Streaming Video Patent Issue and Higher Ed

by Doris Stock
Virginia Tech

Acacia Research Corporation, based in Newport Beach, California, owns several U.S. and international patents which they bought from Greenwich Information Technologies. Acacia says the patents, which expire in 2011, cover the concept behind the storage and transmission of various media types over the Internet in a process called "streaming." Acacia refers to the technology covered by the patents as Digital Media Transmission or "DMT." When audio and video files are digitized, stored on servers, sent to other servers, and played back, Acacia claims their patents cover the process. This technology is used for distance learning classes as well as in on-campus classrooms. It is also used to provide college website "tours" of campus, playbacks of athletic contests, and college radio transmissions. Apparently a live webcast of a class lecture would NOT be covered by these patents, but if the lecture were made available online later, Acacia says its patents would be violated.

Now, Acacia wants colleges and universities (and businesses—radio stations, hotel pay-per-view companies, and adult entertainment distributors—that also use the technology) to pay licensing fees based on either a percentage of revenue they make from the courses using the technology or a fixed annual fee. A recent Gartner survey has indicated that 40% of college courses incorporate some online audio or video and that percentage is growing rapidly.

Acacia has sent letters to hundreds of higher education institutions threatening litigation if the license fees are not paid. Colleges and universities believe the patents are overly broad and may have been granted without regard for "prior art"—closely related research or inventions. The universities consider the technologies to be in the public domain. In some cases, they believe they are protected through the streaming software licenses they already have with companies like Microsoft and RealNetworks.

However, some businesses and schools, especially smaller ones, have already paid the fees because they don’t feel they can afford a court battle over it. Patent fights are among the most expensive kinds of litigation. Acacia is betting on the fact that once some institutions and businesses have agreed to pay, it will be more difficult for others to say the patents are invalid.

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A group of adult entertainment companies—also targeted by Acacia—decided to fight them in court. In a July 2004 ruling, a District Court judge found the terms of the patents "indefinite"—that is, it cannot be determined what they cover. However, the judge did not declare them invalid, and Acacia has said that companies and higher education institutions that have signed licensing agreements with them already must continue to pay. A final ruling in the case is not expected before the end of 2004.

Since that ruling, Acacia has sent out new letters to colleges and universities with more conciliatory terms—especially for small schools or those with very few distance learning students. Most schools seem to be taking a "wait and see" attitude at this point and are waiting for final decisions to be made in the courts before assuming any liability by signing a license agreement. In addition, the Electronic Frontier Foundation (EFF) has announced it will ask the U.S. Patent and Trademark Office to reconsider these patents. As with all issues working their way through the courts and Washington bureaucracy, final decisions could be many months—or years—away. In the meantime, any letters received from Acacia should be taken seriously and referred to campus legal counsel right away.

In June 2004, Acacia also filed patent infringement lawsuits against most of the major cable TV companies including Comcast, Cox Communications, EchoStar, Charter Communications, and Direct TV. In September 2004, Acacia sued an additional group of approximately twenty smaller cable companies.

Some of the colleges and universities that have received letters from Acacia as referenced in various news articles/websites include: Auburn, Georgia Tech, Johns Hopkins, Montana University System, Oregon University System, Seton Hall, Stanford, University of Pennsylvania, and the University of Virginia.

Some of the higher education providers who have agreed to pay Acacia licensing fees as referenced in various news articles/websites include: 24/7 University (for-profit distance learning company), Capella University (for-profit distance learning company), Chapman University, Oral Roberts University, and Park University.

A number of companies have already agreed to pay Acacia licensing fees, as referenced in various news articles/websites, including General Dynamics, Walt Disney Co., and Playboy Enterprises.

Website References:
http://www.fightthepatent.com/v2/Acacia.html
http://www.acaciatechnologies.com
http://www.streamingmedia.com/patent
http://www.acenet.edu/hena/readArticle.cfm?articleID=1017
http://www.spectrum.ieee.org/WEBONLY/publicfeature/jun04/0604aca.html#f1

For additional information, see Doris Stock's complete report which is posted on the ACUTA website at http://www.acuta.org/1226

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**Post Positions Online**

Take advantage of ACUTA's website to post communications technology positions open at your institution—a free service to ACUTA members. Visit the website at http://www.acuta.org/dynamic/jobs/jobpost.cfm. Complete and submit the form, and your listing will be available for at least 30 days.

If you are looking for a position or know someone who is, consider the website a potential resource and check it regularly.
Since the beginning of my relationship with ACUTA I have felt it was the organization that provided the resources I needed to help my university meet its communications technology needs. It took a few years to begin to understand the staff and volunteer efforts that are required to create this environment within ACUTA. As I became more involved in volunteer activities I realized that for any efforts I put forth the rewards are at least ten times greater.

September 17 and 18 the ACUTA staff, board members, and committee chairs gathered in Lexington, Kentucky, to engage in a strategic planning process led by Kermit Eide of Tecker Consultants, L.L.C. We set out on a process to discover through dialogue and use of relevant facts the value proposition ACUTA provides to higher education communications technology.

We used a framework consisting of five planning horizons including: Core Ideology, Envisioned Future, Critical Factors, Strategic Planning, and Action Planning.

- The **Core Ideology** is the organization's reason for being and supporting values; these normally do not change, making this the longest planning horizon.
- Next is the **Envisioned Future** with a timeline of 10-30 years consisting of Big Audacious Goals that vividly describe a huge yet attainable challenge.
- The **Critical Factors** include trends, assumptions about the future, mega issues, and wildcards that are mostly beyond our control but may impact the organization over the next 10-15 years.
- **Strategic Planning** sets goals for the next 3-5 years and these goals are supported by measurable objectives, and active strategies.
- **Action Planning** occurs annually to update the strategic plan, set priorities, and create the annual operational plan.

As we explored these planning horizons, the excitement, creativity, energy, and obvious commitment to ACUTA of the participants was exhilarating. The Board, committee members, and staff will continue to work through this dynamic process in the coming months.

ACUTA is a member-driven organization. All of you—committee members, committee chairs, board members, speakers, staff, authors of newsletter and journal articles, state coordinators, moderators, monitors, listserv participants, and every member who reads, listens, attends and shares information—are an integral part of making ACUTA successful. The ongoing dedication and commitment of the staff and volunteers creates the environment of value that maintains ACUTA as a strong, authoritative, and credible resource for higher education communications technology.

I encourage you to become even more involved; you will harvest the rewards.

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**Still Time to Register for ACUTA's Fall Seminars!**

**October 24-27**

**St. Louis, Missouri**

Hyatt Regency Union Station

Track 1. Campus Wireless Networks

Track 2. Cost Savings and Revenue Generation

Register online at [http://www.acuta.org](http://www.acuta.org)
Being by nature a clean person, I was naturally drawn to the subject of this month’s Tech Talk column. How can you go wrong when the acronym is SOAP? Actually, there are those who think I’m a little too zealous when it comes to hand-washing. But the way I figure it, if I don’t reach the level of the TV detective “Monk” or whip out the rubber gloves when it comes to shaking hands with people, it’s just clean-conscious enough, thank you.

SOAP in this case is the Simple Object Access Protocol, and it is designed to allow any two systems to communicate with each other. This is a good thing, because with today’s environment of varied operating systems, new equipment being mixed with legacy systems, and a maze of networks and software, the chances for miscommunication (or no communication at all) are many. Kind of a technology version of the United Nations.

SOAP creates an “envelope” of sorts, in which the desired data is carried from its source to its destination. The data itself would stand a good chance of being garbled due to the potential incompatibilities described above, but by being wrapped in its secure cocoon, it is safely transported.

Another way to think of SOAP is as a translator. If you spoke Spanish and I spoke Hindi, there wouldn’t be much chance you and I could communicate. We would need a third person between us who understood both languages and could serve as the channel for our communications. That is how SOAP works. It listens to your Spanish, then talks to me in Hindi. When I reply, it reverses the process.

Originally designed to perform the computing function of Remote Procedure Calls (RPCs) over the HTTP protocol, SOAP has been broadened for the task of transporting messages. For RPCs, the request is encapsulated in a standard way understood by all parties to the request. For messaging, the document at issue is fully encapsulated (think of that piece of paper in an envelope) and transported over a dependable protocol. Because the messages and requests are usually sent over HTTP, this enables SOAP to travel across firewalls.

The messages are heard by a SOAP server, consisting of code that listens for them and then deals with them, much as our translator who knows Spanish and Hindi in the previous example. The SOAP server makes sure documents received get converted to the language that the program at the other end can understand.

As a protocol, SOAP has found acceptance relatively quickly among both hardware and software makers, and has been used to develop numerous applications. It has wide industry support, which has helped account for its broad interoperability.

So there you have it, the story of SOAP. Clearly, it is almost as important in the world of computers as it is in the physical world we live in. Excuse me now, while I go wash my hands after using this keyboard.

As always, if there are specific topics you would like to see covered in this space, please let me know via e-mail at kevin@duxpr.com.
... Relief for the fax sender, that is.

Many businesses and non-profits alike are concerned that new FCC rule changes governing "junk faxes," set to go into effect January 1, 2005, will require senders of unsolicited advertisements by facsimile transmission—colleges and universities included—to stop this practice unless they first obtain express, signed written consent from each and every recipient. These new rules will impose substantial administrative and financial burdens on businesses and not-for-profit organizations of all types and sizes. How did this happen?

For more than ten years enterprises and customers, including higher education institutions, have relied on what is known as the "established business relationship" or "EBR" exception to the junk fax rules of the FCC. That exception, very generally stated, allows senders to avoid securing advance approvals from parties with whom they have previously conducted transactions, or with whom they corresponded, or from whom they have received inquiries. However, in June 2003 the FCC eliminated this exemption, requiring further that consents from intended fax recipients must be in writing and signed. Numerous petitions were filed with the agency, seeking reconsideration or postponement of these changes.

However, as of late summer 2004, matters remain in limbo. The FCC has yet to act on the requests for reconsideration, and its initial stay or postponement will expire on December 31, 2004, unless extended. Congress, too, seems disposed to modify the statute (the Telephone Consumer Protection Act) which underlies the FCC’s rules, but one can only guess whether and when, in the few remaining days of the session and with the distractions of the election period, Congress will legislate.

What to do? First, do not panic. Optimistic but reliable sources think that the FCC will likely extend its stay, if only to give Congress time to act or to provide more time to adjust to the inevitable.

Second, you should closely examine your faxing practices. Do they actually fall within the ban? Remember, the unsolicited or "junk" fax rule controls only unsolicited faxes of "advertisements." The statute defines an "unsolicited advertisement" as "any material advertising the commercial availability or quality of any property, goods, or services." If your faxes are not advertisements, you are unaffected by the rule itself— as is, or as may be modified.

Third, stay informed. Legislation, if passed, will likely reinstate the EBR exception, as well as establish recipient "opt out" rights, and impose certain time constraints on the EBR exception itself. The FCC, too, would make further modifications to its junk fax rules to reflect these statutory changes, and may very well do so on its own when it acts on the pending reconsideration petitions. Tax exempt organizations will want to pay close attention as the FCC implements any statutory changes, including possible rule waivers.

In short, keep your fax machines on for "unsolicited announcements" from ACUTA and/or your legal advisors.

John J. Smith practices telecommunications and general commercial law in Washington, DC, and assists various enterprises, including colleges and universities, in a range of information technology and telecommunications transactions. He may be reached at jjosephsmith1@earthlink.net.

John J. Smith, Attorney
A Salary Survey

The September 6, 2004, issue of The Telecom Manager's Voice Report Online (VR) was devoted to their 2004 National Salary Survey. The beginning paragraph paints a rather dismal picture. "It's been a rough year for voice pros, who find themselves facing more job responsibilities but no matching boost in their pay packets."

Of particular interest to ACUTA members: Overall the average telecom worker's wages went up by about 3.4% last year which is a little more than the 3% rate-of-inflation increase. The work load in the telecom area was "up a lot." The average time spent working on the job was 45.2 hours per week. Almost 30% of those responding worked more than 50 hours per week. This overtime is most likely without any overtime pay.

"Meanwhile telecom people continue to struggle with the anti-voice bias that favors data staff when it comes to salary. For example, at a college in Indiana, the IT pros make 'at least 35% more' than the telecom manager. That's the same percentage that separates voice from IT pros staffers at a Kentucky university, even though the voice director has 14 years of experience." A telecom manager in Wisconsin noted that "Data gets all the respect." The manager also said, "I love what I do, but my department is not taken seriously. I guess if the phones were down as much as the data, I would get noticed."

The survey also indicated that women in 2004 were getting about 10% lower salaries than men in comparable positions. However the difference was 16% in 2003 and 17.3% in the 2002 surveys, so the discrepancy is improving.

A new fear that the survey mentioned is that many of the larger companies are outsourcing the telecom segment of the company and the telecom employees are losing jobs. It could happen on campus.

The article lists five things that should be done to help secure the job and improve the annual raise in the future.

1) "Show your boss that your job description has changed – or rewrite the description yourself." There are many things changing in the telecom area, and as the changes occur, your job gets harder and it takes longer to keep up with your responsibilities. Upper level management needs to be informed.

2) "Prove your worth in real-world, dollar-figure terms." Often what you do will save the university much more than the salary increase that you and your staff might get.

3) "Don't be shy about tooting your own horn." Be sure to let management know what is happening that will be in your favor.

4) "Start stockpiling those diplomas and certificates." As you take classes and study to do a better job, you need to keep the boss informed.

5) "Bring wage information to your supervisor for a salary revision." Information from things like this salary survey would be the type of information to pass up the management line. (VR 9/6/04)

Mobile Phone Explosions

A California teenager dropped his cell phone recently, and it exploded when he picked it up. The president of the Wireless Consumers Alliance said in a news release Aug. 20 that the case is just the latest of numerous such incidents. The phone the youth had was made by LG Mobile Phones and a company representative said the company has determined that the cause of the explosion was most likely a counterfeit battery or a battery that's sold by a third party. She said that such counterfeiting has been a growing problem and that the company was working to ensure customer safety. The phone model involved, the VX-10, was discontinued last year. [Telecommunications Reports (TR) 9/1/04]
IP Centrex

VoIP over Centrex networks is beginning to be marketed by several of the companies that provide telecom service and is being called IP Centrex. It is being marketed to small companies with more than one business location. With the Centrex system the costly PBX is not needed. Using IP Centrex, small colleges would be able to test VoIP without making expensive commitments that seem to be needed for a normal VoIP installation. This will be something for the small colleges to watch and experiment with on the campus, especially if the campus has several locations in different places.

The following companies have some VoIP offering (some more than others): BellSouth, Covad, Advantage MCI, and SBC. AT&T, Qwest, Sprint, and Verizon expect to offer services soon. (VR 8/9/04)

E-rate Fraud

The FCC adopted the fifth report and order that takes additional steps to curb waste, fraud, and abuse in the Commission’s E-rate program at the Aug. 4 open meeting. The FCC addressed several concerns raised by the Office of Inspector General related to the Commission’s oversight of the program, which has distributed more than $11 billion to schools and libraries since its inception in 1997. FCC Chairman Powell indicated that “the measures we adopt herein are not the final steps we plan to take for strengthening oversight of the Universal Service Program and combat waste, fraud, and abuse.” (TR 8/15/04)

The FCC has decided it will seek to fully recover funds from its Universal Service Program for schools and libraries when the recipient is found to have violated the program’s rules or "substantive" goals. The Commission also set a 5-year deadline for the agency to complete any investigations into violations. (TR 9/1/04)

Ultrawideband (UWB)

For the first time, the FCC has authorized an ultrawideband (UWB) communications device. Freescale Semiconductor, Inc. which is a part of Motorola and in the process of being spun off from its parent, received the authorization. They plan to develop three UAB products during the next year. These will deliver data with transfer rates of 220 Mbps, 480 Mbps, and 1 Gbps. The chips will be designed for both peer-to-peer and home networking products. (TR 9/1/04)

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WEB TIP

Upload Documents to the Resource Library

Ever wanted to share an RFP with several ACUTA members? Have you participated in a discussion on the ACUTA listserv and wanted to include a Web link for a document not yet stored on an accessible server?

ACUTA members with a MY ACUTA website account can upload documents directly to ACUTA’s Resource Library. Once the upload is approved by ACUTA staff, you can reference the document with a provided URL Web link.

If you already have a MY ACUTA account, you can click "Login" at the top right of any page on ACUTA’s website. At the screen for your “MY ACUTA” choices, click "View/Add your Document Library Submissions.”

If you are not sure you already have a MY ACUTA account, go to http://www.acuta.org/myacuta. Type in your e-mail address, and, if it exists, you can request your password be sent to you. If it does not exist, an email will be sent to you with a personalized URL to set up your account.

This is a great way to share a timely document and at the same time help build the Resource Library for all ACUTA members seeking information.

If you have any questions, contact Aaron Fuehrer, Computer Services Manager, at afuehrer@acuta.org or 859/278-3338 ext. 229.
Welcome New Members

Institutional Members

Maricopa Community College District Office, Tempe, AZ. T1
http://www.maricopa.edu
Jon Clark, Manager, Network Services; 480/731-8663

New York Institute of Technology, Old Westbury, NY. T3
http://www.nyit.edu
Al Dagro, Director of Telecommunications; 516/686-7601

Corporate Affiliate Members

COPPER MEMBERS

Aastra Telecom, Concord, Ontario, Canada
http://www.aastrea.com
Steve Hawkins, Director of Sales; 905/760-4251
Aastra Telecom develops and markets products and systems for accessing communication networks including the Internet. Products include Meridian Digital Centerx terminals, analog telephones, M1 cordless terminals, VoIP products, network access servers, and broadcast quality digital video gateways.

Engage Communication, Inc., Aptos, CA
http://www.engagecom.com
Keith Hanna; 831/688-1021 x104
Engage offers solutions for T1 voice and data over IP. The Engage IP-Tube is an evolutionary solution for interconnecting T1-base phone systems over IP/Ethernet broadband networks. Save your school money with simple, easy, solutions that work.

Ready Talk, Denver, CO
http://www.readytalk.com
Dan King, CEO; 303/209-1700
ReadyTalk offers carrier-grade teleconferencing services at affordable rates, with powerful web conferencing included at no extra charge. We enable ACUTA members to significantly reduce their conferencing spend. Watch a recording on ReadyTalk at: http://www.callinfo.com/pa7id=xkbbbdn9

Shared Technologies, Inc., Phoenix, AZ
http://www.stfi.com
Rebel Pallotti, Major Account Manager; 602/454-6868
National in scope, local in focus, Shared Technologies has a thirty-year track record of success offering "best in class" solutions to those businesses using either Nortel Networks or NEC technology in the United States.

ACUTA Online Press Room

The following press releases have been posted to the ACUTA website since the September eNews. We encourage you to visit the ACUTA website frequently for the latest information from a variety of sources, including our corporate affiliates.

- Avaya Unveils New Wireless IP Telephony Products for Converged Mobility Throughout—and Beyond—an Enterprise
- College of Lake County Selects SunGuard Collegis to Manage its Information Technology