Computing Research Association Conference at Snowbird 2000



Slides from a plenary session on the topic of

"Impact of the Economic Development Imperative on Universities"

presented by

Randy Katz, University of California, Berkeley

> Monday July 10, 2000 1:30 pm

http://www.cra.org/Activities/snowbird/00/plenary2.html

Joint Academic/Industrial Workshop: Dealing with Intellectual Property Issues

> Tuesday, 28 July 1998 10:30 - Noon

> > Randy H. Katz

Electrical Engineering and Computer Science Department

University of California, Berkeley Berkeley, CA 94720-1776

ssues

- Industry becoming an increasingly important source of university funding
- Large-scale consortia research becoming the norm
- Increasing activity of Faculty entrepreneurs: new conflicts of interest
- Does existing university/departmental policies encourage or discourage this activity?
- Where does software fit within existing University copyright/patent policies?

CRA Workshop 9 December 1996

- "University Software Licensing, Patents, and Industrial Interaction"
- Faculty, Administrators, Licensing/Legal Professionals, Industrial Research Managers
- Focus on:
 - Research software
 - VIFs and Industrial Leave Faculty
- Goal: draft principles and guidelines

Observations from Berkeley

- Berkeley BSD Unix Experience
- Software Publishing Agreement
 - Copyright UC Regents, attribution requested
 - Unlimited use research & educational purposes
 - Commercial license for commercial exploitation
 - Retain unrestricted use rights for UC
- 1996-1997
 - \$11 million/year in industry funded research in EECS
 - 25% of all research funding in EECS

Observations from Berkeley

 Most successful license in electronics within UC: switched capacitor filters, \$2 million since 1980 (now expired)

\$543K

- Berkeley OTL FY1997 (102 patents)
 - Gross Patents Income: \$868K \$537K
 - Less Legal Expenses:
 - Less Operating Expenses:
 - \$248K - Less Inventor/State Share: - LOSS \$460K
- \$94K (\$45K net income) from 10 software licenses

HP's Master Research Agreement

- Royalty-free license for inventions
 - Up to \$10K for patent costs
 - First option on exclusive license, with credit for patent cost payments
 - Unrestricted use of software wholly generated in the research
 - Royalty-free use for internal evaluation purposes
 - HP visiting scientists able to work on campus

Breakout Groups

- How is Software Different? Bill Gear
- Who are the Players and What are Their Expectations? Peter Freeman
- What are the Underlying Principles of Intellectual Property Rights? Ed Lazowska
- What are the Special Issues of Consortium Agreements? Rich Adrion

Software IPR

- Rapid dissemination while building on each other's work
- Distinguish between novelty in functionality (object distribution ok) vs. expression of new ideas (source code necessary)
- Authorship complexities
 - Faculty, student, staff authors and who is entitled to inventor royalties
- Derivative works complexities
 - Commercial versions of university software tend to be extensively rewritten and extended

Players and Expectations

- Faculty: fame, support for research group
- Students: experience, good job
- Postdocs: faculty plus students
- Staff: fewer rights than students!
- Trustees: revenue stream, regional development, scandal avoidance, fame
- Industry: early access to commercially useful technology (and well trained students)

IPR Principles

- Uniform treatment of IP
- Use the right incentives: license fees or increased industry sponsorship of research
- Fair sharing among all participants
- Fast licensing decisions is essential
- Realize that software licensing fees are modest and optimize for the common case
- Reserve educational and research rights
- Keep faculty and students educated on these issues

Consortia Agreements

Many different kinds of consortia

- Affliates, one university/many industrial sponsors with and without federal funding, many universities one sponsor, many universities and many sponsors
- Set up consistent rules
- Clarify attribution/clearance mechanisms
- I dentify precise meaning of "divide equally"
- Make all participants aware of IP risks
 - Infringement, breach, liability

Faculty Entrepreneurs

- Ever increasing number of faculty/grad students commercializing own inventions
- Conflicts of interest
 - Research agenda set by dissemination of knowledge or economic gain
 - Faculty time and attention
 - Exploitation of students
 - Reaction of industrial sponsors
 - Extensive use of university facilities
- No real university policy: department culture sets the norms

Faculty Entrepreneurs

- What is the norm in your department?
- What are the guidelines for acceptable behavior?
 - Clean separation of university from industrial lives for faculty and students
 - University ownership of IP/use of facilities
 - Gifts of founders stock to Department
- How do companies handle these issues?