

https://doi.org/10.1093/jeclap/lpae021

Reconsidering the Limits of EU Competition Law on the **IP-Competition Interface**

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Key Points

- · The number of intellectual property rights in the modern economy has given rise to intellectual property law, which overprotects inventions and creations to the detriment of those who seek licences, particularly for follow-on innovation.
- EU competition law has expanded considerably over the last decades to become the default device for the resolution of the overprotection problem, while the TRIPS agreement has marginalised compulsory licences outside intellectual property law.
- Due to its institutional framework, EU competition law is not well suited towards this broader role but is indispensable to provide access to confidential information, including know-how.
- Other overprotection concerns are better addressed by exercising the courts' discretion to deny injunctive relief or making changes to the substantive rules of intellectual property law.

I. Introduction

Given the increased importance of intellectual property ('IP') protection in our modern economy, we now find ourselves faced with issues on the IP-Competition Interface on a far more frequent basis than in the twentieth century. Even though competition law applies to intellectual property rights ('IPRs'), on its face, only in 'exceptional circumstances', in the EU, scrutiny of conduct involving IPRs has become a frequent instance of competition law enforcement, especially in the context of pharmaceuticals, telecommunications, and computer software.

Intellectual property law provides undertakings with exclusive rights to innovative subject matter. As a result of the exclusivity granted, proprietors of industrial intellectual property rights may exclude competitors from the production of a product or the use of a process. This may be problematic for those who seek to utilise the protected subject matter, especially for follow-on innovators who may be estopped from improving on the protected product in the product's core market or creating a new product in an adjacent market. Intellectual property rights may protect inventions and creations to an excessive extent and may provide insufficient benefits to the proprietor to compensate for the harm to follow-on innovators' incentives and ability to invent. This is one facet of the 'overprotection' problem of IPRs.

Competition law limits the ability of undertakings to exercise IPRs and, accordingly, to appropriate the returns of innovative activity. Accordingly, the IP-Competition Interface, which I define here as the application of competition law to IPR-related conduct, is a crucial element of a state's innovation and competition policy. This paper takes a critical view of the expansion of EU competition law on the IP-Competition Interface. On a historical view, competition law has taken a quasi-default role in limiting the excesses of intellectual property law and market circumstances involving IPRs. This is undesirable in light of other legal doctrines that this development has marginalised but which offer superior institutional arrangements to respond to the overprotection concerns associated with intellectual property protection. Specifically, compulsory licensing and the courts' discretion to deny injunctive relief are better suited to oppose overprotection concerns. Similar to competition law, these legal doctrines respond ex post to overprotection concerns where changes in ex ante IP law would have little effect or undesirable side effects. Unfortunately, international law has severely limited the ambit of compulsory licensing. Competition law's unique function lies in the provision of access in the context of confidential information and closed systems, as well as the prevention of certain leveraging conduct arising from market circumstances rather than the correction of market failures resulting from the assertion of IPRs.

Section II provides an overview of the development of the case law of the Court of Justice on refusals to license. I argue that there has been a steady expansion of compulsory licensing through competition law. Recent case law in Huawei and Google Shopping continues the trend that was already evident in IMS and Microsoft. While commentary on the refusal to license jurisprudence is plentiful, commentators have failed to emphasise the degree to which control over the IP-Competition Interface has moved towards competition law by default in conjunction with the continued

See e.g. Steven Anderman and Ariel Ezrachi (eds), Intellectual Property and Competition Law: New Frontiers (Oxford University Press 2011), v-vi (speaking of a 'widening of the IP/competition interface').

marginalisation of legal norms outside of competition law that transform the default property rules of IP law into liability rules. Section III examines alternative legal norms outside the ambit of competition law that may provide workable and superior alternatives to competition law in limiting IPRs. I find that such legal devices are often more specific and superior in theory but have been hemmed in. The revitalisation of compulsory licensing and the discretion to deny injunctive relief are in order. At the same time, in the ideal, competition law's function lies in providing access to confidential information rather than the enablement of ex post compulsory licences for publicly available information protected by IPRs. Section IV provides three actionable recommendations, one for practitioners and two for policymakers.

II. From Volvo to Huawei and Google Shopping

A. Origins: Article 345 TFEU, existence/exercise, and specific subject-matter

As early as Consten and Grundig, the Court considered whether there ought to be a degree of deference to the ownership of national trade marks and decided that such ownership provided no justification for the imposition of vertical restraints dividing markets.2 This early case law of the ECJ set out two tests for assessing whether competition law scrutiny of an IPR was legitimate in the context of its four freedoms case law. First, competition law intervention can only affect the 'exercise' of an IPR, not its 'existence'. Second, intervention must fall outside the 'specific subject-matter' of the IPR at issue.4 Arguably, these tests implemented the policy in Article 345 TFEU that the treaties shall not prejudice the Member States' systems of property rights.⁵ The General Court derived from this provision that interferences with property rights, including IPRs, must 'correspond to objectives of general interest pursued by the Community and do not constitute a disproportionate and intolerable interference, impairing the very substance of the rights guaranteed'.6

B. Volvo/Renault: early days

The first instances of refusals to license that came before the European Courts were Volvo v Veng and CICRA v Renault, commonly known as the Car Parts cases. In both cases, an IPR holder (of, in Volvo, design rights, and in Renault, patent rights) sought to enforce its rights against an infringer in court, and the infringer contended that the enforcement of the IPR constituted a violation of Article 102 TEELI

As a result of Volvo and Renault, IPR holders have become not just subject to the restrictions on their commercial freedom that the principle of free movement places on them, but also to Article 102 TFEU if their conduct involves 'certain abusive conduct such as the arbitrary refusal to supply spare parts to independent repairers, the fixing of prices for spare parts at an unfair level, or a decision to no longer to produce spare parts for a particular model even though many cars of that model are still in circulation'.8

- Case 56/64 Consten and Grundig v Commission, ECLI:EU:C:1966:41.
- Consten and Grundig (n 2).
- Case 78/70 Deutsche Grammophon Gesellschaft v Metro-SB-Grossmärkte, ECLI:EU:C:1971:59.
- Fernando Losada Fraga and others, 'Property and European Integration: Dimensions of Article 345 TFEU'; compare Bram Akkermans and Eveline Ramaekers, 'Article 345 TFEU (Ex Article 295 EC), Its Meanings and Interpretations' (2010) 16 European Law Journal 292.
- Case T-65/98 Van den Bergh Foods v Commission, ECLI:EU:T:2003:281, para. 170.
 - Case 53/87 CICRA and Maxicar v Renault, ECLI:EU:C:1988:472, paras 12-13.

The Court attempted to place a number of further safeguards on the prohibition on refusals to license. It held that it cannot prevent national courts from applying national IP legislation since this would affect the 'existence' of the exclusive right rather than its mere 'exercise'. Similarly, a general duty to license would deprive the proprietor of the substance of its exclusive right.¹⁰ In addition, the exercise of the IPR holder's rights enumerated in the relevant statute (e.g., the Patent Act 1977) constitutes the 'specific subject-matter' of the exclusive rights in question. 11 The specific subject-matter of the design right is to 'to prevent third parties from manufacturing and selling or importing, without its consent, products incorporating the design.'12 Heinemann refers to this idea of dividing legitimate conduct within the IPR's scope from illegitimate conduct outside its scope as 'two-field theory'. 13 This principle hearkens back to the idea developed in early US patent misuse jurisprudence that the ambit of a patent's claims and the rights in the Patent Act determine the correct scope of the patent misuse defence and antitrust liability.¹⁴

The reign of the two tests did not last. Both tests have been effectively abandoned since 1992's Coditel II.15 In 2023's decision in Valve, the General Court did reference the 'existence/exercise' dichotomy when ruling on the legality of geo-blocking restrictions under Article 101 TFEU. 16 The reference is best seen as anomalous in light of the period of disuse, and, in any event, nothing in the case turned on the distinction because the illegality of territorial licensing restrains, even when IP licensing is at issue, has been established as long as Consten and Grundig.

C. Magill and Bronner: from closed list to 'exceptional circumstances'

In Magill, a TV channel dominant in the market for TV programming refused to license programme listing information to an undertaking that sought to produce a TV guide aggregating information from multiple providers. RTE sought to protect its substitutable, if significantly inferior, TV guide from competition in the downstream market, which Magill sought to enter, through a refusal to license to a competitor.

On appeal, the ECJ departed from Volvo's closed list of 'certain abusive conduct' in favour of 'exceptional circumstances'. This widened the applicability of the refusals to license prohibition by focusing on the effects of the conduct on the market rather than the type of abuse that is being controlled. The exceptional circumstances found by the Court were that (i) there was no substitute for a composite weekly TV guide, and the refusal to license prevented the emergence of a new product with potential consumer demand; (ii) there was no justification for the refusal; and (iii) the conduct excluded all competition on the market.¹⁷ Bronner made it clear that this list was cumulative. 18 IMS reiterated

- 8 Case 238/87 AB Volvo v Erik Veng (UK) Ltd, ECLI:EU:C:1988:477, para 9; see also Renault (n 7) para 16.
 - Volvo (n 8), para 8; Renault (n 7) para 11.
 - 10 Volvo (n 8) para 8.
 - Volvo (n 8), para 8.
 - 12 Voluo (n 8), para 8.
- 13 Andreas Heinemann, Immaterialgüterschutz in der Wettbewerbsordnung: Eine grundlagenorientierte Untersuchung zum Kartellrecht des geistigen Eigentums (Mohr Siebeck 2002) 46.
 - ¹⁴ See, e.g., Motion Picture Co. v Universal Film Co., 243 U.S. 502 (1917)
- ¹⁵ Case C-262/81 Coditel v Ciné-Vog Films, ECLI:EU:C:1982:334; cf. Case T-172/21 Value Corporation v Commission, ECLI:EU:T:2023:587.
- 16 Value (n 15).
- 17 Cases C-241/91 and C-242/91 P RTE υ Commission ('Magill'), ECLI:EU:C:1995:98, paras 52–56.
 - 18 Case C-7/97 Oscar Bronner v Mediaprint, ECLI:EU:C:1998:569.

this and implied that the list includes the new product requirement only in IPR-related cases. 19

D. IMS and Microsoft: stretching Magill

In IMS, a pharmaceutical sales company operated a proprietary data format that was protected by copyright and was commonly used in the industry. It refused to provide a competitor with a license. The German Court referred the matter to the ECJ under the preliminary reference procedure. The ECJ indicated that a claimant could obtain a compulsory licence to compete with the proprietor in a market in which it is currently active, i.e., not just on a downstream market as in Volvo, Renault, and Magill.²⁰ The Court justified this by stating that there is a need for the licensee to compete on a secondary market, but such a market can be an upstream market and can be potential or hypothetical, i.e., the market for licences of IPRs.²¹ The Court also gave some guidance on the new product requirement, holding that there must be 'potential consumer demand', and the licensee must not 'intend to limit itself essentially to duplicating the goods or services already offered'.22

The General Court's judgment in Microsoft further stretched the scope for liability for refusals to licences. 23 On the matter of a 'new product', in Microsoft, it was sufficient that technical development had been inhibited.²⁴ The Court also found the indispensability criterion fulfilled even though the refusal to share interoperability information did not exclude all downstream competitors from the downstream market.²⁵ The requirement of 'elimination of competition' in the downstream market was diluted to only requiring 'the risk of effective elimination of competition'.²⁶ The Court gave some degree of credence to a compulsory licence's effects on incentives to innovate, but found that the positive effects of enjoining the conduct exceeded the (minor) harm to Microsoft's incentives to innovate.²⁷ This approach has since been referred to as the 'incentives balance' test. 28 The consideration of adverse effects on incentives to invent is not necessarily new to Microsoft. Czapracka suggests that in Magill, 'the condition relating to the lack of justification could be understood as referring to the fact that the broadcasters made little investment in the development of the listings, and a compulsory license would not be a real disincentive to continue their publishing activities.'29 Together, these changes have significantly lowered the bar for refusal to license claims in EU competition law.

E. Huawei and Google Shopping: abandoning 'exceptional circumstances'

As a result of globalisation and technological progress, standard setting has become a legal battleground. The proprietors of patents essential to important technological standards are able to not only reap substantial licensing income and cross-licence their

- 19 Case C-418/01 IMS Health, ECLI:EU:C:2004:257.
- ²⁰ Pat Treacy and Thomas Heide, 'Compulsory Licences of IP Rights: Easier to Get after the IMS Health Decision?' (2004) 20 Computer Law & Security Review 482.
 - 21 IMS Health (n 19), paras 44-47.
 - ²² IMS Health (n 19), para 49.
- Alison Jones, Brenda Sufrin and Niamh Dunne, Jones & Sufrin's EU Competition Law: Text, Cases and Materials (7th edn, OUP 2019) 512.
 - Case T-201/04 Microsoft v Commission, ECLI:EU:T:2007:289, para 709.
 - Jones, Sufrin, and Dunne (n 23) 516-517.
 - Microsoft (n 24), para 563.
 - Microsoft (n 24), paras 696-712.
- See, e.g., Claudia Schmidt, Refusal to License Intellectual Property Rights as Abuse of Dominance (Peter Lang 2010).
- Katarzyna A Czapracka, Intellectual Property and the Limits of Antitrust: A Comparative Study of US and EU Approaches (Edward Elgar 2009) 48.

patents against other patents essential to the standard, but also to exert market power over those who wish to join the standard. A patent that is essential to a standard, "rendering its use indispensable to all competitors which envisage manufacturing products that comply with the standard to which it is linked", is referred to as Standard Essential Patent ('SEP').30 The classification of a patent as an SEP is not a classification conducted by the courts. A patent becomes an SEP when the parties to a standard agree on its essentiality and subject the licensing of this patent to FRAND terms as a condition to become part of the standard.31 The EU institutions are currently considering a regulation on SEPs that would create an SEP register, include essentiality checks, and may set FRAND criteria.32

SEPs are relevant to Article 102 TFEU enforcement in two scenarios: In 'patent ambush', firms may conceal patents relevant to the standard and use them to later take control of the standard. Outside of patent ambush, seeking an injunction in the course of the enforcement of an SEP can constitute an abuse of dominance, i.e., parties holding SEPs may exclude others from the standard by refusing to license their SEPs. I address this latter issue here.

The Court of Justice first considered the law surrounding SEPs in Huawei v ZTE. Previous case law had shown differences in approaches between Commission practice and the Bundesgerichtshof.³³ Huawei provides a framework under which an SEP holder may petition a court for injunctive relief while complying with Article 102 TFEU. Rather than fitting the case into the preexisting categories of refusals to license³⁴ or abusive lawsuits,³⁵ the Court of Justice treated the issue as a new type of abuse under Article 102 TFEU distinct from a refusal to license because Huawei had given a voluntary FRAND commitment.³⁶ Articulating a framework for SEP licensing negotiations, the Court held that, if the two conditions of (i) the patent being essential to a standard created by a standardisation body and (ii) SEP status being conditional on the irrevocable undertaking to grant licences on FRAND terms, are fulfilled, this creates 'legitimate expectations' on the part of third parties, which allows them to employ Article 102 TFEU in defending against the enforcement of the patent and the seeking of an injunction. SEP holds may then avail themselves of a safe harbour if: '(i) prior to bringing proceedings, the holder must alert the alleged infringer to the alleged infringement; (ii) after the alleged infringer has expressed willingness to take a licence on FRAND terms, the holder must present it with a specific written offer for a licence on FRAND terms; and (iii) the alleged infringer must not have accepted the offer or promptly submitted a written counter-offer.'37 The safe harbour immunises an SEP holder from the application of the prohibition of refusals to license and thereby modifies the essential facilities doctrine.38

- Case C-170/13 Huawei v ZTE, ECLI:EU:C:2015:477, para 49.
- 31 Huawei (n 30), para 44.
- European Parliament Research Service, Briefing on the Standard Essential Patents Regulation (PE 754.578, November 2023).
 - 33 Huawei (n 30), paras 30–34.
- Izarne Marko Goikoetxea, 'Huawei v ZTE Should Have Been Treated as a Refusal to Contract—to Grant SEP Licences—and Not as a New Category of Abuse' (2019) 40 European Competition Law Review 67.
- Case T-111/96 ITT Promedia NV v Commission, ECLI:EU:T:1998:183. Note that the refusal to categorise cases as abusive lawsuits in the guise of ITT is longstanding; Volvo and Renault also concerned the enforcement of IPRs in national courts.
- Huawei (n 30), para 48.
- Jones, Sufrin and Dunne (n 23) 544-545 (internal citations omitted);
- Alina Wernick, Mechanisms to Enable Follow-On Innovation: Liability Rules v Open Innovation Models (Springer 2021) 344; Opinion of AG Wathelet in Case C-170/13 Huawei v ZTE, ECLI:EU:C:2014:2391, para 70.

At least for practicing SEP holders, 39 Huawei imposes a liability rule, at least when the alleged infringer follows proper procedure.40 This suspends the default property rule. Given that the Court denied to follow the Magill line of cases, 41 Huawei seems to not apply outside of the context of SEPs. Yet, despite lip service to the 'exceptional circumstances' principle, 42 the suspension of the liability rule here applies well beyond the 'exception'. Huawei steers the licensing behaviour of every dominant SEP holder when considering whether to seek injunctive relief. Compare Volvo, which also regulated demands for injunctive relief by IP holders, in which a clear separate 'abuse', for example, one based on a leveraging theory of harm, must be present.

The application of Huawei is limited in addressing issues relating to standardisation due to the requirement for dominance under Article 102 TFEU. SEPs do not inherently create dominance. 43 For a firm holding an SEP to be in a dominant position, the standard itself must be dominant and incapable of being reasonably circumvented. Even when this is so, the SEP holder's market power may be counterweighed by other SEP holders. When this is the case, then the enforcement of a patent through an injunction leads to the elimination of effective competition and renders a licence indispensable. Unfortunately, the CJEU paid no attention to competing standards or the operation of the market power screen in the context of multiple holders of SEPs. As a result, at present, the dominance standard targets the firm rather than inquiring whether the standard at issue is also dominant; the 'indispensability' requirement set out by the Court in para 49 only inquires whether the SEP at issue is indispensable to the standard but not whether use of the standard is also indispensable to compete in the market.

If Huawei is part of the Magill line of cases, this constitutes a further weakening of the already comatose 'new product' requirement. Where in Microsoft the inhibition of technical development was necessary, Huawei implies that any implementation of a standard protected by SEPs is sufficient to show actionable harm. Huawei therefore promotes competition by imitation rather than competition by substitution.44

The most recent pronouncement of the European Courts on the issue of refusals to deal is the General Court's judgment in Google Shopping. Google offers search services in which it is clearly dominant. It also offers comparison shopping websites. The allegation in Google Shopping concerned Google's competitors in the downstream comparison-shopping market. Google reserved a box at the top of its general search results for its own Google Shopping service and refused to offer comparison shopping websites access to the box, with the result that rival downstream comparison shopping websites were less visible than Google's own. A second aspect of the alleged abuse was that Google's search algorithm demoted comparison-shopping websites, whereas Google's service remained accessible through the box (and also through a button allowing search via Google Shopping). The Commission pursued the case not on the basis of a theory of a refusal to

- Jones, Sufrin, and Dunne (n 23) 547.
- Wernick (n 38) 349-351.
- 41 Huawei (n 30), para 48.
- Huawei (n 30), para 47.
- Opinion of AG Wathelet in Huawei (n 38), para 57.
- 44 See generally Josef Drexl, 'Is There a "More Economic Approach" to Intellectual Property and Competition Law?' in Josef Drexl (ed), Research Handbook of Intellectual Property and Competition Law (Edward Elgar 2008); Josef Drexl, 'Abuse of Dominance in Licensing and Refusal to License' in Claus-Dieter Ehlermann and Isabela Atanasiu (eds), European Competition Law Annual 2005: The Interaction between Competition Law and Intellectual Property Law (Hart Publishing 2007) (on the distinction between competition by imitation and competition by substitution).

deal but on the basis of a novel theory of harm of abusive 'selfpreferencing' or 'favouring'; this meant that it did not have to engage with the three factors in Bronner. In its decision (which the General Court affirmed), the Commission required that Google bring the infringement to an end and 'regardless of whether Google decided to retain [the box]', that downstream competitors be allowed to join the favoured position on non-discriminatory terms.⁴⁵ Were Google to retain the box, the remedy would effectively impose a duty to deal.

The abuse in Google Shopping was capable of a fairly wide range of reasonable classifications, such as leveraging, selfpreferencing/favouring, discrimination, refusal to supply, or, most generally, as an 'exclusionary abuse'.46 In the end, the General Court in Google Shopping found a violation of the principle of equal treatment and the prohibition of anticompetitive leveraging in the 'favouring' conduct⁴⁷ outside the scope of competition on the merits. Google had contended on appeal to the General Court that the proper categorisation of the abuse was a refusal to supply subject to the three requirements set out in Bronner. In affirming the decision of the Commission, the Court held that the Commission did not err in failing to establish the Bronner criteria. 48 The GC held that the application of the Bronner criteria requires: (i) a request and refusal to be granted access, and that (ii) the exclusionary effect is caused principally by the refusal to deal rather than separate leveraging conduct. 49 The holdings that the GC cites in support do not state this test as a proposition of law; rather, the GC inferred these criteria from the case law. 50 The Court saw the case as one of discrimination, on the basis that Google refused to deal with downstream competitors the way it deals with itself.51 The opinion of AG Kokott strikes a similar tone, distinguishing Bronner on the basis that unreasonable or discriminatory supply terms do not constitute a refusal to supply.52

What used to be commonly accepted after Bronner, that 'a duty to deal may be imposed only with respect to an input that can be validly characterised as an essential facility',53 is no longer true after Google Shopping. Google Shopping accordingly cuts the connection between the remedy of mandating access and the conduct being categorised as a refusal to deal. Hornkohl argues that while the categorisation by the GC is appropriate based on the facts, the Court should have analysed the remedy and distinguished between a remedy that forces Google to deal with a competitor and a remedy that forces Google to establish equal treatment.54

After Google Shopping, the ECJ joined the GC in restricting the applicability of the Bronner test. In Lithuanian Railways, the Bronner criteria were held inapplicable to a railway company removing a shorter, more cost-effective railway track in the presence of a partial obligation in sectoral regulation to give access to a

- ⁴⁵ Case T-612/17 Google υ Commission, ECLI:EU:T:2021:763, para 71.
- 46 Friso Bostoen, 'The General Court's Google Shopping Judgment Finetuning the Legal Qualifications and Tests for Platform Abuse' (2022) 13 Journal of European Competition Law & Practice 75, 75.
- Justin Lindeboom, 'Rules, Discretion, and Reasoning According to Law: A Dynamic-Positivist Perspective on Google Shopping' (2022) 13 Journal of European Competition Law & Practice 63; Lena Hornkohl, 'Article 102 TFEU, Equal Treatment and Discrimination after Google Shopping' (2022) 13 Journal of European Competition Law & Practice 99.
 - Google Shopping (n 45), para 230.
- Google Shopping (n 45), para 232.
- 50 Lindeboom (n 47), 67.
- Google Shopping (n 45) paras 220, 238.
- Opinion of AG Kokott in Case C-48/22 P Google Shopping, ECLI:EU:C:2024:14, para 58.
 - 53 Czapracka (n 29), 18.
 - ⁵⁴ Hornkohl (n 47), 109.

facility. 55 In Bulgarian Energy Holding, the GC re-emphasised that Bronner does not apply to 'purely exploratory' requests for information regarding the terms on which access may be granted and that a dominant undertaking is not required to respond with an offer of reasonable terms to such a 'purely exploratory' request. 56 As a result of this most recent case law, the 'exceptional circumstances' of the prohibition on refusals to license have been further weakened.

III. Alternative limiting devices on the **IP-Competition Interface**

Competition law has effectively taken the role of the default legal device providing limitations to the exercise of IPRs on the IP-Competition Interface. I argue in this section that this is an undesirable development. There are legal norms better suited to addressing adverse consequences arising from intellectual property protection. Legal norms outside competition that create liability rules are better suited to adjusting IPRs to prevent the exercise of market power where market circumstances produce problems. Nonetheless, competition law remains imperative if the issue inhibiting the competitive process is not the permission to use an IPR or a facility but rather the ability to do so in light of confidential information, know-how, or missing access to closed systems. In this case, competition law occupies a unique and nonsubstitutable role in restoring competition.

A. Rationales: Competition law as a response to dubious IPRs or as enforcing a cure for acute market failures?

A common refrain has been that EU refusal to license jurisprudence can be explained as repairing IPR grants by national laws that are questionable in principle and in effect. Drexl argues that not all IPRs necessarily promote dynamic competition, either (i) as a result of faulty regulatory design, some IPRs are so broad as to exclude not just competition by imitation but also competition by substitution, such as the copyright in Magill, or (ii) because market circumstances, such as network effects, outside the IP system cause an IPR to prevent competition by substitution.⁵⁷

The latter fits more obviously in the 'classical field of competition law application.'58 Yet, Magill is clear evidence that the application of EU competition law goes beyond this function. Before Magill reached the ECJ, there were, at one point, substantial doubts surrounding the ability of the TV listings to attract copyright. One view of this is that IP protection of the information in Magill offends copyright's central doctrine, the idea/expression dichotomy,⁵⁹ 'as the copyrighted subject-matter was ancillary to the real inputs: the TV programme information needed by Magill',60 or IP protection of the listings did not incentivise innovation.61 This arguably applies equally to IMS. Huawei and Google Shopping solidily show that enablement of competition by imitation is part of competition policy.

- 55 Case C-42/21P Lithuanian Railways, ECLI:EU:C:2023:12.
- Case T-136/19 Bulgarian Energy Holding, ECLI:EU:T:2023:669, para 282.
- $^{57}\,\,$ Drexl, 'Abuse of Dominance in Licensing and Refusal to License' (n 44), 651-653.
- Drexl, 'Abuse of Dominance in Licensing and Refusal to License' (n 44), 653.
 - Drexl, 'Abuse of Dominance in Licensing and Refusal to License' (n 44).
 - 60 Czapracka (n 29), 47.
- Opinion of AG Jacobs in Case C-7/97 Oscar Bronner v Mediaprint, ECLI:EU:C:1998:264, para 63; Valentine Korah, 'The Interface between Intellectual Property and Antitrust: The European Experience' (2002) 69 Antitrust Law Journal 801, 810.

B. The limits of competition law in addressing IPR-related market failures

Competition law has a number of inherent limits in addressing IPR-related market failures. Its true strength lies in its ability to compel the release of confidential information that would not be available under other types of resolution.

First, the requirement for dominance under Article 102 TFEU decreases the reach of competition law to respond to market failures, particularly as regards novel technologies. Market failures can take place in an innovation context even absent dominance on the part of the undertaking at issue. For example, a start-up holding a patent that has not gone to market yet may refuse to license a patent to a firm in an adjacent market, thereby preventing its ability to innovate in the adjacent market. Given that market entry has not taken place and will not take place in the adjacent market, the start-up is highly unlikely to be found dominant under EU competition law. Forcing a compulsory licence here might well be innovation enhancing, and we might have good evidence for this, especially since compulsory licensing would have little bearing on the incentives to innovate of the patent holder. Yet, if compulsory licensing is only available in competition law, such cases are not even conceivably capable of being resolved. On the other hand, if the issue is that an established dominant firm is holding up follow-on innovation on the same market (or in a downstream or upstream market) as its IPR, the dominance requirement generally does not stand in the way of an effective remedy. Sectoral differences in the strength of new entrants may cause a divergence in how well licensees are protected from 'overprotection'. For example, in sectors with substantial capital and regulatory requirements, such as the pharmaceutical industry, this will be a lesser problem than in industries with fewer such barriers to entry, such as computer software. On the other hand, the more an industry relies on intellectual property rights to appropriate the fruits of innovation, the more acute a problem it presents.

Second, the requirement for an 'abuse' excludes market failures in which intervention could be cost-beneficial despite a lack of morally blameworthy conduct by the proprietor of an IPR. Not all market failures are 'abuses'. To illustrate, in the scenario above involving the start-up, there is no abuse because there is no leveraging conduct. The start-up is not seeking to enter the adjacent market, nor is it defending its present position in the upstream market. As Drexl argues, the abuse requirement prevents proper consideration of poor regulatory design.62 In addition, Drexl argues that the new product rule precludes the application of competition law to the latter category by refusing to apply competition law where competition must necessarily take the form of competition by imitation rather than competition by substitution.63

Third, competition law's institutional arrangements significantly limit the courts' ability to resort to alternative limiting devices on the IP-Competition Interface, both procedurally and organisationally. IP issues tend to not be at issue in competition proceedings. This is for two reasons. As a procedural matter, competition proceedings are initiated by the undertaking seeking a licence whereas IP infringement proceedings are initiated by the IPR holder against an infringer who did not seek a licence and brought his product to market regardless. While allegations of

Drexl, 'Abuse of Dominance in Licensing and Refusal to License' (n 44),

⁶³ Drexl, 'Abuse of Dominance in Licensing and Refusal to License' (n 44), 654-655

invalidity are often part of the infringer's counterclaim, competition claims are not generally brought as a defence to infringement claims.64 In addition, in some jurisdictions, IP and competition issues are tried in different forums. As an organisational matter, the jurisdiction of the Union over competition law but over only a limited part of IP law often prevents pronouncements by the European Courts over IP matters in the course of competition proceedings. This led to the development of doctrines avoiding pronouncements on, e.g., the existence of IPRs, as discussed in Section II-A. Further, for example, national courts may, in different proceedings, hand down judgment on, e.g., the validity of an IPR only after the Commission has adopted a decision on a competition issue related to this IPR. This happened in Magill, in which the Irish High Court decision on the subsistence of copyright in TV listings was handed down after the Commission Decision holding

C. Substantive IP law

In cases in which the issue with an IPR in a competition proceeding results from faulty regulatory design, it is obvious that generally applicable changes in IP doctrine are a more efficient solution than ad hoc competition law intervention.⁶⁵ Yet, this is also not a satisfying solution in a number of cases.

In the first instance, this solution is often not available in the course of competition law proceedings. First, IP law is largely of a statutory character, giving less scope and legitimacy to judges in making changes⁶⁶ and changes in IP doctrine tend to be heavily contested by interest groups and therefore politically fraught. Second, in competition proceedings, the specific IP rule is often not at issue, rendering it incumbent for the courts to come to a conclusion on the competition point regardless, especially as competition law in relation to unilateral conduct is almost exclusively made by the courts. Third, institutional arrangements may prevent consideration of IP law issues, such as the Union's lack of competence over wide swathes of IP law.

Further, in cases in which individual market circumstances reveal faults in the IP system that are only apparent ex post and/or that could not be corrected by changes in general rules without impacting significantly on the remainder of the IP system, changes in substantive IP law are unavailable as solutions in any event. Magill is an example. The 'sweat of the brow' standard of copyright protection is generally unproblematic and, compared to an 'intellectual creation' standard, has the advantage of conferring copyright on information that may be costly to compile. Yet, in the particular circumstances of Magill, copyright protection alongside the entrenched position of existing TV channels created problems in the downstream market.

D. Compulsory licensing

It has been often stated that the effective result of the imposition of a duty to license IPRs in competition law is the imposition of a compulsory licence. This is often used as an argument against the imposition of such duties.⁶⁷ Property rules are subject to the award of injunctions, stopping the infringer from using the property, whereas liability rules are only subject to the payment of

- 64 Unless the jurisdiction's IP law includes a misuse defence.
- 65 Drexl, 'Abuse of Dominance in Licensing and Refusal to License' (n 44), 653, 655.
 - 66 See Kimble v. Marvel Entertainment, LLC, 576 U.S. 446 (2015).
- See, e.g., Makan Delrahim, 'Forcing Firms to Share the Sandbox: Compulsory Licensing of Intellectual Property Rights and Antitrust' (2004) 15 European Business Law Review 1059.

(usually compensatory)⁶⁸ damages.⁶⁹ Rules that transform property rules into liability rules promote follow-on innovation by reducing patent hold-ups.70

In addition to duties to deal in competition law, compulsory licensing provisions are a further way of transforming property rules into liability rules. They have distinct advantages shared with competition law: compulsory licensing claims, like claims in competition law for refusals to license, can be brought before an IPR holder can sue for infringement. As a result, firms need not incur the dangers of infringing the IPR at issue to attempt to clear rights in the absence of a willing licensor (due to declaratory judgment on the validity of IPRs being usually unavailable unless as a counterclaim to infringement)—this is especially important if the right is likely valid/subsists and there is doubt about the availability of defences to infringement. Compulsory licensing therefore fulfils a similar temporal role to competition claims (which can also be brought as claims with the strategy to obtain a licence through legal means against an unwilling licensor).

But compulsory licensing by status also has unique advantages distinguishing their function from compulsory licensing in competition law: the licensor needs not be dominant in the market at issue, and there is no need for an 'abuse' as defined in competition law. As a result, compulsory licensing is, at least in theory, capable of filling holes in the application of competition law. That being said, the ambit of compulsory licensing, exactly due to this broader applicability, is at least prima facie smaller than that of competition law in order to protect incentives to invent.

Present-day compulsory licensing provisions show little promise in filling any of the holes left by the institutional limitations of compulsory licensing under competition law. Presentday compulsory licensing provisions are inconsistent between IPRs, have holes, and are difficult to enforce. International law provides little room to make changes to compulsory licensing to render compulsory licensing a more effective tool in curbing the market failures arising from IPRs that prove adverse to dynamic competition due to market circumstances. As a result, similar to competition law, compulsory licensing is not a panacea.

In the realm of patent law, international law sets out a procedure for the grant of and certain conditions for compulsory licences, such as non-exclusivity,⁷¹ proportionality to their purpose, limitation to domestic markets, and subject to adequate remuneration.⁷² A natural reading of TRIPS suggests that the three-step test in Article 30 cannot be used to circumvent the requirements of the conditions in Article 31. As a result, Article 31 sets a maximum boundary for the procedure and terms of remunerative compulsory licences. Rather, Article 30 may apply merely to compulsory licensing without entitlements to remuneration,73 which is outside the scope of this article.

Compulsory licensing for patents is, in the vast majority of jurisdictions, restricted to the three general cases set out in international law: non-working, dependency, and public interest.⁷⁴

- 68 Some liability rules disgorge rather than compensate, particularly in patent law. Disgorgement pursues very different aims because such remedies completely remove the incentive of a follow-on innovator to innovate.
- See Guido Calabresi and A Douglas Melamed, 'Property Rules, Liability Rules, and Inalienability: One View of the Cathedral' (1972) 85 Harvard Law Review 1089
 - See generally Wernick (n 38).
 - Article 5A Paris Convention; Article 31 TRIPS.
- Article 31 TRIPS; Hanns Ullrich, 'Mandatory Licensing Under Patent Law and Competition Law: Different Concerns, Complementary Roles' in Reto M Hilty and Kung-Chung Liu (eds), Compulsory Licensing—Practical Experiences and Ways Forward (Springer 2014), 337.
 - Wernick (n 38), 259.
 - 74 Ullrich (n 72), 336.

In a review of compulsory licensing provisions for patents in international law, Ullrich writes: 'Frequently enough, compulsory licensing under patent law is not even a useful remedy, given its prerequisites and limitations, and given also that, as such, a compulsory licence may not be the proper remedy in the first place.'75 Further, for example, the non-working requirement cannot address blocking strategies that competition law is capable of addressing. 76 The conditions under which licensing must take place under TRIPS outside of competition law also restrict its utility. For example, Article 31(l) requires that there is a 'blocked' patent to engage the dependency condition; this excludes all cases in which undertakings without blocked patent rights could seek compulsory licensing in the interest of increased competition. Together, non-working and dependency cover very little ground, and the public interest category is limited to public emergencies, which only apply in selected circumstances.

Competition law is allocated a special, broader role in curbing intellectual property rights than compulsory licensing provisions under international law. Article 5A(2) Paris Convention and Article 31(k) TRIPS specifically note that abuses of right can result in compulsory licensing. Article 31(k) TRIPS specifically sets out that such abuses are controlled by competition law. Article 40 TRIPS also allows for the control of anti-competitive provisions in patent licensing. Compulsory licences under competition law do not have to comply with the various conditions set out in Article 31 TRIPS that apply to explicit compulsory licensing provisions.

Compulsory licensing in copyright is also limited. Enumerated 'compulsory licensing' in copyright operates through 'licences of right'. Rather than parties applying for a licence, copyright law allows certain uses by third parties, such as broadcasting, subject to the payment of equitable compensation. In this, compulsory licensing in the guise of licences of right in copyright mirrors the granting and subsistence procedures in patent and copyright law: patents require applications and governmental grants, whereas copyright subsists automatically upon fixation.

Article 11bis(2) of the Berne Convention allows for licences of right for broadcasting and related rights, subject to the restriction of the right being applicable only in the legislating state, that licensing must not be prejudicial to the author's moral rights, and that equitable remuneration is provided. Article 13 allows compulsory licensing for musical works, with the same conditions as under Article 11bis(2). Article 14 specifically does not allow for licences of right in relation to cinematographic works. Similarly, the protection of literary works under Article 12bis does not seem to allow for any restrictions placed on the right aside from the purposes related to freedom of information. Outside of this, compulsory licensing provisions may be available in national law under the general derogation in Article 13 TRIPS, but such provisions are exceedingly rare.

In total, in the absence of sufficient compulsory licensing provisions, competition law has become the default way of imposing compulsory licensing even if it is less suitable than a generalist compulsory licensing regime for curbing IPRs. Merely exploiting IPRs when market circumstances provide the owner with the ability to foreclose competition by substitution does not automatically constitute abuse, either in law or as a matter of theory. International law also confirms this default role for competition law through the wider ambit of compulsory licensing through competition law under Article 40 TRIPS.

TRIPS was agreed upon in 1994. At this time, intellectual property protection enjoyed its heyday, whereas competition law and the anti-market power policies associated with had lost much of its previous strength.77 As a result, TRIPS has codified these policies for a time in which we are actively reconsidering the strength of intellectual property protection as well as reestablishing strong competition laws and enforcement. Given that unanimity is required for further changes and the Doha round negotiations over the last two decades (on what are substantially more politically valent issues) have effectively failed, future changes to the compulsory licensing regime in TRIPS are unlikely.

E. Denial of injunctive relief

If neither competition law nor substantive IP law nor compulsory licensing can effectively address overprotection problems, what remains? If the effective result of a duty to license under Article 102 TFEU is a compulsory licence, and if a compulsory licence is nothing but the substitution of a liability rule for a property rule, then we ought to think of more direct ways of displacing IP's default property rules in cases of overreach. When firms assert their IPRs in court, they generally seek to enjoin an infringing competitor from continuing the use of their IPR. Such injunctive relief is often, but not always, awarded by default. Where injunctive relief is denied, what results is an effective compulsory licence because the IPR holder cannot bring the infringement to an end, but the infringer is required to pay damages to the IPR holder. As long as such damages are of a compensatory nature rather than punitive or disgorgement, an effective compulsory licence results.

At least in common law jurisdictions, injunctive relief is an equitable remedy, whereas damages are a remedy at common law. As a result, injunctive relief is awarded by the discretion of the court, whereas damages are awarded as of right. Often highlighted by commentators, the US Supreme Court in eBay v MercExchange ruled that injunctive relief is not automatic after a finding of patent infringement and that the traditional four-step equitable test for injunctive relief should be used. 78 eBay has had similar effects on injunctive relief in copyright proceedings. 79 Under eBay, a court must consider '(i) that it has suffered an irreparable injury; (ii) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (iii) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (iv) that the public interest would not be disserved by a permanent injunction.'80

In the UK, the rule in Shelfer governs the award of injunctions.⁸¹ While injunctions are a type of equitable relief and therefore awarded by the court's discretion, they are nonetheless awarded to some degree by default. In Shelfer, AL Smith LJ stated that a wrongdoer should not be entitled to ask the Court to sanction his doing so by purchasing his 'neighbour's rights' but rather that the owner of the legal right is 'prima facie entitled to an injunction'.82 The rule stated in Shelfer and subsequently accepted by the courts as a general rule is that under the Lord Cairns' Act, damages may be awarded in lieu of an injunction: (i) if the injury to the plaintiff's legal rights is small, (ii) and is one which is capable of being estimated in money, (iii) and is one which can be adequately

⁷⁵ Ullrich (n 72), 348.

⁷⁶ Ullrich (n 72), 347–348.

See, e.g., Jonathan M Barnett, Innovators, Firms, and Markets: The Organisational Logic of Intellectual Property (Oxford University Press 2020), 65–87.

eBay, Inc. v MercExchange, L.L.C. 547 U.S. 338 (2006).

⁷⁹ Pamela Samuelson, 'Withholding Injunctions in Copyright Cases: Impacts of eBay' (2022) 63 William and Mary Law Review 773.

eBay Inc. v MercExchange, L.L.C. (n 79), 391.

Shelfer v City of London Electric Lighting Company (1894) 1 Ch 287.

Shelfer v City of London Electric Lighting Company (n 81), 322.

compensated by a small money payment, and (iv) the case is one in which it would be oppressive to the defendant to grant an injunction.83 It is apparent that, despite the common origin of injunctive relief in English equity, the starting point in England and Wales is reversed from the anti-injunctive relief starting point in US law.

There is no reason in principle why such discretion ought to not be available in civil law systems. While under TRIPS it is necessary to provide effective action against infringements and judicial authorities shall have the authority to order injunctive relief,84 this does not create an absolute right to permanent injunctions.85 Continental legal systems traditionally do not allow the courts discretion to deny injunctive relief. 86 Under EU law, the Enforcement Directive allows for the possibility to deny permanent injunctive relief,87 but the scope of this discretion remains contested.88 Lacking the concept of equity, awards of injunctions tend to be more automatic in continental systems. Yet, change is afoot. In 2021, the wording of German patent law was changed from virtually automatic injunctive relief to a proportionality test in which injunctive relief could be denied in cases of extreme hardship.89 This accords with previous Bundesgerichtshof jurisprudence, 90 but it remains to be seen how far actual practice is affected.

Due to a lack of constraint by international law as well as the lack of the institutional context of competition law, the denial of injunctive relief is highly flexible and capable of addressing many concerns relating to the overprotection resulting from IPRs. In spite of this flexibility, the legal norm of the denial of injunctive relief has important limits that tell us about the proper scope of competition law on the IP-Competition Interface. Denying injunctive relief can provide no access to information that is inaccessible by an actual or potential competitor. For example, in Microsoft, the claimants sought the disclosure of confidential interoperability information that happened to be protected by copyright. Reverse engineering to obtain the requisite information was excessively costly. Since the core of the market failure at issue that the Commission alleged did not concern the assertion of the IPR at issue against competitors, mere denial of injunctive relief could have done nothing in Microsoft to address the abuse.

F. Competition law is for access, substantive IP law is for regulatory failure, denial of injunctive relief is for circumstances

Those objecting to the imposition of a duty to license often speak of 'compulsory licensing' in the course of competition law enforcement. 91 Despite the obvious rhetorical flourish of this language, the objection has force; duties to license in competition law create effective compulsory licences and subject licensing terms to control by the courts. Yet, the unique strength of competition law in remedying the concern that IPRs protect inventions and creations to an excessive extent is that it imposes not just a compulsory licence but rather a duty to deal. This duty to deal

- 83 Shelfer v City of London Electric Lighting Company (n 81), 322–323.
- Article 44(1) TRIPS.
- 85 Wernick (n 38), 258–259.
- 86 Wernick (n 38), 281.
- Corrigendum to Directive 2004/48/EC of the European Parliament and of the Council of 29 April 2004 on the enforcement of intellectual property rights 2004, Article 16.
 - 88 See Wernick (n 38), 279–281.
 - §139(1) PatG.
- 90 BGH X ZR 114/13 'Wärmetauscher' (Bundesgerichtshof, judgment of 10 May 2016).
- See, e.g., the arguments forwarded by Microsoft in its defence in Microsoft (n 24).

can compel not merely the licensing of an intellectual property right (which is usually public information), but also the disclosure of confidential information and know-how that is relevant to use the IPR competitively. In Volvo, Renault, Magill, and IMS, the information on how to manufacture the product at issue was out in the open and easily accessible by competitors. In Huawei, market power arose from the fact that the members have agreed to the standard rather than merely because the patent could be exploited to yield a return. The information pledged to the standard is public, and the permission to use it can be acquired through a compulsory licence. Compare these cases with Microsoft, in which the interoperability information was confidential and could not have been acquired through a compulsory licence or refusal to deny injunctive relief, regardless of whether it attracted copyright. Google Shopping is an analogous case, where access to a closed system would not be possible without a duty to deal in competition law.

The relative strengths and weaknesses of the legal norms that affect the exploitation of IPRs suggest a regulatory regime that differs substantially from the competition law-centric regime that we inhabit. In an ideal world, competition law provides access to confidential information and closed systems; this includes confidential information and closed systems that happen to be protected by IPRs. Where access is only required to the substantive IPR, denial of injunctive relief is a more comprehensive and appropriate remedy. Substantive IP law is the cure for regulatory failure, rather than any of the ex post cures we have looked at; applying competition law to persistent regulatory failure is a band-aid where the patient requires an amputation. But, since such relief is politically fraught and cannot be addressed to individual cases, denial of injunctive relief is the second best, whereas competition law enforcement is the third best. This leaves the scenario in which market failure is a result of market circumstances rather than regulatory failure. Denial of injunctive relief is the best way of addressing such market failure because it responds directly and in the same action to the assertion of IPRs where such assertion would be detrimental to the interest of the public in competition.

IV. Recommendations for advocates and policymakers

I suggest three ways of changes to legal practice and legal theory that would advance the IP-Competition Interface by expanding the range of institutional contexts in which solutions could be placed. First, advocates should make reference to the alternative limiting devices on the IP-Competition Interface when arguing cases. Second, the expansion of competition law on the IP-Competition Interface ought to be reconsidered in light of the alternative limiting devices in Section III. Competition law is often poorly suited to the IP-Competition Interface due to the requirements for dominance and anti-competitive effects under Article 102 TFEU. Third, the standard for denial of injunctive relief in IP cases should be reconsidered.

A. Advocates should make reference to alternative limiting devices

Awareness and knowledge of the alternative limiting devices covered in Section III are beneficial to advocates in IP-competition matters on both sides of the issue. When advocating against competition law liability for the exploitation of IPRs, advocates benefit from pointing out the fundamental weaknesses of competition law when compared to alternative ways of constraining IPRs; similarly, those who seek to expand competition law may make such expansions more palatable by showing a lack of alternatives to constraining the exploitation of IPRs through competition law.

B. Courts should consider the public interest in competition when considering whether to deny injunctive relief

Generally, the standard for denial of an injunction is proportionality, i.e., the question of whether an injunction would create disproportionate hardship in comparison to the claimant's interest in injunctive relief. As a matter of practice, this leaves little space for consideration of the wider interest in competition matters. Yet, disproportionate hardship is commonly defined as not just the hardship of the infringer but also the hardship of third parties. Accordingly, there is nothing standing in the way of ordinary standards for the denial of injunctive relief becoming capable of addressing potential competition problems at the remedies stage of intellectual property proceedings. Courts should consider the public interest in competition and innovation as a primary consideration in awarding injunctive relief. We already balance the parties' interests in inquiring whether injunctive relief is appropriate; we should also consider and balance the public's interests in innovation and competition on the facts.

C. Expansion of the IP-competition Interface must be reconsidered in light of alternative limiting devices

If we want to take seriously the idea that competition law is not our only recourse when it comes to market failures involving IPRs, we must take seriously the idea that legal norms outside competition law ought to play serious roles in addressing concerns that result from both faulty regulatory design and market circumstances inhibiting competition by substitution. The reflexive application of competition law to problems involving market failures should be blamed for its overexpansion in the context

In particular, the ability to impose liability rules outside competition law using courts' discretion to deny injunctive relief is promising as an avenue of limiting IPRs. Doing so has the advantage of locating the issue right when an IPR is seeking to be enforced. Neither is the denial of injunctive relief limited by the requirements for dominance or an 'abuse'. Yet, the denial of injunctive relief offers no assistance when we are concerned with access to protection information, compared to the enforcement of rights against the users of already public but protected information.

Because this obviously only applies to intellectual property proceedings and because compulsory licensing only allows for the obtaining of a licence but not necessarily of the know-how at issue,92 competition law has a continued role to play in the disclosure of confidential information outside the context of mere licensing. Despite different measures of remuneration for the IPR holder, validity and competition suits share a purpose in compelling the right to use the (public) information in question;⁹³ the same goes for compulsory licensing. Yet, if the claimant has no access to the confidential information in the first place, they cannot wait on an infringement suit to challenge validity⁹⁴ or avail themselves of a defence to IP infringement.

Where failure to disclose know-how indispensable to the exercise of an IPR or other confidential information constitutes an abuse contrary to Article 102 TFEU, disclosure should be available. Similarly, competition law can compel access to closed systems that are not necessarily closed by virtue of the exercise of IPRs but are formed of IPR-protected material (such as confidential computer code protected by copyright).

V. Towards better foundations of limiting

The IP-Competition Interface continues to trouble EU competition law. To be fair, this is understandable. The lack of economic theory surrounding the relationship between IP protection, competition, and innovation makes clear answers a rarity. Yet, as competition lawyers, we ought to think harder about the legal tools available to us, including whether competition law is the best option for all permutations of the refusal to license problematic.

Suits in competition law are indispensable to provide access to confidential information, as in Microsoft, or closed systems, as in Google Shopping. This is a return to the idea that competition law provides for access to essential facilities instead of the expanded idea that competition law is addressable at any market failure, including those in which property rights have been allocated incorrectly or produce undesirable consequences. Competition law is substantially less well-suited to the latter category.

I have argued in this paper that we have promising alternatives, mainly in the guise of the rules for the denial of injunctive relief. We ought to start using them. This paper seeks to start this conversation. Much work remains to be done in future research. How can we constrain competition law to apply only to the provision of access rather than as a response to regulatory design failure and market failure arising from the assertion of IPRs? Given that courts are often reluctant to use their existing jurisdiction to deny injunctive relief, how can we make sure that they address overprotection concerns in the course of IP proceedings?

Further questions attach to the ambit of compulsory licensing. A common objection to compulsory licensing is that it obliges courts to wade into negotiations between private parties and set exact licensing terms (or at least determine a FRAND range). Yet, regardless of which legal norm the compulsory licensing remedy/liability rule arises from, in competition law or outside it, this will have to take place in some cases. As such, the proposal here seeks to merely close the gaps in the coverage of compulsory licensing rules rather than expand them further.

⁹² See, e.g., Robert P Merges, 'Patents, Validity Challenges, and Private Ordering: A New Dispensation for the Easy-Challenge Era' (highlighting the importance of know-how in patent transactions).

⁹³ Maria José Schmidt-Kessen, 'IP-Competition Conflicts in EU Law Through Five Judicial Lenses' (European University Institute 2018), available at https://cadmus.eui.eu/bitstream/handle/1814/55264/Schmidt_Kessen_2018_ LAW.pdf?sequence=1\protect\$\relax>\$, 81.

Schmidt-Kessen (n 93), 82.