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The Need for a Global Framework for Knowledge Transactions: Cross-Border Licensing and Enforcement

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Abstract

Knowledge-based IP transactions are of vital importance to the modern global economy. The IP and information products that trade by license are no less important to this century than goods were to the last (and are now). Yet, there is still no recognized, general statement of the commercial legal principles dealing with the unique but common transactional form of license (like the unique transactional form of sale) and the unique but common qualities of knowledge-based intangibles. Various private ordering regimes have emerged to address discrete types of transactions, whether by industry or other groups. One form of private ordering - "information law merchant" - covers only a limited number of participants who routinely trade in certain types of information assets. Effective participation in many forms of international commercial IP transactions often requires access to specialized legal knowledge, extensive commercial experience, and elaborate contract forms, creating barriers to entry for new actors, disadvantaging smaller firms, increasing transaction and performance costs, and fostering disputes. Another form of private ordering relates to FRAND licensing. Recent developments show a piecemeal and equally fragmented development of FRAND licensing terms and conditions (beyond the issue of the financial remuneration or royalties) provides no firmer foundation for addressing the general commerce in IP assets.

In short, the authors believe that, just as international organizations created to foster global commercial trade and finance analyzed and fashioned frameworks of contractual principles for sales of goods and secured financing, those international organizations and the organizations created to foster intellectual property protection and access should undertake a project to address the general principles relating to international IP commercial contracts.

^{*} Currently a partner at Hunton Andrews Kurth, LLP, but since that firm had no hand in the preparation of this chapter, nothing in this chapter should be attributed to it, its partners or clients (see full biography at p. xvii).

Introduction

The commercial global trade in knowledge-based intangible assets grows apace;¹ the transactions that constitute this trade² being defined, for the most part, by some form of licence.³ While property-based laws and treaties have long been in place for the protection of knowledge-based intangible assets categorized as intellectual property (IP), the contractual principles governing the commercial arrangements by which cross-border trade in such knowledge-based intangible assets is conducted oddly has not been the subject of a similar systematic and comprehensive

- ¹ We describe some of the dimensions of the trade in knowledge-based intangible assets in 'The Importance of Global Trade in Information Assets' below. We use 'knowledge-based intangible assets' and 'information assets' interchangeably. We also have intentionally used these terms instead of referring to 'intellectual property' or specific types of intellectual property, for very often licences reference a technology without specifically identifying the underlying intellectual property directed to the technology (think of the commonplace software licence) or may cover a complex or hybrid of interrelated intellectual property rights in a bundle and/or other forms of knowledge or information that may or may not have specific protections under all relevant intellectual property regimes. So, while intellectual property rights would be comprehended by the terms 'knowledge-based intangible assets' and 'information assets', those rights do not mark precincts of licensing transactions in modern international commerce. The essential contractual elements of the licences relating to such transactions, as well as traditional intellectual property transactions, are identical. To be sure, there may well be discrete clauses in specific licences addressing particular matters associated with identified intellectual property (e.g. confidentiality as to trade secrets), but the contractual elements in modern commercial licences are common, unique, and identifiable. While policymakers may choose to winnow out some subsets of such transactions, the trade in all forms of information assets across boundaries is growing and is an important part of modern commerce. See 'Knowledge Networks and Markets', OECD Science, Technology and Industry Policy Papers, No. 7, pp. 7-11, 29-35 (OECD 2013), available at http://dx.doi.org/10.1787/5k44wzw9q5zv-en (discussing transactions in knowledge, technology and intellectual property markets with a focus on licensing). This chapter addresses this burgeoning trade and the unique form that the commercial contracts used to support that trade as a class. See R. Nimmer and J. Dodd, Modern Licensing Law §\$1A:1-1A:26, Chapter 2A (Thomson Reuters 2019–2020 ed.).
- ² See discussion elsewhere in this volume of the legal character of this trade (Chapter 2) and of the challenges in measuring it (Chapter 4).
- We adopt the following definition of 'licence': 'A license is a contract (whether by express agreement or by implication in law) authorizing, transferring, or allowing a licensee's contractual right, power privilege or immunity with respect to uses of information or rights in information (including intellectual property and intellectual property rights) controlled or made available by or through a licensor without transferring all rights or interests with respect to such information or rights. This includes a focus on what rights, immunities, or uses are permitted (including by access) or withheld in reference to use of the information or rights, as well as what the licensee has agreed to do or not to do with respect to the information or rights.' Nimmer & Dodd, *Modern Licensing Law* (n. 1 above), §1.4.

approach.⁴ Tensions between the globalism of IP transactions and the localism of the applicable regulatory frameworks governing them make contractual commercial arrangements for such transactions vulnerable to numerous legal challenges and uncertainties.⁵ In spite of their global nature, these transactions remain susceptible to geographic fragmentation, for they are subject to many local rules that diverge significantly between jurisdictions. To take but one example, we note that the meaning and import of 'exclusivity' as to exclusive licences is not harmonized at the international level, whether as to standing to sue for infringement

⁴ Our focus is on modern commercial transactions knowledge-based intangible assets – particularly intellectual property assets – as opposed to knowledge and technology transfers incident (and inherent) through movements of populations, particularly those skilled in crafts (or today 'knowledge workers') or through knowledge networks. For time out of mind migration of technology came with movement or migration of people. See, e.g., E. Kiriatzi and C. Knappett (ed.), Human Mobility and Technological Transfer in the Prehistoric Mediterranean, Cambridge University Press, 2016 (collection of articles describing how the prehistoric movement of technology across the Mediterranean, especially as to crafts, came with movement of peoples); N. Blackwell, 'Making the Lion Gate Relief at Mycenae: Tool Marks and Foreign Influence', American Journal of Archaeology Vol. 118, No. 3, pp. 451-488 (July 2014) (describing how stonecutting methods used on the Lion Gate Relief at Mycenae reflected possible Hittite-Mycenaean interaction). But knowledge also can inhere in and course through networks, formal and informal. See OECD, 'Knowledge Networks and Markets' (n. 1 supra) p. 7 ('knowledge networks and markets (KNMs) ... [are] "arrangements which govern the transfer of various types of knowledge, such as intellectual property, know-how, software code or databases, between independent parties". This term has grown in popularity and can be applied to describe a very diverse set of knowledge sharing agreements, institutions, social relations, networks and infrastructures that aim to allow companies, organisations and individuals to safely engage in the meaningful exchange of knowledge and associated rights').

See Sonia Baldia, 'The Transaction Cost Problem in International Intellectual Property Exchange and Innovation Markets', 34 Northwestern Journal of International Law and Business 1, 36-41 (2013) (discussing different hypotheses that show the tensions that can arise between uniform global contractual regimes and fragmented local IP regimes); see generally Michael Anthony C. Dizon, 'The Symbiotic Relationship Between Global Contracts and the International IP Regime', 4 Journal of Intellectual Property Law and Practice 559, 559-565 (2009); this is also evidenced by the recent WTO dispute initiated by the European Union against China with respect to certain Chinese measures pertaining to the transfer of foreign technology into China which are claimed to adversely affect the protection of the intellectual property rights of foreign companies transferring technology to China. G/L/1244; IP/D/39; WT/DS549/1 - China - Certain Measures on the Transfer of Technology - Request for consultations by the European Union, 6 June 2018. This dispute particularly raises the issue of whether a foreign importer of technology shall be held liable in case the licensed technology infringes on third-party IP rights: Article 24 of the Regulations of the People's Republic of China on the Administration of the Import and Export of Technologies requires that licensors of imported technology indemnify licensees for all liabilities for infringement resulting from the use of the transferred technology.

or even as to the rights and powers of the exclusive licensor and the exclusive licensee. Similarly, the effect of the termination of a main licence on the sub-licence fragments along geographic and subject matter lines. Other examples abound.

The absence of a uniform - or at least somewhat harmonized international legal regime governing the commercial licensing of IP and other information assets has further led to various forms of private ordering. In this chapter we discuss two examples. The first, which we discuss in the following section below, is what can usefully be thought of as an 'information law merchant', a contemporary conception of the 'law merchant' or *lex mercatoria* developed through the customary practices of European traders in goods in the late Middle Ages. By one definition, law merchant or *lex mercatoria* comprises rules and principles 'which are developed primarily by the international business community itself based on custom, industry practice, and general principles of law that are applied in commercial arbitrations ... in order to govern transactions between private parties, as well as between private parties and States, in transborder trade, commerce, and finance'.8 We consider whether the emerging practice in licensing IP across national jurisdictions may be usefully considered a contemporary form of such a 'law merchant'.

This form of private ordering, observed among more sophisticated and active participants in the global trade in certain types of information assets, has meant that effective participation in many forms of international commercial IP transactions often requires access to specialized legal knowledge, extensive commercial experience and elaborate contract

⁶ See Jacques de Werra, 'Can Exclusive Licensees Sue for Infringement of Licensed IP Rights? A Case Study Confirming the Need to Create Global IP Licensing Rules', Harvard Journal of Law and Technology, Vol. 30, 2017 (Symposium Issue), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2907655; under UK law, see John Liddicoat, 'Standing on the Edge: What Type of "Exclusive Licensees" Should Be Able to Initiate Patent Infringement Actions?', International Review of Intellectual Property and Competition Law, Vol. 48, No. 6, 2017, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2905761>. For a discussion of US law, see Nimmer & Dodd, Modern Licensing Law (n. 1 supra) p. 5.

⁷ See Neil Wilkof, 'Will There Ever Be Clear Law About the Terminated Sublicense?', blogpost on Ipkat, 2 November 2012, available at http://ipkitten.blogspot.com/2012/11/will-there-ever-be-clear-law-about.html; see Nimmer & Dodd, *Modern Licensing Law* (n. 1 supra) §\$9:26, 11:43, 15:38.

Stephan Schill, 'Lex Mercatoria', in Rüdiger Wolfrum (ed.), Max Planck Encyclopedia of Public International Law, Vol VI, Oxford: Oxford University Press, 2012, p. 823.

forms. In turn, the need for specialist knowledge simply to trade effectively in IP creates barriers to entry for new actors, disadvantages smaller firms, increases transaction and performance costs, and fosters disputes. Even more fundamentally, technological advances have fostered commercialization of intangible knowledge-based assets that may be protected, in whole or in part, by one or more forms of IP where the commercial value lies in the collective intangible asset, not in the discrete types of IP protection accorded to the asset. Commercial transactions in such assets are increasingly conducted by commercial actors and lawyers, not IP specialists. Fragmented sets of practices cannot serve as a secure foundation for a commercial law relating to the unique, growing and diversifying international trade in knowledge-based intangible assets.

Our second example of private ordering in IP commercial arrangements concerns the various licensing frameworks for standard essential patents under fair, reasonable and non-discriminatory terms (FRAND). Patents protecting technologies that are integrated in technological standards (which are frequent in certain industries, and specifically in the telecom industry) become 'standard essential patents' (SEPs), in the sense that any company wishing to use and implement the relevant standards in its products would need a licence to use those patents. To overcome the problem of 'patent holdups' that SEP owners could otherwise interpose through infringement claims, standard-setting organizations (SSOs) develop not only technical standards, but also adopt IPR policies under which 'participants wishing to have their IPR included in the standard [are requested] to provide an irrevocable commitment in writing to offer to license their essential IPR to all third parties on fair, reasonable and non-discriminatory terms ('FRAND commitment')'. 9

However, it remains uncertain today how to determine what licensing terms and conditions are 'fair, reasonable and non-discriminatory'. ¹⁰ As

See OECD, 'Knowledge Networks and Markets' (n. 1 supra) p. 10 ('FRAND pledges have become the recent focus of contention in technology markets – particularly in ICT standards – because FRAND terms can be ambiguous, leaving considerable room for

See the Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (Text with EEA relevance), OJ C 11, 14.1.2011, p. 285, available at http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52011XC0114%2804%29&from=EN. ('the Guidelines'), para. 269; for a (simplified) presentation of the key competition law issues of SEPs, see the Competition policy brief (Issue 8, June 2014) of the European Commission, Standard-essential patents, available at http://ec.europa.eu/competition/publications/cpb/2014/008_en.pdf (relating to the Samsung and Motorola cases, whereby this paper will focus on the Samsung case, see 'The Use of Arbitration to Solve FRAND Disputes' below).

we discuss below, deciding on the fairness and reasonableness of a licence must go beyond the issue of the financial remuneration due by the licensee to the licensor (even though this issue has logically attracted and continues to attract the attention of all stakeholders). FRAND must also apply to all other contractual terms and conditions of the licence agreement (including the term and termination of the licence, the choice of court provision, etc.). This is a difficult exercise which demonstrates the need to develop global guiding principles on these issues as well. In the absence of such guidance, local courts develop their own approach of what they consider to be FRAND terms and conditions which are not ideal models for a uniform set of principles for licensing transactions; moreover, courts tend to rely on the parties' proposed licensing terms, making court-validated FRAND terms no less the product of private ordering than other licences where the courts construe and enforce terms.

This leads us to conclude our chapter by arguing that the international organizations created to foster commercial trade and IP protection and access should undertake a project to address the general principles relating to international IP commercial contracts in cooperation with all stakeholders, including those who license to others and those who license from others (often overlapping constituencies), academia, governmental organizations, industry groups, and other relevant and interested participants. Commercial transactions involving IP and information assets are a substantial and increasing component of world trade, especially among developing countries; such a project could help foster and facilitate that trade.

We also discuss some of the possible issues that may result from the development of general contractual principles in commercial IP and information transactions. In 1980, the UN Convention on Contracts for the International Sale of Goods (1980, 'CISG')¹¹ was adopted in order to provide an optional¹² uniform international framework to govern international commercial¹³ sales of *physical* goods. We submit that a corresponding international instrument relating to principles of international commercial transactions (especially licences) in knowledge-

disagreement between parties regarding the transferability of those pledges and the determination of an appropriate royalty rate in thicketed markets.')

See www.uncitral.org/uncitral/en/uncitral_texts/sale_goods/1980CISG_status.html.

¹² Contracting parties can opt out of the CISG (Article 6).

¹³ Consumer sales are excluded from the scope of the CISG (Article 2(a)).

based *intangible* assets (especially those protected by IP rights) would be no less important for this century's growing and crucial trade in such assets than was the similar recognition accorded to commercial transactions in tangible goods during the last century.

While Global Trade in Information Assets Grows the Commercial Law Relating to Such Transactions is Uncertain

The Importance of Global Trade in Information Assets

While both the global development and trade in information assets has grown substantially, ¹⁴ empirical data regarding the scope and dimensions of this trade is notoriously elusive, nebulous and difficult to measure comprehensively and accurately, ¹⁵ leaving us only glimpses based on various aspects of information transaction markets and indirect sets of

See Chapter 9 this volume, as well as OECD, 'Knowledge Networks and Markets' (n. 1 supra) p. 17. See also T. Agthe et al., 'A Proposed UNICTRAL Project On Commercial Transactions In Intellectual Property', p. 2 (Submitted at UNCITRAL - Fourth International Colloquium on Secured Transactions Vienna, 15-17 March 2017). ('A recent study shows that: (i) from 1998 to 2013, the index of global exports in goods grew by about 20%, but royalty payments for IP more than quadrupled over the same period; and (ii) from 1990 to 2009 the share of developing countries in global technology payments doubled from approximately 13% to 26%. The US Chamber of Commerce identifies five benefits states obtain from increased IP commerce: (i) superior access to finance and venture capital; (ii) higher quality utilization of national human capital; (iii) increased local inventive activity; (iv) better access for local firms to technology: and (v) streamlined and enhanced access for the public to creative content. Realizing these benefits requires both enhanced IP protection and legal support for commercial transactions (e.g. "technology in-flows").'). See also USPTO, 'Intellectual Property and the US Economy: 2016 Update', US Economics and Statistics Administration and US Patent and Trademark Office, September 2016. Available at www.uspto.gov/sites/default/files/docu ments/IPandtheUSEconomySept2016.pdf ('The 2012 report Intellectual Property and the US Economy: Industries in Focus identified IP-intensive industries and quantified their contribution to the US economy. It found that in 2010 IP-intensive industries supported over 40 million jobs and accounted for about \$5.06 trillion in value added; equivalent to 34.8 percent of US GDP. The current report provides updated results demonstrating that IP-intensive industries supported 45.5 million jobs and contributed \$6.6 trillion in value added in 2014, equivalent to 38.2 percent of US GDP. In addition, the current report reinforces the earlier finding that IP use permeates all aspects of the economy with increasing intensity and extends to all parts of the US'), available at www.uspto.gov/ sites/default/files/documents/IPandtheUSEconomySept2016.pdf.

 $^{^{15}}$ See Chapter 5 in this volume.

evidence.¹⁶ In part this is due to the wide variety of information assets and types of information asset trades,¹⁷ as well as the private nature of most transactions.¹⁸ Also, as an historical matter, accounting and other standards have not adequately measured the value and importance of intangible assets to corporate enterprises. Investment in knowledge-based assets is not fully reflected on balance sheets, though investments in tangible assets certainly are. As Jonathan Haskel and Stian Westlake point out in *Capitalism without Capital*, the balance sheets of, say, Microsoft, record very small levels of investment in assets (plant,

One indirect measure of the level of trade may be royalty receipts. Thus, for example, 'the [tax] returns of active [US] corporations reported gross royalty receipts increasing from USD 115.8 billion dollars in 2002 to USD 171 billion in 2008, reaching nearly 1% of total revenue. Over 5% of US receipts in the computer manufacturing industries now derives from royalties and license fees'. OECD, 'Knowledge Networks and Markets' (n. 1 supra) p. 11. Global charges for the use of intellectual property also march upward. See, e.g., https://data.worldbank.org/indicator/BM.GSR.ROYL.CD (charts and related data showing dramatic increase in charges for use of intellectual property from 1960-2017). Another view of information markets and their importance can be gathered by examining the patterns of what the OECD has termed 'knowledge sourcing strategies', not only by internal research and development but also by 'open innovation', that is the 'use of purposive inflows and outflows of knowledge' in the 'arms' length flow of innovation knowledge across the boundaries of individual organizations'. OECD, 'Knowledge Networks and Markets' (n. 1 supra) p. 21. Though the global financial crises in 2008 and the following years clearly had some impact on flows, the OECD has collected data showing the trends of businesses in various countries relying on transactions for outside (extramural) knowledge-based assets characterized as research and development, including through licences. OECD, 'Knowledge Networks and Markets' (n. 1 supra) p. 28. Acquisition of intangible assets takes, of course, various forms, including research and development, purchase and other similar arrangements, as well as assignment of IP rights through mergers and acquisitions. Although we do not frequently draw distinctions as to the form of commercial trade and acquisition of information assets in this chapter, we believe that licences are probably the most common - if not dominant - forms of commercial arrangement by which the trade and acquisition of information assets occurs. We can, of course, mention anecdotal evidence: just think of how most businesses acquire and access information assets such as software and information tools. Again data about the level of licensing compared to other transactional forms for trading in information assets only can be culled in bits from available research, but indirect evidence underscores the importance of licensing, over sales. See OECD, 'Knowledge Networks and Markets', n. 1 supra, pp. 48-49 (describing relative level of sales versus licences across certain

OECD, 'Knowledge Networks and Markets' (n. 1 supra) p. 11('Exact estimates of the size of the IP marketplace are difficult to produce because most transactions are based on confidential agreements and therefore go unreported in open sources of information and registers... Specific information on royalty and licensing income for the entire economy, including both international and domestic transactions, is notoriously more difficult to come by ...').

equipment, etc.) that accounting standards measure relative to their market capitalizations, but clearly Microsoft, as with many modern companies, invests enormous amounts in intangible assets, in their information products through research and development, product design, and the human capital building the products and platforms generating its revenues and profits. However, over time, 'intangible investment has, in most developed countries, been growing more and more important. Indeed, in some countries it now outweighs tangible investment'. ²⁰

Where is the Law?

With the growing importance of knowledge-based intangible assets to the modern global economies and of the commercial trade in such assets among developed and, increasingly, developing countries, we find it perplexing that there is no general legal framework relating to the contractual principles tailored to address the commercial arrangements – especially licences – by which cross-border trade in such unique assets is conducted. To be sure, many domestic and international treaties and laws are directed to IP; some may even feature a few provisions addressing contractual terms. Just as certainly, specific laws and comprehensive statements of contractual principles have been crafted to suit the particular characteristics of discrete types of commercial transactions in other assets. For example, as mentioned above in the introduction, the CISG (UN Convention on Contracts for the International Sale of Goods (1980)²¹) was designed for international commercial trade in sales of physical goods. Similar guidance applies to secured transactions²² and equipment leasing.²³

But a spotty, indirect treatment with principles governing very different types of commercial transactions in very different types of assets will

¹⁹ Haskel and Westlake, *Capitalism without Capital* (Princeton: Princeton University Press, 2018), pp. 4–8.

Haskel, Capitalism without Capital (n. 19 supra) p. 7. To be sure, there are variations by country, and the methods for measuring the amount of intangible investment are still being refined, see Haskel, Capitalism without Capital (n. 19 supra) pp. 24–35, chapter 3. but the technological leaps over the past couple of decades have led to a very different global economy, certainly in most developed and increasingly in developing countries.

See www.uncitral.org/uncitral/en/uncitral_texts/sale_goods/1980CISG_status.html.

See www.uncitral.org/uncitral/en/uncitral_texts/payments/Guide_securedtrans.html (Legislative Guide) and www.unis.unvienna.org/unis/en/pressrels/2016/unisl233 .html (Model Law).

²³ See www.unidroit.org/english/documents/2008/study59a/s-59a-17-e.pdf.

not adequately facilitate or support the increasingly vital commercial trade of knowledge-based intangible assets. The form of the transactions involving tangible and intangible assets differs radically: a licence contemplates that the very subject of the transaction still remains tethered to the owner of the information asset and that its use will be conditioned in ways specified in the agreement. More fundamentally, essential attributes of the intangible assets that are the object of the licence are radically different from the attributes defining the tangible asset. Forcing commercial trade in information assets into the Procrustean bed of commercial legal principles tailored for the types and forms of transactions in very different assets in very different industries, heedless of the commercial practices of licensing or the unique and essential contours of information assets, would be unwise policy and would prove inimical to the growing and important trade in information assets.²⁴ We would not expect that a law governing transactions providing access to software would suit the trade in thoroughbred horses, pipes to be delivered to a drilling site, machinery, pencils or elaborately designed glass bottles that are to be filled with expensive premium whiskeys.²⁵ Why would we expect the opposite for information assets?²⁶

So what does a practising lawyer do now when asked to compose a licence for, say, a software transaction, or, perhaps, a transfer of a patent on a bioacetic acid process, or a musical composition or a trademark. Of course, she would turn to the forms and contractual precedents from other types of transactions as to assets that might be 'similar' though not identical to the

²⁴ Cf. G. Gilmore, 'On the Difficulties of Codifying Commercial Law', 57 Yale Law Journal 1341 (1948) ('The principal objects of draftsmen of general commercial legislation—by which I mean legislation which is designed to clarify the law about business transactions rather than to change the habits of the business community—are to be accurate and not to be original. Their intention is to assure that if a given transaction involving commercial paper is initiated, it shall have a specified result; they attempt to state as matter of law the conclusion which the business community apart from statute and as matter of fact gives to the transaction in any case.').

²⁵ Cf. K. N. Llewellyn, 'Across Sales on Horseback', 52 Harv. L. Rev. 725, 728–729 (1939) (Llewellyn explains what made the law of sales (and contracts for sales) of goods a discrete body of law: it focused on the transfer of property in goods and those transactions were recognized as being discrete from other transactions).

²⁶ See, e.g., L. Brennan and J. Dodd, A Preliminary Review of the UNIDROIT Contracts Principles as Applied to Intellectual Property presented at UNICTRAL Annual Meeting June 2009 (discussing the view that UNDROIT principles are inadequate for IP commerce). See also Nimmer and Dodd, Modern Licensing Law (n. 1 supra) §§8: 4–8: 30 (explaining why warranty law relating to sales of goods is inadequate for transactions in information assets).

subject of the current transaction. Those forms and precedents would have been crafted with regard to the IP laws governing such assets, the practices of those institutions trading in such assets, public policy considerations (such as competition law), and the demands of the clients and transaction. Certainly, she would have IP law to consider, for IP law can influence the shape and content of the contract. Certainly, she would need to be aware of public policy constraints, such as the applicability of competition law and policy. But as to the commercial heart of the licence – its fundamental nature as a contract – she does not have a commercial law framework fashioned to fit the unique aspects of transactions in IP (or knowledge-based intangibles). Yes, there might be generally applicable contractual principles, but those principles would not furnish rules fitted to the unique species of transactions in information assets. No default rules. No common terminology. No general remedies for contractual breaches tailored with a view to the types of harm flowing from a breach of a licence.

Contrast those circumstances with those of a commercial lawyer facing a commercial dispute involving sales of goods or being asked to draft a sales-of-goods contract. If a dispute erupted over the commercial terms of the sale of goods, the commercial lawyer, her clients and, as need be, the judge or arbitrator of the case would have a fairly comprehensive, recognized, identifiable set of laws, domestically and internationally, relating to the contractual principles applicable to such transactions to consult and apply, just as she would have had in framing the original commercial contract. The counterparties and their counsel would as well. They would know how and whether, for example, warranties had been created or disclaimed, what remedies would be available by default and what to modify, the common terminology to be employed to reduce, though never eliminate, the ambit of misunderstanding and the default set of rules that would apply barring agreement to the contrary.

That is, there is an identifiable background of sales-of-goods principles, fashioned with a view to the unique species of transactions and subject matter, on which commercial participants and their counsel can rely. This background law addresses a large class of assets – goods, from horses to machinery – and the particular commercial forms of transactions for transferring such assets – sales and contracts for sales. Laws governing sales-of-goods and ultimately an international sales-of-goods convention did not build multiple, narrowly crafted sales laws tailored to specific industries or goods. (Just imagine, a 'Sales of Horses Law', 'Sales of Industrial Machinery Law', 'Sales of Gas Law' and so forth!) Rather, comprehensive laws, domestic and international, relating to sales as a transactional form and goods as a subject matter

were recognized because the basic principles applying to such transactions were not radically different as to the different types of assets that we call 'goods'. The principles recognized by such laws were largely malleable enough to yield to agreements struck by the parties and industry practices and customs, while allowing commercial lawyers and business counterparties in different locations and with different backgrounds to have a common basis and terminology for transacting business – across boundaries. That framework of principles informs those who participate in the commercial trade and those who draft, who interpret and who decide. Indeed, the legal recognition of comprehensive general commercial legal principles as to sales of goods facilitated the growth in goods-based trade.²⁷

The IP and information products that trade by licence are now no less commercially vital than goods transferred in sales. Legal recognition of the unique legal principles concerning commercial transactions in information assets would undoubtedly have a positive effect on trade in information assets, similar to the effect that the legal recognition of the unique legal principles concerning sales-of-goods transactions had for trade in goods.²⁸

Market Responses to the Absence of Adequate Commercial Law

The yawning absence of international legal regimes validating and supporting commercial licensing of IP and other information assets has led

²⁸ Agthe et al., 'A Proposed UNICTRAL Project On Commercial Transactions In Intellectual Property', pp. 1–3 (n. 14 supra).

²⁷ A fundamental shift in commercial law can have profound consequences to other changes. Cf. Harold J. Berman, Law and Revolution, p. 336 (Harvard University Press, 1983) ('There is also a danger of viewing the law always as a consequence of social and economic change and never as a constituent part of such change, and in that sense a cause of it. In fact, the new jurisprudence of the late eleventh and twelfth centuries provided a framework for institutionalizing and systematizing commercial relations in accordance with new concepts of order and justice. Without such new legal devices as negotiable bills of exchange and limited liability partnerships, without the reform of the antiquated commercial customs of the past, without mercantile courts and mercantile legislation, other social and economic pressures for change would have found no outlet. Thus, the commercial revolution helped to produce commercial law, but commercial law also helped to produce the commercial revolution. Indeed, what occurred was a revolutionary transformation not only of commerce but of the whole society in that total transformation commercial law, like feudal law and manorial law, had its origins and from it, like them, it took its character.') See also K. N. Llewellyn, 'Why We Need the Uniform Commercial Code', 10 Florida. Law Review 367 (1957) (describing the effect of recognition as to sales of goods and negotiable instruments transactions).

to various discrete forms of licences based on private ordering for particular types of information assets. Below we discuss the two examples of private ordering briefly introduced above. In the subsection immediately following, we address the 'information law merchant' that has cropped up among more sophisticated and active participants in the global trade in certain types of information assets. In the following subsection, we address a very different private ordering response: the development of FRAND licensing terms and conditions.

Information Law Merchant

Examples of Law Merchant The absence of comprehensive, recognized principles of commercial law dealing with the unique but common transactional form of licence (like the unique transactional form of sale) and the unique but common qualities of knowledge-based intangibles has led to the emergence of a mélange of custom, ²⁹ practice, borrowed commercial law and bits of IP law, varying according to jurisdiction, industry sector, technology, speciality and practices of discrete sets of commercial participants routinely participating in the trade, somewhat in the fashion of an Information Law Merchant. ³⁰

See Jennifer E. Rothman, 'The Questionable Use of Custom in Intellectual Property', Virginia Law Review, 93, available at www.virginialawreview.org/sites/virginialawreview.org/files/1899.pdf.

For a description of the emergence of *lex mercatoria* among merchants in the late Middle Ages, see E. Hunt and J. Murray, A History of Business in Medieval Europe 1200-1550, pp. 96-97, Cambridge University Press, 1999. Law Merchant had ancient predecessors. Thus, records from Kanesh and Assur in Assyria indicate that credit arrangements among merchants and agreements between local rulers and merchants governed the conduct of business and the settlement of debts, especially when a merchant died, and heirs, business partners and counterparties had to sort through a web of debts, claims and commitments. See M. T. Larsen, Ancient Kanesh: A Merchant Colony in the Bronze Age of Anatolia, pp. 96, 116, 152-153, Cambridge University Press, 2015. Rulers wanted to harvest the tax revenues from the trade that caravans of merchant traders from other cities and regions would provide, so protection of caravans, maintenance of roads, and, importantly, recognition of the contracts and commercial law principles observed by merchants across boundaries was crucial to ensuring that the flow of trade continued. Id. at pp. 152-158. The Romans also recognized a form of law among merchants: 'Indeed, it was the jus gentium, the (customary) "law of nations," applicable to those who were not Roman citizens, that governed most types of commercial transactions within the Roman Empire, especially those involving the carriage of goods over long distances. Included in the customary law of commerce of the Roman Empire was the Sea Law of Rhodes, usually thought to date from about 300 BC, as well as the customs of maritime trade that had been developed subsequently by eastern Mediterranean traders. Some of the rules of the Roman customary law of commerce, as well as some of the rules of Roman civil law,

We could catalogue several examples, but let us focus on a few. For example, the transfers of IP assets in art transactions may take the form of a simple licence of copyrights as incidental part of the relationship between artist and dealer or patron that is otherwise focused on the work or image itself.³¹ So too with many forms of 'entertainment'³² or 'sports' arrangements, where character, services, venue, publicity, distribution may receive more attention than the transfer of rights - though the transfer is undoubtedly important.³³ Indeed, in some cases, the media of delivery of content and the content itself converge (so called 'technotainment'), so that the focus is less on specific IP rights, rather than the cluster of trademark, publicity and copyright interests that may be included in the media 'package' and on the rights and methods of distribution.³⁴ Freelance photographers are the authors and thus owners of the copyrights in their photographs, but when they grant rights with respect to the use of the photographs, they may just refer to the covered photographs in a licence, not specific copyrights, while including scope limitations keyed to the exclusive rights they have as copyright owners.³⁵ The distribution of software invariably is governed by an often-extensive licence, but here again the focus is not necessarily on specific IP, but rather on the programs comprising the software, with the licence regulating the use of the associated IP through terms that refer only to the software. In these transactions, the technology or content may be identified as the subject of the transfer and the licence and the rights conferred may not necessarily specify the IP rights covered. The licences indirectly,

had survived in the West from the fifth to the eleventh centuries, independently of the texts of Justinian; they are to be found, for example, in Lombard law as well as in customs of the merchants of Venice; which remained as a flourishing trading center throughout the period.' Berman, *Law and Revolution*, pp. 339–340 (n. 27 *supra*).

J. Bresler and R. Lerner, Art Law: The Guide for Collectors, Investors, Dealers, & Artists, New York: Practising Law Institute, 2013, pp 941–943 (PLI 4th ed.)

³² For the purposes of simplicity in this short treatment, we have tossed music, book, theatre, television and so forth into the 'entertainment' category. For a collection of articles and sample forms, see generally Counseling Clients in the Entertainment Industry 2018, 2 vols. (PLI Course Handbook).

³³ 27A Am. Jur. 2nd Entertainment and Sports Law §§1, et seq.

³⁴ See, e.g., 'Technotainment' 2016: The Convergence of Sports Media (PLI Course Handbook).

See, e.g., Spinelli v. National Football League, 903 F.3d 18 193-94 (2nd Cir. 2018) ('Photographer hereby provides to AP a perpetual, irrevocable, transferable, worldwide, right and license to reproduce, edit, translate the caption of, prepare derivative works of, publicly perform, publicly display, load into computer memory, cache, store and otherwise use the Final Photos and to transfer or sublicense these rights to other entities.').

but effectively, govern the 'use' of any underlying IP by virtue of imposing control of the content or technology subject matter. Nonetheless, a licence or transfer is a vital part of the transaction; without such provisions no right to use the technology or content would be conferred.

Contrast this with university technology transfers, which often specifically identify the patents or patent applications that are the subject of the licence and define its scope. The classic example here features the transfer of promising biotechnology from a university to a start-up, with participation by the inventor-professor and, perhaps, some of her colleagues, through a licence covering not only the patents or inventions, but also materials and, potentially know-how, accompanied by a host of other obligations, rights and powers.³⁶

However, the reach of a customary 'law' extends only to a limited number of participants.³⁷ Moreover, commercial transactions in knowledge-based assets – especially where IP is not specifically identified or where various IP rights may underlie the transaction – are increasingly conducted by commercial actors and lawyers, not IP specialists. Yet effective participation in many forms of international commercial IP transactions often requires access to specialized legal knowledge, extensive commercial experience and elaborate contract forms, creating barriers to entry for new actors, disadvantaging smaller firms, increasing transaction and performance costs, and fostering disputes.³⁸ Moreover,

³⁶ For but one of a host of examples, see, e.g. Harvard's Sample Licence, available at https://otd.harvard.edu/upload/files/Sample_License_Agreement_Exclusive_Patent_Rights.pdf.

We are reminded of how Karl Llewellyn described the salutary effect of the adoption of a Negotiable Instruments Law at the end of the nineteenth century and the muddled state of the law before then:

Eighty years ago, bankers were swearing at the law of Bills and Notes (mostly Notes) and swearing by the two fat volumes of Daniel. Not that Daniel met the need. Paper ran across state lines, but law didn't. In addition, the law of the paper was tangled and often obscure: there were three or four different rules, for instance, on the 'anomalous indorser,' and what was the status of a 'referee in case of need'? Still, bankers and their lawyers simply had to make out with conflict and with obscurity. James Coolidge Carter had just

We note that the Law Merchant emerging in the eleventh and twelfth centuries might have had more universality than we are suggesting that Information Law Merchant may have. However, the late medieval law merchant subsisted among a small and identifiable group as to their commercial transactions at a limited number of locations. It related to a class of persons and the transactions that they undertook at certain locations. Berman, *Law and Revolution*, p. 341 (n. 27 *supra*) ('The law merchant, then, governed a special class of people (merchants) in special places (fairs, markets, and seaports); and it also governed mercantile relations in cities and towns.') Within that class and at those places, the 'law merchant shared with the other major legal systems of the time the qualities of objectivity, universality, reciprocity, participatory adjudication, integration, and growth'. *Id*.

the trade is international; for among other things, the physics of granting rights in IP or transporting intangible digital information poses fewer challenges than the transport of physical items across distance. The fragmented sets of practices that we have described as 'Information Law Merchant' cannot serve as a secure foundation for a commercial law relating to the unique and growing – and broad-based – international trade in knowledge-based intangible assets.³⁹

Scope: The Core of a Licence Although the shape, content and interpretation of licences in an industry are creatures of the practitioners and participants who regularly trade in the information assets common to the industry, we stress that commercial licences have a core, a spine if you will, that gives shape, support and structure to information transactions. That core is scope.

Certainly the form and content of the scope clause, as well as other terms, are framed by reference to practices in the trade as to a technology. Thus, for example, a software licence may tie scope to the number of 'concurrent users' at a particular location or on specific systems, where the scope provisions in a biotechnology licence may focus on fields of use versus others (e.g. treatment of pediatric oncology vs adult oncology), or territories. A licence with respect to a motion picture licence may have

led the Wall Street Bar and Wall Street Opinion into clear and conclusive understanding that to codify is to kill and that man's wit cannot in our system reach to produce by way of statutory language a workable clarity and reckonability together with a reasonable flexibility. It was all very sad, and there was nothing to do but go on suffering. It was the kind of thing on which everybody knew that Wall Street, like Papa, knows best. . . . Except that, then, in 1897, the National Conference of Commissioners on Uniform State Laws produced the uniform Negotiable Instruments Law. For twenty-five hundred pages of Daniel they proposed to substitute twenty-five pages of code language, much of which an ordinary man can understand. For forty or fifty divergent bodies of law they proposed to substitute a single body. Where possible, they proposed to simplify and clarify matters which the cases had left obscure. Wall Street knew indeed that these goals were impossible, but somehow the N. I. L. got passed, all over the country, and bankers started to live with it and to live by it. . . . Nevertheless, the legislatures kept adopting the N. I. L. and the governors kept signing it and the bankers not only lived under it but found they could rather easily train every last bank clerk to understand it reasonably well. If the surety was the ancient darling of the chancellor, surely the N. I. L. has become the commercial banker's darling. K.N. Llewellyn, 'Why We Need the Uniform Commercial Code', 10 Florida Law Review. 367, 37-68 (1957).

39 Trust is an essential glue to the conduct of business. See generally, R. Botsman, Who Can You Trust?, New York: PublicAffairs, 2017, pp. 29–30, 59–68. But commercial transactions in goods remotely required legal frameworks supporting, validating and enforcing commercial agreements. Trust with teeth, in other words.

very specific scope limitations based on duration of use, theatres in which the motion picture may be featured, and the technological methods for public performance and promotion.

Yet, despite this variety, scope clauses have essential elements that provide a common, though unique, architectural core for licences. Let us take another look at the definition of licence that we adopted earlier:

A license is a contract (whether by express agreement or by implication in law) authorizing, transferring, or allowing a licensee's contractual right, power privilege or immunity with respect to uses of information or rights in information (including intellectual property and intellectual property rights) controlled or made available by or through a licensor without transferring all rights or interests with respect to such information or rights. This includes a focus on what rights, immunities, or uses are permitted (including by access) or withheld in reference to use of the information or rights, as well as what the licensee has agreed to do or not to do with respect to the information or rights.⁴⁰

As this definition makes clear, the essential nature of a licence is its conditionality. Information assets are provided by the licensor without transfer of all rights in those assets; the licensee's use lives within the confines of scope defined by uses permitted or denied and by what the licensee agreed to do or not do with respect to the information or rights. That a licence is subject to the limitations imposed by its scope means that uses outside of its ambit breach a contractual duty (express or implied) and, potentially, could give rise to infringement liability if the unsanctioned use would otherwise infringe the licensor's IP right. Otherwise put: a licence confers on the licensee a contractual immunity from suits, whether infringement, contractual or otherwise, by the licensor as to uses within the confines of scope. In essence, a licence 'invests the licensee with a contractual right or immunity as to actions that an infringement claim would otherwise lie, but the licensor maintains residual (often much more valuable) rights in the intellectual property'. 41

This conditionality encased in scope is the core of the licence and explains the power of licences in information transactions and the reason why licences are so prevalent. Take the example of a manufacturer of a tangible item as to which a patent covers some of the inventions

⁴⁰ See n. 3 supra (quoting Nimmer and Dodd, Modern Licensing Law (n. 1 supra) §1.4 (emphasis added)).

⁴¹ Nimmer and Dodd, Modern Licensing Law (n. 1 supra) §1.11.

⁴² See n. 17 *supra*.

embodied in that item. When it sells its product, its patent rights may be exhausted as to that item, but its patent rights – its power to exclude others from making or selling infringing products – remains intact. If it sold the patents, it would lose that power. Now if that company were in the business of providing information assets as a product – not a tangible item – one can readily see that its very business model depends on not transferring the intellectual property rights relating to those assets but rather controlling the rights even as it provides access over and over. Licences allow that control to be maintained. So while the vagaries of practice and custom by sophisticated participants in information transactions in an industry influence, if not determine, the contractual content of many terms of a licence, the structural form of a licence retains the core of conditionality – that is, it has a scope.

Inadequacy of Law Merchant and 'Current Law' So, while trade in information assets relies on the ubiquitous structure of a licence – a commercial form of transaction that has unique but identifiable and common essential elements – commercial parties strike the particular terms of a transaction based on their arrangement and the commercial practices of their industry or trading groups. Importantly, however, the Information Law Merchant does not address many recurring and important questions affecting the crucial and distinctive structure elements of licences generally, even scope provisions, regardless of the sophistication of the parties or their active participation in a trade of information assets. Nor should one expect that the Information Law Merchant, such as it is, would do so, for, by definition, it is based on the unique aspects of trade in information assets by participants in industries or in trading groups.

Even more importantly, the current state of the law relating to licensing does not provide comprehensive and international structural support to supplement Information Law Merchant by common interpretative principles for the essential and common licence transactional form used in information asset trade. Quite simply, there are no commercial laws or authoritative principles that create a recognized framework for the essential elements of licences – unlike, as we have noted, the sale of goods.

That does not mean laws are absent. There are numerous opinions and pronouncements – far too many to canvass here⁴³ – interpreting

⁴³ See generally R. Nimmer and J. Dodd, *Modern Licensing Law*, 2 volumes (covering US cases and statutes comprising licensing law).

licence terms – including the all-important scope provisions – in cases involving particular licences. However, judicial or administrative determinations vary in their interpretations of important licence terms by case and jurisdiction, and sometimes by subject matter.

Let us consider the example of the word 'exclusive' that often appears in scope clauses as but one example. Hany licences, even licences common in an industry, use the word 'exclusive' without great specification as to what, precisely, powers, privileges, immunities and duties that word is to comprehend. These licences may contain many provisions designed to address industry-specific issues, but a word like 'exclusive', which appears in licences across industries, is assumed to have a known meaning. However, is the meaning of 'exclusive' so clear across jurisdictions – or even within one? Let us take the example of the United States. The difference between an exclusive and a non-exclusive licence generally is thought to lie in the extent to which the licensor is contractually permitted to grant licences to other parties covering the same scope and conditions. Thus, a pure non-exclusive licence does not restrict the licensor from subsequently licensing the same informational asset to other licensees. In contrast, an exclusive licence is ordinarily considered

See, e.g., Sample Publishing Agreement, submitted by Gail Ross, Ross Yoon Agency, Counseling Clients in the Entertainment Industry 2017 (PLI Course Handbook) ('Author grants to Publisher during the full term of copyright and any renewal or extensions thereof the exclusive right to publish the Work including the right to exercise or license the rights set forth in Paragraph 2 throughout the world in the English language and all other languages.').

⁴⁶ See, e.g., Spindelfabrik Suessen-Schurr, Stahlecker & Grill GmbH ν. Schubert & Salzer Maschinenfabrik Aktiengesellschaft, 829 F.2d 1075, 1081, 4 USPQ 2d 1044 (Fed. Cir. 1987) (in a different context, affirming that even an affirmative grant of a right to use does not entail such an assurance).

We cite exclusivity as one example, but we could pick on others. 'Perpetual', 'irrevocable' and many other terms commonplace in licences do not necessarily have certain meanings. See, e.g., *Matter of Provider Meds, L.L.C.*, 907 F.3d 845 (5th Cir. 2018) (discussing meaning of 'perpetual' vs irrevocable and perpetual under Texas law). *See also* Nimmer and Dodd, *Modern Licensing Law, 2019–2020*, Eagan, MN: Thomson Reuters (n. 1 *supra*) \$9:17. Other terms may be given very particular technical interpretations by, say, cases interpreting patent or other IP-specific licences, even though the interpretations are, in theory, based on contract terms and not patent (or other IP-specific) statutes and laws and may not be authortative in other contexts. See, e.g., Cascades AV LLC v. Evertz Microsystems Ltd., 335 F.Supp.3d 1088 (N.D. Ill. 2018) (reference to patents in licence does not include subsequent patents arising from divisional applications based on the original patent). See also Nimmer and Dodd, *Modern Licensing Law* (n. 1 *supra*) \$6:13.

to entail a commitment by the licensor that it will not engage in additional licensing covering the same informational subject matter within the same scope of application. However, does the use of the word 'exclusive' connote that the licensor will itself be precluded from using the underlying right or technology? Does it connote that other non-exclusive licences or other rights to use have not been previously granted and are subsisting? What if the exclusive licensor grants a subsequent licence to a licensee who had no notice of the exclusive licence, or what if prior licences conferred powers to sub-licence and a sub-licence is granted? What are the consequences? Is the subsequent licence or sub-licence invalid, and the third party licensee or sub-licensee infringes the IP right? Is it merely a breach by the licensor? Does the exclusive licensee

Some licences seem to contemplate that exclusivity implicitly provides assurances that the licensor has not granted rights to a third party within the scope of the exclusive licence or is not a party to an arrangement where a third party has retained rights. Thus, for example in the Harvard sample exclusive licence (Harvard's Sample Licence), available at https:// otd.harvard.edu/upload/files/Sample_License_Agreement_Exclusive_Patent_Rights.pdf, Harvard reserves the right 'for itself and for other not-for-profit research organizations, to practice the Patent Rights and to use the Harvard Technology Transfer Materials within the scope of the license granted above, solely for research, educational and scholarly purposes' (Harvard Sample, Section 2.1.1) and 'the United States federal government retains rights in the Patent Rights pursuant to 35 USC §§ 200-212 and 37 CFR § 401 et seq., and any right granted in this Agreement greater than that permitted under 35 USC §§ 200-212 or 37 CFR § 401 et seq. will be subject to modification as may be required to conform to the provisions of those statutes and regulations.' (Harvard Sample, Section 2.1.2). These exceptions would not be necessary if Harvard believed that 'exclusivity' allowed it to practice and third parties to retain rights without breaching the 'exclusivity' provision. Also, many universities are members of an initiative to foster transfers of rights as to licensed products that could result in significant public health benefits in developing countries. For a description of various global access initiatives, see C. Chen et al., 'The Silent Epidemic of Exclusive University Licensing Policies on Compounds for Neglected Diseases and Beyond' (2010), PLoS Negl Trop Dis 4, 3: e570, available at https://doi.org/10.1371/journal.pntd.0000570. Harvard has made such a commitment through its participation in the organization Universities Allied for Essential Medicines (https://uaem.org/). Thus, it may make an otherwise exclusive grant subject to a retained right to grant non-exclusive licences to non-profits and others for 'purposes of alleviating unmet health needs of local populations in' developing countries, see https://otd.harvard.edu/upload/files/Sample_Global_Access_Language.pdf. Again, if Harvard believed that exclusivity did not preclude future grants of non-exclusive licences it would not need to include such a provision. The point here is not to hold Harvard up as an example; many other licences, including many other university licences, include similar provisions. The point is that at least some licensing parties believe that such reservations are necessary or at least strongly advisable because of what 'exclusive' implies. That does not mean they are necessarily right.

have standing to bring action against the third parties? The law is not so clear as to these questions. 48

In short, the term 'exclusive licence' has many colours. Characterizing a licence as 'exclusive' can potentially affect:

- the obligations the licensor owes to the exclusive licensee,
- the scope of privileges that the licensee can exercise,
- the obligations the licensee owes to the licensor, ⁴⁹
- the rights, powers and privileges the licensee has vis-à-vis third parties (including standing to pursue infringement claims), 50
- the liabilities, rights and privileges third parties in the chain of 'title' from the licensor may have vis-à-vis the licensor and the licensee, and
- whether the transaction must be in writing or registered for purposes of enforceability or priority.⁵¹
- ⁴⁸ See generally, R. Nimmer and Dodd, Modern Licensing Law (n. 1 supra) §§5:4, et seq. See US Dept. of Justice and Fed. Trade Comm'n, Antitrust Guidelines for the Licensing of Intellectual Property §4.12. See also Kepner-Tregoe, Inc. v. Vroom, 186 F.3d 283, 51 U.S.P.Q.2d 1771 (2nd Cir. 1999); Finance Inv. Co. (Bermuda) Ltd. v. Geberit AG, 165 F.3d 526, 531-32, 49 USPQ 2d 1289, 42 Fed. R. Serv. 3d 515 (7th Cir. 1998) (a 'truly exclusive licensee' can enforce mark against third parties and exclusive licensor); CRC Press LLC v. Wolfram Research Inc., 149 F. Supp. 2d 500, 57 U.S.P.Q.2d 1220 (CD Ill 2000). See also Milgrim on Licensing §15.10 (1996) ("The word "exclusive" does not tell all. Exclusivity can be granted subject to material limitations."); ICEE Distributors, Inc. v. J&J Snack Foods Corp., 325 F.3d 586, 66 USPQ 2d 1161 (5th Cir. 2003).
- ⁴⁹ See Nimmer and Dodd, *Modern Licensing Law* (n. 1 supra) §§5:28 to 5:62 (best efforts/ diligence). See, e.g., Mechanical Ice Tray Corp v. General Motors Corp, 144 F.2d 720, 62 USPQ 397 (CCA 2nd Cir. 1944) (existence of prior licence did not change character of licence as exclusive for purposes of implying a 'best efforts' obligation on the licensee); Vacuum Concrete Corp. of America v. American Mach. & Foundry Co., 321 F. Supp. 771, 772–73, 169 USPQ 287 (SDNY 1971) (duty on the part of exclusive licensee to exploit the subject matter of the licence with due diligence was implied in order to give meaning and effect to the contract as a whole).
- See Jacques de Werra, 'Can Exclusive Licensees Sue for Infringement of Licensed IP Rights? A Case Study Confirming the Need to Create Global IP Licensing Rules' (2017), Harvard Journal of Law and Technology, 30 (Symposium Issue), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2907655. See also Nimmer and Dodd, Modern Licensing Law (n. 1 supra) §\$5:34-5:62.
- See Nimmer and Dodd, Modern Licensing Law (n. 1 supra) §§3:44 to 3:49, §§5:63 et seq. (statute of frauds). See also John G. Danielson, Inc. ν. Winchester-Conant Properties, Inc., 186 F. Supp. 2d 1, 18, 62 USPQ 2d 1714 (D. Mass. 2002), aff d on other grounds, 322 F.3d 26, 66 USPQ 2d 1065 (1st Cir. 2003) (non-exclusive copyright licence was not governed by the statute of frauds provision of 17 USCA §204). In addition to those listed, the characterization may also affect how a court or an agency examines the context in reference to antitrust issues. See, generally, US Dep't. of Justice and Fed. Trade Comm'n, Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and

Conclusion We end this section by observing that neither the available legal pronouncements nor what we have referred to as the Information Law Merchant have provided a sound, recognized framework for giving legal effect, across boundaries and industry, the licence contract that is generally used across boundaries and industries. We would not expect an Information Law Merchant among commercial participants in any given industry to address matters concerning 'exclusivity', much less the numerous other legal issues relating to the commercial aspects of licences generally. It is tailored, by industry and practice, to address questions common to those who trade in information assets in that industry, not to address questions relating to licensing law generally or to balance policies affecting the different interests of licensors and licensees as to many different information assets. Rather, those questions would remain properly dealt with within the framework of principles of a commercial licensing law dealing with the unique and common elements of licences that would support commercial trade in information assets across boundaries and industries. The 'law' now does not.

Fair, Reasonable and Non-Discriminatory (FRAND) Licensing Terms for Standard Essential Patents

Introduction Another form of specialized private ordering is progressively emerging as a result of the undertakings that certain industries (or subgroups) enter into when they participate in standards adopted by standard-setting organizations (SSOs). The process of standardization defines common technical standards⁵² that must be used in order for a

Competition (04/2007); Department of Justice and Fed. Trade Comm'n, Antitrust Guidelines for the Licensing of Intellectual Property §4.1.2.

The interaction between IP law (and specifically patent law) and standardization is complex. See the definition of technical standards in the report of the International Telecommunication Union (ITU), Understanding patents, competition and standardization in an interconnected world (July 1, 2014), available at www.itu.int/en/ITU-T/ipr/Pages/Understanding-patents,-competition-and-standardization-in-an-interconnected-world.aspx ('the ITU Report'), p. 15: 'Technical standards generally refer to the establishment of norms and requirements for technical systems, specifying standard engineering criteria, methodologies or processes. The functionality of systems incorporating communicating parts is especially dependent on conformance with common standards. Here, we often speak of "compatibility standards", also known as "interoperability standards". These standards specify how technologies such as a mobile phone and a mobile network, or a compact disc and a compact disc player, interact with one another and work together successfully. Compatibility and interoperability standards are most common in the ICT and consumer electronics sectors, but their importance to other industry sectors is growing rapidly'; certain parts of the analysis presented here are derived from: Jacques

product to comply with the relevant technological standard (for instance Wi-Fi).⁵³ Technical standards integrate patented technologies owned by a wide range of companies, which thus become 'standard essential patents' (SEPs),⁵⁴ in the sense that any company wishing to use and implement the relevant standards in its products (which is then called an implementer) needs a licence to use those patents.⁵⁵ This creates the risk of 'patent holdup', i.e. the risk that the owners of such SEPs may unduly block the use of their patented technology by implementers through the use of (or threat of) infringement lawsuits unless they get potentially excessive royalty payments from implementers who want to comply with the relevant technical standard.⁵⁶As a result, this type of behaviour has

de Werra, 'Patents and Trade Secrets in the Internet Age' (2015), 134 Revue de Droit Suisse II 146–164 (2015), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2684616.

- 53 Standards are of essential importance in the Information and Communication Technology (ICT) industry. See ITU Report (n. 52), p. 23, with a chart listing examples of international SSOs and consortia and their standards of relevance to ICTs.
- For a general presentation, see (among multiple other publications) the comprehensive Report prepared for the European Commission (Directorate-General for Enterprise and Industry), Patents and Standards: A modern framework for IPR-based standardization, 2014, available at http://ec.europa.eu/growth/industry/intellectual-property/patents/standards/index_en.htm.
- 55 See the documents and presentations made at the recent Information Session on Patents and Standards (WIPO/IS/IP/GE/18) on 13 July 2018, available at www.wipo.int/meet ings/en/details.jsp?meeting_id=47226 and the dedicated website, available at www.wipo.int/patent-law/en/developments/standards.html; see also the interesting guide published by the Japan Patent Office in June 2018: Guide to Licensing Negotiations involving Standard Essential Patents, available at www.jpo.go.jp/torikumi_e/kokusai_e/seps-tebiki_e.html; see also Commission Communication, Defining the Union's approach to essential patents to standards, 29 November 2017, COM (2017) 712 final, available at https://ec.europa.eu/docsroom/documents/26583?locale=en; for patents and standards, see the report Standards and Patents (doc. ref. SCP/13/2) prepared for the 13th session of WIPO's standing committee on patents (Geneva, March 23–27, 2009), available at www.wipo.int/edocs/mdocs/scp/en/scp_13/scp_13_2.pdf.
- For a short description of the issue, see Judge Birss, in Unwired Planet International Ltd v. Huawei Technologies Co. Ltd & Anor [2017] EWHC 711 (Pat) (05 April 2017), available at www.bailii.org/ew/cases/EWHC/Patents/2017/711.html, at para. 83: 'The point of FRAND in standard setting is fairly easy to understand. Standards exist so that different manufacturers can produce equipment which is interoperable with the result that the manufacturers compete with one another. So the phone makers compete in the market for phones and the public can select a phone from any supplier and be sure (for example) that if it is a 4G phone, it will work with any 4G network. As a society we want the best, most up to date technology to be incorporated into the latest standards and that will involve incorporating patented inventions. While the inventor must be entitled to a fair return for the use of their invention, in order for the standard to permit interoperability the inventor must not be able to prevent others from using the patented invention

been scrutinized under competition law, 57 and measures have been taken to prevent such potentially abusive conduct. 58

The SSOs that set or develop technical standards frequently develop IPR policies in order to address such potentially abusive behaviours. ⁵⁹ Under such policies, 'participants wishing to have their IPR included in the standard [are requested] to provide an irrevocable commitment in writing to offer to licence their essential

incorporated in the standard as long as implementers take an appropriate license and pay a fair royalty. In this way a balance is struck, in the public interest, between the inventor and the implementers. The appropriate license is one which is fair, reasonable and non-discriminatory. That way a standard can safely incorporate the invention claimed in a patent without giving the inventor or his successors in title unwarranted power over those who implement the standard. Thus, the public interest is served because telecommunication standards can be set using the best and most up-to-date technical expedients available and the inventor's private interest is served because the FRAND undertaking ensures they or their successors will obtain a fair reward for their invention.'

Guidelines (n. 9), para. 269; for a (simplified) presentation of the key competition law issues of SEPs, see the Competition policy brief (Issue 8, June 2014) of the European Commission, Standard-essential patents, available at http://ec.europa.eu/competition/publications/cpb/2014/008.en.pdf (relating to the Samsung and Motorola cases, whereby this report will focus on the Samsung case); see also Jay P. Kesan and Carol Hayes, 'Standard Setting Organizations and FRAND Licensing', chapter 10, in R. Anderson, N. De Carvalho and A. Taubman (eds), Competition Policy and Intellectual Property in Today's Global Economy (WTO Internal Only), Cambridge: Cambridge University Press, 2021.

For an analysis, see Michela Angeli, 'Willing to Define Willingness: The (Almost) Final Word on SEP-Based Injunctions in Light of Samsung and Motorola' (2015), Journal of European Competition Law & Practice, 221–241.

This is what was done (by way of illustration) by the European Telecommunications Standards Institute (ETSI) in its IPR Policy. ETSI Intellectual Property Rights Policy (Annex 6 of the Rules of Procedure, 'ETSI IPR Policy'), available at www.etsi.org/images/ files/IPR/etsi-ipr-policy.pdf; see also the webpage dedicated to IPR, available at www.etsi .org/index.php/about/iprs-in-etsi. The ETSI IPR Policy therefore provides for a mechanism of declaration by which the owners of standard essential patents commit to make their patents available to willing licensees under FRAND terms. See 6.1 of the ETSI IPR Policy ('[w]hen an ESSENTIAL IPR relating to a particular STANDARD or TECHNICAL SPECIFICATION is brought to the attention of ETSI, the Director-General of ETSI shall immediately request the owner to give within three months an irrevocable undertaking in writing that it is prepared to grant irrevocable licenses on fair, reasonable and non-discriminatory ("FRAND") terms and conditions under such IPR [...]'.); Article 15.6 of the ETSI IPR Policy (definition of 'ESSENTIAL'). Annex A to the ETSI IPR Policy (entitled 'IPR Licensing Declaration Forms') contains different forms to be completed and signed by the owner of the relevant IP rights under which such IP owner is invited to make a formal and binding statement according to which 'it and its AFFILIATES are prepared to grant irrevocable licenses under its/their IPR(s) on terms and conditions which are in accordance with Clause 6.1 of the ETSI IPR Policy, [...]'. See www.etsi.org/images/files/IPR/etsi-ipr-form.doc (the 'ETSI Declarations').

IPR to all third parties on fair, reasonable and non-discriminatory terms ("FRAND commitment")'. 60

Plainly, the central element of the system is the very notion of FRAND licensing;⁶¹ what shall be considered fair, reasonable and non-discriminatory licensing terms and conditions remains uncertain as of today⁶² and will be discussed below. However, a preliminary legal issue relates to the legal nature and enforceability of the commitments ('undertaking'⁶³) that are made by the owners of the relevant SEPs to the SSOs under the applicable governing law.⁶⁴

By stating that the owners of SEPs are 'prepared to grant irrevocable licenses' under their SEPS to third-party implementers (in the formal undertaking that they make to the SSOs), the issue is whether third-party beneficiaries could request the performance of such obligations, which in turn requires assessing whether these potential licensees (which have not directly entered into any contract with the owner of the relevant SEPs) can be considered as third-party beneficiaries. This issue, which obviously depends on the interpretation of the relevant declaration under the applicable law, remains disputed, ⁶⁶ it being noted that granting – by

⁶⁰ Guidelines (n. 9), para. 285, available at https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2011:011:0001:0072:EN:PD.

⁶¹ For a Swiss perspective, see Rolf H. Weber, 'Competition Law versus FRAND Terms in IT Markets' (2011), World Competition Law and Economics Review, Vol. 34, No. 1, pp. 51–71; Rolf H. Weber/Salim Rizvi, 'FRAND – Versuch einer Strukturierung' (2011), RJB/ZBJV, pp. 433–462; Fabio Babey/Salim Rizvi, Die Frand-Verpflichtung – Fair, Reasonable and Non-Discriminatory terms (FRAND) im Lichte des Kartellrechts, WuW 2012, pp. 808–818.

⁶² See Doug Lichtman, 'Understanding the RAND Commitment' (2010), 47 Houston Law Review, pp. 1023–1050, p. 1031, available at http://papers.ssrn.com/sol3/papers.cfm? abstract_id=1783406 ('It is something of an outrage that the language of the RAND commitment offers so little guidance as to its proper interpretation.').

⁶³ Further to the terminology referred to in the ETSI Declarations (n. 59).

The goal is not to analyse the relevant issues from the perspective of any specific national law, but rather to discuss these legal issues from a more fundamental and policy-oriented perspective (i.e. irrespective of the law that shall apply); the analysis will be made by reference to the ETSI Declarations even if they are to be interpreted under French law, as an example of the types of legal issues that can arise as a result of the commitments made by owners of SEPs.

⁶⁵ ETSI Declarations (n. 59).

Admitting the validity of contractual commitments, see Microsoft Corp. v. Motorola, Inc., 854 F. Supp. 2d 993 (Dist. Court, WD Washington 2012), in which the Court agreed that Motorola (owner of SEP) through its letters to both the IEEE and ITU [as SSOs], has entered into binding contractual commitments to licence its essential patents on RAND terms (with references to prior case law: Research In Motion Ltd. v. Motorola, Inc., 644 F. Supp. 2d 788, 797 (N.D.Tex.2008) and Ericsson Inc. v. Samsung Electronics, Co., Civil

contract – rights to a third party is widely admitted at the global level. Under French law, which is of particular relevance for the discussion here (given that it is the law which governs the ETSI Declarations), the view is expressed that the commitments made by owners of SEPs under the ETSI Declarations can qualify as *stipulation pour autrui* within the meaning of Article 1205 of the New French Civil Code⁶⁷ (that is, identifying third-party beneficiaries of a contract, even when not expressly included as parties to the contract). The UK courts in the English case *Unwired Planet International Ltd v. Huawei Technologies Co. Ltd & Anor* ('*Unwired Planet*') have also accepted that the doctrine of *stipulation pour autrui* could be applied to ETSI even though Justice Birss admitted that the enforceability of the FRAND undertaking in French law is 'not a clear cut question'.⁶⁸

Action No. 2:06-CV-63, 2007 WL 1202728, at *1 (ED Tex. 20 April, 2007)) and that Microsoft, as a member of both the IEEE and the ITU, is a third-party beneficiary of Motorola's commitments to the IEEE and ITU (with reference to ESS Tech., Inc. v. PC-Tel, Inc., No. C-99-20292 RMW, 1999 WL 33520483, at *4 (ND Cal. 4 November 4 1999)); these findings were reaffirmed in the subsequent decision Microsoft Corp. v. Motorola, Inc., 864 F. Supp. 2d 1023 (Dist. Court, WD Washington DC 2012); for an analysis of this case, see Kassandra Maldonado, 'Breaching RAND and Reaching for Reasonable: Microsoft v. Motorola and Standard-Essential Patent Litigation' (2014), 29 Berkeley Tech. L.J., pp. 419-464, available at http://scholarship.law.berkeley.edu/btlj/ vol29/iss4/4; for a contractual analysis of FRAND, see Roger G. Brooks/Damien Geradin, 'Interpreting and Enforcing the Voluntary FRAND Commitment' (July 20, 2010), available at http://ssrn.com/abstract=1645878; for the opposite view (considering that (common law) contract theory does not constitute the proper legal basis for analysing FRAND), see Jorge L. Contreras, 'A Market Reliance Theory for FRAND Commitments and Other Patent Pledges' (2015), to be published in Utah Law Review 2015, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2309023.

On 1 October 2016, Order no. 2016-131 of 10 February 2016, modifying the French Civil Code provisions on contract law and the general regime and proof of obligations, entered into force, see www.trans-lex.org/601101/_/french-civil-code-2016/. See Christophe Caron, 'L'efficacité des licences FRAND: entre droit des brevets, droit civil et normalisation' (May 2013), La Semaine Juridique, édition générale, 21, 20 May, pp. 1006–1013, p. 1008 et seq.

[2017] EWHC 711 (Pat) (5 April 2017), para. 146: 'Standing back I recognise that the enforceability of the FRAND undertaking in French law is not a clear-cut question. Prof Libchaber stated that there remains widespread uncertainty about the issue of whether the doctrine of "stipulation pour autrui" can be applied to ETSI. In my judgment it can be applied in that way and should be. The reason it should be applied is because the FRAND undertaking is an important aspect of technology standardisation. Holders of essential IPR are not compelled to give a FRAND undertaking but it serves the public interest that they make it clear whether or not they are doing so, and it serves the public interest that if they do, the undertaking is public, irrevocable and enforceable. To avoid hold up, implementers need to know that they can hold SEP owners to a FRAND obligation.'

The Development by Courts Of FRAND Licensing Terms: *Unwired Planet International Ltd* v. *Huawei* The analysis relating to the development by courts of FRAND licensing terms that will be made here will based on the case of *Unwired Planet International Ltd* v. *Huawei Technologies Co. Ltd & Anor* that was decided by the United Kingdom Court of Appeal in October 2018 (it being noted that appeals against the judgment were rejected by the UK Supreme Court in its decision of 26 August 2020). This case has attracted a lot of attention and is viewed as an important source in terms of development of global FRAND standards, even if the Court of Appeal has recognized the complexity of patent licensing contracts that can be structured in a variety of ways depending on the interests of the parties. Contrary to the opinion of the

69 Unwired Planet International Ltd. & Anor v. Huawei Technologies Co Ltd & Anor [2018] EWCA Civ 2344 (23 October 2018), available at www.bailii.org/ew/cases/EWCA/Civ/2018/2344.html; Cite as: [2018] EWCA Civ 2344 'the Unwired Planet Huawei Court of Appeal 2018 Judgment'; many decisions were rendered in this dispute, including: Unwired Planet International Ltd v. Huawei Technologies Co. Ltd & Anor [2017] EWHC 711 (Pat) (5 April 2017), available at www.bailii.org/ew/cases/EWHC/Patents/2017/711.html Cite as: [2017] EWHC 711 (Pat) 'the Unwired Planet Huawei April 2017 Judgment'; Unwired Planet International Ltd v. Huawei Technologies Co Ltd & Anor [2017] EWHC 1304 (Pat) (7 June 2017), available at www.bailii.org/ew/cases/EWHC/Patents/2017/1304.html (judgment dealing with the remedies to follow from the main judgment dated 5 April 2017 ([2017] EWHC 705 (Pat), 'the Unwired Planet Huawei June 2017 Judgment')).

See Peter Picht, 'Unwired Planet v Huawei: A Seminal SEP/FRAND decision from the UK' (2017), Journal of Intellectual Property Law & Practice, 12, 10, pp. 867–880, available at https://doi.org/10.1093/jiplp/jpx152; see also Jorge Contreras, 'A New Perspective on FRAND Royalties: Unwired Planet v. Huawei', available at www.ssrn.com/abstract=2949449; 'Global Markets, Competition, and FRAND Royalties: The Many Implications of Unwired Planet v. Huawei', 16 Antitrust Source 17(1) (Aug. 2017), available at www.ssrn.com/abstract=3017850; Jacques de Werra, 'Les licences FRAND: chance ou risque pour l'harmonisation globale du droit des contrats de licence de brevets?' sic! 2019, pp. 77–83, available at https://archive-ouverte.unige.ch/unige:114455.

Unwired Planet International Ltd. & Anor v. Huawei Technologies Co Ltd & Anor [2018] EWCA Civ 2344 (23 October 2018), para. 121: 'Patent licenses are complex and, with regard to the commercial priorities of the participating undertakings and the experience of the parties involved, may be structured in different ways, for example, be included in the license, the geographical scope of the license, the products to be licensed, and paid rates'; for an interesting analysis of the Unwired Planet Huawei April 2017 Judgment (note 62), see Mark Anderson, 'How To Draft A License Agreement That Is Fair, Reasonable, And Non-Discriminatory: A Ten-Point Plan' (2018), Journal of Intellectual Property Law & Practice, 13, 5: 377–392, available at https://doi.org/10.1093/jiplp/jpx212; also available at https://academic.oup.com/jiplp/article-pdf/13/5/377/24572778/jpx212.pdf.

Court of First Instance (Justice Birss), the Court of Appeal admitted the diversity of FRAND licence agreements so that there shall not be a single contract that could generally be considered as FRAND, while Mr Justice Birss stated to the contrary that 'for a given set of circumstances there will only be one set of FRAND terms and only one FRAND rate'. One argument that Mr Justice Birss espoused for this view was that '[i]t will promote certainty and will enhance the normative aspect of FRAND'. The Court of Appeal did not confirm this approach, which means that we cannot expect the decision of the Court of Appeal to offer a justification for the complete unification of FRAND licensing transactions.

The question is to identify which licensing contractual terms are covered by the FRAND obligations and how these obligations must be formulated. While the FRAND debate has essentially focused on the assessment and on the calculation of FRAND-compliant royalties, patent licensing agreements must cover a range of other contractual terms and conditions for which the question of their compliance with FRAND also arises. 75

These other components of a FRAND licence must indeed also be FRAND-compliant and may also raise quite complex legal issues that courts have to address (potentially by moving away from the clauses agreed upon by the parties). It must be noted from a contract law standpoint that it is generally not a standard practice that courts shall intervene in private dealings and shall thus define the content of contracts instead of the contracting parties unless exceptional circumstances justify such judicial interference.

⁷² Para. 164.

⁷³ Para. 156.

⁷⁴ See Gunther Friedl and Ann Christoph, 'Entgeltberechnung für FRAND-Lizenzen an standardessenziellen Patenten' (2014), GRUR, pp. 948–955.

New Jose Jorge L. Contreras and David L. Newman, 'Developing a Framework for Arbitrating Standards-Essential Patent Disputes' (2014), Journal of Dispute Resolution 1, pp. 23–51, p. 39, referring to 'Non-Royalty FRAND Terms', available at http://papers.srn.com/sol3/papers.cfm?abstract_id=2335732; see also James H. Carter, 'FRAND Royalty Disputes: A New Challenge for International Arbitration?', in Arthur W. Rovine (ed.), Contemporary Issues in International Arbitration and Mediation – the Fordham Papers 2013, Leiden/Boston, 2013, pp. 67–78, p. 73 (holding that '[t]he paradigm license term in dispute naturally would be a royalty rate or rates, on the setting of which large amounts of money could turn; but there might be dozens of other disputed terms, many with complicated (but not readily apparent) financial implications. Patent license agreements can be complex documents').

The complexity of defining FRAND contractual terms (beyond the issue of royalties) can be illustrated by focusing on two contractual terms that have been discussed in the *Unwired Planet* v. *Huawei* case which respectively deals with (i) the irrevocable nature of the licence and (ii) the choice of court clause.

The Irrevocable Nature of the Licence The ETSI Declarations⁷⁶ provide that the owners of SEPs must be 'prepared to grant *irrevocable* licenses' (italics added). One can infer from the underlying objective of the FRAND commitment (and of the ETSI Declarations) that by stating that the licence shall be irrevocable, the ETSI Declarations pursued the goal to protect the licensee against an arbitrary unilateral termination of the licence by the licensor (and owner of SEPs).

In any event, leaving aside the interpretation of the concept of an irrevocable licence under French law,⁷⁷ this irrevocability raises the question of the conditions under which a FRAND-compliant licence can be terminated, which in turn refers to the law which shall govern the licence (it being noted that the ETSI Declarations do not prescribe that the licence agreements to be entered on FRAND terms and conditions shall be governed by French law).⁷⁸

In the *Unwired Planet* v. *Huawei* case, the 'settled licence', i.e. the patent licence agreement which was validated as being FRAND by the High Court (fully disclosed in the *Unwired Planet Huawei* June 2017 Judgment as an Annex,⁷⁹ hereafter 'the Settled Licence') and was not challenged by the Court of Appeal is not declared to be irrevocable, contrary to what the ETSI Declarations require.⁸⁰ The Settled Licence was rather entered into for a defined period of time (i.e. until

⁷⁶ N 50

Which has apparently not been discussed in the Unwired Planet v. Huawei case; for a discussion, see F. Ferro, 'The Nature Of FRAND Commitments Under French Contract and Property Law' (2018), The Journal of Intellectual Property Law & Practice, p. 988; M.-R. McGuire, 'Die FRAND-Erklärung' (2018), Anwendbares Recht, Rechtsnatur und Bindungswirkung am Beispiel eines ETSI-Standards, p. 128.

McGuire (n. 77 supra) 133; it is, however, clear that in most cases the licence agreement will be entered between companies which will be located in different countries so this will be an international agreement for which the issue of the governing law will arise; the Settled Licence is governed by English law.

⁷⁹ Para. 70.

⁸⁰ Anderson (n. 71 supra) p. 382.

31 December 2020) and is thus not a perpetual licence.⁸¹ The Settled Licence further provides for a termination clause (Section 6.2) by which

[a] Party may terminate this Agreement by written notice if the other Party (or an Affiliate) at any time commits a material breach of any of its significant obligations under this Agreement (which shall expressly include any non-payment) and, in the event of a breach capable of remedy, fails to cure, or procure the cure of, such breach within thirty (30) days after receipt of a notice specifying the nature of such breach and requiring remedy of the same.

This contractual right of unilateral termination before the agreed date of expiry provided for in the Settled Licence could thus be incompatible with the requirement that the licence shall be irrevocable under the ETSI Declarations, because the term 'irrevocable' could be understood as meaning that the licence precisely cannot be terminated before its agreed date of expiry. 82 The Settled Licence further provides that '[t]he Parties agree that the failure to identify in this Agreement the breach of any particular obligation as a "material breach" does not preclude any Party from contending in the future that such breach is "material". This consequently means that the courts must decide what shall constitute a material breach of the Settled Licence that could lead to its termination under the conditions of Section 6.2.83 In any event, the Settled Licence and its validation by the UK courts seems to indicate that, in spite of the requirement expressed in the ETSI Declaration that the licence shall be irrevocable, parties can agree that a FRAND patent licence agreement can still provide for a right of an early termination of the licence in case

⁸¹ Ibid., p. 382.

⁸² Ibid., p. 382.

The concept of 'material breach' is not used in all legal systems, and particularly not under Swiss contract law. This however does not prevent that reference shall be made to international instruments that allude to the concept of 'material breach' which is related to the concept of fundamental breach under certain international instruments (i.e. the United Nations Convention on Contracts for the International Sale of Goods (Vienna, 1980) (CISG), Article 25, and the Unidroit Principles of International Commercial Contracts (2016), Article 7.3.1 (1) which provides that 'A party may terminate the contract where the failure of the other party to perform an obligation under the contract amounts to a fundamental non-performance', available at www.unidroit.org/instruments/commercial-contracts/unidroit-principles-2016) even if such instruments are not applicable to the international contract at issue. This is what was done by an arbitral tribunal in an award rendered in a dispute about a contract that was governed by Swiss law that was challenged before the Swiss Federal Court which upheld the award, see decision of the Swiss Federal Court in case 4A 240/2009 of 16 December 2009.

of material breach of the licence, leaving uncertainty as to what would constitute such a material breach and as to the consequences of such early termination of the licence. As a matter of principle, an early termination of a patent (or more generally any IP) licence agreement means that as of the effective time of the termination, the ex-licensee is no longer entitled to use the previously licensed patented inventions and is thus exposed to patent infringement consequences, including injunctive remedies. This would, however, seem delicate in a situation in which a licensor (owner of SEPs) would abusively terminate the licence on the grounds of a spurious claim of a material breach of the licence by the licensee. In such a case, the risk would be that the licensor could obtain injunctive relief after the early termination in order to re-negotiate and obtain better licensing terms from its ex-licensee in a new licence agreement that they would enter into (assuming the matter would be heard prior to, and separately from, consideration of the claimed licence infringement). The right of early termination thus raises difficulties for the licensee because this may create a risk of being exposed to injunctions in case of such early termination of the licence (which is essentially the same risk as the one that exists before a licence agreement is entered into). The view was expressed in the legal literature about the Unwired Planet v. Huawei case that the licensee could have insisted on an irrevocable licence on the SEP patents, 'in which the remedy for non-payment of the royalties would be simply to sue for damages, without the right to terminate the licence agreement'. 84 This shows in any event that FRAND licences, like other long-term contracts which remain in force over several years, will evolve over time. It is consequently necessary to anticipate as much as possible such potential evolutions and to adopt mechanisms that shall efficiently manage such potential evolution.85

Even if the licence was declared as irrevocable (in compliance with the ETSI Declarations), this might still be problematic depending on the law of contract that shall govern the licence agreement. Under certain national contract laws (including Swiss contract law, in the event that a

⁸⁴ Anderson (n. 71), p. 382.

On the post-signing adjustment of SEP/FRAND licences (because of alteration in the set of licensed patents (an alteration may take the form of patent invalidation or, on the opposite, the confirmation of patent validity as a result of legal action, etc.), see Peter Picht, 'Post-signing adjustment of SEP/FRAND licenses' (2018), les Nouvelles, 99, available at https://ssrn.com/abstract=3164310.

licence agreement would be governed by Swiss law), ⁸⁶ licence agreements can be validly terminated for just cause even if they are declared irrevocable by the parties, because a party to a long-term contract governed by Swiss law (a licence agreement is one of such contracts) has the unwaivable right to terminate the contract for just cause pursuant to a general principle anchored in Swiss contract law. ⁸⁷ On this basis, a licence agreement on SEPs could or could not be irrevocable depending on the law governing the contract.

In any event, this discussion about the irrevocability of the licence to be granted by the SEP owner shows that courts can have different views on this issue. Even if the ETSI Declarations state that the licence shall be irrevocable, the UK courts validated the licence proposed by the parties even if it was not irrevocable but rather provided for a (quite standard) contractual provision permitting the early termination of the licence in case of an uncured material breach committed by one of the parties. This illustrates how national courts can define what they consider as FRAND terms in the absence of global standard principles that would guide them (even without binding them) in the definition of what shall constitute FRAND licensing terms. In this respect, one has to emphasize that courts 'cannot craft a set of FRAND terms out of thin air' (as expressed by Mr Justice Birss). This consequently means that courts will (heavily) rely on the contractual terms that the parties will propose.

This further means that FRAND terms are defined or at least codefined by the parties to the FRAND dispute and that courts will not intervene intensively in the parties' dealings except with respect to the financial conditions of the licence (e.g. royalty rates and royalty calculation). Viewed from the broader perspective of the role of courts in contractual disputes, the reluctance of courts to intervene and to define independently the rights and obligations of contracting parties is fully understandable. This humble approach of courts is however problematic

89 Anderson (n. 71 *supra*) p. 387.

Which is relatively frequently chosen as governing law in international technologyrelated agreements, as resulting from a recent survey, see the Results of the WIPO Arbitration and Mediation Center International Survey on Dispute Resolution in Technology Transactions (March 2013), available at www.wipo.int/export/sites/www/ amc/en/docs/surveyresults.pdf, p. 15.

Marie-Noëlle Venturi Zen-Ruffinen, La résiliation pour justes motifs des contrats de durée, Fribourg 2007, p. 115 n. 330 et seq.

White Planet Huawei April 2017 Judgment, para. 169: 'Having now heard this trial I remain of the view that the court cannot craft a set of FRAND terms out of thin air.'

to the extent that it may have the consequence that individual clauses negotiated by specific parties in certain circumstances may ultimately become (after their adoption by courts) guiding references on a global basis for defining standard FRAND licensing terms.⁹⁰

In sum, in spite of the requirement of irrevocability of the licence (reflected in the ETSI Declarations), one can admit that a licence shall be FRAND-compliant even if it provides (as this was done in the Settled Licence validated by the UK courts) that the licence can be terminated under certain justifiable circumstances most notably when a party breaches its contractual obligations (e.g. if the licensee does not pay the royalties due under the licence). This right of unilateral termination of the licence for just cause⁹¹ appears reasonable under standard principles of commercial IP licensing law.

As reflected above, the recognition of such a right of early termination of the licence will ultimately depend on the law that shall govern the licence. For this reason, any court that would be invited to assess whether a given licence is FRAND-compliant should pay utmost attention to the conditions under which a licence can be terminated under the relevant law: even if a licence would provide that it would be irrevocable, such irrevocability might not be enforceable under the relevant governing contract law.

The Choice of Court Clause A second important aspect of Unwired Planet v. Huawei results from the geographic scope of the Settled Licence as set by Mr Justice Birss which is a worldwide licence and is thus not limited to the United Kingdom, noting that the Court of Appeal subsequently validated the global geographical scope of the FRAND licence. Mr Justice Birss expressed the position relating to the exclusive choice of court clause that the parties had agreed upon that 'as a worldwide licence I think a jurisdiction clause purporting to oust the jurisdiction of foreign courts would not be appropriate' and thus that the choice of court for the English courts (i.e. the High Court

⁹⁰ Ibid., p. 389 ('the author strongly recommends that FRAND license negotiators do not treat the drafting in this case as a model for future FRAND license agreements').

⁹¹ I.e. termination only if there are objectively justifiable circumstances establishing that the party which terminates cannot reasonably be expected to continue to be bound by the contract.

⁹² According to Sections 1.21 and 2.1 of the Settled License.

⁹³ Unwired Planet Huawei April 2017 Judgment, para. 594.

of England and Wales) should be non-exclusive, as was in any event reflected in the Settled Licence. 94

While we may understand the deference to foreign courts shown by Mr Justice Birss, one can still wonder whether a non-exclusive choice of court agreement makes practical sense. A non-exclusive jurisdictional clause essentially means that the parties remain in a position to start judicial proceedings before other national courts outside of the United Kingdom for any 'disputes, differences or questions arising out of or relating to the interpretation or performance of this Agreement between the Parties', it being noted that the Settled Licence remains governed by 'the substantive law of England & Wales without regard to conflicts of law rules'. This application of the law of England and Wales makes it natural and appropriate that the High Court of England and Wales shall have jurisdiction to decide on disputes by applying its own local law.

It is by contrast more complex and less obvious to submit a dispute governed by UK contract law to foreign (non-UK) courts also because this may lead to conflicting decisions: given the non-exclusivity nature of the choice of court clause, different courts in different countries may end up deciding differently even by applying the same (UK) law for which it is likely that they may call upon experts. It consequently does not appear adequate to favour a system (resulting from the non-exclusive jurisdictional clause) by which parties could litigate the same issue (potentially the issue of the valid termination of the licence in the context of infringement proceedings initiated by the licensor) before different national courts (even though it could be expected that certain of these courts could suspend their proceedings in the expectation of the outcome to be decided by other courts).

On this basis, it is not a desirable outcome that non-exclusive choice of courts has been held FRAND-compliant in *Unwired Planet v. Huawei*.

^{94 &#}x27;9.3 The High Court of England and Wales shall have non-exclusive jurisdiction to finally settle all disputes, differences or questions arising out of or relating to the interpretation or performance of this Agreement between the Parties'.

⁹⁵ Settled License '9.1 This Agreement shall be governed by and construed in accordance with the substantive law of England & Wales without regard to conflicts of law rules'.

⁹⁶ For an illustration of the challenges resulting from the application of foreign law by a national judge, see the US case Bodum, USA, Inc. v. La Cafetiere, Inc., 621 F.3D 624 (7th Cir. 2010); for a discussion of this case, see Philip D. Stacey, Rule 44.1, Bodum USA v. La Cafetiere, and the Challenge of Determining Foreign Law, 6 Seventh Circuit Rev. 472 (2011), available at http://scholarship.kentlaw.iit.edu/seventhcircuitreview/vol6/iss2/5.

This might cause difficulties and might also be understood to mean that exclusive jurisdiction clauses would *not* be FRAND-compliant.

A further point that has not been discussed in *Unwired Planet* v. *Huawei* (at least not reflected in the court decisions so far) relates to the exclusive jurisdiction of courts to decide on disputes relating to the validity of patents (which results from the application of mandatory provisions of private international law). This exclusive jurisdictional power of the courts of the country of registration of the (licenced) patents may be problematic to apply.

From this perspective, by merely providing that the choice of court clause shall be non-exclusive, the Settled Licence does not solve the complexity of international IP patent licensing disputes in which both contractual and non-contractual issues are raised and in which the validity of the relevant patents is frequently disputed. Once the validity of the patents is in dispute, this may lead to the geographic fragmentation of the dispute: the courts in each country in which the patents have been registered have exclusive jurisdiction to decide on the validity of such rights.

This is the case under European law: pursuant to Article 24 para. 4 of the Brussels Regulation⁹⁷ (recast), in proceedings concerned with the registration or validity of patents, trade marks, designs, or other similar rights required to be deposited or registered, regardless of the domicile of the parties and irrespective of whether the issue is raised by way of an action or as a defence, exclusive jurisdiction is ascribed to the courts of the member state in which the deposit or registration has been applied for, has taken place or is deemed to have taken place under the terms of an EU instrument or an international convention. This means that as soon as the issue of the validity of the patents is raised (by way of an action or as a defence) no choice of court agreement would be valid and enforceable.

This does not prevent parties from validly agreeing on an exclusive choice of court clause in their IP licence agreement which would have the advantage of avoiding conflicting decisions of national courts on contractual issues relating to the licence agreement (such as the ones relating to the interpretation of the licence agreement), subject to the limit that such choice of court clause would not apply when the issue of the validity of the licensed patents would arise.

⁹⁷ Regulation (EU) No 1215/2012 of 12 December 2012 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (recast).

From this perspective, the non-exclusive choice of court clause contained in the Settled Licence does not necessarily constitute a model for future FRAND licences, because such clause may contribute to a fragmentation of the future disputes that may result from the Settled Licence. Instead of validating a non-exclusive choice of court clause, a reasonable approach could be to privilege exclusive choice of court clauses under FRAND licensing terms and to bear in mind or even to carve out from the scope of the exclusive choice of court clause (to the extent required) disputes relating to the validity of the licensed patents (because such disputes would have to be submitted to courts in the countries of registration).

The Use of Arbitration to Solve FRAND Disputes Parties could avoid or at least significantly reduce the risk of an undesirable fragmentation of their FRAND dispute by submitting it to alternative dispute resolution mechanisms, and specifically to arbitration. 98 It is worth mentioning that the European Commission has devoted a specific chapter to alternative dispute resolution in its Communication to the Institutions on Setting out the EU approach to Standard Essential Patents of 29 November 2017. 99 The Commission has further expressed the view that alternative dispute resolution (ADR) mechanisms such as mediation and arbitration can offer swifter and less costly dispute resolution. While there can be no obligation for parties to use ADR, the Commission believes that the potential benefits of this tool are currently underexploited. 100 Market players do also confirm the importance of arbitration to settle global patent disputes, as reflected by Maria Varsellona, chief legal officer at Nokia, who stated that '[t]he use of independent arbitration to resolve differences in patent cases is a recognized best practice' (statement made

⁹⁸ See the short but telling statement made in the ppt presentation of Christian Loysau (ETSI) at WIPO (July 13, 2018 (WIPO/IS/IP/GE/18/D ETSI, available at www.wipo.int/edocs/mdocs/scp/en/wipo_is_ip_ge_18/wipo_is_ip_ge_18_etsi.pdf): 'Standardizations, patenting, licensing and disputes are global – court decisions are national'; see also Antje Baumann, 'Einschaltung von Schiedsgerichten zur Bestimmung der FRAND-Konditionen' (2018), GRUR, 145; Peter Picht, Schiedsverfahren in SEP/FRAND-Streitigkeiten – Überblick und Kernprobleme, Max Planck Institute for Innovation & Competition, Discussion Paper Nr. 13 of 14 October 2018, available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3266546.

⁹⁹ See https://ec.europa.eu/docsroom/documents/26583.

¹⁰⁰ Communication, chapter 3.4, p. 11.

in connection with the rendering of an ICC arbitral award in a licensing dispute between Nokia and LG Electronics¹⁰¹).

The efficient use of arbitration in FRAND disputes can be illustrated by the high-profile $Samsung\ v.\ Apple$ dispute which led to an EU antitrust procedure 102 that was resolved on 29 April 2014 by a decision of the EU Commission. 103

By this decision, the Commission accepted the legally binding commitments made by Samsung (hereinafter 'the Commitments'), 104 which are of high importance because they illustrate the type of processes that have been validated in order to solve FRAND-related disputes. 105

The relevant elements of the case are as follows: Samsung owns SEPs related to the 3G UMTS¹⁰⁶ standard (which is an industry standard for mobile and wireless communications). Samsung committed to license its SEPs on FRAND terms and conditions pursuant to the relevant ETSI rules. Samsung started to enforce certain of its UMTS SEPs against Apple in various EU countries (France, Germany, Italy, the Netherlands and the United Kingdom) in which it sought to obtain preliminary and permanent injunctions from the courts. The EU Commission initiated antitrust proceedings in order to investigate whether Samsung had failed to honour the commitment it gave to ETSI that it would license its SEPs on FRAND terms (i.e. whether Samsung has failed to honour its FRAND commitment in licensing negotiations, including by seeking injunctive relief before the courts of certain member states in relation to some of its SEPs). In the course of its investigation, the Commission preliminarily

¹⁰¹ See 'Nokia receives decision in patent license arbitration with LG Electronics', 18 September 2017, available at www.nokia.com/en_int/news/releases/2017/09/18/ nokia-receives-decision-in-patent-license-arbitration-with-lg-electronics.

Case AT.39939 – Samsung – Enforcement of UMTS standard essential patents; see http://ec.europa.eu/competition/elojade/isef/case_details.cfm?proc_code=1_39939.

Commission Decision of 29 April 2014 relating to a proceeding under Article 102 of the Treaty on the Functioning of the European Union and Article 54 of the EEA Agreement (Case AT.39939 – Samsung – Enforcement of UMTS standard essential patents) (notified under document number C(2014) 2891 final), available at http://ec.europa.eu/competition/antritrust/case/dec_docs/39939/39939_1501_5.pdf (the summary of the decision was published in OJ 2014/C 350/08 of October 4, 2014).

The Commitments are available at http://ec.europa.eu/competition/antitrust/cases/dec_docs/39939/39939_1502_5.pdf.

This section of the article is derived from Jacques de Werra, 'The expanding significance of arbitration for patent licensing disputes: From post-termination disputes to prelicensing FRAND disputes', ASA Bulletin 2014, vol. 32, no. 4, pp. 692–706, available at http://archive-ouverte.unige.ch/unige:46142.

¹⁰⁶ Universal Mobile Telecommunications System.

concluded that Samsung's seeking of preliminary and permanent injunctions against Apple on the basis of its SEPs, in view of the exceptional circumstances of the case and in the absence of any objective justification, raised concerns as to the compatibility of the seeking of such injunctions with Article 102 of the Treaty on the Functioning of the European Union (TFEU). The exceptional circumstances were the UMTS standard-setting process and Samsung's commitment to license its SEPs on FRAND terms and conditions. The absence of objective justification related in particular to the fact that the potential licensee, i.e. Apple, was not unwilling to enter into a licence agreement for Samsung's SEPs on FRAND terms and conditions. By its decision of 29 April 2014, the Commission validated the Commitments made by Samsung¹⁰⁷ and decided that they shall be binding on Samsung (and Samsung's affiliates) for a period of five years and consequently concluded that there were no longer grounds for action by the Commission.

The Commitments are extremely interesting from a dispute resolution perspective, given that they provide for the submission to court proceedings or arbitration of FRAND disputes as part of a sophisticated and multi-step negotiation and dispute resolution mechanism. Commitments first provide for the creation of a so-called 'Licensing Framework' the objective of which is to determine FRAND licensing terms between Samsung and potential licensees. 108 The Licensing Framework institutes a mandatory negotiation period (in principle 12 months) during which Samsung and the potential licensee are invited to negotiate on FRAND terms with a view to agreeing on a unilateral licence or a cross-licence. If the negotiations fail and if the parties do not agree on an alternative procedure for determining FRAND terms, the Commitments provide that 'the Parties shall submit the matter to arbitration or to court adjudication in order to determine the FRAND terms of a Unilateral License or, as applicable a Cross-License [...]'109 in the course of a phase called 'Third Party Determination of FRAND Terms.'110 The Parties are then invited to jointly decide whether they shall submit the FRAND dispute to arbitration or court adjudication

¹⁰⁷ See n 103

¹⁰⁸ The Commitments provide for the opportunities to negotiate cross-licences (in the case Samsung's licensees are also owners of SEPs).

¹⁰⁹ Ibid., clause 1.b.

¹¹⁰ Ibid.

within a given time limit, whereby in the absence of agreement, the dispute will be submitted to courts. 111

The Commitments provide for quite detailed rules on the arbitration proceedings. They first opt for institutional arbitration by indicating that 'the dispute shall be finally settled under the rules of arbitration of the ICC, unless the Parties mutually agree that the arbitration tribunal will be the patent mediation and arbitration center as established under Article 35(1) of the Agreement on a Unified Patent Court'. Notably, the Commitments provide that '[a] non-confidential version of the arbitral decision shall be published within 90 days following the issuance of such decision' and that '[t]he non-confidential version of the arbitral decision may disclose the methodology relied upon by the arbitral panel to arrive at specific FRAND terms, but shall in no event disclose specific terms'. This unusual element, which stands in obvious conflict with the basic tenet of confidentiality in commercial arbitration, is due to the requirement of transparency of FRAND decisions and awards reflected in the decision of the Commission of 29 April 2014.

- Pursuant to the Commitments clause 10: '[t]he venue for the court adjudication procedure will be the Patent Court, High Court of England and Wales (or any successor court), or the UPC' [i.e. the Unified Patent Court as instituted by the Agreement on a Unified Patent Court of February 19, 2013, available at www.gov.uk/government/publications/agreement-on-a-unified-patent-court-19-february-2013].
- Ibid., clause 9.a. The reference to the Patent Mediation and Arbitration Centre to be established under the UPC (Article 35) is quite interesting because of the specificities of the Centre. It confirms the potential importance that this centre could gain as provider of arbitration and mediation services for IP (and specifically FRAND patent licensing) disputes in the future. The Centre has not been established yet and has not published its arbitration and mediation rules (that shall be adopted by the Centre pursuant to Article 35 para. 3 UPC); for an analysis, see Jacques de Werra, 'New Developments of IP Arbitration and Mediation in Europe: The Patent Mediation and Arbitration Center Instituted by the Agreement on a Unified Patent Court' (2014), Revista Brasileira de Arbitragem, pp. 17–35 (available at http://archive-ouverte.unige.ch/unige:39878); it also remains to be seen whether the Centre will adopt specific procedures and principles for FRAND disputes.
- 113 Commitments clause 9.e.
- Decision of the Commission (note 103), para. 111 ('the publication of a non-confidential version of arbitration awards will contribute to the creation of a body of case-law upon which future FRAND determinations could draw. This should contribute to a principled and efficient solution of future FRAND disputes by arbitration tribunals'). The justification of the public disclosure of FRAND-related arbitral awards is debated in the legal literature. See Yoonhee Kim, 'Lifting Confidentiality of FRAND Royalties in SEP Arbitration' (2014), 16 Columbia Science & Technology Law Review, pp. 1–35, available at https://doi.org/10.7916/stlr.v16i1.3989. One issue to consider is the value and usefulness of the information contained in an arbitral award that shall potentially be disclosed

The Commitments further provide for a 'de novo appeal on issues of fact and law' against an arbitral award¹¹⁵ before another arbitral tribunal, ¹¹⁶ whereby the 'appeal shall be treated as a separate arbitration'¹¹⁷ in which the parties can 'agree to limit the issues to be considered on appeal'. ¹¹⁸ This constitutes another unusual feature of these proceedings which stands in sharp contrast to standard commercial arbitration practice. Interestingly, the Commitments state in this respect with regard to the seat of the arbitration that it 'will be in an EEA jurisdiction in which national laws permit Parties to agree to make an arbitration decision subject to appeal to a second arbitral tribunal'. ¹¹⁹

Third, the Commitments indicate, as to the substantive scope of the jurisdictional power of the arbitral tribunal that '[t]he arbitral panel shall

to the public. In this respect, we may wonder if the publication of only the FRAND licensing rate would be relevant. See Kim, p. 32 ('[t]his Article does not argue that all patent licensing terms be known to the public: only a FRAND licensing rate calls for scrutiny in light of its public nature'). Knowing that the royalty rate will likely also reflect the validity of the licensed SEPs at issue, the relative value of the asserted patents both to the technical standard and to the infringing product. See Contreras and Newman (n. 75), p. 37. On this basis, it is uncertain whether the disclosure of the sole royalty rate could be of significant value. Another aspect relates to the non-discriminatory element of FRAND licensing. This requirement of non-discrimination presupposes that decision makers (and specifically arbitral tribunals) shall have access to other decisions and licences in order to ensure that this condition of non-discrimination is met. Carter (n. 75), p. 78. It however remains that non-discrimination does not necessarily imply that all the licensing terms and conditions and all the license agreements shall be identical. See Weber (n. 61), p. 56 (noting that the non-discrimination obligation 'does not exclude that licensing terms are dependent on the volume of the ordered goods or the creditworthiness of the licensee'). It would be worth considering the adoption of certain guidelines about the publication of FRAND-related arbitral awards (whereby certain confidential sections could be redacted in order to find an equitable balance between confidentiality and transparency) and to entrust a third party (potentially an arbitration institution) with the mission of communicating the relevant information to the arbitral tribunals, or even with the mission to review and scrutinize draft arbitral awards in order to ensure a certain consistency between the awards that shall be rendered under its supervision on FRAND licensing disputes. See Carter (n. 75), p. 78.

115 '[T]he first arbitral tribunal's decision' (according to the terminology of the Commitments, clause 9.f.).

^{116 &#}x27;[T]he second arbitral tribunal' (according to the terminology of the Commitments, clause 9.f.i), whereby reference is also made to 'the second arbitral panel', clause 9.f.ii).

¹¹⁷ Commitments, clause 9.f.v.

¹¹⁸ Commitments, clause 9.f.iii.

¹¹⁹ Commitments, clause 9.d; the Commitments remain silent as to whether and under what conditions an appeal can be lodged against the award rendered on appeal by 'the second arbitral tribunal' which will ultimately depend on the law applicable in the jurisdiction of the seat of the arbitration.

take into account issues of validity, infringement, essentiality raised by the Parties in making the Third-Party Determination of FRAND Terms'. This is interesting because it shows that arbitral tribunals have to take into account potential claims of invalidity of the disputed SEPs. This is of particular relevance to the extent that this confirms that it is legitimate that arbitral tribunals shall have the power to 'take into account' these issues. 122

The *Samsung* case shows in any event that arbitration is viewed as a sustainable alternative to court litigation for solving FRAND disputes¹²³

120 Commitments, clause 9.g.

It appears that this rule (in view of its systematic position in the Commitments) shall apply to both the 'first arbitral tribunal' and to the 'second arbitral tribunal'.

- The Commitments do not address the potential effects of an award rendered by the arbitral tribunal finding a SEP invalid. It should however be assumed that this will be limited to the parties, i.e. inter partes (and not erga omnes), also because of the wording of the Commitments which indicate that the arbitral tribunal shall 'take into account' these issues, and which does not indicate that the arbitral tribunals shall have the power to decide as such on the invalidity of a given SEP. For arbitration disputes submitted to the patent mediation and arbitration centre under the UPC, Article 35 para. 2 in fine UPC expressly provides that 'a patent may not be revoked or limited in mediation or arbitration proceedings' so that arbitral tribunals would not have the power to revoke a patent in that case. Another issue is to define under which (patent) law(s) the issues of (in)validity and (non-) infringements of SEPs will have to be decided in view of the clause of the Commitments providing that '[t]he arbitration will be governed by the laws of England and Wales'. (It is uncertain whether the goal of this provision was to address the law applicable to the relevant patent issues (particularly their infringement and their validity)). The question arises whether this provision was meant and was supposed to constitute a choice of law clause which could potentially mean that all issues that may arise in the arbitration (including issues of validity or infringement of the SEPs) should be decided under the laws of England and Wales. This would be possible in view of the freedom of the parties to select the governing law in international commercial arbitration. This flexibility and liberalism of arbitration stand in sharp contrast to the rigidity of choice of law rules which apply before (EU) national courts. Article 8 of the Regulation (EC) No 864/2007 of the European Parliament and of the Council of 11 July 2007 on the law applicable to non-contractual obligations (Rome II) indeed provides that '[t]he law applicable to a non-contractual obligation arising from an infringement of an intellectual property right shall be the law of the country for which protection is claimed' (Article 8 para. 1), whereby this choice of law rule is mandatory and thus cannot be derogated from by contract (Article 8 para. 3); on this issue (and on the comparative advantages of arbitration in terms of selection of the governing law), see Jacques de Werra, 'Arbitrating International Intellectual Property Disputes: Time to Think Beyond the Issue of (Non-) Arbitrability' (2012), International Business Law Journal 3, pp. 299-317, p. 307 seq., available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2149762.
- This is also confirmed by other antitrust proceedings relating to FRAND licensing, and particularly by the US case *In re Motorola Mobility LLC, and Google Inc.*, available at: www.ftc.gov/enforcement/cases-proceedings/1210120/motorola-mobility-llc-google-inc-matter;

and has been validated as such by competition authorities. It is therefore not surprising that efforts have been made by major institutions in order to address the needs of companies involved in FRAND licensing disputes and to conceptualize new dispute resolution mechanisms that shall be tailored to such disputes. The WIPO Arbitration and Mediation Center has consequently established specific submission agreements that are adapted to FRAND Disputes and the International Telecommunication Union (ITU) continues to be active on these issues. The surprise of the surprise

The implementation of FRAND commitments still raises major difficulties today and consequently continues to be discussed in the relevant fora. It is in any case important to ensure that fair and equitable dispute resolution mechanisms shall be adopted to solve FRAND patent licensing disputes, whereby arbitration could play a significant role in this context,

in its decision and order of 23 July 2013, available at www.ftc.gov/sites/default/files/documents/cases/2013/07/130724googlemotorolado.pdf, the Federal Trade Commission validated arbitration as a means 'to establish a License Agreement' (para. I.D) under SEPs owned by Motorola to willing licensees; arbitration is also selected by other technical bodies in order to solve FRAND-related SEPs licensing disputes; this is the case of the DVB (Digital Video Broadcasting) Project, available at www.dvb.org, Article 14.7 of its Statutes (also referred to as 'Memorandum of Understanding'), available at www.dvb.org/resources/public/documents_site/dvb_mou.pdf, provides for the submission to arbitration of disputes arising between Members about IPR licensing as follows: 'Each Member hereby agrees, on its behalf and on behalf of its affiliated companies, that, subject to clause 14.9 of this Article 14, all disputes with any other member of these statutes (MoU) regarding solely the terms and conditions of licenses arising in connection with the undertaking in this Article 14 shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by three arbitrators appointed in accordance with such Rules. Arbitration shall take place in Frankfurt, Germany.'

124 See Contreras and Newman (n. 75), p. 46 (group instituted under the aegis of the American Bar Association that is seeking to develop best practices for the arbitration of SEP disputes (called the 'ABA SEP Arbitration Project (ASAP)')).

See the specific submission agreements that are tailored to FRAND Disputes, available at www.wipo.int/amc/en/center/specific-sectors/ict/frand/; for a presentation, see Heike Wollgast and Ignacio de Castro, 'WIPO Arbitration and Mediation Center: New 2014 WIPO Rules' ASA Bulletin 2/2014, pp. 286–296, at p. 290 seq.

See the excellent report of the ITU, Understanding patents, competition and standardization in an interconnected world (1 July 2014), available at www.itu.int/en/ITU-T/ipr/Pages/Understanding-patents,-competition-and-standardization-in-an-interconnected-world.aspx; see also the site of the 'ITU Patent Roundtable', available at www.itu.int/en/ITU-T/Workshops-and-Seminars/patent/Pages/default.aspx. See also Xiaoping Wu, 'Interplay between Patents and Standards in the Information and Communication Technology (ICT) Sector and its Relevance to the Implementation of the WTO Agreements', WTO Working Paper ERSD-2017-08, 7 April 2017, available at www.wto.org/english/res_e/reser_e/ersd201708_e.pdf.

as evidenced by certain proposals which have suggested that arbitration shall be the exclusive dispute resolution mechanism for solving FRAND disputes in certain circumstances. 127

Conclusion The debate about FRAND licensing shows that the transaction costs resulting from licensing negotiations can be very high, 128 which calls for a certain work of legal standardization. In order to be efficient, FRAND terms and conditions should be standardized at the international level in order to offer a global framework for this specific type of knowledge-based transaction. By way of example, and as discussed above, the supposedly irrevocable nature of the licence and the conditions under which a FRAND licence can be terminated unilaterally (particularly by the FRAND licensor) should ideally be harmonized at the global level in order to create standard fair, reasonable and nondiscriminatory FRAND licensing terms. The process of global technical standardization which has led to the development of the concept of FRAND licensing terms and conditions should consequently lead to a global legal standardization of these terms and conditions (substantive legal standards) and to the standardization of the processes and mechanisms (procedural legal standards) which can lead to their use in a specific case, i.e. to the negotiation and conclusion of a FRAND-compliant licence agreement.

FRAND licensing thus shows the complexities of global harmonization of patent licensing transactions as to the substance (i.e. what shall be held as fair, reasonable and non-discriminatory licensing terms and conditions) and as to the processes (i.e. how shall FRAND licensing disputes be efficiently solved). Even if FRAND licensing terms and FRAND-related legal issues have specific features which cannot

¹²⁷ See Mark A. Lemley and Carl Shapiro, 'A Simple Approach to Setting Reasonable Royalties for Standard-Essential Patents' (2013), 28 Berkeley Technology Law Journal, pp. 1135–1166, available at http://btlj.org/data/articles2015/vol28/28_2/28-berkeley-tech-l-j-1135-1166.pdf, who have proposed that the standard-essential patent owner shall be obligated to enter into binding baseball-style (or 'final offer') arbitration with any willing licensee to determine the royalty rate; for a critical analysis of their proposal, see Pierre Larouch et al., 'Settling FRAND Disputes: Is Mandatory Arbitration a Reasonable and Non-Discriminatory Alternative?' (2014), Journal of Competition Law & Economics, pp. 581–610, available at http://jcle.oxfordjournals.org/content/10/3/581 abstract.

See the interesting paper (under copyright law) of Peter S. Menell and Ben Depoorter, 'Using Fee Shifting: A Proposal to Promote Fair Use and Fair Licensing' (2014), 105 California Law Review, pp. 53–86, available at www.jstor.org/stable/23784367.

necessarily be found in other areas of intellectual property licensing, the discussion about FRAND licensing shows that the law of intellectual property licensing is still underdeveloped at the international and even regional level 129 and that this situation is inadequate. 130

The discussion about FRAND licensing and the way national courts deal with this (as reflected in Unwired Planet) reveal the challenges of defining fair and reasonable licensing terms and conditions from a transnational perspective. It may appear surprising that the law governing IP licensing transactions remains largely unaffected by global trends of harmonization in spite of the unanimous understanding that intellectual property transactions as such, and licensing agreements in particular, are essential in today's interconnected world and economy, as demonstrated by this chapter. On this basis, FRAND licensing confirms the interest and even the need to develop common global standards of fair and reasonable licensing terms. This need is further confirmed by the development of compulsory licensing mechanisms which raise similar issues, i.e. what shall be the standard terms and conditions of a compulsory licence?¹³¹ In the absence of source of global guidance,¹³² local courts will most probably continue to establish their own standards, which may lead to conflicting solutions from a transnational

¹²⁹ This is (perhaps surprisingly) also the case within the European Union, see, e.g., Jacques de Werra, 'The Need to Harmonize Intellectual Property Licensing Law: A European Perspective', in Jacques de Werra (ed.), Research Handbook on Intellectual Property Licensing, Cheltenham: Edward Elgar, 2013, pp. 450–472, available at https://archive-ouverte.unige.ch/unige:29497.

For a presentation of various perspectives of licensing practices in various countries and regions, and from various policy standpoints, see Jacques de Werra (ed.), *Research Handbook on Intellectual Property Licensing*, Cheltenham: Edward Elar Publishing, 2013, available at www.ip-licensing.info.

¹³¹ It is worth mentioning that compulsory licensing mechanisms are also attracting increased scientific attention, see the collective book: Reto M. Hilty and Kung-Chung Liu (eds), 'Compulsory Licensing: Practical Experiences and Ways Forward', MPI Studies in Intellectual Property and Competition Law No 22, Munich 2015.

Article 31 TRIPS does not define the detailed conditions under which compulsory licences shall be granted and many issues are still open; for instance, how can the patent owner and licensor control whether the compulsory licensee pays the adequate level of royalties (i.e. can there be an audit?)? Is there an implied warranty of validity or title of the patent owner? Can the compulsory licence be terminated beyond the scenario identified in Article 31 para. g TRIPS (which provides that 'authorization for such use shall be liable, subject to adequate protection of the legitimate interests of the persons so authorized, to be terminated if and when the circumstances which led to it cease to exist and are unlikely to recur [...]'), for instance because of a material breach committed by the licensee, etc.

perspective.¹³³ This is what results from the *Unwired Planet* case, which illustrates the risks resulting from the autonomous definition of FRAND terms by national courts.

Conclusion: Towards a Global Framework for Knowledge Transactions

We began our analysis with a description of the vital importance of knowledge-based IP transactions to the modern global economy. As we observed, the IP and information products that trade by licence are no less important to this century than goods were to the last (and are now). Yet, there is still no recognized, general statement of the commercial legal principles dealing with the unique but common transactional form of licence (like the unique transactional form of sale) and the unique but common qualities of knowledge-based intangibles.

Various private ordering regimes have emerged to address discrete types of transactions, whether by industry or other groups. We discussed

See, by way of example, the dispute about the grant of a compulsory licence between Bayer and Natco in India as resulting from the Decision of the Intellectual Property Appellate Board ('IPAB') of Chennai of 4 March 2013 (OA/35/2012/PT/MUM); decision of the Controller of Patents Mumbai of March 9, 2012; appeals against the decision of the IPAB were dismissed by the Bombay High Court (see http://spicyip.com/2014/07/spicyip-tidbit-bombay-hc-dis misses-challenge-to-nexavar-compulsory-license.html) and by the Indian Supreme Court (which dismissed Bayer's Special Leave Petition, see www.globalhealthrights.org/wp-con tent/uploads/2015/11/Natco-v-Bayer.pdf. The FRAND licensing debate also raises the difficult question of the role of competition law in solving these issues at the crossroads of diverse legal fields, including contract law and intellectual property law (and also to the interactions between these two fields). For quite a vehement position criticizing the interference of competition law in the intellectual property system, see Robin Jacob, 'Competition Authorities Support Grasshoppers: Competition Law as a Threat to Innovation' (2013), Competition Policy International 9, 2, pp. 15-29 (concluding his paper (p. 26) by stating that '[t]he Competition Authorities should cease harassing inventive industries, remember that patents expire anyway and let the patent system do the job it was designed to do. Leave the ants alone'). While it is clear and undisputable that competition law is of key importance in this debate and that it must consequently not be underestimated, it still seems doubtful to admit that mechanisms which have been validated by competition authorities (such as the Commitments of Samsung commented above) shall be viewed as the ultimate standards of reference for all purposes, and specifically from a dispute resolution perspective. See Carter (n. 75), p. 72 seq. (scrutinizing the FTC's proposed and final consent orders in the US Motorola-Google dispute from an arbitration standpoint, whereby these comments can apply to other competition law proceedings in FRAND disputes). As discussed above, the Commitments raise complex issues which will need to be duly reflected upon in order to establish adequate and ideally global substantive and procedural standards for solving FRAND disputes.

two examples. One form of private ordering - 'information law merchant' - covers only a limited number of participants who routinely trade in certain types of information assets. As we observed, effective participation in many forms of international commercial IP transactions often requires access to specialized legal knowledge, extensive commercial experience, and elaborate contract forms, creating barriers to entry for new actors, disadvantaging smaller firms, increasing transaction and performance costs, and fostering disputes. 134 Our other example related to FRAND licensing. Our discussion of FRAND licensing revealed that the piecemeal and equally fragmented development of FRAND licensing terms and conditions (beyond the issue of the financial remuneration or royalties) provided no firmer foundation for addressing the general commerce in IP assets. While it is true that courts ultimately can validate the FRAND licensing terms in case of dispute between the parties, the limited experience so far shows that courts are unlikely to interfere significantly in the parties' proposed licensing terms; 135 thus, as with other licensing regimes, FRAND licensing constitutes a type of private ordering.

In short, we believe that, just as international organizations were created to foster global commercial trade and finance analysed and fashioned frameworks of contractual principles for sales of goods and secured financing, those international organizations and the organizations created to foster intellectual property protection and access should undertake a project to address the general principles relating to international IP commercial contracts.

That naturally leads to the questions of what form the product of such a project takes and what types of issues would such a product address. Let us address the second question first.

Space does not permit us to describe all of the issues that an instrument treating commercial transactions in IP (or information assets for that matter) might address. ¹³⁶ Many are the recurring legal issues in international commercial transactions in information assets, especially

¹³⁴ See our discussion at n. 38, p. 699 supra.

Unwired Planet Huawei April 2017 Judgment, [2017] EWHC 711 (Pat) (5 April 2017), para. 169: (opinion of Mr Justice Birss) ('Having now heard this trial I remain of the view that the court cannot craft a set of FRAND terms out of thin air').

For a discussion of the issues to be addressed in, and a stalking horse start for, a model law, see L. Brennan and J. Dodd, 'A Concept Proposal for a Model Intellectual Property Law', in Jacques de Werra (ed.), Research Handbook on Intellectual Property Licensing, Cheltenham: Edward Elgar, 2013, pp. 257–280.

IP. Even a brief encounter with various treatises and treatments of licensing law¹³⁷ leaves one with at least two impressions: the volumes and volumes of discussion included in these (and other) treatises reflect the state of a far-too-complex Information Law Merchant¹³⁸ and many of the same types of legal issues relating to the commercial and contractual aspects of licences are covered. This suggests that a set of coherent principles relating to international IP commercial contracts could profitably be addressed and distilled for the guidance of courts, practitioners and participants. Here are just a few of those issues:

- Formation: Manner of forming an enforceable IP contract.
 - How can enforceable international IP contract be formed?
 - Should formation rules differ by different types IP (e.g. patent or copyright) or IP uses (e.g. assignment or licence)? If so, how are hybrid licences to be treated (i.e. licences relating to multiple or unidentified IP)?
 - How should territoriality of discrete IP rights be handled in a licence that potentially covers several or many jurisdictions?
 - Can licensees contract out of exhaustion of IP rights?
 - Are, or should there be, any formalities, e.g. a writing requirement or a registration requirement?
 - Can an IP contract be formed electronically?
 - Can an IP contract be formed by conduct, such as an implied licence, and if so how?
 - What formalities, if any, are needed to amend an IP contract?
 - Can an enforceable contract be formed if some terms are left open or to be later specified? If so which ones?
- Interpretation:
 - Should special interpretation rules exist for IP contracts?
 - Most importantly, what are the principles for interpreting scope? E.g.
 - Are incidental rights (e.g. know-how) implicitly covered? If so on what basis and to what extent?¹³⁹

¹³⁷ See, e.g., J. Dratler, *Licensing of Intellectual Property*, New York: Law Journals Press, 1994; R. Milgrim and E. Bensen, *Milgrim on Licensing*, New York: Matthew Bender, 1991; Nimmer and Dodd, *Modern Licensing Law* (n. 1 supra).

Again, we are reminded of Karl Llewellyn's description of the state of the law of negotiable instruments in the United States at the end of the nineteenth century. See n. 27 supra.

Ancillary arrangements can be important in commercial transactions generally, so consideration might be given as to the composite of arrangements that might be included beyond the specific licence arrangement. Cf. Berman, Law and Revolution,

- Are future improvements/new developments/new technologies covered?
- Role of course of performance/industry practice/course of dealing.
- Implied Terms/Default Rules: One essential purpose of a commercial law is to provide default rules/terms that may be customarily included unless the parties otherwise agree. Addressing the question of which default rules/terms are unique to IP contracts and should be recognized would be the most important task of the project. Potential Examples for IP contracts:
 - Exclusivity: What does the word 'exclusive' imply? 140
 - Duration:
 - Duration vs commencement of other performance: future delivery or creation of IP/royalties?
 - What is the duration of an IP contract if not specified?
 - Geographic scope.
 - Transferability:
 - If the IP contract is silent, can a licensee transfer contractual rights or delegate contractual duties to another party?
 - Sub-licence? If the base licence is terminated or expires, what happens to sub-licences?

As to the form of the final product, we would expect that the organizations and entities undertaking this most important project for creating a framework for the commercial law of IP (or information assets) would ultimately determine the form. The important point here is that the project should develop a framework that would provide guidance as to general commercial law principles supporting IP transactions. ¹⁴¹

However, we do think two major boundaries should be set on the scope of the project. First, the project should treat *commercial* law – not consumer transactions and should, as with other commercial laws, not prescribe specific contract terms. The commercial law should support contracts and not make them, setting forth, as default rules, the normal principles that generally would apply, while leaving virtually complete party autonomy to override the default rules by the parties. Commerce

p. 334 (n. 27). The Law Merchant governed not only the sale in the strict sense, but also other aspects of commercial transactions, including transportation, insurance, and financing.

See text accompanying nn. 45–51 supra.

Agthe et al., A Proposed UNICTRAL Project On Commercial Transactions In Intellectual Property, pp. 2–3 (n. 14).

on the terms that the parties agree should be respected in commercial transaction, just as it is under other bodies of commercial law. The idea would be to facilitate and support trade by reducing transaction costs, with a common framework, not frustrate trade on terms of the parties' own choosing.

Second, we firmly believe that the project would not seek to alter public policy requirements or IP regimes. Thus, laws and policies relating to competition, consumer protection or employment law would not be addressed. Nor would the project seek either to expand or restrict IP property rights or privileges. The idea, again, is to support commercial transactions in knowledge-based intangibles by addressing contractual principles, not the substance of IP property rights. Thus, it would not impose mandatory contract terms, but rather only provide a framework for contractual dealings.

In the final analysis, developing international recognition of such contractual principles undergirding global trade in knowledge-based intangible assets is such an important task, and is so vitally needed, that those who steer the project should avoid at all costs the temptations to build rigid rules that would straightjacket, not facilitate, party autonomy and commercial bargains or to tinker with public policy or property rights. The task of formulating a cross-border framework as we have described it is, as we have said above, no less important to commerce in this century than the task of recognizing and validating commercial transactions in tangible goods and in finance during the last century.

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