



PC Software Workshop: Legal Issues - Piracy

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PC Software: Legal Issues - Piracy

Conducted by Software History Center—Oral History Project

Abstract: Executives from the PC software industry join with members of various trade associations (ADAPSO and SPA) to discuss issues related to pirating of software. They talk about the efforts of the trade associations to reduce piracy through education and penalties and they finish by discussing the issues of copy protection, copyrights and patents.

Participants:

<u>Name</u>	<u>Prior Affiliation</u>
Burton Grad	BGAI/Software History Center
Luanne Johnson	Charles Babbage Foundation
Ken Wasch	SPA, SIIA
Oscar Schachter	ACT
Doug Jerger	ADAPSO
Dan Bricklin	Software Arts
Bill Aspray	Indiana University, historian
Tim Bergin	American University, historian
Martin Campbell-Kelly	Warwick University, historian
Jeffrey Yost	CBI Univ. of Minnesota, historian

Doug Jerger: In this workshop we're going to address software legal issues relating to such things as piracy and intellectual property protection. Ken Wasch is going to address the issue of piracy first.

Jeff [Yost], do you or the other historians have thoughts about what you want us to talk about that you think is most important in these areas?

SPA and Anti-Piracy

Bill Aspray: I'd like to hear about the story of how SPA got started with the anti-piracy issue. Did SPA start with this issue or did the anti-piracy issue come up after you started?

Ken Wasch: The anti-piracy issue came up, I think, after it started. I formed SPA because I

was brought in as a lawyer at the U.S. Department of Energy and I thought we all knew the industry, and I said, "You know, there's no trade association for this PC software business. Let's see if we can form it." And I was lucky, I guess, that a number of PC software companies decided that they thought there was a need. But not surprisingly, some of the founding members had different ideas about what they thought the organization ought to be doing, and ultimately those things evolved. But I'll say a couple of words about piracy because I was intimately involved in what our organization was doing from the early days. Although we were formed in 1984, we were a paper tiger doing absolutely nothing on piracy for a good four years except talk. We would talk and we would give interviews about how piracy was bad, and then we ran a few ads. We really didn't do anything significant. We created a hotline that got almost no phone calls.

But I will tell you of the very first piracy case. Because so many years have elapsed, I think I can now discuss the case and the nondisclosure probably won't get me in too much trouble. The very first anti-piracy case was against Hertz Rent-A-Car. This was in 1988, and we got a report that they were buying software like crazy at their offices in Oklahoma City, Oklahoma. We came up with this idea and wrote to their general counsel saying, "We want to come in and do an immediate audit of all your computers. So get your purchase records together so we can come in and do an audit. We want your guys to put together teams of people to go around and do direct research on all the computers in the place."

So the general counsel of Hertz met me at the hotel in Oklahoma City on a hot summer night. We reached an agreement and we went over to their facility together. They must have had 500 computers, and they divided 40 to 50 people into teams of 3 or 4 people each to go around to all the computers. It was a lucky gamble on our part because Hertz Rent-A-Car at that time, and probably today, was one of the most well organized companies on the planet. They had every purchase record imaginable and they stacked them up on a table -- all of their purchase records. And so we knew exactly how many copies of Lotus and WordPerfect and everything else they had. And so gradually, as the night wore on, the reports started coming in from the field as they were doing all the audits. And because of the papers, I knew exactly how many licenses there were. But on the other side, the numbers started to grow and grow and grow. And I'm thinking to myself, they are going to have to pay a penalty equal to one times the MSRP of all the illegal software we find. So, in other words, if they had 20 copies of WordPerfect licensed but they had 40 copies, they would pay a penalty equal to the 20 unlicensed copies. So the general counsel took me aside at about two o'clock in the morning and said, "Ken, rather than add this stuff up and continue to get reports from the field, I'll settle the case with you for \$70,000." It was a tough call because I had no experience with this kind of thing. None of us did. But I said, "No, I'm going to just let the chips fall where they may. Let's do the audit and see how turns out. If it's higher, it's higher. If it's lower, it's lower." The answer is I should have taken his money. He offered \$70K, and in the end we settled that case, I think, for \$30K.

So what's interesting about that piracy case is that they were 96 percent legal, and we were bringing a case against them for the 4 percent they were illegal.

And that gets me to a general comment about piracy in that our efforts of doing these corporate audits was how the corporate audit program was born. That was 1988. Our high water mark in terms of piracy settlements is probably \$3 1/2 million a year. This year we'll do about \$1.2 million. In 2004, we have 200 cases under management. So we are able to do more cases than ever before, but the yield per case has gone down. The history of this is actually very interesting in that in the early days in 1988, 1990, 1992, the percentage of legal software in companies was significantly lower than it is today. Today we just don't get reports anymore about big American companies who have significant levels of piracy. The reports we get are the graphics department has a few unlicensed copies of Adobe products or Macro Media products. So today we only go after companies where anti-piracy knowingly is going on; we don't go after companies that are 85 percent legal, but go after the other 15 percent.

We found that the anti-piracy efforts in the United States are profitable in a corporate setting. And in 15 years of cases, we've only taken one case to trial; that was a software rental case on Long Island. We won the trial. But after we went through the trial and won it, the defendant went bankrupt so we never got anything out of it. We actually filed very few lawsuits. We filed maybe one or two lawsuits a year. It was very rare. Mainly, we ended up settling all the cases quietly and efficiently with our audit program.

We had a very extensive education campaign where we produced some videos which we've distributed all over the country. And I remember going to Bogota, Colombia, to film a corporate anti-piracy video using some of the actors and actresses who appear in Latin American television. It was a very successful video -- about 11 minutes of showing a corporate CEO finding out that he's got unlicensed software and the software police are knocking at his door and it was like, "How could this happen in my company? How could you guys have let me down like this?"

It was very effective. But, the biggest mistake I made in the software piracy area was I listened to the advice of some of largest members in 1994, 1995 and 1996 who wanted us to invest a lot of money fighting international software piracy. But what did we get for it? We spent \$250,000 beating up a few pirates in Malaysia, and there were hundreds more ready to take their place.

You're not going to fight piracy in Asia or in generally poorer countries. It's a huge financial drain. There's really only one company that can afford to do it today, and that's Microsoft. It's just far too expensive.

I'm going to leave you with one other comment. About ten years ago we wanted to produce an educational video for kids. Dan Bricklin was on the Board of Directors at the time when we did it.

It's a rap video.

Dan Bricklin: I still have a copy of that.

Wasch: We produced 25,000 of them. And for the benefit of the tape, it starts like this. It says, "Did I hear you right? Did I hear you saying that you're going to make a copy of a game without paying? Come on, guys, I thought you knew better. You see, on these disks we have for a limited time the creativity of someone's mind. If you think that just because with a flip of a key, you copy that game, that that game is free. You see, we value so highly what the mind's eye saw, we protect it by law." It's something like that.

They distributed 25,000 copies around schools it's called "Don't copy that copy." It was 11 minutes long, and it came with lesson plans for the teacher.

Aspray: Did you really go after those companies that were copying software and selling it back into the United States?

Wasch: We use the law enforcement officials today. We use the customs officials. We did bring cases against what we called hard disk loaders which were unscrupulous computer retailers who would say, "Buy a computer from me and I'll load whatever you want." We did a number of those. But, by and large, it was corporate piracy that was our bread and butter.

And here it is in 2004, and we're finding that there's a new form of piracy that's growing up, which is content piracy: people who have a license to obtain some content from Dow Jones or AP or something. And then you say, "Well, that article was interesting." I'll go send it to Burt. I'll go send it to Dan or somebody else. You don't have a license to do that, so it's the further proliferation of content for which you do not have a license. The content companies are much less willing to file lawsuits against people who are under license than software companies were.

Business Software Alliance (BSA)

Aspray: I have another question related to that. BSA came into the ball game at some point.

Wasch: Business Software Alliance was founded in 1988 for the purpose of fighting international piracy. We were going to be doing domestic piracy. They were going to be doing international piracy.

Yost: Who was it founded by?

Aspray: BSA was founded by five companies -- Microsoft, Aldus, Lotus, WordPerfect and Ashton-Tate -- the big software firms.

Wasch: Yes. They were the ones most interested in fighting piracy. What happened was very shortly after it was founded, everybody said, "Oh, BSA is not going to be a threat to SPA," though of course it was. But what happened was that fighting international piracy required huge amounts of cash. We were making money in the domestic program supported by the same companies that had problems with international piracy. So these companies came to me and said, "Ken, you have to give BSA money. Take the money that you're earning from the domestic anti-piracy program and give it to the BSA." I was supposed to do that. I supported the BSA for several years. I contributed well over \$1 million to the BSA.

And then, at one point in 1990, we were forced into something called a merger with BSA. It was term called merger, but there was really no merger; there was no sharing of any assets or staff or anything else. It was just the BSA board was supposed to report to the SPA board. And so when the board said, "When are you going to report to us?" we said, "We'll send you the board minutes."

We were asked as an organization to contribute the money that we were earning in our anti-piracy efforts to another organization with different interests. That obviously wasn't very much to our liking. But, to be fair to the people who felt we should do that, their position would be that you are earning the money through piracy of our products, so we should be able to tell you what to do with the money you are making from our boxes.

Think about it. SPA represented small businesses as well as big, and there were problems there. BSA represented big businesses, and it became more of a problem. However, the SPA had political clout because it represented small business as well as large businesses.

Well, I can tell you one other little item that's very new. Microsoft dropped out of our anti-piracy program for whatever reason in 1992. We were doing piracy work for just about everybody but Microsoft would never participate. They dropped their membership when we got involved in the antitrust case. But what's most interesting is just in the last two months, Microsoft has rejoined our anti-piracy program. And you know, we're glad to have them.

Corporate Piracy

Martin Campbell-Kelly: There was a time when you had business software, you had games, and you had education software. Did SPA have a particular focus in one of those three areas on the anti-piracy issues?

Wasch: You couldn't make any money on games because you'd have to go after individuals in their homes, and we were never prepared to do that. In education, we brought a couple of cases against schools, and actually, one of our most early celebrated cases was against Oregon State. As part of the settlement they had to put on a big conference on piracy in universities, which they did. But by and large, we found that the biggest loss to the industry was in corporate piracy. And I think that the sales for some of the big software companies in the mid-1990s occurred because corporate end users were afraid and licensed up. I mean, a credible threat from some piracy policy is a pretty powerful motivator. If you're a little accounting shop in Wichita, Kansas, and you say, "What's going to happen to us if we don't license the software as we're using it? A whistle blower is going to call the BSA or SPA, and they're going to come after us so we better have a license."

Aspray: I have a question going back to the very first instance where you hadn't brought any of these cases yet; you hadn't really had a publicity campaign. You called Hertz because you thought that they were stealing. What prevented them from telling you to go rent a car? Why should they respond to you? Why should they allow you to do an audit in the first place?

Wasch: Well, it's not that we had any credibility [as an Association]. [But] they knew whose software we were accusing them of having violated. We told them, and I think they believed it and it was true, that we were doing this work on behalf of Microsoft and WordPerfect and Ashton-Tate and Lotus. And if they didn't legalize their licenses, they knew we were going to file a lawsuit. The conscious reaction in 1988 is the same reaction we get 200 times a year with every case we win -- "Don't sue us. We'll pay for the licenses and pay you the penalty."

Bricklin: I think this is an important thing to the software industry because what happened was by getting the marketplace used to buying and using legally, we didn't have to put in place the things we tried first like copy protection. Copy protection was bad. What happened was for those of us who had it, the sales on all products went up when we removed it. It didn't help prevent piracy; we had piracy anyway. What this did was it helped get corporations used to paying without putting in place the technological things to prevent copying. This is what I think is important to learn from this and to watch what happens with the entertainment business.

Copy Protection

New Speaker: Well, there's one other very important point. I'm glad you brought that up, Dan. Why did copy protection disappear from our industry? There is a story I've heard, and I wish some historian would double check it, involving Lotus and the Department of Defense. Copy protection for business software existed very commonly through the mid-1980s. It was killed because Lotus was bidding on some large procurement at the Department of Defense. The DOD told Lotus, "If your software is copy protected, we just won't buy it." Lotus at that point had competitors. Microsoft was in the market. Sorcim was in the market with SuperCalc. And so

they said, "We'll just never get the sale if we don't remove the copy protection."

New Speaker: Well, was it a practical solution? I mean, corporations were constantly buying new computers. Assume they buy a legitimate copy for computer A? Then they upgrade that computer to computer B. What do they do at that point with the copy protection on the software?

Bricklin: Copy protection worked. With some of the early stuff, you had to have a disk in the drive. The disk had something encoded on it that the software could read. It was later done by doing funny things to the hard disk, and you could turn it off, and you could unprotect and uninstall. One of the reasons it was dropped, as I understand it, was that the cost of copy protection in tech support and customer support was so great that it wasn't worth it except for the fact that the company wanted it. There was an actual cost to it. We went through this because we copy protected VisiCalc but then removed it later.

To give an example, the first VisiCalc copy protection scheme included writing on the disk. We assumed that what would happen is that you would copy the disk and then you would check that it ran, so we wrote something all over the disk to keep the copy from working. What we found out is that Apple didn't quality assure the write protection switch, and many disks -- real disks -- that had the copy protect tab set still while writing one weren't paying attention to the tab, and real versions were dying after a while. We tried it and ran into the same problem.

New Speaker: For 15 years, people called me up, saying, "I've got a new copy protection system that's going to revolutionize the world." And people still use it for low volume. It seemed to work out that big companies wanted to be legal in the aggregate. They might have small problems here and there but as long as the aggregate is legal, you're okay. Right? That's sort of how this worked out, which is the best of both worlds. I think it was something that should have been learned by other industries. Our industry did it well, thank you very much.

Burt Grad: We have experience, though, from back in the punch card mainframe world. Most corporations didn't steal intentionally, and they would find occasional times where they would have paid for one shift and they were using it a second shift. There were all those kinds of things. There was software in one mainframe but not on others. And most companies were not doing it intentionally because somebody was going to save them some money in their budget to avoid it. It was only done at that lower level. If you brought it to a high enough level within the corporation, they invariably would do something to fix it. They did not want to save a nickel that way.

New Speaker: It was harder to do, too.

Grad: Right. We could find out most of the things because you had the field engineers

coming in, and they would know what was on the machine because they were being asked to fix something.

New Speaker: There was another thing. We were fairly priced in that the value of going from no spreadsheet to having Lotus 1-2-3 was worth \$495.

New Speaker: Okay. So the price was very fair for what we were providing. There are some problems coming in now with licensing schemes to try to extract more money. And customers are starting to say that they don't want the upgrades and they don't spend the money. But the actual purchase price was a reasonable one. It was worth it. So for a corporation that wants to do the right thing, as you say, there was a reason they didn't feel like it was unfair.

New Speaker: I've not done any research or anything, but I've obviously lived through it. It seems to me that in the mid-1980s there started to be a grassroots movement, a ground swell about copy protection. And the poor bastard who has something to do the next day but his system just locks up on him and he can't get through to any support person. Why do those stories, whether they were true or not, seem to circulate within the literature? There seemed to be almost an escalation of the issue and the manufacturers started to back off from it. I don't know about these other things, but I remember that.

New Speaker: There's one other very important point. As computers proliferated, it was not uncommon, as it isn't today, for somebody to say, "I have an office machine. I have a home machine. I have a laptop that I carry around with me everywhere. Am I supposed to buy three copies of Microsoft Word? Or, am I allowed to have one copy and copy it to each computer?"

New Speaker: I have a computer in Melbourne, Australia with Microsoft Office on it and another one in the US. I'm only using Word once at a time. So Microsoft changed their license to make that possible.

New Speaker: That is a great case. There were companies that claimed that, and under the Microsoft license they could get away with it. So if you had 1,000 people working in New York and 1,000 people working in Australia, the people in Australia didn't have to buy a single copy of Microsoft Word. They just used the licenses when the people in New York were sleeping.

New Speaker: I think Burt's comment is important. And this has to do with why it works with corporations. They want to do the right thing. They don't want their customers ripping them off, either.

New Speaker: That was one of the things that was important, yet we didn't learn that early in the PC world because we felt we needed mechanical protections because the license agreements and the copyright agreements weren't sufficient. We felt we had to have some other mechanism. I think it came out of dealing with individuals instead of with companies; that's where that risk opened up. And yet, as you point out, it wasn't worth going after Joe who might have a couple of fake copies, but you go after the corporations because there's enough money in it to make it worth your while.

New Speaker: But, there's another difference, which I'm only seeing right now when I'm dealing with these big content companies. If you have McGraw-Hill or Dow Jones, you have relationships that have lasted for decades or 100 years. They don't want to sue their customers. The PC business was populated by people who had no historical business perspective. They would just say, "You're not paying for my software? Sure, I'm going to see you."

There was really a willingness to be more aggressive in their campaign. It had somewhat of a backlash. But until very recently, Microsoft had amnesty programs where they'd say, "We're coming to your town..." They've been very aggressive, and it's worked.

ADAPSO and Anti-Piracy

New Speaker: Let me ask something because the relationship with ADAPSO, as it was called at the time, and SPA and the industry was a fascinating one. What did ADAPSO do?

Luanne Johnson: Well, ADAPSO didn't have this program, but ADAPSO really focused on the reputation issue -- going to teach people they should not copy software. At one time, the ADAPSO software group found a definite violation and they wanted to sue. They were a section within ADAPSO. Well, ADAPSO had another section made up of systems integrators who had these big companies as their customers. And the big company that had the violation was a major customer. So the decision was no, we are not going to sue. So the general feeling was that ADAPSO wasn't going to act to sue. They were only going to say, "You shouldn't do this." Ken [Wasch] came along and said, "Okay, you guys. If ADAPSO won't pursue this by suing to show that we're serious, then come on over to SPA and we'll do it."

Wasch: But remember, there were different types of members. The first members of SPA in the first couple of years were all the on the entertainment and education side. SPA was formed in 1984. Microsoft, Lotus and Ashton-Tate didn't join the organization until 1987 – three years later. And I still remember the line of a guy named (I hope he's not listening to this) Jim Levy who was the CEO of Activision. And in the board meeting, as in a lot of board meetings, the trade association spent a lot of time talking about who ought to be at the table and who they ought to get as members. And he came up with a line which I obviously remember to this day. He said, "See, it's really important for us to get those big companies – you know, Lotus and

Microsoft and Ashton-Tate and WordPerfect, to join our organization. I think it will really strengthen us, but let's keep control." I still laugh about that because it's like looking at the founding fathers of this country – the United States – and saying, "Well, you can join our little union here, but Illinois and Indiana, you're going to have secondary rights."

Entertainment Software

New Speaker: The thing is that the business side was willing to pay, but the individuals – the entertainment side – that was different. They didn't want to sue the individuals except for the people who did the super loading. But at least there was the business side. A lot of us have business products and it did help because we changed the attitude of business.

New Speaker: We did bring one suit against a 15 year old boy in San Francisco. We filed a lawsuit, and it was against a 15 year old. We settled it and his mother made him write us a note.

New Speaker: The legal scholar, Larry Lessig, says there are four ways to emulate behavior. One of them is legal. One of them is norms. I mean, talk about your educational programs. One of them is technology, which is copy protection. And the fourth is the marketplace. Was there a way to try to regulate behavior in this way with the marketplace?

New Speaker: As opposed to education?

New Speaker: Well, for example regarding marketplace -- you might decide you're going to allow a certain amount of copying to go on, and you're just going to price yourself higher. Or, you're going to say, "I'm not going to do business with you if you have a record of copying."

New Speaker: That pertains to the mass market software.

New Speaker: The marketplace could work if the number of customers is going to be a very small number.

Bricklin: First of all, on the education side, I'm comparing and contrasting it with today's music stuff, there was this feeling that there was special treatment for the original author. They're treated special in many ways. And there's a feeling that much of the money did go to development and not just to the middleman. That was one thing. The other is that we did learn one of the reasons you took off copy protection is you realized illegal copies were not always bad. And this was the reason we often gave cheap copies to education because we learned that that got the users hooked, so when they left school, they would then buy the product somewhere else. We learned it was actually this mish-mash of copying and not copying that

won. That's the marketing stuff you're talking about. And open source – a lot of that is going to slosh around in that area today, which is another discussion. But, I don't think we understood it at the time.

New Speaker: But, I remember some discussions about the fact that it hurt you to think there was a pirate who got a copy they should have paid for, but then you realize that actually helped you. It's a very convoluted.

Contracts Information

Jerger: Yes. Oscar, can you talk about what occurred at your earlier session? Mitch Russo from Timeslips said one of the important reasons he joined – the company joined – SPA was for the contracts information. Oscar, you and I know there was a lot of copying. I know I said, "Look, this is shrink wrapped. Get a copy of somebody else's and copy it, and you've got a contract." Why was that such a big issue for the PC companies?"

Schachter: Well, we came up with a contracts guide which had a bunch of different sample contracts and a distributor agreement and a publishing agreement and non-compete clauses. We got a bunch of real agreements, including the VisiCalc agreement – the one we litigated about – and helped write some standard ones. Remember, we didn't have word processing like it was today, and you just had to type each one completely. You couldn't just get things off the Internet in those days.

New Speaker: I remember you got loose leaf folder with all the contracts you'd ever need. We produced all those contracts in 1985, 1986.

Schachter: Right. But, what's interesting is we recently did a contracts guide for the content business – the information content business. This is what the old IIA used to do. And we published it, and it got done fast and we helped pull it together. It was beautiful with information on a CD and a DVD. We just published it maybe three or four months ago. I sold six copies.

New Speaker: I think it was a pretty good product. I was a little surprised that people weren't interested in it.

New Speaker: What was the date of the ADAPSO contracts for the micros?

New Speaker: I think it was copyrighted in 1986.

Amount of Piracy

Campbell-Kelly: Right. And this is about what you knew about the extent of piracy. I certainly read things. This may be a British statistic and not an American one, but it was said that there were actually five copies for every one legal copy sold. From what we're saying, that doesn't sound like that was the case inside corporations where it would be much lower than that.

Wasch: We did an analysis of worldwide piracy every year for 12 to 15 years. We stopped doing that because I don't think anybody cared too much anymore. And I participated pretty heavily in the modeling of how we would calculate this, and we used some consulting firms to help us. And there were some interesting results, I seem to remember. For example, let's say in Italy in 1990, in the entire country of Italy they sold a million PCs; but our members, which consisted of all of the major vendors, had only sold 300,000 copies of any piece of software into Italy. That would be saying that there were three copies of software for every PC. We found in the United States by surveying legal companies that the average PC user, this was a number of years ago, would have five applications per PC. So you say, "Well, are the users in Italy as heavy users as they are in the United States?" And so you find some modeling that says in western European countries we'll assume that the level is about the same. And when you go to third world countries like Thailand or Indonesia or something like that, you can assume the legal level would be a lower one. But, we had absolutely very accurate data as to how much was actually being sold in applications into each of those countries so we could extrapolate the level of piracy. So, to be fair, it wasn't like we would say if every kid has a \$20,000 library of illegal software, that reflects a loss of \$20,000; that wouldn't be fair. But it is fair to say that if you're a business in Bangkok, Thailand, and they're selling one fifth of the number of applications that a PC is sold with, there is a real loss. And so you calculate. You could take the number of applications, the weighted average selling price of those applications, and multiply it by the norm, which would have been 2.5 applications in that country, and you'd come up with a specific level of loss.

Campbell-Kelly: What numbers did you come out with for the United States on this sort of measure?

Wasch: For a number of years the level of piracy among PC software companies was \$2.5 billion to \$3 billion a year in lost revenues. And we would argue that the industry as a whole would lose about \$10 billion or \$11 billion.

New Speaker: What was the ratio? The number of copies in use to the number actually sold?

Wasch: Well, it depends on which period of time, but the number kept coming up that four out of five applications were legal. Basically it is our belief that today, in 2004 in the U.S., less than 20 percent of the software in use in corporations is illegal. But, part of that isn't because

everybody's honest; it's because the major applications they use all come with their machines.

New Speaker: Right. That was another reason that people will use the Microsoft Office Suite; it came with their computers.

Small Companies

Schachter: On the business side the experience Ken had with larger corporations was not quite the same with small corporations. I had a number of clients who were small corporations. When I first started doing work with them in 1992 and 1993, when we went to the company lawyers I found that a number of them had one copy of Word, one copy of WordPerfect, one copy of the spreadsheet, and everyone in the office was using it. Now, there weren't thousands of people in those corporations. There were perhaps 7, 8, 10, 12 people who might be using the application, but that was enough when you multiply that all the small companies that were doing it. And they were in a small enough place they could share the manual. The manual was part of that software protection.

New Speaker: Right.

Wasch: Forgive me for this but I used that statistic in Italy, as a matter of fact, because we got a contact through ADAPSO. Somebody from the Italian embassy contacted us and wanted to come over and talk about piracy issues. So I called [Bob Holloman] at BSA, and said, "What's this?" "Oh," he said, "we just did a bust over there, and they're pretty upset and they're going to have a national conference to show that they're going to fix it." So I said, "What am I going to say?" I convinced [Holloman] to write my speech. I had all these statistics. We went to dinner the night before -- wonderful people, fancy restaurant. I was using these numbers. I said, "Now, you know, this license could be one third, blah, blah, blah." And he said, "Well, I don't know." I said, "Well, we don't appreciate that." I had numbers for the way that Germany did it. In France, there were a couple of companies that had wonderful control of the issue. So I said, "You know, they're big companies. Can you help me out?" He paused and paused, took a drink of wine, and said, "We're Italian."

Government Involvement

New Speaker: So what help, if anything, do you get from the federal government? Does it change over time? Does it change with whether Republicans or Democrats are in control?

Wasch: No, we've gotten pretty good help from the Justice Department. When we wanted to go after hard disk loaders, we'd either go to the Justice Department or the FBI. But you're competing for resources. When they're doing drug busts, it's pretty hard to persuade the FBI to

give up the resources they're spending on drug busts to go beat up some 15 year olds making software copies. But, the government had a commitment to it, and the strongest ally we've had over many years has been the U.S. Trade Representatives office. Specifically I remember the very good work of a woman named Charlene Barshefsky who was the U.S. Trade Representative in the early days of the Clinton administration.

New Speaker: Did you talk about when the copyright law changed that they moved it up to a felony or something, and then they could really come in and do something about it?

New Speaker: Oh, yes. In about 1997, we increased penalties heavily, passing legislation that increased the penalty for copyright violations of software. It lowered the threshold to be a felony. Now, of course, you make one copy of the software and it's legal to cut somebody's hands off.

New Speaker: Can you talk about the intellectual property protection issues or protection mechanisms that you got involved with from SPA?

New Speaker: The copyright legislation is always a balance between users and creators. And Larry Lessig has become an opponent. He wants to make everything free or almost free.

New Speaker: But that's not a fair characterization. I just bought his new book and it is very interesting. I heard him speak just recently. That balance, I think, was last struck with the DMCA [Digital Millennium Copyright Act] in 1998. Now I think it's fair to say that both sides are armed to the teeth waiting for the day when someone wants to reopen the digital millennium copyright act to try to alter the balance between creators and users. I don't think it's going to be in anybody's best interest. The minute it opens up, it's going to be a free for all.

The Use of Patents

New Speaker: Did the patenting issue come into this in any way that may be significant?

New Speaker: Oh, that's a huge wall of discussion. That is today a huge disaster. When software patenting was approved by the patent office in the early 1980s, there was no prior art. And so we were involved in an organization started by Bernie Galler called the Software Patent Institute to try to build a prior art database, which we are still involved in today, and they're still loading information. The whole point of the Software Patent Institute was to try to build a prior art database so that bad patents wouldn't be issued. We probably had some success with that, but I think the patents in the software industry are a huge ticking time bomb. Every major vendor in our industry has accumulated an arsenal of defensive patents for the purpose of protecting themselves. So if you use your patent portfolio to come after me, I've got an arsenal of patents

to defend myself and come after you, and we'll reach some agreement. But what's happening now is that a lot of software companies are getting threatened by people who just buy up patent portfolios and have no business to protect other than their portfolio of patents.

New Speaker: This has been going on since early on when Microsoft was involved in the zero byte on the keyboard issue that IBM was hit with.

New Speaker: I think everyone in our industry, even people who have huge patent portfolios, recognizes the huge potential ticking time bomb of patent portfolios that are in existence.

New Speaker: Is it an objection to software patents per se, or is it to do with the level of obviousness?

New Speaker: It has to do with the fact that you have very skilled patent examiners who are approving patents but there are people out there who say, "We were doing things that way before. We knew how to do that. How could you have issued that patent on that?"

New Speaker: Yes. So it's the process, really, that's the issue

New Speaker: It's the process of doing the search. And so when we built this prior art database for software patents as part of the Software Patent Institute, we thought that law firms around the country would start to use that prior art database. But if you're seeking a patent for your client, ignorance is bliss.

New Speaker: There was recently a trend of computer science engineers becoming patent examiners. Before that, they were all mechanical engineers, electrical engineers.

New Speaker: Sure.

New Speaker: It's a huge problem.

New Speaker: Well, patent stuff was the whole problem. There were two things involved. One thing that was a problem in our industry was that because you may not know about patents, they only bother you after the fact. One example is a patent that's owned by Unisys right now for a certain type of compression scheme. It expired here in the United States last June and sometime this summer it expires in Japan, which is probably the last one that matters. And what happened was it was published just like all the others in the book and in the ACM Journal. It was formally published, and all sorts of people used it because it was published. Everything was very open in the old days. Well, it turned out that with this one particular one –

the LZW as opposed to the LZ or LZH or LZSS type of compression – the guy who added the extra thing decided to patent it to his company, which was Unisys. But, a lot of people didn't know that there was a patent on this. When CompuServe became prominent and had to create a format for compressing images, they used the GIF format. And the GIF format has LZW as the way in which it does its coding compression, or something like that. And when the Internet started coming about, they happened to use the CompuServe form because everybody thought it was okay. Then, Unisys looked up and said, "Wait, people are using it. Well, we're just going to assert ourselves against certain types of people, but education institutions can still use it. And it's debatable about whether decompression is covered."

New Speaker: That's hilarious.

New Speaker: So they started licensing it, but they were the big computer licensing model. They were used to charging \$1,000 per CPU. So they were charging a lot. If you wanted to do GIF compression on your web server until a year ago, you had to pay them something like \$1,000 for each web server CPU.

And so if you were going to build a product like Front Page or Photo Shop or something, you had to produce GIF's as the compression scheme. And if you didn't go to Unisys, they were very strict. As I understand it, they went to at least one company and told them, "You guys must pay \$1 million within 24 hours, or we're going to shut you down." This was a very major company in our industry. And the company had to pay Unisys the money. My company had a license. We knew about this and negotiated with them in advance. But, they were very strict. Just to be able to send out free copies of something, trial copies, the legal juggling we had to go through was tremendous. We had to be able to have a trial copy of our product that was only going to sell for \$50 or \$10. It was just unbelievable and it has messed up things left and right. And this is played out again in the JPG world, which is now a problem too. There's a lawsuit going on there. And people have been trying so hard to be able to come up with a standard where they know that there isn't a minefield of patents. But the GIF example is a good example to look at about how it went. Nobody would talk about it. We don't know who paid. Why did Microsoft have certain browsers to handle GIF and not JPG? Well, maybe they paid for it once, but if you go to the Microsoft web site, they'll tell you that you can use their tools, but it doesn't let you create your own. You have to buy your own license. This was a total mess, and the web browser producers in the first place would not have chosen it as the image format if they had known there was this problem.

So that's an example of a minor little thing in patents. Luckily, it has expired. Luckily, it didn't matter in the first seven years of the patent. And there are a whole lot of other issues like that. Did you know that there was a patent on making a button image on the screen that consists of text in the middle and a table that is three by three with this image of a corner? A corner! Oracle owns a patent on that.

It's interesting. I wrote all about VisiCalc, so you can read about VisiCalc and patenting. Quarterdeck had one of the first interesting patents. In fact, my patent attorney is the one who filed it, which is why he's my patent attorney. And what got me is it was for using an off screen buffer that pretended it was a screen buffer so multiple programs could run at once. It used the hardware of the IBM PC designed to be all three buffers so the hardware/software could run independently. I mean, this is the type of problems that we look at today and say, "This is ridiculous."

New Speaker: Just to comment on that in connection with the way people write contracts now, normally I don't know about the PC world because that's not a world that I work in too much, but in the mainframe world or in the mini world, whenever one sells a business application, software companies are required to warrantee that its software doesn't infringe on the copyright or trade secrets in another company. Most lawyers now will not write a warrantee that it doesn't infringe on existing patents. Or it will say "to the best of our knowledge it doesn't infringe on ..."

New Speaker: That's right.

Grad: Let's look at something which is fascinating: this is the old issue that came up during the late 1960s and 1970s on methods of protection of called software. This was an issue mostly with mainframe but also some minis. We were depending upon the copyright and the trade secret law to hold it place. Marty Goetz was outspoken in favor of patenting from the 1960s on. He claims he had the first software patent by faking it as a piece of hardware.

New Speaker: There were all sorts of software patents.

Grad: But they were small and they were infrequent. In ADAPSO all through the 1970s, we essentially stayed with the view that copyright and trade secret was sufficient protection. That's my view -- my memory, anyway.

New Speaker: Yes, it was good protection.

Grad: I don't know what caused the change. Does anyone know why the patent office all of a sudden decided to make a change?

New Speaker: Diamond versus Diehr was the case.

Grad: But, the point I was making was that everybody had to get their whole collection of patents to protect and to compete. It really left the small companies completely trapped.

Johnson: But at ADAPSO, some of them were just as happy as they could be that all of a sudden we could actually patent what we did.

Grad: We talked about this a lot, and one of the questions that was raised was should we be opposed to patents. And we could never get a group of people that was opposed to it and that was my concern. I could see what was going to happen. It was like what happened with patents 50 years ago in the TV area and in the radio area and we had no way around it.

New Speaker: Now, interestingly enough, people have gone ahead and done these things, and then said, "Oh, now I got you ..."

New Speaker: Right.

New Speaker: There was an interesting case, the case that I mentioned earlier that Tim remembers a little bit. It was the one that woke up Microsoft and some other companies. And IBM, of course, was well aware of it. There was a company or an individual that owned a patent on a keyboard having a zero byte coming first to indicate a function key or something in a word processing environment of some sort. And somebody sued on about the last day of the patent or something like that. I don't remember the specifics. IBM got sued by an individual or a small company. They brought in other parties as part of the defense. I don't think these companies were parties to the lawsuit but they were involved in depositions and all of that. These companies were the MultiMates and the Microsofts and MicroPros and companies like that -- and they learned about this problem. And that woke a lot of people up, including me, because we learned about the patent issue.

Then, there was the case against Novell. It was the client server case in which it turned out that the defendant who sued Novell was somebody who didn't like Novell. It was a personal thing, apparently. It used to be thought that patents were used by the big company to get the little company, and it actually was known as a technique that was successfully used by big companies fighting. But it turned out that it also was the little company against the big company and the little company against the little company. Now there are all sorts of variations going on. I can give you a lot of examples of ones that are going on today.

New Speaker: I have a question here. The way in which things turned out, we really had a response to the fact that copyright was actually used as a form of protection.

Campbell-Kelly: No. I don't think that's what happened. I think what happened was a result of the look and feel copyright process. I've been involved in many, many panels about it during my time. I was involved in some lawsuits during my day as an expert witness. But a couple of things seemed to be happening. One was that people were taking the body of law around fiction and entertainment and with video games and moving it one way, and the body of law around

practical tools and all, and also moving it. There was starting to be a problem because software was in both. And if you look at the particular cases that were involved in patent disputes, that was one of the key things. The other case was a big one.

In the case of Whalen, there was smelly cheese, as the lawyers called it. In other words, it's clear somebody did something that was bad. It didn't seem right. And they were looking for a reason to pin it on them. And the judge in Whalen stated reasons for there being an infringement that were way out of line with what would have been considered reasonable. Basically, he said, "You're infringing an accounts payable program if you have a flag saying that a person paid an invoice. Because it was in both programs, it must have been copied. They were the same."

Now, if you look at it from a legal viewpoint, it is true that if there's an indication of copying, you would find that the way it was handled would be the same. But, it's also true in programs that weren't copied. Then you would still have a similarity. Unfortunately, the judge moved it so much further. And there were a lot of situations where people in companies wrote code, and it was plain that it wasn't copied. But they were using the law from the entertainment business about plots and Hamlet, and stuff like Romeo and Juliet.

Johnson: There was a major argument in the industry in the 1960s and 1970s as to whether there should be a separate copyright law for software because it really didn't fit into the fiction storytelling kind of model that copyright typically was designed to protect, or whether the copyright law should be extended to protect software. And they chose to extend the copyright law to protect software; but it's an imperfect world.

New Speaker: ADAPSO was deeply involved in this. Was it CONTU? I think Lee Keet wrote a book on the concept of registration as against copyright.

Grad: Right.

New Speaker: But then, you have that whole issue -- what is look and feel.

New Speaker: Oh, I have seen that. My point is, what is it you're protecting? The language of FORTAN was not a protected item. You could write a program in FORTRAN and as long as you wrote your own compiler, you were clean in that regard.

New Speaker: But, the way some people interpret look and feel -- if you made a compliant FORTAN compiler, or if you passed COBOL certification or ANSI certification, you would be in violation of the original one. The Supreme Court, thank God, decided what they did on the Lotus case. I think, they finally came up with something reasonable, and it is what's been

used today with what I think regular practitioners would think would be a reasonable thing.

Jerger: Are there any burning issues? If not, we need to close. Thanks, folks. Thank you.