

Standards, Patents and the Dynamics of Innovation on the Web

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this presentation: <http://www.w3.org/2004/09/psi.pdf>

Overview

- ◆ What W3C learned about patents and Web standards: unique dynamics of innovation
- ◆ How we have responded:
 - policy development
 - W3C Member and public interactions
- ◆ Where to from here

Historical Motivation

- ◆ 1993: CERN contributions Web infrastructure to the public domain
- ◆ 1994-1998: Community norms avoids patent licensing issues
- ◆ 1998-1999: Patent holdup of 5 W3C specifications

October 1999: Patent policy development begins

What We Have Learned

- ◆ Unique sources of innovation on the Web
- ◆ Unique Industry Structure
- ◆ Diversity of Business Models
- ◆ In the background: Uneasiness about software patents

Sources of Innovation: The XML Eleven

- ◆ Arbortext - Eve Maler
- ◆ Dyansoft - Steve DeRose
- ◆ Hewlett-Packard - Dave Hollander
- ◆ Independent - Elliot Kimber
- ◆ Independent - James Clark
- ◆ Microsoft - Jean Paoli
- NCSA - Tom Magliery
- Softquad - Peter Sharp
- Sun - Jon Bosak
- Textuality - Tim Bray
- Univ. Illinois - Michael Sperberg-McQueen

Sources of Innovation: Critical Web Infrastructure

Key infrastructure components widely available:

- ◆ Apache
- ◆ Perl
- ◆ Mozilla

Low barriers to entry as important as technical bells & whistles



“Uneasiness” over software patents

- ◆ W3C takes patent law where we find it: no position on software patents
- ◆ Many members feel that low standards of obviousness and inadequate examination process create risk
- ◆ RF policy is pragmatic, not ideological choice for most Members
- ◆ Bookmark: holding patents ends up being important to the operation of the W3C Policy

W3C Response: Patent Policy Favoring Royalty-Free Standards

Goal: Produce Recommendations implementable on Royalty-Free basis and allow technical work to with minimal interruption

Method:

- W3C RF obligations for Working Group participants
- W3C Royalty-Free licensing definition
- Disclosure rules
- Exception Handling: Patent Advisory Group (PAG)

W3C Royalty-Free Licensing Commitment

Social Contract Among Specification Designers and Developers:

- ◆ ALL Working Group Participants must agree to license Essential Claims they hold on an RF basis
- ◆ ONLY Essential Claims - target is interoperability
- ◆ Exclusions possible early in the development of a specification

W3C Royalty-Free Licensing Requirements

Requirements for a license: (partial list)

- ★ available to all
- ★ all Essential Claims 'owned or controlled'
- ★ field of use limitation
- ★ reciprocity
- ★ no fees
- ★ defensive suspension
- ★ no other conditions

Web Community Decisionmaking

◆ *Final poll: highest level of W3C
Member support for ANY W3C action.*

Director's Decision:

The Policy affirms and strengthens the basic business model that has driven innovation on the Web from its inception. The availability of an interoperable, unencumbered Web infrastructure provides an expanding foundation for innovative applications, profitable commerce, and the free flow of information and ideas on a commercial and non-commercial basis.”

Where to from here...Sample Royalty-free commitments

- ◆ (networking) SOAP 1.2: Systinet, DaimlerChrysler, IBM, Tibco, IONA, SUN Microsystems, Fujitsu, Canon, Microsoft, Macromedia, Progress Software
- ◆ (Multimedia) SMIL: Compaq, Intel, Macromedia, Microsoft, Matsushita, Real Networks
- ◆ (Telecom) VoiceXML 2.0: Cisco, Genesys, Health Level 7, Hewlett-Packard, HeyAnita, IBM, Intel, Microsoft, Motorola, Nokia, Openwave, Scansoft, SnowShore, Sun, TelecomItalia, Vocalocity

Coda: Eolas v. Microsoft

- ◆ Eolas wins \$521M+ judgment
- ◆ Little sympathy, but attack on RF expectations of HTML threatens entire Web community, not just Microsoft
- ◆ W3C urges US PTO to re-examine patent -- initial success
- ◆ Early exercise for new W3C policy

References

- ◆ W3C Patent Policy: <http://www.w3.org/TR/patent-policy>
- ◆ Director's Decision on the Patent Policy: <http://www.w3.org/2003/05/12-director-patent-decision-public.html>
- ◆ Testimony before the United States Federal Trade Commission and Department of Justice: <http://www.ftc.gov/opp/intellect/020418weitzner.htm>
- ◆ Selected press coverage: <http://www.w3.org/2001/10/patentpolicypress.html>
- ◆ W3C Filings on Eolas patent challenge <http://www.w3.org/2003/10/28-906-briefing.html>