FOREWORD

By A.H. Rajanit & Alison Watkins

Since its inception, the Berkeley Technology Law Journal—formerly the High Technology Law Journal—has sought to address "the novel legal issues posed by advancing technologies, mixing scholarly analysis with useful research tools for the practitioner." In keeping with this objective, the Annual Review of Law & Technology, now in its tenth volume, provides practitioners, judges, policymakers, scholars, and students with detailed analyses and summaries of the most significant developments in technology law during the past year. And as technology plays an ever-expanding role in our society, it should come as no surprise that the Annual Review covers an increasingly wider range of legal issues.

This year's Annual Review includes twenty-four Notes. Most follow the traditional case note model while others provide broader policy discussions. The thirty-two Additional Developments summarize other significant cases and developments in the law from the past year.

Read collectively, these Notes highlight legal issues common to different areas of technology and intellectual property law. For example, many Notes analyze the extent to which licenses and other forms of contract may alter the scope of intellectual property rights as traditionally defined. A number of the Notes explore this tension in the context of patented inventions and copyrighted works, while others identify similar issues in rapidly emerging virtual worlds and fantasy sports leagues.

Another issue highlighted in this year's Annual Review is the extent to which technological protection measures may enforce or extend copyright protection for software and digital media. This movement to technological self-help is also illustrated in the way some patentees are building protec-

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We are grateful to Professor Peter S. Menell for his continued dedication to this project. Without his guidance and expertise, publication of the Annual Review would be impossible. Thanks are also due to Robert Barr, Executive Director of the Berkeley Center for Law and Technology, for his valuable contribution to this year’s patent Notes. In addition, the Annual Review advisors and the Journal’s editorial board were instrumental to the successful completion of this project. Finally, we owe our most sincere thanks to our authors for their enthusiasm, thoughtfulness, and perseverance.

1. Editors’ Page, 1 HIGH TECH. L.J. 1 (1986).
tion measures into their products rather than relying on licenses or their patent rights.

Finally, as the importance of the internet as a commercial marketplace, a resource for information, and a forum for speech increases, Congress and the courts continue to grapple with how to regulate the commercial, personal and government use of the internet, and indeed the ongoing debate over net neutrality challenges us to perhaps re-envision the structure of the internet itself.

I. INTELLECTUAL PROPERTY

A. Patent

This year’s Annual Review explores a wide range of issues within patent law. Some Notes analyze doctrinal issues, including patentable subject matter, the doctrine of equivalents, claim construction methodology, continuation practice, and the issuance of permanent injunctions. Other Notes address conflicts arising from licensing or other contractual agreements, including potential antitrust liability.

1. Doctrinal Developments and Analysis

Many of the patent Notes employ empirical analysis to explain the current state of the law. The first of these Notes looks at the effect of the Supreme Court’s holding in eBay Inc. v. MercExchange, LLC that a district court must apply a four-factor test to determine whether to grant a permanent injunction in patent cases. This Note examines some post-eBay decisions and predicts that courts will grant permanent injunctions when an infringer directly competes with a patentee, but will deny an injunction when an infringer merely indirectly competes with a patentee.

Another Note analyzes the effect that the Federal Circuit’s decision en banc in Phillips v. AWH Corp. has had on methodology of claim construction. This Note examines subsequent case law to identify how panels of the Federal Circuit and district courts have applied Phillips. The Note’s empirical analysis of post-Phillips claim construction appeals in the Federal Circuit uncovers a willingness to rely on specifications rather than dictionaries to interpret claims, a methodology arguably less predictable

where the court will use dictionary definitions under the guise of "ordinary meaning."

The Federal Circuit doctrine of equivalents jurisprudence is the subject of another Note. The Note examines the new limiting principle adopted by the Federal Circuit in *Bicon, Inc. v. Straumann Co.* and recounts the evolution of the doctrine of equivalents, offering a thorough explanation of the major principles instituted by the Federal Circuit which limit the application of the doctrine. And while the general contours of the doctrine suggest that the principle will not have as drastic of an effect on the doctrine of equivalents as some of the other limiting principles, it remains yet another doctrine of equivalents defense applicable against any structural claim.

In January 2006, the United States Patent and Trademark Office (PTO) proposed a controversial rule that could significantly affect how applicants may use patent continuation applications to protect the priority date of earlier filed applications. One Note investigates whether the PTO is authorized to promulgate the proposed rule and concludes that if the proposed rule is promulgated and its validity is challenged, the Federal Circuit should review and invalidate the rule under a "hard look" standard of review.

Another Note uses the Supreme Court's dismissal of certiorari in *Laboratory Corporation of America Holdings v. Metabolite Laboratories, Inc.* as a starting point to examine the development of patentable subject matter and its role in a modern patent system. This Note contends that subject matter has a role to play in the modern patent system, but not as a traditional bright-line restriction. Instead, courts should treat subject matter as a relevant factor in analyzing other requirements of patentability and should take care to apply those doctrines strictly for patents that cover traditionally unpatentable subject matter.

2. Contract and Antitrust in the Patent Context

Contracts and licensing are often critical elements to the successful exploitation and protection of a patentee's rights. One Note reviews the Federal Circuit's decision in *LG Electronics, Inc. v. Bizcom Electronics, Inc.* within the context of the foundry problem in the semiconductor industry and notes how a carefully drafted licensing agreement can over-

come the doctrine of patent exhaustion, which creates the foundry problem.

Contracts and licensing agreements can also give rise to antitrust liability. One Note analyzes the Supreme Court's holding in *Illinois Tool Works, Inc. v. Independent Ink, Inc.* The Note makes two observations: first, that the Court unequivocally removed the presumption that a patent confers market power and second, that the Court arguably removed the applicability of the *per se* analysis for patent-tying arrangements. The Note concludes that even if the Supreme Court's holding in *Illinois Tool* is unclear as to applicability of the *per se* standard, as a normative matter, the rule of reason should govern future cases challenging patent-tying arrangements.

The recent responses by government agencies and the courts to reverse payment settlements in the context of the Hatch-Waxman Amendments is the subject of another Note. This Note describes how the Hatch-Waxman Amendments created incentives for reverse payments, and set forth the legal standard announced in two circuit court cases, *Schering-Plough Corp. v. FTC* from the Eleventh Circuit and *In re Tamoxifen Citrate Antitrust Litigation* from the Second Circuit. This Note approves of the approach taken by the Second and Eleventh Circuits to determine the legality of reverse payment settlements in the Hatch-Waxman context because they suggest that future antitrust plaintiffs should attack the patent, not the payment.

Another Note addressing the use of licensing examines the implications of *U.S. Philips Corp. v. International Trade Commission* on block licenses, also known as patent pools. This Note finds that the Federal Circuit's decision in *Philips* serves to restrict patent misuse doctrine and encourage patent pools, and concludes that *Philips* creates a legal presumption that encourages the creation of, participation in, and enforcement of package licenses.

Within the agricultural industry, the fact that seed are naturally self-replicating has forced patentees to protect their market in a number of ways. One Note examines *Monsanto Co. v. Scruggs* and *Monsanto Co. v. McFarling*, two cases in which seed producers enforced the single-use

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10. *In re Tamoxifen Citrate Antitrust Litig.*, 466 F.3d 187 (2d Cir. 2006).
terms of their licenses against farmer-licensees, and proposes that the Federal Circuit’s refusal to apply the patent exhaustion doctrine to seeds, despite its negative financial impact on individual farmers, was appropriate given patent law’s role in providing incentives for innovation. The Note also observes that rather than relying solely on licenses, many within the industry have begun to employ technological protection measures such as genetic use restriction technologies (GURTs).

B. Copyright

The interplay between licenses, technological protection measures, and consumer welfare is apparent in the dispute between Apple Computers and French authorities over the application of the “Law on Copyright and Neighboring Rights in the Information Society” (Dadvsi). One Note examines the interoperability debate, focusing on the European consumer actions targeting Apple’s FairPlay platform, the consumer right to interoperability, and the right of companies like Apple to use DRM without regulation. The Note proposes ways that governments may more effectively regulate DRM and concludes that, in view of France’s approach to copyright and the nature of Dadvsi’s interoperability provisions, intellectual property rights will most likely enjoy priority over consumer rights under Dadvsi.

Licensing continues to be crucial to the software industry. In examining the Ninth Circuit’s decision in Wall Data Inc. v. Los Angeles County Sheriff’s Department, one Note discusses the tension between contract and copyright law and the ongoing “license versus sale” debate within software copyright cases.

One Note builds on the discussion in previous issues of the Annual Review and examines the scope of protection afforded by the Digital Millennium Copyright Act (DMCA) in relation to the copyright protection in the underlying work. The Note examines the Federal Circuit’s decision in Storage Technology Corp. v. Custom Hardware Engineering & Consult-
ing, Inc.\textsuperscript{17} against the legal background of both the Computer Maintenance Competition Assurance Act's (CMCAA) safe harbor for maintenance and the DMCA's anti-circumvention provision. The Note concludes that StorageTek exhibits generally sound reasoning, preserves the CMCAA safe harbor, sensibly limits copyright liability and remedies to disputes that infringe the exclusive rights defined by copyright law, and represents a positive development for both for copyright law and the computer service market.

Another Note illustrates that traditional copyright law is just as dynamic as digital copyright. One Note discusses how two recent Second Circuit opinions in \textit{Bill Graham Archives v. Dorling-Kindersley Ltd.} and \textit{Blanch v. Koons}\textsuperscript{18} seem to diverge from the Second Circuit's traditionally conservative approach to fair use. This Note explores how these rulings seem to evince a broader definition of transformative use and consequently find secondary uses fair despite their impact on a copyright holder's potential market, which could be promising for appropriation art in the twenty-first century. These predictions are tempered by the lack of predictability within fair use jurisprudence, and the problems this causes, echoing the concerns raised in two Notes in the 2006 \textit{Annual Review}.\textsuperscript{19}

These Second Circuit opinions could represent a counterbalance within fair use jurisprudence to the restrictive interpretation of fair use in the digital context from the Central District of California in \textit{Perfect 10 v. Google, Inc.}\textsuperscript{20} That case is discussed as an Additional Development rather than a full case note because of its pending review by the Ninth Circuit.

C. Trademark

The internet's role as a commercial marketplace, a resource for information, and a forum for speech continues as a theme of this year's \textit{Annual Review}. The sole Note addressing trademark law examines the application of the initial interest confusion doctrine to the use of trademarked terms within website metatags.\textsuperscript{21} The Note explains the evolution of the initial

\textsuperscript{17} Storage Tech. Corp. v. Custom Hardware Eng'g. & Consulting, Inc., 421 F.3d 1307 (Fed. Cir. 2005), further opinion on denial of reh'g, 431 F.3d 1374 (Fed. Cir. 2005).

\textsuperscript{18} Bill Graham Archives v. Dorling-Kindersley Ltd., 448 F.3d 605 (2d Cir. 2006); Blanch v. Koons, 467 F.3d 244 (2d Cir. 2006).


\textsuperscript{21} The application of the initial interest confusion doctrine in internet-related cases has been the subject of past \textit{Annual Review} Notes. Yas Raouf, Note, Lamparello v. Fal-
interest confusion doctrine, and discusses in detail several cases decided between 2002 and 2006 that represent a growing trend of misapplication and undue broadening of the doctrine. The Note argues that initial interest confusion should not be used as a less stringent substitute for the traditional likelihood of confusion test. The Note locates the source of the courts’ misapplication of the doctrine to metatags with both a misunderstanding of internet search technology and a misunderstanding of the way most consumers use internet search technology to shop on the internet.

D. Trade Secret

In Burbank Grease Services, LLC v. Sokolowski, the Supreme Court of Wisconsin held that the Wisconsin Uniform Trade Secret Act does not preempt common law claims based information that is confidential, but that does not rise to the level of a “trade secret.” The sole Note on trade secret law examines this decision and argues that it frustrates the Uniform Trade Secret Act’s goal of achieving uniformity among states with regard to trade secret protection, and thus concludes that the court’s holding is misplaced both as a matter of statutory interpretation and as a matter of policy.

II. CYBERLAW

The growing importance of the internet as a source of information begs the question: “Are the questions we ask and the information we seek over the internet protected?” One Note delves into the constitutional and statutory protections (or lack thereof) for search query strings. This Note examines Gonzales v. Google, Inc., where the Northern District of California rejected the federal government’s request for thousands of search query strings entered by users of Google’s search engine. The Note wrestles with how to balance the privacy rights of individuals with providing law enforcement appropriate access to relevant information, ultimately proposing that courts should adopt an originalist interpretation of the Fourth Amendment in deciding online communication cases and advo-

icates expanding the Electronic Communications Privacy Act (ECPA) to cover search query strings.\textsuperscript{24}

The internet is not solely a commercial marketplace; it also serves as a platform for the development of online communities. Two Notes explore legal disputes arising from two types of internet communities: fantasy sports leagues and massively-multiplayer online games (MMOGs).

The first of these Notes explores the world of fantasy sports leagues at issue in \textit{C.B.C. Distribution & Marketing., Inc. v. Major League Baseball Advanced Media, LP}.\textsuperscript{25} The Note explains why Major League Baseball’s claim of right of publicity is better understood as an attempt to claim ownership over its ballplayers’ performance statistics. The Note sets forth the public policies underlying publicity rights, and suggests that in light of these policies and other countervailing concerns that Major League Baseball should not be allowed to claim ownership over these statistics.

The second Note examines three disputes over virtual property that exists within the online worlds of MMOGs. The Note discusses the suitability of the end-user licensing agreements (EULAs) in resolving disputes that arise out of these virtual worlds. The Note suggests that because of confusion over EULA terms and the current underenforcement of the EULAs by the game developers, EULAs do not provide adequate protection for the online community’s substantial investments of time and money. The Note identifies problems with most virtual world EULAs, makes a normative argument for revising them, and suggests specific changes that would make EULAs more responsive to the unique needs of inhabitants of virtual worlds.

Regulating activity on internet necessarily involves immense technological challenges. For example, one Note explores the anatomy of click fraud, its growing sophistication, and its impact on the advertising industry. The Note also considers possible legal, regulatory, and market-based solutions that may mitigate the effect and prevalence of click fraud. The second Note reviews the effectiveness of litigation initiated by individual states, the Federal Trade Commission (FTC), and private citizens challenging various actors within numerous sectors of the spyware industry, and concludes that the promising results achieved since 2005 suggest that

\textsuperscript{24}. Amending ECPA to better protect email was the subject of a 2006 Annual Review Note. Katherine A. Oyama, Note, \textit{E-Mail Privacy After United States v. Councilman: Legislative Options for Amending ECPA}, 21 BERKELEY TECH. J. 499 (2006)

these multiple legal mechanisms working together can effectively control the spyware problem.  

The final cyberlaw Note examines judicial review of electronic standard form contracting (or “clickwrap” agreements). Setting aside the question of whether individuals read standard form contracts, the Note suggests that a review of the cases in which clickwrap terms have been litigated demonstrates that contractors are not vigorously exploiting their ability to extract assent in a way that requires drastic judicial response. This Note also argues that although the current analytical framework for adjudicating clickwrap agreements does not include a particularly rigorous assent analysis, it has adequately addressed the types of agreements that have been litigated thus far.

III. TELECOMMUNICATIONS

The first Note on telecommunications addresses the debate over net Neutrality and provides a detailed description of the technical structure of the internet in an effort to point out how the engineering and economic realities of that structure have been overlooked in the debate. The Note posits that a technical understanding of the internet is necessary to properly appreciate the debate over Net Neutrality. The Note argues that (1) the internet has never been neutral and has never been designed to be neutral; (2) internet traffic prioritization can both coexist with and encourage internet innovation; and (3) some minimal regulation is needed to prevent market power abuses and usage discrimination in the internet service market. The Note also proposes a middle-ground solution that can unite both sides of the debate.

The second telecommunications Note discusses the Federal Communications Commission’s (FCC) order to include broadband providers under the substantial replacement provision of the Communication Assistance to Law Enforcement Act’s (CALEA) definition of a telecommunications carrier and the D.C. Circuit’s subsequent review of this decision in American Council on Education v. FCC. This Note analyzes the application of CALEA to Voice over Internet Protocol (VoIP), including Congress’ purpose in crafting its surveillance regulatory legislation, the potential threats to privacy and innovation, and the costs to VoIP providers (and presumable)

bly to consumers) of CALEA compliance.\textsuperscript{28} The Note argues that the FCC's order and the D.C. Circuit's decision affirming it were improper in light of both the architectural differences between VoIP and the older Public Switched Telephone Network (PSTN), as well as the legislative history of CALEA, which did not support the FCC's interpretation.

\textsuperscript{28} FCC regulation of VoIP was also the subject of a 2005 Annual Review Note, Sunny Lu, Note, Cellco Partnership v. FCC & Vonage Holdings Corp. v. Minnesota Public Utilities Commission: VoIP's Shifting Legal and Political Landscape, 20 BERKELEY TECH. L.J. 859 (2005).
BERKELEY TECHNOLOGY LAW JOURNAL
ANNUAL REVIEW OF LAW AND TECHNOLOGY

INTELLECTUAL PROPERTY