors firm, purchased an office computer from the defendant but later found that it could not perform the functions as promised. The plaintiff obtained judgment and damages for breach of warranty.

In the Hong Kong case of *Elpe International (Far East) Limited v Hewlett Packard Hong Kong Limited*,⁷ the plaintiff purchased software systems on the strength of a warranty by the defendant that a special feature would be made available to the plaintiff as part of an updating service within six months. The special feature was never provided so the plaintiff claimed against the defendant for damages. Deputy Judge J Chan distinguished the case from *MacKenzie Patten* in that the computer in that case was not only unsuitable but totally useless to the solicitors firm. In the case before him, however, the software systems served the purpose for which they were purchased, notwithstanding that the defendant did not provide the feature warranted. He therefore held that the damages suffered by the plaintiff were nominal.

A claim for negligence based on the law of tort is also possible under common law. However, it is difficult to prove negligence in the case of defective software claims. In the UK, the Consumer Protection Act 1987 imposes strict liability on producers for defective products causing damage. This gives

⁵ By contrast, in the US, the Uniform Computer Information Transactions Act was adopted in July 1999 to deal with software contracts exclusively.

⁶ Judgment of Michael Davis J in the QBD, dated 11th January 1984.

⁷ [1993] HKLY 466-467.

consumers more protection as it eliminates the necessity of proving negligence. No similar legislation exists in Hong Kong. In 1998, the Law Reform Commission issued a report proposing adoption of legislation similar to the UK Consumer Protection Act in Hong Kong that would impose strict liability on producers for defective products.⁸ In that report, the Law Reform Commission recommended that only 'standardized software which is integrated into the computer to run the hardware and without which the computer cannot function' should be included in the definition of 'product'.⁹ If the recommendation of the Law Reform Commission is adopted without modification, many software consumers will not enjoy the protection afforded under the proposed strict liability legislation.¹⁰

Sale of Goods Ordinance

Another possible cause of action relating to defective software is based on the Sale of Goods Ordinance.¹¹ Under this ordinance, terms of merchantable quality,¹² fitness for purpose¹³ and correspondence with description¹⁴ are implied into contracts of sale of 'goods'. In other words, contracts of sale of defective software will be covered by the Sale of Goods Ordinance if such contracts are treated as contracts of sale of goods. However, as a wide variety of software exists, there is no simple or single answer to the question of whether software should be treated as goods or services. On the one hand, if software is mass-produced and standardised, it shares the attributes of a product that is commonly understood by people; on the other hand, if software is bespoke software, tailor-made for a particular customer and provided by a supplier on an ongoing basis, it is akin to services. The classification of software into goods or services also poses a difficult question of law. This question has received judicial attention in many common law jurisdictions in recent years. In the Australian case of *Toby Constructions Products Pty Ltd v Computer Bar (Sales) Pty Ltd*,¹⁵ Rogers J held that the sale of a whole computer system, including both hardware and software, was a sale of 'goods' within the Sale of Goods Act (ie the Australian counterpart of the Sale of Goods Ordinance), as there was 'a sale of tangible property and a transfer of identifiable physical property'.¹⁶ Roger J's approach, however, did not resolve the problem as to whether software is goods or services. In the English case of *St Albans City and District Council v International Computers Ltd*,¹⁷ Sir Iain Glidewell, in the Court of Appeal

⁸ *Report on Civil Liability for Unsafe Products* (February 1998).

⁹ *Ibid*, para 7.37-38.

¹⁰ For criticisms of the Law Reform Commission Report, see Jill Cottrell, 'The Law Reform Commission Report on Product Liability' (1998) 28 HKLJ 282-304.

¹¹ Cap 26, Laws of Hong Kong.

¹² *Ibid*, s 16(2).

¹³ *Ibid*, s 16(1).

¹⁴ *Ibid*, s 15.

¹⁵ [1983] 2 NSWLR 48.

¹⁶ *Ibid*, at p 54.

¹⁷ [1996] 4 All ER 481 (CA).

judgment, gave a detailed analysis of the issue. He first pointed out that '... in both the Sale of Goods Act and the Supply of Goods and Services Act 1982, the definition of goods includes "all personal chattels other than things in action and money". Clearly, a computer disk is within the definition. Equally clearly, the program, of itself, is not.'¹⁸ He went on to elaborate that if a computer disk containing a defective program is sold or hired by the computer manufacturer, it would prima facie be a breach of the terms as to quality and fitness of purpose implied by the Sale of Goods Act. On the other hand, if a program is transferred into a computer from a disk, the program transferred is not 'goods' within the statutory meaning. The transfer of the program itself does not constitute a transfer of goods and there is no statutory implication of terms as to quality or fitness for purpose. Notwithstanding that there is no term implied by statute, Sir Iain Glidewell took the view that a contract for the transfer into computer of a program is 'subject to an implied term that the program will be reasonably fit for, ie, reasonably capable of achieving, the intended purpose.'¹⁹

It remains to be seen whether Hong Kong courts will adopt the Glidewell approach in future. However, with the rapid development of 'e-commerce', electronic delivery of software will be increasingly common in Hong Kong. If the Glidewell approach is adopted by Hong Kong courts, software will fall outside the ambit of the Sale of Goods Ordinance if it is supplied by internet, and their purchasers will 'lose' the protection afforded by the implied terms of the Ordinance.

Furthermore, the adoption of the Glidewell approach can result in illogical results. For example, software ordered and supplied through a disk will be subject to the implied terms of the Sale of Goods Ordinance but the same software ordered and supplied by internet will not. This is unreasonable as it makes the statutory protection afforded to a software purchaser dependant upon the mode of delivery. Moreover, Government policy, as reflected for instance in the recently passed Electronic Transactions Ordinance, is to encourage and facilitate the development of electronic contracts and electronic transactions in Hong Kong. It will be incompatible with such a goal and the global trend of 'e-commerce' if a software supplied by internet cannot enjoy the same statutory consumer protection as a software supplied by disc.

On the other hand, as 'goods' is defined in the Sale of Goods Ordinance to 'include all personal chattels other than things in action and money',²⁰ it is difficult to argue that software supplied by internet falls within the ambit of 'goods' as defined under the Ordinance, since no transfer of 'tangible property' is involved. Judged from this perspective, amending the definition of 'goods' in

¹⁸ Ibid, at 493.

¹⁹ Ibid, at 494.

²⁰ Note 11 above, s 2.

the Sale of Goods Ordinance is desirable in order to provide all software consumers the same statutory protection irrespective of the mode of delivery of the software they purchase. In the UK, Professor Ian Lloyd called for similar statutory reappraisal of the definition of 'goods' in the Sale of Goods Act.²¹

In this regard, the US adopts a different approach. Instead of categorizing software as goods or services, software is treated as a kind of computer information. In July 1999, a separate Uniform Computer Information Transactions Act was adopted by the US to deal with all transactions involving 'computer information', which mainly consists of computer software 'obtained from or through the use of a computer or in a form directly capable of being processed by, or obtained from or through computer.'²² As Hong Kong is developing rapidly into an information society, a time may come when Hong Kong will need to adopt similar legislation which treats software as computer information, rather than as goods or services. Such legislation also needs to deal with certain issues pertaining to the unique attributes of software, such as the intellectual property rights that the sellers continue to enjoy in the software after sale, the statutory warranties given by the sellers to the software, and the statutory remedies available to the purchasers. Nevertheless, since the US legislation is a very recent phenomenon and no other country has adopted similar legislation, it may be prudent to wait and observe for a few years before Hong Kong introduces similar legislation.

Implied Terms under the Sale of Goods Ordinance

On the assumption that software is classified as goods under the Sale of Goods Ordinance, claims can be brought based on the implied terms of merchantable quality,²³ fitness for purpose²⁴ and/or correspondence with description.²⁵

Merchantable quality

Under the Ordinance, goods are of 'merchantable quality' if they are, inter alia, fit for the purposes 'for which goods of that kind are commonly bought', and if they are free from defects (including minor defects) and are durable as 'it is reasonable to expect having regard to all relevant circumstances'.²⁶ It may be argued that software bought a long time ago is merchantable even if it cannot perform functions of 'modern' software, as it was fit for the purposes for which goods of that kind were commonly bought. But whether the software is 'free from defects or minor defects' or 'durable' are questions of fact, which can only be determined on a case-to-case basis.

²¹ Ian Lloyd, *Information Technology Law* (UK: Butterworths, 2nd ed 1997) pp 415-16.

²² Uniform Computer Information Transactions Act, s 102(a)(10).

²³ Note 11 above, s 16(2).

²⁴ *Ibid*, s 16(1).

²⁵ *Ibid*, s 15.

²⁶ *Ibid*, s 2.

Implied term of fitness for purpose

- Under the Ordinance, a purchaser can claim on the implied term of fitness for purpose only if he or she has made known to the seller the particular purpose for which the goods were bought.²⁷ For example, in the unreported English case of *Micron Computer Systems v Wang (UK) Ltd*,²⁸ Steyn J held that the absence of a 'transaction logging' facility in a computer system delivered by the defendant was not a fault in the system because the plaintiff had not made known to the defendant that it required such a facility. Moreover, Steyn J. held that the computer system could work quite satisfactorily even without the 'transaction logging' facility.

In the case of *Saphena v Allied Collection Agencies Ltd*,²⁹ Staughton LJ, in the English Court of Appeal judgment, held that 'software is not necessarily a commodity which is handed over and delivered once and for all at one time. It may well have to be tested and modified, and thus it would not be a breach of contract at all to deliver software with a defect in it in the first instance.'³⁰

Based on this decision, a software supplier may argue that even it has delivered defective software, it is not in breach of the implied term if the supplier can remedy the problem if and when actual problems occur. If such an argument is accepted by Hong Kong courts, hardship may be caused to software consumers. For example, the software suppliers may have gone out of business by the time the actual problems occur.

In the case of *St Albans City and District Council v International Computers Ltd*,³¹ Nourse LJ, in the English Court of Appeal judgment, held that 'parties who respectively agree to supply and acquire a system recognising that it is still in the course of development cannot be taken, merely by virtue of that recognition, to intend that the supplier shall be at liberty to supply software which cannot perform the function expected of it at the stage of development at which it is supplied.'³² Based on this decision, a purchaser can argue that a supplier is obliged to supply software, which should at least perform the function 'expected of it at the stage of development at which it is supplied.' It therefore appears that after the *St Albans* decision, the implication of the *Saphena* decision is substantially qualified.

In the unreported English case of *Sabir v Tiny Computers*,³³ the plaintiff purchased computer equipment from the defendant. He upgraded the software in the equipment upon purchase without consulting the defendant as to the suitability of such an upgrade. Later the plaintiff discovered that there were

²⁷ *Ibid*, s 2.

²⁸ Decision of Steyn J dated 9th May 1990.

²⁹ [1995] FSR 616.

³⁰ *Ibid*, at p 652.

³¹ Note 17 above.

³² *Ibid*, at p 487.

³³ Decision of Deputy District Judge Harvey dated 19th January 1999.

software problems, so he tried to reject the equipment. The defendant refused and claimed that it would not have advised such an upgrade, as it was known to cause software problems. Deputy District Judge Harvey held that the problems encountered by the plaintiff were fifty per cent attributable to a faulty component, while the remaining fifty per cent was due to the installation of the upgraded software. He further held that installing the upgraded software was an act inconsistent with the seller's right to ownership, such that the plaintiff lost his right to reject the goods under the Sale of Goods Act. Therefore, the plaintiff was neither entitled to rescind the contract nor to reject the goods. However, the court held that the plaintiff was entitled to damages for loss occasioned by faults in the machine not attributable to the upgraded software. It is interesting to see whether Hong Kong courts will apportion liability for defective software in a similar manner.

Supply of Services (Implied Terms) Ordinance

If software is not treated as 'goods' but as 'services', it will be governed by the Supply of Services (Implied Terms) Ordinance.³⁴ Under this ordinance, only a term of reasonable care and skill is implied.³⁵ In the case of *Stephenson Blake (Holdings) Limited v Street Heaver Limited*,³⁶ the defendant was retained to act as consultant to the plaintiff in connection with the acquisition of a computerized accounting system. On the recommendation of the defendant, the plaintiff purchased a system, which was subsequently found to be unsuitable for the plaintiff's purposes. Hicks J held that in recommending a system to the plaintiff, the defendant was under a duty of skill and care and since the system failed to conform to the agreed specifications and was unsuitable for the plaintiff's purposes, the defendant was in breach of its duty of skill and care.

Under the Supply of Services (Implied Terms) Ordinance there is also an implied term as to time for performance.³⁷ If there is no time fixed for 'fixing' defective software under a maintenance agreement, the supplier is obliged to remedy the problem within a reasonable time, but what is a reasonable time is a question of fact.³⁸

Under the same ordinance, there is also an implied term as to consideration.³⁹ If there is a maintenance agreement but there is no provision for the amount of charge payable for 'maintaining' the defective software, the consumer may need to pay a reasonable charge to the supplier for remedying the defective software, if such charge cannot be agreed upon. What is a reasonable charge is, again, a question of fact.⁴⁰

³⁴ Cap 457, Laws of Hong Kong.

³⁵ *Ibid*, s 5.

³⁶ Decision of Hicks J, QC dated 2nd March 1994. See [1994] *Masons CLR* 17.

³⁷ Note 34 above, s 6.

³⁸ *Ibid*, s 6(2).

³⁹ *Ibid*, s 7.

⁴⁰ *Ibid*, s 7(2).

If one compares the implied terms under the Sale of Goods Ordinance and the Supply of Services (Implied Terms) Ordinance, it will be seen that the terms implied under the Sale of Goods Ordinance are more onerous and extensive in scope and give the consumers more protection. In theory, a software supplier may have failed to deliver a software which is merchantable or which does not fit the consumer's purpose, yet the same supplier may prove he has displayed a standard of reasonable care and skill. This makes the classification of software into goods or services a potential issue of contention in any defective software litigation.

The differences in standards of liabilities and legal protection under the Sale of Goods Ordinance and the Supply of Services (Implied Terms) Ordinance also highlight the inadequacy of the current Hong Kong legal framework to deal with defective software. Under the existing legal regime, one must determine the nature of the software as either goods or services before one can apply the 'appropriate' ordinance, namely, the Sale of Goods Ordinance or the Supply of Services (Implied Terms) Ordinance.

This goods-services dichotomy is, however, artificial in the case of software contracts. As Lord Penrose rightly pointed out in the case of *Beta Computers (Europe) v Adobe Systems (Europe)*,⁴¹ software contracts should be regarded as *sui generis*. Apparently, it was with this recognition in mind that the US adopted separate legislation, namely, the Uniform Computer Information Transactions Act, for software contracts, instead of amending its Uniform Commercial Code.⁴²

Copyright Ordinance

Defective software may also lead to copyright litigation. Under the Copyright Ordinance,⁴³ copyright subsists in computer program,⁴⁴ and adaptation to a computer program may infringe copyright of the computer program.⁴⁵ In most software sales, a license agreement is entered into between the software supplier, who provides the software, and the user, who uses the software. If the software is defective and the user attempts to 'fix' the problem without the consent or knowledge of the supplier, the user may infringe the copyright of the supplier.

Under the Copyright Ordinance, the lawful user of a copy of a computer program may copy or adapt the program without infringing copyright if the copying or adaptation is necessary for the lawful use of the program, and in particular for the purpose of correcting errors in it.⁴⁶ Since 'fixing' problems in

⁴¹ Opinion of Lord Penrose dated 14th December 1995. See [1996] *Masons CLR* 16.

⁴² In the US, the Uniform Commercial Code is the principal statute governing the sale of goods.

⁴³ Cap 528, Laws of Hong Kong.

⁴⁴ *Ibid*, ss 2 and 4.

⁴⁵ 'Adaptation', in relation to a computer program, is defined under s 29 of the Copyright Ordinance to mean 'an arrangement or an altered version of the program or a translation of it'.

⁴⁶ Note 43 above, s 61.

a defective software is arguably necessary for the lawful use of the software or correcting errors in it, the lawful user should have the legal authority to adapt a defective software himself. Different considerations will apply, however, if the lawful user hires a consultant to 'fix' a defective software without the consent or knowledge of the supplier.

In the case of *British Leyland Motor Corporation Ltd. v Armstrong Patents Co Ltd*,⁴⁷ the House of Lords held that car owners had an inherent right to repair their cars in the most economic way possible and for that purpose to have access to a free market in car spare parts. Thus, the plaintiff, the manufacturer of cars as well as car spare parts, were not entitled to derogate from or interfere with that right by asserting their copyright even against a person manufacturing car spare parts for repair. Based on this decision, it may be argued that the lawful user of defective software has an inherent right to 'repair' problems in the software and the supplier cannot assert copyright against the consultant who 'repairs' such defective software.

However, in the subsequent case of *Canon Kabushiki Kaisha v Green Cartridge Company (Hong Kong) Limited*,⁴⁸ the Privy Council held that the 'right to repair' in the *British Leyland* case was based on the public policy of preventing a manufacturer from using copyright to control the aftermarket in car spare parts, and any extension of such right should be treated with caution. The Privy Council further held that the *British Leyland* principle rested on two features of the case: namely, a compelling analogy with the kind of repair that an ordinary man would assume he could carry out without infringing the rights of the manufacturer after buying an article; and secondly, an assumption that the exercise of monopoly power by the manufacturer in the aftermarket by means of copyright would prejudice consumers' interests. The *Canon* decision was approved in the recent case of *Mars UK Ltd v Tekknowledge Ltd*.⁴⁹

Applying the *Canon* case to the scenario of a lawful user hiring a consultant to 'repair' defective software, it may be difficult to argue that such a scenario is 'compellingly' analogous to the kind of repair that an ordinary man would assume that he could carry out without infringing the rights of the manufacturer. On the other hand, it is arguable that the exercise of copyright by the software supplier in such a scenario would seriously prejudice the interests of the lawful users, as they cannot access a free market of 'software repairs'. It is difficult to predict how Hong Kong courts will balance these two conflicting factors.

⁴⁷ [1986] AC 577.

⁴⁸ [1997] FSR 817.

⁴⁹ Decision of Jacob J in the Chancery Division dated 11th June 1999.

Personal Data (Privacy) Ordinance

Defective software may also lead to privacy litigation. Under the Personal Data (Privacy) Ordinance,⁵⁰ a 'data user'⁵¹ shall not contravene the 'data protection principles'. These govern different aspects of personal data, including its purpose and manner of collection, its accuracy and duration of retention, its use, its security, the availability of information about the personal data being held, including the data user's purpose, and the right of access to one's personal data.⁵²

If a computer system cannot handle personal data properly as a result of defective software, the owner of the computer system contravenes the data protection principles. For example, one of the principles requires the data user to take practical steps to ensure that the personal data is accurate;⁵³ and another principle requires the data user to take all practicable steps to protect the personal data against unauthorized or accidental access, processing, erasure or other use.⁵⁴

If an individual suffers damage by reason of a contravention by a data user, he can claim compensation from that data user.⁵⁵ In other words, if a person discovers that his personal data becomes inaccurate or is accessed by other people or organizations as a result of defective software in a computer system, he may sue the owner of the computer system (the data user) for damages.

Possible defences to litigation in relation to defective software under Hong Kong law

Although there are many causes of action relating to defective software under Hong Kong law, such claims might be met one of two defences: the exemption clause in the shrinkwrap licence; and the defence of limitation.

Shrinkwrap licences

A shrinkwrap licence is common among software contracts.⁵⁶ By virtue of the shrinkwrap licence, the software supplier grants the right to the purchaser to use the software. The shrinkwrap licence also carries some exemption or limitation of liability clauses as well as a clause to the effect that opening the package means acceptance of the terms of the licence.

⁵⁰ Cap 486, Laws of Hong Kong.

⁵¹ 'Data user' is defined under s 2 of the Personal Data (Privacy) Ordinance as 'a person who controls the collection, holding, processing or use of that data'.

⁵² For a detailed discussion of the six data protection principles set out in Schedule 1 of the Personal Data (Privacy) Ordinance, see Mark Berthold & Raymond Wacks, *Data Protection Law in Hong Kong* (Hong Kong: FT Law & Tax Asia Pacific, 1997).

⁵³ Note 50 above, schedule 1, principle 2.

⁵⁴ *Ibid*, principle 4.

⁵⁵ *Ibid*, s 66.

⁵⁶ The term 'shrinkwrap licence' derives from software packaging because most software are supplied on disks with the licence contained in packets sealed by means of outer shrinkwrap packaging.

The validity of the shrinkwrap licence has in recent years received judicial attention in many common law jurisdictions. In the Canadian case of *North American Systemshops Ltd v King et al*,⁵⁷ Veit J held that shrinkwrap licences are not enforceable against an ordinary purchaser unless there is some clear communication of the shrinkwrap terms at the time of purchase to the party to whom the software is sold. Unless the purchaser knows of the conditions at the time of sale, he has the benefit of the implied licence to use the article free from the conditions.

In the US, the court has shifted its stance in recent years. In the early cases of *Step-Saver Data Systems Inc v Wyse Technology and the Software Link*⁵⁸ and *Arizona Retail Sys, Inc v Software Link, Inc*,⁵⁹ the courts held that the shrinkwrap licence in issue was invalid. In the subsequent case of *ProCD, Inc v Zeidenberg*,⁶⁰ Crabb J in the lower court followed the earlier decisions and held that the shrinkwrap licence in issue was invalid on the ground that computer users should be given the opportunity to review the terms to which they would be bound.⁶¹ On appeal, Easterbrook J reversed the lower court decision and held that the shrinkwrap licence in issue was enforceable and binding on the buyer. The *ProCD, Inc* decision was followed in the subsequent case of *M A Mortenson Company, Inc v Timberline Software Corporation*.⁶² In the Uniform Computer Information Transactions Act adopted by the US, statutory recognition is given to the validity of shrinkwrap licences, which are referred to as 'mass market licences' in the Act.⁶³ In other words, shrinkwrap licences are now generally enforceable under the US law, subject to the restrictions under the Uniform Computer Information Transactions Act.⁶⁴

In the UK, the only authority on shrinkwrap licences is the Scottish case of *Beta Computers (Europe) Limited v Adobe System (Europe) Limited*.⁶⁵ In the *Beta* case, Lord Penrose held that when a party, other than the owner of the intellectual property in the computer software, supplied software in a package containing a shrinkwrap licence, the contract for the supply of the software is not formed until the purchaser has accepted the conditions. He therefore held that the purchaser has the right to reject the conditions of the licence and return the software to the supplier prior to opening the wrapper.

In Hong Kong, there is no judicial decision on the validity of shrinkwrap licences and we can only look at the law applicable to exemption clauses to determine the validity of exemption or limitation clauses contained in such

⁵⁷ 27 CPR 3d 367; 16 ACWS (3d) 24.

⁵⁸ 939 F 2d 91; 1991 US App.

⁵⁹ 831 F Supp 759 (D Ariz 1993).

⁶⁰ 64 USLW 2450, 1995 Corp L Dec P 27, 489, 38 USPQ 2d 1513, 28 UCC Rep Serv 2d 1132.

⁶¹ 65 USLW 2014, 1996 Corp L Dec P 27, 529, 39 USPQ 2d 1161, 29 UCC Rep Serv 2d 1109.

⁶² 37 UCC Rep Serv 2d 892.

⁶³ Note 22 above, s 209.

⁶⁴ *Ibid.*

⁶⁵ Note 41 above.

shrinkwrap licences. Under Hong Kong law exemption or limitation clauses are not enforceable unless they are brought to the notice of the purchaser. Moreover, these clauses must not contravene the provisions of the Control of Exemption Clauses Ordinance;⁶⁶ otherwise they may become unenforceable.

These principles can be illustrated by the recent English case of *Danka Rentals Ltd v Xi Software Ltd*.⁶⁷ The plaintiff entered into a contract with the defendant containing a clause purporting to exclude liability for any breach of contract by the plaintiff. Richard Gibbs QC J held that the contractual exclusion clause had been part of the agreement between the parties, as it had been brought sufficiently clearly to the defendant's attention. However, that term was so widely drawn as to fail the test of reasonableness laid down in the Unfair Contract Terms Act 1977 (the UK counterpart legislation of the Control of Exemption Clauses Ordinance). Richard Gibbs QC J therefore gave judgment for the defendant on the ground that there were implied terms as to quality and fitness for purpose within the contract, and that there had been a breach of those terms.

Under the Control of Exemption Clauses Ordinance, two kinds of liabilities cannot be excluded or restricted: liability for death or personal injury resulting from negligence;⁶⁸ and liability to a consumer for breach of the terms implied by the Sale of Goods Ordinance, such as conformity with description or sample, merchantability and fitness for a particular purpose.⁶⁹ In other words, if there is a case of negligence resulting from defective software causing death or physical injury, it is difficult for the software supplier to rely on any exemption clause contained in the shrinkwrap licence. Similarly, if the software is treated as goods, the software supplier cannot exclude its liability in respect of breach of the terms implied by the Sale of Goods Ordinance.

Moreover, liability for negligence causing loss or damage (other than death and personal injury) cannot be excluded or restricted unless the relevant exemption or limitation clause satisfies the requirement of 'reasonableness'⁷⁰, which is determined by such matters as the strength of the bargaining positions of the parties, any inducement received by the customer to agree to the term, customer's knowledge of the existence and extent of the term, whether compliance with that condition is practicable and whether the goods were made to the special order of the customer.⁷¹

In the English cases of *St Albans City and District Council v International Computers Limited*⁷² and *The Salvage Association v CAP Financial Services*,⁷³

⁶⁶ Cap 71, Laws of Hong Kong.

⁶⁷ (1998) 17 TtLR 74.

⁶⁸ Note 66 above, s 7.

⁶⁹ *Ibid*, s 11.

⁷⁰ *Ibid*, s 7.

⁷¹ *Ibid*, schedule 2.

⁷² [1995] FSR 686.

⁷³ [1995] FSR 654.

both of which involved defective software, the court held that the relevant limitation clauses failed to satisfy the test of 'reasonableness' and were therefore void or ineffective. It appears from the two judgments that if a software supplier is a company with substantial resources or has an insurance cover to meet legal liabilities, the English court will strike down the exemption or limitation clause for failure to satisfy the test of reasonableness. If a similar approach is adopted by the Hong Kong courts, many exemption or limitation clauses contained in the shrinkwrap licences may be struck down.

It may be argued that the control of exemption clauses provisions in the Ordinance are not applicable to software contracts as they relate to the creation or transfer of a right or interest in intellectual property rights. Under the Ordinance, the control of exemption clauses provisions do not apply to 'any contract so far as it relates to the creation transfer of a right or interest in any...intellectual property'.⁷⁴ In fact, a similar argument was raised in the English case of *The Salvage Association v Cap Financial Services Limited*⁷⁵ Thayne Forbes J, however, rejected the argument and held that Schedule I, paragraph 1(c) of the Unfair Contract Terms Act (i.e., the equivalent section under English law) was strictly limited in its application. Thayne Forbes J further held that the provision does not extend generally to all the terms of a contract which deal with the creation of a right or interest in the relevant intellectual property, and does not necessarily extend to all the terms of a relevant contract 'simply because the contract was concerned overall with the provision of service, performance of which would give rise to the creation of some intellectual property rights'.⁷⁶ In other words, the court should examine individual clauses in the software contracts. If some of the clauses are concerned with 'creation of intellectual property rights', the control of exemption clauses provisions in the Ordinance will not apply to such clauses. However, the control of exemption clauses provisions will still be applicable to the remaining clauses of the software contract. If a similar approach is adopted by the Hong Kong courts, many exemption clauses in software contracts are likely to be struck down in accordance with the Control of Exemption Clauses Ordinance.

However, it should be noted that the control of exemption provisions are not applicable to liabilities arising under international supply contracts.⁷⁷ This means that, if a software contract is entered into between an overseas software supplier and a Hong Kong company, it may constitute an international supply contract under the ordinance and the exemption clauses contained in such a software contract will be valid.⁷⁸

⁷⁴ Note 66 above, schedule 1, s 1(2).

⁷⁵ Note 73 above.

⁷⁶ *Ibid*, at p 663.

⁷⁷ Note 66 above, s 16(1).

⁷⁸ *Ibid*, s 16(3).

Limitation Ordinance

Under the Limitation Ordinance,⁷⁹ the time limit for actions on simple contract or tort is six years from the date on which the cause of action accrued.⁸⁰ The time limit for actions for damages for negligence, nuisance or breach of duty is three years from the date on which the cause of action accrued or the date of the plaintiff's knowledge, whichever is later.⁸¹ The time limit for actions in respect of latent damage not involving personal injury damages is either six years from the date on which the cause of action accrued or three years from the date of knowledge, if the latter period is later than the preceding period. If defective software was sold and delivered many years earlier, as is often the case, the consumer's claims may be time-barred by the provisions of the Limitation Ordinance.

In the recent Hong Kong case of *The Bank of East Asia Limited v Tsien Wui Marble Factory Limited and Others*,⁸² an action for latent property damage, the Court of Final Appeal held the date when the cause of action accrued to be the date when the physical damage suffered by the plaintiff first occurred, which was about 1985. The court rejected the approach adopted in other jurisdictions, such as Australia,⁸³ and in particular New Zealand where, in the case of *Invercargill City Council v Hamlin*,⁸⁴ the limitation period was held to commence to run only when the defect was discovered or at least was 'reasonably discoverable'. The *Bank of East Asia* case was decided apparently on the basis that the material facts took place before 1991 and so the latent property damage and amendments in section 31 of the Limitation Ordinance were inapplicable.⁸⁵ Nevertheless, the case demonstrates that if a restrictive approach is adopted by the Hong Kong courts in interpreting the provisions of the Limitation Ordinance, much potential litigation on defective software will be time-barred.

Conclusion

As Hong Kong enters the new millenium, software will become increasingly valuable as it is an essential component of any information society. While defective software may not produce a significant amount of litigation, the legal issues raised in such litigation will continue to be relevant to Hong Kong. These

⁷⁹ Cap 347, Laws of Hong Kong.

⁸⁰ *Ibid*, s 4.

⁸¹ *Ibid*, s 27.

⁸² [2000] 1 HKC 1.

⁸³ See *The Council of the Shire of Sutherland v Heyman* (1985) 157 CLR 424.

⁸⁴ [1996] AC 624.

⁸⁵ Under the 1991 amendments to the Limitation Ordinance, time only runs against a plaintiff when he acquires the knowledge necessary to bring an action for damages for negligence. See R Glofcheski, 'Limitation (Amendment) Ordinance 1991' (1991) 21 HKLJ 353.

include issues of whether software is goods or services, whether new legislation for software liability is necessary, and whether shrinkwrap licences should be valid. Viewed from this perspective, litigation relating to defective software serves as a reminder of the inadequacy of our existing legal framework to deal with software and software contracts, and of the constant need to review our legislation to cope with the new social and economic needs of Hong Kong as it develops into an information society.