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**Defenses in Year 2000 Litigation:
New Technology, Old Theories**

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Defenses in Year 2000 Litigation: New Technology, Old Theories*

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I. INTRODUCTION TO THE PROBLEM

1. A lawyer in the small town of Bingham Farms, Michigan filed the first “Year 2000” lawsuit on July 11, 1997,¹ thus firing the first shot in what has erupted into a small war over the “Millennium Bug,” also known as the “Y2K” problem. Since that date, at least fifty-nine lawsuits have been filed concerning software and hardware that are allegedly not Year 2000 compliant,² and the number of lawsuits is rapidly increasing.

2. But what *is* the *problem*? Unless someone lives on the dark side of the moon, they have at least *heard* of the Y2K problem, but may not *understand* it. During the early days of computers, storage space was a major concern because the more powerful the computer, the greater the physical space needed to store the computer. Therefore, in an attempt to save space, early programmers decided to use two digits to indicate the year, as opposed to four. For example, programmers stored Halloween in 1978 as 10-31-78, and not 10-31-1978. The *problem* arises when dates from the twenty-first century – so called “Year 2000 dates” – are entered. A computer reads January 1, 2000 as 1-1-00, and some software programs reading that date will think that it is January 1, 1900 and not January 1, 2000. The implications of such a problem are enormous. For example, computer programs may think that new credit cards have expired, or the IRS could think that a taxpayer hasn’t filed a tax return in one hundred years, and so forth. Moreover, the

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¹ See *Compl. of Produce Palace Int’l, Produce Palace Int’l v. Tec-America Corp.*, No. 97-3330-CK (Mich. Cir. Ct. filed June 12, 1997).

² See *FICC – Y2K Lawsuits Filed* (last modified Apr. 26, 1999) <<http://www.thefederation.org/Public/Y2K/lawsuits.htm>>; *Year 2000 Legal Update* (last modified Apr. 16, 1999) <http://www.wrfy2k.com/y2k_lawsuits.html> (providing hypertext links and summaries of filed Y2K-related suits).

problem is not limited to software: computer hardware and embedded computer chips may also malfunction when interpreting dates after January 1, 2000.

3. Although the predicted Y2K related computer failure is a very serious problem, the real commotion over this problem involves money. Estimates indicate that the Y2K problem will cost approximately *six hundred billion dollars*: the money needed to avert failures, to fix occurring failures, and to repair the damage that these failures cause.³ Predictions about the affects of malfunctions occurring at midnight on January 1, 2000 include everything from lights going out to airplanes plunging out of the sky.⁴ As the public concern for the problem has grown, so too has the involvement of lawyers.

4. The lawsuits filed to date, however, do not reflect the concerns of mass chaos and personal injury that some of the more negative Y2K predictions portend.⁵ While some suits claim violations of the federal securities laws⁶ or assert claims involving non-compliant hardware,⁷ the majority of the cases filed to date involve claims by purchasers of computer software that has failed to, or the purchaser fears will fail to, process information containing Year 2000 and post-Year 2000 dates.⁸

³ See MERRILL LYNCH, *The Millennium Challenge*, (last visited Apr. 26, 1999) <<http://www.ml.com/wom1/forum/pdfs/millen.pdf>>. Another research company, however, has estimated that the total cost and impact from the Y2K problem will be two *trillion* dollars. See Joseph McKendrick, *Study Finds Y2K Problems May Cost Trillion* (Aug. 15, 1997) <<http://www.midrangesystems.com/Archive/1997/Aug15/in101202.htm>>.

⁴ See Rebecca L. Eisenberg, *Year 2000 Hype is Relentless*, San Francisco Examiner (Apr. 19, 1998) <<http://www.sfgate.com/cgi-bin/article.cgi?file=/examiner/archive/1998/04/19/BUSINESS15481.dtl>>

Power outages darken streetlights, causing countless car crashes. Tap water runs cold and contaminated, spreading killer plague. Airplanes collide in mid-flight. Public transportation halts, trapping BART riders beneath the Bay. Elevators hover between floors, then plummet to the ground. Banks lose all records and seal safe deposit boxes permanently. Prison gates fling open, freeing all inmates. All taxpayers are called for audit; all voters, for jury duty. The stock market crashes. Economic depression ensues. Riots destroy the cities that mass suicide has spared.

See id.

⁵ *See id.*

⁶ See Poller v. Micro Focus Grp., No. 98CV8619 (S.D.N.Y. filed Dec. 4, 1998); Ehlert v. Singer, No. 98CV02168 (M.D. Fla. filed Nov. 2, 1998); Downey v. Chan, No. 98CV10578 (D. Mass. filed Apr. 1, 1998).

⁷ See Compl. of Hannah Films Inc., Hannah Films Inc. v. Micron Elec. Inc., No. CV-98-05692 (Idaho Dist. Ct. filed Oct. 26, 1998).

⁸ Technically, one who purchases software is actually purchasing a license to use the software; in this article the term "purchaser" will mean such licensee.

These lawsuits generally assert typical contract and tort theories, as well as actions under various state consumer protection statutes.⁹

5. A plethora of Y2K defenses are available to the defendants in these actions. In litigation, defendant manufacturers have already achieved favorable results by utilizing some of the defenses that have already been successful in non-Y2K based tort and contract lawsuits. Part II of this article will discuss the various contract based defenses available to defendants and analyze why these defenses may or may not be successful. Part III will discuss defenses to tort based causes of action that have been, or may be, raised in Y2K lawsuits. Part IV will discuss general defenses, as well as possible defenses to claims brought under state statutes.

II. CONTRACT BASED CLAIMS AND THEIR DEFENSES

6. Plaintiffs can and have brought a host of claims against manufacturers of allegedly non-Y2K compliant software under various contractual theories. The Uniform Commercial Code ("U.C.C.") limits these manufacturers' liability and the remedies available to plaintiffs.¹⁰ Although these liability theories are not new and are seemingly simple in their application, they are already causing very contentious litigation.

A. Breach of Contract

7. Although not as numerous as breach of warranty claims, many of the lawsuits filed to date regarding allegedly non-Y2K compliant software include an allegation of breach of contract. Generally, these claims are simple: the purchasers of software licenses are not getting the "benefit of their bargain," since they

⁹ See, e.g., *Compl. of Yu, Yu v. IBM Corp.*, No. 98C8241 (N.D. Ill. filed Dec. 22, 1998); *Compl. of SPC Inc., SPC Inc. v. First of Omaha Merchant Processing*, No. 898-CV-521 (D.Neb. filed Oct. 23, 1998); *Compl. of H. Levenbaum Ins. Agency, Inc., H. Levenbaum Ins. Agency, Inc. v. Active Voice Corp.*, No. 98-3864 (Mass. Sup. Ct. filed July 28, 1998).

¹⁰ Since U.C.C. § 2-102 limits the scope of Article 2 to transactions in "goods," it is not immediately apparent that the U.C.C. should govern sales of licenses to use computer software. As one court has stated, "[s]oftware licenses are difficult to categorize as goods because they possess elements of both intangibles and goods that are treated differently under the Uniform Commercial Code." *NMP Corp. v. Parametric Tech Corp.*, 958 F. Supp. 1536, 1542 (N.D. Okla. 1997). However, a majority of courts and commentators have agreed that the U.C.C. applies to computer software licenses. See, e.g., *id.*; *Colonial Life Ins. Co. v. Electronic Data Sys. Corp.*, 817 F. Supp. 235, 239 (D.N.H. 1993); *Advent Sys. Ltd. v. Unisys Corp.*, 925 F.2d 670, 676 (3d Cir. 1991); *RRX Indus., Inc. v. Lab-Con, Inc.*, 772 F.2d 543, 546 (9th Cir. 1985); *Vmark Software, Inc. v. EMC Corp.*, 37 Mass. App. Ct. 610 (1994); Andrew Rodau, *Computer Software: Does Article 2 of the Uniform Commercial Code Apply?*, 35 EMORY L.J. 853, 864 (1986); Note, *Computer Programs as Goods Under the U.C.C.*, 77 MICH. L. REV. 1149, 1150 (1979); Bonna Lynn Horovitz, Note, *Computer Software as a Good Under the Uniform Commercial Code: Taking a Byte Out of the Intangibility Myth*, 65 B.U.L. REV. 129, 131 (1985). This article is written under the assumption that the U.C.C. applies to such transactions.

purchased software that cannot process Year 2000 dates. Moreover, some of the plaintiffs have also alleged that the software packaging or advertising materials indicated that the programs would be able to process Year 2000 dates, thus constituting a breach of contract.¹¹ Defendants in these circumstances can raise a number of specific contractual defenses.

8. It is axiomatic that the parties in a suit for breach of contract, if not third-party beneficiaries, must be either the parties to the contract or in privity with the parties to the contract.¹² Thus, in the situation where a consumer purchases “off-the-shelf” software, the contract for sale is between the purchaser and the retailer. It would appear, therefore, that a defendant manufacturer could argue that a purchaser of such software would be unable to bring an action against that software manufacturer for breach of contract. However, such a defense is unlikely to succeed, for the simple reason that a “purchaser” of software is not actually “purchasing” the software; rather, he is purchasing a *license to use* the software.¹³ When a consumer purchases “off the shelf” software, such as Intuit’s Quicken® (which has been the subject of much of the already filed Year 2000 litigation),¹⁴ such software inevitably contains a License Agreement. The License Agreement is a contract between the end-user and the manufacturer that licenses the end-user’s use of the software. Typically, the language explicitly creates the contract between the manufacturer and the end-user,¹⁵ and thus privity of contract will not be a viable defense for manufacturers.¹⁶

9. A party suing under a breach of contract theory cannot recover unless he has actually suffered damage; otherwise, he has no “wrong” to redress: a plaintiff

¹¹ Plaintiffs have also asserted that these same packaging or advertising representations created express warranties. *See infra* Section II(B)(1).

¹² *See* Professional Bankers Corp. v. Floyd, 331 S.E.2d 362, 364-65 (S.C. Ct. App. 1985); Gonzalez v. Kil Nam Chun, 465 N.E.2d 727, 729 (Ind. Ct. App. 1984).

¹³ *See supra* note 10.

¹⁴ *See, e.g.*, Compl. of Colburn, Colbourn v. Intuit, Inc., No. 405095 (Cal. Super. Ct. filed June 4, 1998); Compl. of Rubin, Rubin v. Intuit, Inc., No. CV774287 (Cal. Super. Ct. filed May 27, 1998); Compl. of Issokson, Issokson v. Intuit, Inc., No. CV773646 (Cal. Super. Ct. filed Apr. 29, 1998); Compl. of Stein, Stein v. Intuit, Inc., No. 98603134 (N.Y. Sup. Ct. filed June 25, 1998).

¹⁵ For instance, the License Agreement at issue in Paragon Networks Int'l v. Macola, Inc., No. 98CV0119 (Ohio Ct. C.P. filed Apr. 1, 1998) states: “This is a legal agreement between you, the end user, and Macola, Inc.”

¹⁶ However, defendants can assert that there is no privity of contract if the plaintiff fails to plead privity. Plaintiffs must plead privity in the complaint, and a failure to do so may lead to dismissal of that cause of action (although it is likely a plaintiff would be granted leave to amend to add privity). *See* Brandt v. Sreenan's Office Sys./Designs, No. 15-93-1, 1993 LEXIS 3613, *10-11 (Ohio Ct. App. July 14, 1993). Privity of contract, however, has great vitality in claims for breach of warranty under the U.C.C. *See infra* Section II(B)(2).

cannot recover for purely speculative injury.¹⁷ Therefore, a defendant can assert that plaintiffs cannot raise a breach of contract claim in Year 2000 litigation concerning software that is currently still functioning, but will fail on or after January 1, 2000. However, there are two problems with such a defense. First, some software products are still usable if the dates entered into them are not Year 2000 or post-Year 2000 dates, however, these programs will not currently process the Year 2000 and post-Year 2000 dates. Thus, the software can process data that does not contain the Year 2000 and post-Year 2000 dates, substantially diminishing its usefulness. Second, some software purchasers have already suffered damages, because they have needed to purchase upgrades of their non-compliant software to more current, Year 2000 compliant versions. The extra expense in purchasing these newer versions satisfy a damages requirement.¹⁸

10. Finally, breach of contract, by its very terms, requires that there be a breach by one of the parties, or a party to whom obligations have been delegated. In order to show breach, a plaintiff must show proof that she is not getting the benefit of her bargain.¹⁹ However, some of the software that is (or could be) the subject of Year 2000 litigation was sold many years ago; as such, defendants may successfully argue that plaintiffs *have* gotten the benefit of their bargain, and that the software product was never intended to work indefinitely: as computers evolve and become more powerful, the software applications running on them are continuously upgraded.

B. Breach of Warranty

11. Breach of warranty is the most popular claim asserted in Year 2000 litigation. A breach of warranty claim essentially asserts that a product was supposed to function in a certain manner, and it has failed to do so. There are two types of breach of warranty actions; (i) express warranties, such as those included with software packages or those allegedly arising out of software packaging or

¹⁷ See *Story Parchment Co. v. Paterson Parchment Paper Co.*, 282 U.S. 555, 563 (1931)

The general rule is, that all damages resulting necessarily and immediately and directly from the breach are recoverable, and not those that are contingent and uncertain. The latter description embraces, as I think, such only as are not the certain result of the breach, and does not embrace such as are the certain result, but uncertain in amount.

See id.

¹⁸ Some of the defendants in pending Year 2000 litigation have also argued that plaintiffs cannot suffer damages because the manufacturer intends to offer a free "patch" for the non-compliant software. See Mem. in Supp. Of Def.'s Mot. To Dismiss, ¶ 4, n.1, Issokson, No. CV 773636.

¹⁹ See, e.g., *Luebke v. Miller Consulting Eng'rs*, 446 N.W.2d 753, 755 (Wis. Ct. App. 1993); *Kurtz v. Oremland*, 33 N.J. Super. 443, 460-61 (N.J. Super. Ct. Ch. Div. 1954).

advertising representations, and (ii) implied warranties, such as the implied warranty of merchantability, that the law imposes in order to afford consumers a modicum of protection from defective products. Litigation over U.C.C. warranty provisions has been extensive, providing defendants with many defenses to breach of warranty claims.

1. Express Warranties

12. Most consumer computer software sold today contains a license agreement. The agreement typically appears in print on an envelope which holds the program diskettes, and becomes effective immediately upon opening the package.²⁰ Not only does such an agreement grant the end-user a license to use the software, it usually contains a warranty. Such warranties typically state that the product software will function within its specifications, or that the product will be “free of defects,” for a specified period of time (the “warranty term”), usually sixty or ninety days. The terms further limit the types of remedies available for failure of the product to perform as indicated, and waive any and all other express or implied warranties. Much of the current Year 2000 litigation deals with express warranties contained in shrink-wrap license agreements.

13. Alternatively, some of the Y2K complaints filed to date deal with representations made on the packaging materials, or on advertising materials related to the products. Plaintiffs have alleged that statements similar to “your software will never become obsolete,”²¹ “software you’ll never outgrow,”²² and “your investment in [the software] is protected”²³ create express manufacturers’ warranties that the software will properly function after January 1, 2000, and thus be Year 2000 compliant. Such statements have also been alleged to modify the warranties contained in the product’s shrink-wrap license agreement.²⁴

²⁰ Such an agreement is usually called a “shrink-wrap” agreement, and that term will be used herein.

²¹ Compl. of Rockland Pulmonary and Med. Assoc. ¶24, Rockland Pulmonary and Med. Assoc. v. Medical Manager Corp., No. 98-CIV-6190 (S.D.N.Y. filed Aug. 7, 1998).

²² Compl. of Paragon Networks Int’l ¶18, Paragon Networks Int’l v. Macola, Inc., No. 98CV0119 (Ohio Ct. C.P. filed Apr. 1, 1998) (emphasis omitted).

²³ See Compl. of College ¶¶37-49, College v. Medical Manager Corp., No. 98-06401 (Fla. Cir. Ct. filed Aug. 25, 1998).

²⁴ See Compl. of Rockland Pulmonary and Med. Assoc. ¶¶ 45-48, Rockland Pulmonary and Med. Assoc. v. Medical Manager Corp., No. 98-CIV-6190; Compl. of Paragon Networks Int’l ¶¶18-19, Paragon Networks Int’l v. Macola, Inc., No. 98CV0119; Compl. of College ¶¶37-49, College v. Medical Manager Corp., No. 98-06401.

14. In some instances, shrink-wrap warranties may be viewed as contracts of adhesion,²⁵ and therefore might be held to be unenforceable. Not every form contract is a contract of adhesion; rather, one “must . . . determin[e] on an individual basis, in light of the particular circumstances and parties involved” whether the given contract is an adhesion contract.²⁶ Factors that courts consider when determining whether a contract is an adhesion contract include: (i) a showing of “unfairness, undue oppression, or unconscionability”;²⁷ (ii) whether the contract “does not fall within the reasonable expectations of the weaker . . . party”;²⁸ and (iii) whether “the parties are in positions of relative equality and . . . their consent is freely given.”²⁹ The question of whether shrink-wrap agreements on software packages constitute adhesion contracts has no definite answer; some courts have found that such agreements are adhesion contracts, and are thus unenforceable,³⁰ while others have found them to be valid and fully enforceable.³¹ Regardless, defendants can raise the argument that the court should enforce shrink-wrap licenses against a plaintiff. This defense is almost inevitably fatal to a plaintiff’s claim, since a Year 2000 software “defect” is typically brought to the manufacturer’s attention only after the sixty or ninety day warranty period.

15. Defendants may also argue that they have not breached the written warranty covering the product. A defendant might argue that a Year 2000 non-

²⁵ An “adhesion contract” is a “standardized contract form offered to consumers of goods and services on essentially [a] ‘take it or leave it’ basis without affording [the] consumer [a] realistic opportunity to bargain and under such conditions that [the] consumer cannot obtain [the] desired product or services except by acquiescing [to the] form contract.” BLACK’S LAW DICTIONARY 40 (6th ed. 1990).

²⁶ See *Denlinger, Inc. v. Dendler*, 608 A.2d 1061, 1067 (Pa. Super. Ct. 1992) (citing *Commonwealth v. Monumental Properties, Inc.*, 314 A.2d 333, 339 (Pa. Commw. Ct. 1973)).

²⁷ *Rush v. Oppenheimer & Co.*, 638 F. Supp. 872, 875 (S.D.N.Y. 1986).

²⁸ *Graham v. Scissor-Tail, Inc.*, 623 P.2d 165, 172 (Cal. 1981).

²⁹ *Vazquez v. Glassboro Serv. Ass’n, Inc.*, 415 A.2d 1156, 1164 (N.J. 1980).

³⁰ See, e.g., *Step-Saver Data Sys., Inc. v. Wyse Tech.*, 939 F.2d 91, 105-06 (3d Cir. 1991); *Vault Corp. v. Quaid Software Ltd.*, 847 F.2d 255, 269 (5th Cir. 1988); *Novell, Inc. v. Network Trade Center, Inc.*, 25 F. Supp. 2d 1218, 1230 (D. Utah 1997).

³¹ See, e.g., *ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1455 (7th Cir. 1996); *Microsoft Corp. v. Harmony Computers*, 846 F. Supp. 208, 213-14 (E.D.N.Y. 1994); *Harper Tax Servs., Inc. v. Quick Tax Ltd.*, 686 F. Supp. 109, 112 (D. Md. 1988) (holding that a limitation of damages provision in license agreement is enforceable even though contract was an adhesion contract); *Brower v. Gateway 2000, Inc.*, 676 N.Y.S.2d 569, 572-73 (N.Y. App. Div. 1998) (holding that the arbitration clause in agreement for sale of computer hardware and license of software is an enforceable contract of adhesion). Illinois and Louisiana passed statutes that reinforced the validity of shrink-wrap license agreements; however, the Illinois statute was repealed, and the Louisiana statute was held unenforceable as pre-empted by federal law. See *Vault Corp.*, 847 F.2d at 270. See also Lloyd L. Rich, *Mass Market Software and the Shrinkwrap License*, 23 COLO. LAW. 1321, 1322 (1994).

compliant product does not breach a warranty that states that a product will perform "within its specifications," since the specifications for the product never included Year 2000 compliance.³² In a situation where the warranty covering the product states that it shall be "free of defects," the defendant might argue that being non-Y2K compliant is not in fact a "defect." This is especially true in instances where the product continues to function, and will only fail on January 1, 2000. Moreover, even if the problem is construed to be a "defect," a defendant can argue that the problem was not a defect when the software was licensed, and, therefore, is not within the scope of the warranty. Furthermore, if the product is not performing "within its specifications," or there is a "defect" in the product, a defendant can claim that the warranty term expired before the occurrence of the problem with the software. As stated above, shrink-wrap warranties typically have a sixty or ninety day term. Many of the software products already alleged in litigation to be non-Y2K compliant, as well as many that may be subject to future litigation, had warranties that expired well in the past, and thus defendants can argue that a plaintiff's warranty claim has become overripe and died on the tree.

16. Where plaintiffs argue that representations made on product packaging or advertising have created an enforceable express warranty against software manufacturers, the rights of the parties must similarly be analyzed according to the Uniform Commercial Code ("U.C.C."), as adopted in the relevant state. Section 2-313(1)(a) of the U.C.C. states that "affirmations of fact" or "promises" relating to the goods, if such affirmations or promises become a "basis of the bargain," will create an express warranty that the goods will conform with the affirmation or promise.³³ Similarly, section 2-313(1)(b) creates an express warranty that goods will conform to a "description . . . which is made part of the basis of the bargain."³⁴ It is not a defense that a defendant had no intention to create an express warranty by making such statements.³⁵ Section 2-313 has been interpreted to mean that so long as the buyer can prove that some affirmation or promise was made regarding the product, and that the buyer ultimately purchased the product, such affirmation or promise

³² Evidence concerning the product's specifications may or may not be admissible to explain the terms of the written warranty because of the parol evidence rule. If the court finds that the written warranty "is a 'complete and exclusive' statement of the contract terms, then the [court] may not admit evidence even of terms that do not contradict terms in the writing" or "even of consistent additional terms." JAMES J. WHITE & ROBERT S. SUMMERS, UNIFORM COMMERCIAL CODE § 2-10, at 71-72 (4th ed. 1995). If the court does not so find, it may consider evidence that supplements the writing. *See id.* at 72.

³³ "Any affirmation of fact or promise made by the seller to the buyer which relates to the goods and becomes part of the basis of the bargain creates an express warranty that the goods shall conform to the affirmation or promise." U.C.C. § 2-313(1)(a) (1995).

³⁴ "Any description of the goods which is made part of the basis of the bargain creates an express warranty that the goods shall conform to the description." U.C.C. § 2-313(1)(b).

³⁵ *See* U.C.C. § 2-313(2).

was part of the “basis of the bargain.”³⁶ Thus, on their face, such representations *can* create express warranties between the manufacturer and the end-user.³⁷

17. However, defendants can utilize multiple defenses to defeat claims based on express warranties created by product packaging, or claims that such representations modified the shrink-wrap warranties. First, defendants can argue that such statements were not part of the “basis of the bargain” between the manufacturer and the end-user. A defendant manufacturer can argue that no reasonable person would construe a statement like “your investment in the software is protected” to create an express warranty that the product would be Year 2000 compliant, and that, therefore, the statement could not possibly be part of the “basis of the bargain.”³⁸

18. Second, a defendant manufacturer may argue that it is not a “seller” within Section 2-313, and is therefore not subject to this provision of the code.³⁹ A third and even stronger argument for a defendant is that the “affirmations” or “promises” contained in software packaging or advertising materials are merely

³⁶ See WILLIAM D. HAWKLAND, U.C.C. SERIES § 2-313:5 (Art 2)(1995). See also *Weng v. Allison*, 678 N.E.2d 1254, 1256 (Ill. App. Ct. 1997) (“Affirmations of fact made during the bargain are presumed to be part of the basis of the bargain unless clear, affirmative proof otherwise is shown.”).

³⁷ It is important to note that there need not be any actual reliance on the part of the end-user; rather, the phrase “basis of the bargain” is more narrowly construed than “reliance.” As Comment 3 to Section 2-313 states, “no particular reliance on such statements need be shown in order to weave them into the fabric of the agreement.” U.C.C. § 2-313 cmt. 3.

³⁸ For example, in *Maneely v. General Motors Corp.*, 108 F.3d 1176, 1178 (9th Cir. 1997), the plaintiffs argued that General Motors’ ads depicting people standing or sitting in the beds of pickup trucks expressly warranted that riding in the bed of such trucks was safe. The court held that no reasonable jury could find, on such evidence, that General Motors had so warranted. See *id.* See also U.C.C. § 2-313(2) cmt. 8 (“common experience discloses that some statements or *predictions* cannot fairly be viewed as entering into the bargain”) (emphasis added).

³⁹ This argument may be difficult for a court to accept, since the term “seller” is defined broadly by the U.C.C. to mean “a person who sells or contracts to sell goods.” U.C.C. § 2-103(1)(d). Manufacturers of software would seem to fall within this definition, as they sell software to retailers who ultimately sell it to end-users. It has been extensively argued, however, that manufacturers do not fall within this definition. See HAWKLAND, *supra* note 36, § 2-103:1 n.19 (Art 2) for a listing of cases where such arguments have been made. Moreover, “the warranty sections of this Article are not designed in any way to disturb those lines of case law which have recognized that warranties need not be confined either to sales contracts or to the direct parties to such a contract.” U.C.C. § 2-313 cmt 2. It is interesting to note that Maryland has specifically modified § 2-314(1)(a) to define the term “seller,” for purposes of Sections 2-314 through 2-318, to specifically include “manufacturers” other than the “retailer.” Thus, a defendant manufacturer in Maryland may be able to convince a court that manufacturers are specifically (and possibly intentionally) *excluded* from the definition of “seller” under § 2-313. See, e.g., *Dici Naz Velleggia, Inc. v. Executive Office Concepts, Inc.*, 17 U.C.C. Rep.Serv.2d 79 (Md. Cir. Ct. 1992).

“puffery,”⁴⁰ and, therefore, do not rise to the level of an express warranty. The computer software market is incredibly dynamic, with products constantly changing to adapt to faster hardware and to respond to consumer demand for increased functionality. In such an industry, a defendant manufacturer can argue that a reasonable consumer would not believe that a statement like “software you’ll never outgrow” means that the product will last forever, since most products in this market have limited useful lives.⁴¹

19. Fourth, manufacturers can claim protection under the recently enacted Year 2000 Information and Readiness Disclosure Act (“IRDA”).⁴² Under Section 4(e)(1) of the IRDA, “a Year 2000 statement⁴³ shall not be interpreted or construed as an amendment to or alteration of a contract or warranty, whether entered into by or approved for a public or private entity.”⁴⁴ If a product involved in Year 2000 litigation is subject to the warranty provisions of its shrink-wrap license agreement, the IRDA may prevent the packaging statements from modifying the warranty.⁴⁵ Even if a court finds that the representations on product packaging or advertising create an express warranty, a court’s holding that the shrink-wrap agreement is valid and enforceable gives rise to a potential defense. Typically, the license agreement contains language that expressly waives any and all other warranties.

⁴⁰ Puffery is an exaggeration, expression of opinion, or advertising that concerns an opinion as to the quality of goods sold, and not a representation of fact. *See* BLACK’S LAW DICTIONARY 1233 (6th ed. 1990).

⁴¹ *See, e.g.*, *Schmaltz v. Nissen*, 431 N.W.2d 657, 661 (S.D. 1988) (holding that statement by seller of allegedly defective seed that it was “good seed” was puffery that did not create an express warranty); *Jordan v. Paccar, Inc.*, 37 F.3d 1181, 1185 (6th Cir. 1994) (holding that statement in sales brochure that truck’s fiberglass roof was “rock-solid” and “strong, light, [and] leakproof” was commercial puffery); *but cf. WHITE & SUMMERS, supra* note 32 § 9-4, at 335 (“[A] written statement is less likely to pass as a puff than an oral one”).

⁴² *See* Year 2000 Information and Readiness Disclosure Act, Pub. L. No. 105-271, § 1, 112 Stat. 2368 (1998). The purpose of the IRDA is to facilitate the disclosure and exchange of information about computer processing problems, solutions and related matters in connection to the transition to the Year 2000.

⁴³ The IRDA defines a “Year 2000 statement” as including “any communication . . . concerning an assessment, projection or estimate concerning Year 2000 processing capabilities of an entity, product, service, or set of products and services.” *Id.* § 3(11)(a)(i).

⁴⁴ *Id.* § 4(e)(1).

⁴⁵ However, the IRDA may not protect the statements from actually *creating* an express warranty. A Year 2000 statement that is made “in conjunction with the formation of the contract or warranty” does not qualify for protection under the IRDA. *See id.* § 4(e)(2)(ii).

A defendant can therefore argue that any warranty that the packaging materials creates is expressly waived under the terms of the shrink-wrap license.⁴⁶

20. Another common shrink-wrap license agreement term opens a larger can of worms: a limit of a defendant's liability to "repairing or replacing" the defective product. The U.C.C. specifically provides that a seller can limit its liability to the repair or replacement of non-conforming goods,⁴⁷ that the manufacturer can disclaim any and all consequential damages,⁴⁸ and that repair or replacement can be the exclusive remedy available to the plaintiff. The U.C.C. further complicates matters, stating that if circumstances cause the exclusivity of this type of remedy to "fail of its essential purpose," then damages may be had as provided elsewhere in the Code.⁴⁹ Further, consequential damage limitations will not be enforced if they are "unconscionable."⁵⁰ What makes a remedy "fail of its essential purpose" or become "unconscionable" has been the subject of scores of judicial opinions.⁵¹ The case law states that if the remedy "fails to cure the defect," such as in a situation where the "seller is unwilling or unable to repair the defective goods within a reasonable period of time,"⁵² the remedy fails of its essential purpose. Furthermore, without at least some "fair quantum of remedy" available to the plaintiff, a limitations of damages clause is unconscionable.⁵³ Defendants cannot know beforehand whether the terms of a shrink-wrap license agreement warranty

⁴⁶ It may seem contradictory that a plaintiff can waive an express warranty, especially by the provisions contained in a different express warranty; however, the code specifically anticipates such a situation. According to U.C.C. § 2-316, two such "contradictory" provisions should be interpreted "wherever reasonable as consistent with each other." U.C.C. § 2-316. If doing so is "unreasonable," the limitation is inoperative. *See id.* One commentator states that in such a situation, since the terms of the shrink-wrap license agreement are not negotiated, the limitation is inherently unreasonable, and thus inoperative. *See* WHITE & SUMMERS, *supra* note 32, § 12-3, at 418. *See also* Wenner v. Gulf Oil Corp., 264 N.W.2d 374, 384 (Minn. 1978).

⁴⁷ *See* U.C.C. § 2-719(1)(a) (1995).

⁴⁸ *See* U.C.C. § 2-719(3).

⁴⁹ U.C.C. § 2-719(2). An example of a provision for damages under the code can be found at U.C.C. §§ 2-714(1) and (2).

⁵⁰ U.C.C. § 2-719(3).

⁵¹ *See, e.g.*, Lewis Refrig. v. Sawyer Fruit, Veg. & Cold Storage, 709 F.2d 427, 430-31 (6th Cir. 1983); Roneker v. Kenworth Truck Co., 944 F. Supp. 179, 184 (W.D.N.Y. 1996) (applying New York law); Myrtle Beach Pipeline Corp. v. Emerson Elec. Co., 843 F. Supp. 1027, 1042 (D.S.C. 1993); Jim Dan, Inc. v. O.M. Scott & Sons Co., 785 F. Supp. 1196, 1199 (W.D. Pa. 1992); Golden Reward Min. Co. v. Jervis B. Webb Co., 772 F. Supp. 1118, 1123 (D.S.D. 1991).

⁵² *See* WHITE & SUMMERS, *supra* note 32, § 12-10, at 442.

⁵³ *See* U.C.C. § 2-719 cmt. 1 (1995); *See also*, Canal Elec. Co. v. Westinghouse Elec. Corp., 756 F. Supp. 620, 625-26 (D. Mass. 1990) (quoting § 2-719 cmt. 1).

will fail their essential purpose or are unconscionable. Therefore, defendants should keep in mind this type of rebuttal argument is available to plaintiffs, and should not rely solely on the waiver and limitation language of a shrink-wrap agreement to avoid liability.

21. Finally, lack of damages is another defense available to defendant manufacturers for claims of breach of express warranty under the terms of either a shrink-wrap license agreement warranty or a warranty created by packaging and advertising representations.⁵⁴ As with a claim for breach of contract, a plaintiff asserting a claim for breach of an express warranty must show that he has been damaged.⁵⁵ Absent a showing of damage, a defendant can assert that no claim for breach of warranty exists.⁵⁶

2. Implied Warranties

22. In any contract for the sale of goods by a "merchant with respect to goods of that kind," the U.C.C. implies two warranties.⁵⁷ The first warrants that "the goods shall be merchantable" unless the warranty is excluded or modified.⁵⁸ In layman's terms, this warranty ensures that the products "measure up 'at least' to a certain quantitative standard;"⁵⁹ the products "are fit for the ordinary purposes" for

⁵⁴ See, e.g., *University of R.I. v. A.W. Chesterton Co.*, 2 F.3d 1200, 1219 (1st Cir. 1993) ("Absent competent evidence of damages, the district court properly granted judgment as a matter of law in favor of Chesterton on URI's breach of warranty claims."). See also, *First Nat'l Bank in Harvey v. Colonial Bank*, 898 F. Supp. 1220, 1236 (N.D. Ill. 1995) (finding for the defendants because no causal link was shown between defendant's actions and plaintiff's loss). The Year 2000 cases against Intuit regarding its Quicken® software were dismissed on the theory that the plaintiffs had not suffered any present damages, since the Year 2000 defect has not yet manifested itself. See *CA Judge Throws Out Y2K Suit Against Intuit; Plaintiffs to Amend Suit*, SOFTWARE LAW BULLETIN, Oct. 1998, at 196. It would seem, however, that if a plaintiff can successfully show that a software product is "defective" under the warranty, the plaintiff would at least be entitled to nominal damages. See, e.g., *Ashley v. Boch Toyota, Inc.*, 1992 Mass. App. Div. 35, 36 (1992) (citing *Hogan v. Riley*, 13 Gray 515, 516 (1859)). Moreover, a plaintiff with non-Year 2000 compliant software arguably has been damaged by merely receiving the "defective" product, regardless of whether the defect has manifested itself. The market value of such product has been diminished, and according to U.C.C. § 2-714(2), the measure of damages for breach of warranty is "the difference . . . between the value of the goods accepted and the value they would have had if they had been as warranted." U.C.C. § 2-714(2). Thus, it is unclear whether the Intuit cases have been properly decided.

⁵⁵ See *supra* note 54.

⁵⁶ See *id.*

⁵⁷ U.C.C. § 2-314(1) (1995).

⁵⁸ *Id.*

⁵⁹ HAWKLAND, *supra* note 36, § 2-314:1.

which they will be used.⁶⁰ Nearly all of the Year 2000 lawsuits filed to date raise claims under this implied warranty of merchantability, as will, presumably, most of those that have yet to be filed.

23. The second implied warranty under the U.C.C. is that goods will be “fit” for the “particular purpose for which the goods are required,” so long as the seller has reason to know such purpose and has reason to know that the buyer is relying on the seller’s skill or judgment in selecting suitable goods.⁶¹ Unlike the implied warranty of merchantability, the implied warranty of fitness for a particular purpose requires that goods satisfy the *particular* needs of the buyer, and not the *ordinary* needs for which they are used.⁶² As literally thousands of claims have been asserted under these implied warranties, case reporters are replete with decisions that illustrate a number of defenses software manufacturers can raise to such claims in Year 2000 litigation.

24. One of the express warranty defenses is also available to defeat claims under the implied warranty of merchantability; defendant manufacturers can argue that any alleged “breach” of warranty has not damaged the plaintiffs, and, therefore, no claim can lie for breach of warranty.⁶³ Apart from this defense, however, available defenses to claims of implied warranty of merchantability, while similar, are in fact different to those that can be asserted for breach of an express warranty. One such defense is that there has been no “defect.” For example, the goods *are* fit for the ordinary purpose for which they are used. This is very similar to an assertion that a warranty has not been breached: in other words, this is a claim by the defendant that the goods are in fact merchantable. Most non-Y2K compliant software does function; it is just unable to process dates of January 1, 2000 and thereafter.⁶⁴ A manufacturer may therefore be able to argue that such software *is* merchantable, i.e. it is fit for its “ordinary” purpose.⁶⁵ Obviously,

⁶⁰ U.C.C. §2-314(2)(b) (1995).

⁶¹ U.C.C. § 2-315 (1995).

⁶² Note, therefore, that it is probably impossible to breach the implied warranty of merchantability without breaching the implied warranty of fitness for a particular purpose. If goods are unable to be used for their *ordinary* purpose, it is highly unlikely that they can be used for a buyer's *particular* purpose. See HAWKLAND, *supra* note 36, § 2-315:1. The reverse, however, need not be true; there are many situations when goods can breach the implied warranty of fitness for a particular purpose without breaching the implied warranty of merchantability.

⁶³ See *supra* note 53 and accompanying text; see also, Storey v. Day Heating & Air Conditioning, Inc., 319 So. 2d 279, 280 (Ala. 1975) (noting that causation of damages is an element of a claim for breach of implied warranty).

⁶⁴ The viability of this defense will obviously be severely impacted after January 1, 2000, when presumably all dates entered into non-Y2K compliant software will be unprocessable.

⁶⁵ See, e.g., Balog v. Center Art Gallery-Haw., Inc., 745 F. Supp. 1556, 1563 n.16 (D. Haw. 1990) (noting that counterfeit artwork purchased by plaintiff was suitable for the ordinary purpose of

depending on the context of the software's use, this defense may be more viable for some software applications than for others.⁶⁶ Another defense which the defendant may raise to an implied warranty of merchantability claim is that the defendant is not a "merchant" with respect to this type of goods: an argument similar to a manufacturer's claim that it is not a "seller" under a claim for breach of an express warranty.⁶⁷

25. As stated above, a defendant's privity defense will probably fail to avoid a breach of contract claim, since a shrink-wrap license agreement will create privity between the manufacturer and the end-user.⁶⁸ However, lack of privity is a strong argument for a defendant seeking to avoid liability on a claim for breach of the implied warranty of merchantability, at least with regard to direct economic loss.⁶⁹ Although "a growing number of courts now allow non-privity plaintiffs to recover for direct (and even consequential) loss,"⁷⁰ the majority of courts still require a showing of privity before a plaintiff can recover for breach of an implied warranty.⁷¹ The

artwork, thus no breach of the implied warranty of merchantability claim could lie); *Pronti v. DML of Elmira, Inc.*, 478 N.Y.S.2d 156, 157-58 (N.Y. App. Div. 1984) (no breach of implied warranty of merchantability for furniture sold to plaintiff, which was not in perfect condition, but was nonetheless usable as dining room furniture).

⁶⁶ For example, the software at issue in *Produce Palace International v. Tec-America Corp.*, No. 97-3330-CK (Mich. Cir. Ct. filed June 12, 1997) was a cash register software program that was unable to process credit cards with expiration dates in the year 2000 or after. Every time such a credit card was used, the program would crash, requiring the store owner to re-boot the entire system. *See id.* Such a system would most likely be found to have breached the implied warranty of merchantability. Plaintiffs in the Intuit line of cases, however, have a greater uphill battle because the Quicken® software at issue had allegedly not yet begun to fail, and thus was currently usable. *Cf. Story Parchment Co. v. Paterson Parchment Paper Co.*, 282 U.S. 555, 563 (1931) ("The general rule is, that all damages resulting necessarily and immediately and directly from the breach are recoverable, and not those that are contingent and uncertain.").

⁶⁷ *See supra* note 39. Like an argument that a manufacturer is not a "seller," such an argument will likely fail. *See* U.C.C. § 2-104(1) & cmt. 2 (explaining that a merchant of a particular kind of goods is one who has a "professional status" as to that type of goods).

⁶⁸ *See supra* notes 12-16 and accompanying text.

⁶⁹ *See* WHITE & SUMMERS, *supra* note 32, § 11-5, at 395 (defining "direct economic loss" as "damage flowing directly from insufficient product quality.").

⁷⁰ *Id.* at 396.

⁷¹ *See, e.g.*, *Rhodes v. General Motors Corp.*, 621 So. 2d 945, 947 (Ala. 1993) (requiring privity for damage recovery for breach of implied warranty); *Fieldstone Co. v. Briggs Plumbing Prods.*, 62 Cal. Rptr. 2d 701, 708 n.10 (Cal. Ct. App. 1997) (noting an exception to the general privity requirement when a manufacturer's advertising creates an express warranty); *Prairie Prod., Inc. v. Agchem Div.-Pennwalt*, 514 N.E.2d 1299, 1302 (Ind. Ct. App. 1987); *Ralston Purina v. Arthur G. McKee & Co.*, 551 N.Y.S.2d 720, 721 (N.Y. App. Div. 1990). *But see*, *Dassault Falcon Jet Corp. v. Oberflex, Inc.*, 909 F. Supp. 345, 354 (M.D.N.C. 1995) (applying Arkansas law in a diversity suit, privity is not required); *Flory v. Silver Crest Indust., Inc.*, 633 P.2d 424, 426 (Ariz. App. 1980) (believing it is better not to require privity for recovery). White and Summers note that some courts allow ordinary consumers to

reason why these courts require a showing of privity is that the language of U.C.C. Section 2-314 regarding a "seller" has been construed more narrowly than that of Section 2-313.⁷² Furthermore, it is unlikely that a court will allow the recovery of consequential damages for breach of an implied warranty of merchantability without privity.⁷³

26. Another defense available to manufacturers for implied warranty of merchantability claims is that such claims can be, and usually are, disclaimed by the terms of the shrink-wrap license agreement. As stated previously, shrink-wrap license agreements typically waive all other warranties except the express written warranty contained therein;⁷⁴ such a provision can therefore waive the implied warranty of merchantability. However, the Code makes it more difficult to disclaim an implied warranty than an express warranty. Under U.C.C. Section 2-316(2), any exclusion or modification of the implied warranty of merchantability must specifically "mention merchantability and in case of a writing must be conspicuous;"⁷⁵ failure to do so will likely lead to a court's rejection of an argument that the implied warranty of merchantability has been disclaimed.⁷⁶ In order to make a writing "conspicuous," it will generally suffice that the manufacturer either change the size of the writing, or contrast its type or color.⁷⁷ It is important to note, however, that the ability to disclaim the implied warranty of merchantability is limited in some cases under state and federal law; a defendant manufacturer must be sure that such limitations do not apply before relying on disclaimers to avoid

recover direct economic loss, even if not in privity. See WHITE & SUMMERS, *supra* note 32, § 11-5, at 396.

⁷² See *Rhodes*, 621 So. 2d at 947 (suggesting that while manufacturers are free to provide express warranties, implied warranties under the U.C.C. will only apply to "sellers"); see also *Tomczuk v. Town of Cheshire*, 217 A.2d 71, 73 (Conn. 1965) (distinguishing "manufacturer" from "seller"); *Frericks v. General Motors Corp.*, 336 A.2d 118, 127 (Md. 1975) (suggesting the same). In other words, while the shrink-wrap license agreement creates privity for the purposes of a breach of contract action, privity only exists between the actual seller, i.e. the retailer, of the software and the end-user in the implied warranty situation. The shrink-wrap license agreement therefore arguably does not create privity for the purposes of claims under the implied warranties of merchantability and fitness for a particular purpose.

⁷³ See WHITE & SUMMERS, *supra* note 32, § 11-6 at 397.

⁷⁴ See *supra* Section II(B)(1).

⁷⁵ U.C.C. § 2-316(2) (1995).

⁷⁶ See, e.g., *Ricwil, Inc. v. S.L. Pappas & Co.*, 599 So. 2d 1126, 1130 (Ala. 1992) (holding that an exclusion written in normal type face was not conspicuous and therefore failed to exclude the implied warranty of fitness for a particular purpose); *Lecates v. Hertrich Pontiac Buick Co.*, 515 A.2d 163, 169 (Del. Super. Ct. 1986) (holding the same).

⁷⁷ See U.C.C. § 1-201(10) (1995).

liability.⁷⁸ Further, modification or exclusion of the implied warranty of merchantability is still subject to the Code's general protection against unconscionability.⁷⁹

27. A final, yet important, defense available to manufacturers against claims of breach of the implied warranty of merchantability is lack of notice or opportunity to cure the "defect." Under U.C.C. Section 2-607(3)(a), a plaintiff must give a seller notice of the "breach" of the warranty, within a reasonable time after he has discovered or should have discovered the "breach," otherwise the plaintiff is barred from any remedy.⁸⁰ "The first and foremost [policy] for requiring notice is to enable the seller to make adjustments or replacements or to suggest opportunities for cure to the end of minimizing the buyer's loss and reducing the seller's own liability to the buyer."⁸¹ In the event that a software manufacturer is sued regarding software that was licensed many years ago, which will inevitably be the case with many Y2K lawsuits, a defendant may successfully assert that the plaintiff should have discovered the defect well in the past, and thus the plaintiff failed to notify the defendant within a "reasonable" period of time.⁸² This is especially true in the constantly changing computer software market; as the computer software market advances, a manufacturer ought to be able "to close his books on goods sold in the past and to pass on to other things."⁸³ Section 2-607(3) poses two difficult questions: (i) determining when an end-user of Y2K non-compliant software "should" discover the Y2K problem in the software;⁸⁴ and (ii) what constitutes a

⁷⁸ See, e.g., MASS. GEN. LAWS ch. 106 § 2-316A (1973); Magnuson-Moss Consumer Product Warranty Act, 15 U.S.C. § 2301, *et seq.* (1975), discussed *infra*, Section II(B)(3).

⁷⁹ See U.C.C. § 2-719(3). This might be the case when no express warranty is available to the plaintiff, or if the express warranty "fails of its essential purpose." See *supra* Section III(A)(1).

⁸⁰ Section 2-607 is not limited specifically to actions for breach of implied warranties; as such, failure to give notice and/or opportunity to cure is also a defense defendants should raise to claims of breach of contract and breach of express warranties.

⁸¹ WHITE & SUMMERS, *supra* note 32, § 11-10, at 612-13.

⁸² Defendants beware: some states and courts have removed the notice requirements of Section 2-607(3) for buyers of "consumer goods." See, e.g., S.C. CODE ANN. § 32-6-207 (Law Co-op. 1976); Fischer v. Mead Johnson Lab., 341 N.Y.S. 2d 257 (N.Y. App. Div. 1973). See *generally* HAWKLAND, *supra* note 36, § 2-607:5.

⁸³ HAWKLAND, *supra* note 36, § 2-607:4.

⁸⁴ The following is a common commercial situation involving computer software: a manufacturer has written a specifically tailored software application for a company, and prior to its full implementation the company has the opportunity to test the software. Such a case is a good example of when a court might find that the plaintiff should have discovered the Y2K problem almost immediately. In the case of off-the-shelf consumer software, however, the plaintiff's lower sophistication implies that a court would be more likely to find that the plaintiff "should" have discovered the problem only once he began to enter Year 2000 dates.

“reasonable” time to give notice. The case law is brimming with cases attempting to answer such questions; needless to say, no bright-line rule answers these questions. To make these determinations, courts will likely look to the nature of the software involved, the sophistication of the parties, and the circumstances surrounding the notice.⁸⁵

28. Many defenses to claims of breach of the implied warranty of merchantability are also defenses to claims brought for breach of the implied warranty of fitness for a particular purpose. Defendant manufacturers can assert that there have been no damages from an alleged “breach” of the warranty, and therefore no claim lies.⁸⁶ Further, a plaintiff’s failure to demonstrate privity is also a bar to a claim under the implied warranty of fitness for a particular purpose.⁸⁷ As stated above, a plaintiff’s failure to give notice or opportunity to cure is also a viable defense for defendants.⁸⁸ Furthermore, the implied warranty of fitness for a particular purpose can be disclaimed under U.C.C. Section 2-316(2).⁸⁹

29. An implied warranty of fitness for a particular purpose defense that there has been no “breach” of the warranty is similar to, but not exactly the same as, the same defense to a claim of implied warranty of merchantability. The implied warranty of fitness for a particular purpose is intended to protect a

⁸⁵ Some early decisions interpreting Section 2-607(3) found that a remote manufacturer was not a “seller” for purposes of the section’s requirement that the plaintiff give notice. *See, e.g.*, Tomczuk v. Town of Cheshire, 217 A.2d 71 (Conn. 1965). However, manufacturers need not worry. “In more recent decisions . . . the courts indicate that a non-privity consumer buyer must timely notify a remote manufacturer of alleged defects, at least when the buyer seeks recovery under the Code for economic loss.” WHITE & SUMMERS, *supra* note 32, § 11-10 at 617.

⁸⁶ *See* cases cited *supra* note 51. *See also* University of R.I. v. A.W. Chesterton Co., 2 F.3d 1200, 1219 (1st Cir. 1993) (“Absent competent evidence of damages, the district court properly granted judgment as a matter of law in favor of Chesterton on URI’s breach of warranty claims.”).

⁸⁷ *See* Bryant v. Southern Energy Homes, Inc., 682 So. 2d 3, 5 (Ala. 1996); Gowen v. Cady, 376 S.E.2d 390, 393 (Ga. Ct. App. 1989); Hole v. General Motors Corp., 83 A.D.2d 715, 716 (N.Y. App. Div. 1981).

⁸⁸ *See supra* note 79.

⁸⁹ There are two important differences between how manufacturers must disclaim the implied warranty of fitness for a particular purpose and how they must disclaim the implied warranty of merchantability. First, unlike the requirement that a disclaimer of the implied warranty of merchantability specifically mention “merchantability,” there is no requirement that the disclaimer specifically state “fitness” in order to be adequate. *See* Lumber Mutual Ins. Co. v. Clarklift, Inc., 569 N.W.2d 681, 682 (Mich. Ct. App. 1997); Adams v. American Cyanamid Co., 498 N.W.2d 577, 585 (Neb. Ct. App. 1992); Leland Indus., Inc. v. Suntek Indus., Inc., 362 S.E.2d 441, 443 (Ga. Ct. App. 1987). Second, any disclaimer of the implied warranty of fitness for a particular purpose *must* be in writing. *See id.* However, like the implied warranty of merchantability disclaimers, any disclaimer of the implied warranty of fitness for a particular purpose must be conspicuous. *See id.* Once again, manufacturers must be sure to remember that some state and federal law limit the ability to disclaim implied warranties. *See supra* note 77.

consumer that purchases goods that are unable to perform a specific function.⁹⁰ Furthermore, the seller must have knowledge of the buyer's intent to use the goods for that particular function, and the buyer must have relied on the seller's specific skill in determining which goods are most appropriate for the buyer's use.⁹¹ The defendant manufacturer, therefore, has two available defenses, based on this warranty, to show that there has been no breach. First, a defendant can claim that it had no knowledge of the particular purpose for which the plaintiff intended to use the product. Without such knowledge, by the very terms of the warranty, there can be no breach. This is especially true in the Y2K situation, since the product at issue was probably manufactured well before the end-user ever made his purchase. However, the legitimacy of this defense is questionable, since there need not be actual knowledge on the part of the "seller."⁹² A plaintiff need only show that "the circumstances are such that the seller has *reason to realize the purpose intended*."⁹³ In the case of off-the-shelf software, the defendant manufactures the product for the end-user to use it for a specific purpose. Thus, this defense may be difficult to assert successfully.

30. The second defense that a defendant can raise to show no breach is that the buyer did not rely on any specific skill of the "seller."⁹⁴ A remote defendant manufacturer that the end-user is suing may contend that it is impossible to show how the manufacturer used any specific skill in selecting a product appropriate for the end-user's need. Even if the end-user can somehow demonstrate skill on the part of the manufacturer in selecting appropriate software, it also seems unlikely that the end-user relied on such skill. Instead, the end-user inevitably selected the software at issue after considering a number of alternatives. If the buyer relies on his *own* skill, and not that of the "seller," there can be no breach of the warranty of fitness for a particular purpose.⁹⁵

⁹⁰ See U.C.C. § 2-315 (1995).

⁹¹ See *id.*

⁹² See U.C.C. § 2-315 cmt. 1.

⁹³ *Id.* (emphasis added).

⁹⁴ Again, it is important to note that the "seller" might only be construed, for purposes of the implied warranties of fitness for a particular purpose and merchantability, to include the retailer, and not the manufacturer. This is simply a restatement of the argument that there is no privity between the manufacturer and the buyer. See *supra* notes 67-68.

⁹⁵ See, e.g., *Jacobs v. E.I. du Pont de Nemours & Co.*, 67 F.3d 1219, 1247 (6th Cir. 1995); *Duffin v. Idaho Crop Improvement Ass'n*, 895 P.2d 1195, 1204 (Idaho 1995); *Connick v. Suzuki Motor Co Ltd.*, 656 N.E.2d 170, 181 (Ill. App. Ct. 1995).

3. Magnuson-Moss Consumer Product Warranty Act Liability

31. The Magnuson-Moss Consumer Product Warranty Act⁹⁶ (the “Warranty Act”) provides that a consumer may bring an action to recover damages from a warrantor that fails to comply with any obligation under the Warranty Act.⁹⁷ One such obligation is that the “supplier” cannot limit the implied warranties’ duration to a shorter period of time than “the duration of a written warranty of reasonable duration.”⁹⁸ Such limitation only applies if the “supplier” makes a written warranty to the consumer regarding the product.⁹⁹ Since the shrink-wrap license agreement in off-the-shelf software typically contains an express warranty, the Warranty Act will apply to such software if the product involved is a “consumer product.” Thus, a plaintiff that would not otherwise have a claim under the implied warranties of merchantability and fitness for a particular purpose because the terms of the shrink-wrap license agreement include a disclaimer, will be able to bring her cause of action under the Warranty Act. The Warranty Act applies because a complete disclaimer of the implied warranties is inevitably limiting them to a period of time shorter than the duration of a written warranty of *reasonable* duration.¹⁰⁰

32. Defendant manufacturers should not despair, since some of the defenses available to defeat claims under the implied warranties are also available to defeat claims under the Warranty Act. More specifically, giving notice and opportunity to cure is “a jurisdictional prerequisite to the Warranty Act’s cause of action for breach of warranty.”¹⁰¹ Furthermore, a plaintiff cannot maintain a cause of action under the Warranty Act unless that plaintiff has suffered actual damage.¹⁰² Moreover,

⁹⁶ Pub. L. No. 93-637, 88 Stat. 2183 (1975) (codified as amended at 15 U.S.C. §§ 2301-2312 (1994)).

⁹⁷ See 15 U.S.C. § 2310(d)(1).

⁹⁸ 15 U.S.C. § 2308(b).

⁹⁹ The Act defines “Supplier” to include “any person engaged in the business of making a consumer product directly or indirectly available to consumers.” 15 U.S.C. § 2301(4) (1994). A manufacturer of computer software likely qualifies as a “supplier” under the Act. A manufacturer might be able to argue that it is a company and not a “*person*” engaged in making consumer products available to consumers. Further, “consumers” include “any buyers of consumer products.” 15 U.S.C. § 2301(3). “Consumer products” are defined to mean “tangible personal property which is distributed in commerce and which is normally used for personal, family, or household purposes.” 15 U.S.C. § 2301(1).

¹⁰⁰ See *Ismael v. Goodman Toyota*, 417 S.E.2d 290, 294 (N.C. Ct. App. 1992); *Pay Tel Sys., Inc. v. Seiscor Tech. Inc.*, 850 F. Supp. 276, 280 (S.D.N.Y. 1994).

¹⁰¹ *Gorman v. Saf-T-Mate, Inc.*, 513 F. Supp. 1028, 1034 (N.D.Ind. 1981); see also 15 U.S.C. § 2310(e); *Maberry v. Said*, 911 F. Supp. 1393, 1408 (D. Kan. 1995).

¹⁰² See 15 U.S.C. § 2310(d)(1) (“[Only] a consumer *who is damaged* by the failure . . . of a warrantor [has a cause of action under the Act.]”); *Feinstein v. Firestone*, 535 F. Supp. 595, 602 (S.D.N.Y. 1982) (denying class certification because prospective plaintiff could not demonstrate damage).

some plaintiffs may fall outside of the scope of the Warranty Act if they are not “consumers,” or have not purchased “consumer products.”¹⁰³ Defendants should be cautious, however, as the Warranty Act certainly may impose liability where they may have previously thought there was none.

III. TORT-BASED CLAIMS AND THEIR DEFENSES

33. Contract-based claims make up the vast majority of claims asserted in the Year 2000 litigation filed to date.¹⁰⁴ That does not mean, however, that plaintiffs have no available tort based claims in Year 2000 suits. In fact, such claims may be more appealing to plaintiffs than contract claims, since courts cannot award punitive damages in a contract suit, but can make such awards in a tort suit.¹⁰⁵ Further, since some plaintiffs may have their contract claims barred due to warranty disclaimers, lack of privity, or difficulty proving breach, it is likely that they will instead pursue tort causes of action. Tort-based causes of action, however, are difficult for plaintiffs: even though plaintiffs may want to bring tort-based claims, contract law seems most capable of handling remedies for Y2K problems. The law, therefore, creates a significant barrier as plaintiffs try to cram their square-peg contract claims into the round-hole tort of relief.¹⁰⁶

34. The “economic loss rule” is one major impediment for plaintiffs who may wish to bring a tort-based claim for non-Y2K compliant software. This rule “prohibits a plaintiff who has a contract claim from recovering tort damages for

¹⁰³ An important note is that “consumer products” are products “which [are] *normally* used for personal, family, or household purposes” 15 U.S.C. § 2301 (emphasis added). It does not matter how the software is *actually* being used. Thus, a defendant cannot claim that because the plaintiff is using its software in a manner which takes it outside the scope of “consumer products,” the plaintiff cannot maintain a cause of action. See *Najran Co. v. Fleetwood Enter., Inc.*, 659 F. Supp. 1081, 1099 (S.D. Ga. 1986); *Business Modeling Techniques, Inc. v. General Motors Corp.*, 474 N.Y. S.2d 258, 260-61 (N.Y. Sup. Ct. 1984).

¹⁰⁴ See *Status of Pending Year 2000 Litigation*, YEAR 2000 L. REP. (BNA, Washington, D.C.) Mar. 1999 at 119-23; *Status of Pending Year 2000 Litigation*, YEAR 2000 L. REP. (BNA, Washington, D.C.) Feb. 1999 at 73-76.

¹⁰⁵ See, e.g., *McGreevy v. Daktronics, Inc.*, 156 F.3d 837, 843 (8th Cir. 1998) (interpreting South Dakota law); *In re Graham Square, Inc.*, 126 F.3d 823, 828 (6th Cir. 1997) (interpreting Ohio law); *Triangle Sheet Metal Works, Inc. v. Silver*, 222 A.2d 220, 225 (Conn. 1966); *Ferguson Transp., Inc. v. North Am. Van Lines, Inc.*, 687 So. 2d 821, 822-23 (Fla. 1996); *Meek v. Bishop Peterson & Sharp, P.C.*, 919 S.W.2d 805, 808 (Tex. Ct. App. 1996); RESTATEMENT (SECOND) OF CONTRACTS § 355 (1986). However, “something more than the mere commission of a tort is always required for punitive damages.” W. PAGE KEETON, ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 2, at 9 (5th ed. 1984). Rather, there must be fraud, malice, or some other “evil motive” that shows that the conduct is willful or wanton. *Id.* at 10. For this reason, “mere negligence is not enough” to recover punitive damages. *Id.*

¹⁰⁶ For this reason, tort based claims are discussed in considerably less detail than the contract based ones discussed above.

purely economic losses in the absence of personal injury or damage to 'other property'.¹⁰⁷ The rule is utilized so "that tort law [is not] employed to circumvent and emasculate the statutory scheme of the U.C.C."¹⁰⁸ An ingenious plaintiff might attempt to argue that non-Y2K compliant software *does* create property damage, since it damages the software itself. However, this argument will fail. "When the injury is only the economic loss to *the subject of the contract itself*, the action sounds in contract alone."¹⁰⁹ In instances where a Y2K failure has actually caused property damage, however, the economic loss rule itself will probably not bar a plaintiff from bringing a tort suit.¹¹⁰

35. Another potential barrier for a plaintiff who wishes to bring a tort-based Y2K suit is the obligation to "mitigate," or attempt to lessen, his damages.¹¹¹ Such an obligation only arises if the plaintiff was aware of the Y2K problem. However, even without showing plaintiff's actual knowledge, a defendant may argue that the public awareness of the Y2K problem put the plaintiff on notice of possible Y2K problems, which the plaintiff was then obligated to assess and remedy. If a plaintiff has failed to mitigate his damages, he may lose a portion or all of the remedy he has against the defendant.¹¹²

A. Negligence-Based Claims

36. Negligence is probably the most commonly asserted tort in all of tort law. Although negligence generally involves the showing of four simple elements – duty, breach, causation, and damages¹¹³ – there are many permutations a cause of action for negligence can take in a Y2K software lawsuit. The most likely of these

¹⁰⁷ *Comptech Int'l Inc. v. Milam Commerce Park, Ltd.*, 711 So. 2d 1255, 1259 (Fla. Dist. Ct. App. 1998), *review granted*, Table No. 93,336 (Fla., Sept. 22, 1998) (unpublished table decision).

¹⁰⁸ *Lloyd F. Smith Co., Inc. v. Den-Tal-Ez, Inc.*, 491 N.W.2d 11, 13 (Minn. 1992).

¹⁰⁹ *Meek*, 919 S.W.2d at 808 (emphasis added).

¹¹⁰ Such a situation may arise when non-Y2K compliant software causes the failure of machinery that, in turn, causes property damage. For instance, a Y2K failure could cause the shut down of some air traffic control hardware, with potentially disastrous results. The economic loss rule would not bar suit in such a situation.

¹¹¹ The mitigation obligation applies in both contract and tort based lawsuits. *See, e.g.*, *Fleet Nat'l Bank v. Anchor Media Television, Inc.*, 45 F.3d 546, 561 (1st Cir. 1995); *Knapp Shoes, Inc. v. Sylvania Shoe Mfg. Corp.*, 72 F.3d 190, 204-05 (1st Cir. 1995); *In re Davis*, 172 B.R. 437, 453 (Bankr. D.C. 1994).

¹¹² A plaintiff, however, may be able to recover nominal damages.

¹¹³ *See* KEETON ET AL., *supra* note 105, § 30, at 164-65; *Rodriguez v. Housing Auth. Of New Haven* 702 A.2d 417, 419 (Conn. Super. Ct. 1997).

permutations are negligent misrepresentation, negligent design, and computer malpractice.

1. Negligent Misrepresentation

37. A plaintiff in a claim for negligent misrepresentation in a Y2K case asserts that the defendant negligently stated that its software was Y2K compliant without fully assessing whether the software was actually compliant. Alternatively, the representations on a software product's packaging or advertising may reasonably give the impression that the product is Y2K compliant, thus leading to a possible claim for negligent misrepresentation.¹¹⁴ Moreover, if a manufacturer becomes aware that its software is not Y2K compliant, but fails to timely disclose the Y2K problem, it may be liable for negligent misrepresentation.¹¹⁵

38. Defendants can assert a number of defenses to defend against such claims. By its very nature, one of the elements of negligent misrepresentation is negligence, thus, a defendant manufacturer can assert any defense available in a negligence action: defenses that negate the existence of a duty,¹¹⁶ breach of any such duty,¹¹⁷ causation,¹¹⁸ or damages.¹¹⁹ Moreover, the IRDA may provide protection for some defendants from charges of negligent misrepresentation by allowing a defendant to post a statement on its website that gives consumers post-sale notice of Y2K non-compliance.¹²⁰ Such statements may protect a defendant

¹¹⁴ Plaintiffs have already asserted such a claims in Y2K litigation. *See* Compl. of Produce Palace Int'l ¶¶ 69-84, Produce Palace Int'l v. Tec-America Corp., No. 97-330-CK (Mich. Cir. Ct. filed June 12, 1997); Compl. of Women's Institute ¶¶ 34-37, Women's Institute for Fertility, Endocrinology, and Menopause v. Medical Manager Corp., No. 000419 (Pa. Ct. C.P. filed Aug. 4, 1998).

¹¹⁵ *See generally* Gelinas v. Gelinas, 522 A.2d 295, 298 (Conn. App. Ct. 1987); Roy v. Mugford, 642 A.2d 688, 693 (Vt. 1994).

¹¹⁶ To determine whether a defendant owed a duty to a plaintiff, courts will look to: (1) the relationship between the parties, (2) whether the plaintiff was within the foreseeable zone of harm, (3) whether the harm was actually within that foreseeable zone, and (4) considerations of public policy. *See* Di Ponzio v. Riordan, 89 N.Y.2d 578, 583 (1997).

¹¹⁷ Courts determine whether a defendant breached a duty owed to a plaintiff by using an objective standard to decide whether the defendant acted as a "reasonable person" (or, in this case, a reasonable corporation) would have acted. *See* KEETON ET AL., *supra* note 105 § 32, at 174; RESTATEMENT (SECOND) OF TORTS § 283, cmt. c (1977).

¹¹⁸ In order to show causation, a plaintiff must demonstrate that he actually relied on the misrepresentation. *See* RESTATEMENT (SECOND) OF TORTS § 552(1).

¹¹⁹ For a discussion concerning lack of damages, see *supra* Sections II(A) and II(B)(1).

¹²⁰ *See* Year 2000 Information and Readiness Disclosure Act, Pub. L. No. 105-271, § 4(d)(1), 112 Stat. at 2390 (1998).

from claims that it failed to disclose that its product was Y2K non-compliant. Lastly, lack of privity may once again prove a sufficient defense to such a claim.¹²¹

2. Negligent Design

39. In the Y2K context, a plaintiff's negligent design claim asserts that the defendant's software design in a software application is not reasonably safe for use in a foreseeable manner.¹²² Such a claim might exist if a plaintiff can show that the defendant should have foreseen a software product designed with a Y2K problem would eventually cause it to malfunction, making the software's use unsafe. Along the same lines, a plaintiff may raise a negligent warning claim, which is an assertion that the defendant failed to adequately warn of dangers inherent in the product's use in reasonably foreseeable ways.¹²³ Thus, a claim for negligent warning is merely a specific type of negligent design claim; the defendant has negligently designed the warning by failing to apprise users of Y2K problems inherent in using the software.

40. Similar to defenses for negligent misrepresentation, because negligent design necessarily entails an element of negligence, any of the defenses to a negligence claim are available.¹²⁴ Further, a defendant may argue that it *did* act reasonably when it designed its product with a Y2K problem, because designing computer software in that manner was the industry custom and usage at that time. In other words, if designing products with only two digits available for storage of the year in an inputted date was the custom of the computer industry, then it would not have been objectively "unreasonable" for a defendant to have designed its software in that manner.¹²⁵ Likewise, for a failure to warn claim, a manufacturer might argue that it did not act unreasonably by failing to provide "adequate" warning, because a reasonable manufacturer would not have known of the non-compliance, or would not have provided a warning.¹²⁶

¹²¹ See *Learjet Corp. v. Spenlinhauer*, 901 F.2d 198, 203 (1st Cir. 1990) (citing *Haberman v. Washington Public Power Supply System*, 744 P.2d 1032, 1070 (Wash. 1987)).

¹²² See PAUL SHERMAN, PRODUCTS LIABILITY FOR THE GENERAL PRACTITIONER, § 1.01 (1981).

¹²³ See RESTATEMENT (SECOND) OF TORTS § 388, cmt. b.

¹²⁴ See *supra* notes 114-18

¹²⁵ See RESTATEMENT (SECOND) OF TORTS § 295A. See also *Ogletree v. Navistar Int'l. Transp. Corp.*, 390 S.E.2d 61, 66 (Ga. Ct. App. 1989) (stating that industry standards are relevant to reasonableness determination). The likelihood of success with such an argument would seem to hinge on the nature of the software involved and when it was manufactured.

¹²⁶ This argument is especially unlikely to succeed, since the computer software industry has known about the Y2K problem for some time. See *Compl. of Gravity Apparel, Inc. ¶ 14*, *Gravity Apparel, Inc. v. Quarterdeck Corp.*, No. 603 752-98 (N.Y. Sup. Ct. filed July 30, 1998); *Compl. of Women's*

3. Computer Malpractice

41. Computer malpractice is another negligence based claim. A cause of action for computer malpractice is a new defense that arose out of general malpractice claims, such as those asserted against lawyers, doctors, and other professionals. In the Y2K context, these claims might arise in situations where a plaintiff has asked for software that the defendant custom designs to serve a specific function for the plaintiff. As a result, a defendant's actions may be viewed as offering a "professional service" to a plaintiff, and the defendant is held to a higher standard of care. Although this claim has been asserted in a number of cases filed to date (although none of those cases are Y2K cases), courts have been reluctant to adopt it.¹²⁷ Thus, it is, as yet, unlikely a plaintiff can succeed on such a theory.¹²⁸

B. Fraud and Deceit Claims

42. A number of the Y2K complaints filed thus far contain allegations of fraud and deceit against defendant manufacturers.¹²⁹ Such allegations require a showing that the manufacturer's statements - either in advertising materials, packaging materials, or elsewhere - led the purchaser to believe that the product was Y2K compliant, and the purchaser relied on that belief in deciding to purchase the product. Moreover, plaintiffs must prove that the manufacturer made statements either with the intent to deceive the plaintiff, or with reckless disregard to their truth or falsity.¹³⁰

Institute ¶ 22, *Women's Institute for Fertility, Endocrinology, and Menopause v. Medical Manager Corp.*, No. 000419 (Pa. Ct. C.P. filed Aug. 4, 1998).) (both alleging that the industry has known about the Y2K problem since "at least the mid-1970's"). Moreover, it is likely that manufacturers would provide warnings if it was foreseeable to a defendant that a Y2K failure would cause personal injury or property damage.

¹²⁷ See, e.g., *Hospital Computer Sys., Inc. v. Staten Island Hosp.*, 788 F. Supp. 1351, 1361 (D.N.J. 1992); *Invacare Corp. v. Sperry Corp.*, 612 F. Supp. 448, 453-54 (N.D. Ohio 1984); *Chatlos Sys. v. National Cash Register Corp.*, 479 F. Supp. 738, 740-41 (D.N.J. 1979).

¹²⁸ Even if a court would be willing to entertain such a claim, a defendant can still argue that it did not breach the higher standard of care, that there was no causation, and/or there were no damages; in others words, it can assert all the other possible negligence defenses. See *supra* notes 114-18

¹²⁹ See, e.g., *Compl. of Atlaz Int'l Inc. ¶¶ 29-35, Atlaz Int'l Inc. v. Software Bus. Tech.*, No. 172539 (Cal. Super. Ct. filed Dec.2, 1997); *Compl. of Issokson ¶¶ 33-41, Issokson v. Intuit, Inc.*, No. CV773646 (Cal. Super. Ct. filed Apr. 29, 1998); *Compl. of Cameron ¶¶ 37-46, Cameron v. Symantec Corp.*, No. CV 772482 (Cal. Super. Ct. filed Mar. 6, 1998).

¹³⁰ See *NMP Corp. v. Parametric Tech Corp.*, 958 F. Supp. 1536, 1544 (N.D. Okla. 1997); See also SHERMAN, *supra* note 122, §2.02, at 32 n.4 ("[Defendant's] representation must be of a material fact."). Since Year 2000 compliance statements address the very nature of a particular piece of software, a court will likely hold that they are material.

43. Much like negligence based claims, defendants can defend against such claims by attacking the elements of a fraud and deceit claim. For instance, it will likely be difficult for a plaintiff to prove that it relied on a defendant's Y2K statement in deciding to purchase the product, or that a defendant had the requisite intent to deceive the plaintiff when it made any such Y2K statement.¹³¹ Furthermore, defendants may also successfully argue that many of the advertising or packaging statements that constitute the alleged "deceit" were mere "commercial puffery" or salesmanship, and thus no reasonable person would have relied on them, nor construed them to mean that the defendant's product was Y2K compliant.¹³²

C. Products Liability

44. A final tort claim plaintiffs may bring for non-Y2K compliant software falls under the theory of "products liability." According to the Restatement (Second) of Torts,

(1) One who sells any product in a defective condition unreasonably dangerous to the user or consumer or to his property is subject to liability for physical harm thereby caused to the ultimate user or consumer, or to his property, if (a) the seller is engaged in the business of selling such a product, and (b) it is expected to and does reach the user or consumer without substantial change in the condition in which it is sold.¹³³

This section can impose strict liability on a defendant manufacturer for property damage or personal injury caused by Y2K non-compliant software; the defendant is liable regardless of whether the plaintiff acted in a reasonable manner, or even a hyper-cautious manner, in preparing or selling the software.¹³⁴ No Y2K suit filed to date alleges strict products liability, since none of the actions already filed claim personal injury or property damage. However, as the frequency of Y2K failures

¹³¹ This seems especially true in the Y2K context, since Y2K fraud claims are based on advertising or packaging materials. "Traditional" fraudulent representations are made during the course of negotiations prior to sale; manufacturers of computer software are generally not parties to those negotiations. *See, e.g.,* Guernsey Petroleum Corp. v. Data General Corp., 359 S.E.2d 920, 924 (Ga. Ct. App. 1987) (holding that the manufacturer, Data General Corp. did not commit fraud by insisting that it would stand behind its product if the customer awarded a supplier contract to a particular independent supplier, since the customer was not justified in relying on such a third party statement).

¹³² For a discussion of "puffery," *see supra* note 40 and accompanying text.

¹³³ RESTATEMENT (SECOND) OF TORTS § 402A (1977).

¹³⁴ *See* RESTATEMENT (SECOND) OF TORTS § 402A(2).

increase, these types of injuries will inevitably occur and plaintiffs will, therefore, be more likely to assert products liability claims.

45. Products liability claims fall into three broad categories; (i) design claims; (ii) manufacture claims; and (iii) warning claims.¹³⁵ First, a *design claim* is an assertion that the manufacturer's product design results in an unreasonably dangerous condition for the product's intended use.¹³⁶ Second, a *manufacture claim* is not an assertion that the design of the product is improper, but rather that the use of a specific product purchased by the plaintiff - in the Y2K situation, the specific copy of the software licensed to the plaintiff - in the manner in which the manufacturer intended, poses a danger, because of a manufacturing defect.¹³⁷ Third, a *warning claim* is an assertion that a product was unsafe, despite the defendant's actual warning, because the warning did not adequately convey to users the risks inherent in product's use.¹³⁸

46. It is unlikely that a specific programming error would cause one particular copy of software to have a Y2K problem or be Y2K non-compliant. Instead, a *design problem* in the underlying source code probably caused the Y2K problem. Thus, plaintiffs are unlikely assert *manufacture claims* in Y2K cases, and, therefore, this paper does not address the available defenses to such a claim. To succeed on either *design* or *warning claims*, the plaintiff must show that the product is "unreasonably dangerous" to the consumer.¹³⁹ A defendant might defend against such claims by arguing that a Y2K problem does not render its software "unreasonably dangerous."¹⁴⁰ Further, many of the same defenses are available for design claims and warning claims as for negligent design and negligent warning claims. A determination as to whether a product is "unreasonably dangerous" involves a determination as to what constitutes a "reasonably dangerous" product; because this analysis involves the objective "reasonableness" determination, courts will look to many of the factors that constitute defenses to negligence-type claims.

¹³⁵ See generally SHERMAN, *supra* note 122, § 1.01-1.22.

¹³⁶ See *id.* § 1.15.

¹³⁷ See *id.* § 1.04.

¹³⁸ Alternatively, a warning claim can also arise if the manufacturer fails to give any warning whatsoever. See *id.* § 1.10.

¹³⁹ RESTATEMENT (SECOND) OF TORTS § 402A.

¹⁴⁰ The likelihood of success of such a defense would seem to turn on the nature of the software involved; it is more likely that a Y2K failure in software intended for use in complex or dangerous machinery would "unreasonably dangerous" than the consumer's home accounting software.

IV. GENERAL DEFENSES

47. Although defendants often choose defenses depending on whether the plaintiff bases their cause of action in contract or in tort, a few important defenses are available under either theory of recovery.

A. Statute of Limitations

48. One of the most common defenses that defendant manufacturers can assert, and have asserted, in claims for Y2K non-compliant software is the running of a statute of limitations.¹⁴¹ Under the U.C.C., “an action for breach of any contract for sale must be commenced within four years after the cause of action has accrued.”¹⁴² This limitations period includes claims for breach of warranty as well.¹⁴³ Similarly, tort claims also have a short life-span; the plaintiff must typically bring them within a two or three year period.¹⁴⁴ Defendants sued over software that was manufactured and sold well in the past, therefore, have a considerably strong statute of limitations defense to both contract and tort based claims.

49. However, before invoking a statute of limitations defense, the defendant must address two issues. First, U.C.C. Section 2-725(1) states that a cause of action must be brought within four years of “accrual”; however, it is unclear when such a cause of action does in fact accrue.¹⁴⁵ Section 2-725(2) does shed some light on the issue, stating:

a cause of action accrues when the breach occurs, *regardless of the aggrieved party's lack of knowledge of the breach*. A breach of warranty occurs *when tender of delivery is made*, except that where a warranty explicitly extends to future performance of the goods and discovery of

¹⁴¹ See U.C.C. § 2-725(1) (1995).

¹⁴² *Id.*

¹⁴³ See *Tourist Village Motel, Inc. v. Massachusetts Eng'g Co.*, 801 F. Supp. 903, 906 (D.N.H. 1992); *Larsen v. Pacesetter Sys., Inc.*, 837 P.2d 1273, 1280 (Haw. 1992).

¹⁴⁴ See, e.g., COLO. REV. STAT. § 13-80-102(1)(a) (1987) (2 year limitations period); CONN. GEN. STAT. § 52-926 (1997) (3 year limitations period); KAN. STAT. ANN. § 60-513(a)(4) (1996) (2 year limitations period); MASS. GEN. LAWS ch. 260 § 2A (1992) (3 year limitations period). Note, however, that some states segregate different types of tort claims; for instance, New York has a six year limitations period on fraud and negligence claims, and a three year limitations period for other tort claims. See N.Y. C.P.L.R. §§ 213(6), 213(8), 214(4), 214(5) (Consol. 1999).

¹⁴⁵ U.C.C. § 2-725(1) (1995).

the breach must await the time of such performance the cause of action accrues when the breach is or should have been discovered.¹⁴⁶

Thus, a defendant can argue that any claim for breach of warranty accrues immediately upon tender, and the statute of limitations bars any claims brought after four years from the date of tender. A plaintiff will likely argue that the warranty “extends to future performance,” especially in the case of packaging or advertising materials that the plaintiff alleges to have created an express warranty that the software is Y2K compliant.¹⁴⁷ For tort claims, the statute of limitations begins to run when the plaintiff knows, or reasonably should have known, of his cause of action.¹⁴⁸ Again, a defendant will argue that the plaintiff should reasonably have known of his cause of action shortly after acquiring the software, or at the very latest, the first time a user entered a Year 2000 date.

50. Second, section 2-725(4) of the U.C.C. makes it clear that the statute of limitations can be tolled or suspended in certain circumstances.¹⁴⁹ For both contract and tort based claims, the plaintiff may toll statute of limitations if she can show that the defendant fraudulently concealed the Y2K problem in the product software.¹⁵⁰

B. Assumption of Risk

51. *Assumption of risk* is another possible defense for defendants to both contract and tort based causes. A plaintiff assumes the risk when he knows of facts constituting a dangerous condition, “he knows the condition is dangerous, . . . he appreciates the nature or extent of the danger, and . . . he voluntarily exposes himself to the danger.”¹⁵¹ In the Y2K context, assumption of risk may be a defense for a manufacturer if it puts consumers on notice that its software is Y2K non-

¹⁴⁶ U.C.C. § 2-725(2) (first emphasis added) (second emphasis added).

¹⁴⁷ A defendant can likely counter that the breach should have been discovered reasonably quickly, but certainly in no instances later than when the plaintiff first enters a Year 2000 date into the software. *See, e.g.*, *Catrone v. Thoroughbred Racing Ass'ns.*, 929 F.2d 881 (1st Cir. 1991) (a cause of action accrues when an event likely to put the plaintiff on notice first happens).

¹⁴⁸ *See, e.g.*, *Kent v. Dupree*, 13 Mass. App. Ct. 44, 47 (1982); *Wyatt v. A-Best Co.*, 910 S.W.2d 851, 854 (Tenn. 1995). A plaintiff will likely argue that she could only have known of her cause of action the first time she was injured, for example, the first time the software failed.

¹⁴⁹ U.C.C. § 2-725(4) (“This section does not alter the law on tolling of the statute of limitations . . .”).

¹⁵⁰ *See, e.g.*, *Henandez v. Garcetti*, 68 Cal. App. 4th 675, 680-81 (1998); *LeBrun v. Conner*, 702 N.E.2d 754, 758 (Ind. Ct. App. 1998) (stating that the statute of limitations is tolled when a continuing wrong is present); *Sattler v. Bailey*, 400 S.E.2d 220, 227-28 (W. Va. 1990) (referring to state statute that tolls statute of limitations when defendant fraudulently concealed the cause of action).

¹⁵¹ BLACK'S LAW DICTIONARY 123 (6th ed. 1990) (defining “assumption of risk”).

compliant, yet certain consumers continue to use the software.¹⁵² Furthermore, if a defendant has manufactured custom made software for a plaintiff, who likely will have a "testing" period before full implementation of the software occurs, the defendant may be able to assert that the plaintiff has assumed the risk by accepting the software. The likelihood of success using such a claim is unknown, especially since defendants in pending Y2K cases have not yet asserted this claim.

V. CONCLUSION

52. As the Year 2000 approaches, unless the appropriate actions are taken and the necessary costs expended, more and more computer software is likely to fail; only once January 1, 2000 passes will we know the true extent of the Y2K problem. It is likely that a growing number of Y2K lawsuits will be filed, most of which will be filed only after the turn of the century. Fortunately for defendants, a number of good U.C.C. and tort law based defenses to Y2K claims exist. How courts treat such defenses in light of the new ways defendants are applying them in Y2K cases, however, remains to be seen.

¹⁵² Recall that under the Year 2000 Information and Readiness Disclosure Act, posting on a website that a product is not Y2K compliant constitutes sufficient notice. *See supra* note 120.