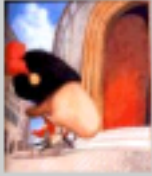


## NOSE: Information Technology in Higher Education



Technology Changes. Economic Laws Do Not.

05 August 2006

### How to Think About the Blackboard Patent: Part II. What is the Scope of Blackboard's Patent?

In Part I I argued that Blackboard is disingenuous in claiming that its intent for filing a patent is to prevent software "copying". Copyrights, not patents, cover copying of software code. Everyone agrees that Blackboard is entitled to receive copyright protection for its code. That's not the issue in this case. But as Richard Stallman noted in a Lecture on Software Patents at Cambridge University, patents are an entirely different beast because they entitle property rights for a mere idea, irrespective of its expression: "A patent is an absolute monopoly on using an idea. Even if you could prove you had the idea on your own, it would be entirely irrelevant if the idea is patented by somebody else."

I also suggested that a fundamental question in the Blackboard debate concerns the boundaries of its idea or invention.

#### What is the scope of Blackboard's patent claim?

Does it cover all Virtual Learning Environments? Does it exclude blogs, wikis, e-portfolio, and other emerging learning technologies or methods? Does it cover only current technologies or even new ones? What about affiliated infrastructure technologies such as portals, ERP-integration, online registration, and e-commerce?

Based on a reading of the patent I shall argue that the patent grant is breathtaking in its sweep and goes well beyond what we normally associate with course management systems or virtual learning environments. **In addition to the core technologies associated with a VLE, the Blackboard patent potentially covers any infrastructure and integration elements when used in the context of course delivery.** This means, for example, that even if your institution uses Blackboard software but decides to integrate a tuition payment engine or portal technology (in the context of online course delivery) from a third-party other than Blackboard, the vendor could be required to pay royalties to Blackboard. The same logic would apply for integration elements such as data feeds from a student or financial information system. Because the Blackboard patent also covers certain "methods", the use of blogs, wikis or any other future technologies (when used in the context of online course delivery) could also be subject to the Blackboard patent.

The Blackboard patent covers both **systems** and **methods**. I shall describe these systematically in subsequent postings. But let me introduce here some excerpts from the patent filing to motivate my claim that the Blackboard patent goes well beyond the basic functionality of a course management system.

**Example 1:** "The present invention also relates to (translate "relates to" to "covers") the provision of an infrastructure that allows for on-line registration and tuition payment of educational courses."

**Example 2:** "The present invention also **enhances the prior art** (emphasis mine) by providing a flexible infrastructure for colleges, universities, and other institutions wishing to facilitate on-line registration and tuition payment. More specifically, the present invention can accommodate different billing methods, including, but not limited to, billing on a per-credit-hour basis, and billing on a per-registrant basis."

The system aspects of Blackboard's purported invention are delineated in section "Three Tier Functionality" of the patent. It is claimed that the invention can have various levels of "embodiment".

The "first element" includes the elements of what we traditionally associate with a course management system. The course management tier includes "tools that enable instructors to provide their students with course materials, discussion boards, virtual chat, online assessments, and a dedicated academic resource center on the Web. As explained further below, the Course Manager includes personal information management tools, course content management tools, course communication and collaboration tools, assessment tools, academic Web resources, course management tools, and system management tools."

The "second tier" includes all the elements of the first but goes beyond it and "provides **customized institution-wide portals** (emphasis mine) for faculty, students, staff, and alumni with access to numerous personalized news and information services from across the Web.....In addition to the features of the Course Manager, the Course & Portal Manager includes enterprise database support, customizable portal modules and information services, web-based email system, community management, institutional services management, extended customization for institutional services management, extended customization for institutional branding, institution-wide content sharing and management, and course e-commerce management."

The "third tier" is "a complete end-to-end "e-Learning solution." "This is the fully functional embodiment that includes all the features and functionality of the first and second tiers and **adds certain integration technologies** (emphasis mine) that allow integration of the invention with existing enterprise systems, such as for downloading student databases, etc. as defined further below. This includes a snapshot user management API, an event-driven (real-time) user management API, an end user authentication (security) API, and a network protocol for passing user authentication data."

Although it is not stated explicitly, it is implied that the patent covers each of these embodiments: "It is contemplated that each tier would be offered to institutions in a

**licensing program** (emphasis mine) that would best suit the needs and budget of the institution."

In summary, the text of the patent establishes a comprehensive claim on a wide variety of tools, infrastructure, and methods associated with online learning environments. Because the text of the patent is deliberately written in Derridian techno-legalese its interpretation has many degree of freedoms. As Richard Stallman has noted, "Sometimes the idea that's patented will be so broad and basic that it basically rules out an entire field." Potentially any individual or organization can be slapped with an infringement claim by Blackboard.

We should give Blackboard the benefit of the doubt and reserve judgment about the company's intentions, but only if the company's leadership states in clear prose and as a matter of public record which technologies it believes are covered and how it intends to apply its patent. Otherwise we will be forced to conclude that Blackboard's intentions are malign and predatory.