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Jacques de Werra (éd.)

Accords de technologie

Technology Transactions

intelle©tual p®operty - p®opriété intelle©tuelle
p®opriété intelle©tuelle - *intelle©tual p®operty*

Accords de technologie

Technology Transactions

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Mark Anderson; Philippe Gilliéron; Adrien Alberini



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Avant-propos

Cet ouvrage constitue le onzième volume de la collection propriété intellectuelle – *intellectual property* (www.pi-ip.ch) lancée il y a dix ans à la Faculté de droit de l'Université de Genève. Il rassemble les contributions qui ont été rédigées à l'occasion de la Journée de Droit de la Propriété Intellectuelle (www.jdpi.ch) organisée le 8 février 2018 sur le thème « Accords de technologie / *Technology Transactions* ».

La valorisation efficace et contrôlée du savoir constitue l'un des moteurs de l'économie globalisée de la connaissance dans laquelle nos entreprises, institutions et sociétés évoluent. Une telle valorisation porte en particulier sur le savoir de nature technologique (souvent protégé par le droit de la propriété intellectuelle – principalement droit des brevets d'invention, des secrets d'affaires et droit d'auteur) dont la transmission fait l'objet de transactions contractuelles aussi nombreuses que multiformes. En dépit de leur fréquence dans la pratique, les accords de technologie continuent à soulever de multiples questions juridiques non seulement sur le plan international mais aussi au niveau national et local. Les raisons en sont multiples: limitons-nous à mentionner ici que les accords de technologie se trouvent à l'intersection de plusieurs domaines du droit (notamment le droit des contrats, de la propriété intellectuelle et de la concurrence) et qu'ils portent sur un objet (la technologie) par essence mouvant et mobile qui ne cesse d'évoluer, ce qui confère une dynamique particulière à ces accords.

De plus, bien que cela puisse paraître étonnant dans un monde globalisé et connecté qui repose sur l'immatériel, force est de constater que les règles applicables aux accords de technologie ne sont pas harmonisées sur le plan global, et ce, même si une grande partie de ces accords s'étend sur plusieurs territoires nationaux, voire couvrent le monde entier (p.ex. sous la forme d'une licence de technologie de portée mondiale). Des questions épineuses se posent au demeurant aussi sur le plan local en fonction du type de transactions, des secteurs technologiques concernés (par exemple en matière de technologies de l'information et de la communication) ou encore des domaines juridiques en cause (en particulier pour ce qui concerne l'application du droit de la concurrence aux d'accords de technologie).

Au vu de ces questions, l'ambition de cet ouvrage est d'offrir (sans prétention d'exhaustivité tant la matière est vaste) des analyses fouillées d'un

certain nombre d'entre elles conduites du point de vue de la politique réglementaire et/ou de la pratique des accords de technologie. C'est l'occasion de remercier ici très vivement les auteurs pour les excellentes contributions qu'ils ont livrées dans cet ouvrage. Nos vifs remerciements s'adressent également à Hélène Bruderer qui a géré les travaux d'édition de ce nouveau volume de la collection.

Genève, septembre 2018.

Jacques de Werra

Sommaire/*Contents*

Avant-propos	V
Table des abréviations	XIII
Marco M. Aleman	
Patent Transactions. Limited regulation in the multilateral legal framework and diverse legislation and practice at the country level	1
Christoph Spennemann	
International Technology Transactions from a Development Perspective ..	15
Mark Anderson	
International IP transactions: arguments for developing a UN standard ..	33
Philippe Gilliéron	
IT Agreements – from software to cloud services	53
Adrien Alberini	
Accords de technologie et droit de la concurrence: de l’approche plus économique à la saisie par l’abus de position dominante	73

Table des matières/*Table of contents*

Avant-propos	V
Table des abréviations	XIII

Patent Transactions. Limited regulation in the multilateral legal framework and diverse legislation and practice at the country level

Marco M. Aleman

I. Introduction	1
II. Types of Patent Technology Transactions Involving Patents	2
III. The International Legal Framework	3
IV. The current agenda	4
V. Key Issues for International Patent Transactions	5
A. Assignment of Patent Rights	6
1. The line between inventorship and ownership	7
2. Joint inventions	8
3. Formalities required to effect assignment of patent rights	9
B. Licensing of Patents	10
1. Formalities required	10
2. Standing of exclusive licensees to enforce a patent	11
C. Security interests over patent rights	12
D. Other issues to consider in international patent transactions	13
VI. Conclusion	14

International Technology Transactions from a Development Perspective

Christoph Spennemann

I. Introduction	15
II. Formal and informal means of technology transfer and their role in the development process	16
III. The role of contractual transactions in facilitating developing countries' access to technology	18
A. <i>ELEA</i> in Argentina	19
B. <i>Beximco Pharmaceuticals Ltd</i> in Bangladesh	20
C. <i>Tecnoquímicas</i> in Colombia	20

D. SEAA in Ethiopia	22
E. <i>Quality Chemicals</i> in Uganda	23
F. Lessons from the case studies	24
IV. The limitations of the licensing approach	25
A. The UNCTAD draft International Code of Conduct on the Transfer of Technology	27
B. The TRIPS Agreement	28
V. Conclusions	30

International IP transactions: arguments for developing a UN standard

Mark Anderson

I. Introduction	33
II. International nature of IP transactions, and their increasing importance in international trade	35
III. Patchy and inconsistent treatment of IP transactions in national and international IP laws	37
A. Assignments	39
B. Licences	40
C. Co-ownership	42
IV. Why does it matter?	43
A. Dealing with the issues in the licence agreement; poor quality of licence templates	43
B. First example – pass on the benefit of the licence to licensee’s customers	45
C. Second example – pass on obligations to new owners of the licensed IP	46
V. Comparison with laws on the sale of goods	49
VI. Need for international approach to IP transactional law	51

IT Agreements – from software to cloud services

Philippe Gilliéron

I. Typology	53
A. Proof of concept (PoC)	53
B. Software agreements	54
C. Cloud based agreements	54
D. Professional services agreements	55
E. Digital agreements	55

II.	Structure	55
III.	Software agreements (on premises)	57
	A. General remarks	57
	B. License	57
	C. Support	59
	D. Escrow	60
IV.	Cloud based agreements	61
	A. General remarks	61
	B. License	61
	C. Support	63
	D. Escrow	65
	E. Data protection and security	66
V.	Professional services agreements	67
	A. General Remarks	67
	B. Contract structure	67
	C. New products	68
	D. Customization of existing products	69
VI.	Digital services agreements	70
VII.	Conclusion	72

Accords de technologie et droit de la concurrence: de l'approche plus économique à la saisie par l'abus de position dominante

Adrien Alberini

I.	Introduction	73
II.	Réglementation en matière d'accords de technologie	77
	A. Aperçu des règles applicables	77
	B. Changement de paradigme	79
III.	Notion d'accord de technologie	80
	A. Véritables accords de technologie?	80
	B. Qualification autonome et distinctions	82
	C. Contexte économique et structure de marché	83
IV.	Restrictions intratechnologiques: approche formaliste	84
	A. Notion et approche	84
	B. Restrictions en matière de territoires et de clients	85
V.	Restrictions de l'incitation à innover: approche plus économique	89
	A. Notion et approche	89
	B. Rétrocessions des améliorations	90

XII Table des matières/*Table of contents*

C. Interdiction d’effectuer de la recherche et développement	92
D. Non-contestation des droits de propriété intellectuelle	93
VI. Une saisie par l’abus de position dominante?	97
A. Du refus de contracter aux termes FRAND	97
B. Engagement FRAND: focus initial sur le processus de négociation .	100
C. Evolution vers les conditions de la licence et le niveau des redevances	101
VII. Conclusions	106

Table des abréviations

ADPIC/TRIPS	Accord sur les aspects des droits de propriété intellectuelle qui touchent au commerce, annexe 1C de l'Accord de Marrakech du 15 avril 1994 instituant l'Organisation mondiale du commerce/ Agreement on Trade-Related Aspects of Intellectual Property Rights, Annex 1C of the Marrakesh Agreement Establishing the World Trade Organization, signed in Marrakesh, Morocco on April 15, 1994
Aff.	Affaire
AI	Artificial Intelligence
Al.	Alinéa
APIs	Active Pharmaceutical Ingredients
Art.	Article
ARVs	Antiretroviral
ATF	Arrêts du Tribunal fédéral (Recueil Officiel) (Suisse)
Berne Convention	Berne Convention for the Protection of Literary and Artistic Works signed in Berne on September 28, 1979
BO	Bulletin Officiel (Suisse)
c./consid.	considérant
CC	Code Civil du 10 décembre 1907 (RS 210) (Suisse)/Swiss Civil Code (RS 210) (Switzerland)
CDPA	Copyright Designs and Patents Act 1988 (United Kingdom)
CEIPI	Centre for International Intellectual Property Studies
Cf.	Conférer
chron.	Chronique
CISG	United Nations Convention on Contracts for the International Sale of Goods signed in Vienna on April 11, 1980
CJCE/ECJ	Cour de Justice des Communautés Européennes/European Court of Justice
CJUE/CJEU	Cour de Justice de l'Union Européenne/Court of Justice of the European Union
CO	Code des obligations du 30 mars 1911 (RS 220) (Suisse)/Swiss Code of Obligation (RS 220) (Switzerland)
Coll.	Collection
Comco	Commission suisse de la concurrence
comm.	Commentaire
CPU	Central Processing Unit

CR PI	Commentaire Romand Propriété Intellectuelle, Jacques de Werra/Philippe Gilliéron (eds.), Bâle 2013
DMCA	Digital Millennium Copyright Act (Pub L 105–304) (US)
Draft ToT Code	UNCTAD Draft International Code of Conduct on the Transfer of Technology of 1985
e. g.	Exempli gratia
ECHR	European Convention on Human Rights
ECJ	Voir CJCE
éd./ed.	Éditeur/editor
EHGCs	empty hard gelatin capsules
EIPR	European Intellectual Property Review
EU	Voir UE
EUIPO	Office de l'Union européenne pour la propriété intellectuelle/ European Intellectual Property Office
EWHC	High Court of England and Wales
FF	Feuille fédérale (Suisse)
FRAND	Fair, Reasonable and Non-Discriminatory Standard
FTC	US Federal Trade Commission
GATT	General Agreement on Tariffs and Trade/Accord Général sur les Tarifs Douaniers et le Commerce
GDPR	Regulation (EU) 2016/679 of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (JO 2016/ L 119)
GMP	Good Manufacturing Practice
GRUR	Gewerblicher Rechtsschutz und Urheberrecht (Allemagne)
GRUR Int.	Gewerblicher Rechtsschutz und Urheberrecht, Internationaler Teil (Allemagne)
i. e.	id est
IaaS	Infrastructure as a Service
ibid.	Ibidem
id.	idem
IIC	International Review of Intellectual Property and Competition Law
IP	Voir PI
IPi	Institut fédéral de la Propriété Intellectuelle (Suisse)
IPR	Intellectual Property Rights
IT	Information Technology

JO/OJ	Journal Officiel de l'Union Européenne/Official Journal of the European Union
LBI	Loi fédérale sur les brevets d'inventions du 25 juin 1954 (RS 232.14) (Suisse)/Federal Act on Patents for Inventions (RS 232.14) (Switzerland)
LCart	Loi fédérale sur les cartels et autres restrictions à la concurrence du 6 octobre 1995 (RS 251) (Suisse)/Cartel Act (RS 251) (Switzerland)
LCD	Loi contre la concurrence déloyale du 19 décembre 1989 (RS 241) (Suisse)/Federal Act on Unfair Competition (RS 241) (Switzerland)
LD CoHor	Lignes directrices sur l'applicabilité de l'article 101 du traité sur le fonctionnement de l'Union européenne aux accords de coopération horizontale (JO 2011/C 11/1)
LD TT	Lignes directrices concernant l'application de l'article 101 du traité sur le fonctionnement de l'Union européenne à des catégories d'accords de transfert de technologie (JO 2014/C 89/3)
let./lit.	Lettre/littera
LPI	Law on Industrial Property 9,279 of May 14, 1996 of Brazil
OJ	Voir JO
OMC/WTO	Organisation Mondiale du Commerce/World Trade Organisation
OMPI/WIPO	Organisation Mondiale de la Propriété intellectuelle/World Intellectual Property Organisation
OMS/WHO	Organisation Mondiale de la Santé/World Health Organisation
p./pp.	Page(s)
p. ex.	Par exemple
PaaS	Platform as a Service
para.	Paragraphe(s)
PCT	Patent Cooperation Treaty signed in Washington on June 19, 1970
PI/IP	Propriété intellectuelle/Intellectual Property
PLT	Patent Law Treaty signed in Geneva on June 1, 2000
PoC	Proof of concept
préc.	Précité(e)
PTP	Voir TPP
R&D	Research and Development
RDS	Revue de droit suisse (Suisse)

REC 1217/2010	Règlement (UE) N° 1217/2010 de la Commission du 14 décembre 2010 relatif à l'application de l'article 101, paragraphe 3, du traité sur le fonctionnement de l'Union européenne à certaines catégories d'accords de recherche et développement (JO 2010/L 335/36)
REC 316/2014	Règlement (UE) N° 316/2014 de la Commission du 21 mars 2014 relatif à l'application de l'article 101, paragraphe 3, du traité sur le fonctionnement de l'Union européenne à des catégories d'accords de transfert de technologie (JO 2014/L 93/17)
Règl./Reg	Règlement/Regulation
RS	Recueil systématique (Suisse)
RSDA	Revue suisse de droit des affaires et du marché financier
RSJ	Revue suisse de jurisprudence
RSPI	Revue suisse de la propriété intellectuelle
s./ss	Suivant/suivants
SaaS	Software as a Service
SCM	Agreement on Subsidies and Countervailing Measure
SCP	WIPO Standing Committee of the Law of Patent
SDO	Standard Developing Organizations
SEAA	Sino-Ethiop Associate (Africa)
SEP	Standard Essential Patent
SGA	United Kingdom Sales of Goods Act 1979
sic!	Revue du droit de la propriété intellectuelle, de l'information et de la concurrence (Suisse)
SIWR	AUTEUR in : Roland von Büren/Lucas David (éd.), Schweizerisches Immaterialgüter- und Wettbewerbsrecht, Markenrecht, Helbing Lichtenhahn, Bâle 2009
SLA	Service Level Agreement
SMEs	Small and medium-sized enterprises
SOW	Statement of Work
SSO	Standard Setting Organizations
TC	Tribunal cantonal (Suisse)
TF	Tribunal fédéral (Suisse)
TFEU/TFUE	Treaty on the Functioning of the European Union (OJ C 326/47)/Traité sur le Fonctionnement de l'Union Européenne (JO C 326/47)
TPP/PTP	Trans-Pacific Partnership Agreement/Accord de Partenariat Transpacifique
TRIMS	Agreement on Trade-Related Investment Measures
TRIPS	Voir ADPIC

U. S./US	United States of America/Etats-Unis d'Amérique
U. S. C.	United States Code
UCC	United States Uniform Commercial Code
UE/EU	Union européenne/European Union
UK	United Kingdom
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
US\$	US Dollars
WHO	Voir OMS
WIPO	Voir OMPI
WTO	Voir OMC

Patent Transactions. Limited regulation in the multilateral legal framework and diverse legislation and practice at the country level

*Marco M. Aleman**

I. Introduction

Innovation serves as an important driver of our economies. Many enterprises are born based out of efforts to develop technology, and protecting the fruit of that innovation through intellectual property rights is critical. Intellectual property rights of all types, including patents, play a critical role in supporting the related activity. These rights help entities manage their investments in technology by providing some control over their destiny.

In particular, patents serve as a tradable economic asset that can be sold or licensed to others. This role is essential today as technologies increasingly need to be shared amongst those who will further its development and dissemination. These technology transactions may adopt various forms such as agreements related to research, joint development, supply arrangements, and licensing. In this vein, it is critical to recognize and consider intellectual property-related issues that may arise from these transactions.

Importantly, many technology transactions cross borders, either because parties are located in different countries, plan to do development or manufacturing across locations, or involve commercialization in multiple markets. As the framework that governs IPRs can vary significantly by country, the international nature of these transactions may introduce additional complexity.

* Director, Patent Law Division, World Intellectual Property Organization (WIPO). Views and opinions expressed are exclusively those of the author and do not represent the position of the international organization where he works.

Many types of IPRs may be involved in international technology transactions. However, within this article, we focus only on patent rights and the associated legal framework.

II. Types of Patent Technology Transactions Involving Patents

Patents provide on one hand the right to exclude others from making, using or selling an invention, but on the other, it facilitates the sharing of technologies between parties, by enabling strategic alliances to be formed, whether during development, manufacturing, or scale up. In the latter case, transactions take different forms, but the most typical patent related technology transactions include:

- **Sale or assignment of patents:** The transfer of the patent owner's rights to a third party on a permanent (irrevocable) basis in exchange for remuneration.
- **Licensing:** Certain rights to the patent may be transferred to a third party without ownership itself being transferred, in exchange for some form of remuneration.
- **Security Interest over patents:** The patent, as an asset, is used as collateral to secure loans and other types of capital investments.
- **Joint Development Agreements:** Alliances between two parties that may or may not constitute a new company, where the parties agree on jointly developing a product, technology or some form of intellectual property.

While patent transactions often take place between commercial entities, they are not limited to business enterprises. Universities and other research institutions play an active role in today's technology development. Patent transactions serve an important role in enabling the translation of proofs of concept or laboratory-scale prototypes to the next step of development.

III. The International Legal Framework

A patent related transaction involves an exchange or transfer of rights concerning one or more patented inventions. Patent transactions are often accompanied by efforts to transfer technology. For example, while a patent license provides only the right to use a certain invention more effort may be needed to understand how to deploy technology.

When reference is made to the international legal framework in the field of IP, the immediate referred body is the World Intellectual Property Organization (WIPO) – a self-funding agency of the United Nations, established in 1967 – which is the global forum for intellectual property services, policy, information and cooperation (among the 191 member states). WIPO's mission is to lead the development of a balanced and effective international intellectual property (IP) system that enables innovation and creativity for the benefit of all.

Despite the extensive multilateral legal system that is administered by WIPO (26 treaties), provisions dealing directly or indirectly with patent transactions are very rare. In the Paris Convention (1883) – which is the backbone of the industrial property multilateral legal system – only one provision deals with transactions, namely, Article 6*quater* which regulates the assignment of Marks.

References to patent transactions, in other WIPO administered treaties are more procedural in nature. For example, the Patent Cooperation Treaty (PCT) provides a mechanism to indicate willingness to license an application.¹ The request results in a statement along these lines in the published PCT application. Similarly, the Patent Law Treaty (PLT) contains a provision concerning procedural requirements regarding a request for recording changes to ownership, how the owner can be contacted, and the existence of licenses or security interests, with a view to avoiding unreasonable complexities in national patent procedures.² The purpose of this provision is to support disseminating accurate up-to-date information concerning the owner of the rights and their licensing status. The PLT also establishes that Model International Forms that shall be accepted by all Contracting Parties.³

1 Form PCT/IB/382 available at: www.wipo.int/pct/en/forms/ib/editable/ed_ib382.pdf (last accessed 8 August 2018). Details can include potential licensing term.

2 See Article 14, PLT.

3 See Article 8(3) PLT.

In addition, WIPO through the Arbitration and Mediation Center, offers dispute resolution procedures⁴ as an alternative for private parties to efficiently settle their domestic or cross-border IP and technology disputes out of court. To facilitate their use, WIPO provides model clauses for parties to access such mechanisms within their agreements.⁵

This link between patents and the transfer of technology has been recognized at the international level, in the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement)⁶. Article 7 of the TRIPS Agreement provides:

“The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.” (emphasis added)

However, while technology transfer is often discussed, the specific way technology is exchanged is only sparingly regulated at the international level. The TRIPS Agreement only establishes the right to assign or to engage in licensing and intervene in the face of practices that “may have adverse effects on trade and may impede the transfer and dissemination of technology.”⁷

IV. The current agenda

Patent transactions serve many purposes, from gaining access to technology, developing new research, or establishing a competitive advantage.⁸ The diverse nature of these undertakings makes establishing a single approach challenging. There is no one size fits all approach. Therefore, the limited international legal framework regarding patent transactions is not surprising.

4 Mediation, arbitration, expedited arbitration, and expert determination.

5 See <http://www.wipo.int/amc/en/clauses> (last accessed 8 August 2018).

6 See complete text: https://www.wto.org/English/docs_e/legal_e/27-trips_01_e.htm (last accessed 8 August 2018).

7 See TRIPS Articles 28(2) and 40(2).

8 Marshall Philips. How Uber Built Up Its Patent Strength Quickly. Chief Executive. April 24, 2018. Available at: <https://chiefexecutive.net/how-uber-built-up-its-patent-strength-quickly/> (last accessed 8 August 2018).

Terms like the breath of a license or its duration, for example, are often dictated by the circumstances leading to the transaction. Ensuring participants have the freedom to craft arrangements that work best for them, leads to important efficiencies. However, some countries do provide some regulation in this area, such as requirements to record licenses and limitations based on competition law. As discussed below, regulations can vary significantly between countries.

Discussions at the WIPO Standing Committee of the Law of Patents (SCP), includes among the five agenda items under consideration, the subject of transfer of technology. The work of the SCP has contributed to a better understanding of the role of the patent system in technology transfer⁹, as well as describing the role of WIPO in this regard¹⁰, the identification of examples and experiences regarding the interlink between patents and transfer of technology¹¹, the potential impact of the disclosure requirement in technology transfer and the most recent work of the committee has focused on discussions on patent law provisions that had contributed to effective transfer of technology. Which are those provisions and what are their policy impact in promoting or hindering technology transfer? Are crucial questions for the SCP to analyze.

V. Key Issues for International Patent Transactions

Due to the lack of an international regulatory framework, many aspects of patent transactions are governed by local law, and in some cases the laws of multiple jurisdictions for cross border transactions. Further complicating matters is the territorial nature of patents. As patents are national rights, this may lead to potential differences in ownership of an invention within countries. As a result, access to a patent in one country may not provide access to the protected invention worldwide.

Therefore, due diligence on matters related to patents are needed before a transaction takes place. In this regard, parties should review the patent law in the jurisdictions where the technology will be used to determine both ownership and any formalities required for the transaction to be effective and any default terms. In addition to patent specific laws, other

9 See SCP/14/4 Rev.2.

10 See SCP/18/7.

11 See documents SCP/18/8 and SCP/20/10 and SCP/21/10.

bodies of law may determine aspects of the transaction, such as choice of law and dispute resolution.

While the terms of patent transactions develop from the unique circumstances involved, there may be an opportunity to establish best practices that can help avoid potential disputes that may arise. Below, we highlight aspects of these transactions that are regulated in substantially different ways around the world. These variations may present challenges for those involved in patent transactions, particularly across borders, and could impair the effective transfer of the patented technology.

A. Assignment of Patent Rights

Patents operate similarly to tangible personal property. They are assignable, allowing a patent owner to transfer all or part of its right, title and interest to another person. Knowing who owns a patent is critical to a smooth patent transaction, yet the determination of ownership can sometimes be a complex exercise. While the spark of invention stems from an individual, the inventor may not be the resulting patent's owner. For example, if the invention is conceived as part of a person's job, as discussed below, an employer may have a claim to the resulting patent.

During the lifetime of a patent, it is also not unusual for patent ownership to change hands. For example, for a company it can be a matter of strengthening its technology position while for another entity it could be just a way of getting a return through a sale of patents that relates to areas of technology that are not the core business of a given company¹². Patents are sold for a variety of reasons, for example when a business is purchased or there is a desire to transfer rights to someone else for manufacturing or further commercialization. Patents may also be contributed as an asset when creating a partnership or similar venture. However, whether an assignment is recorded in accordance with local law can also impact ownership. And when multiple inventors are involved, especially across borders, each ownership interest needs to be determined separately.

¹² In 2017 Uber purchased 66 ridesharing patents and 10 patent applications from AT&T, allowing the former to save time and money in conducting the research needed to get that technology, interestingly including patents that predates Uber's foundation. The deals also allow the later to get a return in areas of technology that are not its priority.

1. *The line between inventorship and ownership*

Who owns a patent upon its creation varies by local law. In some countries, patent ownership remains with the inventor, until it is assigned to someone else. For example, in both Japan and the United States patents are owned by their inventors by default.¹³ Employers who wish to own the rights to inventions created during employment must do so by contract. For this reason, many companies require agreements with employees, consultants or others who may develop intellectual property on their behalf that expressly transfer over patent rights. In Japan, such an agreement is expressly contemplated by the law though those inventions made outside the course of employment may require additional compensation.¹⁴

In the U. S., any transfers of a patent's ownership must be made in writing.¹⁵ The specific language used in the assignment can be important to determine whether rights to a patent have actually been transferred.¹⁶ To be valid, an assignment must use language that assigns future rights created during the course of employment; otherwise, the employee has no obligation to provide ownership to an employer.¹⁷ Importantly, an assignment that relates to the disclosure made in an invention may impact ownership of multiple unrelated patents.¹⁸ This approach significantly diverges from practices in other countries, where such an assignment is generally not possible.

We note that while patent rights do not automatically vest in an employer in these and other countries, employers may still have the rights to use those inventions created during the course of employment. Known as "shop rights", employers generally are provided a license to use the inventions, though they may not have other rights associated with the patent, such as the ability to license them.¹⁹

13 In the U. S. See 35 USC § 101.

14 See Article 35 of the Japan Patent Act.

15 See 35 USC § 261.

16 See *United States v. Dubilier Condenser Corporation* 289 US 178 (1933).

17 For example by using the phrase "I will and hereby assign." See *Stanford v. Roche*, 563 U.S. 776 (2011).

18 *MHL Tek LLC v Nissan Motor co* 655 F3d 1266 (Fed Cir 2011).

19 See Japan Patent Act Article 35(1). See also *Dubilier Condenser Corporation* 289 US 178 (1933).

In Brazil, by contrast, inventions made during the course of employment or under the scope of a service contract vest automatically with an employer or purchaser.²⁰ Even patent applications filed up to one month following the end of an employment or service contract ends are presumed to belong to the employer.²¹ An employee or service provider, however, may contest this presumption. When an invention was developed outside the scope of the work contract but using the employer's resources, both parties share ownership of the patent equals shares.²²

In other countries, civil or commercial laws may govern patent ownership created through employment or services contracts. For example, in Colombia, patents that result from work performed as part of a contract belongs to the person paying for the services provided the contract is in writing.²³ No express inclusion of the assignment of patent rights is required.

Similarly, in Switzerland, when an employee creates an invention in the course of his work contract the invention belongs to the employer. However, for inventions that are developed outside the scope of the obligations, ownership remains with the employee.²⁴ Yet with respect to service contracts, Swiss law is silent.

Therefore, ownership of created by employees patent depends both on the country and often the context in which it was invented. Without proper due diligence, assumptions as to ownership should not be made and those engaged in patent transactions should do their homework and include appropriate representations and warranties in their agreements.

2. *Joint inventions*

When there are multiple inventors for an invention, the ownership rights of each inventor need to be determined. Joint inventors generally have an undivided interest in a patent. However, joint inventors may not be able to exercise all of their patent rights without consent of other co-owners.

20 Law on Industrial Property 9,279 of May 14, 1996 of Brazil (hereinafter "LPI"), Article 88.

21 See Article § 2 LPI.

22 See Article 91 LPI.

23 Article 29, Law 145, 2011 of Colombia.

24 See Article 332 of the Swiss Code of Obligations.

In Switzerland, joint patent owners can exercise certain patent rights without consent of the other owners, such as bringing an infringement action or paying a patent's renewal fees.²⁵ However, other rights like assigning, selling, or licensing the patent, need consent of each patent owner.²⁶ If consent is not obtained, the transaction is invalid. However, by contrast, in Japan a joint owner must also obtain the consent of the patent's other owners to transfer ownership or license the underlying rights, even for non-exclusive licenses.²⁷

3. *Formalities required to effect assignment of patent rights*

Many jurisdictions require an assignment to be registered to be valid against third-parties. In other countries, a less formal process may suffice.

In Germany, there are no legal requirements to record an assignment of patent rights. Even in the absence of a written assignment, a transfer of patent rights may be valid. However, in Switzerland a patent assignment is valid only if it is in writing and signed by both parties.

Recording the assignment before the Swiss Patent Register is not necessary to establish its validity. There are benefits, though, to recording the assignment, as any action related to the patent, such as invalidation, may only be filed against the owner recorded in the Register.

In the U. S. patent assignments are also valid only if made in writing. It is also not required to record an assignment of a patent at the United States Patent and Trademark Office (USPTO) in order for it to be effective between parties. However patent assignments must be recorded to be effective against third parties who buy patent rights in good faith and without notice of a previous assignment.²⁸ Therefore patent ownership can effectively be lost if the assignment was not properly recorded.

Similarly, Brazil's law does not explicitly require that an assignment be recorded. However, the Patent Law does require that the assignment of a patent must be made in writing, signed by both parties and registered

25 See Article 33(2) of The Federal Act of June 25, 1954 (hereinafter "the Swiss Patent Act").

26 See Article 33(2) and 34(2) of the Swiss Patent Act.

27 See Article 73 of the Patent Act No. 121 of April 13, 1959 (hereinafter "the Japan Patent Act").

28 See 35 USC § 261.

before the Brazilian Patent Office (INPI) to be effective against third parties.²⁹

Yet in Japan, the assignment of patent rights must be registered before the Japan Industrial Property Office (JPO) to have validity and legal effect between the parties.³⁰ Unrecorded assignments fail to adequately transfer patent rights to a new owner.

As illustrated above, countries vary in how patent assignments must be made and whether they need to be recorded. When engaging in patent transactions that involve a patent assignment, it should be determined which formalities are needed and who will be responsible for the recording process. Similarly, if patents involved in a transaction have ever changed ownership prior to the transaction, the recording history should be reviewed to determine if the rights being negotiated actually belong to the parties executing the transaction.

B. Licensing of Patents

A patent license involves transfer of certain rights of the owner to a third party on a temporary basis and under certain conditions, in exchange for remuneration. However, a number of factors that relate to how the rights are defined and the entities involved can impact how local law may be applied. Laws in the country of each party and in the country where a license is granted should be carefully reviewed by the parties involved. Some examples regarding the way these aspects are regulated in different jurisdictions are listed as follows.

1. Formalities required

While in many countries the registration of a patent license is not required, in others a patent license must be registered to be valid either amongst the parties themselves or against third parties. When registration is required, it usually accomplished through the local patent office.

In the U. S. there is no requirement to record a patent license neither to be effective between the parties or against third parties. In Switzerland, patent licenses are also not subject to particular formalities. Once executed, a license agreement has goes into force as of its effective date. However,

²⁹ See Article 59, LPI.

³⁰ See article 98 (1) (i) of the Japan Patent Act.

for a license to be valid before third parties, it must be registered with the Federal Institute for Intellectual Property in Bern. Only written notification of a license is required.

However in other countries, registration is a critical step. For example, in Japan, certain exclusive license, known as *Senyojishiken*³¹ must be registered before the JPO to be effective with respect to the parties involved.³² This type of license gives it holders special rights, such as the ability to request injunctions against an infringer and to claim damages. All other types of licenses in Japan, including standard exclusive licenses are not required to be registered. However, registration is required to be effective against third parties.

In Brazil, registration of a license agreement is required for certain kinds of patent licenses, such as those that involve royalties by a Brazilian entity to a third party abroad.³³ Without registration, Brazilian entities cannot deduct any royalties paid on their taxes. It is also necessary to register a patent license before the local patent office in order to enforce a patent. Upon registration, Brazil's patent office has the power to refuse registration.

2. *Standing of exclusive licensees to enforce a patent*

By virtue of the right, patent owners can bring legal actions against potential patent infringers. However, the situation for exclusive licensees is less clear. Local laws can determine under what conditions the licensed patent rights can be enforced by a licensee. As part of the value of an exclusive license stems from a licensee's position to exclude third-party infringers from using the patent, understanding this local requirements is critical. In some countries, the right to enforce a patent may flow automatically from the exclusive nature of the license. However, this is not the case worldwide.

In Switzerland, an exclusive licensee automatically has the right to file a legal action before patent infringers, unless it is expressly excluded in a license agreement.³⁴ Similarly, in Japan, a holder of *Senyojishiken* license, a special type of exclusive license, has the same rights as the patentee

31 See Article 77 of the Japan Patent Act.

32 See Article 98(1)(ii) of the Japan Patent Act.

33 See Article 62, LPI and Normative Act No. 135 of 15 April 1997 of Brazil.

34 See Article 75(1) of the Swiss Patent Act.

when it comes to enforcement, including demand an injunction against the alleged infringer and claim for damages. However, the holder of a standard exclusive license does not enjoy equivalent rights.³⁵

In the U. S., an exclusive licensee has standing to enforce a patent if “substantially all the rights” have been conveyed in the license.³⁶ This means that the license agreement must convey the right to exclude, the right to sue infringers, and the right to transfer the license. An exclusive license that does not include “substantially all the rights” will need to join the patent owner to enforce the patent.

Brazil takes a somewhat difference approach as the right to sue for infringement does not flow naturally from an exclusive license. Rather, it is separate from the type of license granted. As mentioned above, if a license provides the right to sue, then it must be registered with the local patent office in order to be effective.³⁷

Given the significant differences among jurisdictions, care should be taken to review whether an exclusive licensee can be empowered to take action on its own against potential infringers. Even if the parties wish to provide these rights, as a practical matter, it may not be possible. Licenses should therefore take into account the potential need to join the patent owner to any relevant litigation.

C. Security interests over patent rights

Patent assets are increasingly used as collateral to secure loans and other types of capital investments. The ability of businesses to use their IP to gain access to credit requires the support of national law and financial institutions. Like patent ownership and licenses discussed above, the laws governing patents as security interests also vary from country to country.

In some countries, patents are not available as collateral, or even if they are available, the effect is different. Registration is sometimes required for the legal effect against third parties and may be done in the country in which the patent is granted.

³⁵ See Article 77 of Japan Patent Act.

³⁶ *Mentor H/S, Inc. v. Med. Device Alliance, Inc.*, 240 F.3d 1016, 1017 (Fed. Cir. 2001); *Vaupel Textilmaschinen KG v. Meccanica Ero Italia S. P. A.*, 944 F.2d 870, 875 (Fed. Cir. 1991).

³⁷ See Article 62, LPI.

For instance, in Japan, the Patent Act provides that pledges may be used to obtain a security interest over a patent right.³⁸ This is similar to the registration requirement for exclusive licenses, discussed above.

In France, patent holders are allowed to securitize patents, including patent applications, for the payment of any debt. The patent holder grant must be in writing and recorded before the Tax authority and the Intellectual Property Authority (INPI).³⁹ However, in many other jurisdictions, national legislations are silent on this topic.⁴⁰

There has been some interest in harmonizing how security interests are handled for patents globally. In 2007, UNCITRAL adopted the UNCITRAL Legislative Guide on Secured Transactions (UNCITRAL Secured Transactions Guide)⁴¹ and in 2010, the Supplement on Security Rights in Intellectual Property (UNCITRAL IP Supplement).⁴² The later document was supported by The World Intellectual Property Organization (WIPO), which sent a questionnaire on security interests on IPR to Member States.⁴³

D. Other issues to consider in international patent transactions

Although this article is not exhaustive in covering the whole issues involved in international patent transactions, it is worth mentioning other aspects that may be also challenging for the parties involved. For instance, who owns the patent rights if new technologies are developed out of the arrangement, and who will handle securing them and pay the expenses should be determined. Similarly, what happens if an existing technology is improved can be decided in the contract. And if patent ownership is provided only to one party, will the other parties involved

38 See Article 98(1) (iii) of Japan Patent Act.

39 See Articles L613–8 and R613–55 of the Intellectual Property Code of France.

40 See WIPO Information Paper on intellectual Property Financing – Annex 1: WIPO Questionnaire on Security Interests in Intellectual Property, (hereinafter “WIPO Questionnaire”) available at: http://www.wipo.int/meetings/en/doc_details.jsp?doc_id=131002 (last accessed 8 August 2018).

41 http://www.uncitral.org/uncitral/en/uncitral_texts/security/Guide_securedtrans.html (last accessed 8 August 2018).

42 http://www.uncitral.org/uncitral/en/uncitral_texts/security/ip-supplement.html (last accessed 8 August 2018).

43 See WIPO Questionnaire.

have any rights? We note that in some countries, clauses that oblige the buyer or licensee to transfer ownership to the supplier (former owner/licensor) of the improvements are forbidden.

Other issues like determining practical dispute resolution clauses and choice of law are important, particularly in cross border transactions. As mentioned above, the WIPO model clauses for future disputes under a particular contract on cross-border patent transactions may facilitate this decision.

VI. Conclusion

As discussed in this article, there are significant variations in the legal framework that governs patent transactions across countries. For cross border transactions, understanding the differences can be critical to determining if the parties can actually provide the rights they intend and whether the transaction will have any legal effect.

We also note that there have only been limited efforts to establish an international legal framework to guide such transactions. Is international harmonization the answer? Is there a need for default rules?

Patent transactions do not refer to a single type of contract, but rather a plethora of arrangements that serve a variety of purposes, from achieving access to technology, jointly developing new ones, or building competitive positions. It would certainly be a challenge to create an exhaustive set of international rules able to take into account the diversity these transactions and their motivations. However there are certain areas that parties may benefit from a set of default rules, to fill areas where agreements silent on a particular issue. A set of best practices or default rules could also lay the groundwork for further efforts on harmonization. If done with this principle at the forefront, such efforts could speed up the flow of technology around the world.

International Technology Transactions from a Development Perspective

*Christoph Spennemann**

I. Introduction

Technology plays a key role in developing countries' efforts to transition from the reliance on natural resources and cheap labor to knowledge based economies. Due to various reasons, developing countries are not the main creators of new technologies but find themselves on the receiving end. This article will discuss the important role transactions with foreign investors play for the creation of technological capacity in developing countries. "Technology transactions" in this sense are not limited to intellectual property licensing agreements, but also comprise agreements to transfer knowledge and know how that does not involve any intellectual property. I will present some practical cases of technology transactions in the pharmaceutical industry and highlight the factors that ensured success or caused difficulties. Beyond those examples, the article will discuss some limitations that developing country firms may face when seeking to benefit from international technology transactions. In this context, I will review international approaches to regulate technology transactions in the contexts of the United Nations Conference on Trade and Development (UNCTAD) and the World Trade Organization (WTO). The article concludes by emphasizing the importance of building technological capacities within developing country firms to attract in-

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vestors, and the need to build capacities in those firms to better understand the technicalities of technology contracts.

II. Formal and informal means of technology transfer and their role in the development process

2017 figures on patent filings under the World Intellectual Property Organization's (WIPO) Patent Cooperation Treaty (PCT) show that developing countries (with the important exception of China) are far behind: while 56,624 filings came from the United States and 48,882 from China, Brazilian residents filed 593 applications, South Africans 301, as compared to 157 from Thailand, 8 from Kenya and 6 from Nigeria. Countries like Burundi, Congo, Gabon and others filed no applications.¹ Patents in developing countries are most often not granted to local ("resident") but to foreign ("non-resident") applicants: Thailand for instance granted 1081 patents to non-residents in 2013, as compared to only 68 to resident applicants. Ethiopia in 2007 granted 13 patents to non-resident applicants, but none to residents.² The number of patent filings and grants are often referred to as indicators of countries' technological capacity. It is obvious from the above figures that the bulk of the world's technological development is not happening in the developing countries. To the contrary, they depend on access to foreign technologies, and effective technology transfer has been one of the major objectives pursued by developing countries in multilateral trade negotiations, as further discussed below.

There is no internationally agreed uniform definition of technology transfer.³ An early attempt to provide a definition was made in the

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- 1 CATHERINE SAEZ, Irrepressible Rise of China In International Patent Applications, Developing Countries Lagging, Intellectual Property Watch of 21 March 2018. Available at <https://www.ip-watch.org/2018/03/21/irrepressible-rise-china-international-patent-applications-developing-countries-lagging/> (last accessed 3 May 2018).
 - 2 Figures from WIPO Statistical Country Profiles Thailand and Ethiopia. Available at http://www.wipo.int/ipstats/en/statistics/country_profile/ (last accessed 3 May 2018).
 - 3 HANS HENRIK LIDGARD/JEFFERY ATIK/TU THANH NGUYEN, Framing the Issues, in: Hans Henrik Lidgard/Jeffery Atik/Tu Thanh Nguyen (ed.), Sustainable Technology Transfer. A Guide to Global Aid & Trade Development, Wolters Kluwer, The Netherlands, 2012, p. 4.

1985 UNCTAD Draft International Code of Conduct on the Transfer of Technology, which defined technology transfer as the “transfer of systematic knowledge for the manufacture of a product, for the application of a process or for the rendering of a service, which does not extend to the transactions involving the mere sale or mere lease of goods”.⁴ For the pharmaceutical sector, UNCTAD and the World Health Organization (WHO) have defined technology transfer as “the transfer of technical information, tacit know-how and performance skills, technical materials or equipment, jointly or as individual elements, with the intent of enabling the technological or manufacturing capacity of the recipients.”⁵

Technology transactions as defined in the Introduction above are one means of technology transfer. They usually consist of formal contracts between two parties, e. g. licensing, franchising, distribution agreements, joint ventures, R&D arrangements, or the sale of goods embodying technology. They are based on some sort of legal agreement and a monetary transaction. Other means of technology transfer are informal and involve no legal agreement or monetary transaction. They may consist of reverse engineering of products, follow-on improvements, creative imitation, simple copying, and learning by doing. At early stages of development, informal means of technology transfer may take a more important role than contractual arrangements.⁶ Some of today’s major technology developing countries such as the Republic of Korea put considerable emphasis on reverse engineering of foreign technologies to build initial domestic capacities. This in turn attracted foreign investors, who agreed to let the domestic firms produce their original products and through technical assistance made sure the products would meet certain technical spe-

4 UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT (UNCTAD), Draft International Code of Conduct on the Transfer of Technology, 1985 version, Chapter 1, Paragraph 1.2. Available at http://unctad.org/Sections/dite_tobedeleted/ia/docs/compendium/en/14%20volume%201.pdf (last accessed 3 May 2018).

5 WHO, Local Production for Access to Medical Products: Developing a Framework to Improve Public Health, Geneva, 2011, p. 14. Available at http://www.who.int/phi/publications/local_production_policy_framework/en/ (last accessed 3 May 2018).

6 UNCTAD and INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (ICTSD), Intellectual Property Rights: Implications for Development. Policy Discussion Paper, Geneva, 2003, p. 85. Available at <http://www.iprsonline.org/uncta/dictsd/policyDpaper.htm> (last accessed 3 May 2018).

cifications.⁷ It was thus a mix of informal and formal means of technology transfer that the Republic of Korea relied on for building domestic technological capacities. While this approach responded to the specific situation in Korea in the 1960s and 1970s, it may be observed that foreign investors in order to enter into any sort of technology transaction expect to obtain something in return, for instance the possibility to produce high quality at more competitive prices than at home. Domestic producers that already hold a certain level of technological know-how, for instance acquired through reverse engineering, stand better chances to attract a foreign investor than those that cannot provide any added value. Consequently, informal means of technology transfer may prepare the ground for formal means such as a licensing agreement. Informal means often play a key role in creating domestic “absorption” capacity, i. e. the ability of domestic stakeholders to understand foreign technologies. Without such absorption capacity, any attempts to transfer technology are likely to fail. The creation of absorption capacity on the receiving end is thus the first step in the technology transfer process. The next section will review some practical cases of technology transfer in the pharmaceutical sector and discuss the role of technology transactions, how they relate to other means of transfer, and what their role is in the creation of domestic absorption capacity.

III. The role of contractual transactions in facilitating developing countries’ access to technology

UNCTAD in 2009 and 2010 conducted a series of case studies related to the transfer of pharmaceutical technologies to local producers in Argentina, Bangladesh, Colombia, Ethiopia, Indonesia, Jordan, Thailand and Uganda.⁸ The studies examine specific inter-firm technology transactions but also analyze the host country’s legal and policy framework. The objective was to identify the conditions that need to be in place for

7 LINSU KIM, Technology Transfer & Intellectual Property Rights. The Korean Experience. UNCTAD-ICTSD Issue Paper No. 2, Geneva, 2003, pp. 16, 17. Available at <https://www.iprsonline.org/resources/docs/Kim%20-%20ToT%20and%20IPRs%20-%20Blue%202.pdf> (last accessed 3 May 2018).

8 UNCTAD, Local Production of Pharmaceuticals and Related Technology Transfer in Developing Countries. A series of case studies by the UNCTAD secretariat, United Nations, New York and Geneva, 2011. Available at http://unctad.org/en/PublicationsLibrary/diaepcb2011d7_en.pdf (last accessed 3 May 2018).

successful technology transfer and to accordingly inform UNCTAD's technical cooperation with developing country governments. Some of these cases will be presented in the following sections.

A. *ELEA in Argentina*⁹

ELEA is a family-owned pharmaceutical company. It is the third biggest domestic producer in Argentina in terms of sales value and makes a large variety of products ranging from cardiovascular treatments to vaccines and anti-retroviral drugs. ELEA developed its initial technological capacity from the knowledge generated over the years by its in-house research and development (R&D) unit, especially in the area of biotechnology. Another important factor is the R&D network that ELEA has created in cooperation with Argentinean universities and R&D centers from Cuba in the area of anti-cancer vaccines. ELEA's well developed technological capacity in conjunction with a ten-year purchase commitment by the Argentinean government for all the vaccines needed for a national vaccination program attracted the Swiss multinational company Novartis to cooperate with ELEA on the production in Argentina of influenza vaccines. This cooperation consisted of transferring the required technology under a contractual agreement. The agreement at the same time lays down the conditions for the transfer, the details of the production plant to be built, the kind of engineering processes to be used and the price to be paid by ELEA.

Under a license agreement with Pfizer/Warner Lambert, a pharmaceutical company from the United States, ELEA acquired the right to use that company's trademark for the production of the licensor's products. The licensor also transferred its former domestic production plant and technical personnel to ELEA, thus making sure that ELEA would be in a position to meet the high quality standards imposed by Pfizer/Warner Lambert. At the same time, ELEA under that agreement is not obliged to purchase the active pharmaceutical ingredients (APIs) needed for production from Pfizer/Warner Lambert, but may acquire them from alternative sources at more favorable prices. ELEA pays a royalty of 7 per cent of the net sales value to Pfizer/Warner Lambert.

This example demonstrates the importance of initial technological capacity to attract foreign investors and beneficial licensing terms. In addition,

9 See UNCTAD, *supra* n. 9, pp. 17, 23–28.

government support such as a purchase guarantee may provide considerable assistance in this context. In sum, it was a mix of different factors that enabled mutually beneficial agreements between ELEA and its private sector partners.

B. *Beximco Pharmaceuticals Ltd* in Bangladesh¹⁰

Beximco is one of the largest pharmaceutical firms in Bangladesh. It makes a wide range of generic drugs and is engaged in the production of APIs from advanced intermediaries. Technology transfer agreements played an important role in the development of Beximco's initial technological capacity. In the 1980s, Beximco manufactured drugs under licenses from two foreign investors, Bayer AG and Pharmacia & Upjohn Inc. The licenses included the provision of training to Beximco on how to meet international manufacturing quality standards. The acquired know-how enabled Beximco to launch its own line of generic products and to engage in contract manufacturing arrangements with other multinational investors such as Glaxo SmithKline (GSK). These arrangements have further contributed to the building of Beximco's manufacturing capacity.

This case study shows that the need to meet international quality standards of drug production, such as Good Manufacturing Practice (GMP), may be a major driver of training provided by a licensor to a licensee. In exchange for shares in the domestic market, a foreign producer may be willing to invest in GMP training. The licensee may benefit beyond the scope of the licensing agreement by developing the capacity to produce independently.

C. *Tecnoquímicas* in Colombia¹¹

Tecnoquímicas is the largest pharmaceutical company in Colombia in terms of sales value. Established in the 1930s, it first focused on the importation and distribution of finished pharmaceuticals and only began producing its own drugs in the 1950s. The domestic intellectual property regime, which only permitted patents on manufacturing processes, but not on pharmaceutical substances, enabled Tecnoquímicas to practice the reverse engineering of imported finished pharmaceutical products. Be-

¹⁰ See UNCTAD, *supra* n. 9, pp. 57, 63–66.

¹¹ *Ibid.*, 89, 93–102.

tween the 1950s and the 1990s, the company entered into licensing agreements with several multinational companies. The latter wished to benefit from Tecnoquímicas' well developed distribution network, which made it unnecessary for them to invest in the establishment of their own networks. In exchange, Tecnoquímicas in parallel to the production licenses received from its licensors production-related know-how and training for meeting GMP standards. Thanks to the multitude of licenses, Tecnoquímicas became "the sum of all the know-how of all the companies that had been its licensors, which gave Tecnoquímicas a huge competitive advantage."¹² Colombia in the 1990s introduced the patentability of pharmaceutical products and amended its investment and tariff regimes to promote foreign investment.¹³ Despite these moves, in the 1990s many multinational pharmaceutical firms divested from Colombia, due to political unrest in the country and the global consolidation of the pharmaceutical sector. As a result, Tecnoquímicas lost its most important licensing agreements and consequently the technology transfer generated under those. This had a considerable impact on the company's product profile. The licenses were terminated before Tecnoquímicas was able to fully develop sufficient capacity to make high technology medicines, *i. e.* high selling prescription drugs. Instead, the firm had to shift its focus to simpler over-the-counter drugs, production of generic copies of older drugs and contract manufacturing for other companies. The loss of the licenses also forced Tecnoquímicas to develop its own trademarks. Today, the firm has developed a network of foreign companies and research institutes from which it receives the APIs required for its production, as well as the necessary training and confidential information to achieve GMP. For the transfer agreements, Tecnoquímicas renounced more affordable offers from China and India and entered into agreements with know-how providers from Latin American countries. The reason was the language barrier. Being able to negotiate the transfer agreements and to follow the actual process of know-how transfer in Spanish was considered a huge advantage by Tecnoquímicas.

This case study demonstrates the important impact of foreign investors on the kind of technology that may be transferred. It also shows that cultural similarities such as language may play an important role in the negotiations of licenses and technology transfer contracts. Finally, this study

12 *Ibid*, p. 98.

13 *Ibid*, pp. 115–119.

shows the limitations of investment promotion policies like intellectual property rights and tariffs when faced with more fundamental considerations such as cost saving through global consolidation and avoidance of markets that show political instability.

D. SEAA in Ethiopia¹⁴

Sino-Ethiopian Associate (Africa) (SEAA) in Addis Ababa is a joint venture between two Chinese pharmaceutical companies and an Ethiopian firm engaged in the importation and distribution of pharmaceuticals, *inter alia* the products of its Chinese partners. SEAA is active in the manufacturing and marketing of empty hard gelatin capsules (EHGCs). EHGCs are filled with drugs formulated separately under the forms of powder, granules or pellets. EHGCs permit faster drug formulation, predictable and more comfortable administration by the patient, and protection of the formulation from light. SEAA sells their EHGCs within Africa and in the Middle East. The main rationale for the Chinese investor to make EHGCs in Ethiopia is a logistical one: it is faster and simpler to distribute the products to African and Middle Eastern countries from the Ethiopian hub, rather than shipping them long distance from China.

When SEAA was established, the Ethiopian partners had no capacity to manufacture EHGCs. To make SEAA operational on a sustainable basis, the Chinese partners built the facility, installed the machinery and subsequently trained the Ethiopian staff in the use of the manufacturing technology and passed on the related know-how until the Ethiopian partners had fully absorbed the manufacturing process. In return, the Ethiopian Investment Agency helped to provide the land for the facility at very favorable rental rates. The Ethiopian partner in SEAA makes available its domestic distribution network for the marketing of the EHGCs.

SEAA is an example of an international technology transaction that does not involve any intellectual property rights, but a transfer of machinery and the know-how for its operation. The manufacturing technology at the time of transfer was state of the art in Ethiopia, even though unknown to the Ethiopian SEAA partner. Making technology and related know-how available to a joint venture constitutes a case of in-kind investment (as opposed to cash). Under the Ethiopian investment framework, investors have the right to contribute in-kind or in cash. For in-kind con-

¹⁴ *Ibid*, pp. 137–167.

tributions, the Ethiopian Commercial Code generally requires an independent valuation of the contribution.¹⁵ The purpose of this requirement is to ensure that foreign investors do not exploit a joint venture by contributing technology whose value is inferior to what a local partner may expect in terms of its own contribution. In the case of SEAA, however, the partners sought to avoid a situation where a government entity would have the last word on the value of the technology. Consequently, the Chinese partners decided to contribute cash to the joint venture, which the latter would then use to purchase the technology from the Chinese partner. In other words, the attempts by the government to limit the parties' contractual freedom failed, with partners relying on creative modifications of the originally envisaged transaction.

This case study demonstrates the importance of non-IP-related technology transfer for certain transactions, especially involving mature technologies no longer protected under a patent. The study also provides an example of the potential clash of interests between a government that seeks to control technology investments and the parties to the transaction that wish to remain independent of such government control.

E. *Quality Chemicals in Uganda*¹⁶

Under a joint venture with Cipla Pharmaceuticals from India, Quality Chemicals has turned from a distributor of imported medicines to the largest manufacturer of anti-retroviral drugs and anti-malaria treatments in Uganda. Comparable to its counterparts in Ethiopia, Quality Chemicals had no drug manufacturing capacity prior to entering the joint venture. As in the Ethiopian case, the government attracted the foreign investor by making the land for the production facility available. But the Ugandan government went a few steps further. It financed the construction of the manufacturing plant near Kampala, provided roads, electricity and water free of charge and agreed to invest a 23 % stake as part of Quality Chemical's local equity contributed to the joint venture. In addition, the gov-

15 For more details, see ATKILIT BEKELE/YEMISRACH TASSEW, Capital increases under Ethiopian law. A discussion on capital increases made by way of in kind contributions and the use of the Franco-Valuta privilege, in: Simmons & Simmons elexica, published on 9 January 2017. Available at <http://www.elexica.com/en/legal-topics/commercial/090117-capital-increases-under-ethiopian-law-4fr1ca> (last accessed 3 May 2018).

16 See UNCTAD, *supra* n. 9, pp. 261–292 (265–268).

ernment paid the salaries of the Indian experts on site for training for a period of three to five years, gave the joint venture a seven-year purchase commitment worth of \$30 million per year and promised a ten-year tax holiday to the joint venture.¹⁷ In return, Cipla committed to training Ugandan pharmacists in the production of Antiretroviral (ARVs) and anti-malarial drugs. As compared to the production of gelatin capsules in the Ethiopian case study above, this represents a much more complicated endeavor and takes considerably more time to complete. The know-how that was transferred relates to (1) plant design and installation, (2) product and process know-how, (3) good laboratory practices, (4) engineering for plant maintenance and (5) sourcing of raw materials.¹⁸ As in the Ethiopian case, this transaction was a know-how transfer and did not involve any intellectual property rights.

This case study illustrates the important contribution that governments can make to attract foreign investors. At the same time, it highlights the significant role that domestic absorption capacity plays in benefiting from technology transactions, and how the latter in turn may contribute to the promotion of absorption capacity.

F. Lessons from the case studies

The main lesson to be drawn from the above examples is that technology transactions with foreign investors may constitute important avenues of technology transfer for domestic firms to gain a competitive edge, but that at the same time these agreements have little impact if not accompanied by effective training and knowledge transfer. The latter, however, is usually provided by the foreign licensor in its own interest to ensure quality production by the licensee. This may be important for the reputation of the investor's trademark if the latter is also licensed to the domestic manufacturer. In any case, it is clear that in a developing country context, technology is not simply transferred on the basis of a legal agreement, but needs to be embedded in a broader context of providing know-how in exchange of advantages for the investor in the domestic market.

17 UNCTAD, *Development Dimensions of Intellectual Property in Uganda: Transfer of Technology, Access to Medicines and Textbooks*. United Nations, New York and Geneva, 2010, p. 7. Available at http://unctad.org/en/docs/diaepcb200913overview_en.pdf (last accessed 3 May 2018).

18 UNCTAD, *supra* n. 9, p. 267.

Another important lesson is that potential licensees may best establish a basic minimum of technological capacity through in-house R&D coupled with the establishment of a network of partners for the transfer of knowledge. Where the capacity for even basic R&D does not exist, other assets such as effective distribution networks may to some extent make up for such a disadvantage.

In the short term, governments can actively support local producers through public purchase commitments. They may also use industrial policy to provide a certain level of protection to local production initiatives to ensure an investor of the sustainable character of its investment.¹⁹ In a longer-term vision, governments seeking to create attractive investment frameworks in pharmaceuticals need to extend their efforts beyond trade and intellectual property policies and ensure good systems of education; science, technology and innovation; and health policy.²⁰

IV. The limitations of the licensing approach

The main lesson drawn in the previous section regarding the important role of technology transactions in successful technology transfer requires a qualification in cases where the subject of the transaction is some form of intellectual property. Intellectual property rights confer exclusive rights, and the right holder may of course refuse the granting of a license.²¹ An interesting exception to this exclusive nature of a granted patent is provided under Article 40b of the Swiss Patents Act, which states that “Any person who intends to use a patented biotechnological invention as an instrument or means for research is entitled to a non-exclusive licence.” The Swiss legislator thus considers that the core purpose of bio-

19 Such industrial policies are subject to the pertinent agreements of the WTO, such as the General Agreement on Tariffs and Trade (GATT), the Agreement on Subsidies and Countervailing Measures (SCM), the Agreement on Trade-Related Investment Measures (TRIMS), etc. See UNCTAD, Tool Box for Policy Coherence in Access to Medicines and Local Pharmaceutical Production, United Nations, New York and Geneva, 2018, pp. 25–40. Available at <http://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=1921> (last accessed 3 May 2018).

20 For more details, see UNCTAD, *supra* n. 20.

21 See for instance Article 28.1 of the TRIPS Agreement : “*A patent shall confer on its owner the following exclusive rights : ...* ». Article 28.2 TRIPS grants the patent holder the right to *inter alia* conclude licensing agreements, but does not impose an obligation to license the patent to others.

technological research tools, i. e. the promotion of research, could be endangered under an exclusivity approach. Consequently, the patent holder does not have the right to refuse a license but can claim remuneration for the use of its patented invention.²² While this approach appears appropriate in the specific case of biotechnological research tools, it does not limit the patent holder's right to refuse a license in other areas of technology. Not every developing country-based firm may realistically hope to benefit from a licensing agreement and accompanying technology transfer and training. As to off-patent, mature technologies, these are generally available in the public domain. But as illustrated in the above case studies on Ethiopia and Uganda, companies may not be in a position to use these technologies without some training that is typically provided under a technology transfer contract.

Even where the patentee is willing to license its technology, or the holder of off-patent technology is willing to transfer, the question arises whether the licensee understands the licensed technology. This issue has been addressed above in the context of necessary "absorption" capacity on the part of the licensee. But independent of the technological understanding, does the licensee grasp the meaning of the terms of the license? This problem was highlighted for a developed country context by another speaker at the *Journée de droit de la propriété intellectuelle 2018* on 8 February 2018 at the University of Geneva. If despite the availability of well-trained lawyers, the understanding of licensing terms may pose a problem, we may get a sense of the gravity of the issue in a developing country context, where the familiarity with these legal complexities may be much lower, especially within resource-poor small and medium-sized enterprises (SMEs).

Assuming the licensee does understand the terms, there is another serious limitation to IPR-related technology transactions, which again is particularly relevant in a developing country context. Contract negotiations do not happen in a vacuum. They involve a power relationship between the negotiating parties. When a foreign investor, in many cases a multinational company, enters into negotiations with a developing country-based firm (for instance in contract manufacturing arrangements or

22 For a discussion of this provision see NIKOLAUS THUMM, A statutory research exemption for patents, in: Meir P. Pugatch/Anne Jensen (eds.), *Healthy IPRs. A forward look at pharmaceutical intellectual property*, Stockholm Network and Profile Books Ltd., London, 2007, pp. 116–124 (122).

R&D outsourcing agreements), this raises the question of a “level playing field”: Does the potential licensee have sufficient negotiating power to arrive at beneficial licensing terms? Or does it have to accept terms that restrict its radius of action under the contract? Examples may refer to exclusive grant back obligations, under which the licensee must transfer any of its own improvements of the licensed product back to the licensor and not to third parties in exchange of fees. Some licenses include no-challenge clauses that are supposed to prevent the licensee from challenging the intellectual property rights that are at the basis of the license. This puts the licensee at a disadvantage *vis-à-vis* its competitors, who may benefit from lower production costs in case they successfully challenge the intellectual property right and may use the technology free of charge. Finally, some licensees may be obliged to purchase items that are not relevant to the license and that they may not need, but that are offered by the licensor in a “coercive package” with the wanted technology.

These and other cases of restrictive terms in technology licenses have generated considerable concern in developing countries. Policy makers therefore made certain attempts to regulate licensing with a view to limiting these issues. The following sections will discuss approaches pursued in the contexts of UNCTAD and the WTO.

A. The UNCTAD draft International Code of Conduct on the Transfer of Technology

Between 1976 and 1985, Member States of UNCTAD pursued negotiations on international rules or principles on transfer of technology. The negotiations finally ended due to a lack of consensus between developing countries on the one hand and developed countries on the other. The main issue in this sense was the question of how to address restrictive practices in licensing agreements that could act to the detriment of the licensee. The question over which governments split was to what extent it was desirable to exercise control over contractual freedom in a context characterized by uneven negotiating power.²³ The developing countries sought to establish *per se* prohibitions of certain restrictive clauses, which

23 For more details see PEDRO ROFFE/CHRISTOPH SPENNEMANN, Competition Policy and the TRIPS Agreement: The Control of Anti-competitive Practices in Contractual Licenses, in: Carlos Correa/Abdulqawi Yusuf (eds.), Intellectual Property and International Trade. The TRIPS Agreement. Third edition, Wolters Kluwer, The Netherlands, 2016, pp. 359–399 (378–382).

would have resulted in an agreed list of practices that countries had the right to prohibit without further examination of their actual effect on the consumer. By contrast, developed countries argued for a rule of reason approach, according to which certain restrictive clauses, which on their balance and in certain cases generated beneficial effects for consumers and for competition, would still be allowed. The reason for these different approaches was the different objectives pursued by the two groups of countries. Developing countries sought to ensure access to technology, technological growth and the creation of a level playing field for negotiations between their domestic firms and their developed country-based counterparts. In their view, the guiding question regarding restrictive licensing clauses should have been: "Is the deal fair?" This was not to be the case where the restrictions complicated the international flow of technology and thus prejudiced national development. Developed countries, on the other hand, wanted to maintain contractual flexibility for their investors. In their view, the guiding question regarding restrictive licensing clauses should have been: "Is the deal anti-competitive?" They were ready to accept certain restrictions in international technology flows to the extent that this generated pro-competitive effects.

Countries were unable to bridge this divide. The negotiations of the Code of Conduct were abandoned in 1985. It should be noted, however, that some of the ideas developed in this context were again picked up during the negotiations of the TRIPS Agreement. Three of the restrictive licensing practices listed under the draft Code are now referred to under Article 40.2 of the TRIPS Agreement.

B. The TRIPS Agreement

Article 7 of TRIPS provides that

"The protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations."

This provision makes clear that the purpose of intellectual property protection is not solely related to rewarding the inventor; it rather is about achieving a balance between the interests of inventors and the users of technology that depend on its transfer and dissemination.

More specifically with respect to licensing, WTO Members in Article 40.1 of the TRIPS Agreement agree that some licensing practices may *inter alia* impede the transfer of technology.²⁴ Article 40.2 provides Members the right to address licensing practices that on a case by case analysis constitute an abuse of intellectual property rights, provided they generate an adverse effect on competition. Restrictive clauses in exclusive grant back arrangements, no-challenge clauses and coercive package licensing are expressly mentioned in this context.²⁵ As in accordance with Article 7 TRIPS the transfer of technology is one objective of intellectual property protection, the recognition under Article 40.1 TRIPS that certain licensing practices may impede such transfer has been interpreted as creating “an obligation on [WTO] Members to address certain forms of anticompetitive practices in licensing agreements.”²⁶

One way of addressing anticompetitive practices under the TRIPS Agreement is the granting of a compulsory license under Article 31. The TRIPS Agreement does not set any limitations regarding the substantive grounds upon which such a license may be granted. Governments have often used the threat of issuing a compulsory license as a negotiating tool to persuade intellectual property holders to agree on lower prices on the protected product. The same approach may be used to negotiate other conditions of a licensing contract in terms that are more favorable to the licensee. The limitation of this approach, however, is the need for the would-be licensee to involve an entity in the negotiations that has the authority to issue a compulsory license. This may be a court or a government agency, depending on national law. The would-be licensee in ad-

24 See Article 40.1: “Members agree that some licensing practices or conditions pertaining to intellectual property rights which restrain competition may have adverse effects on trade and may impede the transfer and dissemination of technology.”

25 “Nothing in this Agreement shall prevent Members from specifying in their legislation licensing practices or conditions that may in particular cases constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market. As provided above, a Member may adopt, consistently with the other provisions of this Agreement, appropriate measures to prevent or control such practices, which may include for example exclusive grantback conditions, conditions preventing challenges to validity and coercive package licensing, in the light of the relevant laws and regulations of that Member.”

26 HANS ULLRICH, Chapter 29: Competition, in: UNCTAD-ICTSD Resource Book on TRIPS and Development, Cambridge University Press, Cambridge, 2005, p. 555. Available at <http://www.iprsonline.org/unctadictsd/ResourceBookIndex.htm> (last accessed 3 May 2018).

dition to conducting the negotiations with the would-be licensor would also need to convince such third party that an intervention is needed. Another limitation of the compulsory licensing approach may lie in the fact that a licensee often needs additional know-how transfer from the right holder to effectively use the licensed technology. Under a compulsory license, the licensor may be willing to provide only the technology at the negotiated terms without offering additional services for implementation.

V. Conclusions

Technology transactions carry important potential for technology transfer to developing country firms. Technology holding investors are attracted by local capacities to use and develop technology. In the pharmaceutical sector, this may be illustrated by the increasing integration of developing country companies in global value chains, by means of outsourcing certain elements, which may involve the use of patented or off-patent technology.²⁷ This article presented some practical cases of pharmaceutical technology transfer through various kinds of transactions. All of the involved companies, at very different levels of technological development, managed to leverage certain competitive advantages to attract foreign investment and technology. From a policy advisory and technical assistance perspective, a lot can be done to assist developing country firms to benefit more from technology transactions. First, the legal and policy framework should be designed in a way conducive to foreign investment, but at the same time leaving space for local technological learning and absorption of technology. Second, developing country firms need assistance in understanding the legal technicalities of technology contracts. This is an area where technical assistance is so far missing. As the negotiation of contracts is up to the contracting parties, there are no international rules or guidelines on the content or the negotiation of such contracts. The TRIPS Agreement only provides minimum guidance in some narrowly defined areas. From that perspective, it appears useful to engage in a discussion on a potential framework of principles for tech-

27 See UNCTAD, *World Investment Report 2011, Non-Equity Modes of International Production and Development*, United Nations, New York and Geneva, 2011 pp. 142–147. Available at http://unctad.org/en/PublicationsLibrary/wir2011_en.pdf (last accessed 3 May 2018).

nology transactions, as is currently underway within the United Nations Commission on International Trade Law (UNCITRAL) and some academic institutions.²⁸

28 See ANDREA TOSATO, Intellectual Property License Contracts: Reflections on a Prospective UNCITRAL Project, in: University of Cincinnati Law Review, Vol. 4, No. 86, 2018. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3037356 (last accessed 3 May 2018).

International IP transactions: arguments for developing a UN standard

*Mark Anderson**

I. Introduction

Readers of this article will be familiar with intellectual property (IP) laws. Patents, copyright, design rights and trademarks are just some of the types of IP that exist in many countries of the world, and which protect aspects of technology, and associated products and services.

Although IP laws are mostly national, international treaties and conventions harmonise IP laws in different ways, whether through:

- a single application route (as in the case of the Patent Cooperation Treaty or the European Patent Convention);
- a single, multi-country form of protection (as in the case of pan-EU trade marks, registered designs and unregistered design rights); or
- mutual recognition of national IP (as in the case of copyright under the Berne Convention).

Other international measures such as TRIPS¹ require national governments to set consistent, minimum standards for the protection of IP.

The main focus of national IP laws, and of international measures concerned with IP, has been on areas such as subsistence, ownership, validity, infringement and enforcement of the IP in question. By contrast, the

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1 Agreement on Trade-Related Aspects of Intellectual Property Rights, established through the World Trade Organisation.

transactional aspects of IP – how do you assign, license or grant a security interest over IP, and what terms apply to such a transaction – have historically received little attention, both at the national and international level.

This article will argue that:

1. Many, or most, IP transactions are international, either because they are concerned with activities in more than one country, or because the parties are based in different jurisdictions.
2. IP transactions have moved, in recent years, from a quiet backwater to the main flow of international commerce. Just as the 19th century saw the flowering of international trade in goods, and the development of laws to govern that trade (e. g. the UK Sale of Goods Act 1893), the 21st century is seeing a flowering of trade involving technology and IP, and a coherent set of laws is needed to govern this trade.
3. National laws on IP transactions are patchy in their coverage, inconsistent between IP types, and inconsistent between countries. In many countries there is no coherent set of laws for IP transactions, and it may be necessary to draw on general contract law principles, or principles from traditional property law, to fill in the gaps, sometimes with unexpected consequences.
4. As a result, the rights and obligations of parties to an IP agreement are not always clear. Litigating IP agreements is an expensive process, with an uncertain outcome. This is detrimental to an efficient system of international trade. It is important to find a solution.
5. To some extent, defects in transactional IP laws can be addressed through detailed terms in licence agreements and other IP agreements. However, many of the agreement templates that are used for IP transactions are of poor quality and are not entirely appropriate or fully understood by the parties using them.
6. Given the international nature of many IP transactions, it would be sensible to develop new laws to govern them at the international level, in areas such as the interpretation and enforcement of IP agreements, and the terms that should be implied into them. The example of the United Nations (UN) Convention on the International Sale of Goods may provide a template for the methodology of developing such a law and for the types of issues that may need to be addressed in such a law.

This article will discuss examples from patent law, but similar points may be made in relation to other types of IP. The main theme of this article is that there should be a set of international standards for IP transactions, which could be applicable to different types of IP and to different types of IP transaction, including assignments and licences. The exact scope of any such standards would need to be decided by the committee or body that develops the standard, when considering in detail the legal and practice issues that arise.

II. International nature of IP transactions, and their increasing importance in international trade

For practitioners working in this field, the international nature of IP transactions, and their increasing significance in international trade, are well-known.² A subject that once seemed technical and specialist is increasingly part of the commercial and political mainstream. There is some political debate about the approach that national IP laws should take, but the importance of their underlying subject-matter – innovation – to international trade is generally recognised.³

2 Anecdotal evidence can be seen in the increasing number of IP contract disputes, many of them involving overseas parties, that have reached the English courts in recent years. About 20 years ago, the author commissioned a review of reported English cases on IP contract disputes in the specialist IP law reports, from the 19th century to the then present day. The results (as updated since then) can be found in chapter 10 of *Technology Transfer* (General Editor: MARK ANDERSON, 3rd edition, Bloomsbury Publishing, 2010; new edition in preparation). Typically, there was no more than one reported case every few years. Since 2000, the number of reported cases has increased dramatically, and there are typically several cases per year. For example, in 2017 there were cases on the effect of US copyright law on an assignment made under English law, the meaning of “exclusive”, FRAND licensing terms, and when a party can terminate for breach. See further the author’s blog which discusses these and other cases at www.ipdraughts.wordpress.com and an article co-written by the author in 2017, *Contract Law for IP Lawyers*, *Journal of Intellectual Property Law & Practice*, Volume 12, Issue 10, 1 October 2017, Pages 837–850.

3 Eg “Ideas and knowledge are an increasingly important part of trade. Many products that used to be traded as low-technology goods or commodities now contain a higher proportion of invention and design in their value. Films, music recordings, books, computer software, on-line services, clothing, food, plants, biotechnology products and many others are bought and sold because of the information, creativity and identity they contain – not usually because of the plastic, metal, cloth, paper or other material used to make them.” (World Trade Organisation summary of current issues in

The author is most familiar with this trend in the United Kingdom. In recent years, the UK government has commissioned several national reviews of the IP system and its use,⁴ and its recently-published White Paper on Industrial Strategy⁵ includes specific references to IP and IP commercialisation, as in the following extract:

“University patents, licence income and industrial collaboration are increasing, and there is scope – and demand from business – to do more. We have announced an increase of £40m a year to HEIF and will now commit to reaching a total of £250m a year by 2020–21, as recommended in the Witty Review. The increased support will align with the needs of the Industrial Strategy...”⁶

Further evidence of the UK government’s international focus on IP can be seen from its appointment of dedicated IP Attachés in its embassies in certain developing markets, including China, India and Brazil.⁷

IP transactions are part of this increased, international focus on IP. Later, this article will discuss an example of an international IP transaction that has recently been the subject of litigation in several jurisdictions – the licensing of standards-essential patents, and in particular patents relating to mobile devices and networks.

intellectual property, on their website at https://www.wto.org/english/tratop_e/trips_e/trips_issues_e.htm; last accessed on 4 March 2018).

- 4 Including the Gowers Review (2006; Gowers Review of Intellectual Property), Hargreaves Review (2011; Digital Opportunity: a Review of Intellectual Property and Growth), Witty Review (2013; Encouraging a British Invention Revolution: Review of Universities and Growth) and McMillan Review (2016; University KE framework: Good practice in technology transfer).
- 5 “Industrial Strategy: Building a Britain Fit for the Future” (White Paper published 27 November 2017) published at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/664572/industrial-strategy-white-paper-print-ready-version.pdf (last accessed 3 May 2018).
- 6 Industrial Strategy at page 80.
- 7 See <https://www.gov.uk/government/news/uk-overseas-intellectual-property-at-tache-network> (last accessed 3 May 2018).

III. Patchy and inconsistent treatment of IP transactions in national and international IP laws

IP laws typically address issues such as subsistence and infringement in detail, while transactional issues are considered only briefly. Two examples illustrate the point.

1. **European Patent Convention.** The European Patent Convention⁸ contains 178 articles. Only four of these articles (71 to 74) deal with transactional issues. In summary:
 - a. Article 71 states “A European patent application may be transferred or give rise to rights for one or more of the designated Contracting States.”
 - b. Article 72 states “An assignment of a European patent application shall be made in writing and shall require the signature of the parties to the contract.”
 - c. Article 73 states “A European patent application may be licensed in whole or in part for the whole or part of the territories of the designated Contracting States.”
 - d. Article 74 states “Unless this Convention provides otherwise, the European patent application as an object of property shall, in each designated Contracting State and with effect for such State, be subject to the law applicable in that State to national patent applications.”

Most of the above provisions are concerned with territorial issues. The main guidance given to the transactional IP lawyer is that assignments must be (i) in writing, and (ii) signed by the parties. By implication, a licence need not be in writing or signed. But as Article 74 makes a European patent application subject to national [property] laws, we may also need to consider national laws governing patent assignments and licences.

2. **UK Patents Act.** An example of a national law affecting patent applications is the (UK) Patents Act 1977⁹ (the Act). To the extent that a

8 16th edition, 2016. See <http://www.epo.org/law-practice/legal-texts/epc.html>. Last accessed on 3 May 2018.

9 See <https://www.legislation.gov.uk/ukpga/1977/37/contents>. Last accessed on 3 May 2018.

European patent application designates the UK as a territory for any granted patent, the Act will be a relevant law for this purpose. The Act contains 132 sections and six schedules. Only three¹⁰ of these sections (30, 33 and 36) are directly concerned with transactions. In partial summary:

- a. Section 30¹¹ provides that patents and patent applications are personal property, and that they can be assigned, licensed or mortgaged¹², or vest by operation of law (eg pass under a will). “To the extent that the licence so provides” a licence may be sub-licensed. Assignments and mortgages must in writing and signed by the assignor or mortgagor, but there is no requirement for them to be signed by the assignee or mortgagee.
- b. Section 33 describes the legal effect of registering an assignment, licence or other “transaction, instrument or event” on the UK register of patents. The wording of the section is detailed and technical, but to take a simple example, if two people claim that a patent was assigned to them, the first to register their assignment will usually take precedence.
- c. Section 36 is concerned with co-ownership of patents. In partial summary: (i) unless otherwise agreed, each co-owner has an “equal, undivided share” in the patent, (ii) each co-owner can use the patented invention without accounting to the other, and (iii) a co-owner may not assign or license their interest without the consent of the other co-owner(s).

The above UK patent laws address more transactional issues than the above provisions of the European Patent Convention. But the UK laws still only scratch the surface of the transactional issues that could be dealt with, and there is inconsistency between the laws governing different IP

10 But see next footnote in respect of Scotland.

11 The Act applies to the United Kingdom, but section 31 provides that section 30 does not apply to Scotland, and instead section 31 applies in Scotland. Section 31 sets out equivalent provisions to those of section 30 but worded to reflect Scots law and practice.

12 In other words, a legal interest (less than an assignment) may be granted over it, eg as security for a debt. Other names for interests of this general kind include charge and pledge.

types. It seems that no attempt has been made to develop a coherent set of laws across different IP types.¹³

The following examples illustrate (a) certain inconsistencies in transactional IP laws across different IP types in one jurisdiction, and (b) certain inconsistencies in transactional IP laws across different jurisdictions:

A. Assignments

1. **Assignment of future inventions.** Is an assignment of an invention or patent that has not yet come into existence legally effective? UK patent law¹⁴ is silent¹⁵ on this point, unlike UK copyright law, which provides:¹⁶

“Where by an agreement made in relation to future copyright, and signed by or on behalf of the prospective owner of the copyright, the prospective owner purports to assign the future copyright (wholly or partially) to another person, then if, on the copyright coming into existence, the assignee or another person claiming under him would be entitled as against all other persons to require the copyright to be vested in him, the copyright shall vest in the assignee or his successor in title by virtue of this subsection.”

2. **Rights of assignee.** Many IP assignments in the UK state that they are an “absolute” assignment¹⁷, to avoid any suggestion that the assign-

13 Another illustration of this point is in relation to unregistered design rights. When these rights were introduced, by the UK Copyright, Designs and Patents Act 1988, the drafter of the legislation included a provision that the commissioner of a design, rather than its creator, would be the first owner of design right in that design (section 215). This was inconsistent with the position for ownership of all other types of UK IP, and was eventually reversed by the UK Intellectual Property Act 2014. A more systematic approach to IP transactions would have avoided this anomaly.

14 A similar question, in relation to US patents, came into sharp relief in the United States Supreme Court case of *Stanford v Roche*, 563 U. S. 776 (2011). There a majority of the Supreme Court decided that an agreement signed by an inventor that used the words “I will assign and do hereby assign” took precedence over an earlier agreement, signed by the same inventor, that used the words “I agree to assign”; both agreements were concerned with the assignment of a future invention.

15 Though Arnold J in *KCI v Smith & Nephew* [2010] EWHC 1487 considered (obiter) that section 7 of the Patents Act 1977 might be interpreted as allowing assignment of future inventions.

16 Section 91(1), UK Copyright, Designs and Patents Act 1988.

17 Traditionally the words “to hold unto the assignee absolutely” were seen.

ment is partial in some way (eg UK copyright assignments can be for a term of years less than the full life of the copyright). In the author's view, it would be desirable for this to be clearly stated in IP legislation as the default position unless some other arrangement is stated.¹⁸ More generally, in the author's view it would be helpful to have legislative clarification that (unless otherwise expressly agreed) an assignment is an absolute transfer of title, such that no rights are retained by the assignor. (Similarly, it might be clarified that a licence (whether exclusive or non-exclusive) is not a transfer of title.) This might avoid the need for over-elaborate wording in IP agreements, such as the following which appears in many US assignments that the author has seen, and which has crept into some UK assignments:¹⁹

"The Assignor hereby sells, assigns and transfers unto Assignee, its successors or assigns..."

Instead, wording such as "The Assignor hereby assigns to the Assignee..." should suffice.

B. Licences

1. **Implied obligations of licensor.** There is little, if any guidance, in the UK IP legislation as to the obligations on a licensor. Applying general contract law principles on the implication of terms into contracts, one might speculate that, in an individual case, it would be implied that the licensor owns the IP that is being licensed. It might be more difficult to argue, unless there were special circumstances, that the licensor implicitly warranted that use of the licensed IP would not infringe third party IP, or that the licensor had an obligation to sue infringers of the licensed IP.²⁰

18 Arguably, a similar effect is achieved by the UK Law of Property Act 1925, section 63, but the application of this Act to international IP transactions is obscure.

19 For a discussion of (slightly different) assignment wording that was apparently drafted by Freshfields, a major London law firm, and used in connection with the London Olympics in 2012, see the author's blog article at <https://ipdraughts.wordpress.com/2012/08/10/olympic-contracts-gold-silver-or-lead/> (last accessed on 3 May 2018).

20 For a discussion of English case law in this area, see chapter 10 of *Technology Transfer* (Anderson (ed); Bloomsbury Publishing, 3rd edn 2010; 4th edition in preparation).

The author understands, from speaking to IP lawyers in other jurisdictions, that other countries' laws may imply greater obligations on a licensor, eg to license improvements or sue infringers.

2. **Implied obligations of licensee.** There is little, if any, guidance in the UK IP legislation as to the obligations on a licensee. Case law suggests that there is no implied obligation on a licensee to exploit the licence or to refrain from selling competing products.²¹
3. **Sub-licensing.** Section 30(4)(a) of the UK Patents Act 1977 includes the following provision:

“to the extent that the licence so provides, a sub-licence may be granted under any [patent] licence and any such licence or sub-licence may be assigned or mortgaged...”

Similarly, section 28(4) of the UK Trade Marks Act 1994 uses similar language to that above with reference to the sublicensing of trade marks. By contrast, the UK Copyright, Designs and Patents Act 1988 says nothing²² about the rights of a licensee of copyright or design rights to sub-license their rights.

It is understood that, under German law, it is implied that an exclusive licensee of a patent may sub-license, but a non-exclusive licensee may not.²³

4. **Survival of sub-licences.** The traditional position under English law was that a sub-licensee could acquire no greater rights than the (head) licensee from which it derived its rights, and therefore on any termination of the head licence, the sub-licence would automatically terminate.²⁴ A recent case in the English High Court has diluted this purist approach, where the head licensee was a member of the same group of companies as the IP owner.²⁵ It seems that in certain other jurisdictions,

21 See the discussion of what limited case law there is on this point see chapter 10 of *Technology Transfer* (Anderson (ed); Bloomsbury Publishing, 3rd edn 2010; 4th edition in preparation).

22 Eg in relation to copyright, one might expect any such provision to appear in section 90 of that Act.

23 See the discussion at <https://gettingthedealthrough.com/area/19/jurisdiction/11/licensing-germany/> (last accessed 3 May 2018).

24 *Austin Baldwin v Magnetic Car Company* (1925) 42 RPC 454.

25 *VLM Holdings Limited v Ravensworth Digital Services Limited* [2013] EWHC 228 (Ch).

including the USA and Germany, a sub-licensee's rights may survive such termination.²⁶

C. Co-ownership

1. **Legal status of co-owners.** By section 36(1) of the UK Patents Act 1977:

“Where a patent is granted to two or more persons, each of them shall, subject to any agreement to the contrary, be entitled to an equal undivided share in the patent.”

To understand fully what these quoted words mean, it may be necessary to consider the different forms of co-ownership in traditional property law. When two people buy a house together in England, they must choose whether to do so as tenants in common (in which case, on the death of one of them, their share passes in their will), or as joint tenants (in which case, on the death of one of them, the other owner automatically becomes the sole owner). It is understood that an “undivided share” is equivalent to a tenancy in common. For this reason, the author tends to refer to “co-ownership” rather than “joint ownership” with respect to UK patents.

The IP legislation in the UK for other types of IP is not explicit as to the nature of co-ownership, but it is likely that the rules will follow the patents legislation.

2. **Rights of co-owner to use, assign or license.** Under section 36(2)(a) of the UK Patents Act 1977, each co-owner may work the invention (but not license or assign their interest) “for his own benefit and without the consent of or the need to account to the other or others”.

This contrasts with the position under the laws of some other countries, including certain countries that have a civil code, where a co-owner may be entitled to compensation if another co-owner exploits the patent.²⁷

26 This subject is discussed further on the author's blog at <https://ipdrafts.wordpress.com/2013/03/13/what-happens-to-a-sub-licence-when-the-head-licence-is-terminated/> (last accessed on 3 May 2018).

27 Eg in relation to Germany, see the following commentary: <https://gettingthedealthrough.com/area/19/jurisdiction/11/licensing-germany/> (last accessed on 3 May 2018).

A co-owner of a UK patent may not, however, assign or license their interest without the consent of the other co-owner(s).²⁸ This contrasts with the position in certain civil code countries, where a co-owner may do so, but must grant a right of first refusal to the other co-owner(s),²⁹ and with the USA, where a co-owner may license or assign their interest.³⁰

To be clear, the author is not arguing that UK patent laws are better or worse than the patent laws of any other country. His point is rather that, in both national and supra-national IP laws, the attention given to transactional aspects is limited, and that there are inconsistencies in those laws between countries. Moreover, at least in the UK, the author considers that the chances of the legislature spending time to develop a systematic and coherent set of rules for IP transactions are currently low.

IV. Why does it matter?

IP-related litigation can be expensive and hard-fought.³¹ Improving the clarity and understanding of the rules governing IP transactions should reduce the costs of negotiating such transactions, and reduce the likelihood of misunderstandings and disputes arising in relation to existing agreements. This will be beneficial for an important area of international trade.

A. Dealing with the issues in the licence agreement; poor quality of licence templates

With some limited exceptions, eg as to the writing and signing formalities for assignments, the parties to an IP agreement may agree terms that are different to the ‘default’ rules for transactions under national IP legislation. For example, co-owners may agree that one of them will have the

28 Section 36(3), UK Patents Act 1977.

29 Eg, in relation to patents in Spain, see the commentary at: <https://gettingthedealthrough.com/area/19/jurisdiction/21/licensing-spain/> (last accessed on 3 May 2018).

30 35 USC 262 as interpreted by case law.

31 Eg see the WIPO report “IP Litigation Costs” (WIPO Magazine, February 2010) at http://www.wipo.int/wipo_magazine/en/pdf/2010/wipo_pub_121_2010_01.pdf (last accessed on 3 May 2018).

exclusive right to use or license the co-owned IP, without obtaining consent from the other co-owner(s) on each occasion.

A possible response, therefore, to the perceived defects in transactional IP laws discussed above, is to point out that the parties can decide what terms to include in their IP agreement. That is true, but the following points should be borne in mind:

- Parties use template agreements of varying quality and provenance.
- Parties do not always understand what they are agreeing to.
- A more coherent set of default rules would reduce the need for detailed terms in IP agreements, and would reduce the costs of negotiating IP transactions.

A good illustration of these points is a patent licence agreement whose terms were set out in full in an English High Court judgment in 2017. The case was called *Unwired Planet International Ltd v Huawei Technologies Co Ltd & Anor*.³²

The case is significant for lawyers who are interested in the subject of standards-essential patents (SEPs) and their licensing on terms that are fair, reasonable and non-discriminatory (FRAND). Some of the transactional issues are discussed elsewhere by the author of this article, and will not be explored further here.³³ This article simply uses the case as an illustration of some legal and drafting issues in the wording that the parties adopted. The key points for the purposes of this article are that:

- this was a negotiation of some significance – the judge referred to the “enormous sums spent in costs by the parties in these proceedings”;³⁴
- it was an international negotiation – the four parties to the licence agreement were incorporated in China, the UK, the USA and Ireland, respectively; and

32 See in particular the two hearings of the “non-technical” trial, reported at [2017] EWHC 711 (Pat) (see <http://www.bailii.org/ew/cases/EWHC/Patents/2017/711.html>) and at [2017] EWHC 1304 (Pat) (see <http://www.bailii.org/ew/cases/EWHC/Patents/2017/1304.html>).

33 See “How to Draft a Licence Agreement That is Fair, Reasonable and Non-Discriminatory: a 10 point plan”: article published online by the Journal of Intellectual Property Law and Practice (OUP) in December 2017, Journal of Intellectual Property Law & Practice, Volume 13, Issue 5, 1 May 2018, Pages 377–392.

34 Paragraph 364, *Unwired Planet International Ltd v Huawei Technologies Co Ltd & Anor*, [2017] EWHC 711.

- the parties used a template for their licence agreement that appears to include some US-style contract language. The agreement is stated to be governed by English law.

B. First example – pass on the benefit of the licence to licensee’s customers

Two clauses from the agreement illustrate some of the author’s concerns about the wording of international licence agreements, and about the lack of a coherent set of legal rules governing such transactions.³⁵ First a clause about the rights of customers of the licensee:

2.4 For the avoidance of doubt, the license granted by Licensor and its Affiliates to Licensee herein shall convey to any direct or indirect customer of Licensee without additional compensation to Licensor with respect to any Licensed Product Sold by Licensee to such customer (whether or not as part of a Combination) the benefit under the license herein.

In essence, this clause states that the licensor will not sue customers of the licensee for infringement of the licensed patent. In the author’s view, this topic is well-suited to the development of an international standard on the point. National courts, at least in the UK and USA, have looked with disfavour on the suggestion that an IP owner, having licensed someone to make and sell products, could then sue the purchaser of those products for infringement of the licensor’s IP. In the absence of a specific provision in IP legislation, the courts have applied principles from other areas of law. Whether the principle is called the first sale doctrine, exhaustion of rights, non-derogation from grant, or implied licence, the outcome is the same – you can’t sue for infringement in respect of products put into the supply chain by the IP owner or his licensee.³⁶

35 The following paragraphs criticise the drafting of the agreement. There may be good commercial reasons why the parties used a particular template, eg if it had been used before and there was a concern that changing the template would give rise to allegations of unequal treatment of licensees. The author has no information about the instructions that any lawyer received in relation to the agreement, and he makes no criticism of any individual. His criticism is focussed purely on the wording of the agreement.

36 Some courts in the UK and USA have reached for principles from general property law to explain their decisions in IP cases. Eg in the case of *British Leyland Motor*

If this principle were incorporated into IP legislation, it would not be necessary to make the same point in the licence agreement, in rather clumsy language. There are several problems with the above-quoted clause, including:

- A sentence of 57 words – a sentence this long is unlikely to be easy to understand.
- Use of the concept (which to many will be unfamiliar) of “conveying the benefit of a licence”, rather than a simpler statement such as an obligation not to sue customers.
- More generally, use of technical legal expressions and jargon that may be more familiar to lawyers from an Anglo-American background than to non-lawyers, or to anyone from a different language background, eg
 - For the avoidance of doubt;
 - Convey;
 - Compensation;
 - Benefit under;
 - Herein.

C. Second example – pass on obligations to new owners of the licensed IP

A second clause from the agreement focuses on a different topic, but raises similar concerns. Clause 7 is concerned with the obligations of successor-in-title to the licensor (eg someone who buys the licensed patents from the licensor), and includes the following wording:

7.1.2 if Licensor or any of its Affiliates transfers its business in whole or in part through divestiture, merger or otherwise to a Third Party, Licensor shall procure, prior to the divestiture, that the license, covenant and release granted to Licensee under this Agreement shall continue...

Corp. v Armstrong Patents Co. [1986] UKHL 7, the House of Lords made use of a property law principle known as “non-derogation from grant” to justify allowing a purchaser of a car to purchase spare parts from a third party supplier without infringing the copyright of the car manufacturer.

7.2 ...in the event that any successor-in-interests or assigns of Licensor ("Assignees") make any claim ...against Licensee or its Affiliates ...Licensor shall ...use its commercially reasonable best efforts to ensure compliance with Sections 7.1.1–7.1.3 by Assignees and shall indemnify Licensee from any such claims ...including directly intervening in any such claim or legal proceeding

The broad principle in this clause is that future owners of the licensed IP should license the IP to the licensee on the same terms as are agreed in this licence agreement. If, contrary to that licence, the new owner sues the licensee, the licensor under this agreement will indemnify the licensee from any such claims.

This clause, particularly clause 7.1.2, raises general principles that might be included in IP legislation, such as the circumstances in which a new owner of IP is bound by a licence entered into before it acquired the IP. To some extent and in some jurisdictions, a new owner is bound if the licence has been registered at national patent offices. For unregistered IP such as copyright, a new owner may be bound if he was aware of the licence when he acquired the copyright. For example, UK copyright law³⁷ provides:

"A licence granted by a copyright owner is binding on every successor in title to his interest in the copyright, except a purchaser in good faith for valuable consideration and without notice (actual or constructive) of the licence or a person deriving title from such a purchaser."

This is a topic that could be covered by international legislation, to ensure consistency between jurisdictions and IP types, and to avoid the need for elaborate provisions in contracts.

Again, the drafting of the above provisions is far from ideal. Some of the problems include:

- Clause 7.1.2, which is part of a sentence, runs to 45 words, which is too long for easy understanding;
- Use of American legal concepts, which may not readily translate to other legal systems, eg divestiture, successors-in-interest, covenant;
- Use of contract lawyers' jargon, eg in the event that, procure, assigns;

37 Section 90(4), UK Copyright, Designs and Patents Act 1988.

- Use of American business jargon, eg commercially reasonable best efforts.

A possible answer to some of these criticisms is that the contracting parties can rely on their lawyers to ensure that any legal terminology and jargon is correctly used. But in the author's experience, these types of contracts are sometimes used in circumstances where a party does not involve an Anglo-American legal adviser. In any event, in the author's view, the language of contracts should be understood by the commercial representatives of the parties. In the court case in which this agreement was discussed, the lead commercial negotiator for Huawei was a Mr Cheng. In the words of the judge:³⁸

"Mr Cheng has been the Deputy Director of Huawei's IP Department since February 2008, and Vice President for IP Licensing & Transactions. He gave his evidence through an interpreter. His evidence related to Huawei's position on FRAND, whether any steps have been taken to avoid infringing Unwired Planet's patents, and Huawei's conduct in licence negotiations."

In the author's view, given the above statement, the likelihood that Mr Cheng understood the detailed meaning of the provisions quoted above must be small. And yet it seems he had commercial responsibilities, on behalf of Huawei, for agreeing the terms in the licence agreement. This is not a criticism of Mr Cheng, it is a criticism of the practice of using complex contractual language, designed for a particular legal system, in international licence agreements.

There are many other examples of wording that is encountered in international licence agreements whose precise meaning and relevance may not be clear to the parties. Often this wording is part of the fabric of conventional US agreements, and its meaning may not be clear to non-US lawyers³⁹ or to lay clients. Some common examples include:

- In consideration of the premises and for other good and valuable consideration, the receipt and sufficiency of which is acknowledged;
- Represents and warrants;

38 At paragraph 33, *Unwired Planet International Ltd v Huawei Technologies Co Ltd & Anor*, [2017] EWHC 711.

39 Whether these terms are meaningful or useful under US laws may also be open to question – see the discussion of these and other terms in *Manual of Style for Contract Drafting* by Ken Adams (4th edition, American Bar Association, 2017).

- Indemnify, hold harmless and defend;
- Inure to the benefit of the parties, their successors and assigns.

In the author's view, developing international standards for IP transactions could include the development of model agreements that take account of those standards, and which would avoid some of the old-fashioned and legalistic language that is encountered in many international IP agreements at present.

V. Comparison with laws on the sale of goods

As previously mentioned, international trade in goods has been happening at a substantial scale for several centuries, and the laws on the sale of goods are, in general, more comprehensive than those governing IP transactions. Sale-of-goods laws may provide a model that could be adapted to IP transactions. This article will focus on two examples of such laws, namely the English Sale of Goods Act and the UN Convention on the International Sale of Goods.

Although England does not, in general, have a codified legal system, there is a major exception to this rule in relation to the sale of goods. The Sale of Goods Act 1979, as amended (SGA) provides a comprehensive code for contracts for the sale of goods. The SGA is the latest manifestation of sale-of-goods legislation that can trace its origins to the nineteenth century.⁴⁰ It is understood that US sale-of-goods legislation, and in particular the Uniform Commercial Code, can also trace some of its origins to English nineteenth century laws.

An important part of the SGA is sections 10 to 15, which incorporate certain implied warranties into contracts for the sale of goods. As well as the familiar implied warranties of satisfactory quality (previously known as merchantable quality, and still referred to by this name in the US Uniform Commercial Code) and fitness for purpose, a less frequently considered implied term is that provided by section 12(2):

⁴⁰ Eg see the Sale of Goods Act 1893 at <https://www.legislation.gov.uk/ukpga/1893/71/contents/enacted> (last accessed on 3 May 2018. Some of the terms of the 1893 Act are virtually identical to those in the SGA, eg there is an implied warranty of quiet possession under section 12 of both statutes.

“(2) In a contract of sale ... there is also an implied term that –

(a) the goods are free, and will remain free until the time when the property is to pass, from any charge or encumbrance not disclosed or known to the buyer before the contract is made, and

(b) the buyer will enjoy quiet possession of the goods except so far as it may be disturbed by the owner or other person entitled to the benefit of any charge or encumbrance so disclosed or known.”

English case law provides that the quiet possession warranty is breached if a purchaser of goods is sued by a third party for patent or trade mark infringement.⁴¹

In the author’s view, a law on IP transactions would address analogous questions, such as whether a purchaser from a licensee has an implied licence from the licensor.

The United Nations Convention on the International Sale of Goods⁴² can be viewed as similar in concept to the Sale of Goods Act 1979, in that it also provides a comprehensive code for the sale of goods, at an international level. In the words of an explanatory note⁴³ on the convention on the UNCITRAL website:

“The adoption of the CISG provides modern, uniform legislation for the international sale of goods that would apply whenever contracts for the sale of goods are concluded between parties with a place of business in Contracting States. In these cases, the CISG would apply directly, avoiding recourse to rules of private international law to determine the law applicable to the contract, adding significantly to the certainty and predictability of international sales contracts.

Moreover, the CISG may apply to a contract for international sale of goods when the rules of private international law point at the law of a Contracting State as the applicable one, or by virtue of the choice of the contractual parties, regardless of whether their places of business are located in a Contracting State. In this latter case, the CISG pro-

41 In the case of patents, see *Microbeads v Vinhurst Road Markings Limited* [1975] 1 All ER 529, CA, and in the case of trade marks see *Niblett Limited v Confectioners Materials Limited* [1921] 3KB 387, CA.

42 http://www.uncitral.org/uncitral/en/uncitral_texts/sale_goods/1980CISG.html (last accessed 3 May 2018).

43 See http://www.uncitral.org/uncitral/en/uncitral_texts/sale_goods/1980CISG.html (last accessed 3 May 2018).

vides a neutral body of rules that can be easily accepted in light of its transnational nature and of the wide availability of interpretative materials...

The third part of the CISG deals with the obligations of the parties to the contract. Obligations of the sellers include delivering goods in conformity with the quantity and quality stipulated in the contract, as well as related documents, and transferring the property in the goods. Obligations of the buyer include payment of the price and taking delivery of the goods. In addition, this part provides common rules regarding remedies for breach of the contract. The aggrieved party may require performance, claim damages or avoid the contract in case of fundamental breach. Additional rules regulate passing of risk, anticipatory breach of contract, damages, and exemption from performance of the contract.”

If a similar approach were to be adopted for patent licences, negotiating parties would benefit from having a set of default terms for their licensing relationship, which they could agree to adjust to their individual circumstances.

Like the SGA, the UN convention includes some provisions that touch on IP issues, including Article 42, which includes the following text:

“42. The seller must deliver goods which are free from any right or claim of a third party based on industrial property or other intellectual property, of which at the time of the conclusion of the contract the seller knew or could not have been unaware...”

Thus, Sale-of-goods laws recognise the importance of addressing IP issues. In both of these examples, the SGA and the UN convention, IP issues may be considered secondary to the main purpose of the legislation. But they illustrate that a comprehensive code will cover the full range of issues that are likely to arise in a particular type of transaction, and thus are much better than the current, partial focus on transactional issues in national IP laws.

VI. Need for international approach to IP transactional law

It is hoped that the above discussion has demonstrated:

- the importance of IP issues in modern, international trade;

- the lack of a coherent set of legal rules governing international IP transactions;
- the desirability of introducing such rules;
- that an international body, such as a UN agency, may be better placed than national governments to introduce such a set of rules;
- that the UN convention on the international sale of goods may provide a model that could be adapted for the development of rules suitable for IP transactions.

The issues that any such convention or other set of rules might cover, include the formation of IP contracts, how they are interpreted, and the terms that might be implied into them. For example, in relation to IP licence agreements, the convention might address issues such as:

- Scope of licence, including as to rights to improvements;
- Meaning of exclusive, sole, etc;
- Rights to sublicense;
- Implied warranties of ownership, non-infringement;
- Duties of exclusive licensee to exploit;
- Product liability indemnities by licensee;
- Dealing with infringers.

A possible counter-argument is that IP issues have proved to be politically contentious in international forums such as UN agencies. In the author's understanding, much of the controversy concerns areas such as the legal rights of an IP owner, and public policy constraints on those rights, such as those provided by national and EU competition laws.

In the author's view, there is no need for any international convention or set of rules for IP transactions to raise controversial issues of this kind. For present purposes, the scope of IP rights and exceptions to those rights should be treated as a "given". This proposal is primarily concerned with the development of a consistent set of technical rules for commercial transactions in relation to those rights.

IT Agreements – from software to cloud services

*Philippe Gilliéron**

This paper is based upon my personal experience as a practitioner having negotiated hundreds of IT agreements over the last years, from the simplest to the most complex one. Aimed at providing the reader with salient points to take into account when negotiating IT agreements, this contribution should not be considered as a scientific paper; in other words, readers shall not find any footnote or academic reference in it.

The pitfalls to be avoided when negotiating IT agreements are numerous and could lead to the drafting of a whole book. The goal of this contribution is limited in its scope and shall focus on a subset of these pitfalls, namely the ones involving intellectual property considerations or related ones.

I. Typology

“IT agreements” is a generic reference that encompasses several types of agreements all related to the exploitation and use of digital resources. It is fairly common within the industry to make a distinction between the following agreements:

A. Proof of concept (PoC)

A proof of concept is meant to enable customers to test a product, its functionalities and performance for a limited period of time within its environment, so as to ensure that the product meets the customer’s expectations before being subscribed to.

Such entitlement being limited in time and usually provided for free, or at a minimum at a significantly discounted price, a proof of concept takes the form of a concise agreement limited to the “strict necessary”, tradi-

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tionally limiting if not excluding any type of warranty or indemnification clause.

While data processing terms and security requirements shall also be limited, one should not forget that legal requirements are indifferent to the complexity or duration of an agreement, and that the legal requirements, notably but not only related to applicable data protection laws and regulations, will apply in any case.

As a result, the provisions parties decide to incorporate into such an agreement will ultimately be the result of their power of bargaining, a risk assessment, notably based upon the type of data to be processed and the duration of the PoC (which can vary from a few weeks to one year in exceptional cases). In order to avoid any risk, customer will try to ensure that data to be processed will be limited to a testing environment, at the exclusion of an environment in production, although this is not always possible to fully test the product).

Proof of concepts shall not be further addressed in this paper.

B. Software agreements

Unlike cloud based agreements, software agreements relate to the licensing of a software as an asset by a provider to a customer. These agreements will thus result in the installing (either through a formal installation procedure or downloading) of the software within the customers' premises.

C. Cloud based agreements

Unlike software agreements, cloud based agreements relate to the entitlement granted by a provider to a customer to access and use IT resources remotely. The remote consumption of these resources is considered as a service, and may consist of a software as a service (*SaaS*), platform as a service (*PaaS*) or infrastructure as a service (*IaaS*). In this paper, while most considerations will apply indifferently to any type of cloud based agreements, I shall focus on *SaaS* which is now becoming the leading type of IT agreements.

D. Professional services agreements

While the business model retained by IT providers may vary, an IT project will regularly involve professional related services. Implementing and rolling out an IT project will require the support of the IT provider, whose assistance might be needed to install, configure the products, develop interfaces or even customize the product to meet customers' ends. It is fairly common to divide the type of services an IT provider can be requested to perform between development, consulting and support services.

E. Digital agreements

Digital agreements are a subset of professional services agreement which consist of the development of a website or applications. These agreements will be handled separately as they usually raise specific concerns in terms of intellectual property that are the object matter of specific provisions.

II. Structure

The negotiation of IT agreements may be bilateral, *i. e.* between one given provider and a given customer, in which case they do not raise much concerns from a structural standpoint.

These agreements may however also be contracted at the level of a group of companies, either at the level of the provider, the customer, or both. Negotiating IT agreements at the level of the group can serve several purposes such as, amongst others: (i) negotiate the terms of the frame agreement at the central level to ensure that these terms will align with the group's policies and compliance requirements and avoid inconsistencies or deviations at market level; (ii) negotiate the commercial terms at the central level to get a better pricing and exercise a better control upon the pricing, or (iii) avoid inconsistency in having multiple providers providing the same product or service to the affiliates by ensuring that preferred providers will be the preferred vehicle to be retained at market level (thus ensuring better control and pricing through volume, although one will always need to have in mind potential competition law issues).

In this case, the structure that may be retained is multifold:

- The frame agreement will normally always be contracted at central level, although tax implications may sometimes come into play to opt for a different vehicle.
- The central company may consist of an enterprise agreement. In this case, the central company will sign on behalf and for the account of all the affiliates (which may or not extend to business partners or other third parties providing services to customer) and directly pay for all the affiliates centrally. The affiliates may automatically benefit from the products or services, or still be required to execute a transactional document referring to the frame agreement to benefit from such product or service. In most instances, the central entity paying centrally will then internally charge back to the affiliate their share of the price globally paid to the provider. The downside of this structure is that, in most instances, the central entity will be directly liable for whatever may happen at the market level, and thus endorse a global and central liability as well, an effect usually deemed undesirable.
- The central company will sign on behalf and for the account of all the affiliates (which may or not extend to business partners or other third parties providing services to customer), but the decision to benefit from the terms and conditions negotiated at central level will depend upon each affiliate's option. Such option will be exercised through the execution of a transaction document referring to the frame agreement but, unlike the above situation, the relevant affiliate will then directly pay and be directly liable for its wrongdoings. This structure thus avoids any concern of internal charge back or central liability, but requires additional paperwork. In these cases, customers will be better at trying to ensure that local to local invoicing is secured (*i. e.* that a local entity of the provider, potentially acting through a reseller if need be, will directly charge the local affiliate), so as to avoid potential withholding tax issues.

III. Software agreements (on premises)

A. General remarks

Software are hardly ever purchased (unless as a result of a customized development resulting from a professional services agreement), but rather licensed by a provider to a customer. Consequently, software agreements take the form of license agreements according to which a provider will license the software it owns to the customer subject to usage parameters to be complied with by customer.

License agreements bear several distinctions compared with cloud based agreements; unlike cloud based agreements:

- software being hosted internally, it will require a form of installation, to be carried out either by the customer itself or by the vendor. Installation and configuration will usually be subject to an acceptance period, whose length may vary but will typically consist of thirty days, so as to enable the customer to ensure that the software has been properly installed. Following such acceptance, warranty will come into play, normally ranging between one to three months, sometimes more depending upon the customer's power of bargaining.
- License will not automatically include the support of the licensed software. Support typically include corrective maintenance, but also the delivery of updates, upgrades, enhancements, improvements and the like. This basically means that, absent payment of an additional fee, such support will not be included in the licensed fees.

B. License

License metrics may greatly vary. For obvious reasons, software licensing of a standard product will never be exclusive and always lead to the granting of a non-exclusive license. The usage parameters of such license may however differ and may typically consist of:

- a single license limited to one entity, defined affiliates or enterprise wide;
- the geographical scope;
- the duration of the license, which can be limited in time (this is the standard as vendors' pricing models are normally not contemplated for perpetual license, which triggers substantial price increase) or per-

petual. Depending upon their power of bargaining, customers may obtain that, after a certain term, they may be entitled to acquire a perpetual license subject to a premium fee;

- Metrics may for instance be user, server or CPU (Central Processing Unit) based. If the license is user based, this typically means that customers will need to purchase one license for each user; user licenses can be subject to their own parameters: the most restrictive ones are *named* user licenses, i. e. only a given user is entitled to use the software, so that such user is not entitled to enable a colleague for instance to use the software; user licenses may also be *concurrent*, which is an additional restriction stating how many users may, in the same time, access and use the software. While, as of the time of this writing, this remains an exception, questions related to the increasing impact of artificial intelligence (AI) is likely to trigger questions such as the following one, already faced by the author: does the use of a chatbot¹ amount to a user that would require the granting (and thus payment) of a license? Unsurprisingly, the answer to the question was affirmative, but one should remember to define the notion of “user” accordingly.

Compliance with the licensing metrics will require the provider to be entitled to audit its customers. Licensing agreements will thus typically contain an audit clause entitling vendors to carry out such audit at their own costs once per year, subject to a certain prior written notice during business hours.

While vendors will try and make sure that breach of the license terms will automatically entitle them to an additional remuneration (ideally at the standard list price rather than the negotiated one), customers will rather try and obtain a grace period to ensure a return to compliance prior to having to pay an additional fee. This may typically be justified under circumstances where a breach of those parameters might take place for a limited period of time (for instance when there is an increasing demand for the software to be used during certain periods, such as Christmas); truth also is that compliance of licensing metrics may sometimes be tricky within multinational companies, thus triggering questions around license management: how can one for instance make sure that the 100'000'365 user licenses are actually complied with on a worldwide basis at any time at a group level?

1 A chatbot is a computer program which can conduct a conversation via text.

C. Support

As mentioned above, in order to benefit from support, customers will have to pay an additional fee, typically ranging between 17–22 % of the license fees. Based upon the author's experience, current standard (as of the time of writing) was however closer to 17 % rather than 22 %.

One may wonder whether to pay for support as of the effective date of the licensing agreement actually makes sense. Considering the fact that software warranty may sometimes (rarely, but still) extend for one year after the acceptance period, why would customers be willing to pay a support fee in addition to the license fee if the provider is in any case obligated to remedy any defect during the warranty period? The answer lies in the updates and enhancements. Absent any support, customers may have their software defects remedied, but will not be entitled to benefit from the updates. Depending upon the vendor's release cycle, customers will thus prefer to pay for support as of the effective date, notwithstanding the fact that, in theory, they should at a minimum be entitled to benefit from a discount upon the support fee during the warranty period as they would in any case be entitled to benefit from repair of any software defect during such period.

While customers obviously have an interest in making sure that vendors keep up to speed with technologies and demonstrate continuous improvement through the regular delivery of updates or upgrades, truth also is that customers may be unwilling to roll out each and every update within their company; based upon the experience of the author, such roll out on a worldwide basis may take up to six months, if not more, thus making it difficult for customers to keep up with the release cycle. As a result, multinational companies will typically want to have some provisions related to their vendors' release cycle, so as to ensure that there is both a minimum, but also a maximum of updates and upgrades per year.

While updates and upgrades is a topic of its own, one may want to pay particular attention to the following two issues:

- The first one consists of knowing what the impact upon the support will be if customers do not roll out each and every update or upgrade, as some vendors may only provide full support for the latest version of their software. Consequently, customers will have to try and ensure that, notwithstanding the absence of deployment of each and every update, they are still entitled to benefit from a full support, at least for a predefined set of versions of the software.

- The second one relates to rebundling. Rebundling typically consists for a provider to decide to remove certain features of a product to incorporate them in another product. This may for obvious reasons prove a rather unpleasant experience for customers, who may thus be willing to ensure that, for the term of their agreement, features they have subscribed to will not be removed or rebundled in any way, or that customers will be entitled to benefit from such successor product at no additional cost.

D. Escrow

The conclusion of an escrow agreement will oblige the vendor to deposit its source code with a third party, so as to enable a given customer to have access to this source code as a beneficiary under certain circumstances to be agreed upon. The goal of such escrow is to ensure business continuity and to avoid customers to face operational issues if the concerned provider was to go bankrupt as an example. While using escrow agreements as a standard makes no sense (and will be hard to negotiate in any case), their role for software deemed critical for operations (such as a line of production or supply chain for instance) should not be underestimated.

To be entitled to benefit from such an agreement, customers will obviously need to benefit from a perpetual license, as restricted ones will not enable customers to be entitled to further use the software after the term of their subscription.

The vendor's obligation to deposit its source code should not only be related to the existing one as of the effective date of the license agreement, but also to any update, upgrades and the like that may be released during the term of the agreement.

While discussions may take place as to the release events that will entitle customers to benefit from the source code, these events will typically consist of the vendor going bankrupt or becoming insolvent.

Ultimately, if the importance of escrow agreements should not be underestimated for software deemed critical to the customers' operations, it should not be overestimated either. Customers should indeed always bear in mind that the conclusion of an escrow agreement only makes sense if they benefit internally from the expertise to use the code and have it evolve in the future. Absent such skillsets, to have access to the source code will prove of little value.

IV. Cloud based agreements

A. General remarks

Unlike licensing agreements, usually meant to refer to the installation of software on premises, cloud based agreements relate to the entitlement to remotely access and use IT resources, be it as a software (*SaaS*), infrastructure (*IaaS*) or a platform (*PaaS*). Consequently, while cloud based agreement may be subject to a proof of concept, installation procedures do not exist and, consequently, acceptance periods will normally be absent of such agreements.

While cloud based agreements present numerous advantages, one can pinpoint some of the main interests for companies to engage with cloud vendors:

- First of all, these services enable companies to benefit from an undeniable flexibility; in a cloud environment, companies do not need to secure costly, space and energy consuming data centers anymore but rather enjoy scalable resources at hand at any time. On the other hand, however, the subscription to such services will be linked to the transfer of data to the vendors, i. e. a partial loss of control upon such data that will require particular scrutiny from a privacy and security standpoint, two issues I shall briefly address below (see Section E).
- Second, unlike an on premise license, the subscription to the service will not only include the entitlement to access and use the service, but also the related support. Such support will enable customers to have any defect remedied and to automatically enjoy updates, upgrades, enhancements and improvements, without having the need to roll them out internally.

Finally, one may add that, considering the trend for vendors to move from software to services, customers sometimes have no other alternative if they are interested in a product than to subscribe to a cloud based agreement absent any equivalent offer for an on premise solution.

B. License

Similarly to license agreements, cloud based agreements will contain relevant provisions to enable customers to access and use the services. Unlike software licensing agreements, the transfer of data and content from customers to the vendors' servers (or their sub-processors) will however

also require the granting of a license from the customer in favor of the vendor.

With regards to the license to be granted by vendors in favor of customers so as to enable the latter to access and use the service, the metrics will be comparable to the ones already encountered with regards to software licensing agreements, with some specificities:

- While the license granted may still be a single one (at a level of one company) or an enterprise one (potentially benefitting to all affiliates), the license will in any case be granted on a non-exclusive basis. Considering the multi-tenant environment all cloud based agreements are based upon, the granting of an exclusive would obviously not match with the business model of such agreements.
- Unlike a software licensing agreement that may sometimes be perpetual (although this actually remains exceptional), cloud based agreements are based upon a subscription model meant to enable recurring revenues. As a result, the license granted will always be limited in time, usually for a year subject to automatic renewal unless otherwise terminated with an agreed upon prior written notice.
- If the geographical scope may vary, it will usually be worldwide, so as to enable users to access and benefit from the services no matter where they are.
- While the geographical scope will most of the time be irrelevant, the key metric will most of the time be the user. Licensing metrics will regularly be based upon authorized users (either concurrent or named users).

In order to fully benefit from the services, customers will most of the time upload content and potentially proprietary information on the vendors (or their sub-processors)' servers. As such data may be protected by intellectual property rights, such upload will require customers to grant vendors a duly license. Needless to say, such license will be restricted and only be granted to the extent strictly required and for the duration of the subscription. In other words, in order to avoid any lock-in, customers will have to secure the relevant provisions in case of termination of an agreement, and notably to ensure that their data will be returned in an agreed format and deleted from the vendors' servers (as well as backups and sandboxes for instance) within a given period of time after expiration of termination of the agreement. In complex cases, such termina-

tion will usually trigger the implementation of an exit plan, that will be the subject of a dedicated schedule.

C. Support

Support will take the form of a Service Level Agreement (SLA) that will be the object matter of a schedule to the cloud based agreement. SLAs can take numerous forms, as most vendors will provide some standard support, included in the subscription fees, but also premium support that will be subject to an additional fee so as to benefit from an extended form of a support. No matter the level of support, SLAs will typically contain the following type of provisions:

- *Availability.* As computing resources will be accessed remotely, it is key to ensure a satisfactory level of availability of such resources. The expectations are obviously increasing over the years, and it is now fairly standard to have an expectation of 99.9 %. Key obviously however is to know how to measure such availability, as the relevant metrics will obviously influence the true expectations:
 - What will be the periodicity of such measurement? Will it be monthly? Quarterly? The impact will be significant. If we consider a 30 day month, a monthly measurement will “only” allow less than an hour of downtime, while the same availability expectation measured on a quarterly basis will thus allow for a period of close to three hours downtime without being in breach.
 - What will be excluded from downtime measurement? Maintenance windows will for instance be excluded from such calculation, so that a clear understanding of the maintenance windows (their periodicity, duration and timing) will be important. Similarly, it is not uncommon for vendors to try and exclude downtime below a certain time (for instance thirty seconds) from the calculation as well.

In short, parties will have to pay close attention to the metrics used to calculate such availability as a mere percentage without a proper understanding of such metrics may lead to unexpected outcome.

- *Average response time.* Customers will usually try and ensure that the display of a webpage does not take too much time; average response time will typically relate to the time expected between a click and the display of such webpage, the execution of a transaction, etc. Vendors will however most of the time try and pushback this type of pro-

visions, as such average response time may vary upon a number of variables they do not control, such as the network quality or the location of the computing resources; obviously, connecting from Switzerland to a data center located in Singapore will require more time than if the same computing resources are located in Switzerland.

- *Criticality levels.* The expectations of support level will obviously differ depending upon the issue. If business continuity is at stake on multiple sites, expectations will be different than if the issue is merely of a cosmetic nature in a single site. SLAs will thus contain what is referred to as priority levels, typically ranging from P1 to P3 or even P5. A P1 issue will typically involve a downtime for multiple sites preventing critical operations to operate, while a P2 may for instance relate to a single site.
- *Response/resolution time/update.* The level of criticality will have an impact upon customers' expectations as to response, resolution time and updates. SLAs will contain different expectations if the issue relate to a P1 or a P3. Vendors will however be reluctant to accept resolution time as it obviously will be difficult for them to assess the time required to resolve an issue without even knowing it; as a result, SLAs may make a distinction between the time needed to implement a temporary work around and the final resolution of the problem, which may for instance be planned within a certain time, or within a timing agreed upon by the parties after having carried out a root cause analysis, or even for a next update. In addition to the response and resolution times, it will be fairly common, notably for a P1 or P2 issue, to plan regular updates as to the resolution of the issue.
- *Service credits/termination events.* Having criticality levels and response or resolution times without any impact in case of breach would make little sense. As a result, each breach of an SLA will lead to potential credits, usually equaling a percentage of the monthly fees, capped at a certain amount per month. Credits are not meant to function as damages, but rather as an incentive for vendors to comply with the service levels. Depending upon their bargaining power, customers will also try and have service level termination events in place, i. e. an entitlement for customers to terminate the agreement if the service levels are repeatedly breached.
- *Support hours and channels.* In addition to the above, SLAs will define the hours when support is available and the channels to communicate.

Typically, standard support will be offered during business hours at the place where support is remotely provided, through email (ticketing system) and sometimes phones, notably for P1 issues. At a premium charge, some vendors will offer additional coverage, sometimes extending to 24/7, and ensure that issues are worked on 24/7, in accordance with the “*follow the sun rule*”; in accordance with this rule, once a business day is over in a given zone (for instance Europe), the next zone catches up (for instance East Cost), etc.

As vendors start having a trend to refer to URL for customers to review their SLAs rather than to provide them and have them physically attached to the agreement and signed in hardcopy, it will be important for customers not only indeed to review these documents carefully, but also to make sure that the level of support does not change over time during their subscription to their detriment, as vendors may sometimes try and reserve the right to change their SLAs at any time.

Similarly to license agreements, it will also be key for customers to ensure that the functions of a *SaaS* they have initially subscribed to are not modified during their subscription through updates and upgrades of the service, and that the key functions they were interested in when they subscribed to the service are not removed or at least modified in a material way. Needless to say, the capacity for customers to have a say on that regard will largely depend upon its bargaining power.

D. Escrow

Considering the fact the cloud based agreements are by definition (i) subscription based (thus ensuring recurring revenues) and (ii) based upon a multi-tenant environment business model where volume is key for vendors, vendors will never allow customers to benefit from an escrow upon their source code.

In other words, escrow does not come into play in cloud based agreements. Consequently, it is key for customers to properly address the termination clauses of the agreement to benefit from the relevant termination assistance and ensure a proper migration or hand-over of the customer data to the new vendor, ideally at no cost, or at a cost already agreed upon. This may sometimes take the form of an exit schedule.

Absent a proper understanding of the impact upon termination, customers may find themselves in an uncomfortable position locking them

into the existing vendor or requiring them to pay substantial amount in professional services to properly terminate the relation, without even mentioning potential risks for business continuity.

E. Data protection and security

Unlike licensing agreements, where data and security are less of an issue as customers will have full control upon the software that will be installed on premise (although potential remote support will still have to be addressed), cloud based agreements will require particular scrutiny on that regard. While this could be the subject of a separate paper or even an entire book, I shall limit myself to some generic remarks:

The significance of properly addressing data protection issues is particularly true considering the GDPR that came into play on 25 May 2018 (not yet in force as of the time of this writing), which requires data controllers to properly document any risk based decision and maintain in accordance with Art. 30 of the GDPR, a proper recording of their inventory (at least if they have more than 250 employees). Data flow will have to be properly understood, and proper transfer solutions in place if data are to be processed outside of EEA, notably through Model Clause which one may hope will remain a valid transfer solution in the coming years.

In accordance with Art. 32 of the GDPR, the adequate technical and organizational measures will also have to be implemented considering the data at stake. Security will typically be the object of a separate schedule to the agreement. Although a one size fits all is not required (or may even be inadequate), it will not be uncommon for customers to ensure that their vendors (and/or potentially sub-processors) have the relevant assurances in place, such as an ISO27001 *certificate or be ready to deliver a SOC Type2* report for instance on a yearly basis; penetrating testing may also be discussed depending upon the service at stake.

Having the proper technical and organizational measures in place will also require the parties to agree on back-up, disaster recovery (DRP) and business continuity plans (BCP) to try and mitigate any risk related to data loss.

Proper vendor management will also require to ensure that the relevant provisions are in place to enable customers as data controllers to respond

to any data subject request, and to have a satisfactory data breach notification mechanism in place.

As the world is not limited to EEA, local requirements will finally have to be taken into account for services to be used globally, as privacy regulations may be subject to significant constraints; as an example, Russian and Kazakhstan both require data collection to take place in these countries, so that data collection from Russian citizens on a server in the United States will typically be considered illegal, thus triggering significant IT architecture issues for both vendors and customers.

V. Professional services agreements

A. General Remarks

Professional services agreements relate to the services that a vendor may provide in addition to the mere licensing of an existing product (license agreement) or service (cloud based agreement). Typically, the object matter of such agreements will relate to consulting related work, configuration of a product, interfacing or development related work involving coding.

For the purpose of this paper, we shall focus on development related work involving coding, as this type of services will typically trigger issues related to ownership upon the deliverable.

Development services may be categorized in different ways. We shall here make a distinction between the developments that relate to fully new products created from scratch at the request of and for customers on the one hand, and customization of an existing product on the other hand, as both hypothesizes will be handled differently from an intellectual property perspective.

B. Contract structure

From a structural standpoint, services agreement will regularly take the form of a frame agreement or general terms and conditions that will be applicable for all types of projects to be executed, under which parties will enter into a statement of work (SOW).

Each SOW will be agreed upon for each project. The SOW will describe the project in general terms and services to be provided by vendor before

defining in more details the specifications to be met. A well drafted SOW will contain milestones with each deliverable to be performed, the related timeline and sign off period.

It is now fairly common to favor an AGILE² approach for any development work, notably using SCRUM³ methodology. Such methodology has the advantage to provide more flexibility to a development by splitting the project into phases, called sprints, that will typically consist of two weeks for each sprint phase, after which parties will have to assess, test (based on user stories) and agree on the concerned deliverable prior to move to the next sprint phase, potentially addressing the issues of the previous sprint in the meantime. In other words, AGILE approach can be understood as short term milestones with short acceptance periods favoring an iterative and flexible approach towards completion.

While such an approach has numerous advantages in terms of quality of the deliverables, customers will have to pay close attention to the timeline to avoid an endless project going on forever, and to control its costs, to be set ideally on a fixed basis rather than on a time & costs basis.

C. New products

No matter whether the development relate to a fully new product or the customization of an existing one to meet the customer's expectations, it will be key on customer's side to ensure that vendor agrees to warrant and represent that the deliverables will not infringe upon third parties' rights, respectively that the vendor will have obtained all licenses required for potential third party materials embedded in such deliverables. Customers will have to pay particular attention when Open Source Software is used, and to ideally ensure that use of the deliverable as contemplated will not infringe upon any such terms.

Rights, title and interest upon the outcome of the developments made by vendor in favor of customer will, or should normally be owned by customer, including as to the source code. If these rights cannot automatically vest in customer, customer will have to ensure that these rights are assigned to it. To give effect to these provisions, vendors will also have to represent and warrant that they have duly ensured such assignment

2 An AGILE software development is an approach of software development, which involves collaborative efforts.

3 Scrum is a framework for managing software development.

from their employees or third parties in their favor. It may however happen that, in certain jurisdictions, a mere assignment leading to a full transfer of ownership is not possible; in these circumstances, customers will try and make sure that they enjoy an exclusive worldwide and perpetual license.

Strangely enough, the principle described above may not always be in the interest and be desirable for the client. Assuming the client gets full rights and ownership upon the developed product, the vendor will obviously have no incentive to support the product or to further develop it through updates and upgrades; any further support services will thus be subject to an additional professional services agreement involving significant costs. As a result, when the developed product does not provide any competitive advantage to the customer, it may be more interesting for the customer to let supplier own all rights into the product and to merely benefit from a license (whose terms will however obviously be very broadly defined). This will enable the supplier to integrate this new product in its stream line of standard products; as part of its catalogue, vendor will then provide support and update/upgrades to the product, which the customer may obtain for a significant discounted price or even for free for a certain duration as it will have – in a way – subsidized the vendor's business in having it develop a new product then integrated in its general offer to the public.

D. Customization of existing products

The situation is different when a customer requires some customization of an existing generally available product from supplier to meet its expectations. In this case, an assignment of the rights upon such customization will be hard to reconcile with the fact that the underlying product is part of the catalogue of the vendor; more than that, in most instances, an assignment upon the sole customized part of the code will hardly make sense as such code will have been integrated into the product, thus hardly usable on a separate basis.

As a result, parties will first have to clearly identify the foreground intellectual property belonging to each of them, notably to the vendor, which exist in the product prior to performing the customization (also referred to as background IP), and the newly created intellectual property rights resulting from such development.

Ultimately, the main goal of the client is to not be blocked and to ensure a full freedom to operate with the customized product so as to ensure business continuity. To that effect, a license will usually be sufficient.

Should the customization provide a competitive advantage to the customer, the client may try and obtain an exclusive license upon the customized version preventing the vendor to further use it with other customers, notably competitors. For obvious reasons, vendors will only reluctantly agree to such contractual restrictions. As raised above, the granting of a “mere” non-exclusive license in favor of customers is likely to also bear advantages, as the integration of this customization to the generally available catalogue of the vendor will enable the customer to then benefit from support, updates and upgrades made by the vendor upon such customization. The contractual frame in place will however have some limits, as customer is unlikely to have a right to use the customized product (or at least the background IP) in perpetuity, thus generally requiring customer to accept a limit in its entitlement to benefit from the customized version paid for (an issue to be commercially taken into account during the course of negotiations).

Alternatively, although this only is to be seen from my experience in exceptional cases, parties may also agree upon joint ownership upon such customization; provided, however, that each will be entitled to use such customization independently from its contracting party and without having to seek for consent for each and every use.

As reflected here, customizations of existing products to meet customer’s expectations trigger difficult questions in terms of ownership and, consequently, as to license scope. Ultimately, one can only recommend customers to try and stick to the standard product without having to request any customization, or with full awareness that such customization may potentially trigger support issues and not enable customer to further use it after expiration of the subscription term for the standard product.

VI. Digital services agreements

Digital services agreements are only a subset of professional services agreements, in the sense that they relate to the development of digital assets which typically consist of a website or a mobile application.

In comparison with traditional professional services agreement in the IT space, digital services agreements however present certain specificities, as they will empower agencies to use protected content (notably copyright) whose rights are neither owned by the agency nor by customers. To take an example, a website or a mobile application will normally use multimedia content such as videos, images or further content whose rights belong to third parties.

In line with the explanations I made to professional services agreements, customers will try and seek to own all rights, title and interest related to the deliverables, for instance the developed website or the mobile application; the customer having paid for such customized development, it logically expects all rights to automatically vest in it, or to be assigned to it.

The agency will however understandably want to make sure that ownership is not extended to the third party content embedded in the deliverables (such as the images licensed from a third party). Although an agency may agree to try and make best efforts to have an assignment upon such third party content, this will obviously come at a price that customers will usually be unwilling to accept, or even not be possible at all. As a result, digital services agreements will typically contain the following type of provisions:

- *Branding.* Agencies will carve out any liability for any branding they may have to develop, and will refuse to carry out any freedom to operate investigations. Although customers may be willing to have agencies perform the required researches to that effect, risks are normally considered too high for agencies that will not accept such obligations, no matter the price (or a significant price covering their risk that hardly makes sense for customers). In other words, digital services agreement will contain a provision disclaiming any warranty and liability of the agency as to the absence of infringement of third parties' rights with regards to such deliverable. It will thus be up to customers to make the researches deemed appropriate to mitigate such risks.
- *Copyrights.* Agencies will usually accept to try and make their best efforts to obtain the most extended license they can with the relevant third party owning the rights upon the content to be used. It will be up to the agency to inform the customers of the extent of the license the agency has managed to secure and to obtain customer's prior approval before making any commitment with the third party (if the license is considered too restrictive by customers, the latter may have

no interest in having such content embedded in the deliverable, and may then rather invite the agency to look for alternatives). The customer's attention having been drawn upon the license restrictions, it will up to it to have the proper internal management and governance in place to ensure compliance with the license terms and to potentially renew the relevant licenses upon their term.

VII. Conclusion

IT agreements are a world on their own. The absence of expertise and proper understanding of this industry and related agreements for most lawyers, be they external or in-house, make it complicated for customers to properly understand the risk or, worse but not uncommon, to even understand that there is a risk which would deserve some legal attention.

This paper was meant to have readers understand that IT agreements do indeed bear significant legal risks that may easily put business continuity at stake if not properly handled. I hope to have provided an insight into this world, pointing out certain salient points to bear in mind when one negotiates this type of agreement, more particularly related to intellectual property rights.

The world changes quickly, and so does the IT environment, which is at the core of this evolution. At the time we live in, it will not be long before we see the new types of IT agreements addressing emerging topics such as virtualization, blockchain, AI or machine learning to name a few. Without much doubt, it will not be long either before legal awareness make it a key point within companies to properly handle IT agreements.

If this paper has humbly managed to build some awareness as to these risks and the importance to address them properly as to not jeopardize daily operations, my goal will have been achieved.

Accords de technologie et droit de la concurrence : de l'approche plus économique à la saisie par l'abus de position dominante

Adrien Alberini

I. Introduction

Aborder des questions de droit de la concurrence dans le cadre d'une journée consacrée à la propriété intellectuelle relève toujours d'un pari audacieux, dans la mesure où ce premier domaine est encore (parfois) perçu comme une entrave à l'incitation à innover et créer que la propriété intellectuelle tend à favoriser. A ce propos, on a souvent dit que le droit de la propriété intellectuelle et le droit de la concurrence sont dans une relation de tension¹.

Cela étant, il est vrai que ces deux domaines ont pour ainsi dire appris à coexister, notamment en raison du fait qu'ils poursuivent, en fin de compte, le même objectif. En effet, l'innovation et la création ne requièrent pas seulement l'existence d'un système de rémunération (la propriété intellectuelle); encore faut-il que le marché soit suffisamment concurrentiel et dynamique, ce que le droit de la concurrence tend à préserver par l'interdiction de pratiques qui affectent la concurrence².

Par ailleurs, il est devenu impensable en pratique de faire abstraction du droit de la concurrence, en particulier en lien avec les accords de recherche et développement et de transfert de technologie, tant cette matière est désormais gouvernée par les règles interdisant les accords anticoncurrentiels et, dans une certaine mesure également comme nous le verrons dans cette contribution, les abus de position dominante³.

1 CR PI-ADRIEN ALBERINI, art. 3 II LCart N 1 ss.

2 *Ibidem*.

3 Pour une approche générale de la relation entre le contrat et le droit de la concurrence, voir CHRISTIAN BOVET, Le droit de la concurrence à l'assaut du contrat, in: FRANÇOIS BELLANGER/FRANÇOIS CHAIX/CHRISTINE CHAPPUIS/ANNE HÉRITIER LACHAT (éd.), Le

La présente contribution poursuit un double objectif. Premièrement, elle vise à montrer de manière générale la relation que le droit de la concurrence et le droit de la propriété intellectuelle entretiennent. Ce sera notamment l'occasion de se demander si une forme d'équilibre a été atteinte ou si, au contraire, l'interaction entre ces deux domaines continue à évoluer. Deuxièmement, et il s'agit probablement de l'approche qui intéressera davantage les praticiens, cette contribution présentera le traitement réservé à une série de clauses courantes dans les accords en matière de technologie (avec un accent sur les accords de transfert de technologie), en mettant en exergue les évolutions les plus récentes.

En lien avec ce second point, il nous paraît utile de rappeler que les clauses anticoncurrentielles sont nulles au sens de l'art. 20 CO⁴ et que la potentielle application du droit de la concurrence peut ouvrir des perspectives intéressantes dans le cadre de la négociation d'une clause (que ce soit dans le cadre de discussions en vue de la conclusion d'un contrat ou en cas de désaccord, voire de litige à proprement parler, relatif à l'exécution d'une clause).

En termes de référentiel juridique, la présente contribution s'appuiera essentiellement sur le droit européen de la concurrence, étant donné que ce droit est désormais souvent considéré comme un standard en la matière. Il n'est d'ailleurs pratiquement plus une décision de la Commission suisse de la concurrence (Comco), ou un arrêt du Tribunal administratif fédéral ou du Tribunal fédéral qui ne fasse pas référence au droit européen dans ce domaine⁵. C'est également le lieu de rappeler que le droit eu-

contrat dans tous ses états, Publication de la Société genevoise de droit et de législation à l'occasion du 125^{ème} anniversaire de la Semaine Judiciaire, p. 17. Pour un examen approfondi des règles de droit européen de la concurrence applicables aux accords de technologie, voir ADRIEN ALBERINI, *Le transfert de technologie en droit communautaire de la concurrence – Mise en perspective avec les règles applicables aux accords de recherche et développement, de production et de distribution*, thèse, Genève, Zurich, Bâle 2010.

- 4 Voir notamment ATF 134 III 438. Dans cet arrêt, le Tribunal fédéral a par ailleurs précisé que l'art. 66 CO, selon lequel il n'y a pas lieu à répétition de ce qui a été donné en vue d'atteindre un but illicite ou contraire aux mœurs, doit être interprété restrictivement et ne s'applique pas à ce qui a été donné en exécution d'un accord non conforme à la LCart.
- 5 CHRISTIAN BOVET/ADRIEN ALBERINI, *Recent developments in Swiss competition law*, RSDA 2018/1, p. 73, en particulier § 3. A noter en outre qu'à ce jour la Comco n'a pas adopté de communication spécifique relative aux accords de recherche et développe-

ropéen de la concurrence s'applique à des pratiques qui prendraient place par hypothèse en Suisse, mais qui déploieraient des effets dans l'UE⁶.

Certains développements récents et importants ne concernent pas directement le sujet de la présente contribution mais se trouvent à sa périphérie, si bien qu'il est en principe conseillé d'en avoir connaissance dans le cadre de l'appréciation concurrentielle relative aux accords de technologie. Sans que l'on ne puisse les aborder ici, on retiendra en particulier ce qui suit:

- L'affaire européenne *Google*, qui donne des indications utiles sur la manière dont la Commission européenne apprécie la relation entre le détenteur d'une technologie dominante et d'autres (petits) acteurs qui dépendent de cette technologie⁷.
- Les nombreux cas d'accords ou de refus de contracter dans le secteur des droits télévisuels (notamment liés à des événements sportifs majeurs) méritent eux aussi d'être mis en perspective avec les accords de technologie⁸.
- Les décisions rendues dans le cadre du contrôle des concentrations, qui concernent souvent des transactions dans le secteur technologique et qui, par conséquent, contiennent des développements utiles en matière de définition de marchés pertinents caractérisés par une innovation rapide⁹.
- A noter en lien avec ce dernier point que certaines juridictions sont actuellement en train de réviser leur réglementation en matière de contrôle des concentrations de manière à étendre le champ d'application de ces règles et, ainsi, soumettre à ces règles (qui prévoient un

ment ou de transfert de technologie. Il est généralement admis en Suisse qu'il convient de se référer aux règles européennes en la matière.

6 De manière similaire, le droit suisse de la concurrence s'applique à l'inverse à des pratiques qui prennent place à l'étranger mais qui produisent des effets en Suisse. Voir PRANVERA KËLLEZI, Prohibition of parallel imports and market integration: The role of the "effects doctrine" and the development of the substantive laws, *Concurrences* 2017/3, p. 185.

7 Commission européenne, décision du 27 juin 2017, *Google Search (Shopping)* (AT.39740).

8 Voir par exemple en Suisse le cas *Swisscom* traité par CHRISTIAN BOVET/ADRIEN ALBERINI, Recent developments in Swiss competition law, *RSDA* 2017/1, p. 102, en particulier § 8.

9 Voir à ce sujet BOVET/ALBERINI, *supra* n. 5, en particulier § 20 ss; BOVET/ALBERINI, *supra* n. 8, *RSDA* 2017/1, p. 102, en particulier § 10 ss.

contrôle *ex ante* basé sur une notification) certains contrats de licence prévoyant des mécanismes de paiement initial (« *upfront payment* »)¹⁰.

- Le RGPD consacre désormais un droit à la portabilité des données. Cette thématique d'importance croissante relevant également du droit de la concurrence, il est probable qu'il faudra croiser ces deux domaines lorsque la question se posera dans les contrats relatifs aux technologies de l'information¹¹.

La présente contribution est structurée comme suit:

- Nous proposons d'abord un aperçu de la réglementation européenne qui gouverne les accords de technologie, en mettant notamment en évidence le changement de paradigme qui l'a caractérisée au tournant des années 2000 (II), puis nous fournissons quelques clés qui permettent d'appréhender le concept d'accord de technologie dans une perspective de droit de la concurrence (III).
- Dans les parties IV et V, nous nous concentrons sur le traitement de deux groupes de clauses courantes dans les accords de technologie, à savoir les clauses restreignant la concurrence intratechnologique et celles restreignant l'incitation à innover, en mettant en perspective le traitement formaliste réservé aux premières et l'approche plus économique qui prévaut s'agissant du second groupe.
- Nous présentons ensuite les développements les plus récents et significatifs qui affectent les accords de technologie, et nous interrogeons en particulier sur la question de savoir si ces accords seront toujours plus « saisis » par les règles applicables aux abus de position dominante (VI).

10 FIONA CARLIN/CHRISTIAN BURHOLT/ANDREAS TRAUGOTT/JANE HOBSON, New value-based filing thresholds in European merger control regimes implications for health-care and life sciences companies, disponible à l'adresse https://www.lexology.com/library/detail.aspx?g=c85be631-c514-4f74-b7c6-8690de644f5d&utm_source=Lexology+Daily+Newsfeed&utm_medium=HTML+email+-+Body+-+General+section&utm_campaign=LIDC+subscriber+daily+feed&utm_content=Lexology+Daily+Newsfeed+2017-10-10&utm_term (accès le 7 mai 2018).

11 ADRIEN ALBERINI/YANIV BENHAMOU, Data portability and interoperability: an issue that needs to be anticipated in today's IT-driven world, Expert Focus 2017/8, p. 518.

II. Réglementation en matière d'accords de technologie

A. Aperçu des règles applicables

En droit européen, les accords de technologie sont principalement régis par l'article 101 du Traité sur le fonctionnement de l'Union européenne (TFUE). Selon l'alinéa 1 de cette disposition, les accords qui restreignent la concurrence par leur objet ou leurs effets sont interdits. Les parties à un tel accord peuvent toutefois bénéficier d'une exemption individuelle si l'accord produit des effets proconcurrentiels qui contrebalancent les effets anticoncurrentiels (para. 3).

Suivant la théorie économique selon laquelle les accords de transfert de technologie et les accords de recherche et développement sont en principe favorables à la concurrence, la Commission européenne a adopté des règlements dits d'exemption par catégorie pour ces accords (les «REC»). Les accords de transfert de technologie font l'objet du REC 316/2014 et de Lignes directrices relatives à ce REC (les «LD TT»)¹². Quant aux accords de recherche et développement, ils font l'objet du REC 1217/2010 et d'une section spécifique dans les Lignes directrices relatives à la coopération horizontale (les «LD CoHor»)¹³.

En substance, ces règlements concrétisent le paragraphe 3 de l'article 101 TFUE en permettant une exemption automatique de ces catégories d'accords; ainsi, les parties n'ont pas à démontrer que leur accord de recherche et développement ou leur accord de transfert de technologie produit dans le cas d'espèce des effets concurrentiels qui contrebalancent les effets anticoncurrentiels.

12 Règlement (UE) N° 316/2014 de la Commission du 21 mars 2014 relatif à l'application de l'article 101, paragraphe 3, du traité sur le fonctionnement de l'Union européenne à des catégories d'accords de transfert de technologie (JO 2014/L 93/17), et Communication de la Commission, Lignes directrices concernant l'application de l'article 101 du traité sur le fonctionnement de l'Union européenne à des catégories d'accords de transfert de technologie (JO 2014/C 89/3).

13 Règlement (UE) N° 1217/2010 de la Commission du 14 décembre 2010 relatif à l'application de l'article 101, paragraphe 3, du traité sur le fonctionnement de l'Union européenne à certaines catégories d'accords de recherche et développement (JO 2010/L 335/36), et Communication de la Commission, Lignes directrices sur l'applicabilité de l'article 101 du traité sur le fonctionnement de l'Union européenne aux accords de coopération horizontale (JO 2011/C 11/1).

Il est important de souligner que l'exemption par catégorie exige tout de même le respect de certaines conditions.

Il faut d'abord que les parts de marché détenues par les parties à l'accord se situent en-dessous de certains seuils. En matière d'accords de transfert de technologie entre concurrents, la part de marché cumulée détenue par les parties ne doit pas excéder 20 % sur le ou les marchés en cause. Si les parties sont dans une relation de non-concurrence, la part de chacune des parties ne doit pas excéder 30 % sur le ou les marchés en cause¹⁴. S'agissant des accords de recherche et développement entre entreprises non-concurrentes, l'exemption s'applique pendant toute la durée de la recherche et du développement. En cas d'exploitation en commun des résultats, l'exemption continue de s'appliquer pendant une période de sept ans à compter de la date de la première mise sur le marché des produits ou des technologies contractuels au sein du marché intérieur¹⁵. S'agissant des accords de recherche et développement entre concurrents, le seuil est fixé en substance à une part de marché de 25 %¹⁶.

Il faut ensuite que l'accord ne contienne pas de clauses considérées comme particulièrement problématiques pour la concurrence. On distingue à ce propos les restrictions caractérisées (clauses dites noires ou « *hardcore* »), qui empêchent l'accord de bénéficier de l'exemption par catégorie dans son intégralité¹⁷, et les restrictions exclues (clauses dites grises), qui sont seules exclues de l'exemption par catégorie, le reste de l'accord qui les contient pouvant en bénéficier¹⁸.

Il est encore important de garder à l'esprit que la Commission européenne peut en tout temps retirer le bénéfice de l'exemption par catégorie dans un cas spécifique si l'accord risque de produire des effets négatifs pour la concurrence¹⁹.

Si l'une ou l'autre de ces conditions n'est pas réalisée, l'accord n'est pas nécessairement illicite, mais il doit faire l'objet d'une analyse spécifique visant à déterminer s'il peut bénéficier d'une exemption individuelle²⁰.

14 Art. 3 REC 316/2014.

15 Art. 4 para. 1 REC 1217/2010.

16 Art. 4 para. 2 REC 1217/2010, qui prévoit toutefois un mécanisme plus complexe qu'un simple seuil de part de marché.

17 Art. 4 REC 316/2014 et art. 5 REC 1217/2010.

18 Art. 5 REC 316/2014 et art. 6 REC 1217/2010.

19 Voir par exemple art. 6 REC 316/2014.

20 Voir par exemple para. 156 ss LD TT.

B. Changement de paradigme

L'approche adoptée dans les règlements d'exemption par catégorie reflète ce qu'on qualifie généralement d'approche «plus économique». En effet, les seuils de parts de marché sont sous-entendus par la réflexion économique selon laquelle les parties qui détiendraient des parts de marché se situant en-dessous des seuils prévus ne détiennent en réalité pas de pouvoir de marché, et donc que l'accord en question n'est pas capable d'affecter la concurrence. Il en va de même de l'approche selon laquelle les clauses noires ou grises ne sont pas nécessairement interdites, mais doivent être appréciées dans chaque cas concret.

L'adoption de cette approche plus économique, qui est intervenue au tournant des années 2000, contraste avec l'approche légaliste qui prévalait auparavant. Les générations antérieures de règlements d'exemption par catégorie prévoyaient en effet simplement des listes de clauses autorisées (clauses blanches) et de clauses interdites (clauses noires). Cela avait pour conséquence que les parties rédigeaient leurs accords en suivant les listes de clauses blanches. Cette évolution a souvent été décrite avec l'adage «*from the straight jacket to the safe harbour*»; la «veste étroite» représentait le catalogue de clauses blanches à suivre impérativement, alors que le «havre de sécurité» constitue la zone dans laquelle peuvent se réfugier les parties, celles-ci restant toutefois libres de passer des accords potentiellement plus délicats sous l'angle concurrentiel pour autant qu'elles parviennent à démontrer que lesdits accords produisent des effets proconcurrentiels contrebalançant les effets négatifs pour la concurrence.

Il n'est sans doute pas inutile de rappeler que le changement de paradigme ci-dessus a provoqué des inquiétudes considérables chez les juristes, qui se voyaient contraints de procéder, à tout le moins partiellement, à une appréciation économique. Cela générait le souci de ne pouvoir fournir la sécurité juridique nécessaire en cas d'analyse des accords. Force est de constater que, une quinzaine d'années plus tard, la communauté juridique s'est relativement bien adaptée à ce modèle de réglementation, voire a même su en tirer profit pour faire preuve de plus de créativité dans la rédaction et l'appréciation des clauses contractuelles. Cet accueil finalement positif se reflète dans le fait que la génération de règlements d'exemption par catégorie des années 2010 n'a que peu été modifiée par rapport à la génération précédente des années 2000.

III. Notion d'accord de technologie

A. Véritables accords de technologie?

Certaines collaborations entre entreprises semblent, de prime abord, constituer des accords de technologies. C'était par exemple le cas de la collaboration entre Summit Tech Inc. et VISX Inc. en lien avec une technologie de laser permettant des opérations de l'œil. En bref, ces deux entreprises étaient convenues de regrouper leurs technologies (substituables). Lorsque l'une de ces entreprises utilisait l'une des technologies, elle devait verser une redevance dans ce «*pool*». Les bénéfices du pool étaient ensuite partagés entre Summit Tech Inc. et VISX Inc. Logiquement, cette collaboration a été considérée comme un accord de fixation de prix entre concurrents, plutôt qu'un accord de transfert de technologie permettant une diffusion de l'innovation²¹.

D'autres situations sont plus subtiles: il convient par exemple d'être prudent en présence d'accords de licence mixtes portant sur un brevet et un savoir-faire, lorsque des redevances continuent à être dues par le preneur de licence après l'expiration du brevet. La redevance doit en effet refléter une véritable contre-prestation; en d'autres termes, il faut que le savoir-faire soit secret (c'est-à-dire qu'il n'est pas généralement connu ou facilement accessible), substantiel (c'est-à-dire important et utile pour la production des produits contractuels), et identifié (c'est-à-dire décrit d'une façon suffisamment complète pour permettre de vérifier qu'il remplit les conditions de secret et de substantialité)²². A défaut, il s'agit simplement d'un partage de revenus entre deux entreprises qui n'est pas conforme au droit de la concurrence.

La nécessité de bien analyser l'accord et de rechercher quel est son véritable objet était encore récemment au centre d'une affaire *Roche* relativement complexe qui est montée jusqu'à la Cour européenne de justice²³. Cette affaire peut être résumée comme suit:

21 Federal Trade Commission, complaint du 24 mars 1998, Summit Technology, Inc., and VISX, Inc. (9286). Cette affaire est disponible sur le site de la FTC à l'adresse <https://www.ftc.gov/enforcement/cases-proceedings/summit-technology-inc-visx-inc-matter>. Des problématiques similaires peuvent se rencontrer en matière d'accords de recherche et développement (para. 128 LD CoHor).

22 Art. 1(j) REC 316/2014.

23 CJUE, arrêt du 23 janvier 2018, F. Hoffmann-La Roche Ltd e. a. contre Autorità Garante della Concorrenza e del Mercato (C-179/16).

- Genentech, une société établie aux États-Unis, dont l'activité est limitée au territoire de ce pays, a développé deux médicaments, l'Avastin et le Lucentis, qui seraient en tous points équivalents pour le traitement de maladies oculaires. Genentech a confié l'exploitation commerciale de l'Avastin en dehors du territoire des États-Unis à Roche, sa société mère. Cette dernière n'étant pas active dans le domaine de l'ophtalmologie, Genentech a également chargé le groupe Novartis d'assurer l'exploitation commerciale du Lucentis en dehors du territoire des États-Unis, au moyen d'un accord de licence conclu au mois de juin 2003²⁴.
- L'Avastin est devenu, en raison de son utilisation hors Autorisation de mise sur le marché largement répandue en Italie, le principal concurrent du Lucentis²⁵.
- Roche et Novartis se seraient entendus pour produire et diffuser des avis de nature à susciter des inquiétudes dans le public quant à la sécurité des utilisations ophtalmiques de l'Avastin et à déprécier les avis scientifiques contraires. Cette entente aurait également porté sur la procédure de modification du résumé des caractéristiques de l'Avastin en cours devant l'Agence européenne des médicaments et l'envoi subséquent d'une communication formelle aux professionnels de la santé, initiés par Roche. L'entente a engendré une baisse des ventes de l'Avastin et a provoqué un déplacement de la demande vers le Lucentis. Cet effet aurait généré un surcoût pour le service national de santé, évalué, pour la seule année 2012, à environ 45 millions d'euros²⁶.

La CJUE a retenu ce qui suit:

- « Une entente convenue entre les parties à un accord de licence relatif à l'exploitation d'un médicament, qui, afin de réduire la pression concurrentielle sur l'utilisation de ce médicament pour le traitement de pathologies données, vise à limiter les comportements de tiers consistant à encourager l'utilisation d'un autre médicament pour le traitement de ces mêmes pathologies, n'échappe pas à l'application de [l'art. 101 para. 1 TFUE] au motif que cette entente serait accessoire audit accord »²⁷.

24 *Idem*, para. 27 ss.

25 *Idem*, para. 33.

26 *Idem*, para. 32 s.

27 *Idem*, para. 75.

- Plus fondamentalement encore, «l'entente entre deux entreprises commercialisant deux médicaments concurrents, qui porte, dans un contexte marqué par une incertitude scientifique, sur la diffusion auprès de l'Agence européenne des médicaments, des professionnels de la santé et du grand public d'informations trompeuses sur les effets indésirables de l'utilisation de l'un de ces médicaments pour le traitement de pathologies non couvertes par l'AMM de celui-ci, aux fins de réduire la pression concurrentielle résultant de cette utilisation sur l'utilisation de l'autre médicament» constitue une restriction par objet de la concurrence au sens de l'art. 101 para. 1 TFUE²⁸.
- Une exemption individuelle ou par catégorie n'entre pas en ligne de compte en présence d'un tel accord²⁹. On relèvera à ce dernier égard que la CJUE a expressément exclu l'application du REC 772/2004 (à savoir le règlement d'exemption par catégorie qui s'appliquait avant l'adoption du REC 316/2014)³⁰.

B. Qualification autonome et distinctions

Le droit de la concurrence ne s'attache pas à la dénomination du contrat choisie par les parties, ni aux qualifications pertinentes sous l'angle du droit privé. C'est une véritable qualification autonome de l'accord dans une perspective concurrentielle qui doit être effectuée.

En présence d'accords de technologie, il convient d'examiner le centre de gravité de l'accord, afin de déterminer essentiellement s'il s'agit d'un accord de recherche et développement ou d'un accord de transfert de technologie³¹. Cet exercice est indispensable, dans la mesure où des règles différentes s'appliqueront en fonction de la qualification de l'accord. Cet exercice n'est par ailleurs pas toujours aisé, certaines coopérations étant véritablement à l'intersection entre la recherche et le développement en commun et le transfert de technologie (unilatéral ou réciproque)³².

28 *Idem*, para. 95.

29 *Idem*, para. 96 ss.

30 *Idem*, para. 99.

31 Para. 44 ss LD TT, en particulier para. 70 ss.

32 A noter en outre que les accords de transfert de technologie doivent être distingués des accords de distribution. Cette distinction ne devrait en principe pas poser trop de problèmes en pratique. La question s'est néanmoins posée dans l'affaire *Gaba*, dans laquelle il était question d'une licence de marque et de savoir-faire. La Comco a toujours soutenu que la composante marque était clairement dominante et qu'il fal-

A noter encore que le choix du type de coopération peut en pratique être influencé par la réglementation applicable. Il arrive en effet que les parties structurent leur coopération de manière à tomber dans le champ d'application de la réglementation applicable aux accords de recherche et développement ou, à l'inverse, aux accords de transfert de technologie de manière à pouvoir profiter de règles qui peuvent être plus permissives dans l'une ou l'autre de ces réglementations.

C. Contexte économique et structure de marché

Dans une perspective concurrentielle, la qualification de l'accord s'accompagne presque intrinsèquement d'un examen du contexte dans lequel l'accord se situe.

Cet examen porte typiquement sur la nature de la relation concurrentielle entre les parties à l'accord, étant précisé que des règles différentes peuvent s'appliquer en fonction de cette nature³³. Les parties peuvent se trouver dans une relation de concurrence ou de non-concurrence. A cet égard, on relèvera essentiellement les points suivants :

- Il convient de tenir compte du ou des marchés de produits ou services incorporant les technologies concernées par l'accord³⁴. A noter que l'identification des marchés de produits peut être délicate lorsque les technologies en cause n'ont encore jamais été intégrées dans des produits ou services au moment de l'examen.
- On tiendra compte également du marché de technologies, c'est-à-dire de l'ensemble des technologies substituables à celle qui fait l'objet de l'accord³⁵. Dans une certaine mesure également, on se placera un échelon en amont afin d'examiner le marché de recherche et développement, à savoir les pôles d'activités de R&D qui peuvent exercer

lait donc examiner l'accord du cas d'espèce comme un accord de distribution. Voir en particulier Tribunal administratif fédéral, arrêt du 19 décembre 2013, Gaba International AG gegen WEKO (B-506/2010), en particulier considérant 8.5.

33 En matière d'accords de transfert de technologie, des seuils de part de marché différents sont prévus pour bénéficier de l'exemption par catégorie en fonction du fait que les parties sont dans une relation de concurrence ou de non-concurrence (voir *supra* II.A). Dans le même sens, les clauses peuvent faire l'objet de règles plus restrictives en fonction de la nature de la relation concurrentielle entre les parties (voir *infra* IV).

34 Para. 21 LD TT.

35 Para. 22 LD TT.

une pression concurrentielle sur la technologie qui fait l'objet de l'accord³⁶.

- Dans le cadre d'un accord de transfert de technologie, les parties peuvent par exemple ne pas se trouver sur le même marché de produits mais détenir des technologies substituables. Dans ce cas, on considérera que les parties sont concurrentes sur le marché de technologies.

S'agissant ensuite d'autres paramètres à prendre en compte, il convient d'examiner le dynamisme du marché, l'existence d'éventuelles barrières à l'entrée (par exemple sous la forme de réglementations fortement contraignantes comme c'est le cas dans l'industrie pharmaceutique et biotechnologique) et la détention d'un éventuel pouvoir par les parties sur le marché pertinent³⁷. En lien avec ce dernier point, il est essentiel de souligner que la détention d'un droit de propriété intellectuelle par une partie ne signifie pas en soi que ladite partie détient un pouvoir de marché³⁸. D'un point de vue économique en effet, un droit de propriété intellectuelle n'est pas un monopole. Ces droits peuvent être «contournés», en ce sens que plusieurs parties peuvent offrir un même produit ou service tout en détenant des droits de propriété intellectuelle sans qu'une situation de violation de droit se produise. C'est typiquement le cas dans le domaine IT.

IV. Restrictions intratechnologiques : approche formaliste

A. Notion et approche

Les restrictions intratechnologiques – terminologie dérivée de la notion de restrictions intramarque dans le domaine de la distribution – se définissent comme les restrictions concernant la diffusion de la technologie incorporée dans des produits. Les restrictions intratechnologiques comprennent essentiellement les restrictions en matière de prix, de quantités et de territoires. Ce sont généralement les restrictions de la concurrence considérées comme les plus dures.

36 Para. 26 LD TT.

37 Voir en particulier ALBERINI, *supra* n. 3, p. 81 ss.

38 Cela ressort des para. 5 ss LD TT.

Les REC 316/2014 et 1217/2010 contiennent tous deux des listes de restrictions intratechnologiques qui excluent l'exemption par catégorie³⁹. Traiter l'ensemble des restrictions visées par ces listes excéderait le cadre de la présente contribution, de sorte qu'on se limitera ici à quelques observations d'ordre général:

- D'un point de vue pratique, il convient de faire particulièrement attention dans les accords de technologie aux clauses qui, indirectement, conduisent à une fixation de prix. Tel est par exemple le cas d'une clause selon laquelle le niveau de redevances dues au donneur par le preneur de licence augmente si le prix des produits incorporant la technologie concédée sous licence passe en-dessous d'un certain seuil. Une telle clause crée en effet une incitation pour le preneur de licence à maintenir un niveau de prix élevé lors de la vente des produits contractuels⁴⁰. De manière générale, il est à notre sens conseillé de se méfier de clauses de redevances qui paraissent excessivement complexes et dont la justification économique sous-jacente n'est pas claire.
- Plus fondamentalement, on assiste actuellement à un durcissement de l'approche à l'égard des restrictions qui concernent les prix, quantités et territoires. Par durcissement, on entend l'absence quasi-totale de l'examen de l'effet produit par la restriction sur le marché. En d'autres termes, on en revient à une approche légaliste, selon laquelle certaines clauses sont prohibées en raison de leur nature, indépendamment de leur impact concret sur le marché dans un cas d'espèce. En Suisse, cette approche formaliste a été validée récemment par le Tribunal fédéral dans l'affaire *Gaba*⁴¹.

B. Restrictions en matière de territoires et de clients

Les règles applicables aux restrictions en matière de territoires et de clients dans les accords de transfert de technologie sont détaillées et méritent à notre sens une attention particulière compte tenu de leur impor-

39 Art. 4 REC 316/2014 et art. 5 REC 1217/2010.

40 Para. 99 LD TT. Pour des développements sur les divers problèmes que peuvent poser les clauses de redevances, voir para. 184 ss LD TT.

41 ATF 143 II 297. A propos de cet arrêt, voir en particulier ANDREAS HEINEMANN, Das Gaba-Urteil des Bundesgerichts: Ein Meilenstein des Kartellrechts, RDS 2018 I/1, p. 103; NICOLAS BIRKHAUSER/MANI REINERT, Das Gaba-Urteil des Bundesgerichts: Kritik und künftige Anwendung, RDS 2018 I/1, p. 121.

tance pratique. Ces règles sont d'abord basées sur une distinction entre accords entre concurrents et accords entre non-concurrents, ces dernières étant naturellement plus permissives.

S'agissant des accords entre concurrents, le REC 316/2014 pose le principe de non-exemption par catégorie de toute répartition des marchés ou des clients entre les parties à l'accord⁴². S'ensuit la liste d'exceptions indiquées ci-après (dont le commentaire détaillé dépasserait le cadre de la présente contribution), qui bénéficient de l'exemption par catégorie:

- L'obligation imposée au donneur de licence et/ou au preneur de licence, dans un accord non réciproque, de ne pas produire à partir des droits sur technologie concédés sur le territoire exclusif réservé à l'autre partie et/ou de ne pas vendre, activement et/ou passivement, sur le territoire exclusif ou à un groupe d'acheteurs exclusif réservé à l'autre partie⁴³.
- La restriction, dans un accord non réciproque, des ventes actives par le preneur de licence sur le territoire exclusif ou au groupe d'acheteurs exclusif attribués par le donneur de licence à un autre preneur de licence, à condition que ce dernier n'ait pas été une entreprise concurrente du donneur de licence au moment de la conclusion de son propre accord de licence⁴⁴.
- L'obligation imposée au preneur de licence de ne produire les produits contractuels que pour son propre usage, à condition qu'il puisse vendre librement, activement et passivement, les produits contractuels en tant que pièces de rechange pour ses propres produits⁴⁵.
- L'obligation imposée au preneur de licence dans un accord non réciproque de ne produire les produits contractuels que pour un acheteur déterminé, lorsque la licence a été concédée en vue de créer une source d'approvisionnement de substitution pour cet acheteur⁴⁶.

Déjà au stade du principe, l'approche est plus permissive lorsque l'accord est passé entre entreprises non-concurrentes: seules les restrictions concernant le territoire sur lequel, ou la clientèle à laquelle, le preneur de licence peut vendre passivement les produits contractuels constituent

42 Art. 4(1)(c) REC 316/2014.

43 Art. 4(1)(c)(i) REC 316/2014.

44 Art. 4(1)(c)(ii) REC 316/2014.

45 Art. 4(1)(c)(iii) REC 316/2014.

46 Art. 4(1)(c)(iv) REC 316/2014.

des restrictions caractérisées⁴⁷. Quand bien même cela ressort du texte même de la disposition, il convient de souligner que ce ne sont que les restrictions imposées au preneur qui sont visées (et non celles imposées au donneur de licence) et ce, pour autant qu'elles concernent les ventes passives (et non les ventes actives)⁴⁸. Cela appelle les deux commentaires qui suivent :

- Les restrictions imposées au donneur de licence ne sont pas caractérisées car il est économiquement justifié, dans les accords verticaux, de prévenir la concurrence qui pourrait être exercée par l'entreprise en amont dans la chaîne de production et de distribution. En effet, l'entreprise en amont dispose souvent d'un avantage en termes de coûts et de know-how par rapport à l'entreprise en aval, dont l'incitation à accepter de prendre une licence risque d'être fortement réduite si elle n'est pas protégée contre son partenaire contractuel.
- N'exclure le bénéfice de l'exemption par catégorie que pour la restriction des ventes passives résulte de la recherche d'un équilibre. Au sein d'un réseau de licences et de distribution, il est économiquement justifié d'accorder à chaque preneur une certaine protection contre les ventes des autres preneurs de licences, d'où la possibilité de restreindre les ventes actives. En revanche, on considère que restreindre les ventes passives va au-delà de ce qui est nécessaire en termes d'incitation de chaque preneur à investir dans la fabrication de produits incorporant la technologie du donneur de licence.

A l'instar de ce qui prévaut en matière d'accords entre concurrents, le principe est suivi d'une liste d'exceptions. En matière d'accords entre non-concurrents, les clauses suivantes bénéficient de l'exemption par catégorie :

47 Art. 4(2)(b) REC 316/2014.

48 Les ventes actives se définissent comme les mesures prises par une entreprise pour solliciter et vendre des produits ou services à une clientèle particulière. En revanche, les ventes passives se définissent comme le fait, pour une entreprise, de répondre à des demandes non sollicitées provenant d'une clientèle particulière. Dans une optique de conformité avec le droit de la concurrence, il convient de tenir compte de ces distinctions lors de la rédaction de clauses contractuelles. Des clauses formulées trop largement, telles que l'interdiction de vendre en-dehors d'un territoire donné, sont généralement interprétées par les autorités de concurrence comme interdisant tant les ventes actives que passives.

- La restriction des ventes passives sur un territoire exclusif ou à un groupe d'acheteurs exclusif qui est réservé au donneur de licence⁴⁹.
- L'obligation de ne produire les produits contractuels que pour son propre usage, à condition que le preneur de licence puisse vendre librement, activement et passivement, les produits contractuels en tant que pièces de rechange pour ses propres produits⁵⁰.
- L'obligation de ne produire les produits contractuels que pour un acheteur déterminé, lorsque la licence a été concédée en vue de créer une source d'approvisionnement de substitution pour cet acheteur⁵¹.
- La restriction des ventes aux utilisateurs finals par un preneur de licence qui opère en tant que grossiste sur le marché⁵².
- La restriction des ventes par les membres d'un système de distribution sélective à des distributeurs non agréés⁵³.

On notera encore que par rapport à la génération de REC précédente, la Commission européenne a durci l'approche, dans les accords de transfert de technologie entre entreprises non-concurrentes, vis-à-vis de l'interdiction faite au preneur de vendre passivement ses produits sur un territoire ou à un groupe de clients réservés exclusivement à un autre preneur, pendant une période de deux ans. Cette restriction bénéficiait précédemment (*i. e.* sous le REC 772/2004) d'une exemption par catégorie (basée sur la réflexion selon laquelle il était nécessaire de protéger un preneur même contre des ventes passives afin qu'il ait une incitation suffisante à investir dans la technologie du donneur afin de l'incorporer dans des produits et de commercialiser ceux-ci), ce qui n'est plus le cas sous l'égide du REC 316/2014⁵⁴.

49 Art. 4(2)(b)(i) REC 316/2014.

50 Art. 4(2)(b)(ii) REC 316/2014.

51 Art. 4(2)(b)(iii) REC 316/2014.

52 Art. 4(2)(b)(iv) REC 316/2014.

53 Art. 4(2)(b)(v) REC 316/2014.

54 Art. 4(2)(b) REC 316/2014. Cela étant, la Commission européenne reconnaît le besoin de protection que peut avoir le preneur de licence contre les ventes passives pendant une certaine période (possiblement même au-delà d'une période de deux ans). La Commission européenne considère toutefois que ce type de restriction doit être examiné au cas par cas (para. 126 LD TT). Cette clarification est bienvenue mais elle ne fournit à notre sens pas la sécurité juridique nécessaire pour que les entreprises puissent incorporer ces restrictions dans leurs contrats lorsqu'elles en ont besoin. En effet et comme déjà indiqué plusieurs fois, les restrictions caractérisées sont sou-

V. Restrictions de l'incitation à innover : approche plus économique

A. Notion et approche

Une diversité de clauses dans les accords de transfert de technologie et les accords de recherche et développement peuvent avoir pour objet ou effet de restreindre l'incitation à innover de l'une ou l'autre des parties. Ces clauses impactent donc la composante recherche et développement de l'efficacité dynamique, alors que les restrictions de la concurrence intra-technologique (traitées ci-avant) ont un effet sur la diffusion de la technologie incorporée dans des produits ou services.

Les quatre types de restrictions de l'incitation à innover sont en substance les suivantes :

- Les clauses de rétrocession des améliorations, *i. e.* l'obligation faite à une partie de céder ou concéder une licence sur les améliorations apportées à la technologie qui a été mise à sa disposition.
- Les clauses d'interdiction d'effectuer de la recherche et développement.
- Les clauses d'interdiction faite à une partie d'exploiter sa propre technologie.
- Les clauses de non-contestation de la validité des droits de propriété intellectuelle mis à disposition.

A l'instar de ce qui a déjà été indiqué à plusieurs reprises, on fera particulièrement attention aux clauses, nombreuses en pratique, qui restreignent indirectement l'incitation à innover de l'une des parties et équivalent en réalité à l'une des quatre catégories de clauses susmentionnées. Par exemple, une clause dans un accord de transfert de technologie obligeant le preneur à payer une redevance au donneur de licence calculée sur les produits issus de la technologie du preneur peut être considérée comme une clause d'interdiction d'exploiter sa propre technologie ou une clause d'interdiction d'effectuer de la recherche et développement en lien avec la technologie concédée.

vent considérées en pratique comme de pures interdictions et les entreprises sont réticentes à l'idée de prévoir des restrictions des ventes passives sur la base de leur propre appréciation du risque concurrentiel.

Les restrictions de l'incitation à innover font, de manière générale, l'objet d'une approche plus économique que les restrictions de la concurrence intratechnologique, reflétant ainsi vraiment le changement de paradigme souhaité au tournant des années 2000⁵⁵. En effet, le fait pour une restriction de l'incitation à innover de ne pas bénéficier de l'exemption par catégorie ne signifie pas encore que cette restriction est pratiquement interdite. La réglementation européenne offre dans de nombreux cas une multitude d'éléments permettant d'apprécier l'impact économique de la clause.

Si cette approche doit à notre sens être saluée, car elle évite un traitement trop rigide de clauses dont les effets économiques peuvent être variés, elle présente certaines difficultés pratiques. La réglementation est en effet très fournie et il n'est pas toujours facile d'identifier les éléments qui permettent l'appréciation des clauses, ces éléments pouvant être répartis dans diverses sections de la réglementation.

Il n'est pas possible de présenter, dans le cadre de la présente contribution, l'ensemble de la réglementation applicable aux restrictions de l'incitation à innover. On se concentrera donc sur certains points qui nous paraissent présenter un intérêt théorique ou pratique important, en particulier en lien avec la réglementation applicable aux accords de transfert de technologie.

B. Rétrocessions des améliorations

En pratique, les clauses de rétrocession des améliorations sont extrêmement fréquentes et le fait qu'elles soient appréhendées par le droit de la concurrence constitue souvent un point de friction pour les entreprises. On insistera donc immédiatement sur le fait que ces clauses ne sont pas interdites en tant que telles et que leur appréciation dépend de plusieurs facteurs⁵⁶.

55 *Supra* II.B.

56 A noter que l'ancien REC 772/2004 faisait une distinction entre les améliorations dissociables et les améliorations non-dissociables, ces dernières étant celles couvertes par le champ des droits de propriété intellectuelle du donneur de licence (et qui ne pouvaient donc pas être exploitées par le preneur sans violer les droits du donneur de licence). Sous le régime du REC 772/2004, les obligations de rétrocession des améliorations non-dissociables bénéficiaient de l'exemption par catégorie, alors que cette distinction n'existe plus sous l'empire du REC 316/2014.

Le facteur essentiel d'appréciation est le fait que l'obligation de concéder une licence soit sur une base exclusive, voire que ce soit même une cession des améliorations qui soit imposée au preneur de licence. Ces clauses ne bénéficient pas de l'exemption par catégorie, car elles réduisent l'incitation à innover du preneur. En effet, un preneur qui n'est pas en mesure d'exploiter lui-même les innovations apportées à une technologie risque de ne pas consentir à fournir les efforts pour la développer. Cette situation est d'autant plus problématique que le preneur est souvent le mieux placé, du fait qu'il exploite la technologie, pour parvenir à l'améliorer⁵⁷.

Contrairement à l'idée parfois reçue, les clauses de rétrocession des améliorations sur une base exclusive ne sont toutefois pas interdites en tant que telles. La réglementation applicable aux accords de transfert de technologie prévoit une «*safety zone*» (qui vient d'une certaine manière compléter le «*safe harbor*» de l'exemption par catégorie) qui fonctionne comme suit : si quatre technologies substituables à la technologie du donneur sont présentes sur le marché, la clause de rétrocession est en principe licite. L'idée sous-jacente est que dans ces circonstances, la réduction de l'incitation à innover du preneur n'est pas absolument problématique dès lors qu'il existe d'autres technologies similaires qui peuvent faire l'objet de développement⁵⁸.

Lorsqu'il existe moins de quatre technologies substituables, l'obligation de rétrocéder les améliorations sur une base exclusive est en principe illicite. Cela étant, la réglementation applicable aux accords de transfert de technologie ouvre quand même une dernière échappatoire dans cette situation : il convient en effet de prendre en considération la redevance qui serait versée par le donneur au preneur de licence en contrepartie de la mise à disposition de l'amélioration sur une base exclusive⁵⁹. Il est regrettable que la réglementation ne fournisse pas davantage de critères d'appréciation en lien avec cette situation. Mais on retiendra qu'il existe potentiellement une option permettant de justifier une clause de rétrocession des améliorations sur une base exclusive même dans le cas où le donneur de licence bénéficierait d'un pouvoir de marché.

S'agissant des clauses de rétrocession des améliorations non exclusives, elles bénéficient de l'exemption par catégorie, même lorsqu'elles sont non-réciproques (c'est-à-dire qu'elles ne sont imposées qu'aux preneurs

57 Art. 5(1)(a) REC 316/2014; para. 129 LD TT.

58 Para. 157 LD TT.

59 Para. 130 LD TT.

de licence) et lorsque le donneur est autorisé à communiquer les améliorations à d'autres preneurs. Ce type de clause favorise la diffusion de l'innovation, en particulier parce que chaque preneur sait qu'il se trouvera à pied d'égalité avec les autres preneurs⁶⁰.

Si une telle exemption n'est pas donnée dans un cas d'espèce en raison des parts de marchés trop élevées détenues par les parties à l'accord, la clause devrait en principe néanmoins être licite, à moins qu'elle soit prévue, de manière réciproque, dans un accord de transfert de technologie croisé entre concurrents. Dans ce dernier cas, il existe le risque qu'aucun des concurrents ne soit incité à acquérir de l'avance par rapport à l'autre. La réglementation prévoit toutefois une exception intéressante: le cas dans lequel la licence contribue à la création d'un espace de liberté de conception («*design freedom*»), *i. e.* la licence a pour objet de permettre aux parties de développer leurs technologies respectives et elle ne les conduit pas à utiliser la même base technologique pour concevoir leurs produits⁶¹.

C. Interdiction d'effectuer de la recherche et développement

S'agissant des clauses d'interdiction d'effectuer de la recherche et développement, le point qu'il nous paraît intéressant de mettre en exergue est la différence de traitement en fonction du fait que de telles clauses soient prévues dans des accords de transfert de technologie ou des accords de recherche et développement.

Lorsque ce type de clause est prévu dans un accord de recherche et développement et que la clause fait l'objet d'une délimitation adéquate, elle fait l'objet d'une exemption par catégorie ou, si les seuils de parts de marchés sont dépassés, d'une exemption individuelle sur une base quasi-automatique. Il faut pour cela que la clause soit limitée à la durée des activités de recherche et développement en commun et ne porte que sur le domaine lié aux activités de recherche et développement en commun. Une telle clause est considérée comme étant véritablement accessoire, c'est-à-dire indissociable, à la coopération entre les parties en matière de recherche et développement⁶². A l'inverse, toute clause dont le champ excéderait, soit en termes de durée, soit matériellement, les conditions men-

60 Para. 131 LD TT.

61 Para. 132 LD TT.

62 Art. 5(a) *a contrario* REC R&D.

tionnées ci-avant est en principe automatiquement considérée comme contraire au droit de la concurrence.

La situation est bien différente en matière d'accords de transfert de technologie. Lorsque les parties sont dans une relation de concurrence, ce type de restriction est caractérisé et en principe illicite, sans même qu'une appréciation du cas d'espèce ne doive être effectuée⁶³. Même lorsque les parties sont dans une relation de non-concurrence, la réglementation traite ce type de restrictions de manière restrictive, en excluant l'exemption par catégorie. Il s'agit néanmoins d'une restriction exclue et le bénéfice de la «*safety zone*» peut entrer en considération⁶⁴. L'idée qui sous-tend l'approche restrictive en matière d'accords de transfert de technologie est le fait qu'on veut éviter d'empêcher l'innovation cumulative par le preneur de licence.

On peut se demander si les régimes applicables respectivement aux accords de recherche et développement et aux accords de transfert de technologie sont cohérents. Dans le fond, le régime prévu pour cette dernière catégorie d'accord risque de restreindre l'incitation de donneur, à la base, à concéder sa technologie en licence. Or, ce type de réflexion est précisément à la base de la licéité de la clause d'interdiction d'effectuer de la recherche et développement pendant la durée et dans le domaine de la coopération dans les accords de recherche et développement: ce type de clause est autorisé car on veut augmenter l'incitation des parties à coopérer en matière de recherche et développement. Ce n'est sans doute pas le lieu de débattre plus avant de cette question⁶⁵. Il convient néanmoins de garder à l'esprit, au moment de la structuration d'une coopération, que les clauses d'interdiction d'effectuer de la recherche et développement peuvent être traitées de manières fort différentes en fonction de la catégorie d'accord en cause.

D. Non-contestation des droits de propriété intellectuelle

Dans les accords de transfert de technologie, les clauses de non-contestation de la validité des droits de propriété intellectuelle («*non challenge clauses*») font l'objet d'une approche restrictive⁶⁶. L'idée sous-jacente

63 Art. 4(1)(d) REC 316/2014; para. 115 LD TT.

64 Para. 143 et 157 LD TT. Sur le concept de *safety zone*, voir *supra* V. B.

65 ALBERINI, *supra* n. 3, p. 301 ss.

66 Ces clauses font l'objet d'un traitement plus permissif dans les accords de recherche

est d'éviter que des droits non-valides demeurent sur le marché et empêchent une diffusion et une utilisation plus large de la technologie, étant précisé que le preneur de licence, qui utilise la technologie, est souvent le mieux placé pour identifier que des droits de propriété intellectuelle n'auraient pas dû être octroyés.

En tant que restrictions exclues, ces clauses ne bénéficient pas de l'exemption par catégorie⁶⁷ et sont, à notre sens, en principe illicite sans qu'il ne soit nécessaire que le donneur détienne un pouvoir de marché⁶⁸. Cela résulte d'une interprétation des paragraphes 133 ss LD TT, selon lesquels l'art. 101 para. 1 TFUE trouve application dès que la technologie concédée possède une certaine valeur (ce qui devrait généralement être le cas), et l'exemption individuelle de l'art. 101 para. 3 TFUE ne devrait pas trouver application (sauf si la technologie concédée est liée à un processus techniquement obsolète que le preneur n'utilise pas, ou si la licence est accordée à titre gratuit; exceptions qui ne devraient que rarement trouver application).

On relèvera encore que les clauses de non-contestation devraient bénéficier d'une approche au contraire favorable lorsqu'elles portent sur du savoir-faire car il est probable que le savoir-faire concédé sera impossible ou très difficile à récupérer une fois qu'il aura été divulgué. Par cette approche, la Commission européenne essaie d'augmenter l'incitation à diffuser des technologies protégées uniquement au titre de savoir-faire, en particulier lorsque les donneurs se trouvent face à des preneurs puissants⁶⁹.

Ces dernières années, l'attention s'est davantage portée sur le droit du donneur de licence de résilier l'accord en cas de contestation de la validité de ses droits de propriété intellectuelle par le preneur de licence, pratique

et développement. Selon l'art. 6(a) REC 1217/2010, constitue une restriction exclue «l'obligation de ne pas contester, après la réalisation des travaux de recherche et de développement, la validité des droits de propriété intellectuelle qui sont détenus par les parties dans le marché intérieur et qui sont utiles à la recherche et au développement, ou, au terme de l'accord de recherche et de développement, la validité des droits de propriété intellectuelle qui sont détenus par les parties dans le marché intérieur et qui protègent les résultats de la recherche et du développement [...]». Ainsi, il est possible de restreindre la contestation de la validité des droits des parties utiles à la coopération pendant la durée des activités de recherche et développement.

67 Art. 5(1)(b) REC 316/2014.

68 Para. 134 LD TT.

69 Para. 140 LD TT.

dont l'impact économique est similaire aux clauses de non-contestation à proprement parler. Le droit de résiliation du donneur en cas de contestation de la validité de ses droits de propriété intellectuelle par le preneur de licence réduit en effet l'incitation du preneur à contester lesdits droits. À ce propos, il convient d'effectuer la distinction essentielle suivante⁷⁰:

- Si la licence est concédée à titre exclusif, le droit de résiliation bénéficie d'une exemption par catégorie. Cette approche bienveillante s'explique par le fait qu'on ne peut exiger du donneur de licence qu'il reste dans une relation contractuelle unique (compte tenu de l'exclusivité) avec le preneur qui remet en question la validité des droits de propriété intellectuelle en cause. Si les seuils de part de marché sont dépassés, il faut effectuer une analyse économique mais, dans ce cas également, la clause devrait en principe être licite⁷¹.
- Si la licence est concédée à titre non-exclusif, c'est le régime inverse qui s'applique. En particulier, le droit de résiliation ne bénéficie pas de l'exemption par catégorie⁷². Sur cette base, certains auteurs semblent considérer qu'un preneur de licence non-exclusif peut à la fois contester la validité des droits de propriété intellectuelle en cause et continuer à exploiter la technologie concédée en licence⁷³. À notre sens, cette conclusion fait abstraction, à tort, du fait qu'il convient de procéder à une analyse complète de la situation lorsque l'exemption par catégorie ne s'applique pas⁷⁴; on relèvera en particulier que, dans ces circonstances, le bénéfice de la « *safety zone* » peut trouver application, ce qui conduirait à la licéité du droit de résiliation du donneur (et qui peut donc avoir des conséquences difficiles pour le preneur qui verrait l'accord de licence valablement résilié à la suite de la contestation de la validité des droits de propriété intellectuelle)⁷⁵. Selon nous, la réglementation ne fournit pas actuellement un cadre d'analyse offrant une sécurité juridique suffisante par rapport à cette clause importante en pratique. Un apport jurisprudentiel serait souhaitable.

70 Dans les accords de recherche et développement, les parties ont la possibilité de mettre fin à l'accord de recherche et de développement au cas où l'une des parties contesterait la validité de pareils droits de propriété intellectuelle (art. 6(a) REC 1217/2010).

71 Para. 134 LD TT.

72 Art. 5(1)(b) REC 316/2014.

73 RICHARD BINNS/NICOLA WALLES, *Royalties For Unpatented Technology*, Les Nouvelles 2017 LII/1, p. 27, en particulier p. 30.

74 Para. 136 ss LD TT.

75 Para. 157 ss LD TT.

Economiquement, les clauses de paiement de redevances par le preneur de licence après invalidation des droits de propriété intellectuelle du donneur de licence sont également similaires aux clauses de non-contestation à proprement parler. L'incitation du preneur à contester lesdits droits est en effet réduite si le preneur doit en tout état continuer à payer une redevance liée à ces droits. A notre sens, on peut déduire de l'arrêt de la CJUE *Genentech* que les clauses de paiement de redevances par le preneur de licence après invalidation des droits de propriété intellectuelle du donneur de licence sont illicites, à moins que le preneur ait facilement la possibilité de sortir du contrat (*i. e.* droit de résilier moyennant le respect d'un délai raisonnable)⁷⁶.

Au risque de s'écarter quelque peu du sujet des clauses de non-contestation, l'arrêt *Genentech* présente également de l'intérêt dans la perspective plus générale de la compatibilité avec le droit de la concurrence du paiement de redevances par le preneur de licence lorsque le brevet n'est pas violé, a été révoqué ou a expiré:

- Dans le sens indiqué ci-avant, ce type de clauses est licite si le preneur a facilement la possibilité de sortir du contrat. On peut néanmoins se demander si, même dans ces circonstances, ces clauses ne posent pas problème dans la mesure où elles ne refléteraient pas une contre-prestation, et donc cacheraient une forme de coordination sans véritable accord de technologie⁷⁷. On notera d'ailleurs que ce type de considération sous-tend le régime beaucoup plus prohibitif qui s'applique à ce type de clauses aux Etats-Unis⁷⁸.
- Dans le fond, la question économique qu'il convient de se poser est la suivante: est-ce que le paiement qui interviendrait par hypothèse après que le brevet a expiré est en réalité un paiement différé de la licence concédée pour la période durant laquelle le brevet était encore valable? Si la réponse est positive, la clause devrait être valable, à tout le moins en droit européen (et possiblement même en droit améri-

76 CJUE, arrêt du 7 juillet 2016, *Genentech Inc. and Hoechst GmbH and Sanofi-Aventis Deutschland GmbH* (C-567/14). Sur cette affaire, voir PATRICIA CAPPUYNS/JOZEFIEN VANHERPE, *Patent Royalties And Competition Law: The Genentech Judgment Of The Court Of Justice Of The European Union*, Les Nouvelles 2017 LI/4, p. 293.

77 Voir *supra* III.A.

78 PATRICK GATTARI/STEVEN FERGUSON/DAVID CRICHTON/BRYAN HELWIG, *Beyond Hybrid Licenses – Strategies for Post Patent Expiration Payments in the United States*, Les Nouvelles 2017 LII/1, p. 31.

cain⁷⁹). En cas de réponse négative, la clause risque d'être nettement plus problématique et ce, à notre sens, même sous l'angle du droit européen. En pratique, la manière d'éviter les situations problématiques est d'accorder une attention particulière à la rédaction du contrat de licence, en prenant bien soin de structurer de manière claire les clauses de paiement de redevances de sorte à ce qu'elles soient le reflet d'une contre-prestation (par exemple sous la forme d'un paiement différé)⁸⁰.

Sans entrer dans le sujet hautement complexe des accords de règlement de litiges en matière de propriété intellectuelle, on relèvera que les clauses de non-contestation de la validité des droits de propriété intellectuelle contenues dans de tels accords sont en principe licites, pour autant que l'accord dans son ensemble le soit. L'approche permissive dans ce cas, qui contraste avec l'approche restrictive à laquelle nous faisons référence au début de cette section, est justifiée par le fait que les clauses de non-contestation sont intrinsèquement liées aux accords de règlement de litige⁸¹.

S'agissant des accords de règlement de litige, il faut donc bien vérifier que l'accord n'est pas problématique en soi. Or, ce type d'accord est essentiellement problématique dans les deux situations suivantes :

- Il reporte l'entrée d'une partie sur le marché («*pay for delay*»)⁸².
- Il contribue à une répartition, entre les parties, de territoires ou de groupes de clients⁸³.

VI. Une saisie par l'abus de position dominante?

A. Du refus de contracter aux termes FRAND

En matière de nouvelles technologies, l'accent de l'appréciation concurrentielle sous l'angle de l'abus de position (*i. e.* de l'exercice d'un fort pouvoir de marché au détriment de la concurrence) a traditionnellement por-

79 *Idem*, p. 31 ss.

80 Pour une conclusion qui va dans le même sens, voir BINNS/WALLES, *supra* n. 73, p. 30. GATTARI/FERGUSON/CRICHTON/HELVIG, *supra* n. 78, p. 31 ss, insistent sur l'importance de structurer et rédiger correctement les clauses de paiement post expiration en droit américain.

81 Para. 242 LD TT.

82 Para. 238 LD TT, qui fait référence à la décision de la Commission européenne du 19 juin 2013, Lundbeck (AT.39.226).

83 Para. 240 ss LD TT.

té sur les cas de refus de partager une technologie. La question était en substance de savoir si certaines entreprises dominantes empêchaient, par l'exercice de leurs droits de propriété intellectuelle, le développement de l'innovation cumulative, en particulier l'amélioration des technologies existantes par de plus petites entreprises particulièrement dynamiques.

Si ces questions sont toujours d'actualité⁸⁴, une forme d'apogée juridique a sans doute été atteinte dans les années 2000 avec l'affaire *Microsoft*, qui a établi les conditions applicables en matière de refus de contracter. En bref, Microsoft avait été condamnée par la Commission européenne pour avoir refusé de fournir des informations d'interface empêchant ainsi l'apparition de nouveaux produits sur le marché⁸⁵. Cette décision avait ensuite été confirmée par le Tribunal de première instance de l'Union européenne⁸⁶.

Depuis l'affaire *Microsoft*, l'attention s'est déplacée sur un phénomène d'importance croissante pour le développement technologique: la standardisation. Il ne s'agit en réalité pas d'un phénomène nouveau; de tout temps, il a été nécessaire d'établir des standards pour permettre aux technologies d'interopérer. Ce qui a évolué, c'est le besoin accru d'interopérabilité entre les technologies et, phénomène lié, le rôle toujours plus essentiel joué par les organismes de standardisation (généralement désignés par leur acronyme anglais, SSO pour «*Standard Setting Organizations*», ou SDO pour «*Standard Developing Organizations*»).

La sélection d'une technologie comme partie d'un standard fournit généralement un avantage compétitif au titulaire des droits de propriété intellectuelle protégeant cette technologie, dès lors que la technologie devient techniquement essentielle pour l'implémentation du standard (on parle à cet égard de «*standard essentiel patent*», ou SEP). S'il n'y a par ailleurs pas de standard alternatif disponible sur le marché, la technologie incorporée dans le standard n'est pas uniquement techniquement mais également commercialement essentielle. Dans ces circonstances, le titulaire des droits sur la technologie est en principe en position dominante au sens du droit de la concurrence.

84 Voir par exemple STÉPHANIE MUSY/ADRIEN ALBERINI, Design change: quelles limites posées par le droit de la concurrence? Une approche globale de Nespresso aux secteurs high-tech, RDS 2016 I/2, p. 135.

85 Commission européenne, décision du 21 avril 2004, Microsoft (COMP/C-3/37.792).

86 TPICE, arrêt du 17 septembre 2007, Microsoft (T-201/04).

Au cours de la dernière décennie, les litiges dans le secteur des technologies de l'information ont de manière toujours plus importante porté sur des requêtes faites par les titulaires de brevets essentiels visant à empêcher l'utilisation de leurs droits par des tiers (généralement désignés en tant qu'« *implementers* ») ou à obtenir une compensation prétendument excessive pour le droit d'utiliser la technologie. Quand bien même ces litiges sont à la base de nature civile, les autorités de concurrence sont intervenues de manière accrue (souvent à la demande de preneurs de licence potentiels) au motif que les titulaires de brevets essentiels essayaient de s'approprier les marchés concernés (« *standard hold up* ») ou d'obtenir des rémunérations excessives en contrepartie du droit d'utiliser leur technologie. En conséquence, ces titulaires de droit ralentissaient le rythme de diffusion de la technologie et empêchaient le développement d'une concurrence effective⁸⁷.

Afin de répondre à ces problèmes, les organismes de standardisation adoptent des politiques en matière de droits de propriété intellectuelle dont l'objectif principal est d'exiger des titulaires de droits qu'ils s'engagent *ex ante* à concéder des licences pour l'utilisation de leur technologie qui serait incorporée dans un standard à des conditions dites « *fair, reasonable and non-discriminatory* » (d'où l'expression généralement utilisée en pratique de conditions FRAND ou RAND). D'un point de vue théorique, le concept de conditions FRAND n'est pas trop compliqué à appréhender. En revanche, la détermination en pratique de ce que constitue des redevances FRAND pour l'utilisation d'une technologie incorporée dans un standard est considérablement plus délicate⁸⁸.

87 Dans l'UE, voir par exemple Commission européenne, décision du 29 avril 2014, Samsung – Enforcement of UMTS standard essential patents (COMP/39.939). Aux Etats-Unis, voir par exemple United States Court of Appeals for the Ninth Circuit, arrêt du 30 juillet 2015, Microsoft Corp. v. Motorola, Inc. (Case No. 14–35393). Pour un commentaire de ce cas, voir JOHN PAUL/D. BRIAN KACEDON, Recent U.S. Court Decisions and Developments Affecting Licensing, Les Nouvelles 2015 L/4, p. 237 (en particulier p. 240). S'agissant de la Chine, voir ZHAOFENG ZHOU, New Chinese Rules on Abusing IPRs: What Does It Mean for the Exercise of IPRs after the Qualcomm Case, World Competition 2015, p. 597 (en particulier p. 601 ss à propos du cas *Qualcomm*). Voir également OECD, Intellectual Property and Standard Setting – Note by the United States, DAF/COMP/WD(2014)116.

88 Voir notamment les propositions formulées sur la plateforme Geneva Internet Dispute Resolution Policies visant à faciliter le règlement des litiges relatifs aux engagements FRAND (<https://geneva-internet-disputes.ch/>). Voir également JACQUES DE WERRA, Patent and Trade Secrets in the Internet Age, RDS 2015/II, p. 123, en particulier p. 146 ss.

B. Engagement FRAND: focus initial sur le processus de négociation

Les premières décisions rendues dans le contexte de la standardisation en lien avec les engagements FRAND ont essentiellement porté sur le processus de négociation et, plus spécifiquement, sur la manière dont ce processus devait être organisé pour parvenir à donner un certain pouvoir de négociation aux potentiels preneurs de licence par rapport aux titulaires de brevets essentiels qui se trouvaient par définition en position de force⁸⁹.

L'arrêt *Huawei/ZTE* constitue sans doute la décision la plus topique à l'heure actuelle sur cette question⁹⁰. Dans sa décision, la CJUE a cherché au mieux à prendre en considération et à mettre en balance les intérêts légitimes du titulaire de droits de propriété intellectuelle (Huawei) et, par là même, le but de favorisation de l'innovation poursuivi par ce domaine du droit, et ceux du preneur de licence potentiel (ZTE) à pouvoir exercer une concurrence sur la base de la technologie concédée. La CJUE s'est concentrée sur les conditions que le titulaire des brevets essentiels doit respecter avant de pouvoir valablement requérir à l'encontre d'un tiers des mesures faisant interdiction d'exploiter lesdits brevets. En premier lieu, le titulaire des droits de propriété intellectuelle doit expliquer au tiers en quoi les brevets en cause risquent d'être violés. Lorsque ce tiers a indiqué sa volonté de prendre une licence (on parle à ce sujet de «*willing licensee*»), le titulaire des droits de propriété intellectuelle doit faire une offre FRAND, à laquelle le preneur potentiel doit répondre de bonne foi. Si une contre-offre est faite et rejetée, le preneur potentiel peut uniquement exploiter la technologie en cause s'il a déposé des sûretés. Autrement dit, ce n'est que si le preneur potentiel n'a pas déposé de sûretés au terme de ce processus de négociation que le titulaire des droits de propriété intellectuelle est en droit de valablement faire interdiction d'utiliser la technologie en cause. A noter encore que le preneur de licence doit en

89 Voir notamment Bundesgerichtshof, arrêt du 6 mai 2009, *Orange-Book-Standard* (KZR 39/06).

90 CJUE, arrêt du 16 juillet 2015, *Huawei Technologies Co. Ltd contre ZTE Corp. Et ZTE Deutschland GmbH* (C-170/13). Pour une revue critique de ce cas, voir notamment MIGUEL RATO/MARK ENGLISH, *An Assessment of Injunctions, Patents, and Standards Following the Court of Justice's Huawei/ZTE Ruling*, *Journal of European Competition Law & Practice* 2016/2, p. 103.

tout état rester libre de pouvoir contester la validité des droits de propriété intellectuelle ou le fait qu'il les aurait violés⁹¹.

Si cette décision a été saluée parce qu'elle a fourni une certaine sécurité juridique qui faisait jusqu'alors défaut, elle est restée limitée, comme indiqué ci-dessus, au processus à respecter par le titulaire des droits de propriété intellectuelle. La question de savoir ce que constituent des termes FRAND, en particulier s'agissant du niveau de redevances et de l'étendue de la licence, n'a pas été abordée⁹².

C. Evolution vers les conditions de la licence et le niveau des redevances

Ce qui était parfois discuté mais pratiquement inenvisageable en droit de la concurrence il y a une quinzaine d'année – à une époque durant laquelle une intervention contre Microsoft pour refus de révéler des informations d'interface paraissait déjà audacieuse – est désormais en train de se concrétiser: les conditions de licences, et même le niveau des redevances, peut être apprécié sous l'angle de l'abus de position dominante, à l'aune des règles sur l'imposition de prix ou conditions excessifs (pratiques dites d'exploitation)⁹³.

Le pas décisif a été franchi dans l'affaire *United Planet/Huawei*⁹⁴. Le cas concernait six brevets dans le domaine de la téléphonie mobile acquis par

91 Dans le même sens, voir V. D. ci-dessus en matière de clauses d'interdiction de contester la validité des droits de propriété intellectuelle.

92 PATRICIA CAPPUYNS/JOZEFIE VANHERPE, *The Scoop from Europe: Europe Takes On FRAND Licensing – Again*, *Les Nouvelles*, 2017 LII/2, p. 122, en particulier p. 122 s. Cette contribution traite également du cas allemand *Sisvel/Haier*, qui concrétise les principes posés par la CJUE dans l'affaire *Huawei/ZTE*.

93 Il est vrai qu'en soi, cette possibilité existe depuis l'adoption des premières règles en matière d'abus de position dominante. Les autorités ont toutefois longtemps fait preuve d'une grande retenue dans ce domaine, considérant comme plus adéquat de se focaliser sur les pratiques d'exclusion.

94 High Court of Justice, arrêt du 5 avril 2017, *Unwired Planet International Ltd and Huawei Technologies Co. Ltd, Huawei Technologies (UK) Co. Ltd and Unwired Planet LLC* ([2017] EWHC 711 (Pat)). Sur cette affaire, voir en particulier CAPPUYNS/VANHERPE, *supra* n. 92, p. 122; ANDREW MOIR/REBEKAH GAY/NIC RUESINK-BROWN, *High Court adopts tough stance on party unwilling to take worldwide licence on FRAND terms – Unwired Planet v. Huawei*, in: *European Intellectual Property Review* 2017/39(10), p. 658. Pour les conséquences pratiques de l'arrêt, voir MARK ANDERSON, *How to draft a licence agreement that is fair, reasonable and non-discriminatory: a ten-point plan*, *Journal of Intellectual Property Law & Prac-*

United Planet, dont cinq avaient le statut de brevets essentiels. En bref, Huawei s'était déclarée prête à prendre certains brevets sous licence (et ce, en lien avec certains territoires définis) pour le cas où les brevets seraient valides et où l'utilisation de la technologie par Huawei violerait lesdits brevets. En revanche, United Planet était uniquement prête à concéder une licence mondiale sur l'ensemble des brevets couvrant des technologies essentielles.

Sans revenir ici sur la totalité des points qui ont fait l'objet de la décision, il est intéressant de relever d'abord ce qui suit :

- Selon le juge en charge du dossier, aucune des propositions faites par les parties ne constituait une licence FRAND. A noter en lien avec ce point que le fait pour le titulaire des brevets essentiels de faire une offre qui ne correspond pas à ce que le juge considère comme étant FRAND ne constitue pas nécessairement un abus de position dominante. Encore faut-il que le niveau de redevances proposé soit excessif⁹⁵.
- S'agissant ensuite de l'étendue de la licence, une offre qui porte sur une utilisation pour le monde entier est FRAND⁹⁶.

Quant à la question encore plus délicate du niveau de redevances, le juge a retenu ce qui suit :

- Il est impossible de faire abstraction, comme benchmark, de la valeur du portefeuille de brevets essentiels détenus par le donneur de licence potentiel⁹⁷.
- Une première approche (dite «*top down*») pour déterminer cette valeur consiste à déterminer les redevances totales qui doivent être payées pour implémenter un standard (T). A partir de ce montant, on peut partager les redevances en fonction de la valeur du portefeuille de chaque titulaire de droits de propriété intellectuelle (S), cette valeur constituant une partie du portefeuille total de brevets essentiels pour

tice, 26 décembre 2017. Pour une appréciation des conditions de licences, voir également l'arrêt rendu par le tribunal de Shenzhen en Chine, résumé par ANNSLEY MERELLE, Shenzhen court issues written judgment in Huawei v Samsung case, IPKat, 25 mars 2018, disponible à l'adresse suivante : <http://ipkitten.blogspot.ch/2018/03/shenzhen-court-issues-written-judgment.html> (accès le 7 mai 2018).

95 Arrêt Unwired Planet/Huawei, *supra* n. 94, para. 627 ss.

96 *Idem*, para. 523 ss.

97 *Idem*, para. 178.

implémenter le standard. Le niveau FRAND est déterminé selon la formule TxS^{98} .

- Une seconde approche consiste à tenir compte de licences comparables qui auraient été concédées (pour autant qu’il y en ait). Dans le domaine de la téléphonie mobile, où les standards se succèdent, des licences comparables sont en principe disponibles⁹⁹.
- En tout état, il est difficile d’échapper à une forme de décompte de brevets (*«patent counting»*). A ce propos, les passages suivants de la décision méritent en particulier lecture :
 - *«Indeed when one thinks about it some sort of patent counting is the only practical approach at least for a portfolio of any size. Trying to evaluate the importance of individual inventions becomes disproportionate very quickly»¹⁰⁰.*
 - *«It may be that other technology standards are different but I am not surprised that patent counting is the approach taken for GSM, UMTS and LTE telecommunications standards. Each standard defines a system with a large number of different parts all of which have to interact with each other. The interactions and interdependencies are complicated. To make a coherent system which works at all, let alone one which delivers the performance demanded of these systems, is difficult and demands insight and creativity on the part of the engineers involved. It is unsurprising that many inventions (and therefore many patents and SEPs) will be involved. Short of the disproportionate task of evaluating every single patent thoroughly in order to compare each one with all the others, one can only ever hope to analyse SEPs in broad categories and it is not meaningful to attempt to weigh the value of individual patents within these categories against one another»¹⁰¹.*
 - *«I suppose in some cases it may be possible to identify a patent as an exceptional sort of keystone invention underpinning the entire technical approach on which a standard is based but that is not this case. There was unchallenged evidence that Unwired Planet’s patents made an “average” contribution to the standards. I am satisfied that*

98 *Idem*, para. 178.

99 *Idem*, para. 179 ss.

100 *Idem*, para. 182.

101 *Idem*, para. 183.

none of the Unwired Planet patents are in the exceptional keystone category»¹⁰².

On relèvera encore brièvement que cette thématique devrait continuer à faire l'objet de développements dans les années à venir, notamment en raison de l'intervention d'autorités de la concurrence. De son côté, la Commission européenne a publié en fin d'année 2017 une communication contenant un certain nombre d'orientations en matière d'appréciation des conditions FRAND; il ressort de ce document que la Commission européenne souhaite éviter que le secteur prometteur de l'internet des objets ne soit ralenti en Europe en raison de problèmes liés aux licences de brevets essentiels¹⁰³. Quant à la FTC, elle s'est attaquée à Qualcomm et sa politique «*no license, no chips*», selon laquelle Qualcomm refuse de livrer ses puces à moins que les fabricants de téléphones portables acceptent les conditions de licence de Qualcomm, incluant une obligation de payer des redevances sur tous les appareils fabriqués et ce, même si ces appareils contiennent une puce provenant d'un fournisseur concurrent de Qualcomm¹⁰⁴.

A notre sens, l'arrêt *United Planet/Huawei* mérite en outre d'être mis en perspective avec l'arrêt rendu par la CJUE dans l'affaire *AKKA/LAA*¹⁰⁵. Cet arrêt fait également état de la méthode des licences comparables et montre que le niveau de redevances peut véritablement être revu sous l'angle du droit de la concurrence:

- Cette affaire ne concernait pas directement les accords de technologie, mais portait néanmoins sur une problématique analogue. Il était en effet question des tarifs – excessifs – pratiqués par l'AKKA/LAA. Il s'agit d'un organisme de gestion collective des droits d'auteur d'œuvres

102 *Idem*, para. 184.

103 Communication from the Commission of November 29, 2017, to the European Parliament, the Council and the European Economic and Social Committee Setting out the EU approach to Standard Essential Patents (COM(2017) 712 final). A noter encore que, plus tôt en 2017, la Commission européenne avait déjà publié une roadmap sur ce sujet. Voir à ce propos CAPPUYNS/VANHERPE, *supra* n. 92, p. 125 s.

104 La documentation relative à cette affaire est disponible sur le site de la FTC à l'adresse <https://www.ftc.gov/enforcement/cases-proceedings/141-0199/qualcomm-inc> (accès le 7 mai 2018). Voir également JOHN PAUL/D. BRIAN KACEDON, Recent U. S. Court Decisions And Developments Affecting Licensing, *Les Nouvelles* 2017 LII/2, p. 127, en particulier p. 131 s.

105 CJUE, arrêt du 14 septembre 2017, *Autortiesību un komunikēšanās konsultāciju aģentūra/Latvijas Autoru apvienība contre Konkurences padome* (C-177/16).

musicales. L'AKKA/LAA est la seule entité autorisée en Lettonie à accorder des licences à titre onéreux pour la communication au public des œuvres musicales dont elle gère les droits d'auteur. Elle collecte les redevances à partir desquelles les titulaires de droits d'auteur lettons sont rémunérés et, par la voie de contrats conclus avec des organismes de gestion étrangers, celles à partir desquelles les titulaires de droits étrangers sont rémunérés. Parmi ses licenciés figurent notamment des magasins et des espaces de service, en tant qu'utilisateurs des œuvres protégées par le droit d'auteur et les droits voisins¹⁰⁶.

- La CJUE a considéré qu'afin « d'examiner si un organisme de gestion des droits d'auteur applique des prix non équitables au sens de l'art. 102, second alinéa, sous a), TFUE, il est adéquat de comparer ses tarifs à ceux applicables dans les Etats voisins ainsi qu'à ceux applicables dans d'autres Etats membres, corrigés au moyen de l'indice PPA [indice de la parité du pouvoir d'achat], pourvu que les Etats de référence aient été sélectionnés selon des critères objectifs, appropriés et vérifiables et que la base des comparaisons effectuées soit homogène »¹⁰⁷.
- La CJUE est ensuite allée jusqu'à créer une présomption selon laquelle, si l'écart entre les tarifs comparés est sensible et persistant, il constitue un indice d'abus de position dominante et il appartient alors à l'organisme de gestion des droits d'auteur en position dominante de démontrer que ses prix sont équitables en se fondant sur des éléments objectifs ayant une incidence sur les frais de gestion ou sur la rémunération des titulaires de droits¹⁰⁸.

Si ces affaires, notamment mises en perspective, sont à notre sens révélatrices d'une véritable avancée, peut-être convient-il tout de même de tempérer l'approche audacieuse qu'elles paraissent introduire. En effet, il convient de garder à l'esprit que les décisions évoquées ci-avant ont été rendues dans des contextes particuliers (la standardisation technologique, respectivement l'activité des sociétés collectives de gestion) caractérisés par la position dominante particulièrement qualifiée des entreprises au centre de ces affaires¹⁰⁹.

106 *Idem*, para. 7.

107 *Idem*, para. 51.

108 *Idem*, para. 61.

109 La position quasi-monopolistique est d'ailleurs une constante dans les affaires qui portent sur des pratiques dont la qualification comme abus n'est pas aisée. Voir par

Au vu de ce qui précède, on peut se demander si l'on franchira encore d'autres étapes et s'il y aura un contrôle plus généralisé des conditions de licence et du niveau de redevances, en dehors de contextes particuliers tels que celui de la standardisation technologique. En tout cas, la porte semble ouverte...

VII. Conclusions

Les dernières évolutions – récentes – évoquées ci-dessus en matière de standardisation, qui montrent que le niveau-même des redevances peut être appréhendé en lien avec l'appréciation concurrentielle, nous conduisent à revenir à la question posée en début de contribution: nous trouvons-nous au début d'une nouvelle période de tension entre le droit de la propriété intellectuelle et le droit de la concurrence? Si l'on ne saurait totalement l'exclure, force est en tout état de constater que le droit de la concurrence joue un rôle toujours plus important, depuis une quinzaine d'années, en matière d'accords de technologie. Formulé différemment, on peut se risquer à affirmer que la propriété intellectuelle, à tout le moins lorsqu'elle fait l'objet d'une exploitation contractuelle, est toujours plus « saisie » par le droit de la concurrence.

Outre cette considération fondamentale, il convient à notre sens de retenir les trois éléments suivants:

Premièrement, le droit européen de la concurrence joue un rôle prépondérant de modèle (*i. e.* de référentiel juridique), *a fortiori* lorsqu'il n'existe pas de réglementation spécifique au plan national, comme c'est le cas en Suisse où la Comco a choisi de ne pas adopter de règles applicables spécifiquement aux accords de technologie.

Deuxièmement, le praticien sera attentif au fait que, s'il est vrai qu'une approche plus économique a été introduite, le traitement de plusieurs clauses demeure empreint d'un certain formalisme. Il en va ainsi en particulier des clauses en matière de prix, quantités et territoires. S'agissant plus spécifiquement des accords de technologie, il convient de faire attention aux accords qui, déguisés en coopération technologique, visent essentiellement à permettre aux parties de se coordonner sur le marché ainsi

exemple l'affaire *Microsoft* (*supra* VI.A) et, plus récemment, l'affaire *Google* (*supra* I.).

qu'aux clauses qui ont indirectement pour objet ou pour effet une restriction dure de la concurrence.

Troisièmement, et il s'agit peut-être du point le plus important en pratique, l'approche plus économique introduite au tournant des années 2000 en droit européen des accords offre des options intéressantes, en particulier en ce qui concerne les clauses qui restreignent l'incitation à innover dans les accords de technologie. A cet égard, la réglementation européenne constitue une véritable «*toolbox*», dont le praticien inspiré saura sans nul doute faire bon usage.

* * *

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