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A PRACTITIONER'S INTRODUCTION TO THE TECHNOLOGICAL AND LEGAL IMPLICATIONS OF THE YEAR 2000 PROBLEM

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I. Introduction

On October 8, 1999, the SETON HALL LEGISLATIVE BUREAU and the SETON HALL INTELLECTUAL PROPERTY LAW ASSOCIATION hosted a seminar entitled *A Practitioner's Introduction to the Technological and Legal Implications of the Year 2000 Problem*. E. Judson Jennings brought his insight into the subject technology of the Year 2000 problem, while Richard L. Ravin shared his experience and knowledge as a daily practitioner in the field of high technology law. What appears on the following pages is a reproduction of their comments supplemented with footnotes by the SETON HALL LEGISLATIVE BUREAU.

II. Speakers' Biographies

E. Judson Jennings, Esq.
Professor of Law, Seton Hall University School of Law

Professor Jennings teaches Internet Law, Evidence, Civil Procedure, and Remedies at the Seton Hall University School of Law. He is also the technical consultant on Y2K projects for Integrated Computer Management.

Professor Jennings was also a prominent litigator for several legal services programs, including Mobilization For Youth Legal Services, the Columbia University Welfare Law Program, and Legal Services for the Elderly Poor, and a clinical instructor at New York University Law School. He has also written monographs on New Jersey Evidence, New Jersey Civil Practice, New York Civil Practice, New Jersey Municipal Law, and Computer Law. He came to Seton Hall in 1976.

Professor Jennings received his A.B. from Princeton University and his J.D. from Georgetown University.

Richard L. Ravin, Esq.
Co-Chair of the New York State Bar Internet Law Committee

Mr. Ravin is a partner in the Roseland, N.J. firm Ravin, Sarasohn, Cook, Baumgarten, Fisch and Rosen. He is the head of the firm's intellectual property and computer law department, and represents clients in diverse matters involving high technology.

Mr. Ravin is the co-chair of the New York State Bar Association Internet Law Committee. He is also a Master for the John J. Gibbons Intellectual Property Law Inn of Court. Mr. Ravin is widely published in the field of intellectual property and computer law, and is a prominent lecturer in the related fields of intellectual property and technology law.

Mr. Ravin received his B.S. from Syracuse University's Newhouse School of Public Communications and his J.D. from Nova Southeastern University School of Law.

III. Remarks of E. Judson Jennings, Esq.

First, let me talk a little bit about the technological origins of the Y2K problems. All of us have heard about it, maybe too much about it. There is no question that it is a substantial problem. Millions of dollars have already been spent on it. There is also no question that there are still some serious problems out there - some in the United States and many in other parts of the world. One of the things that will undoubtedly happen after the first of the year is that there will be some failures. How serious they will be and how extensive they will be is, at this point, unknown.

There will also be, it is certain, a substantial number of disputes about liability for problems caused by the Y2K bug; and, whether the failures are large or small, attorneys in all areas of practice will undoubtedly be called upon over the next year or maybe even longer to deal with problems that have some relationship to Y2K. Some attorneys will specialize in the area or will devote a large portion of their practice to it. Other attorneys will be called upon to consult with regard to problems in smaller or more peripheral ways.

It is important, as with any area of law where we become specialized, to have some understanding of what is going on underneath the hood. The Y2K problem, from a technical standpoint is a fairly simple one. It is because it is so pervasive and has so many manifestations that it causes so many difficulties. So, let us spend a couple of minutes looking at the nuts and bolts side of the problem and then devote the bulk of the program to dealing with the substantial number of legal issues that have begun to emerge with regard to this difficulty.

The genesis of the so-called Y2K bug or Year 2000 problem really could not be simpler: back when computers were new (relatively speaking), they were far less powerful and had far fewer resources than they have today. We often forget the scale of magnitude of progress in advancing the capability of computers to perform useful tasks. Roughly speaking, in every year since 1960, computers have become twice as powerful and half as expensive as they were the year before. That does not change the fact that each year, when we want to buy a personal computer for our own use, it is going to cost us a couple thousand dollars; but what we are getting

for that couple thousand dollars has changed tremendously in a relatively short period of time.

Back in the early 1970s, when personal computers were first being developed on a widespread basis, the amount of memory and other computer resources were very cramped. As a result, programmers were almost as much concerned with conserving computer resources as they were with actually developing code. So they developed a bunch of programming tricks to allow them to conserve the scarce resources of the computer. One of the most straightforward of these tricks, and yet one of the most damaging in the long run, was to truncate the computer fields which held dates for processing purposes. A human being knew that there was an equivalency between 1/1/1975 and 1/1/75, and computer programmers knew that 75 took up less memory than 1975 did. What could be easier than to use the shorthand form and to save a couple of digits? And that is exactly what was done.

Now, the problem is that sometime between 1975, when this was a sensible thing to do, and 1999, when it seems like a hideous error, there was an opportunity to make a change. As computer resources became more efficient and less expensive, it started to make sense to say "well let's go back and visit that motion on a shortcut;" and now the question for the courts will be at what point in time should that have occurred? That is, when should computer programmers have begun to make up for this earlier deficiency?

There are some respected authorities that contend that this is not the way to look at the problem at all. They say that computer resources were so scarce that it was ultimately worth all of the trouble that we are now having, even taking into account all of the costs we are now encountering. This is one of the many areas of contention that litigation will have to resolve.

Our next questions are: Where does this problem live? Where does it come from? Where does it become manifest? And what do we look for in systems that may have the Y2K bug?

Essentially, the bug exists in four principal areas. The first is in the hardware, down at the chip level. The second is the operating system, the very basic software that gets the computer up and running before you try to do any practical work. The third is the application or the data. That is the stuff that most of us are familiar with, whether we are doing simple word processing or managing a complex database, we are many times dealing with dates and

sequences, and which document comes earlier and which comes later. All of those things can be critically important for getting a job done accurately and if there are date processing errors in even the application software or in the data that that software uses, we could be in for big problems. Finally, and this one is a little bit more sophisticated, it is found in the device of date windowing – that is, how we interpret two-digit years at the computer programming level. Let us now look at each one of these problems in turn and see how they work.

IBM is often called a major culprit in causing the Y2K problem to be so pervasive, although Microsoft certainly deserves some of the credit. Way back in the 1970s when I was talking about this problem beginning to arise, IBM chose a particular computer chip to use in the first series of personal computers they brought to the market. The computers, the IBM XT series of computers, used an 8086 chip made by Intel, which by the way at that time was a very small company, although we have certainly all heard of them now. That was the beginning of the so-called Z80 series of chips, which was used in the many personal computer lines. It was not, I should add, used in all of them, not Apples, Commodores, Ataris, for example. Thus, although the Z80 dominated the market, alternative designs that had equivalent performance ratings were not only feasible but were actually being made at that time.

We should also note here that the Motorola chipset I have been talking about as the building block for the Z80 was also used in a lot of other devices as well as in personal computers. I am sure you have heard the term "embedded system" and you will hear it some more tonight. That term refers to the many devices that we do not consider computers, but which in fact have the same sort of basic chip built in to them and that, therefore, may also be susceptible to this Y2K problem. That is the source of speculation about widespread failures in medical devices, elevators, security systems, copiers, and so on. This aspect of the Y2K problem is greatly complicated by the difficulty of testing embedded systems for the Y2K bug, or for anything else for that matter.

Returning to our main thread, the original PC CPU chips had no real time clock: they could count, but they did not know what time it was. Every time you started the computer, you had to enter the date manually. If you did not, the computer used January 1, 1980. In the early 1980s, a decision was made to refine the Z80

chip, and one of the improvements in the 286 and 386 Z80s was a built-in real-time clock, called an RTC. As the name suggests, the RTC would run even though the computer was off, because it was hooked up to a battery so it did not need separate power. Thus it would not have to be set manually each time the computer was started. Some "oldsters" may remember the havoc that threatened when all those little batteries started to wear out.

Of course, the RTC, again to save resources, was also programmed to have a two-digit year, e.g. 10/10/85. A crucial decision was made at this time, one that we are still recovering from. That decision was that, for the most part, advances in operating systems and advances in computer chips should be "backward compatible." That is, we should improve the technology while still allowing older applications to run on the new chip. While at this point a decision could have been made to simply abandon the technology and replace it with something completely new, there was a business judgment that there would be too much resistance from consumers who would have a perception of planned obsolescence. So the flaws were retained along with the advances in the name of preserving backward compatibility.

The BIOS (basic input/output operating system) on the Z80 computer chip was actually upgraded back around 1993 to deal with this problem of needing a four-digit year field instead of a two-digit year field before the end of 1999. At that time, some of the RTCs, were also upgraded. Now, you would think that seven or eight years would be plenty of time to make the transition. However, as it turned out, due to fierce price competition that drove even large PC manufacturers to use chips from the cheapest possible source, the transition to the bug-free chips was much slower than initially thought. In fact, by 1998 and 1999 we wound up with three different levels of computer chips in these AT-type PCs, which, incidentally, power not only desktop workstations, but also many of the powerful servers that are used to store data and manage such resources as printers, FAX machines, Internet connections, etc. The earliest chips are so flawed by their two digit year design that the basic input system of the computer can not even recognize a four digit year, because they have no place to store the century digits. Those computers are essentially obsolete as of the end of 1999. There are not too many of them around anymore in commercial and university environments, but there are still millions being used,

particularly in the Eastern Bloc countries and in other developing areas of the world.

At the opposite extreme is a computer which is equipped with a BIOS/RTC that has solved the problem entirely: the real time clock will automatically roll over on January 1, 2000, just like it does on any other date. If it is lucky, this computer also recognizes the Year 2000 as a leap year, which is sort of a little side problem and has caused some big issues for people who forgot about that. Although we have a leap year every four years, there is an exception to this rule every 100 years, and there is an exception to the exception every 400 years.

Finally, we have an intermediate class of computers that can recognize a four-digit year if it is entered, but do not have real time clocks that will automatically roll over to the next century. That is where some of the real uncertainty is right now, because you can do one of two things if you run an enterprise using such computers or if you have one at home that fails in this little area. You can treat such a PC as non-compliant and get rid of it or upgrade it; or you can say, "well, there is nothing wrong with setting the clock manually one time if it is going to hold the date thereafter." That is where some of the real questions come into play, because power failures, reboots, and other abnormal conditions may cause that computer to lose the correct date. How many of these "in between" computers will be retained after the first of the year? If a lot of them are retained, what effect will they have on long term operations?

The next Y2K concern is at the operating system level. Operating systems are not things that we normally have to be concerned with unless something goes wrong, although we have all heard the terms bandied about and sometimes we even get involved a little bit with operating systems ourselves. Popular operating systems include: DOS - Disk Operating System, the one that began the PC revolution; Windows - you are all familiar with that, perhaps too familiar; UNIX, which is a venerable, popular, very robust programming operating system, currently manifested in LINUX; and finally, Netware. All of these systems do the same thing, that is to say, they get the computer up and running in a basic, fundamental kind of way. All of them have a clock function. Many operating systems are the source from which applications get their information about what time and date it is. So, if the operating system clock routine is not correctly configured, then every

application, including those that are otherwise Y2K compliant, may be candidates for failure when they are run in that operating system's environment.

The flaw in the DOS and Windows operating system is that they have authorized the use of two digit years and that authorization continues, even up until the present. The simple fix at the operating system level, and this goes particularly for the home or the small business user, is to make darn sure that the operating system defaults require four digit years across the board. Now this can be a little bit misleading because the operating system has short date formats and long date formats and you would think that short date format must be a two digit year. Not true. Both short and long date formats can be set for four digit years and should be. The difference between short and long date is not the number of digits in the year but whether you have ten for the month or October and you want to make sure that both are configured for four digit years in order to avoid errors.

The third and major source of the problem now is in dealing with the applications and the data that we encounter every day. Data has been created on computers for over fifty years now and an awful lot of that data has already been coded in two-digit format and somebody has to deal with that problem. Every program has some sort of date processing routine built into it and some of those programs have been mass produced by operations like Microsoft but many others have been written for individual situations in languages like COBOL and BASIC and so forth. Every single bit of that code, every single bit of that data, in principle, should be explored in order to see whether it has two-digit years in it, and could therefore be a potential source of error. It is a tremendously expensive thing to do. Many of the large enterprises in the banking, financial, and insurance communities and the securities industry have had no choice but to spend millions of dollars having programmers go through code in order to uncover potential sources for error and to correct them. That is both a technological concern and a legal obligation that is being posed, at least in this country on those sorts of businesses. Other smaller businesses have their choice and it will be interesting to see what the outcome of the exercise of that choice will be after the first of the year. The bottom line is still the same and you can see it is not really a very complicated technical

the year.

The last problem, the problem of date windowing does get a little bit involved, although it certainly is not much more complicated than what we have been looking at so far. No matter how much of the other work you do, you are still going to have situations now and after the first of the year when a problem encounters a two-digit year. The question is, what should a programmer do in writing code to plan for that encounter?

The programmer essentially has two choices. One is to produce a critical stop in the program. That is to say, to have the program halt and wait for user input to clarify the ambiguity. Do you mean 1909 or do you mean 2009 and a human being has to make that call. Obviously, that is the most effective way to correct errors or to track them because the human being is far more intelligent than a computer. But, for automated processes it can be an operational disaster if the program produces critical halts every single time it encounters one of these situations.

An alternative that has been developed is to have the program itself make the interpretation using a technique that is called windowing. That is to say you simply write code that says to the program "if you see a value that is equal to or greater than a certain amount, then you treat it as being in the 21st century; if it is less than that amount then you treat it as being in the 20th century." The computer will then automatically convert the two-digit year to the four-digit year. The problem is where do you "kick the pivot." They call the pivot the year where we make the decision to assign it to the earlier or to the later century. There is no government standard, there is no industry standard, nor is there a general consensus for what to use for the pivot. The programmer again has a choice. He can ask the user to specify the pivot year in the particular application or he can, which is more frequently done, arbitrarily assign a pivot. Now you have the interesting situation where two programs that individually are absolutely compliant may produce errors if they are working together and are using different pivot years. So, this notion of what they call cascading error in the Y2K area is a pretty substantial one, indeed.

The responses to dealing with the Y2K problems are straightforward, but expensive and time consuming. At the hardware level, it is a matter of determining whether the BIOS has the compliance in issues that I identified by performing tests which

are relatively simple and doing the necessary upgrades which may include replacement of the computer. At the software level, the program becomes more involved because, as I am sure you are aware, at least in a general way, we do not have just one version of programs anymore. They do not stick around for four or five years until we get used to them. It seems like every time we turn around, if there is not a new version, there is a new release or a sub-release. There may be patches or service packs that are supposed to be applied and there may be special fixes or patches to deal with the Y2K problem. Somebody's got to keep track of all that when you have a computer that is running a bunch of different programs. This is where small businesses are in for a real nightmare if they do not have standardized desktops where all computers are running the same versions of the programs. If they do not have full-time administrators who are responsible to see that the latest fixes are applied before the end of the year, they are going to be in for a fairly chaotic situation and the small business user may be the most vulnerable member of the technology community.

If you are looking at dealing with your own system, there is a lot of help available on the Internet. You will hear more later on tonight about the Year 2000 Information and Readiness Disclosure Act, which was passed a little under a year ago and which has had one effect. That is to encourage members of the intellectual property and technology community to put a lot of information up on the Web about Y2K problems and to give lots of advice about how to deal with it. Not all of it is helpful, and a lot of it changes, but there are resources to allow for planning, even now, before the end of the year occurs.

Now, one of the big questions in terms of liability will be whether it was technically feasible to design a system that did not have this fault, or whether we could have avoided this with a little bit better planning. That is something that courts and juries will have to decide. They do have a tendency, based on past practice in other areas, to judge using the standards of today rather than the standards of the era in which the decisions were made. However, one of the short answers is, Apple does not have this problem because they thought about using a four-digit year from the get go. It is certainly not an area where you can say that it was impossible, and it is even going to be hard to argue that it was economically unfeasible to undertake an alternative design.

So, we can see that technology is fairly simple in terms of where the problem came from, but resolving it now, particularly in the last few months of 1999 is a devilishly difficult thing to do. The big enterprises are probably going to make it. The embedded systems are going to be a major question mark. Small businesses, even in this country, I think are vulnerable. In addition there are probably many countries in other parts of the world that will experience substantial disruptions and in this global economy that may have some repercussions for us as well.

That is the technology side of it. Next you will hear about the legal environment which is already robust and will explode, I think, in a matter of a few months. Thank you.

IV. Remarks of Richard L. Ravin, Esq.

I was asked to speak primarily about the Year 2000 problem legislation that is pending and of course, that really comes down to two major pieces of legislation. However, in order for that to have meaning, I thought it would be a good idea to talk a little bit about the legal environment with respect to the Year 2000 problem. You have already heard the Y2K background from the technical end. I am going to talk a little bit about becoming Y2K compliant; what a company should do, should be doing or should have done, and the theories of litigation, because you can not talk about a statute in a vacuum, it will have no meaning.

The first federal legislation was the Year 2000 Information and Readiness Disclosure Act,[1] otherwise know as the IRDA. The second one to come along was the Y2K Act.[2] Now, in between those two, I am going to talk a little bit about negligent misrepresentation and fraudulent inducement, which are all components of the Year 2000 Information and Readiness Disclosure Act. I will also discuss the Economic Loss Rule and this notion of

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1 Year 2000 Information and Readiness Disclosure Act, Pub. L. No. 105-271 (1998) (amending 15 U.S.C. § 1 (1998)).

2 Y2K Act, Pub. L. No. 106-37, 15 U.S.C. §§ 6601-17 (1999).

loss of data versus physical damage because many principles of law require physical damage for you to have recovery. Finally, I will address trading partner disputes, the Uniform Commercial Code, and, from a legislative standpoint, what statutes are going to be implicated when it comes time for litigation.

Now, in order to become Y2K compliant, first the management of the corporation has to realize that it is a serious problem. Then you need to take an evaluation of the company's Year 2000 problems; take an inventory from an internal standpoint and then from an external standpoint. From an internal standpoint, you have to look at the hardware, the software and the firm ware, otherwise known as embedded microprocessors, and take an inventory of the legal documentation, particularly the licensing contracts and the vendor promotional literature. Did the vendor say that this product was going to take you through the 21st century and beyond, making representations that it would be compliant? You have to determine the mission critical versus the non-mission critical systems of your company's operations so you know where to focus your attention.

Again, the reason I am going through this is because in the Y2K Act, there is a requirement for the company to mitigate its damages. In order to mitigate damages, you have to have taken reasonable steps toward solving the problem that you knew about, and you can not know about the problem unless you undertake certain due diligence. Ordinarily this should have been done by now, so you are really going to look at this issue in retrospect. Was this done and can the mitigation of damages requirement be satisfied?

After listing the critical versus non-critical suppliers, there should have been a dialogue with the trading partners, suppliers, and distributors to determine whether they are Y2K compliant. They should have created a Y2K response team or department so that any inquiries that come in to the business asking whether the company is Y2K compliant is answered with a uniform statement. Risk management is a very important component, especially insurance coverage. Insurance issues are a whole area that I do not want to get too involved with now, but it is going to be a big area of Y2K litigation by itself. For example, it is probable that first-party insurance company disputes will have a major presence.[3] Officer

[3] First party meaning the insured is suing his own insurance company.

and directors' insurance will also be a very big issue because, in order for officers and directors to enjoy the business judgment immunity rule, they had to have taken certain steps inquiring about the Year 2000 problem in the first place. Sticking your head in the sand does not entitle a director or officer to the business judgment rule defense.

Thus, Y2K has direct implications with respect to the insurance industry. The basic problem is that, if you need Y2K insurance, you will not qualify for it; however, if you do not need Y2K insurance, they will be happy to write it for you. So, if you have a Y2K problem and you disclose it, you are probably not going to get insurance to cover the problem, if there is even insurance to cover it. If you do not disclose the problem, then you have breached the contract and perhaps committed fraud. So either way you are going to be without insurance. So, that is why it is very important that these steps were taken.

Briefly, let me explain the three insurance doctrines. The first is the no loss rule, which is similar to what I was talking about before. Insurance companies will not pay a loss if it is known to have occurred or will occur at the time of the application. Next, the fortuity doctrine simply says that insurance companies insure risk, not certainty. The Year 2000 is a certainty. Therefore, anything that occurs as a result of it will not be insurable, or at least that is what the insurance industry will say. However, what is really uncertain are the consequences of the Year 2000 problem. What will happen?

The final insurance doctrine is the sue and labor doctrine, which goes back to maritime and admiralty law. Essentially this doctrine says that if a storm is coming and a ship owner holds his boat out of the water to prevent damage, that ship owner is entitled to recover the cost and expense of saving or preventing a catastrophe from happening, and the insurance company is liable to pay that expense. That makes sense. The insurance company saved a lot of money because if the boat was not taken out of the water, the insurance company would be required to pay the claim for damages because there was no duty on the part of the boat owner to take it out of the water. The same issue exists with the Y2K problem. We are starting to see sue and labor suits being brought against the insurance carriers for remediation work especially with the larger companies. These companies are spending twenty, thirty, fifty, and

even hundreds of millions of dollars to remediate millions of lines of computer code to replace the two-digit years with four-digit years.

Let me continue about making the appropriate disclosures to insurance companies. Interestingly, about a year ago, loan documents from banks started showing up with these representations of warranties that a borrower was making. So you borrow money and along with all of the other clauses, there is a representation either that the company is Y2K compliant or a promise, an obligation that it will be Y2K compliant in the future. The problem is that if the representation becomes a misrepresentation, then the signatory of that document, perhaps the President or an officer of that company, is going to be exposed for a fraud. If it is an obligation instead of a representation of a warranty, usually what happens is the bank has the right to seek assurance that the obligations are being performed and that they can come in and say "show us that you are continuing to become Year 2000 compliant." Then if they think that the customer is not being Year 2000 compliant, they will call the loan; they will call a default. That can have some serious ramifications.

Then, of course, you have to upgrade the information technology systems once you establish the level of compliance or non-compliance. It is important to document these due diligence efforts. You have to retain audits, including your clients' plans and contingency plans. If you do the best job you can with the Year 2000 compliance, but the clock turns 12:00 on the last night of the last century and there is a problem, what is going to be your contingency plan? Your phones do not work and your computer system does not work. Are you going to have people in? Are you going to have hard copies of ledgers, general ledgers and accounts receivable? What is the company going to do? Are you going to have stockpiling of supplies, etc.? You must have a contingency plan. Also, you need to have sent out letters, and this is again documenting your due diligence. You must have contacted your vendors to find out what their compliance status was because it is not just your compliance, but the compliance of the supply chain, that allows you to operate.

When thinking about the issue of the compliance of a company's supply chain, keep in mind that in the 1980s, the automobile manufacturing industries spent millions and millions of dollars developing what is called "just in time" inventory control

systems. They traded-off millions of square feet of warehouse space where all the engine parts and car parts, usually a two to three month supply, were being stored. Instead of that, to save money, they went to "just in time" inventory control so that now they do not have all this warehousing, but who warehouses the parts? The manufacturer? The suppliers? They do not want to warehouse it either, so what they do is make the parts "just in time" and they ship them "just in time." Well it is going to be very interesting to see how all of this plays out when the clock rolls over.

Now, I want to quickly go through the types of Y2K problem litigation that we can expect and that has already occurred. There are approximately 70 suits concerning the Year 2000 problem.[4] There are suits against software vendors, hardware vendors, and system integrators. There are also suits against all types of service providers from cleaning facilities to providers of medical care and hospitals. By the way, hospitals and the healthcare industry generally are considered to be among the least prepared for the Year 2000, especially the intensive care units.

Computer consultants who recommend non-compliant products are also at risk. Other professionals at risk include Y2K remediators (the people who go in and say, "we are going to save your system"), accountants, attorneys, officers and directors, and as I talked about a little bit before, trading partners, and by that I just mean one business dealing with another business. So, there is business against business exposure. In addition, borrowers and landlords are at risk if their buildings are not compliant. For example, at Seton Hall Law School, if the lights go out, you may walk outside and it might not be safe because there is no lighting. What if there is a theft or some kind of other injury? You could fall because the lighting is not proper, you could get locked in the building, the security alarm system may not work, it may not detect a fire. All these could relate to Year 2000 problems and that is why landlords are also at risk.

Let's now talk about theories of liability. Most of the software, that is 99% of the software that you buy, comes with disclaimers and limitations on damages. That is, the software industry has basically limited its liability to the purchase price or to an amount equal to repair or replacement. Furthermore, when you buy that product,

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[4] This figure is accurate as of October 8, 1999.

most of the time you are stuck with claims founded on contract theory. So, it is very difficult to bring Year 2000 litigation claims against software vendors and hardware vendors for that reason. In addition, they disclaim all warranties implied or otherwise, to the extent that it is legal to do so in that particular state. Basically, the product is what it is. If you turn it on and it works, that's it. There is no time period, it is not like buying a car where you get a three year warranty.

However, if there is an injury, physical damage or a personal injury, then all of those disclaimers and warranties go out the window because you are then dealing with products liability law. Just like if you were injured in a car, it does not matter what the warranty says. If you are injured in a car or if a bystander or pedestrian is injured by a car, you sue the manufacturer and you sue under products liability, negligence, fraud, intentional misrepresentation, negligent representation and fraud.

Now, there are some custom-made and big-ticket software where a purchaser negotiates with the software vendor. In these situations, the purchaser has some leverage. If you are buying a $25,000 to $30,000 piece of software or a $100,000 piece of software, there is usually a lot of customization and, in that case, these warranty and damages issues become very much negotiated. In such cases, you have to look at the contract with a high degree of scrutiny. However, for off-the-shelf products, you are going to have a hard time and the brief history has shown us that there has been very little, if any, success at collecting damages "outside the contract." There have been a number of dismissals of lawsuits involving such contract provisions.

Statutory Consumer Fraud is turning out to be the better route. This is because the Consumer Fraud Statute[5] says that if you mass produce or mass market an item and you have a material misrepresentation or a material omission, you will be liable for a breach of that statement, irrespective of any disclaimers or warranties that you have.[6] This means that there does not have to be reliance.

Of course there is also the Uniform Commercial Code and the non-delivery of goods. After all, the company making the parts is

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[5] *See* N.J. STAT. ANN. §§ 56:8-1 through 56:8-91.

[6] *See id.* § 56:8-2.

not shipping them because they also have supply problems and can not get their parts. Thus, products can not go downstream causing problems that will be the subject of U.C.C. disputes. I will address the U.C.C. a little bit later on tonight.

Just two seconds on the Small Business Year 2000 Readiness Act.[7] Basically, it allows the government to guarantee loans that banks make to small businesses, because after all, what a bank is most concerned about is getting repaid.[8] So, if the government is going to guarantee eighty percent of the loan or a substantial part of the loan, it is going to be easier for the bank to make the loan.

There is also the Y2K Act, and while that does not create new claims, or at least it is not supposed to create any new claims,[9] it does create or certainly enhances the defense of mitigation of damages.[10] It eradicates joint and several liability in favor of proportionate liability,[11] and it has something called bystander liability.[12] Then there is the Year 2000 Information and Readiness Disclosure Act and that, of course, creates defenses to negligent misrepresentation and defamation.[13] It does more than that but to sum it up that is what it does.

The Year 2000 Information and Readiness Disclosure Act provides protection for certain types of statements concerning the Y2K compliance of products and the Y2K compliance of businesses.[14] The purpose was to encourage businesses to talk about the problem.[15] The thinking in Congress was, "look, nobody is

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7 *See* Small Business Year 2000 Readiness Act, Pub. L. No. 106-8 (1999) (amending 15 U.S.C. § 636(a)(27) (1999)).

8 *See id.* § 3.

9 *See* 15 U.S.C. § 6603(b).

10 *See id.* § 6608. There is an exception to this rule in cases involving "intentional fraud." *See id.* § 6608(c).

11 *See id.* § 6605.

12 *See id.* § 6612(b).

13 *See* Pub. L. No. 105-271 §§ 4(b), 4(c).

14 *See* Pub. L. No. 105-271 § 4.

15 *See id.* § 2(b). The Act's purpose is:

> (1) to promote the free disclosure and exchange of information related to year 2000 readiness; (2) to assist consumers, small businesses, and local governments in effectively and rapidly responding to year 2000 problems; and (3) to lessen burdens on interstate commerce by establishing certain uniform legal principles in connection with the disclosure and exchange of information related to year 2000 readiness.

going to say anything if they are going to be liable because there is no benefit, there is only a risk. If you say your product is not compliant, the stock price is going to fall, the directors and officers are going to get sued and no one is going to buy the product, so what's the benefit?" Well, of course the benefit is that if not disclosing that information subjects you to liability, then you ought to disclose it. And to encourage businesses to disclose it to other businesses and to the government, the statute gives immunity or defenses for good-faith statements that are made.[16]

If the statement is made in good faith, even though it was made negligently and carelessly, you are not going to have liability.[17] This provision is based on a concept in tort law called negligent misrepresentation, which is a funny animal. It is not quite negligence. So, this Act calls for safe harbors from liability and from defamation[18] for negligent misrepresentation.[19] What it does not do is provide immunity from suit for a defective product in tort or contract.[20] It does not provide for limitation of damages to perform and it does not give protection for statements made in bad faith such as intentional false statements.[21] And it does not affect disputes concerning the sale of consumer products.[22] That is excepted out of the Act.

Id.

16 *See id.* § 4.

17 *See id.*

18 *See id.* § 4(c). The Act states that:

> [i]n a covered action arising under any Federal or State law of defamation, trade disparagement, or a similar claim, to the extent such action is based on an allegedly false, inaccurate, or misleading year 2000 statement, the maker of that year 2000 statement shall not be liable with respect to that year 2000 statement, unless the claimant establishes by clear and convincing evidence, in addition to all other requisite elements of the applicable action, that the year 2000 statement was made *with knowledge* that the year 2000 statement was false or made with reckless disregard as to its truth or falsity.

Id. (emphasis added).

19 *See id.* § 4(b). A party may only be held liable if they possess "actual knowledge that the year 2000 statement was false, inaccurate, or misleading[.]" *Id.* § 4(b)(2)(A)(i).

20 *See* Pub. L. No. 105-271 § 6(b).

21 *See id.* §§ 4(b), 4(c).

22 *See id.* § 6(b)(2). The Act "does not apply to a year 2000 statement expressly made in a solicitation, including an advertisement or offer to sell, to that consumer by a seller, manufacturer, or provider of a consumer product." *Id.* § 6(b)(2)(A).

It does protect from liability the making of statements concerning a company's own Y2K readiness and the readiness of a manufactured product.[23] Now, there is something called the Y2K Statement and there is something called the Y2K Disclosure. The Y2K Statement is an oral, written or electronic statement concerning Y2K compliance plans or information.[24] The statement does not need to be about the maker's own product or services.[25] I emphasize that because when you talk about disclosure, it does have to be about the statement maker's own product. Just to give you a flavor of the technical definition: a Y2K Statement is an assessment, projection or estimate concerning the Y2K processing capabilities of an entity, product or services, plans objectives, timetables for implementing or verifying Y2K processes.[26] The Y2K Statement receives no protection when it is subject to a SEC action or for federal banking purposes and there is a deadline for the statement.

Now, let's talk about the Y2K Statement versus Disclosure. A Disclosure is: "a written, electronic Y2K Statement."[27] Disclosure is often said to be a subset of a Statement. It must be made on or after

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23 *See id.* § 3(11)(A)(i), 3(11)(A)(iii)

24 *See id.* § 3(11). A Y2K Statement is defined as:

> any communication or other conveyance of information by a party to another or to the public, in any form or medium—(i) concerning an assessment, projection, or estimate concerning year 2000 processing capabilities of an entity, product, service, or set of products and services; (ii) concerning plans, objectives, or timetables for implementing or verifying the year 2000 processing capabilities of an entity, product, service, or set of products and services; (iii) concerning test plans, test dates, test results, or operational problems or solutions related to year 2000 processing by (I) products; or (II) services that incorporate or utilize products; or (iv) reviewing, commenting on, or otherwise directly or indirectly relating to year 2000 processing capabilities.

Id.

25 *See id.*

26 *See* Pub. L. No. 105-271 § 3(11).

27 *See id.* § 3(9). A Disclosure is defined as:

> any written year 2000 statement—(A) clearly identified on its face as a year 2000 readiness disclosure; (B) inscribed on a tangible medium or stored in an electronic or other medium and retrievable in perceivable form; and (C) issued or published by or with the approval of a person or entity with respect to year 2000 processing of that person or entity or of products or services offered by that person or entity.

Id.

October 1998, and be identified as "a Year 2000 Readiness Disclosure;" it has got to have this legend on it. So, if your business is saying we are or are not Y2K compliant and you are responding to an inquiry, you should put this legend on it to get the higher protection of the Disclosure. The Disclosure must be made with the approval of the entity providing the product and service. That simply means that the company must have made it itself or the statement was made by an agent with the company's approval.[28]

A Y2K Statement is admissible in court for any purpose and I am emphasizing this because a Disclosure is not admissible in court.[29] So there is no protection for a Y2K Statement if the Statement would prove an anticipatory breach, repudiation of a contract or warranty, or if the Y2K Statement was made in bad faith.[30] The Y2K Disclosure receives extra protection. It is not even admissible as evidence in court against the maker of that statement for the purpose of proving the truth or accuracy of the statement.[31] This sounds like a hearsay definition but it might not really be the same test. Some of my colleagues have even said that the Y2K Disclosure is not admissible for proving the truth or accuracy of the statement but it is admissible for proving the falsity of the statement. That seems to stretch it a little bit.

Again, a Y2K Disclosure must have a proper labeling wherever it is made. It must specifically state that it is a "Year 2000 Readiness Disclosure," and, I would like to add, "pursuant to the Year 2000 Information and Readiness Disclosure Act."[32] Of course, there is a catchall or a fudge provision, which nobody really knows what is going to be made of it yet. The provision states that the court has discretion in applying evidentiary exclusions.[33]

There are special provisions for Year 2000 remediation companies and how they have to deal with their Disclosures. The interesting thing about this legislation is that, to my knowledge, it

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28 *See id.* § 3(9)(C). There is also another type of statement called a "republication." *See id.* § 3(6). A republication is "any repetition, in whole or in part, of a year 2000 statement originally made by another." *Id.* There are additional protections for statements that satisfy this definition. *See id.* § 4(b)(2)(B).

29 *See id.* § 4(a).

30 *See id.* § 4(a)(1).

31 *See id.* § 4(a).

32 *See* Pub. L. No. 105-271 § 4(a)(2).

33 *See id.* § 4(a)(2).

was the first official act of Congress that addressed the Y2K problem. This was a year ago, when the Web was a little bit newer than it is today, but it provided that companies can satisfy a legal requirement by posting notices on the World Wide Web portion of the Internet.[34] Finally, there is a temporary antitrust exception so that companies like Ford, GM, Chrysler or Mercedes can get together and talk about Y2K issues.[35] They have certain protections from the antitrust laws in this respect.

I want to talk a little bit about negligent misrepresentation and fraudulent inducement. I think that the more I am practicing law, the more I am seeing these types of issues come up. I guess it is because I practice intellectual property and technology law, but in other areas as well, issues involving negligent misrepresentation are becoming more important because we live in an information society. The key element of negligent misrepresentation is the duty to communicate accurate information.[36] The other elements are: a false statement of material facts, the falsity of which defendant should have known, justifiable reliance by plaintiff and, of course, damages.[37] Again, the critical inquiry is where is the duty. If an individual goes into a software retailer and buys a product, does this doctrine apply to the salesman? Does the salesman have a duty to provide accurate information?

What if someone asks a stranger on the street about a product and the stranger guarantees that the product is Y2K compliant? Can the stranger be sued if it turns out that the product is not Y2K compliant? In this situation, of course not. The stranger does not have a duty. He may have been wrong. He may have been stupid shooting off his mouth, but either you had no justifiable reliance or, more likely, he had no duty. Simply because someone says something that is wrong, you do not have the right to sue that person.

There is not a whole lot of law in this area but I will give you a few more examples. Suppose someone went into a store to buy a product for the home, for example a certain lighting fixture, which

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34 *See id.* § 4(d)(1). Under certain enumerated circumstances, a party may not avail themselves of the benefits of this provision. *See id.* § 4(d)(2).

35 *See id.* § 5.

36 *See, e.g.*, Reynolds v. Lancaster County Prison, 325 N.J. Super. 298, 314 (App. Div. 1999).

37 *See id.*

was going to be installed by a contractor. In search of information, the consumer calls up the manufacturer of the fixture and the manufacturer says "here is our brochure and here is our Web site and what do you want to know?" Isn't the manufacturer in the business of not only selling the product, but also providing information? Does the manufacturer have a duty to provide accurate information to the seller, distributor, and purchaser?

The first issue a practitioner should investigate is whether the contract at issue had an integration clause. If the contract itself did not articulate the harmful statements on which the plaintiff relied, then the presence of an integration clause may make unreasonable any reliance on the misrepresentations.[38] It should be noted that as of yet there are not many jurisdictions that have addressed this issue. Generally speaking, if there is an integration clause, you're going to have a tough time. If there is no contract, then of course there is not going to be an integration clause.

Now there is a case called *Florian Greenhouse, Inc. v. Cardinal*,[39] which is an interesting case. This was a situation where a distributor of glass went to the manufacturer and wanted to cut some kind of special arrangement with the manufacturer like an exclusive arrangement to sell a special kind of glass.[40] The customer asked the manufacturer if the agreement would violate any other contracts that they have with anyone else and the manufacturer said no.[41] The distributor entered into a contract with the manufacturer in reliance on the manufacturer's statement. However, it turned out that the manufacturer already had an exclusive arrangement with someone else preventing them from selling to the plaintiff.[42] The plaintiff sued on the basis of the statement (not its contract) and it alleged that the manufacturer had a *duty in tort to provide accurate information*.[43] The court's analysis is very interesting because the court held that the case was not about the warranty of the product,

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38 *See* Sunquest Information Systems, Inc. v. Dean Witter Reynolds, Inc., The Compucare Company, 40 F. Supp. 2d 644 (W.D. Penn. 1999).

39 Florian Greenhouse, Inc. v. Cardinal IG Corp., 11 F. Supp. 2d 521 (D.N.J. 1998). The *Florian* plaintiff was alleging an intentional misrepresentation (fraud), as opposed to mere negligent misrepresentation. *See id.* at 526-28.

40 *See id.* at 523.

41 *See id.*

42 *See id.* at 524.

43 *See id.* at 526-27.

but it held that the statement was a collateral representation made outside the contract.[44] Since there was no integration clause in this case, the court determined there was a duty to provide accurate information running from the manufacturer to the plaintiff.[45] So, we see that there has to be some kind of special relationship to establish a duty. This question must be squarely addressed before one can ascertain if that duty was breached.

Now lets turn to the Y2K Act. Sometimes I refer to it as the FEF Y2KL Act, which is the Full Employment For Y2K Lawyers Act. You know Congress, they want to fix something, well actually the special interest groups want to fix something, and so it gets rushed through. Nobody really thinks it through and many times an act such as this winds up having the opposite results of what everyone intended. The purpose of the statute was to limit litigation, eliminate non-meritorious litigation and lessen the burden on interstate commerce and the courts. In reality, however, it may have the opposite effect.

The basic provision of the Act is the ninety-day cooling off period. If a plaintiff wants to bring a claim against a defendant, the plaintiff must first send a notice to the defendant explaining what the problem is.[46] The defendant then has thirty days to respond to the plaintiff.[47] If the defendant sends a response within thirty days, he is given sixty days to do what he said he would do in the response.[48] If at the end of the ninety days, the problem has not been fixed, the plaintiff is entitled to go to court.[49]

The Y2K Act also provides a cap on punitive damages. However, the cap is only applicable to individuals with less than $500,000 net worth and to small businesses with under fifty employees.[50] In addition, the Act also does away with joint and several liability and provides proportionate liability in certain circumstances.[51] It is not applicable to personal injury claims or to

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44 *See id.* at 528.

45 *See* 11 F. Supp. 2d at 528.

46 *See* 15 U.S.C. §§ 6606(a), 6606(b).

47 *See id.*

48 *See id.* § 6606(e)(1).

49 *See id.* The remediation period may be extended upon agreement of the parties. *See id.* § 6606(e)(2).

50 *See id.* § 6604(b)(2).

51 *See id.* § 6605. Joint liability is appropriate when a defendant has acted

wrongful death claims.[52]

I just want to go over some of these definitions quickly because they are important. The Act defines a "Y2K Action." The Y2K Action is a civil action in federal or state court in which a plaintiff alleges harm or injury that arose from or "is related to an actual or potential Y2K failure."[53] This is interesting because the Act allows a suit even though the failure has not occurred yet. As long as the alleged injury arises out of or is related to an actual or potential Y2K failure, the harmed party may bring suit. Eventually, however, there must be a Y2K failure. A Y2K failure includes failure by any device or system, including computer systems, microchips, embedded chips, integrated circuits embedded in another device or product, software, firmware, or other set or collection of processing instructions that process, calculate, compare, sequence, display, distort, transmit or receive Year 2000 related data.[54]

The presence of a material defect is also a requirement in a Y2K Action.[55] A material defect is defined as "a defect in any item whether tangible or intangible."[56] An example of an intangible injury would be when there is corruption of data stored on a computer, but the harm to the computer and the hard drive themselves is not obvious. The harm to the hard drive itself would be impossible to find unless someone used an electron microscope to figure out the magnetic polarity of the little bits of iron that are on the media. In other words, the only physical harm is the change in the magnetic structure of the iron particles. However, a material defect does not include a defect that is de minimis[57] or "affects only a component of an item or program that, as a whole, substantially operates or functions as designed."[58]

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fraudulently or with "specific intent." *See id.* § 6605(c).

52 *See* 15 U.S.C. § 6603(c).

53 *Id.* § 6602(1).

54 *See id.* § 6602(2).

55 *Id.* § 6606(a).

56 *See id.* § 6604(4).

57 *See id.* § 6602(4)(A).

58 15 U.S.C. § 6602(4)(B). There is also an interesting provision that states that warranties and contracts are to be strictly enforced. *See id.* § 6603(d)(1). It is unclear how the courts will apply this provision, but defendants are certainly going to attempt to invoke this provision to their benefit.

The Y2K Act preempts state law unless the state law attempts to further the cause that the Y2K Act furthers.[59] The Y2K Act is not intended to supercede the IRDA.[60] An interesting thing that has been happening recently is that defendants are removing what were ordinarily state court claims into federal court. Congress thought that it was going to limit Y2K suits, and probably the reverse is going to happen, certainly with the federal courts.

The Act also contains a provision called the Y2K Upset Defense for the Federal Government.[61] Under this provision, if a corporate entity has a duty to report to a federal agency within a certain time period (such as the SEC or the EPA), the entity has a fifteen day grace period in the event of a delay in reporting caused by a Y2K problem.[62] The grace period does not apply in industries that directly affect the health, safety and welfare of the people.[63]

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59 *See id.* § 6615. The Act expressly states that it should not be "construed to affect the applicability of any State law that provides stricter limits on damages and liabilities" designed to afford greater protections to Y2K defendants. *See id.*

60 *See id.* § 6603(f).

61 *See id.* § 6603(g). A Y2K upset is "an exceptional temporary noncompliance with applicable federally enforceable measurement, monitoring, or reporting requirements directly related to a Y2K failure that are beyond the reasonable control of the defendant charged with compliance[.]" *Id.* § 6603(g)(2)(B)(i).

62 *See id.* § 6603(g)(5). The grace period may be extended upon consent of the relevant government agency. *See id.*

63 *See id.* § 6603(g)(2)(B)(ii)(I). There are a total of six exceptions to this defense. *See id.* § 6603(2)(B)(ii). The statute states that a Y2K upset does not include:

> (I) noncompliance with applicable federally enforceable measurement, monitoring, or reporting requirements that constitutes or would create an imminent threat to public health, safety, or the environment; (II) noncompliance with applicable federally enforceable measurement, monitoring, or reporting requirements that provide for the safety and soundness of the banking or monetary system, or for the integrity of the national securities markets, including the protection of depositors and investors; (III) noncompliance with applicable federally enforceable measurement, monitoring, or reporting requirements to the extent caused by operational error or negligence; (IV) lack of reasonable preventative maintenance; (V) lack of preparedness for a Y2K failure; or (VI) noncompliance with the underlying federally enforceable requirements to which the applicable federally enforceable measurement, monitoring, or reporting requirement relates.

Id.

As another matter, there is also a provision that protects homeowner's form "their own personal Y2K upset." *See id.* § 6603(g). There is a provision concerning Residential Mortgage Foreclosure Protection so that if a homeowner pays his mortgage

As another matter, a practitioner needs to be aware of the proportional liability provision.[64] This provision says that there may not be joint and several liability.[65] In other words, every defendant has to bear his or her own share of the fault or damages.[66] However, if there is a judgment against "defendant A" who is bankrupt and can not satisfy the judgment, then the other defendant or defendants are responsible to pay a pro rata amount.[67] For this provision to apply, however, the plaintiff must make a motion within six months after entry of judgment.[68] If you do not do that, I guess you're going to be looking at a malpractice claim.

An action for contribution has a statute of limitation of six months after entry of judgment.[69] There are two things that you need to be aware of that may catch some practitioners off guard if they are not familiar with the issue. For instance suppose that a supplier does not deliver a product to a car company because it did not receive the product from the manufacturer. The manufacturer of the product did not manufacture and ship the product to the supplier so the car company sues the supplier, and what looks like an ordinary non-delivery of goods case really, down the line five or six stops, is a Year 2000 problem. If it arises out of, or is related to a Year 2000 problem failure, then it fits under the Act, and thus, there is going to be proportioned liability, and punitive damages caps which perhaps might seem unfair but evidently fall into what Congress intended.

The pre-litigation notice requires the plaintiff to advise the defendant as to what defects it alleges and what harm it is alleging was caused or will be caused.[70] In addition, there is a requirement

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electronically and either the bank is not in compliance, or the homeowner is not in compliance, then there is grace period to make the mortgage payment. *See id.* The homeowners may only avail themselves of this protection if they follow specified notice requirements. *See id.*

64 *See* 15 U.S.C. § 6605

65 Id. § 6605(a). There is an exception for parties who acted fraudulently or with specific intent. *See id.* § 6605(c).

66 *See id.*

67 *See id.* § 6605(d)(1).

68 *See id.* § 6605(d)(1)(A).

69 *See id.*

70 *See* 15 U.S.C. § 6606(a). Prelitigation notice must include:

> specific and detailed information about—(1) the manifestations of any material defect alleged to have caused harm or loss; (2) the harm

that the plaintiff include the nature and amount of damages.[71] This is unusual in New Jersey. The pre-litigation notice has to be in a separately filed statement and that can also catch practitioners off-guard because it is not something that is normally done. My question is this: All this speaks in the past tense about what harm or loss already was caused or suffered, but what if the harm is anticipated but has not yet happened? I raise this question because this provision is at odds with the applicability section, which expressly contemplates suits filed claiming damages for potential failure that could occur.

There is a requirement that this notice be sent via certified mail.[72] There is then thirty days for defendant to respond.[73] Another question that I want to raise is: If the defendant responds with a plan of action that is futile and that can easily be proven will not correct the problem of which plaintiff claims, evidently the statute nonetheless provides that there is still this waiting period. So this is an opportunity, certainly, for defendants to drag things out for an extra 90 days before the suit starts. The Act, however, does not affect your right to seek injunctive relief for temporary restraining orders or for preliminary injunctions.[74]

The defendant has thirty days to respond and if the defendant fails to respond, the suit can be started immediately. However, if a suit is started without the proper notice, then the proceeding is stayed. Another issue that will need to be addressed is what will happen if other defendants are added; is each additional defendant entitled to a notice period? If so, this could potentially drag out complex litigation for years.

One important thing to remember is that the Y2K Act has an effect on state contract law.[75] Many state contract laws that were

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> or loss allegedly suffered by the prospective plaintiff; (3) how the prospective plaintiff would like the prospective defendant to remedy the problem; (4) the basis upon which the prospective plaintiff seeks that remedy; and (5) the name, title, address, and telephone number of any individual who has authority to negotiate a resolution of the dispute on behalf of the prospective plaintiff.

Id.

71 *See id.* § 6606(a).

72 *See id.*

73 *See id.* § 6606(c).

74 *See id.* § 6606(i).

75 *See id.* § 6603(d). The Act does not affect state contract laws regarding

enacted on or after January 1, 1999, will have no applicability in Y2K actions.[76] The Act effectively "freezes" state contract law. Another thing to remember is that the Act places an affirmative duty of mitigation on the plaintiff.[77] There is no compensation for damages if a plaintiff could have reasonably been aware of a problem and avoided the problem in light of any disclosures or other information.[78] Defendants are going to invoke this provision to defend against suits, which is one reason why it is important for plaintiffs to use due diligence to find out what information their service providers and vendors possess. Otherwise, there is going to be a big fight.

There is also a provision that codifies the common law doctrine of the Economic Loss Rule.[79] The Economic Loss Rule bars a plaintiff from suing for damages outside of a contract, unless the relief sought is for personal injury or physical damage to property other than the product itself.[80] For example, if a party purchases a computer and the computer explodes, but nobody is hurt and there is no damage to the surrounding area, then the individual does not have a right to sue "outside the contract". In other words, the individual is bound to the product's accompanying warranties,

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warranties, interpretation, or unconscionability. *See id.* However, state contract law is limited in that the doctrines of impossibility and impracticability are expressly limited to the articulations of the law as they existed prior to January 1, 1999. *See id.* § 6609.

76 *See* 15 U.S.C. § 6603(d). As another matter, the Y2K Act does not apply to actions relating to § 3(a) of the Securities Exchange Act of 1934. *See id.* § 6603(i).

77 *See id.* § 6608.

78 *See id.* § 6608(a). Damages do not include:

> compensation [that] the plaintiff could reasonably have avoided in light of any disclosure or other information of which the plaintiff was, or reasonably should have been, aware, including information made available by the defendant to purchasers or users of the defendant's product or services concerning means of remedying or avoiding the Y2K failure involved in the action.

Id.

79 *See id.* § 6611. Economic loss" includes harm resulting from: (1) business interruption; (2) lost sales or profits; (3) losses that arise from third party claims; (4) losses that are only indirectly suffered as a result of a wrongful act or omission of the defendant; (5) "losses that must be pled as special damages"; and (6) consequential damages. *See id.* § 6611(b). Economic loss is only recoverable if: (1) the contract between the parties provided for economic loss; (2) the loss was a direct result "from damage to tangible personal or real property" other than damage to the contracted product itself; or (3) the claim is for an intentional tort that arose outside the contract. *See id.* § 6611(a).

80 *See id.* § 6611(a)(2).

disclaimers, etc. On the other hand, if there is damage to the surrounding areas, now the individual has the right to sue "outside the contract."

I want to briefly go over the Uniform Commercial Code Non-delivery of Goods Provision, U.C.C. § 2-713.[81] This provision may come into play in trading partner disputes that concern Y2K issues. Under the U.C.C., if a supplier makes a misrepresentation and misses a deadline, the trading partner can sue under the U.C.C. to recover actual and consequential damages.[82] Therefore, companies should scrutinize contractual provisions addressing limitations of damages. The thing about consequential damages is that recovery is all about foreseeability. The key to recovery of consequential damages is whether the supplier knew how the product was to be used.[83] In many situations, though, contracts properly disclaim liability for consequential damages. However, even if there is a proper claim under the Code, § 2-715(2)(a) has been interpreted to impose an affirmative duty to mitigate.[84] One thing a company can do from a trading partner standpoint is shift the risk of loss if they are concerned about not providing a product because of the Year 2000 problem.

Another issue to be wary of is the fact that the Year 2000 problem may not fit very well into a force majeure clause. This is simply due to the fact that the Y2K problem is an expected issue and the clause traditionally provided coverage for unexpected events. From the other side, however, the force majeure clause usually protects against occurrences outside the control of the trading partner, and the Y2K problem may be viewed as such an occurrence. Also, if the particular manufacturer or customer at hand had the ability to avoid consequences of the Y2K problem, then the force majeure clause is not going to help.

The United States is considered to be far ahead of the rest of the world, and while there is a level of confidence in terms of the United

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81 *See, e.g.*, N.J. STAT. ANN. 12A:2-713 (West 1999).

82 *See id.* § 12A:2-713(1). "The measure of damages for non-delivery or repudiation by the seller is the difference between the market price at the time when the buyer learned of the breach and the contract price together *with any incidental and consequential damages* [], but less expenses saved in consequence of the seller's breach." *Id.* (emphasis added).

83 *See id.* § 12A:2-715.

84 *See id.* § 12A:2-715(2)(a).

States and its major power systems and telecommunications, there still could be problems. However, it is believed that there are probably going to be more problems on an international level. So, companies and industries that rely on supply of goods internationally are probably going to be more affected.

I see that we have run out of time, so this is the end of the presentation. I want to thank every one for coming today.