THE FUTURE ACCORDING TO GOOGLE: TECHNOLOGY POLICY FROM THE STANDPOINT OF AMERICA'S FASTEST-GROWING TECHNOLOGY COMPANY

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As the fastest-growing technology company in the United States, ¹ Google has been at the center of some of the most contentious technology policy disputes of recent years. In the federal courts, these disputes focus on the fair or noncommercial use of copyrighted work and trademarks on the Internet. In Congress, Google is leading the charge in favor of laws protecting innovative Internet companies from discriminatory or exorbitant charges by broadband and wireless infrastructure providers. It has also been a vocal opponent of excessive governmental control over Internet content.

Copyright lawsuits arising out of search engines and usergenerated content sites such as Google Video and YouTube have the potential to change the rules governing communication over the Internet. Similarly, trademark litigation alleging that comparative and Internet keyword-based advertising are infringing may limit the ability of technology companies and their customers to compete online. Many technology companies also believe that injunctive relief obtained by the owners of patents in comparatively minor components of complex software-enabled products may chill innovation and divert capital away from applied research. But it seems that the power of infrastructure providers to favor allied content providers has truly spooked technology leaders like Google. Meanwhile, Google, other technology and Internet companies, and members of Congress have demanded action to limit foreign governments' ability to block U.S.-based Web content from being accessed by persons present in their territory.

This essay contends that two of the most likely candidates

^{*} Associate Professor of Law, Florida International University. I would like to thank my father Merrill Travis for very helpful comments on a draft of this essay, and the editors of the *Yale Journal of Law and Technology*, particularly Janice Ta, for their assistance with substance, style, and citation.

¹ See John J. Ray & Paul M. Murdock, *America's 25 Fastest-Growing Tech Companies*, FORBES.COM, Jan. 24, 2008, http://www.forbes.com/2008/01/24/fastest-growing-technology-tech-fasttech08-cx_jr_pm_0124fastintro.html. There are of course technology companies that must be growing more rapidly than Google from a smaller base, for example from zero to 50 employees in a year; the *Forbes* ranking is focused on large technology companies with a record of successful operations.

for important technology policy initiatives in the administration of President Barack Obama are two of Google's public policy priorities, namely net neutrality and global online freedom. The adoption of these initiatives as public policy priorities would be a positive development for technology users and producers around the world. Their success would mean that two of the foremost threats to online freedom have been deferred, at least for a while. Nonetheless, overbroad or questionable copyright, trademark, and patent rights will continue to bedevil technology firms, as they have for much of the past century.

I. INTELLECTUAL INNOVATION

A. Calibrating Copyright

The struggle by authors and innovators against claims to absolute ownership rights in copyrighted work goes back centuries.² In recent years, demands by copyright holders to control the secondary markets for indexing, utilizing excerpts of, and improving upon their works have generated increasing numbers of cases alleging copyright infringement.³ These demands have set into motion a cycle of overprotection of intellectual property, suppression of output and of new methods of distribution, overcompensation of a minority of heavily-promoted celebrities, the overshadowing of most other creative work, and a consumer revolt against the system by means of small-scale infringements.⁴

 ² See, e.g., Stover v. Lathorp, 33 F. 348, 349 (C.C.D. Colo. 1888); Stowe v. Thomas, 23 F. Cas. 201, 207 (C.C.E.D. Pa. 1853) (No. 13,514); Story v. Holcombe, 23 F. Cas. 171, 173 (C.C.D. Ohio 1847) (No. 13,497); Folsom v. Marsh, 9 F. Cas. 342, 345 (C.C. Mass. 1841) (No. 4901); Gyles v. Wilcox, (1740) 26 Eng. Rep. 489.

³ See, e.g., Campbell v. Acuff-Rose Music Inc., 510 U.S. 569 (1994); Harper & Row, Publishers, Inc. v. Nation Enters., 471 U.S. 539, 558 (1985); Kelly v. Arriba Soft Corp., 336 F.3d 811 (9th Cir. 2003); Matthew Bender & Co. v. Hyperlaw, Inc., 158 F.3d 693 (2d Cir. 1998); Princeton Univ. Press v. Mich. Document Servs., 99 F.3d 1381 (6th Cir. 1996); Amer. Geophysical Union v. Texaco Inc., 60 F.3d 913 (2d Cir. 1995); Williams & Wilkins Co. v. United States, 487 F.2d 1345, 1352-53 (Ct. Cl. 1973), aff'd by an equally divided court, 420 U.S. 376 (1975) (per curiam); N.Y. Times Co. v. Roxbury Data Interface, Inc., 434 F. Supp. 217, 219 (D.N.J. 1977).

⁴ See, e.g., Byars v. Bluff City News Co., 609 F.2d 843, 846-64 (6th Cir. 1979) (describing restriction of distribution of copyrightable magazines and other periodicals to "limited" channels, and exclusion of competition among distributors in potential violation of Sherman Antitrust Act of 1890); ROBERT SPECTOR, CATEGORY KILLERS: THE RETAIL REVOLUTION AND ITS IMPACT ON CONSUMER CULTURE 31-36 (2005) (describing restriction of number of distinct copyrighted works, and of number of copies of such works, that are distributed to the public); SIVA VAIDHYANATHAN, THE ANARCHIST IN THE LIBRARY: HOW

Starting in the early- to mid-1990s, U.S. courts began to threaten the development of innovative Internet and Web-enabled services by holding technology companies liable for contributing to their users' copyright infringement, and by interpreting defenses to copyright such as the fair use doctrine in a narrow manner.⁵ Before Sony Corp. of America v. Universal City Studios, Inc, 6 it was sometimes said that one could commit contributory copyright infringement simply by "inducing" or encouraging another's infringement. After Sony, the contributory infringement standard was more clearly stated as making a material contribution to infringement one knows is going on. Sony also said that knowledge of infringement cannot be presumed in such a case, or for purposes of vicarious infringement, if the product or service that contributed to the infringement is capable of substantial noninfringing uses.⁸ The Supreme Court muddied the waters in 2005, when it held in Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.9 that whether or not a company is liable under Sony, it may still be liable for inducing copyright infringement. Such liability may exist for either encouraging infringement or distributing products which actively promote infringement.

THE CLASH BETWEEN FREEDOM AND CONTROL IS HACKING THE REAL WORLD AND CRASHING THE SYSTEM 48-64, 93, 98 (2004) (describing overprotection of intellectual property and resulting user noncompliance); Hannibal Travis, Google Book Search and Fair Use: iTunes for Authors, or Napster for Books?, 61 U. MIAMI L. REV. 87, 151-60 (2006) (describing suppression of digital channels of distribution and fixing of prices in markets for copyrighted music and motion pictures); Zev Chafets, Late-Period Limbaugh, N.Y. TIMES, July 6, 2008, at MM30 (reporting that right-wing radio personality Rush Limbaugh earns nearly \$40 million per year producing copyrightable radio programming, and owns a \$54 million airplane); MTV Cribs (MTV 2001) (providing striking examples of how overcompensation of producers of copyrightable music and video performances results in immense private fortunes and wasteful consumption). By 2003, polls revealed that the vast majority of young people, and a majority of those under the age of 50, disregarded copyright in the context of downloading music. See Lisa Lerer, Bar Talk, 5 IP L. & BUS. 18, 18 (2005).

⁵ See, e.g., L.A. Times v. Free Republic, 54 U.S.P.Q.2d (BNA) 1453 (C.D. Cal. 2000); Intellectual Reserve, Inc. v. Utah Lighthouse Ministry, Inc., 75 F. Supp. 2d 1290 (D. Utah 1999); Religious Tech. Ctr. v. Netcom On-Line Commc'n Servs., Inc., 907 F. Supp. 1361, 1382 (N.D. Cal. 1995); Playboy Enters. v. Frena, 839 F. Supp. 1552, 1557-58 (S.D. Fla. 1993).

⁶ 464 U.S. 417 (1984).

⁷ See, e.g., Gershwin Publ'g Corp. v. Columbia Artists Mgmt., Inc., 443 F.2d 1159 (2d Cir. 1971); Shapiro, Bernstein & Co. v. H. L. Green Co., 316 F.2d 304 (2d Cir. 1963); Deutsch v. Arnold, 98 F.2d 686 (2d Cir. 1938).

⁸ Sony, 464 U.S. at 442-44.

⁹ 545 U.S. 913 (2005).

Google initially opposed the result in *Grokster*. It joined the Computer and Communications Industry Association and the Consumer Electronics Association in opposing the "Induce Act," which would have codified the common-law extension of copyright liability in *Grokster*. This was a risky stance for the company, which had not yet completed its pending initial public offering of stock. At the time, the legislation was co-sponsored by a formidable list of luminaries that included Senate Majority Leader Bill Frist, Senate Minority Leader Tom Daschle, Senate Judiciary Committee Chairman Orrin Hatch, Senate Judiciary Committee Ranking Member Patrick Leahy, and Senator Barbara Boxer of California. After it was a done deal, however, Google praised the *Grokster* decision as "carefully calibrated." After it was a done deal, however,

Google has also insisted on a vigorous fair use doctrine. The doctrine provides a limitation on copyright exclusivity, but is only available for uses that satisfy a multi-factor test inquiring into the purpose, nature, amount and substantiality of the portion used, and the likely marketplace effects on the sales of the copyrighted work. 14 When Google was sued in 2005 for making the headlines and story leads of hundreds of newspaper, magazine, and wire service Web sites searchable and navigable in "Google News," it vigorously asserted its right to do so under the doctrine of fair use. as supplemented by the safe harbors enacted by Congress as section 512 of the Digital Millennium Copyright Act of 1998 (DMCA). Google argued that indexing the Internet was a beneficial activity that should be immunized from liability by fair use and the DMCA. 15 Likewise, Google denied allegations that it infringed copyrights in photographs by providing "image search" functionality. Google's position is that a search engine makes a

¹⁰ See Steve Lohr, Software Group Enters Fray over Proposed Piracy Law, N.Y. TIMES, July 19, 2004, at C8.

¹¹ Google's opposition to the bill was clear by July 2004, while its initial public offering was not completed until August 2004. *See* DAVID A. VISE & MARK MALSEED, THE GOOGLE STORY 188-194 (2005); Lohr, *supra* note 10, at C8.

¹² See Lohr, supra note 10, at C8.

¹³ Posting of Andrew McLaughlin, Senior Policy Counsel, Google Inc. to The Official Google Blog, Google Goes to Washington, http://googleblog.blogspot.com/2005/10/google-goes-to-washington.html (Oct. 6, 2005, 07:09 PST).

¹⁴ See 17 U.S.C. § 107.

¹⁵ See Defendant's Opposition to Plaintiff's Motion to Dismiss Counterclaims, Agence France-Presse v. Google, No. 1:05CV00546, 2005 U.S. Dist. Ct. Motions LEXIS 32772, at *12-13 (D.D.C. June 22, 2005) (internal citation omitted).

fair, productive, and non-competitive use of images and Web sites that it indexes. 16

When Google announced its project to scan millions of books and make them searchable in digital form from any computer connected to the Internet, the company claimed to "make it possible to search across library collections including out of print books and titles that weren't previously available anywhere but on a library shelf." Commentators lauded Google Book Search as establishing, "for the first time in human history ... the theoretical possibility that every book ever printed in whatever language will be available to everyone on earth with access to the Internet."

In the fall of 2005, five publishers and a putative class action representing potentially thousands of authors filed suit against Google for copyright infringement. 19 Google's CEO, Eric Schmidt, took the somewhat unusual step of defending the legality of the company's book search functionality in an op-ed in the Wall Street Journal, arguing that "the use we make of books we scan through the Library Project is consistent with the Copyright Act, whose 'fair use' balancing of the rights of copyright-holders with the public benefits of free expression and innovation allows a wide range of activity," including the use of "a search engine that indexes billions of Web pages."²⁰ Only 15-16% of books available to be made searchable on Google are in the public domain because their copyright has expired; the remainder are copyrighted, and of these, the vast majority, perhaps eight out of every nine, are out-ofprint and not for sale.²¹ Either Google's version of an Internetfriendly doctrine of fair use must prevail, or book-search technology must remain the exclusive preserve of publishers and their licensees.²²

Since 2006, the expansion of copyright liability has continued to threaten Google's growth. Copyright lawsuits filed by

¹⁶ See Defendant's Opposition to Plaintiff's Motion for a Preliminary Injunction, Perfect 10, Inc. v. Google, Inc., No. CV04-9484 AHM (SHx), 2005 U.S. Dist. Ct. Motions LEXIS 17394, at *9-15 (C.D. Cal. Sept. 26, 2005).

¹⁷ Press Release, Google, Inc., Google Checks Out Library Books (Dec. 14, 2004), http://www.google.com/press/pressrel/print_library.html.

¹⁸ Jason Epstein, *Books@Google*, N.Y. REV. OF BOOKS, Oct. 19, 2006, *available at* http://www.nybooks.com/articles/19436.

¹⁹ See Jeffrey Toobin, Google's Moon Shot, THE NEW YORKER, Feb. 5, 2007, http://www.tinyurl.com/6w57mx.

²⁰ Eric Schmidt, *Books of Revelation*, WALL ST. J., Oct. 18, 2005, at A18, *available at* http://googleblog.blogspot.com/2005/10/point-of-google-print.html.

²¹ See Toobin, supra note 19.

²² See Travis, supra note 4, at 126-60.

the entertainment conglomerate Viacom and a putative class action led by Britain's most-watched soccer league seek to enjoin Google and its subsidiary YouTube from reproducing, displaying, or streaming any copyrighted works, alleging that Google has lost the safe-harbor protections for Internet service providers under the Digital Millennium Copyright Act. 23 Citing the inducement standard from *Grokster*, the plaintiffs request thousands of dollars in damages for each work infringed by YouTube, and the seizure of all profits earned illegally by YouTube and its parent company Google to date.²⁴ The copyright cases pending against Google and its subsidiary YouTube will shape the development of online video sites and user-generated content platforms on the Internet. With 51 million users in mid-2007. YouTube was more popular than the video sites of MySpace, AOL, and Yahoo! combined.²⁵ Unless Google prevails, it may become much more difficult to create and expand search engines, user-generated content platforms, and ecommerce sites like eBay.²⁶

In 2008, Google achieved important agreements with large copyright holders, agreements that would permit its innovative Internet services to survive and develop. In October, it settled the Google Book Search cases on terms that enabled the project to

²³ See Second Amended Class Action Complaint ¶ 150, Football Ass'n Premier League Ltd. v. YouTube, Inc., No. 07 Civ. 3582 (S.D.N.Y. Nov. 26, 2008); First Amended Complaint for Declaratory and Injunctive Relief and Damages and Demand for Jury Trial at 28, Viacom Int'l, Inc., v. YouTube, Inc., No. 1:07-cv-02103 (S.D.N.Y. Apr. 28, 2008).

²⁴ See Second Amended Class Action Complaint ¶ 150, Football Ass'n Premier League Ltd. v. YouTube, Inc., No. 07 Civ. 3582 (S.D.N.Y. Nov. 26, 2008); First Amended Complaint for Declaratory and Injunctive Relief and Damages and Demand for Jury Trial at 28, Viacom Int'l, Inc., v. YouTube, Inc., No. 1:07-cv-02103 (S.D.N.Y. Apr. 28, 2008).

²⁵ See Miguel Helft, Google Acts to Make YouTube a Cash Cow; Formula Is Found for Ads on Some Clips, INT'L HERALD TRIB., Aug. 23, 2007, at Finance 11.

The same arguments made against YouTube, i.e. that it supposedly "encourages" or "materially contributes" to infringement by its users, may be made against eBay or Google's Web search. See, e.g., Parker v. Google, Inc., 242 F. App'x 833, 836–37 (3d Cir. 2007) (alleging that Google infringed copyrights through its search engine); Tiffany (NJ) Inc. v. eBay, Inc., 576 F. Supp. 2d 463 (S.D.N.Y. 2008) (involving allegations of secondary trademark infringement against eBay); see also Field v. Google Inc., 412 F. Supp. 2d 1106, 1119-21 (D. Nev. 2006); Hannibal Travis, Opting Out of the Internet in the United States and the European Union: Copyright, Safe Harbors, and International Law, 84 NOTRE DAME L. REV. 371, 389 (2008) (discussing Parker and Field); Greg Sandoval, Prince Lashes Out at YouTube, eBay and The Pirate Bay, CNET NEWS.COM, Sept. 13, 2007, http://www.news.com/8301-10784_3-9778087-7.html.

expand beyond snippets of copyrighted books into subscription-based access to entire catalogues of books, as well as sales of digital copies to readers.²⁷ The settlement represents a far superior outcome to a simple victory by Google or the copyright owners in the litigation, in that it creates "a transformative resource" offering access to a huge trove of copyrighted, yet out-of-print or otherwise obscure, books and anthologies.²⁸ In November, Google reached an accord with MGM Worldwide Digital Media for the sharing of revenue from the display of full-length movies and trailers on YouTube.²⁹ A similar settlement with Agence France-Presse removed a key hurdle to Google News.³⁰

When settlements could not be reached, Google had mixed results in copyright litigation, particularly in Europe. It lost two cases involving Google Video in France, on the ground that the plaintiffs, documentary film directors in both cases, had submitted notifications of infringement and take-down notices, which Google had either failed to address completely, or had addressed only to have the films re-posted by other users.³¹ In Belgium, a court ruled that Google News, as a searchable index of news headlines, story leads, thumbnail-sized photographs, and story text, infringed the copyrights of newspapers because Google had failed to license that specific use of the articles.³²

²⁷ See Jessica Guynn, Google Reaches Settlement with Book Industry, L.A. TIMES, Oct. 29, 2008, available at 2009 WLNR 20570132 (describing how the deal calls for publishers and authors to receive 63% of revenue from advertising, digital sales, and subscription-based access, as well as payment of \$60 per book scanned); see also Motoko Rich, Google Hopes to Open a Trove of Little-Seen Books, N.Y. TIMES, Jan. 5, 2009, at B1 (exploring implications of settlement on access to out-of-print and other obscure books).

²⁸ John Wilkin, *HathiTrust and the Google Deal*, LIBRARY J., Jan. 15, 2009, at 142; Rich, *supra* note 27, at B1.

²⁹ See YouTube, MGM Bring Full-Length Films Online, TECHWEB NEWS, Nov. 10, 2008, available at 2008 WLNR 21504747.

³⁰ See Noam Cohen, Paying for Free Web Information, N.Y. TIMES, Dec. 10, 2007, at C4.

³¹ See Jane C. Ginsburg, Whose Tube? Liability Risks and Limitations of Copyright-Dependent Technology Entrepreneurs, in GOOGLE ET LES NOUVEAUX SERVICES EN LIGNE: IMPACT SUR L'ÉCONOMIE DU CONTENTU ET QUESTIONS DE PROPRIÉTÉ INTELLECTUELLE 244-49 (Alain Strowel & Jean-Paul Triaille eds., 2008) (citing Flach Films v. Google Video, Tribunal commercial [commercial court] Paris, Feb. 20, 2008 [Fr.]; and Zadig Productions et autres v. Google Inc, Tribunal de grande instance [T.G.I.] [ordinary court of original jurisdiction] Paris, 3d ch., 2d sec., Oct. 19, 2007 [Fr.]).

³² See Tribunal de première instance de Bruxelles [court of first instance] Brussels, Feb. 15, 2007, No. 06/10 928/C (Belg.) (Copiepresse SCRL v. Google Inc.); Travis, *supra* note 26, at 379-83 (discussing *Copiepresse* case).

B. Triggered Trademarks

On the trademark front, Google has been on the defensive since 2004, when the U.S. Court of Appeals for the Ninth Circuit held that selling banner advertisements triggered by Internet users' searches for words resembling registered trademarks may constitute trademark infringement if consumers are confused by the advertisements.³³ Not long after that, a federal court held that Google may be liable for trademark infringement for using other companies' trademarks as advertising keywords on its search engine, which often facilitates comparative advertising by competing firms over the Internet.³⁴ Subsequently, several other courts have held likewise.³⁵

The resolution of these cases could be deeply threatening to Google's business model. Google earned the majority of its revenue in 2005 and 2006 from its AdWords program for keyword-based text advertising.³⁶ Its AdSense program, which is

³³ See Playboy v. Netscape Commc'ns Corp., 354 F.3d 1020 (9th Cir. 2004).

³⁴ See Gov't Employees Ins. Co. v. Google, Inc., 330 F. Supp. 2d 700, 701-03 (E.D. Va. 2004) (citing *Playboy*, 354 F.3d at 1024).

³⁵ See Vulcan Golf, LLC v. Google Inc., 552 F. Supp. 2d 752, 759-60, 779 (N.D. Ill. 2008) (holding that plaintiff adequately alleged that Google intentionally induced trademark infringement by sharing revenue generated by "parked domains," domains that are confusingly similar to trade names or marks and that are aggregated across various individual domain registrants for purposes of earning more advertising revenue) (citing Gov't Employees Ins. Co., 330 F. Supp. 2d at 703-04); Google Inc. v. Am. Blind & Wallpaper Factory, Inc., 74 U.S.P.Q.2d (BNA) 1385, 2005 U.S. Dist. LEXIS 622874, at *3-32 & n.26 (N.D. Cal. Mar. 30, 2005) (denying motion to dismiss claims of trademark infringement and dilution where Google allegedly sold Sponsored Links under its AdWords program to advertisers who desired to display ads triggered by words similar to plaintiff's trademarks); see also Picture It Sold, Inc. v. iSold It, L.L.C., 199 Fed. Appx. 631, 633-34 (9th Cir. 2006); Rhino Sports, Inc. v. Sport Court, Inc., Nos. CV-02-1815 & CV-06-3066, 2007 WL 1302745 (D. Ariz. May 2, 2007); Hamzik v. Zale Corp., No. 06-cv-1300, 2007 WL 1174863 (N.D.N.Y. Apr. 19, 2007); J.G. Wentworth, S.S.C v. Settlement Funding LLC, Civ. No. 06-0597, 2007 WL 30115, at *7-8 (E.D. Pa. 2007); Int'l Profit Assocs., Inc. v. Paisola, 461 F. Supp. 2d 672, 677 n.3 (N.D. Ill. 2006); Buying for the Home, LLC v. Humble Abode, LLC, 459 F. Supp. 2d 310, 323 (D.N.J. 2006); 800-JR Cigar, Inc. v. GoTo.com, Inc., 437 F. Supp. 2d 273, 278-86 (D.N.J. 2006): Edina Realty, Inc. v. TheMLSOnline.com, No. 04-4371, 2006 WL 737064 (D. Minn. 2006).

³⁶ See Steve Lohr, Just Googling It Is Striking Fear into Companies, N.Y. TIMES, Nov. 6, 2005, available at http://www.nytimes.com/2005/11/06/technology/06google.html (claiming that text ads displayed by Google on behalf of advertisers along with organic search results, i.e. AdWords, are "the source of most of Google's revenue"); Google, Inc., Google Annual Report 2007 (Form 10-K), at 43 (Feb. 15, 2008), available at http://investor.google.com/pdf/2007_google_annual_report.pdf (reporting that Google earned between 25%

based on revenue sharing with Google's content partners and operates on a content-detection (or "sense") model, makes up less than half of its overall revenue, and it has little non-advertising revenue. Google's annual report for 2005 warned, with regard to lawsuits pending in the U.S., Europe, and Israel involving trademark infringement claims premised upon the display of text ads in response to searches for terms that are similar to trademarks, that findings of infringement could choke off sources of revenue. 88

Starting in 2006, however, Google began to turn the tide, both in the courts and in the academic literature. In *Rescuecom Corp. v. Google, Inc.*,³⁹ the court held that selling text-based advertisements that are displayed in response to Internet users' searches for terms that are similar to a trademark is not an infringing "use" of the mark.⁴⁰ Another court agreed with this conclusion not long after the opinion was issued.⁴¹

As Mark Lemley and Stacey Dogan argue in a recent article, the principle that a company such as Google is not liable for trademark infringement unless it uses the trademark of another to market its own services has a long pedigree, and serves important functions in delineating trademark infringement from valuable commercial speech.⁴² Holding Google liable as a result of

to more than 50% more revenue on "Google Web sites" than "Google Network Web sites").

³⁷ See Google, Inc., Google Annual Report 2007 (Form 10-K), at 43 (Feb. 15, 2008); Posting of Rob Hof to Tech Beat, Live: Surprise! Google Beats Third-Quarter Profit Forecasts, http://www.businessweek.com/the_thread/techbeat/archives/2008/10/googles_third_q.html (Oct. 16, 2008) ("Google's partner sites generated revenues, through AdSense programs, of \$1.68 billion, or 30% of total revenues, in the third quarter of 2008."); Posting of John Batelle to Searchblog, \$11B in Liquid Assets and Growing, http://battellemedia.com/archives/003413.php (Mar. 1, 2007) (identifying "Google Network" revenue with AdSense, which suggests that most other revenue is AdWords, and stating that advertising accounted for 99% of Google's revenue in 2005 and 2006).

³⁸ See Google, Inc., Google Annual Report 2005 (Form 10-K), at 38 (Mar. 10, 2006), available at http://investor.google.com/pdf/2005_google_annual_report.pdf.

³⁹ 456 F. Supp. 2d 393 (N.D.N.Y. 2006).

⁴⁰ See id. at 402-03 (quoting 1-800 Contacts, Inc. v. WhenU.Com, 414 F.3d 400, 410-11 (2d Cir. 2005)); see also Universal Comm. Sys., Inc. v. Lycos, Inc., 478 F.3d 413 (1st Cir. 2007); U-Haul v. WhenU.com, 279 F. Supp. 2d 723 (E.D. Va. 2003); Wells Fargo v. WhenU.com, 293 F. Supp. 2d 734 (E.D. Mich. 2003).

⁴¹ See Merck & Co., Inc. v. Mediplan Health Consulting, 431 F. Supp. 2d 425, 427 (S.D.N.Y. 2006).

⁴² See Stacey L. Dogan & Mark A. Lemley, Grounding Trademark Law Through Trademark Use, 92 IOWA L. REV. 1669, 1669, 1683-84 (2007).

allowing competitors of a trademark owner to advertise in close proximity to the owner's mark could therefore have adverse effects on comparative advertising, consumer criticism, and other beneficial uses of the Internet.⁴³

C. Patent Parties

By the time of Google's founding in 1998, the courts had clarified that software-related inventions with a "tangible result" were patentable, and 400 such patents were being issued each year. ⁴⁴ By 2006, the federal government was issuing over 1,200 such patents each year, and their nature and scope had serious implications for the Internet. ⁴⁵

Google faced an early hurdle to its growth in the form of a patent owned by Yahoo! on a method of displaying advertising in response to keywords on which advertisers could bid (for example, "cars"). 46 Google assuaged Yahoo! by offering it stock that was worth about \$300 million in 2004, and several multiples of that in 2007. 47

When the Supreme Court heard its first patent case since

Professor Lemley represents Google in keyword-advertising trademark cases, but Professor Dogan does not. *See id.* at 1669 n.aa1.

⁴³ See Dogan & Lemley, supra note 42, at 1676-77, 1683-84, (citing, as cases exemplifying the "trademark use" defense upon which Google relies in keyword advertising disputes, the consumer "gripe site" case Bosley Med. Inst., Inc. v. Kremer, 403 F.3d 672 (9th Cir. 2005) and the comparative advertising cases Holiday Inns, Inc. v. 800 Reservation, Inc., 86 F.3d 619 (6th Cir. 1996); Klein Cosmetics Corp. v. Lenox Labs., Inc., 815 F.2d 500 (8th Cir. 1987); and G.D. Searle & Co. v. Hudson Pharm. Corp., 715 F.2d 837 (3d Cir. 1983)).

⁴⁴ See STEVEN W. LUNDBERG, STEPHEN C. DURANT, & ANN M. MCCRACKIN, ELECTRONIC AND SOFTWARE PATENTS: LAW AND PRACTICE 1-2 – 1-5 (2005 & 2007 Supp.) (citing, inter alia, State Street Bank & Trust Co. v. Signature Fin. Group Inc., 149 F.3d 1368 (Fed. Cir. 1998)).

⁴⁵ See id. at 1-5.

⁴⁶ See James Grimmelmann, The Structure of Search Engine Law, 93 IOWA L. REV. 1, 49 (2007).

⁴⁷ See id. (citing George Mannes, Yahoo! Gets Bigger Stake in Google, THESTREET.COM, Aug. 9, 2004, http://www.thestreet.com/pf/tech/georgemannes/10177217.html). Google's stock more than tripled in the first year after its IPO, which was "the largest technology IPO ever." VISE & MALSEED, supra note 11, at 4. It reached a high of over \$700 per share in late 2007, more than seven times the IPO price. See Associated Press/CBS News, Has Google Hit a Wall Street Firewall?, CBS NEWS, Feb. 28, 2008, http://www.cbsnews.com/stories/2008/02/28/business/main3885976.shtml; Paul R. La Monica, Google Sets Price at \$85, Stock Expected to Trade Thursday, CNN/MONEY, Aug. 19, 2004, http://money.cnn.com/2004/08/18/technology/googleipo.

Google went public in 2004, Google filed an amicus brief along with Amazon.com and other corporations, arguing that software patents posed a risk to innovation by diverting resources from research and development into litigation, and by requiring reprogramming of software. 48

The Supreme Court ruled in favor of eBay, whose position Google supported in the case, but its reasoning did not entirely favor Google's policy argument that patent injunctions, especially in complex software fields, threaten innovation. The Court required patent holders seeking injunctive relief to satisfy the traditional four-factor test for equitable injunctive relief, but also stated that "some patent holders, such as university researchers or self-made inventors, might reasonably prefer to license their patents, rather than undertake efforts to secure the financing necessary to bring their works to market themselves," and that they may be able to obtain injunctive relief.

After the decision in *eBay*, the focus of the public debate on patents shifted to legislative reform. By the end of 2005, Google had established a long-term lobbying presence in Washington, D.C., mainly prioritizing copyright and net neutrality issues, but also adding privacy, voice over Internet protocol, and patent reform to its agenda. Google's agenda was not exactly antipatent, having claimed its own patents on search technology, advertising methods, and other features. Despite pressure from Google and other technology companies, patent reform measures "died in committee" in 2006.

The Patent Reform Act, by contrast, passed the House and

⁴⁸ See Brief for Time Warner, Inc. et al. as Amici Curiae in Support of Petitioner at 5, 8, 22, eBay, Inc., v. MercExchange, L.L.C., 547 U.S. 388 (2006) (No. 05-130), available at http://patentlaw.typepad.com/patent/eBayTimeWarner.pdf.

⁴⁹ eBay, 547 U.S. at 393.

⁵⁰ See Anne Broache, Google Descends on D.C., CNET NEWS.COM, Oct. 6, 2005, http://www.news.com/8301-10784_3-5890152-7.html.

⁵¹ See, e.g., Nancy Gohring, Google Files Mobile Patent, MACWORLD, Jan. 16, 2006, http://www.macworld.co.uk/news/index.cfm?NewsID=13598&Page=1&pagePos=3; Posting of Johanna Shelton & Michelle Lee to Google Public Policy Blog, Reforming Patents, Promoting Innovation, http://googlepublicpolicy.blogspot.com/2007/09/reforming-patents-promoting-innovation.html (Sept. 4, 2007, 14:44 EST).

⁵² Anne Broache & Declan McCullagh, *Congress and Tech: Little to Show*, CNET.COM, Dec. 11, 2006, http://news.cnet.com/Congress-and-tech-Little-to-show/2100-1030_3-6142709.html. On industry pressure, see Larry Downes, *Patent (Reform) Pending*, CIOINSIGHT, Oct. 5, 2005, http://www.cioinsight.com/c/a/Past-Opinions/Patent-Reform-Pending/; and Ryan Paul, *Congress Has Big Plans for Technology Reform in 2006*, ARS TECHNICA, Dec. 27, 2005, http://arstechnica.com/news.ars/post/20051227-5854.html.

Senate Judiciary Committees in July of 2007.⁵³ As the bill neared a vote in the full House, Google's Head of Patents and Patent Strategy, Michelle Lee, and its Policy Counsel and Legislative Strategist, Johanna Shelton, wrote in strong support on Google's policy blog.⁵⁴ They praised the bill for restricting treble damages for willful infringement, and for reducing the measurement of damages to a patent's contribution to a product's overall value. rather than the value of an entire complex product.⁵⁵ They also celebrated venue provisions that required a more "reasonable connection" with the case. 56 Finally, they argued that the bill's requirement of a more "meaningful" post-grant review of patents for validity could eliminate lower-quality patents in a more "timely way."⁵⁷ At about the same time, Google joined the Coalition for Patent Fairness, an existing coalition of high-tech and financial companies that supported the Patent Reform Act of 2007. The coalition included Amazon.com, Apple, the Business Software Alliance, Dell, Intel, Microsoft, Time Warner, Visa, and an alliance of financial companies including Citigroup.⁵⁸

Despite the large coalition supporting the Patent Reform Act, the bill "stalled" in the Senate in May 2008 as the Majority Leader yanked it from the floor schedule. A huge countercoalition was by then arrayed against the legislation, including the U.S. Department of Commerce, venture capitalists, large labor unions, trade associations for small businesses, the pharmaceutical research companies, biotechnology companies, wireless equipment manufacturers, large IP law firms, medical device makers,

⁵³ See Brian Wingfield, Patent Fight Pending, FORBES.COM, July 20, 2007, http://www.forbes.com/home/businessinthebeltway/2007/07/19/patents-congress-washington-biz-wash-cx_bw_0720patents.html.

⁵⁴ See Shelton & Lee, supra note 51.

⁵⁵ See id.

⁵⁶ See id.

⁵⁷ *Id*.

⁵⁸ See Press Release, House of Representatives Passes the Patent Reform Act of 2007, Votes To Bring Balance to Our Nation's Patent System (Sept. 7, 2007), available at http://www.patentfairness.org/pdf/CPF_Release_--_Passage_of_hr_1908_FINAL.pdf; Financial Services Round Table, Member Companies, http://web.archive.org/web/20070317233055/http://www.fsround.org/about/member companies.htm (last visited Jan. 19, 2009).

⁵⁹ Posting of Emily Berger to Electronic Frontier Foundation Deeplinks Blog, http://ftp.eff.org/deeplinks/2008/05/patent-reform-act-stalls-senate (May 2, 2008).

engineering groups, and research universities.⁶⁰ Perhaps the most interesting argument came from the unions, who focused on U.S. competitiveness. They argued that it would frustrate efforts to pressure China to enforce U.S. IP rights, by undermining U.S. patents via "an endless loop of legal challenges after patents are awarded."⁶¹

As 2008 came to a close, Google faced challenges on the patent front that were nearly as serious as Yahoo!'s keyword-advertising patent case in 2004. It faced a lawsuit seeking a permanent injunction against infringing a patent granted in 1996, before Google was founded, as well as other patents granted in 1998 and 2001.⁶² These patents cover methods for searching, indexing, and displaying information.⁶³ Another case challenges not only Google but also Apple and Napster as infringing a patent on one of the first pay-to-download services for online audio and video content.⁶⁴ Apple, Microsoft, and Comcast have settled with the patent owner, but Google fights on.⁶⁵

The Federal Circuit's opinion in the seminal case of *In re Bilski*⁶⁶ may have profound implications for Google's patents, as

⁶⁰ See Am. Intellectual Prop. Law Ass'n, Board of Directors 2008, http://www.aipla.org/Content/NavigationMenu/About AIPLA/Association Lea dership/Board of Directors/Board of Directors.htm (last visited Jan. 19, 2009); Drug Trade Group Spent \$22M Lobbying, FORBES.COM, Feb. 21, 2008, http://www.forbes.com/afxnewslimited/feeds/afx/2008/02/21/afx4681738.html; Grant Gross, Tech Groups Push Patent Reform, PC WORLD, Feb. 9, 2008, https://www.pcworld.com/article/id,142320-page,1/article.html; Look Patent WEEK, 2007, Fighting Reform, BUS. July http://www.businessweek.com/magazine/content/07 28/b4042075.htm; Sullivan, The Most Anti-Tech Organizations in America, PC WORLD, Dec. 2, http://www.pcworld.com/article/id,140081-page,2-c,technology/ 2007, www.aipla.

⁶¹ Grant Gross, *Patent Reform Opponents Find Support from Unions*, PC WORLD, Aug. 25, 2007, http://www.washingtonpost.com/wp-dyn/content/article/2007/08/25/AR2007082500114_2.html (quoting a letter from United Steelworkers).

 $^{^{62}}$ See, e.g., Software Rights Archive, LLC v. Google Inc., No. 2:07-CV-511 (E.D. Tex. Nov. 21, 2007).

⁶³ See id. ¶¶ 10, 15, 20.

⁶⁴ See Apple, Google, Napster Sued over Internet Movie Patent, BRANDWEEK, Jan. 8, 2007, at 8. The plaintiff's amended complaint names YouTube, LLC as a defendant. See First Amended Complaint ¶ 4, Intertainer, Inc. v. Apple Computer, Inc., No. 2:06CV0059 (E.D. Tex. Jan. 15, 2008).

⁶⁵ See Apple Settles Lawsuit with Intertainer, L.A. TIMES, Jan. 4, 2008, at 4, available at 2008 WLNR 204154. The case has been stayed pending reexamination of the patent by the Patent and Trademark Office.

⁶⁶ 545 F.3d 943 (Fed. Cir. 2008) (en banc).

well as for cases alleging that its search engine or other services infringe the patents of others. In that case, the court held that patent claims directed at purely mental processes or mathematical concepts are not patentable. Instead, some kind of "transformation of [a] physical object or substance," including a machine such as a computer, is needed before an inventor may patent a process or method relating to computer software or the Internet. The application of these principles to search engine algorithms and the hosting and display of audio and video content online will be a fiercely contested and immensely significant matter.

II. INFRASTRUCTURE INTRIGUES

Google has argued in Congress that one of the greatest threats to the development of high-technology applications in the U.S. is the ability of infrastructure providers such as telephone and cable network operators to charge discriminatory or exorbitant fees. The placing of such burdens on technological innovators and digital media companies such as Google or Apple's iTunes might seem to be legitimate when implemented in order to recoup traffic costs or maintain service quality given high-bandwidth usage. Yet charges that vary by the type of content or provider attempting to access a network may violate the principles underlying federal antitrust or telecommunications law when they amount to collusive price-fixing or anticompetitive price "squeezes."

In 2002, Google CEO Eric Schmidt warned that the Internet's openness was under siege from the "profit motives of corporations and control issues of governments." The company's

⁶⁷ See id. at 965-66.

⁶⁸ *Id.* at 964. The patent at issue in *Bilski*, according to the examiner, did not disclose a computer or other machine with which the invention, involving a method for purchasing energy-related commodities, could be carried out. *See id.* at 949-51; Ex parte Bilski, No. 2002-2257, slip op. at 1-4 (B.P.A.I. Sept. 26, 2006).

⁶⁹ See Posting of Christopher S. Yoo to Legal Affairs, Keeping the Internet Neutral?, http://www.legalaffairs.org/webexclusive/debateclub_netneutrality0506.msp (May 4, 2006, 07:49 EST).

⁷⁰ See Covad Commc'ns Co. v. BellSouth Corp., 299 F.3d 1272, 1276-78 (11th Cir. 2002) (describing such a price "squeeze" between an incumbent Internet infrastructure provider's high-cost wholesale access fees charged to competing Internet service providers, and lower retail access fees for its own subscribers); see generally Hannibal Travis, Wi-Fi Everywhere: Universal Broadband Access as Antitrust and Telecommunications Policy, 55 AM. U. L. REV. 1697 (2006).

Anick Jesdanun, Governments, Businesses Placing Internet's Openness at Risk, ASSOCIATED PRESS, June 21, 2002, available at http://www.govtech.com/tt/articles/14689.

net neutrality position has grown increasingly firm since then. By spring 2006, Google co-founder Sergey Brin had personally lobbied members of Congress to codify net neutrality, while Federal Communications Commission (FCC) Chairman Kevin Martin joined telecommunications companies in opposing it.⁷² One of the founders of the Internet itself, Vinton Cerf of TCP-IP fame, ⁷³ testified on behalf of his new employer Google, where he served as Chief Internet Evangelist, that the "remarkable success of the Internet" could give way to innovation-crushing fees and gatekeeping imposed by network owners.⁷⁴

Google's network neutrality activism suffered a setback in June 2006, as the U.S. House of Representatives voted nearly two-to-one to reject a proposal that would have made discrimination by broadband providers against content or applications companies a violation of the Clayton Antitrust Act remediable by treble damages. The FCC Chairman came out against net neutrality, calling it unnecessary in light of the FCC's existing enforcement authority. In late 2008, the FCC enforced its net neutrality rules.

⁷² See Tom Abate, House Floor Vote on Network Neutrality Expected Friday, S.F. CHRON., June 8, 2006, available at http://www.sfgate.com/cgibin/article.cgi?f=/c/a/2006/06/08/BUGA0JACKO1.DTL.

⁷³ TCP/IP stands for "Transmission Control Protocol/Internet Protocol," and served "as the common language of networking" before becoming the principal protocol of the Internet, the "network of networks." Vint Cerf, http://soe.stanford.edu/AR95-96/vint.html (last visited Dec. 28, 2008).

⁷⁴ See Net Neutrality: Hearing Before the S. Comm. on Commerce, Sci., & Transp., 109th Cong. 1, at 1, 6 (2006) (statement of Vinton G. Cerf, Vice President and Chief Internet Evangelist, Google, Inc.), available at http://commerce.senate.gov/pdf/cerf-020706.pdf.

⁷⁵ The vote was 269 "for" to 152 "against" net neutrality legislation. Declan McCullagh, *House Rejects Net Neutrality Rules*, CNET NEWS.COM, June 8, 2006, http://www.news.com/House-rejects-Net-neutrality-rules/2100-1028_3-6081882.html. For analysis of the legislation, see H.R. Rep. No. 109-541 (2006).

⁷⁶ See Senate Commerce Committee Debates Need for Net Neutrality Bill; Martin Says FCC Can Act Now, Telecomm. Rep., May 1, 2008, available at 2008 WLNR 7603332.

⁷⁷ See Opinion and Order, In the Matters of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Networks; Broadband Industry Practices; Petition of Free Press et al. for Declaratory Ruling that Degrading an Internet Application Violates the FCC's Policy Statement and Does Not Meet an Exception for "Reasonable Network Management," No. FCC 08-183, ¶ 43 n.203 (Aug, 20, 2008) ("[W]e believe that taking action to preserve the open character of the Internet 'promotes rather than restricts expressive freedom' because it provides consumers with greater choice

Meanwhile, the main thrust of Google's lobbying shifted a bit, to emphasize neutrality in the market for wireless telephone equipment and applications. It drew on Professor Tim Wu's proposal to "blow open the wireless market" by replicating the regulatory framework that made the development of the Internet over the wireline telephone network possible, by banning discrimination by incumbent telephone firms. The FCC began in 2007 to auction wireless spectrum on the condition that bidders allow any device or application to connect. Google's CEO Eric E. Schmidt touted an "Open Handset Alliance" as a rival to the limitations of existing wireless telephone carriers.

The 2008 Democratic primary process brought new champions to Google's push for network and wireless neutrality. By the close of 2007, then-candidate Barack Obama had endorsed net neutrality, ⁸⁰ and several members of Congress with Silicon Valley constituents called on the FCC to open up more spectrum for "unlicensed use" by owners of portable computers and wireless handsets. ⁸¹

III. INTERNATIONAL INFORMATION

In 1996, Human Rights Watch issued an important report on Internet censorship worldwide, which detailed how governments, particularly in China and Saudi Arabia, were tightly controlling access to the Internet and censoring information that could prove detrimental to the image or ideology of governing elites. By 2003, members of Congress had grown sufficiently alarmed about such efforts to sponsor a law stating that:

The governments of Burma, Cuba, Laos, North Korea, the People's Republic of China, Saudi Arabia, Syria, and Vietnam, among others, are

in the applications they may use to communicate and the content they may access.") (citation omitted).

⁷⁸ Spencer E. Ante, *Tim Wu, Freedom Fighter: His Wireless-Phone Manifesto Was the Inspiration for Google's New Mobile-Software Strategy*, Bus. WEEK, Nov. 19, 2007, at 88.

⁷⁹ *Id*

⁸⁰ See Matt Marshall, Obama Shares Tech Plan Today in Silicon Valley, SAN JOSE MERCURY NEWS, Nov. 14, 2007, at 3C.

⁸¹ Google, Congress Members Press FCC To Open TV White Spaces, Television A.M., Dec. 19, 2007, available at 2007 WLNR 25445325.

⁸² See Karen Sorensen, Silencing the Net: The Threat to Freedom of Expression On-line, 8 HUM. RTS. WATCH 1 (1996), available at http://epic.org/free_speech/intl/hrw report 5 96.html.

taking active measures to keep their citizens from freely accessing the Internet and obtaining international political, religious, and economic news and information . . . [There is a] widespread and increasing pattern by authoritarian governments to block, jam, and monitor Internet access and content, using technologies such as firewalls, filters, and 'black boxes' ⁸³

The law would have financed the deployment of technology by the U.S. government to counter and evade government-mandated or -implemented Internet filters and blocks.⁸⁴

Google was viewable in China from its inception, but Chinese users frequently had their access to Google blocked, degraded, or filtered by Chinese Internet companies, which operate under draconian government-mandated censorship and surveillance measures. Using licensing regulations as a pretext, the Chinese government excludes American or other foreign companies from directly operating their own Internet services in China. He Chinese government lambasted its Chinese version in 2006, the Chinese government lambasted the site for linking to "illegal" content such as pornography, failing to comply with local licensing laws, and informing users that Chinese law restricted the results they saw. Google had to hand over control of part of its Chinese operations to a local Chinese partner, Ganji.com, with the result that users would be denied access to "sites the governing

 $^{^{83}}$ H.R. 48, 108th Cong. § 2 (2003), available at http://www.theorator.com/bills108/hr48.html.

⁸⁴ See id. §§ 3-5.

⁸⁵ See Google, Inc., Google Annual Report 2005 (Form 10-K), at 5-6 (Mar. 10, 2006), available at http://investor.google.com/pdf/2005_google_annual_report.pdf; see also Jennifer A. Chandler, A Right to Reach an Audience: An Approach to Intermediary Bias on the Internet, 35 HOFSTRA L. REV. 1095, 1130-36 (2007) (describing China's Internet filtering regime); Grimmelmann, supra note 46, at 42-43 ("Falun Gong, Tibetan culture, and political dissidence are the principal, but by no means the only, targets.").

⁸⁶ See Rebecca MacKinnon, "Race to the Bottom": Corporate Complicity in Chinese Internet Censorship, 18 HUM. RTS. WATCH 4 (2006), available at http://www.hrw.org/sites/default/files/reports/china0806webwcover.pdf (describing how China uses its licensing system to attack Internet service providers or search engines who do not censor dissenting voices).

⁸⁷ See Philip P. Pan, Chinese Media Assail Google, WASH. POST, Feb. 22, 2006, at A9.

⁸⁸ See Google Inc., supra note 85, at 5-6.

By 2006, members of Congress had proposed legislation that would more directly affect Google: the Global Online Freedom Act. The law would have required Google not to host content on servers based in an Internet-censoring country or to distort its search results in those countries. Google's CEO Eric Schmidt answered questions about such laws at a 2007 policy forum. Mr. Schmidt argued that technology, of its own power, would transcend bad policy "because the technology is inherently empowering. Should the power of the Internet lose this aura of inevitability and "inherent" power due to continuing successful moves to restrict it, efforts like the Global Online Freedom Act may gain wider and wider support as a means of safeguarding the human right of both Americans and foreigners to freedom of expression.

IV. UNCERTAIN CONCLUSION

Net neutrality and global online freedom may be the two most challenging issues of technology policy to confront the next administration. Given the flexible doctrines of fair use and Internet safe harbors in copyright law, and the growing number of rulings that selling proximity to a firm's competitors using keyword advertising is not trademark infringement, it seems unlikely that momentum will build for radical change in copyright or trademark doctrine that would significantly benefit Google. Additionally, the stiff opposition of the large coalition resisting patent reform makes strong reform measures in that area difficult to achieve. This leaves two areas in which new laws or initiatives may help resolve threats to the Internet in general and Google in particular, namely net

⁸⁹ Pan, *supra* note 87, at A9.

 $^{^{90}}$ See Global Online Freedom Act of 2006, H.R. 4780, 109th Cong. §§ 201-04 (2006).

⁹¹ Eric Schmidt, C.E.O. & Chairman, Google, Aspen Summit 2007 Chairman's Dinner Address, Address Before the Progress & Freedom Foundation (Aug. 21, 2007), *in* 14.18 PROGRESS ON POINT, Aug. 2007, at 12, *available at* http://www.pff.org/issues-pubs/pops/pop14.18schmidttranscript.pdf.

⁹² See Chandler, supra note 85, at 1135-36 (noting that censorship ordered by foreign governments has negative effects on the freedom and business interests of U.S. nationals and other deleterious effects within U.S. territory, including "abridging the freedom of Americans to communicate with interested [foreign] listeners, undermining the freedom of speech not just of [foreign] citizens but also of Americans"); Grimmelmann, supra note 46, at 43 ("The complexity of varying international standards and the concern that compliance with local law may lead to human-rights violations have led some companies to ask the United States government for help.").

neutrality and censorship. Although far from certain, one could expect legislation in these areas in the next few years.

Google's position on key technology issues could be described from the standpoint of the average Internet user using the old cliché, "doing well by doing good." By constantly seeking out new sources of information to make searchable, and content partners to attract eyeballs that can be sold to advertisers, Google has vastly expanded the universe of knowledge and expression that is available to its users. One of its strengths lies in its ability to buy out or otherwise resist claims for a greater share of the value it creates by indexing and aggregating sources of information. Some assertions of control over Google's search and hosting services, like demanding that it not index copyrighted or trademark-related material or suffer a degradation of its services imposed by broadband infrastructure providers or foreign governments, are unfortunately less amenable to reasoned, negotiated resolution. In these areas, sound technology policy can help align corporate incentives with the public interest.