



## RESPONSE OF THE COMPUTER & COMMUNICATIONS INDUSTRY ASSOCIATION TO THE GOWERS REVIEW ON INTELLECTUAL PROPERTY

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### OVERVIEW

The Computer & Communications Industry Association (CCIA)<sup>1</sup> appreciates this opportunity to respond to the Call for Evidence in the Gowers Review of Intellectual Property. CCIA is a trade association with a long-standing mission of promoting open markets, open systems, and open networks.

The Government of the United Kingdom has been a leader in the development of sound intellectual property policy. By conducting studies, consultations, and workshops that reach beyond the usual professional community, the U.K. Patent Office has already played an exemplary role among patent agencies. By looking at a broad set of intellectual property policy issues from an independent, top-down perspective, this Review represents another important step in addressing fundamental issues of the knowledge economy. CCIA members appreciate the challenges of developing principles of intellectual property policy in an economy that is increasingly digital, networked, and knowledge-intensive. These comments aim to advance that effort.

CCIA members rely heavily on their intellectual property and depend upon robust intellectual property protection to encourage innovation and produce profits. At the same time, the ability to create and innovate free from disputes over intellectual property is essential to the information and communications technology (ICT) industry. Intellectual property law, therefore, must strike a balance between underprotection and overprotection.

With respect to patent law, CCIA advocates rules that are sensitive to the economic realities of the ICT sector. In regard to copyright law, we advocate for the application of legal standards that will effectuate the mandate to ensure authors the right to their original expression while allowing competitors “to build freely upon the ideas and information conveyed by a [copyrighted] work.”<sup>2</sup>

This response is divided into five parts. The first part identifies the primary challenge facing an intellectual property policy maker: balancing the costs and benefits of an intellectual property protection regime to strike the right level of protection. The second part responds to the Introductory Issues noted by the Call for Evidence, focusing principally on patent law. The third

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<sup>1</sup> CCIA is an international, nonprofit association of computer and communications industry firms, representing a broad cross section of the industry. CCIA is dedicated to preserving full, free and open competition throughout its industry. CCIA members employ more than 600,000 workers and generate annual revenues in excess of \$200 billion.

<sup>2</sup> *Feist Publications v. Rural Tel. Serv. Co.*, 499 U.S. 340, 349-50 (1991).

part responds to several Specific Issues, focusing principally on copyright law. The fourth part responds to the Call for Evidence on other issues not raised, focusing principally on *sui generis* protection for databases. The fifth part is an addendum of CCIA's principles for patent reform.

## I. POLICY CHALLENGES

CCIA believes that intellectual property rights should be viewed as instrumental rights, not natural rights. The rights-holder's intellectual property right exists for the benefit of the public, not to enrich the rights-holder, except insofar as the latter achieves the former. Intellectual property "reflects a balance of competing claims upon the public interest: Creative work is to be encouraged and rewarded, but private motivation must ultimately serve the cause of promoting broad public availability of literature, music, and the other arts."<sup>3</sup> Thus, the right *itself* does not benefit the public; the act of granting exclusive rights necessarily implies the exclusion of the public, which is not a benefit, but a cost. The existence of this right to exclude, however, incentivizes crucial innovation and creativity – the benefits of which the public would otherwise be deprived.

As one court put it, "[t]he immediate effect of our copyright law is to secure a fair return for an "author's" creative labor. But the aim is, by this incentive, to stimulate artistic creativity for the general public good."<sup>4</sup> Thus, "[o]verprotecting intellectual property is as harmful as underprotecting it.... Overprotection stifles the very creative forces it's supposed to nurture."<sup>5</sup>

As intellectual property becomes more relevant in an information age, IP rights should be viewed in their generally commercial context. The romantic notion of natural rights proves unhelpful where expanding intellectual property rights may impede other legitimate economic activity.

The dangers of intellectual property overprotection are evident in a recent European Commission Working Paper on the Directive on the Legal Protection of Databases.<sup>6</sup> In that document, the European Commission reexamines the controversial European Database Directive, which created *sui generis* protection for databases. Part IV of this response explores how the failure of that experiment – which saw the European share of the database market decline precipitously since the adoption of the directive – debunks the notion that "more and more layers of IP protection means more innovation and growth."<sup>7</sup>

## II. INTRODUCTORY ISSUES: PATENT

CCIA applauds the Gowers Review for examining the growing set of issues about patent use and practice for different purposes and in different contexts. The U.S. Federal Trade Commission

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<sup>3</sup> *Twentieth Century Music Corp. v. Aiken*, 422 U.S. 151, 156 (1975).

<sup>4</sup> *Ibid.*

<sup>5</sup> *White v. Samsung Electronics, Inc.*, 989 F.2d 1512, 1513 (9th Cir.)(Kozinski, J., dissenting), *cert. denied*, 113 S. Ct. 2443 (1993).

<sup>6</sup> DG Internal Market and Services Working Paper, "First evaluation of Directive 96/9/EC on the legal protection of databases," Dec. 12, 2005 (*available at* <[http://europa.eu.int/comm/internal\\_market/copyright/docs/databases/evaluation\\_report\\_en.pdf](http://europa.eu.int/comm/internal_market/copyright/docs/databases/evaluation_report_en.pdf)>) (hereinafter "Working Paper")

<sup>7</sup> *Ibid.* at 23.

undertook a similar effort when it examined how patents were used and experienced in four critical sectors in 2002-2003. The results are detailed in Section 3 of the FTC's report, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy*.<sup>8</sup> We urge the Review to examine the FTC record and findings and to consult with FTC staff on their experience in evaluating the relationship between patents, innovation, and competition in these critical areas.

As the Review is aware, there is an abundance of anecdotal and testimonial evidence about the use and effects of the patent system but a conspicuous dearth of empirical evidence.<sup>9</sup> No systematic collection of data occurs beyond the processes for examining and awarding patents at the front end and the litigation of patents at the back end. Empirical data on patent use, including licensing and settlements, is collected only by academic researchers on an occasional basis. This data collection is an expensive process that is difficult to maintain over time. The cost and difficulty of acquiring useful data is further magnified by the diversity of innovation and market environments.

We would like to draw the Review's attention to several other top-level problems that are too often missing from patent policy discussions:

- Despite the important role that patents play in the knowledge-based economy, remarkably little is known about business practices and the consequences of patents in different fields and sectors. Given the vast sums at stake, there is far too little public investment in understanding effects of patents, and in ensuring that the system works optimally in all areas of the economy.<sup>10</sup>
- As a practical matter, the patent system operates increasingly at a portfolio level, especially in information and communications technology, where products include thousands of patentable functions. Indeed, the rationale for patents is based on long-term aggregate economic benefit. Yet patent law functions at the level of individual patents, and policy discussion has traditionally focused on the use and effect of individual patents – to the exclusion of portfolio strategies and effects.<sup>11</sup>
- While the technical nature of patent law and practice has often left policy in the hands of patent professionals, the growing diversity in technologies and innovation environments leads to an increasing variety of practice and experience – with the growing likelihood of divergent economic results. The isolation of

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<sup>8</sup> The FTC report is available online at <<http://www.ftc.gov/os/2003/10/innovationrpt.pdf>>.

<sup>9</sup> This problem was addressed in the report commissioned by DG Research for the European Parliament on the proposed "Computer-Implemented Inventions Directive" on software patents, in which the authors proposed a European Patent Observatory; see <<http://www.europarl.eu.int/meetdocs/committees/juri/20020619/SoftwarePatent.pub.pdf>>.

<sup>10</sup> For example, the UMIST initiative on intellectual property and SMEs was very helpful in challenging assumptions about SMEs and patents.

<sup>11</sup> For example, see the letter prepared by European economists of innovation critiquing the rapporteur's summary of the Computer-Implemented Inventions Directive: <http://www.researchineurope.org/policy/patentdirltr.htm>. DG Enterprise and Industry has recently funded a study on the effects and implications of patent portfolios.

patent law diminishes the opportunity for well-informed industry input and stewardship, bolsters the insularity of the system, and makes the policy process vulnerable to capture.<sup>12</sup>

- There is presently little capacity for integrated economic and legal analysis of patent policy. The lack of economic expertise and inattention to business effects contributes to capture by “customers.” Despite the need for in-depth grounding in innovation and technology policy, patent agencies often enjoy considerable autonomy, especially if they are fee-funded. (E.g., the EPO is entirely independent of the European Union; the U.S. Patent and Trademark Office is separate from the Technology Administration in the Department of Commerce.)<sup>13</sup>

CCIA commends the Call for Evidence for drawing attention to five important issue clusters that commonly do not appear in legalistic analyses of patent policy. We offer the following specific comments on the Call for Evidence’s text:

- Past legislative reform has resulted in a highly complex IP system. While a degree of complexity is inevitable in a system covering a wide range of products and innovations, aspects of the system appear to have become increasingly opaque. There may be options to improve the transparency of the system and increase business awareness of IP, making the system easier to navigate.

Opacity is a major problem that is difficult to address in a straightforward manner. It is a consequence of several mutually reinforcing factors: low standards that lead to too many patents of dubious quality; the poorly defined nature of patent rights (relative to rights in tangible property); the high costs of adjudicating patent validity and infringement; and the economic incentives for surprise and hold-up.

Opacity is especially problematic with respect to information technology, where the high number of patentable functions makes clearance searches prohibitively expensive. Opacity appears to be less of a problem in sectors where high barriers to entry limit the number of participants and companies have a clear sense of who their competitors are and what they are working on.

“Increasing business awareness of IP” may make the system more opaque rather than less. For example, inducing greater patenting by making patents more powerful and easier to get results in portfolio racing. While large companies deal with the associated problems by cross-licensing to each other, all companies face greater and greater problems of identifying and clearing relevant intellectual property.

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<sup>12</sup> As one treatise notes: “Workloads increase and regulatory authority expands when new industries become subject to the appropriations authorized by the patent law. Noticeably absent from the private, administrative and judicial structure is a high regard for the public interest.” See Roger E. Schechter & John R. Thomas, *Intellectual Property* (West Hornbook Series 2003).

<sup>13</sup> The FTC report represents a landmark advance in integrated analysis. The Report also recommends infusing patent policy with economic analysis.

The battles over patent reform in the United States strongly suggest that the one-size-fits-all paradigm is becoming antiquated. This could lead to a more differentiated system in which standards could be linked to market realities. Technology professionals might find a tailored regime easier to understand and navigate.

- Obtaining IP rights can impose significant costs on businesses and innovators. For example, evidence suggests that securing patent protection in a selection of European countries and in the USA typically costs around £75,000 over the first seven years, including legal fees and renewal fees. Moreover, it appears to be considerably more expensive to obtain patent protection across Europe than it is in the US, largely due to translation fees and other costs at the national level. These figures do not include the costs of enforcing IP and challenging infringement through litigation, which also appear to be very high, often prohibitively so, especially for small and medium enterprises. This may be acting as a barrier to efficient enforcement of IP rights and equally as a deterrent to innocent parties being able to challenge dubious rights. Efforts to agree on a European Community Patent, aimed in part at reducing these costs, have repeatedly foundered.

We commend the Call for Evidence for this balanced presentation of the cost problem. By contrast, the European Commission's arguments for the community patent and for subsidized patent insurance were premised narrowly on concern for costs facing patent applicants and enforcers. One consequence of only making patents cheaper, easier-to-get, and more powerful is to increase system transaction costs and the overall exposure to liability. In the United States, cheap and easy-to-get patents have fueled portfolio races, possibly to the detriment of investment in research and development.<sup>14</sup> Large numbers of patents become decoupled from going businesses as businesses fail or change course. These patents may be acquired by non-producing licensing firms that have no need for cross-licenses and are therefore free to extract license fees as aggressively as they choose.

- While patents provide a vital incentive for innovation, the granting of overly broad patent protection, together with restrictive or restricted licensing of IP, can impede the development of the next generation of products and reduce competition. The practice of obtaining patents defensively also appears to be widespread in some industries, where rights holders have no intention to develop marketable products or to license the IP to others, but wish to prevent others from undertaking research and development in similar areas. Others may hold defensive patents and seek to generate revenue not by commercializing them, but by seeking out potential infringers and proposing licensing agreements to them under threat of litigation. While such practices are legal, they may hinder innovation if the original patent was dubious or too broad in scope, and impose barriers to market entry for those who have legitimate innovations but are unable to risk litigation. Use of a patent in a way that places a burden on innovation rather than stimulating it will not be achieving the objective of the patent system.

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<sup>14</sup> James Bessen and Robert M. Hunt, *An Empirical Look at Software Patents*, March 2004, draft available at <<http://www.researchoninnovation.org/swpat.pdf>>.

The Call for Evidence correctly identifies a major problem in many industries where innovation is cumulative or otherwise interdependent. The lower the threshold for patenting and the greater the allowable breadth, the greater the potential for interference with follow-on innovation.<sup>15</sup> The shorter product cycles of less mature industries further burdens follow-on innovation.

Unfortunately, there are multiple meanings of “defensive”:

- use for protecting a technology developed within a business against imitation by competitors (the classic purpose of patents)
- preemption – *i.e.* filing for patents to preclude competitors from filing; this purpose can be achieved narrowly but cheaply by defensive disclosure
- patenting of improvements in order to restrict the ability of competitors to enhance or expand products (which create leverage for cross-licensing the competitor’s underlying technology)
- contingency stockpiling – patents acquired to be used in response to infringement suits filed by others

A fifth “defensive” use (which appears to be the subject of the second sentence) is probably relatively rare: the situation where a monopolist patents an important advance to keep others from developing a better alternative to the monopolist’s high-margin product – and to preserve the high returns for this established product.

Properly developed, patent policy should monitor and take into account all these uses of the patent. It should also monitor and account for the variety of “offensive” uses, some of which amount to more than regulatory arbitrage that redistributes wealth from productive companies to patent specialists. This is the so-called “troll” phenomenon. While the “troll” name is new, the phenomenon is not, and its increased visibility testifies to trolls’ growing skills and motivation in extracting value from patents. This business model, while lucrative for patent holders, ultimately undermines the incentives to undertake the full range of value-added activity needed to design, develop, refine, test, and market innovative products.

- The increasing complexity of high-tech products and of scientific research may also be leading to problems. Firms often need to use large numbers of existing patents to develop a new product. They may find themselves having to negotiate complex licensing agreements, often with multiple rights-holders holding overlapping patents, in order to emerge from so-called “patent thickets”. Delays in patents being granted can also lead to new products inadvertently infringing on patents issued after these products were brought to market. These problems are at their most extreme in high-tech industries such as computing and telecoms because of the complex and fast moving nature of the innovations concerned and the need to set formal technological standards and ensure interoperability.

In this passage, the Call for Evidence correctly characterizes the problems of complex technologies – or, more accurately, complex products that include large numbers of patentable

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<sup>15</sup> Robert M. Hunt, *Patentability, Industry Structure, and Innovation*, 52 J. of Indus. Econ. 401-25 (2004).

functions. However, as suggested in the last patent issue cluster below, firms find ways to deal with dense, overlapping, and conflicting patent claims either by ignoring them or by agreeing not to look too closely. Reportedly, even large information technology firms no longer do clearance searches.<sup>16</sup> The costs of clearing thousands of patentable functions at five to fifty thousand dollars each is prohibitive. And this is just to locate patents, evaluate them, and assess the likelihood of infringement. It does not include the cost of clearing any problems through licensing.

At the same time, there is growing potential liability in inadvertently incorporating patented functions in complex technology products, especially in the United States where injunctive relief is currently nearly automatic. Companies are taking a gamble that an unknown infringement will not be discovered, or that the patent will be found invalid or un infringed in the course of litigation, or that the patentee will also face large costs and uncertainty – and can therefore be bought off for a reasonable licensing fee.

The obvious solution to this potentially massive embedded liability is to raise the threshold of the inventive step (commonly referred to as “nonobviousness” in the United States). This would reduce the widespread inadvertent infringement documented in the FTC hearings. In particular, raising the threshold would realign the legal standard for the “inventive step” with the economic principle that the patents should only be available to motivate inventions that would not otherwise be made.<sup>17</sup> Such a change would minimize conflict among independent creators and minimize inadvertent infringement. This would be an important step toward recognizing that economic circumstances need to play a role in patent policy, and that legal mechanisms need to support the economic goal of promoting innovation.

- Increasingly firms appear to be innovating collaboratively, and using crosslicensing agreements and “patent pools” to share their IP with other firms and reduce the need for costly and time consuming negotiations. However, while this may enable innovation among the firms involved, it may also increase barriers to market entry for others.

A distinction should be made between the collaborative innovation in which intellectual property issues are addressed ahead of time and situations where intellectual property problems require solutions after the fact of collaboration. Patent pools (as they are implemented in the ICT sector today) are usually formed after the fact by pooling patents from different companies or groups in order to create a useful standard or platform. This stems from the need to aggregate and integrate functionality at a higher level. The development of the standard itself is usually a collaborative process, although it may be quite arbitrary – one of many possible ways of accomplishing the goal. Typically, standards are developed by engineers, and then the problem of clearing rights by creating a patent pool is turned over to lawyers. In the case of MPEG, the

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<sup>16</sup> “[T]here are too many patents to be able to even locate which ones are problematic. I used to say only IBM does clearance ... but IBM tells me even they don’t do clearance searches anymore.” Robert Barr, Worldwide Patent Counsel, Cisco Systems, FTC Roundtable, “Competition, Economic, and Business Perspectives on Substantive Patent Law Issues: Non-Obviousness and Other Patentability Criteria,” (Oct. 30, 2002), at 81, *available at* <<http://www.ftc.gov/opp/intellect/021030trans.pdf>>.

<sup>17</sup> This is the “but-for” principle, described in greater depth in the FTC report, *supra* note 8, Ch. 1, pp. 10-11.

video compression standard of the Moving Picture Experts Group (responsible for development of video and audio encoding standards) it took as long to create the patent pool as to develop the standard in the first place.

Standards development organizations can rarely afford to research and identify problem patents; instead, they rely on their members to disclose any patents they own and to commit to licensing on “reasonable and nondiscriminatory” terms. Problems arise when companies game the process or decline to participate, using their patents to ambush a standard after it has been adopted and widely implemented. The threat from nonparticipant patent holders is a growing problem since systemic incentives encourage ambush and hold-up by patentees.<sup>18</sup>

Similarly, cross-licensing is a way of reducing the need for costly and time-consuming negotiations after invention has taken place and patents have been received. Although companies can provide for automatic inclusion of future patents in the cross-license, this does not normally involve collaborative innovation.

The Call for Evidence correctly identifies barriers to new entrants as a problem inherent in portfolio cross-licensing. Ironically, patents may sometimes help small companies raise venture funding – and then find that the need to license patents of the others makes it difficult to get a finished product to market. Without much of a portfolio for trading, the new entrant may be forced to sell out to an established company that already has a substantial portfolio. While this may appear to be a sufficient return on investment, the new entrant would be in a stronger position if it also had the option of growing on its own. This problem, too, could be mitigated by raising the inventive step threshold to reduce portfolio effects and the hazards of inadvertent infringement.

In the interests of laying a better foundation for patent policy, CCIA has developed a set of principles that are attached below as Part V of this submission. These principles specifically address the need to limit inadvertent infringement, reduce patent inflation to manageable levels, and increase flows of knowledge about patented technology.

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<sup>18</sup> A newly published report by the Committee for Economic Development, *Open Standards, Open Source, and Open Innovation* (April 2006), recommends “that incentives be created to induce the early disclosure of intellectual property claims and that consideration be given to progressively limiting recovery by a firm asserting infringement, as time elapses from the adoption of a standard.” Accord Brian Kahin, *Common and Uncommon Knowledge: Reducing Conflict Between Patents and Standards*, reprinted in Sherrie Bolin, ed., *The Standards Edge: Golden Mean* (Sheridan Books 2006); and available at

### III. SPECIFIC ISSUES: COPYRIGHT

- **Current term of protection on sound recordings and performers' rights**

Background: The Review will fulfill the Government's commitment to examine whether the current 50 year term of protection on sound recordings and performers' rights in sound recordings is appropriate, in the light of its extension to 95 years in a number of other jurisdictions.

(a) What are your views on this issue?

#### *CCIA Views on the Current Term of Protection on Sound Recordings and Performers' Rights*

CCIA opposes copyright term extension. "[T]he copyright term is limited so that the public will not be permanently deprived of the fruits of an artist's labors."<sup>19</sup> To extend the term is to deprive the public, and extension must therefore be justified by a corresponding increase in the production of creative works. The extraordinary extension achieved by the U.S. Copyright Term Extension Act (CTEA),<sup>20</sup> colloquially referred to in the United States as the "Mickey Mouse Protection Act," has not led to a proportionate increase.

(b) Is there evidence to show the impact that a change in term would have on investment, creativity, and consumer interests?

(c) Are you aware of the impact that different lengths of term have had on investment, creativity, and consumer interests in other countries?

(d) Are there alternative arrangements that could accompany an extension of term (e.g. license of right for any extended term)?

When the U.S. term extension was challenged before the Supreme Court of the United States,<sup>21</sup> a brief filed by a group of recognized and Nobel Prize-winning economists explained how the term extension would lead to the creation of few new works, while increasing the social cost of monopoly and inhibiting innovation.<sup>22</sup> In return for depriving the public of works for twenty additional years, the economists estimated, the CTEA increased the author's present-value incentive by a mere 0.33%. When comparing the economic deadweight loss of term-extended works that had been nearing expiration to that of newly created works, the economists found it to be 224 times as large in present value.<sup>23</sup>

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<sup>19</sup> *Stewart v. Abend*, 495 U.S. 207, 288 (1990).

<sup>20</sup> Copyright Term Extension Act of 1998, Pub. L. No. 105-298, 112 Stat. 2827.

<sup>21</sup> *Eldred v. Ashcroft*, 537 U.S. 186 (2003) The legal challenge to the CTEA questioned only Congress's authority to enact it, not its wisdom in doing so. The Court's opinion suggested that, given the authority, it may very well have questioned the prudence of the extension. *Ibid.* at 222 ("petitioners forcefully urge that Congress pursued very bad policy in prescribing the CTEA's long terms. The wisdom of Congress' action, however, is not within our province to second guess.").

<sup>22</sup> *Amicus curiae* Brief of George Akerlof, Kenneth Arrow, Ronald Coase, et al. (No. 01-618).

<sup>23</sup> *Ibid.* at 6, 11.

Even the U.S. Register of Copyrights subsequently characterized the U.S. term extension as “too long” and “a big mistake.”<sup>24</sup> CCIA agrees entirely with this assessment, and urges the Government of the United Kingdom not to make the same mistake.

(e) If term were to be extended, should it be extended retrospectively (for existing works) or solely for new creations?

Because copyright creates an incentive for authors to produce new creative works, it only functions prospectively. The law cannot incentivize creativity after the relevant investment has been made. Any retroactive extension merely provides a windfall to the rights-holder without any benefit accruing to the public.

• **Copyright exceptions - fair use / fair dealing**

Background: There are a number of exceptions to copyright that allow limited use of copyright works without the permission of the copyright holder.

- (a) What are your views on the current exceptions in copyright law?  
(b) Could more be done to clarify the various exceptions?

***CCIA Views on Copyright Exceptions and Fair Use***

Copyright, like patent, requires a balance between overprotection and underprotection. Copyright law thus requires its own built-in safeguards such as a prohibition against the protection of facts, and limiting protection to the expression of ideas, rather than the ideas themselves – both of which figured prominently in the recent U.K. copyright litigation over Dan Brown’s *The DaVinci Code*. Brown’s publisher, Random House, was vindicated in part because “there is no copyright in ideas or schemes or systems or methods: it is confined to their expression.”<sup>25</sup>

Other limitations and exceptions on the copyright holder’s exclusive right, such as limited terms and fair use/fair dealing, are similar in that they too “enable a fair balance to be struck between protecting the rights of the author and allowing literary development.”<sup>26</sup> Today, however, it is not only literary development against which the interests of rights-holders must be balanced, but also innovation in ICT.

Because these limitations and exceptions ensure against the over-protection of copyright and stifling of subsequent creativity and innovation, they are vitally important. Moreover, in many ways it is their flexibility that makes these principles effective. The fair use doctrine, for example, has remained sufficiently flexible over time, allowing it to deal with a variety of unforeseen developments – such as the recent trend in “space-shifting” sound recordings for

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<sup>24</sup> UNC Symposium on Intellectual Property, Creativity, and the Innovation Process, Nov. 2, 2005 (video excerpt available at <[http://www.ibiblio.org/yugen/video/too\\_long.mpg](http://www.ibiblio.org/yugen/video/too_long.mpg)>).

<sup>25</sup> *Baigent v. Random House Group Ltd.*, [2006] EWHC 719 (Ch.), ¶ 158 (quoting *Harman Pictures N.V. v. Osborne*, [1967] 1 WLR 723). U.S. copyright jurisprudence referred to this principle as the “idea/expression dichotomy.”

<sup>26</sup> *Ibid.* ¶ 153.

personal use. Too often, rights-holder-driven efforts to “clarify” the limitations and exceptions that balance copyright law have devolved into the dilution or narrowing of those limitations and exceptions. Thus, policymakers should take care when clarifying the law, so as not to inadvertently circumscribe the rights of the public and expose ICT innovators and others to the risk of unwarranted litigation.

- (c) Are there other areas where copyright exceptions should apply?
- (d) Are the current exceptions adequate or in need of updating to reflect technological change? For example copyright law in the UK does not currently have a private “fair use” exception. Such an exception might allow individuals to copy music CDs onto their PC and MP3 player for their personal use. Should UK law include a statutory exception for “fair use”?

The following discussion of fair use argues that the Review should evaluate the possibility of implementing a similar doctrine in U.K. law, to be applied and interpreted in a flexible manner by common law courts. CCIA believes that in all areas where copyright applies, U.K. copyright law should also apply some form of equitable doctrine that permits unauthorized, yet socially beneficial uses of copyrighted works. Such a rule should look to whether enforcing the copyright would yield a net loss to society. This approach allows common sense to keep pace with technological change.

From the perspective of the ICT industry, fair use is essential to innovators.<sup>27</sup> Presently, the “fair dealing” principle embodied in the 1988 Copyright Design and Patent Act, as revised by the Copyright Directive implementation, may prove insufficient to protect certain socially beneficial activity. Unlike the more limited “fair dealing,” fair use accommodates rapid technological innovation in commercial and non-commercial contexts through its inherent common law flexibility. This flexibility permits the doctrine to adapt more easily than specific statutory exemptions. Thus, adopting an equitable, flexible doctrine for both commercial and noncommercial fair use would allow the consumer uses noted in the Call for Evidence and would simultaneously protect ICT innovators from unwarranted litigation.

In the U.S. tradition, fair use represents the public’s right to engage, without a copyright owner’s express authorization, in activities such as criticism, commentary, education, parody, news reporting, and research. Fair use is also one of the “traditional First Amendment safeguards” that prevents U.S. copyright law from restricting the free expression rights of the public.<sup>28</sup>

Fair use protects several crucial ICT activities. As the U.S. Supreme Court reaffirmed in the file-sharing case, *MGM Studios v. Grokster Ltd.*, promoting copyright must be balanced against promoting innovation.<sup>29</sup> The Fair Use Doctrine is the means by which copyright law prevents intellectual property rights from stifling innovation. Fair use also serves as the statutory vindication for reverse-engineering and other ‘copying’ that benefits consumers without impairing the rights of copyright holders.

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<sup>27</sup> The U.S. fair use doctrine is codified in Section 107 of the U.S. Copyright Act. See 17 U.S.C. § 107.

<sup>28</sup> See *Eldred v. Ashcroft*, 537 U.S. 186, 220 (2003).

<sup>29</sup> See *Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd.*, 545 U.S. \_\_\_\_, 125 S. Ct. 2764 (2005).

The following describes how fair use allows: (1) copying in the course of “reverse-engineering” to achieve product interoperability; (2) direct “copying” in the ICT industry, when the copies at issue are not the types of usable “copies” contemplated by copyright law; and (3) copying by consumers who take advantage of new technology to benefit from the copyrighted works they own.

(1) *Fair use protects interoperability.* The existence of fair use guarantees “reverse engineering” of computer hardware and software products. Reverse engineering promotes competition by permitting hardware and software to work together, or *interoperate*. Two technology products can interoperate only if they conform to the same set of rules, or *interface specifications*. Interoperability, therefore, is about “playing well with others.” If a company could exercise proprietary control over the interface specifications implemented by its products, that company could determine which products made by other firms – if any – could interoperate with its software.

Such a broad monopoly poses serious risks to consumer welfare.<sup>30</sup> Consumers would not receive the benefit of innovative products introduced by new entrants, and the first developer would have little incentive to develop more innovative and less costly products. For example, prohibiting competitors from accessing the *de facto* standard interface specifications could lock users into a particular operating system, software platform, or network software environment, leverage less competitive products, and inhibit users from transferring data between different computing environments.

Fortunately, U.S. courts in recent years have held that interface specifications are unprotectable ideas, rather than copyright-protected expression.<sup>31</sup> Some courts invoked fair use as an alternate theory for copying interface specifications.<sup>32</sup> But even though the interface specifications are not protected by copyright, a company seeking to interoperate must still learn what those specifications are. Unless the company that controls the interface publishes detailed, accurate, and timely information about the specification, competitors seeking to develop interoperable products have no choice but to perform painstaking research on the original program to learn how the interface works. This is usually by decompilation, a form of reverse engineering, that takes machine code and turns it into source code that humans can read. This is a basic, accepted practice in the development of software products.

Since the U.S. Court of Appeals for the Ninth Circuit’s 1992 *Sega v. Accolade* decision, no fewer than five U.S. courts have permitted incidental reproduction of code in the course of reverse

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<sup>30</sup> See, e.g., Peter S. Menell, *An Analysis of the Scope of Copyright Protection for Application Programs*, 41 Stan. L. Rev. 1045, 1082, 1097 n.281 (1989).

<sup>31</sup> *Sega Enterprises, Ltd. v. Accolade, Inc.*, 977 F.2d 1510 (9th Cir. 1992). See also *Computer Assocs. Int’l v. Altai, Inc.*, 982 F.2d 693 (2d Cir. 1992); *Lotus Dev. Corp. v. Borland Int’l, Inc.*, 49 F.3d 807 (1st Cir. 1995), *aff’d by an equally divided Court*, 516 U.S. 233 (1996); *Mitel, Inc. v. Iqtel, Inc.*, 124 F.3d 1366 (10th Cir. 1997); *Lexmark Int’l, Inc. v. Static Control Components Inc.*, 387 F.3d 522, 536 (6th Cir. 2004).

<sup>32</sup> Jonathan Band & Noah Levine, *You Say Misuse, I Say Fair Use*, Computer Lawyer (Nov. 1996) available at <<http://www.policybandwidth.com/doc/JBand-YouSayMisuseISayFairUse.pdf>>.

engineering by invoking the fair use doctrine.<sup>33</sup> Absent fair use, however, such copying would likely constitute infringement, and the wealth of benefits resulting from interoperability would be lost. In fact, during consideration of the European Software Directive,<sup>34</sup> the U.S. Ambassador to the European Community wrote that copying of a computer program that is not authorized by the rights-holder “is not permitted unless excused by our fair use doctrine” or Section 117 of the U.S. Copyright Act.<sup>35</sup> Subsequent interpretations of Section 117 in *MAI Systems Corp. v. Peak Computer, Inc.* construed that provision narrowly, thus leaving fair use as the only copyright safe harbor for reverse engineering.<sup>36</sup>

Ultimately, U.S. and U.K. law provided similar protection for “black box” reverse engineering and decompilation, although through different means.<sup>37</sup> The Software Directive’s reverse engineering and decompilation provisions proved highly beneficial to ICT industries by obviating the need to rely upon fair use or the idea/expression dichotomy, thus creating more certainty in the short run. In the long run, however, technologies change, and new innovations may not be covered by existing law.<sup>38</sup> Fair use’s flexibility permits common law courts to adapt the rule to technological progress, saving the costs and long-run uncertainty inherent in legislating reactively.<sup>39</sup> The flexible fair use approach found in U.S. copyright law therefore merits consideration, as it is most adaptable to future developments.

(2) *Fair use protects direct “copying” by ICT innovators.* In a networked and information-driven economy, information moves perpetually from one place to another via electronic means. The incessant movement of information requires copying. Billions of transitory copies of protected intellectual property are made every day on devices, computers, and computer

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<sup>33</sup> *Atari Games Corp. v. Nintendo of America, Inc.*, 975 F.2d 832 (Fed. Cir. 1992); *Bateman v. Mnemonics, Inc.*, 79 F.3d 1532 (11th Cir. 1996); *DSC Communications Corp. v. DGI Techs.*, 898 F. Supp. 1183 (N.D. Tex. 1995), *aff’d*, 81 F.3d 597 (5th Cir. 1996); *DSC Communications Corp. v. Pulse Communications, Inc.*, 976 F. Supp. 359 (E.D. Va. 1997), *aff’d in part, rev’d in part, and vacated in part*, 170 F.3d 1354 (Fed. Cir. 1999); *Sony Computer Entm’t, Inc. v. Connectix Corp.*, 203 F.3d 596 (9th Cir.), *cert. denied*, 531 U.S. 871 (2000).

<sup>34</sup> See Council Directive, 91/250/EEC, Legal Protection of Computer Programs (May 14, 1991) (hereinafter “Software Directive”).

<sup>35</sup> Jonathan Band & Masanobu Katoh, *Interfaces on Trial – Intellectual Property and Interoperability in the Global Software Industry*, at 233 (Westview Press 1995).

<sup>36</sup> *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511 (9th Cir. 1993). The *MAI v. Peak* opinion prompted a maintenance exception to be added to Section 117 by the Digital Millennium Copyright Act, although that provision does not mitigate the risks of reverse engineering. The narrow statutory reversal of *Peak* further demonstrates the benefit of a flexible rule over a statutory exception: not only can subject-matter-specific statutory exceptions be construed narrowly by courts, but subsequent legislative reversals of those judicial decisions, while intended to protect particular subject matter, impliedly endorse those aspects of the opinion which the legislature does not address. The naturally narrows the legislative response and risks reinforcing the underlying judicial decision. *Peak*, for example, has not been successful in preventing hardware providers from using copyright to leverage themselves into the aftermarket for maintenance by locking out competitors. See, e.g., *Storage Tech. v. Custom Hardware Eng’g*, 421 F.3d 1307 (Fed. Cir. 2005), *available online at* <<http://fedcir.gov/opinions/04-1462.pdf>>.

<sup>37</sup> See Band & Katoh, *supra* note 35, at 258.

<sup>38</sup> *Ibid.* at 257 (noting criticism by some commentators that the Directive’s precision is illusory since ambiguities invite litigation).

<sup>39</sup> Article 6 of the Software Directive, for example, protects decompilation to achieve interoperability with software, but said nothing of hardware.

This ambiguity created uncertainty as to whether the Directive protected software-to-hardware interoperability. See Band & Katoh, *supra* note 35, at 248-50, 257. This illustrates the benefits of a flexible doctrine such as fair use, which is not circumscribed by a narrow statutory protection.

networks. The vast majority are not pirated copies with which intellectual property law is concerned. Rather, these copies are the inevitable artifacts of digital communications. Under some regimes, such as in the European Copyright Directive's Article 5(1), temporary copies are directly exempted from the copyright holder's reproduction right. In other regimes, however, temporary copies are treated as "copies" for purposes of copyright law. In these cases, copyright treats transitory copies, cached copies, and indexing copies as non-infringing. Some of the most revolutionary and successful Internet businesses depend on the legality of such copying. Search engines such as Yahoo and Google, for example, "index" webpages by making copies of those pages. They also "cache" pages so as to provide users with access even when servers or networks have failed.<sup>40</sup>

Google has been subjected to litigation in multiple fora on the basis that this and related activities violate copyrights of Internet content. While some courts have held that such copying is non-volitional, and therefore not a "copy" within the sense that the copyright laws intend,<sup>41</sup> other courts have blessed this copying on the basis of fair use. In *Field v. Google*, a court denied a claim of infringement by an attorney who alleged Google had wrongfully copied and redistributed a poem he had posted to his Internet website. The court denied the claim, ruling that "to the extent that Google itself copied or distributed Field's copyrighted works by allowing access to them through 'Cached' links, Google engaged in a 'fair use' of those copyrighted works."<sup>42</sup> Similarly, in *Kelly v. Arriba Soft Corp.*, a search engine was sued by a photographer who claimed that the engine's "thumbnailing" of photographs posted to his website infringed copyright. The appeals court in *Kelly* concluded that the copying was a transformative fair use which would "improv[e] access to information on the internet."<sup>43</sup> Absent a broadly construed doctrine of fair use, cutting-edge innovators such as Yahoo and Google risk vexatious litigation merely because their business models entail making the Internet more useful.

Unlike interoperability, protection for search engine activities may not be as broad under U.K. law as it is in U.S. law, particularly in light of the limitations of fair dealing.<sup>44</sup> Needless to say, if a search engine were obliged to license each image it collected, its operations would be greatly limited. While copyright law could create another explicit exception for search engines, a fair use

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<sup>40</sup> Websites may decline to be indexed by using a standardized robot.txt file or a "no archiving" metatag – computer code which tells search engine computers engaged in automated copying of websites not to copy the website in question. This allows websites to opt out, but establishes a default rule in favor of fair use.

<sup>41</sup> *Parker v. Google*, No. 04-CV-3918 (E.D. Pa. March 10, 2006) (citing *Costar Group, Inc. v. LoopNet, Inc.*, 373 F.3d 544, 549 (4th Cir. 2004), *Religious Tech. Ctr. v. Netcom On-Line Comms. Servs., Inc.*, 907 F. Supp. 1361 (N.D. Cal. 1995)).

<sup>42</sup> *Field v. Google*, 2006 WL 242465, 04-CV-413 (D. Nev. Jan. 19, 2006). The *Field* court also concluded, however, that much, if not all of the copying in which Google engaged would not have constituted volitional copies, and therefore was protected under *Costar* and *Netcom*, *supra*.

<sup>43</sup> 336 F.3d 811, 819 (9th Cir. 2003).

<sup>44</sup> While temporary copies would presumably not create liability in U.K. law pursuant to the temporary copy provisions of the Copyright Directive, the "thumbnail" images made in *Kelly* were more permanent, thus giving rise to a fair use defense.

doctrine would protect ICT innovation without the requirement of pushing additional legislation past vested interests when each technological leap forward occurs.<sup>45</sup>

(3) *Fair use protects consumer copying.* Fair use also protects electronics manufacturers, software developers, and network service providers from liability for any copying that involves their products or services. In cases of secondary liability, courts have held that a product with substantial lawful (or “fair”) uses cannot be presumed to induce copyright infringement, even if the manufacturer knew that incidental infringement may result from the product’s distribution.<sup>46</sup>

Because the function of the fair use doctrine is to expand the scope of potential lawful uses, a flexible fair use doctrine protects ICT innovators from litigation by vested interests that do not benefit from the innovation.<sup>47</sup> For example, the “time-shifting” fair use permitted by a VCR encouraged the development of that product, and – litigation by the movie industry notwithstanding – spawned a multi-billion dollar industry in home movie viewing, and many billions more in the market for home theater consumer electronics. Similar fair uses enabled the development of mp3 players such as the iPod and innovative place-shifting technology such as the Slingbox, which allows users to view their paid-for television programs on devices outside their home. Without fair use, innovators would have assumed the risk of secondary liability in designing and marketing these products.<sup>48</sup> Again, the benefit in adopting a flexible rule like fair use is that the law need not be updated with each technological change, and the doctrine can be interpreted over time by common law courts. Fair use ensures maximum principled flexibility, regardless of whether the relevant copy is made by a user, manufacturer, or Internet service provider.

(e) How would you see content owners being compensated for such use?

Content owners benefit from new technology-enabled uses of their products insofar as the products are made more valuable to potential purchasers, thereby expanding market demand. The unstated assumption here – that each individual use of a work is one for which the rights-holder must be compensated – merits reexamination. The question is not whether a rights-holder is compensated for any given use. Rather, the question is whether the system as a whole offers sufficient incentives for the creation of the works in the first place, and whether it properly

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<sup>45</sup> Members of the U.S. Congress identified the flexibility of the fair use doctrine as applied to evolving technology as a reason for the European Community to adopt the doctrine in 1990. See Band & Katoh, *supra* note 35, at 232-33.

<sup>46</sup> The common law rules of secondary liability for copyright infringement in the United States, *see generally* *Shapiro, Bernstein & Co. v. H.L. Green & Co.*, 316 F.2d 304 (2d Cir. 1963) and *Gershwin Publ'g v. Columbia Artists Mgmt.*, 443 F.2d 1159 (2d Cir. 1971), bear some similarities to Sections 16(2) and 24(1) of the Copyright, Designs and Patents Act 1988 and *CBS Songs Ltd. v. Amstrad Consumer Elecs. PLC*, [1988] AC 1013. For further analysis comparing “authorization” to U.S. common law secondary liability in the file-sharing context, *see* Jonathan Band & Matt Schruers, *Grokster in the International Arena*, 7(1) COMPUTER L. REV. INT’L 6 (2006), available online at <<http://www.policybandwidth.com/doc/GroksterCRI.pdf>>.

<sup>47</sup> Under the *Sony* “Betamax” rule reaffirmed in the U.S. Supreme Court’s recent *Grokster* decision, technological innovators understand that they need not design their products to the whims of copyright holders. *Grokster*, 125 S. Ct. at 2777-78 (citing *Sony Corp. v. Universal City Studios*, *supra*, at 442).

<sup>48</sup> Entertainment-industry championed attacks on fair use threaten these innovative products even today. *Lawsuits Expected Over TV Slingbox*, UPI Newswire, July 6, 2005.

balances creative incentives and innovation.

In short, copyright serves to maximize the public good, not the author's good. Fair use often intercedes when these two objectives part ways. If fair uses benefit society and do not substantially undermine an author's incentive to create, no compensation should be necessary.

- **Copyright – digital rights management**

Background: Increasingly digital media content is distributed with digital rights management (DRM) technologies that can enable rights-holders to track usage and prevent unlicensed copying by technological means. However concerns have been raised about interoperability and that such technologies may impair the content consumer's legal rights. For example they may be unable to take into account exceptions to copyright, the ultimate expiry of copyright term, or the future evolution of technology. They may therefore undermine legitimate rights to access digital content, now and in the future. (NB: We are aware of all formal submissions that have been made to the All Party Parliamentary Internet Group on this issue.)

(a) Do you have a view on how the use of digital rights management technologies should be regulated?

### ***CCIA Views on Digital Rights Management***

Digital rights management (DRM) technology may be an appropriate tool to secure copyrighted works from Internet piracy. Because DRM itself is rarely the problem, it is only in rare cases such as antitrust/competition enforcement and security threats that governments should consider regulating technology, and even then with care. Ultimately, the market should decide when and where DRM is deployed.

The principal policy challenge posed by DRM is not the DRM itself but the creation of “anticircumvention” rules – legal protection for the DRM itself, rather than the underlying work.<sup>49</sup> If policymakers elect to institute anticircumvention rules, they must carefully protect competition, the rights of consumers, and critical infrastructure security.

*(1) DRM Protected by Anticircumvention Can Threaten Competition.* Because DRM often requires controlling how one product interfaces with another, DRM may be used anticompetitively to prevent competitors' products from interoperating with one's own. Normally, competitors will reverse-engineer the product so as to understand its interface and achieve interoperability. In some cases, this can require circumventing DRM. If DRM is protected by law, however, businesses can legally lock out their competitors, to the ultimate detriment of the consumer.

Some form of anticircumvention rule (*i.e.*, protection for “technological protection measures” or TPMs) is required by Article 11 of the World Intellectual Property Organization (WIPO)

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<sup>49</sup> Anticircumvention rules are sometimes referred to as “paracopyright.”

Copyright Treaty and Article 6 of the European Copyright Directive.<sup>50</sup> In the United States, the anticircumvention rule was codified by the Digital Millennium Copyright Act.<sup>51</sup> The United Kingdom also provides protection for TPMs in Sections 296ZA-ZF of the 1988 Copyright, Designs and Patents Act.

When the DMCA was pending before the U.S. Congress, developers of interoperable computer products, including CCIA, explained that the act of reverse engineering – the uncovering of the interface specifications – could require the circumvention of a technological protection measure, an act which is presently prohibited by Section 1201 of that law. Recognizing that Section 1201 could prevent a developer of interoperable products from exercising fair use privileges, Congress created an exception to Section 1201 explicitly directed toward the development of interoperable products: Section 1201(f).<sup>52</sup> Indeed, the language of Section 1201(f) was modeled on the language of the European Software Directive, which pioneered the concept of protecting interoperability and reverse engineering in order to promote competition.<sup>53</sup> The enactment of Section 1201(f) demonstrates that reverse engineering is an economically important fair use and that Congress recognizes that importance, just as the Software Directive did.<sup>54</sup>

Unfortunately, in the United States there have been several cases in which companies used the DMCA's anticircumvention rule against competitors to lock them out, turning the law into an anticompetitive tool. Section 1201(f), although designed to prevent this, has proven too narrow. While Section 1201(f) has prevented some misconduct, the DMCA nevertheless remains "ripe for anticompetitive abuse,"<sup>55</sup> particularly in cases that have *nothing to do with copyright piracy*. These cases are more specifically detailed in the response to the next Specific Issue, "Coherence Between Competition Policy and IP Policy."

CCIA raises these cases in order to counsel vigilance against the evolution of a similar trend in the United Kingdom. While the Software Directive is generally viewed as a success, elements of the U.S. DMCA sprang from concepts in the Software Directive, and the less litigious culture of Europe may have only slowed parallel developments. Accordingly, policy-makers should guard against permitting such defects from hijacking U.K. anticircumvention jurisprudence and repeating the mistakes of the United States.

The competitive effect of DRM has been the subject of contentious debate in France, where the French government is attempting to implement the recent Copyright Directive. The legislation

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<sup>50</sup> Council Directive, 2001/29/EC, Harmonisation of Certain Aspects of Copyright and Related Rights in the Information Society (May 22, 2001) (hereinafter "Copyright Directive"). This document uses the lay term "DRM" interchangeably with the legal term "TPMs."

<sup>51</sup> Pub. L. No. 104-304, 112 Stat. 2860 (1998) (codified in various sections of U.S. Code, Title 17).

<sup>52</sup> The Senate Judiciary Committee explained the policy underlying Section 1201(f), stating that the exception was "intended to allow legitimate software developers to continue engaging in certain activities for the purpose of achieving interoperability to the extent permitted by law prior to the enactment of this chapter." See S. Rep. No. 105-190, at 32 (1998).

<sup>53</sup> For example, the Software Directive and the DMCA share the same definition of interoperability ("interoperability can be defined as the ability to exchange information and mutually to use the information which has been exchanged"). Compare Software Directive, *supra* note 34 with 17 U.S.C. § 1201(f)(4).

<sup>54</sup> See generally Band & Katoh, *supra* note 35, at 242-58.

<sup>55</sup> Dan Burk, *Anticircumvention Misuse*, 50 UCLA L. Rev. 1095, 1096 (2003).

indicates that French legislators are sensitive to the importance of interoperability. The specifics of the legislation are not presently clear. Some have alleged that it is a “technology mandate” which requires all technological protection measures (i.e., DRM) to be interoperable, while others have suggested that the law merely limits anticircumvention protection to DRM that is interoperable.

A technology mandate would be troublesome, since while interoperability is an essential goal, government technology mandates are normally unsuccessful. Governments do not excel at picking winners and losers. Accordingly, mandates are normally only appropriate as a competition/antitrust remedy, when misconduct has been found, or to ensure computer security.

If the French legislation merely limited anticircumvention protection to interoperable DRM, however, this may be a positive development. The government would then be encouraging interoperability – a positive feature for consumers – without mandating particular technology architectures – a positive feature for competitors. As discussed further in “Coherence Between Competition Policy and IP Policy,” it is the closed nature of DRM that locks out competitors. Thus, withholding anticircumvention protection from non-interoperable DRM is far less troublesome. A legislative proposal along these lines may in fact promote competition by encouraging interoperable DRM, thereby benefiting consumers without completely forfeiting the possible benefits of DRM technology.

### *(2) DRM Protected by Anticircumvention Can Threaten Consumer Rights*

When protected by poorly-crafted anticircumvention rules, DRM can threaten consumer rights, suppressing lawful uses that would benefit the public. In requiring “adequate legal protection and effective legal remedies against the circumvention of effective technological measures” securing copyrighted works, WIPO Treaty Article 11 did not mandate protection for DRM in the case of non-infringing uses of works. Unfortunately, upon enacting the Digital Millennium Copyright Act, the U.S. Congress went far beyond the revisions necessary to conform American law to treaty obligations and inadvertently conferred broad new rights on the owners of copyrighted material, to the detriment of consumers and competition. Numerous organizations, ranging from civil liberties advocates to conservative think tanks,<sup>56</sup> have criticized the anticompetitive and anti-consumer effect of this misguided legislation.

### *(3) DRM Protected by Anticircumvention Can Threaten Critical Infrastructure Security*

Rights – including copyrights – imply responsibilities. Just as the fair use right must be exercised responsibly, the copyright comes with responsibilities as well. Copyright holders have a responsibility to treat users equitably, and to use self-help to protect copyrights judiciously. The debacle involving Sony’s digital rights management “rootkit” exemplifies some copyright holders’ failure to take their responsibility seriously. Sony surreptitiously caused the installation of a security-compromising application on the computers of millions of consumers and

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<sup>56</sup> See Electronic Frontier Foundation, *Unintended Consequences: Seven Years Under the DMCA* (Apr. 2006) available online at <[http://www.eff.org/IP/DMCA/DMCA\\_unintended\\_v4.pdf](http://www.eff.org/IP/DMCA/DMCA_unintended_v4.pdf)>; Timothy B. Lee, *Circumventing Competition: The Perverse Consequences of the Digital Millennium Copyright Act* (Cato Institute Mar. 2006) available online at <<http://www.cato.org/pubs/pas/pa564.pdf>>.

institutional users – including governments and militaries – who purchased certain copy-protected discs. This revelation shocked the Internet and computing community, and led to class action litigation and product recalls.

Even more alarming was the revelation that the cloaking device Sony used to disguise its DRM from consumers was exploited by hackers to launch malicious computer attacks. This particular use of DRM has abused consumer trust, seriously compromised computer security, and threatened critical infrastructure. Yet if security researchers, professionals, and security applications developers attempted to remedy the security threat posed by the offending software, they risked violating the anticircumvention rules – a potentially criminal act. While CCIA and others petitioned the U.S. Copyright Office to establish an administrative exemption in the law to protect against this threat, the ideal remedy is to ensure that anticircumvention rules do not impede security in the first place.

- **Coherence between competition policy and IP policy**
  - (a) Has your organisation experienced any activity linked to IP rights that you regarded as unfair competition?

### ***CCIA Views on Coherence Between Competition Policy and IP Policy***

As noted in our comments on digital rights management, anticircumvention rules can have serious anticompetitive effects. In the United States, we have witnessed a printer manufacturer using intellectual property law to suppress competition in the toner aftermarket. In this case, *Lexmark Int'l, Inc. v. Static Control Components, Inc.*,<sup>57</sup> the printer manufacturer invoked the U.S. Digital Millennium Copyright Act's anticircumvention rule in order to prevent other manufacturers from selling competing toner in the aftermarket. While an appellate court ultimately denied this effort, it is not the only example.

In a similar case, *Chamberlain Group v. Skylink Technologies*,<sup>58</sup> Chamberlain, a garage door opener manufacturer, sued Skylink over Skylink's competing garage door opener remote. By designing a remote that worked with Chamberlain's garage door opener, Chamberlain claimed, Skylink allegedly violated Chamberlain's copyright by circumventing software code within Chamberlain's garage door opener. A federal district court in Chicago found for Skylink, as did the U.S. Court of Appeals for the Federal Circuit. Since interoperability lay at the heart of Skylink's actions, there could be no infringement. Yet unfortunately, Skylink, like SCC, was forced to endure years of litigation merely for lawfully competing.<sup>59</sup>

More troublesome are those cases in which appellate courts have failed to limit these inappropriate uses of anticircumvention protection. Recently, in *Davidson & Associates v.*

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<sup>57</sup> 253 F. Supp. 2d 943 (E.D. Ky. 2003), *reversed*, 387 F.3d 522 (6th Cir. 2004).

<sup>58</sup> *The Chamberlain Group Inc. v. Skylink Techs., Inc.*, 292 F. Supp. 2d 1040 (N.D. Ill. 2003), *reversed*, 381 F.3d 1178 (Fed. Cir. 2004), *cert. denied*, 125 S. Ct. 1669 (2005), *available online at* <<http://www.fedcir.gov/opinions/04-1118.doc>>.

<sup>59</sup> *See also Storage Tech. v. Custom Hardware Eng'g*, *supra* note 36.

*Jung*,<sup>60</sup> the computer game developer Blizzard successfully employed the anticircumvention provisions of the DMCA to sue a group of developers who produced an open-source program that emulated Blizzard's official servers for online, multi-player gaming. This permitted users to engage in online multi-player games if they were unable or unwilling to connect to Blizzard's official servers, which were then plagued with delays, cheating, hacking, and profanity. Unwilling to tolerate users playing games on servers it did not control, Blizzard used the DMCA to eliminate this competition. Similarly, the DMCA has been used successfully to lock out competitors in markets for computer peripherals, cell phones, digital music, and console gaming industries.<sup>61</sup> These cases represent examples of unfair competition through the misuse of IP rights. As discussed below, however, in none of them did the normal remedy for "unfair competition" – antitrust/competition law – operate to protect the victim of the IP misuse.

(b) How did you deal with this problem?

CCIA has advocated for strong enforcement of antitrust law and a balanced approach to intellectual property law, recognizing that when used improperly, intellectual property can be a powerful anticompetitive tool.

On the specific matter of anticircumvention abuse, CCIA filed *amicus curiae* briefs in each of the appellate cases noted above, explaining that where interfaces are protected by intellectual property rights, they are especially susceptible to use for anticompetitive purposes. Because interoperability is essential to competition in high-technology industries, CCIA argued that disputes concerning proprietary interfaces and interface specifications merit special consideration. Furthermore, CCIA President Ed Black testified before the U.S. Federal Trade Commission in 2002 on this matter, arguing that "antitrust enforcement alone is not sufficient to restrain an aggressive monopoly. The protection of vital user rights under the Copyright Act is also essential to the preservation of competition and innovation in the software and computer industries."<sup>62</sup>

CCIA has also supported legislative reform of the DMCA, including H.R. 1201, the Digital Media Consumers' Rights Act (DMCRA) that seeks to restore the historical balance in copyright law and ensure consumers are given proper notice of "copy-protected compact discs" upon purchase. The DMCRA clarifies that it is not a violation of the DMCA to circumvent a technological measure in connection with gaining access to or using a work if the circumvention does not result in an infringement of the copyright in the work. The DMCRA would also reaffirm the Supreme Court's "Betamax" doctrine set forth in *Sony v. Universal City Studios*,<sup>63</sup> and specify that it is not a violation of the DMCA to manufacture, distribute, or make non-infringing use of a hardware or software product capable of enabling significant non-infringing use of a copyrighted work.

<sup>60</sup> *Davidson & Associates v. Jung*, 422 F.3d 630 (8th Cir. 2005)

<sup>61</sup> See *Unintended Consequences*, *supra* note 56, at 8-10.

<sup>62</sup> Testimony of Edward J. Black, President & CEO, Computer & Communications Industry Association, before the U.S. Federal Trade Comm'n, March 20, 2002, available at <<http://www.ftc.gov/opp/intellect/020320black.pdf>>.

<sup>63</sup> *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984).

(c) Was competition law effective at controlling this behaviour?

In some cases, appellate courts have vindicated the victims of anticompetitive uses of the DMCA. However, these courts have generally done so by adopting a narrow construction of the Act, rather than through the use of competition law. This may indicate a lack of courts' awareness as to the competition risks that intellectual property law may pose. Regardless of the cause, competition law has generally failed to prevent the anticompetitive use of anticircumvention law. Accordingly, policymakers should pay particular attention to how new layers of intellectual property law may interact with competition policy.

#### IV. ADDITIONAL ISSUES: DATABASE PROTECTION

Although the Call for Evidence does not raise the question of *sui generis* protection for databases, this issue should not be overlooked. Presently, the European Commission is reevaluating the controversial and evidently unsuccessful European Database Directive of 1996.<sup>64</sup> Righting this policy blunder would have a substantial positive impact on global intellectual property policy.

While U.S. copyright law safeguards compilations, the U.S. Supreme Court has held that protecting facts violates copyright's constitutionally-mandated requirement of originality in its seminal, unanimous opinion, *Feist Publications v. Rural Telephone Service*.<sup>65</sup> CCIA has long argued that creating a new ownership right over facts would threaten the free flow of information throughout society, undermining even the Internet itself. Such a law would harm scholarship, research and development, and public discourse. The right to "own" mere facts would empower database owners to charge fees every time someone else used them. Writers and researchers who repeated weather data, commodities prices, data from scientific journals, even citations of law could be forced to license or "rent" those facts from others.

The European Database Directive represented the success of intellectual property rights promoters to overturn the principle of non-protection of facts. It created *sui generis* protection for certain compilations of facts. The Directive was implemented in the United Kingdom by the 1997 Copyright and Rights in Databases Regulations.<sup>66</sup> This experiment in creation of new IP rights proved unsuccessful, however. "Interpreting the precise scope of the '*sui generis*' right has proved difficult [and] '*sui generis*' provisions have ... created considerable legal uncertainty," the Internal Markets and Services Directorate General found in its December 12 Working Paper. The Working Paper also noted that "the complexity of the '*sui generis*' regime may have caused confusion among certain users, in particular the academic and scientific community." Moreover, after the Directive, the European portion of the global database market has plunged relative to the U.S. share, such that the ratio of European to U.S. database production fell from 1:2 to 1:3.<sup>67</sup>

<sup>64</sup> Council Directive, The Legal Protection of Databases, 96/9/EC (March 11, 1996) ("Database Directive").

<sup>65</sup> *Feist Publications Inc. v. Rural Tel. Service Co.*, 499 U.S. 340 (1991). The court reaffirmed this doctrine in 2003 in *Dastar Corp. v. Twentieth Century Fox Film Corp.*, 539 U.S. 23 (2003).

<sup>66</sup> The law was subsequently evaluated by the European Court of Justice in *The British Horseracing Board Ltd and Others v. William Hill Organization Ltd*.

<sup>67</sup> Working Paper, *supra* note 7 at 15, 22.

Even though U.K. law once afforded “sweat of the brow” protection, the failure of the E.U. database experiment proves that such protection is unwarranted and evidently counterproductive. The Government of the United Kingdom should urge the Commission to undo the damage it has done, and repeal the *sui generis* right created by the Database Directive. Similarly, the United Kingdom itself should abjure *sui generis* protection for databases beyond the selection, coordination, and arrangement of facts.

## V. ADDENDUM: CCIA PRINCIPLES FOR PATENT REFORM

***The fundamental purpose of patents is to promote innovation, not patents.*** Patents are one tool in an ecology of knowledge, innovation, and commercialization that varies across technology and market environments. The patent system should be designed to optimize innovation, commercialization of technology, and dissemination of knowledge in all fields that it covers.

***Patent law and policy should be sensitive to the different social and economic contexts in which it operates.*** The relative contribution of patented inventions to finished products and services varies greatly. Patent policy should recognize that competition is a primary motivator of innovation in free markets and that there are means other than patents for securing returns from innovation. Patent incentives should be balanced against other values, including public health, freedom of expression, security, and voluntarism. Investments in developing and implementing open standards should not be jeopardized by patents.

***Threshold requirements for patenting should be sufficiently high that inadvertent infringement rarely occurs.*** Standards of inventiveness (nonobviousness) should reflect rising expectations of competence resulting from globalization of knowledge and innovation, increased competition, multidisciplinary teams, and technological advance. The likelihood of independent invention anywhere in the world should be reflected in a high threshold of patentability to minimize chances of inadvertent infringement. The length of any *ex parte* process after filing contributes to risks and costs of inadvertent infringement.

***Public disclosure is an essential function of the patent bargain.*** Disclosure is not merely a legal formality; it must be measured by the quality, usability, timeliness, cost, availability, and actual use of patent information. Effective disclosure requires that patents be read for their technical content as distinct from business intelligence or legal implications and that there is no risk of being penalized for reviewing patents. Patent information must be diffused in a timely and efficient manner in order to avoid inadvertent infringement.

***Invalidation of questionable patents should be encouraged.*** Questionable patents are a burden and threat to innovators and users of technology. The invalidation or clarification of questionable patents is a public good that should be encouraged through appropriate incentives. Patents should not carry an extraordinary presumption of validity absent an objective judicial or administrative determination that such a standard is justified.

***The patent system should be limited to fields and applications where benefits outweigh the costs.*** Patent policy must take into account the costs of asserting, avoiding, and adjudicating patents. Patents should be available only when and where researching patents to avoid

infringement can be justified as cost-effective. Patents should not be asserted against consumers and other end users who have no practical ability to research and evaluate patents that may affect them.

***Patents should not endanger investments in other forms of knowledge creation and use.*** Patent policy and practice should respect the creation, management, and exchange of knowledge developed under incentives other than exclusionary rights. Patent rights should be limited to the scope of the new knowledge disclosed. They should not inhibit use of patented technology that is limited to understanding and building on the technology. The patent incentive should not be enhanced by opportunities for surprise, hold-up, and extortion.

***National and international patent policy should be advanced by informed democratic policymaking.*** The development of patent policy should be open, transparent, and broadly representative. It should guard against capture by professional, institutional, and economic self-interest. Policy development should not be constrained by treaty provisions negotiated under outdated assumptions, incomplete knowledge, or the undue influence of particular stakeholders.

***Governments should monitor and evaluate the impact of the patent system on an ongoing basis.*** Patent agencies should develop open metrics for different aspects of patent quality and patent practice. Standards for inventiveness and the scope of the patent right should be reviewed by recognized experts to ensure that patents in their field are not overbroad, trivial, questionable, excessive, or otherwise inhibiting innovation.