

**Patent  
Reform**  
for a  
**Digital  
Economy**

*Executive Summary*

November 2006

Dear friends,

It is with great pleasure that CCIA is issuing this white paper prepared by Brian Kahin, Senior Fellow at the Computer & Communications Industry Association (CCIA). *Patent Reform for a Digital Economy* presents and explains the unresolved problems in our patent system and recommends innovative solutions for solving them.

*Why reform patent law?* In the 1970s, ill-advised technology policies hindered growth, limited consumer choice, and ultimately delayed the information revolution. Today that revolution has arrived, yet we may still be denied its fruits. Why? Our intellectual property law runs amok. Current patent law encourages fraud, abuse, and opportunism. Patents invade all aspects of modern life. Instead of promoting innovation, patent law often only promotes more patents.

*Why do CCIA's members care about patent law?* CCIA is a nonprofit membership organization comprised of cutting-edge information, and communications technology companies, represented by their senior executives. CCIA's members depend on a well-functioning patent system to continue innovating. Our diverse membership encompasses telecommunications, Internet, and web service providers, hardware and software developers, resellers, and financial service companies that together employ almost one million workers and generate nearly \$250 billion in annual revenue.

For nearly 35 years, CCIA has worked with our members to further their goals in the legislative and regulatory arenas. Policymakers need to now turn their attention to the patent system. A well-balanced patent system can protect invention and foster innovation in the computer, information, and communications technology industries that CCIA represents. But to do so it must be reformed. With your help, CCIA aspires to create an innovation-friendly landscape.

I trust this white paper will prove to be a valuable tool as we work together to achieve this essential goal.

Yours truly,

A handwritten signature in black ink, appearing to read "Ed Black". The signature is fluid and cursive, with a large initial "E" and a long, sweeping underline.

Ed Black  
President & CEO, CCIA

# *Patent Reform for a Digital Economy*

**Brian Kahin<sup>1</sup>**

Computer & Communications Industry Association

November 2006

## **EXECUTIVE SUMMARY**

Today the patent system is in crisis. As technology burgeons and diversifies, patents work differently in different sectors – with divergent results in terms of business effects, benefits, and costs. There is growing tension between the pharmaceutical and biotechnology perspectives and the IT sector's need for reform.

While often viewed narrowly as arcane legal problems, patents today raise business problems that are increasingly threatening to high-tech industries. Since the goal of the patent system is to promote innovation, this can lead to the conclusion that the patent system is broken.

Litigation, costly and disruptive as it is, is only the tip of the iceberg. The number of patent assertions far exceeds the number of patent cases filed, let alone the number that are fully litigated. Patent practice in IT is characterized by low-quality patents, poorly defined boundaries, a vast number of potentially patentable functions, patent thickets and landmines, and impractically high costs of avoiding infringement.

These problems are manifestations of a volume-driven patent system that has been captured by the business interests of patent

professionals and the bureaucratic interests of a fee-funded Patent and Trademark Office. They are also a consequence of decisions by the specialized Court of Appeals for the Federal Circuit that have made patents:

- more potent (automatic injunctions);
- easy to get (a low standard of nonobviousness);
- easy to assert (an unwarranted high presumption of validity); and
- available for virtually unlimited range of subject matter (including software and business methods).

IT experiences these policies differently because it is marketed in the form of complex products that can incorporate many thousands of patentable functions. In pharmaceuticals, by contrast, there is a close association between individual drugs and patents.

An excess of patents creates problems in identifying, evaluating, and avoiding patents. This creates an opaque intellectual

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property landscape in which, as a practical business matter, it is impossible to know what patent rights are needed to get a product to market, who owns them, what they cover, and whether or not they are valid and worth licensing. At the same time, the networked nature of IT makes it essential to combine many different functions, components, and products – or at least enable them to work together.

Big companies deal with these problems by accumulating and cross-licensing large portfolios of patents. These portfolios deter litigation by other producers, but they are ineffective against patent holders who have no need for cross-licenses because they have no products. The opacity of the landscape makes inadvertent infringement commonplace, enabling non-producing patent holders to profit from “being infringed.” By lying low as industry standards and commercial products are developed, implemented, and marketed, they quietly encourage investments that they can later hold hostage.

Legislation introduced in the 109th Congress stalled because pharmaceutical and biotechnology interests resisted reforms that might possibly diminish the value of their patents. But unless the IT sector is to subsidize pharma and biotech, reform is needed to address underlying problems in three areas.

First, the standard of patentability, “nonobviousness,” has been lowered by the Federal Circuit and by patent office practice. It needs to be raised to take into account the real world of rising expectations, increased competition, global markets, and changing technology and product markets.

Second, patent administration and practice should be aligned with the vigorous, rapid,

and networked movement of technological knowledge. Rapidly evolving Internet-enabled technical knowledge should not be constrained by secretive, slow, liability laden processes of patent examination and assertion. The present mismatch between rapid technological evolution and standards-based investment on the one hand and patent-based incentives to surprise and hold-up on the other is dangerous and damaging to IT.

Third, the forms of capture that have constrained and distorted the rational development of patent policy must be addressed. Patent policy must be firmly tied to the goal of promoting innovation, not the self-interest of those who use and manage the system.

In conclusion, we need to rethink patent policy in terms of fundamental principles: promoting innovation, efficiency in implementation, and accountability for results. To this end, CCIA’s proposals for substantial reform include:

- Tailor patent protection to reflect the diversity of innovation environments.
- Raise the basic threshold: eliminate the “ordinary” from patent law.
- Implement peer review for patent applications.
- Reward submissions of prior art that invalidate defective patents.
- Require registration of notice letters that assert infringement.
- Condition full fee-funding on PTO accountability.
- Put PTO at the forefront of knowledge management and information science.
- Stop the ambush of openly developed standards.
- Reengineer patent institutions to promote innovation, preclude capture, and reduce costs.