

## Refusal to Deal and “Essential Facilities”: Does Intellectual Property Require Special Deference Compared to Tangible Property?

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### Introduction

As a threshold matter, this paper asks whether there is a difference between the “refusal to deal” line of case-law (*Commercial Solvents*, *Télémarketing*) and the “essential facilities” line of case-law (the airline/airport cases, the port cases, *Magill*, *Ladbroke*, *Bronner*, *IMS*). It will be argued that there is a direct continuity between the two. More importantly, it will be shown that under current legal standards, refusal to deal/essential facility cases involving intellectual property are subject to a higher standard than non-IP cases (i.e., IP cases are governed by a stricter test which is therefore more favourable to defendants). Is IP entitled to special deference in this context? The proponents of this approach take it for granted that any relaxing of the standard in IP-related essential facility cases would have dire consequences on innovation incentives – but they fail to produce arguments supporting their point of view. In 2002, Michael Katz observed that “the arguments for special treatment of intellectual property are incomplete. Indeed, the arguments for imposing less of a duty to deal on intellectual property than on other forms of property have been disappointingly superficial to date. ... [M]ore rigorous analysis is needed if one

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is to take seriously arguments that intellectual property is deserving unique treatment”.<sup>1</sup> The purpose of this paper is precisely to make some progress towards such analysis, by presenting a series of arguments against special deference to IP.

**Is there a difference between the *Commercial Solvents* line of case-law and the “essential facilities” line of case-law?**

As is well-known, *Commercial Solvents* stands for the proposition that

“an undertaking which has a dominant position in the market in raw materials and which, with the object of reserving such raw material for manufacturing its own derivatives, refuses to supply a customer, which is itself a manufacturer of these derivatives, and therefore risks eliminating all competition on the part of this customer, is abusing its dominant position within the meaning of Article [82]”.<sup>2</sup>

The *Télémarketing* Court confirmed *Commercial Solvents*, holding that RTL, which was dominant on the broadcasting market in French-speaking Benelux countries, had committed an abuse by refusing to sell air time to CBEM in order to reserve to itself the market where CBEM was active (telemarketing services based on television advertising). The *Télémarketing* judgment is noteworthy in that it introduced two important terms.<sup>3</sup> First, the Court noted that the input at issue was “indispensable” to the downstream competitor. Second, the Court recognised that there would be no abuse if the refusal was “justified by technical or commercial requirements”.

In *Bronner*, the Court formulated the modern theory of essential facilities, holding that a dominant company in an upstream market (such as newspaper delivery schemes) would be committing an abuse if (i) it refused to grant access to its facility; (ii) that facility was indispensable to the person requesting access; (iii) the refusal was likely to exclude the person requesting access; and (iv) such refusal could not be objectively justified. *Bronner* is also noteworthy in that it tightens the screws on the indispensability test.

There has been a great deal of discussion on the question whether the “essential facilities” line of case-law is distinct from the *Commercial Solvents* line of case-law.<sup>4</sup> On

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<sup>1</sup> Katz, “Intellectual Property Rights and Antitrust Policy: Four Principles for a Complex World”, 1 *Journal on Telecommunications & High Technology Law* 325 (2002), at 349.

<sup>2</sup> *Commercial Solvents*, para. 25.

<sup>3</sup> *Télémarketing*, para. 26.

<sup>4</sup> See, e.g., Hatzopoulos, case note on *IMS*, 41 *Common Market Law Review* 1613 (2004) (*IMS* confirms that there is “a refusal to supply doctrine distinct from the *Commercial Solvents* line of case law”);

one side, it could be argued that they are two distinct lines of case-law because (a) refusal to deal cases should properly be viewed as unlawful extension/leveraging of market power from one market to another and as such concern a certain type of “conduct” or “behaviour”, while essential facility cases involve a “structural” problem in the market which creates an affirmative *duty* to deal (a situation which is more akin to utility regulation than to antitrust);<sup>5</sup> (b) consequently, refusal to deal cases usually involve the termination of supplies to an *existing* customer, while essential facility cases involve a duty to supply a *new* customer on terms which are to be defined;<sup>6</sup> and (c) the elements of the offence as formulated in essential facility cases are different from the refusal to deal case-law (in particular, there is no indication that the refusal to supply would have enabled Commercial Solvents to monopolise the downstream market).

On the other side, however, it could be argued quite convincingly that both refusal to deal cases and essential facility cases refer to a situation of privileged access to a captive input, with the consequence that the company’s position is improved or even unassailable. Whether the input has always been captive or was recently reserved by the defendant to its own production is not decisive to the analysis. Moreover, the distinction between “termination of supplies” cases and “new customer” cases is not determinative.<sup>7</sup> The point

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*contra*, Gérardin, “Limiting the Scope of Article 82 EC: What Can The EU Learn From the U.S. Supreme Court’s Judgment in *Trinko*, in the Wake of *Microsoft*, *IMS*, and *Deutsche Telekom*?”, 41 *Common Market Law Review* 1519 (2004) at 1526 (noting that the difference between the *Commercial Solvents* “refusal to deal” line of case-law and the essential facility doctrine “may only be a question of semantics”); and the Opinion of Advocate-General Poiares Maduro in case C-109/03 *KPN Telecom v. OPTA*, not yet reported, at para. 32 (implying that *Commercial Solvents*, *Télémarketing*, *Magill* and *Bronner* all belong to the “essential facilities” line of case-law).

<sup>5</sup> In other words, we have a distinction between (a) prohibiting restrictions of competition in the form of leveraging of market power and (b) actually *creating* competition by remedying structural problems. See also, e.g., Hovenkamp, Janis and Lemley, “Unilateral Refusals to License”, *Ecole des Mines/Berkeley Conference on Antitrust, Patent and Copyright*, Paris, 15-16 January 2004, at p. 14-15: “The essential facilities doctrine is unique in that a monopolist’s status (as the owner of the facility and a competitor in the market that relies on the facility) rather than any affirmative conduct determines liability. ... The monopolist in an essential facilities case may be thought to have ‘acted’ in some sense, by refusing to deal or to continue dealing with a competitor. But generally speaking a unilateral refusal to deal is not the sort of affirmative anticompetitive conduct that the antitrust law is concerned with.”

<sup>6</sup> In *Genzyme*, [2004] CAT 4, para. 571, the UK Competition Appeal Tribunal expressly used this argument to distinguish between *Bronner* on the one hand and the *Commercial Solvents* and *Télémarketing* judgments on the other. See also Sher, “The Last of the Steam-Powered Trains: Modernising Article 82”, [2004] *European Competition Law Review* 243 (in the area of refusal to deal, “we have one rule for existing customers, another for new customers”), and the Opinion of A.G. Jacobs in case C-53/03 *SYFAIT v. Glaxosmithkline*, para. 66 (identifying two different rules, one for existing customers and one for new customers).

<sup>7</sup> See Abbamonte and Rabassa, “Foreclosure and Vertical Mergers – The Commission’s Review of Vertical Effects in the Last Wave of Media and Internet Mergers: *AOL/Time Warner*, *Vivendi/Seagram*, *MCI Worldcom/Sprint*”, [2001] *European Competition Law Review* 214, at 215 (“in economic terms ... there is no difference between the two”); and Subiotto and O’Donoghue, “Defining the Scope of the

is that in both situations, the claim relates to “the duty to deal of a monopolist who is able to supply an input for itself in a fashion that is so superior to anything else available that others cannot succeed unless they can access this firm’s input as well.”<sup>8</sup> If a *Commercial Solvents* type of situation were to arise today, it should – and would probably – be assessed under the *Bronner* rule or under the *IMS* rule (depending on whether it involves intellectual property). The ECJ may clarify this point in the upcoming *SYFAIT v. Glaxosmithkline* judgment, although the case is not on all fours with *Commercial Solvents* or *Télémarketing*.

The confusion is due to the fact that *Commercial Solvents* and *Télémarketing* were “termination” cases and that they used an apparently less stringent test than later cases dealing with first-time access requests. But the *Commercial Solvents* line of case-law must be viewed as having evolved over time towards more economic rigour and a stricter stance towards complainants, as is apparent from *Bronner* (there must be an assessment of indispensability, there must be a serious competition problem on the downstream market, and there must not be any justification for the refusal to supply). Crucially, these three elements can already be found in *Commercial Solvents* and *Télémarketing*:

- The *Commercial Solvents* and *Télémarketing* judgments both examine whether there were any alternative sources of supply. Admittedly, in *Commercial Solvents*, this analysis was done in the context of dominance. But in the summary of *Commercial Solvents* at para. 38 of the *Bronner* judgment, the Court itself states that *Commercial Solvents* concerned raw materials “which were indispensable” to the downstream rival. And already in *Télémarketing* the Court clearly noted that the input at issue was “indispensable” to the downstream competitor – a term that the Court was using for the first time but which was to prove central to the essential facility doctrine. (Indeed, the Commission’s own definition of the essential facility theory in the *Port of Holyhead* case<sup>9</sup> relies on *Commercial Solvents* and *Télémarketing*, and the *Magill* judgment also relies on *Commercial Solvents*.)<sup>10</sup>

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Duty of Dominant Firms to Deal with Existing Customers under Article 82 EC”, [2003] European Competition Law Review 683 (distinction between dominant firms’ duties towards new and existing customers seems “arbitrary”; both new customers and existing customers are subject to the requirement that the requested input or facility be “essential”).

<sup>8</sup> Areeda and Hovenkamp, *ANTITRUST LAW*, ¶ 771, at page 174.

<sup>9</sup> Commission Decision 94/19 *Sea Containers v. Stena Sealink* (interim measures), OJ 1994 L 15/8, para. 66: “An undertaking which occupies a dominant position in the provision of an essential facility and itself uses that facility (i.e. a facility or infrastructure, without access to which competitors cannot provide services to their customers), and which refuses other companies access to that facility without

- Just like in *Bronner*, the *Commercial Solvents* and *Télémarketing* judgments mention the risk of “eliminating all competition on the part of” the party requesting supplies.
- Finally, the issue of justification was actually examined in both judgments. In *Commercial Solvents*, both the Commission and the Court considered whether *Commercial Solvents* could actually “satisfy Zoja’s needs”. And in *Télémarketing* the Court recognised that there would be no abuse if the refusal was “justified by technical or commercial requirements”.

Therefore, it is submitted that the case-law of the Court on first time refusals and on termination cases is relatively consistent (given the normal refinement of legal tests over time within the same strand of case-law).

Moreover, if there were a distinction between first time refusals and termination cases, once a dominant company has begun to deal with a third party, Article 82 would prevent it from refusing to continue to deal if the refusal is found to be anti-competitive. This cannot be right – it would be unwise to adopt a less stringent legal test, i.e., a stronger presumption of illegality, in relation to the severance of a prior course of dealing (as opposed to a first time refusal to supply). No one wants to be locked into a relationship after it has ceased to be useful simply because legal consequences would follow its termination. Such legal consequences could deter firms from dealing at all, which would be damaging to the economy.

It follows that the essential facility reasoning – which is, in effect, a rule on the rare circumstances in which there exists a “duty to deal” – applies equally to existing customers and first-time requests, although admittedly, in practice, there will be two small differences between existing customer cases and “new customer” cases: (a) in existing customer cases, it would seem more difficult for the defendant to argue that it has a valid business justification for ceasing to supply the complainant (unless the defendant shows that the circumstances have changed); and (b) in new customer cases, it would seem more difficult to resolve the issue of determining the proper price and terms of access, whereas in existing customer cases there *was* a business relationship indicating what normal terms might be (unless the circumstances have changed).

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objective justification or grants access to competitors only on terms less favourable than those which it gives its own services, infringes Article [82] if the other conditions of that Article are met.”

<sup>10</sup> ECJ judgment in *Magill*, para. 56.

In sum, there is a direct continuity between the *Commercial Solvents* judgment and the “essential facility” case-law. This is a single strand of case-law which evolved over time. The *Commercial Solvents* judgment can be seen as pioneering the “essential facility” line of case-law – a subset of the “refusal to deal” category, which also includes other species such as the conditional refusal to deal found in *United Brands* (access to Chiquita bananas conditional on not promoting/distributing rival bananas); refusal to supply as a retaliatory measure against a customer who is trying to enter the upstream market in competition with its supplier (*Boosey & Hawkes*); refusal to deal in the form of a margin squeeze (*Napier Brown*); concerted refusal to deal/collective boycott cases (although these would be treated under Article 81 instead of Article 82); and refusal to deal in the form of tying. The *real* issue is whether there is a different standard in refusal to deal/essential facility cases involving IP, and if so, whether that is justified.

### **Does IP require special deference?**

In *Magill*, the ECJ held that a refusal by a dominant IP owner to grant a licence cannot in itself constitute an abuse, although it may involve an abuse in “exceptional circumstances”.<sup>11</sup> The Court found such exceptional circumstances in *Magill* due to the fact that (a) the refusal in question concerned information which was indispensable for carrying on the business in question, (b) such refusal prevented the appearance of a *new product* for which there was a potential consumer demand, (c) the refusal was not justified by objective considerations, and (d) it was likely to exclude *all* competition in the secondary market of television guides. This judgment sent shockwaves among IP and antitrust lawyers. In my opinion commentators have grossly exaggerated the perils faced by IP owners in view of the *Magill* judgment. The same goes for *IMS*. Cases such as *Magill* and *IMS* are unlikely to emerge in the future; they must be seen as oddities, in view of the highly unusual facts in both cases.<sup>12</sup> In short, I subscribe to the view that *Magill* and *IMS* “can be seen as remedies

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<sup>11</sup> ECJ judgment in *Magill*, para. 56. See also the CFI judgment in case T-198/98 *Micro Leader*, para. 56.

<sup>12</sup> Forrester, “Compulsory Licensing in Europe: A Rare Cure to Aberrant National Intellectual Property Rights?”, paper presented at the 2002 FTC/DOJ hearings on “Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy”, May 22, 2002: it would be “unimaginable ... that a truly innovative piece of technology (a pharmaceutical patent or novel software code, for example) would be treated in such a manner.” See also Delrahim, “Forcing Firms to Share the Sandbox: Compulsory Licensing of Intellectual Property Rights and Antitrust”, paper presented at the British Institute of International and Comparative Law, London, May 10, 2004: “I believe that the *Magill* and *IMS Health* cases may provide little precedent for a future case that features undisputed software rights, for example, or strong patent rights.”

to aberrations in the application of national copyright laws”.<sup>13</sup> This view has sparked some debate as to whether competition law should be used in order to correct the flaws within the IP system, such as overbroad copyright. Cornish and Llewellyn, for example, note that “[i]n a period when intellectual property rights are being rapidly expanded, it must be wise for competition authorities to retain some ultimate means of curbing their range in egregious cases, which, in the scramble to satisfy industrial lobbies, legislatures may not have sufficiently cogitated.”<sup>14</sup> Other commentators vigorously object – although they fail to formulate convincing arguments to support their point of view.<sup>15</sup> Given the complementary

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<sup>13</sup> Forrester, footnote 12 above. See also the opinion of A.G. Jacobs in *Bronner* at para. 63: “The ruling in *Magill* can in my view be explained by the special circumstances of that case which swung the balance in favour of an obligation to license. ... [T]he provision of copyright protection for programme listings was difficult to justify in terms of rewarding or providing an incentive for creative effort”; Cornish and Llewellyn, *INTELLECTUAL PROPERTY: PATENTS, COPYRIGHT, TRADE MARKS AND ALLIED RIGHTS*, Sweet & Maxwell, 5th ed., London, 2003, at page 755 (the IPR at issue in *Magill* “was an extension of copyright to subject-matter (straightforward factual information) which many Member States would consider not to justify intellectual property protection in the first place”); Doherty, “Just What Are Essential Facilities?”, 38 *Common Market Law Review* 397 (2001), at 429 (“*Magill* is a good example of trivial IP”); Motta, *COMPETITION POLICY*, Cambridge University Press, 2004, page 68 (programme listings do not deserve copyright protection); Temple Lang, “The Application of the Essential Facility Doctrine to Intellectual Property Rights under European Competition Law”, *Ecole des Mines/Berkeley Conference on Antitrust, Patent and Copyright*, Paris, 15-16 January 2004, page 14 (“in *Magill* the duty to supply programme listings had no effect on the incentive to broadcast television programmes or to create programme listings, since listings are a necessary by-product of broadcasting”).

<sup>14</sup> See Cornish and Llewellyn, footnote 13 above, at 755.

<sup>15</sup> See, e.g., Temple Lang, “Intellectual Property and Competition Policy – Mandating Access: The Principles and the Problems”, *British Institute of International and Comparative Law*, May 2004 (“Competition law should not be used to try to correct what are said to be defects in intellectual property law”); Lipsky and Sidak, “Essential Facilities”, 51 *Stanford Law Review* 1187 (1999), at 1218-1220 (“the application of the essential facilities doctrine to intellectual property is antithetical to [IP policy]. The essential facilities doctrine is ... inconsistent with the exclusivity that is necessary to preserve incentives to create, the core operative device of intellectual property law in a market economy. In short, essential facilities principles are inherently inconsistent with intellectual property protection”); Carlton, “A General Analysis of Exclusionary Conduct and Refusal to Deal – Why *Aspen* and *Kodak* Are Misguided”, 68 *Antitrust Law Journal* 659 (2001), at 674 (“Antitrust should be especially wary when its action reduces the return to innovators of intellectual property because we know that there already is too little incentive to create such intellectual property”); Lévêque, “Innovation, Leveraging and Essential Facilities: Interoperability Licensing in the EU Microsoft Case” 28 *World Competition* 71 (2005), at 80 (discussing the fact that the essential facility doctrine “allows competition authorities to rectify the scope of intellectual property rights” and that “most economists reject this intrusion of competition law into patent or copyright law”), and at 91 (arguing that although an ex post, competition law-based “corrective mechanism” intervention may be necessary, “it would be less costly and more effective to locate such a mechanism in patent and trademark offices rather than in antitrust authorities”); Katz, footnote 1 above, at 351 (“Even if one concludes that someone should engage in fine-tuning intellectual property rights to reflect competitive conditions or other market characteristics, that someone need not be a competition policy authority. Present antitrust laws and enforcement institutions have not been created with this role in mind. Absent legislation, using antitrust policy to fine tune intellectual property laws would very likely create more problems that it would solve”); Cotter, “Intellectual Property and the Essential Facilities Doctrine”, 44 *Antitrust Bulletin* 211 (1999), at 214 (“it might be preferable to modify intellectual property doctrine than to rely upon the hazy and uncertain contours of the essential facilities doctrine”) at 250 (same).

relationship between IP and antitrust, which has become accepted wisdom,<sup>16</sup> antitrust enforcers and judges should not feel precluded from scrutinising essential facility cases involving IP and, where necessary, redress the balance between exclusivity and competition if that balance is upset (within the strict limits of the essential facility theory). This must be so for two reasons. First, an *ex post*, case-by-case approach is by definition superior to *ex ante*, generally applicable legislative provisions on the scope of IP (so long as the cost of such case-by-case decision-making does not exceed the gain to society that can be expected from this more precise examination). This is because the market information available when IP rights are granted is not as complete as the information available when antitrust cases arise, meaning that antitrust agencies are likely to have much better information about the economic importance of a given innovation and about the structure of the market(s) where the innovation is used. Second, in the current context of boundless enthusiasm towards intellectual property,<sup>17</sup> antitrust enforcers and judges are less likely than the legislature to be influenced by lobbying.<sup>18</sup>

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<sup>16</sup> See the European Commission's Guidelines on Technology Transfer Agreements, OJ 2004 C 101/2, para. 7. See also Peeperkorn, "IP Licenses and Competition Rules: Striking the Right Balance", 26 *World Competition* 527 (2003); Vickers, "Competition Policy and Innovation", speech to the International Competition Policy Conference, Oxford, 27 June 2001: "The fact that more competition to innovate requires limitation of a kind of product market competition – namely imitation – does not point to a tension between competition and innovation. The trade-off is between kinds of competition, not between competition and something else." From a U.S. perspective, see *Atari v. Nintendo*, 897 F.2d 1572, 1576 (Fed. Cir. 1990) ("the aims and objectives of patent and antitrust laws may seem, at first glance, wholly at odds. However, the two bodies of law are actually complementary, as both are aimed at encouraging innovation, industry and competition"); *Intergraph v. Intel*, 195 F.3d 1346, 1362 (Fed. Cir. 1999) (same); *Zenith v. Exzec*, 182 F.3d 1340, 1352 (Fed. Cir. 1999) (same); *Loctite v. Ultraseal*, 781 F.2d 861, 877 (Fed. Cir. 1985) (same). Another view is that in the short run, IP and antitrust have conflicting objectives; in the long term, however, they complement each other and share a common goal: see Gallini and Trebilcock, "Intellectual Property Rights and Competition Policy: A Framework for Analysis of Economic and Legal issues", in "Competition Policy and Intellectual Property Rights", report by the OECD Committee on Competition Law and Policy, document no. DAF/CLP(98)18, 1998, at page 326 ("the previous 'short-run' view of competition authorities has been replaced by a longer-run view, which acknowledges that technological progress contributes at least as much to social welfare as does the elimination of allocative inefficiencies from non-competitive prices. There is, therefore, a growing willingness to allow restrictions on competition today in order to promote competition in new products and processes tomorrow").

<sup>17</sup> See Posner, "The Law & Economics of Intellectual Property", *Daedalus*, vol. 131, issue 2 (Spring 2002), page 5 (speaking of the "seemingly relentless expansion of intellectual property rights in modern law").

<sup>18</sup> Witness the intense level of lobbying surrounding the draft Software Patents Directive (no. 2002/47 (COD)) and the recent IP Enforcement Directive (no. 2004/48). See also Hovenkamp, "United States Antitrust Policy in an Age of IP Expansion", Fordham Corporate Law Institute 31th Annual Conference on International Antitrust Law and Policy, October 2004 (available at [ssrn.com/abstract\\_id=634224](http://ssrn.com/abstract_id=634224)); Grimes, "Counterproductive Incentives For Innovation? – Exclusionary Conduct in the Sale of an IP Product", 36 *International Review of Intellectual Property and Competition Law* 214 (2005); and Lemley, "Property, Intellectual Property and Free Riding", 83 *Texas Law Review* 1031 (March 2005), at 1063: "the very process of government granting rights over creations encourages creators to petition

Nonetheless, it is interesting to note that the judges in Luxembourg have adopted a higher standard for refusal to license cases (i.e., compulsory licensing of IP) than for refusal to deal cases involving “tangible” or “physical” property. *Bronner* is the controlling authority on refusal to deal cases involving physical property. In that case, the ECJ did not take a definitive position on whether the *Magill* case-law (on the exercise of IPRs) was transposable to the exercise of any property right. Now that the ECJ has delivered the *IMS* judgment, it is clear that *IMS* is the controlling legal standard on the issue of refusal to license. Although the *IMS* judgment leaves open the issue of whether the “exceptional circumstances” are exhaustive,<sup>19</sup> it confirms that there is a higher standard for compulsory licensing cases than for compulsory access to “physical” property (there was no “new product” requirement in non IP-related cases).<sup>20</sup> In short, under EC law, an essential facility consisting of IP is more sacred than an essential facility consisting of physical property.

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Congress to give them still more rights. This sort of legislative rent-seeking has proven to be a real problem in intellectual property, particularly in the copyright field, where Congress of late seems willing to give copyright owners whatever they ask for, at least as long as there is no large vested interest making demands on the other side.”

<sup>19</sup> On the one hand, it could be argued that *IMS* clarifies the issue whether *Magill* exhaustively listed the exceptional circumstances giving rise to an abuse, in the sense that under the *IMS* case-law it is now clear that there are three exhaustive and cumulative “exceptional circumstances” giving rise to an abuse. See *IMS*, para. 49. On the other hand, it could be argued quite convincingly that the *IMS* conditions for a finding of abuse are not exhaustive. First, the Court refers to both *Volvo* and *Magill* as sources of the “exceptional circumstances” doctrine; and, second, the Court states that the three *IMS* conditions are “sufficient”, rather than “necessary”. See *IMS*, para. 38. This leaves open the possibility that there are other “circumstances” which could also be found to be “sufficient” for proving an abuse. See, e.g., Anderman, “Does the *Microsoft* Case offer a New Paradigm for the ‘Exceptional Circumstances’ Test and Compulsory Copyright Licenses under EC Competition Law?”, *Competition Law Review*, Volume 1, Issue 2 (noting that the *IMS* judgment offers “good grounds for concluding that other types of abuse can also fall within the category of exceptional circumstances.”) Thus the *IMS* judgment retroactively vindicates the Commission’s point (in *Microsoft*) that “there is no persuasiveness to an approach that would advocate the existence of an exhaustive checklist of exceptional circumstances and would have the Commission disregard a limine other circumstances of exceptional character that may deserve to be taken into account when assessing a refusal to supply.” (*Microsoft* decision, para. 555).

<sup>20</sup> See Lévêque, footnote 15 above, at page 73 of his article (noting the difference between the *Bronner* conditions and the *IMS* conditions); Gérardin, footnote 4 above (distinguishing *Magill/IMS* test from *Bronner* test); Ridyard, “Compulsory Access Under EC Competition Law – A New Doctrine of ‘Convenient Facilities’ and the Case for Price Regulation”, [2004] *European Competition Law Review* 669 (noting that the “new product” requirement in *Magill* and *IMS* “has no analogue in the essential facilities cases that involve physical property rights”); Vilches Armesto, “*IMS Health*: dernier développement de la C.J.C.E. relatif au refus de licence en droit de propriété intellectuelle”, *Revue du Droit des Technologies de l’Information*, issue no. 20, December 2004, page 65 (distinguishing “exceptional circumstances” line of case-law as a subset of the “essential facilities” cases); Eilmansberger, “How to Distinguish Good From Bad Competition Under Article 82 EC: In Search of Clearer and More Coherent Standards for Anti-Competitive Abuses”, 42 *Common Market Law Review* 129 (2005), at page 159 (noting the “privileged position of IP facilities” compared to physical facilities); Heinemann, “Compulsory Licences and Product Integration in European Competition Law – Assessment of the European Commission’s *Microsoft* Decision”, 36 *International Review of Intellectual Property and Competition Law (IIC)* 63 (2005), at 71 (distinguishing IP cases from “normal” essential facility cases involving physical property).

It seems that the position is similar under U.S. law. In *CSU v. Xerox* (2000), the Court of Appeals for the Federal Circuit held that absent any indication of illegal tying, fraud on the patent office or sham litigation, a court can never find Section 2 liability in case of refusal to license.<sup>21</sup> Klein and Wiley argue that “the court essentially immunized intellectual property holders from antitrust liability for refusals to deal.”<sup>22</sup> Note however that *CSU v. Xerox* has variously been criticised as “unnuanced”, “overbroad”, “troubling”, “unwise”, and “unfortunate”.<sup>23</sup> It is useful to note that the DOJ opposed categorical antitrust immunity for refusals to license in its brief to the Supreme Court opposing certiorari in *CSU v. Xerox*.<sup>24</sup>

In the EU, one of the proponents of this approach requiring extra care when dealing with IPRs is Advocate General Jacobs. In *Bronner*, he asserted that

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<sup>21</sup> 203 F.3d 1322 (Fed. Cir. 2000). Contrast with the (less specific and therefore less authoritative) language in *U.S. v. Microsoft*, 253 F.3d 34, 58-59 (D.C. Circuit 2001) (en banc): “Microsoft’s primary copyright argument borders upon the frivolous. The company claims an absolute and unfettered right to use its intellectual property as it wishes: ‘[I]f intellectual property rights have been lawfully acquired,’ it says, then ‘their subsequent exercise cannot give rise to antitrust liability.’ Appellant’s Opening Brief at 105. That is no more correct than the proposition that use of one’s personal property, such as a baseball bat, cannot give rise to tort liability.”

<sup>22</sup> “Competitive Price Discrimination as an Antitrust Justification for Intellectual Property Refusals to Deal”, 70 *Antitrust Law Journal* 599 (2003).

<sup>23</sup> See Melamed and Stoeppelwerth, “The *CSU* Case: Facts, Formalism and the Intersection of Antitrust and Intellectual Property Law”, 10 *George Mason Law Review* 407 (2002); MacKie-Mason, “Antitrust Immunity for Refusals to Deal in (Intellectual) Property Is a Slippery Slope”, *The Antitrust Source*, July 2002; Genevaz, “Against Immunity for Unilateral Refusals to Deal in Intellectual Property: Why Antitrust Law Should Not Distinguish Between IP and Other Property Rights”, 19 *Berkeley Technology Law Journal* 741 (2004). Several commentators have criticised *Xerox* during the 2002 FTC/DOJ hearings on “Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy”. See the contributions by Pitofsky (IP incorrectly trumped antitrust in *Xerox*), Whitener (*Xerox* dictum is “inaccurate or incomplete”) and Kobak (*Xerox* contains “sweeping very unnuanced dicta” which seem to go “beyond any real balanced description of black letter law”). See also the October 2003 FTC report “To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy”, Chapter 6, page 17. See also Pitofsky, “Antitrust and Intellectual Property: Unresolved Issues at the Heart of the New Economy”, remarks before the Antitrust, Technology and Intellectual Property Conference, Berkeley Center for Law and Technology, University of California at Berkeley, March 2, 2001 (IP given “undue weight” in *Xerox*; the *Xerox* approach to the trade-off between IP and antitrust “gives intellectual property an inappropriate weight in the traditional balancing process”).

<sup>24</sup> See brief for the United States as amicus curiae at page 10 (expressing “serious concerns about such a holding” and stating that the U.S. “would not be prepared to endorse it”). There is ample support for the DOJ’s position: see *Continental Paper Bag*, 210 U.S. 405, 425 (1908) (“patents are property, and entitled to the same rights and sanctions as other property”); Turner, “Basic Principles in Formulating Antitrust and Misuse Constraints on the Exploitation of Intellectual Property Rights”, 53 *Antitrust Law Journal* 485 (1984) (“a patent or copyright is a species of property whose use and disposition are no more immune from scrutiny under antitrust law and other public policies than other forms of property”); 1995 DOJ/FTC Antitrust Guidelines for the Licensing of Intellectual Property, section 2.0 (intellectual property is “essentially comparable to any other form of property”). And the Supreme Court judgment in *Verizon v. Trinko*, 540 U.S. 398 (2004), does not differentiate between IP and tangible property.

“in assessing such conflicting interests [between compulsory access to an essential facility and investment incentives] particular care is required where the goods or services or facilities to which access is demanded represent the fruit of substantial investment. That may be true in particular in relation to refusal to license intellectual property rights. Where such exclusive rights are granted for a limited period, that in itself involves a balancing of the interest in free competition with that of providing an incentive for research and development and for creativity.”<sup>25</sup>

The Court duly followed his lead, implicitly casting doubt on the notion that the “case-law on the exercise of an intellectual property right is applicable to the exercise of any property right whatever”.<sup>26</sup>

Derclaye has made the same point: since copyright is only intended for a limited term,

“[m]ore caution must be exercised when further limiting these rights. ... there are reasons to be more prudent when imposing compulsory licences on copyright holders rather than on owners of other types of property. A difference in treatment, most probably in the direction of a lower incursion of competition law into copyright’s scope than into the scope of other forms of property, is therefore justified.”<sup>27</sup>

She also points out that “[c]ontrary to other forms of property, copyright arises from an individual’s intellectual creation. The author has moral rights over his/her creation. A compulsory licence on something so personal should be imposed with extra care.” By contrast, the Commission had argued in *IMS* that “copyright is a property right like any other with which it has in common the power of the owner to have exclusive rights of disposition over the (tangible or intangible) asset which forms the subject-matter thereof.”<sup>28</sup>

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<sup>25</sup> *Bronner* opinion, para. 62. See also the order of the President of the Court of First Instance in T-184/01 R *IMS* [2001] ECR II-3193, para. 125 (stating that compulsory licensing undermines innovation incentives). The views expressed by A.G. Jacobs and President Vesterdorf echo similar concerns in the U.S. See, e.g., *Data General v. Grumman*, 36 F.3d 1147, 1186 (1st Cir. 1994) (“exposing patent activity to wider antitrust scrutiny would weaken the incentives underlying the patent system, thereby depriving consumers of beneficial products”); *SCM v. Xerox*, 645 F.2d 1195, 1209 (2d Cir. 1981) (imposing antitrust liability for refusal to license “would severely trample upon the incentives provided by our patent laws and thus undermine the entire patent system”). Another related idea is that the prospect of lawsuits will act as a “tax” on the innovation system: see *Kodak*, 125 F.3d 1195, 1217-18 (9th Cir. 1997) (holding that the cost of potential refusal-to-license lawsuits will “reduce patent holders’ incentives to invest in research and development”).

<sup>26</sup> *Bronner* judgment at para. 41.

<sup>27</sup> Derclaye, “Abuses of Dominant Position and Intellectual Property Rights: a Suggestion to Reconcile the Community Courts Case Law”, 26 *World Competition* 685 (2003) at 700-701.

<sup>28</sup> In the words of A.G. Tizzano. See his opinion in *IMS* at para. 45. For a comparison of IP and tangible property, see Gilbert and Tom, “Is Innovation King at the Antitrust Agencies? The Intellectual Guidelines Five Years Later”, 69 *Antitrust Law Journal* 43 (2001); and Langenfeld, “Intellectual Property and Antitrust: Steps Toward Striking a Balance”, 52 *Case Western Reserve Law Review* 91 (2001).

Another standard argument in favour of “special protection” of IP is that IP is more vulnerable to replication than tangible property.<sup>29</sup> (This is not always true, however; in practice, it may require a lot of effort to build up the necessary know-how in order to use someone else’s patented idea.)

Temple Lang goes even further, arguing that there can never be a free-standing duty to license because any essential facility claim involving IP would fail at the level of justification – according to him, an IPR by definition constitutes sufficient justification for refusing to deal, since an IPR is after all, “a right to foreclose competitors.”<sup>30</sup> In his view, a duty to license only arises as a remedy for some other, additional “abusive conduct” (as the Court said in *Volvo*).<sup>31</sup>

As shown above, the ECJ has adopted an approach whereby although IP is not entirely immunised from antitrust claims, IP is treated with more circumspection than physical property. It is respectfully submitted that this approach is mistaken. It will be argued in this section that in the area of essential facilities there is no reason to treat IPRs with more circumspection than physical property.

As a preliminary remark, it should be noted that this article *does* recognise that innovation is the single most important element of economic growth and consumer welfare.<sup>32</sup> And, crucially, this article *does* recognise that liability under the essential facility theory should be subject to a set of very strict conditions. Instead of delving into the controversial issue of what these very strict conditions might be, this article focuses on the narrow issue of whether or not IP cases should be treated under a higher standard than the legal standard governing “tangible property” cases. One of the key issues in this context is whether it is wise to assume that compulsory licensing *necessarily* reduces innovation incentives (which is apparently taken for granted in some circles).

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<sup>29</sup> See, e.g., the 1995 DOJ/FTC Antitrust Guidelines for the Licensing of Intellectual Property, section 2.1 (“Intellectual property has important characteristics, such as ease of misappropriation, that distinguish it from many other forms of property”).

<sup>30</sup> John Temple Lang, “Anti-competitive abuses under Article 82 involving intellectual property rights”, in *EUROPEAN COMPETITION LAW ANNUAL 2003: WHAT IS AN ABUSE OF A DOMINANT POSITION?*, edited by Claus Dieter Ehlermann and Isabela Atanasiu, Hart Publishing, forthcoming in November 2005.

<sup>31</sup> See also Temple Lang, “Mandating access : the principles and the problems in intellectual property and competition policy”, [2004] *European Business Law Review* 1087. See Case 238/87 *Volvo v. Veng* [1988] ECR 6211, para. 9.

<sup>32</sup> Brodley, “The Economic Goals of Antitrust: Efficiency, Consumer Welfare, and Technological Progress”, 62 *New York University Law Review* 1020 (1987), at 1026: “Innovation efficiency or technological progress is the single most important factor in the growth of real output [and is] the largest single source of social wealth enhancement”. See also Peeperkorn, footnote 16 above, at page 532 of his article (the view that innovation, as opposed to static efficiency, is the main source of increases in economic welfare is “generally accepted and well substantiated”).

There are at least four more or less strong arguments why IP probably does *not* deserve “special deference” compared to tangible property.<sup>33</sup> First, before moving on to policy arguments and economic arguments, it is useful to bear in mind that the “special deference” approach does not have any legal foundation. The law does not exempt IP owners from antitrust scrutiny. The “right to property” and the right to protection of *intellectual* property, which are both protected under EU law and under the European Convention on Human Rights,<sup>34</sup> are strictly parallel, meaning that IP does not require *more* protection than physical property. Moreover, under EU law as well as under the ECHR, neither physical property rights nor IP rights are absolute.<sup>35</sup> Second, any difference in treatment favouring IP compared to physical facilities would induce dominant firms to incorporate *some* IP into their valuable input or facility or interface in order to make sure it benefits from the higher standard that applies to IP, compared to physical facilities.<sup>36</sup> Third, IP infringement – or, rather, the limitation of an IPR by means of a compulsory license – is in many cases more practical and productive than mandating access to somebody else’s physical property. This is due to the very nature of IP rights, which are “non-rivalrous” (i.e., your use of an IPR does not interfere with my use of that IPR; we can both use it at the same time and it does not deteriorate as a result of use). The fourth reason is that – contrary to current wisdom – limiting certain IP rights through compulsory licensing does not *necessarily* discourage innovation. The rest of this section expands on this idea.

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<sup>33</sup> Elhauge provides similar and additional arguments in his article entitled “Defining Better Monopolization Standards”, 56 *Stanford Law Review* 253 at 276-278. See also, inter alia, Heinemann, footnote 20 above, at 71 (“no sufficient reason to protect tangible property less than intellectual property”).

<sup>34</sup> See the 2000 Charter of Fundamental Rights (Article 17) and the 1950 European Convention on Human Rights (Article 1 of Protocol 1, as interpreted in case 12633/87 *Smith Kline and French* and case 15375/89 *Gasus*).

<sup>35</sup> See, e.g., case 44/79 *Hauer* [1979] ECR 3727, para. 23, case C-293/97 *Standley* [1999] ECR I-2603, para. 54, case 265/87 *Schröder* [1989] ECR 2237, para. 15, case 5/88 *Wachauf* [1989] ECR 2609, para. 18, case C-177/90 *Kuehn* [1992] ECR I-35, para. 16, case C-280/93 *Germany v. Council* [1994] ECR I-4973, para 78, case T-65/98 *Van den Bergh Foods*, para. 170. The right to property may be restricted in order to further objectives of general interest of the EC, subject to the principle of proportionality. Competition rules fall within this notion of “general interest” (*Van den Bergh Foods*, para. 170).

<sup>36</sup> MacKie-Mason, footnote 23 above, makes the same point: “it would be a trivial matter for firms, on advice of counsel, to modify their designs in order to incorporate protected components.” Melamed and Stoepelwerth, footnote 23 above, make a similar point at page 424 of their article, in connection with the *MCI v AT&T* case: “There is no reason to think that AT&T should have been permitted to engage in the conduct at issue there if only the interfaces used by MCI to connect with AT&T’s network had been patented – especially since AT&T’s market power was a result of its ubiquitous local network, not its interfaces. ... [S]afe harbors distort business behavior. Antitrust counsel would advise an AT&T of today, for example, that it could immunize its anticompetitive refusal to deal from the antitrust laws by contriving to design its system so that firms like MCI that need access to its network would have to use patented or copyrighted interfaces that, under *CSU*, it may refuse to license.”

When I own a piece of land and build a plant on it, nothing prevents another person from buying another piece of land and building a plant on it in order to manufacture competing products. Whereas if I were to obtain a patent, I would be more likely to obtain market power. Indeed, it is generally thought that IP protection actually *aims* to give some degree of market power to the rightholder as a reward for his work and as an encouragement for future work.<sup>37</sup> Thus IP law and market power are closely intertwined. On the one hand, ensuring a sufficient return on investment provides a necessary reward and encouragement. On the other hand, IP entails a cost to society, at least in the short run. That cost is made up of (a) the deadweight loss caused by market power, plus (b) the reduction of innovation incentives caused by market power,<sup>38</sup> plus (c) the cost of maintaining an IP enforcement system, plus (d) the cost of prohibiting further innovation that builds on the first innovation (although some IP laws have a mechanism for dealing with this), plus (e) the cost of discouraging innovation that is too close to the protected innovation (the issue of patent breadth and the doctrine of equivalents). Moreover, as Langenfeld notes, “the duration of a

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<sup>37</sup> The ECJ recognised the importance of the reward mechanism in case 19/84 *Pharmon v. Hoechst* [1985] ECR 2281, para 26: “the substance of a patent right lies essentially in according the inventor an exclusive right of first placing the product on the market so as to allow him to obtain the reward for his creative effort.” See also the *Microsoft* decision at 711: “The central function of intellectual property rights is to ... ensure a reward for the creative effort.”

<sup>38</sup> Various studies have consistently shown that the optimal level of R&D activity and innovation occurs when the industry four-firm concentration ratio (CR4) is between 50% and 64%. See Scherer and Ross, *INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE*, 3rd ed., Houghton Mifflin, 1990, page 645-647, and the references cited therein. See also Aghion et al., “Competition and Innovation: An Inverted U Relationship”, The Institute For Fiscal Studies, Working Paper 02/04, February 2002, and the references cited therein; and Barton, “Antitrust Treatment of Oligopolies with Mutually Blocking Patent Portfolios”, 69 *Antitrust Law Journal* 851 (2002) (finding that optimal innovation occurs where there is a market concentration of 4 to 5 firms). See also the European Commission’s decision in *Microsoft*, para. 725. There is another argument to the effect that small firms have a greater incentive to innovate than dominant firms: it is that innovation incentives depend not so much on post-innovation profits *per se*, but rather on the difference between pre-innovation profits and post-innovation profits. See Peeperkorn, footnote 16 above, at 533, who presumably relies on Arrow’s analysis of the “replacement effect”. The replacement effect means that a small firm has more to gain from a given innovation than a monopolist. The monopolist does not stand to gain much from its effort, since the new invention’s monopoly price will for a large part merely “replace” the existing monopoly price. Another way of saying this is that the monopolist faces a higher opportunity cost of innovating than the small firm does. See Arrow, “Economic Welfare and the Allocation of Resources for Invention”, in NBER, *THE RATE AND DIRECTION OF INNOVATIVE ACTIVITY*, Princeton University Press, 1962. For a more agnostic view of this issue, see Régibeau and Rockett, “The Relationship Between Intellectual Property Law and Competition Law: An Economic Approach”, University of Essex Department of Economics Discussion Paper no. 581 (2004), at page 28: “we do not know what the effect of market structure on investment incentives are. [Emphasis in original.] Economic theory just does not have any robust prediction as to whether ‘competition drives innovation’ or invention is best nurtured – and financed – by large firms with significant monopoly power.” (Citing Kamien and Schwartz, *MARKET STRUCTURE AND INNOVATION*, Cambridge University Press, 1982.)

patent at twenty years from filing can ensure market power over a period of time seldom possible in markets lacking legally granted rights of exclusion.”<sup>39</sup>

It is also accepted that a patent or copyright does not necessarily grant market power to the rightholder, as the patented invention may compete with substitutes.<sup>40</sup> Thus in a (rare) worst-case scenario an IP holder may derive zero return from his invention – apart from the small profit it may be able to make in a competitive market. (And then IP law will have failed to ensure an appropriate reward and encouragement to the IP holder – but that is an issue for IP law, not competition law.) Conversely, a patent holder may be so successful during the term of protection that his return far exceeds what would have been necessary to reward and encourage the innovation. This may be due to the fact that the product creates its own market, or wipes out competitors in an existing market either because it is genuinely superior to rival products or because it owes its dominance to peculiar market forces such as network effects or switching costs/learning effects.<sup>41</sup> It is also possible that

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<sup>39</sup> Langenfeld, footnote 28 above, at page 95 of his article.

<sup>40</sup> Under EC law, the owner of an IP right is not necessarily dominant by reason of this fact alone. See 24/67 *Parke, Davis* [1968] ECR 55, p. 72; 40/70 *Sirena* [1971] ECR 69, para. 16; 78/70 *Deutsche Grammophon* [1971] ECR 487, para. 16; C-241/91 *Magill* [1995] ECR I-743, para. 46. The position is identical under U.S. law: a patent does not automatically confer market power on the IP owner, and determination as to whether a patent confers monopoly power depends on the availability of substitutes in the relevant market. See the 1995 DOJ/FTC Antitrust Guidelines for the Licensing of Intellectual Property, section 2.2: “The Agencies will not presume that a patent, copyright, or trade secret necessarily confers market power upon its owner. Although the intellectual property right confers the power to exclude with respect to the specific product, process, or work in question, there will often be sufficient actual or potential close substitutes for such product, process, or work to prevent the exercise of market power.” See also *Abbott v. Brennan*, 952 F.2d 1346, 1355 (Fed. Cir. 1991) and *Loctite*, footnote 16 above. There is a much criticised exception to this rule in the area of tying, where according to Supreme Court and Federal Circuit precedent a patent on the tying product raises a rebuttable presumption of market power. See *Independent Ink*, case no. 04-1196 (Fed. Cir., January 25, 2005).

<sup>41</sup> Hatzopoulos, footnote 4 above, makes a similar point: “the object of IPRs is often excessively strengthened by network externalities, which allow the beneficiary thereof unjustified excess monopoly profits”. A “network effect” exists when the utility that a user derives from a product increases with the number of users. See also Lemley and McGowan, “Legal Implications of Network Economic Effects”, 86 *California Law Review* 479 (1998). A “learning effect” arises when a user invests significant resources into learning how to use a product and therefore feels that switching to a new product would nullify the sunk investment into learning how to use the first product. Significant switching costs induce “excess inertia” or even a “lock-in effect”. See Farrell and Shapiro, “Intellectual Property, Competition, and Information Technology”, Berkeley Competition Policy Center Working Paper No. CPC-04-45, 2004; Viard, “Do Switching Costs Make Markets More or Less Competitive?”, Stanford Graduate School of Business Research Paper No. 1773 R2, 2004; Fazio and Stern, “Innovation Incentives, Compatibility, and Expropriation as an Antitrust Remedy”, 68 *Antitrust Law Journal* 45 (2000) (discussing the fact that in the presence of switching costs, network effects, excess inertia, and a “lock-in” effect, new customers may choose to buy an inferior product with a larger installed base even though a superior product is available). See also the concurring opinion of Judge Boudin in *Lotus v. Borland*, 49 F.3d 807 (1st Cir. 1995). The issue was whether Borland infringed Lotus’s copyright by copying the Lotus 1-2-3 menu command hierarchy in Borland’s Quattro/Quattro Pro spreadsheet programs. The 1st Circuit Court of Appeals held that the Lotus menu command hierarchy was not copyrightable and therefore not infringed. (The Supreme Court affirmed, 4-4, without issuing an opinion.) In his opinion,

the payoffs may not adequately match the initial investment in R&D because the investment was enormous but the market is small or “narrow” (in terms of volume of commerce and length of the product life cycle). Conversely, a particular investment in R&D may be relatively small compared to the payoffs in a very large market. Microsoft, for instance, enjoys a near-monopoly in a very large market which displays network effects, learning effects and a relatively short product life cycle.<sup>42</sup> The point is that IP law does not provide a precise relationship, or “calibration”, between the investment and the payoffs – it all depends on the market conditions. In short, the term of protection is by definition imprecise: depending on the market conditions, the IP holder may be under-protected and under-rewarded, or over-protected and over-rewarded. Consequently, it is submitted that A.G. Jacobs is making a mistake by assuming that the term of protection accurately balances the interests of the IP holder versus the interests of the public. Applying competition law in some of these situations (in order to correct a situation of over-protection) is by definition more appropriate than relying on IP legislation because competition law enforcement on an *ex post*, case-by-case basis results in a more precise balancing of competing interests (again, assuming intuitively that the societal benefits of case-by-case assessment compared to the general IP rule outweigh its additional cost).<sup>43</sup>

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Judge Boudin wrote that if the Lotus menu commands were copyrightable, then computer users who were familiar with Lotus and had written programs for Lotus 1-2-3 would be “captive” to the copyrighted menu, “because of an investment in learning.” “A new menu may be a creative work, but over time its importance may come to reside more in the investment that has been made by users in learning the menu and in building their own mini-programs – macros – in reliance upon the menu. Better typewriter keyboard layouts may exist, but the familiar QWERTY keyboard dominates the market because that is what everyone has learned to use.”

<sup>42</sup> Today there are approximately 600 million PCs around the world. Source: Microsoft Corporation 2004 Annual Report.

<sup>43</sup> See Katz, footnote 1 above, at 350 (questioning “whether patent policy has gotten the tradeoff between competition and the creation of incentives right. ... The crude nature of current policies raises the possibility that someone should engage in fine-tuning” of IP rights); Hatzopoulos, footnote 4 above (speaking of the essential facilities doctrine/compulsory licensing as a “corrective” mechanism); Gallagher, “Copyright, Compulsory Licensing and Incentives”, Oxford Intellectual Property Research Centre Working Paper Series, 2001, p. 9-11 (“market power and the expansion of copyright may distort the law’s incentive justification, represented by the ‘ideal’ copyright balance outlined above. It is argued that the traditional responses of copyright law fail to calibrate incentives accordingly. Compulsory licensing is explained as an alternative response to owner-biased copyright balances, more properly (if imperfectly) calibrating incentives in situations where standard copyright law paradigms provide no answers ... Traditional ‘ideal’ copyright law, in responding to cases of individual market power, either extends exclusive rights or fails to provide protection for such works. ... The inadequate choice between complete protection and no protection will provide either inflated rewards for owners or will remove the possibility of any reward. In short, there are reasons to believe that incentives will be poorly calibrated in [such] scenarios. ... Compulsory licensing has been used to alter the incentives/access balance in situations of individual or collective market power. ... [T]he positive impact of compulsory licensing depends upon providing owners with rewards that are commensurate with the value of the work in the absence of market power”); Dumont and Holmes, “The Scope of Intellectual Property Rights and Their

Those who are sceptical towards compulsory licensing will be quick to raise the argument that compulsory licensing undermines investment incentives. But this argument is misguided. Although compulsory access reduces the return earned by the rightholder, it does not necessarily follow that compulsory access also diminishes investment incentives. There are at least six reasons for this.

First, it remains unclear why the issue of investment incentives would be more important in the area of IP than in the area of physical facilities. The trade-off between safeguarding incentives and ensuring that markets remain competitive applies with equal force to IP and to tangible property (consider, e.g., port and airport facilities, railway infrastructure, ski lifts, etc).<sup>44</sup>

Second, compulsory licensing does not entirely deprive the licensor of any revenue: there is no doubt that the licensor is entitled to fair and non-discriminatory royalties.<sup>45</sup> And it seems exaggerated to dismiss the idea of compulsory licensing as a whole for the single

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Interface With Competition Law and Policy: Divergent Paths to the Same Goal”, *Economics of Innovation and New Technology*, Volume 1, Issue 11, 2002 (“It is impossible to design an optimal system in advance. The actual conditions in the innovation market and product market will emerge after a patent has been granted. There has to be a degree of flexibility in any event. Given that competition policy is case law driven and IPR rules tend to be set in stone for many years, it makes sense for the ground rules to be set in IPR legislation and for tweaking to be done by the application of competition policy. ... It is quite unreasonable to expect the patent office to be able to take competition factors into account *ex ante*”). *Contra*, Picker, “Copyright as Entry Policy: The Case of Digital Distribution”, 47 *Antitrust Bulletin* 423 (2002) (“antitrust really is not about calibrating the returns from an innovation or copyrighted work that results in substantial market power and monopoly profits. ... In contrast, copyright is precisely about making careful trade-offs between creation incentives and subsequent use rights”); Cotter, footnote 15 above, at 244 (same) and 250 (antitrust enforcement would upset the “delicate balance between incentive and access” as codified in IP law); Jorde, “Issues in the Antitrust-Innovation Interface”, presented at the ABA Antitrust Section Program on “The Changing Nature of Competition”, Washington, D.C., November 7-8, 1996 (“problems associated with the breadth of intellectual property should be addressed within intellectual property law”).

<sup>44</sup> See Doherty, footnote 13 above, at page 429 of his article: “IP rights are not the only investment which requires significant capital. A dominant undertaking could also claim to have invested large sums in a port or a bridge or a telephone network, and argue that the principles which protect IP owners (i.e. the need to encourage investment) also apply to investment in other property. ... It would certainly be strange if there were an automatic protection for IP (however trivial) but a harsher rule for other forms of property.” See also Eilmansberger, footnote 20 above, at 159 (noting that the risk inherent in investment applies in equal measure to physical and intellectual facilities and that “it would also be erroneous to assume that IP rights have a superior value in comparison to other property rights”); Régibeau and Rockett, footnote 38 above (same); Katz, footnote 1 above, at 345; and Hovenkamp, footnote 18 above. For literature on incentives which does not differentiate between IP and physical property, see Brunell, “Appropriability in Antitrust: How Much is Enough?”, 69 *Antitrust Law Journal* 1 (2001); Evans and Schmalensee, “Economic Aspects of Payment Card Systems and Antitrust Policy Toward Joint Ventures”, 63 *Antitrust Law Journal* 861 (1995).

<sup>45</sup> Ideally, the “fair” royalty rate should take failed projects into account. This idea seems to have been accepted by the Commission in the area of Article 81. See the Guidelines on Technology Transfer Agreements, [2004] OJ C 101/2, para. 8: “the innovator should normally be free to seek compensation for successful projects that is sufficient to maintain investment incentives, taking failed projects into account.”

reason that courts and enforcers may encounter methodological difficulties in setting the correct “fair and non-discriminatory” price. Again, the problem of setting the correct level of royalties is not materially different from setting price and access conditions in the context of a physical facility.

Third, more financial incentive in the form of a broader exclusive right (than if the IP right was curtailed by a compulsory license) does not necessarily translate into more innovation. The IP-related financial incentive curve – i.e., the return per invention which is attributable to IP protection, or “patent premium” – and the innovation curve are not indefinitely parallel: at some point, the innovation curve diverges. Therefore, more financial incentive is not an end in itself.<sup>46</sup> Actually, maintaining such a degree of IP protection that it permits rightholders to capture the maximum possible amount of money from their invention/creation would have harmful consequences: (a) it would stifle second-generation innovation which builds on first-generation innovation; (b) the reward would be such that the R&D market would attract too many players engaging in wasteful duplication of research efforts, which means that the rate of return on total R&D investment would decrease (and, as a corollary, this would channel investor money away from low-risk, productive efforts towards high-risk efforts which may not yield any result).<sup>47</sup>

Fourth, the “patent premium” is actually not as important to innovators as other factors of success: patents are merely one of several devices that firms use to “capture” or “appropriate” the returns from an invention, such as the first-mover advantage, successful

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<sup>46</sup> See the concurring opinion of Judge Boudin in *Lotus v. Borland*, footnote 41 above, in which he observed that “any use of the Lotus menu by Borland is a commercial use and deprives Lotus of a portion of its ‘reward,’ in the sense that an infringement claim if allowed would increase Lotus’ profits. But this is circular reasoning: broadly speaking, every limitation on copyright or privileged use diminishes the reward of the original creator. Yet not every writing is copyrightable or every use an infringement. The provision of reward is one concern of copyright law, but it is not the only one. If it were, copyrights would be perpetual and there would be no exceptions.”

<sup>47</sup> For example, in the year 2000, two thirds of the total volume of venture capital investment in the U.S. went to Internet-related companies. See also Lemley, footnote 18 above, at page 1064 and footnotes 133 and 134 of his article; Fazio and Stern, footnote 41 above, at page 60 of their article (noting that the combination of IP and network effects in the IT industry “provides an environment where over-investment may in fact occur”); and Lévêque, footnote 15 above, at page 86 of his article, noting that over-investment in R&D is welfare detrimental, as in the example of patent races, and citing Nordhaus, *INVENTION, GROWTH, AND WELFARE: A THEORETICAL TREATMENT OF TECHNOLOGICAL CHANGE*, MIT Press, 1969. See also Posner, footnote 17 above, discussing this issue in terms of rent seeking and diversion of resources (“we want to make sure that the rewards of owning a patent are not so huge that they operate to suck a disproportionate fraction of society’s scarce resources into efforts to accelerate the pace of invention”); and Menell, “Intellectual Property: General Theories”, in the *ENCYCLOPEDIA OF LAW & ECONOMICS*, Edward Elgar, 2000, chapter 1600, page 138, available at [encyclo.findlaw.com](http://encyclo.findlaw.com) (discussing literature on patent races).

marketing, maintaining the secrecy of the invention, the ability to move quickly down the learning curve, superior service, or network effects.<sup>48</sup>

Fifth, managerial decisions on whether to invest in a project are not based on perfect “outlay v. payoff” calculations, because key factors vary or are unclear (e.g., some managers suffer from an over-optimism effect, the time frame of the payoff is unclear, future market conditions are very difficult to predict, etc).<sup>49</sup> Even assuming that a firm’s decision to invest in research is rational *and* factors in the probability that the result of its research will be subject to a compulsory license, that probability is in any event negligible: compare the number of compulsory licenses ordered by antitrust enforcers with the total amount of IP produced in any given timeframe. Is it reasonable to believe that firms will scale back their R&D investment because they observe, say, Microsoft having to grant a compulsory license and being deprived of some revenue? I would tend to say “no”. Even if Microsoft ends up having to license its interface information to competitors in the server operating system market, Microsoft remains the epitome of the super-rich company cashing in on its innovation and tremendous business instinct.<sup>50</sup> Therefore one may doubt whether the prospect of compulsory licensing will really discourage investment in innovation. This is confirmed by empirical evidence.<sup>51</sup>

Sixth, the argument that compulsory licensing undermines innovation reflects an extremely narrow view of the problem in that it fails to account for second-generation innovation (building on first-generation inventions) which is “unlocked” by the compulsory

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<sup>48</sup> See Cohen, Nelson and Walsh, “Protecting Their Intellectual Assets: Appropriability Conditions and Why U.S. Manufacturing Firms Patent (or Not)”, NBER Working Paper # 7552, February 2000, which essentially confirms earlier research by Klevorick, Levin, Nelson and Winter in “Appropriating the Returns from Industrial Research and Development”, Brookings Papers on Economic Activity, 1987.

<sup>49</sup> See also Katz, footnote 1 above, at 346 (speaking of “the high degree of uncertainty that innovation often entails”). See also, generally, Scherer, “The Innovation Lottery”, in Dreyfuss et al., eds., *EXPANDING THE BOUNDARIES OF INTELLECTUAL PROPERTY*, Oxford University Press, 2001, page 3.

<sup>50</sup> Microsoft’s average net profit margin over the last five years exceeds 26%. Source: Microsoft Corporation 2004 Annual Report.

<sup>51</sup> Melamed and Stoepelwerth, footnote 23 above, express the same opinion at 422: “plaintiffs rarely succeed under this doctrine, so the risk that intellectual property might be deemed to be an essential facility is not likely materially to diminish ex ante incentives for innovation and thus should not undermine the purposes of the intellectual property laws.” They cite Scherer, *INNOVATION AND GROWTH: SCHUMPETERIAN PERSPECTIVES*, MIT Press, 1984, page 216 (“no evidence” that compulsory licensing in antitrust decrees led to reduced development in R&D). See also Turner, footnote 24 above, at 489 (noting the “flaw in the supposition that any antitrust rules limiting the patentee’s reward would have a significant effect on decisions to embark on inventive activity”); Genevaz, footnote 23 above, cites “empirical evidence showing that compulsory licensing have little, if any, effects on the incentives to innovate”, also referring to Scherer, *THE ECONOMIC EFFECTS OF COMPULSORY PATENT LICENSING*, New York University Monograph Series in Finance and Economics, 1977, page 63 (“no indication that mandatory licensing ha[s] an adverse effect on R&D investment”). See also the statement by Scherer in the transcripts of the FTC hearings on Global and Innovation-Based Competition on November 29, 1995 (at [ftc.gov/ftc/hearings.htm](http://ftc.gov/ftc/hearings.htm)).

license.<sup>52</sup> Basically, a compulsory license may affect innovation by (i) the dominant firm in question; (ii) rivals that are dependent on the compulsory license to develop and market their own products; and (iii) potential entrants and by-standers who observe the situation and draw conclusions for themselves and their own industry.<sup>53</sup> Let's assume that the compulsory license has a neutral effect on potential entrants' and by-standers' incentives. The effect of the compulsory license on the dominant firm's incentive to invest in R&D is probably neutral or positive, for the various reasons set out in this article. Even assuming that these effects are negative, they are probably offset by rivals' new possibilities to innovate. Jonathan Baker has argued that antitrust enforcement (e.g., in the form of a compulsory license) "can make a big difference to rivals" while "it is unlikely that the dominant firm's innovation incentives would decline substantially as a consequence of antitrust enforcement in industries where innovation competition has strong winner-take-all properties".<sup>54</sup> This is especially true where the dominant firm has already gained a commensurate reward by winning over the entire market.<sup>55</sup> I am making two points here:

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<sup>52</sup> See Stiglitz, speech at opening of the 1995/1996 FTC Hearings on Competition Policy in the New High-Tech, Global Marketplace, 1995 ("some people jump ... to the conclusion that the broader the patent rights are, the better it is for innovation, and that isn't always correct, because we have an innovation system in which one innovation builds on another..."); Menell, "An Epitaph for Traditional Copyright Protection of Network Features of Computer Software", 43 *Antitrust Bulletin* 651 (1998) at 677 ("in view of the cumulative nature of technological advancement, intellectual property law must be careful not to choke off secondary innovation by according excessive or unjustified protections for first generation inventions"), Landes and Posner, "An Economic Analysis of Copyright Law", 18 *Journal of Legal Studies* 325 (1989) (same); Brunell, footnote 44 above: "strong protection of individual achievements may slow the general advance. When innovations are 'building blocks,' weaker appropriability may in fact increase overall R&D, not only by increasing the incentives and productivity of follow-on innovators, but by increasing the incentives of the first-generation innovator as well. The 'first generation' innovator may itself be a borrower from previous generations, may find that the follow-on innovation complements or improves its own innovation, or may be spurred by follow-on innovators to improve its own innovation." (Internal footnotes and quotation marks omitted; see the references he cites at footnotes 84 to 87 of his article.) See also Fazio and Stern, footnote \_\_ above: "Where innovation is distributed among multiple firms over time, the key question is not whether to allocate IP rights but how to allocate IP rights across different generations of innovators so as to preserve the momentum of the innovative process."

<sup>53</sup> See also, generally, Posner, footnote 17 above: "expansive intellectual property rights may actually reduce the creation of intellectual property"; and Lemley, footnote 18 above, "too much protection is just as bad as not enough protection".

<sup>54</sup> Baker, "Promoting Innovation Competition Through The *Aspen/Kodak* Rule", 7 *George Mason Law Review* 495 (1999), at 514. See also Salop and Romaine, "Preserving Monopoly: Economic Analysis, Legal Standards, and Microsoft", 7 *George Mason Law Review* 617 (1999), at 664: "If a market is driven more by innovation than price competition, then entrants also must have an open environment in order to challenge the monopolist. An overly permissive antitrust regime may reduce aggregate innovation, as innovation by entrants and small competitors is reduced by more than innovation by the monopolist increases."

<sup>55</sup> See Brunell, footnote 44 above: "It certainly seems plausible that Microsoft has earned far more than was necessary to induce its research and development expenditures." See also the concurring opinion of Judge Boudin in *Lotus v. Borland*, footnote \_\_ above, in which he observed that "Lotus has already

(a) innovation incentives should be assessed on an industry-wide basis; and (b) antitrust enforcement may be necessary in order to create the conditions for the emergence of the Microsofts of the future. (It is useful to keep in mind that Microsoft itself is a second or third-generation innovator, owing much of its success to its purchase of DOS from Seattle Computer Products in 1980, a 1985 license to exploit Apple's graphical user interface, and a 1991 consent decree enjoining Borland/Ashton-Tate from asserting some of its IP in the market for relational database management software.)<sup>56</sup>

In the *Microsoft* cases, both the European Commission and the U.S. Department of Justice looked at industry-wide innovation incentives. The Commission's *Microsoft* decision states that "on balance, the possible negative impact of an order to supply on Microsoft's incentives to innovate is outweighed by its positive impact on the level of innovation of the whole industry (including Microsoft)."<sup>57</sup> Similarly, one of the DOJ's economic experts testified that Microsoft's conduct "reduces the expected profits that outside innovators can expect to earn from developing technologies that threaten to create additional competition for Microsoft's operating system monopoly. ... Because outsiders are such an important source of innovative energy, Microsoft's threatening message reduced the rate of innovation in the software industry as a whole."<sup>58</sup> Some commentators have asked whether antitrust agencies are well-equipped to carry out this kind of industry-wide balancing of incentives;<sup>59</sup> but this is a biased formulation. The real question is: Is the risk of antitrust agencies erring in evaluating the need for compulsory licenses so great that we should generally prefer no compulsory licenses at all? Those who argue that false convictions are more damaging to the economy than false acquittals<sup>60</sup> have so far failed to produce evidence supporting their position. Even so, it would be necessary to show that the

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reaped a substantial reward for being first" on the market with a computer spreadsheet program. He concluded that Borland should be able to use the Lotus commands "to enable the old customers to take advantage of a new advance, and to reward Borland in turn for making a better product."

<sup>56</sup> See *United States v. Borland*, 1992-1 Trade Cas. (CCH) ¶ 69,774 (N.D. Cal. 1992).

<sup>57</sup> Para. 783 of the Commission Decision.

<sup>58</sup> Testimony of Paul Romer before the U.S. District Court for the District of Columbia in Civil Action No. 98-1232 (TPJ), para. 12-13, available at [usdoj.gov/atr](http://usdoj.gov/atr).

<sup>59</sup> For a sceptical view of balancing tests, see Gérardin, footnote 4 above, at 1542 ("Balancing tests are an inherently unreliable and unpredictable method to address mandatory access cases. They may also introduce a bias in favour of access seekers"). For an explanation of this bias in favour of the requesting party, see Régibeau and Rockett, footnote 38 above.

<sup>60</sup> Easterbrook, "The Limits of Antitrust", 63 *Texas Law Review* 1 (1984), reprinted in 1 *Competition Policy International* 179 (2005); Evans and Padilla, "Designing Antitrust Rules for Assessing Unilateral Practices: A Neo-Chicago Approach", AEI-Brookings Joint Center for Regulatory Studies paper # 04-20 and CEPR Discussion Paper # 4625, September 2004; Cass and Hylton, "Preserving Competition: Economic Analysis, Legal Standards, and Microsoft", 8 *George Mason Law Review* 1 (1999).

cumulative cost of false convictions is *so* great (given their rate of occurrence) that it would be preferable to have no enforcement at all.

In any event, innovation competition, just like price competition, is merely an intermediate goal in order to improve consumer welfare (one of the end goals, if not *the* end goal of competition policy). Even if compulsory licensing were found to reduce innovation incentives, and therefore dynamic efficiency, this negative effect may be outweighed by the “static” gains in allocative efficiency, so that on the whole, consumer welfare is increased.<sup>61</sup> (And, again, I readily acknowledge that dynamic efficiency is more important than allocative efficiency.) On the basis of this broader framework, it is perfectly possible that, on balance, compulsory licensing may be appropriate in certain circumstances, just like compulsory access to physical facilities may be appropriate in “certain circumstances” (to quote from *Trinko*). For the various reasons outlined above, it is submitted that (a) in the area of essential facilities, IP cases and “tangible property” cases should be governed by the same legal standard; and (b) the counter-argument based on “innovation incentives” should be taken with a pinch of salt.

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<sup>61</sup> See Brunell, footnote 44 above: “Acknowledging that the long-term welfare effects of dynamic efficiency gains are far more significant than short-term allocative efficiency gains does not mean that any possible diminution in incentives, no matter how remote, ought to trump significant and certain short-term gains.” It is puzzling to note that in the area of refusal to license those who support weak antitrust enforcement tout the benefits of future innovation (which are uncertain and unmeasurable), as opposed to immediate antitrust intervention, while in other areas such as predatory pricing, they prioritize immediate, measurable benefits over possible competitive concerns in the future. “A bird in the hand...”