Drafting Of Royalty Clauses: 30 Ways To Head For Windfall Or Pitfall

By Erik Verbraeken

Introduction

After a lengthy and difficult commercial negotiation, licensor and licensee have finally succeeded in finding an agreement. They have agreed on the business principles that are to govern the exclusive license that the licensor will grant to the licensee with respect to a very promising "green drilling" technology with burgeoning market perspectives. Under the agreement the licensee accepts to pay the licensor a percentage royalty on net sales of the licensed product. The next step will be for the Legal Division of licensor to draft a contractual document under which this gentleman's agreement is to be translated and converted into a legally enforceable commitment. A one out of a dozen exercise, isn't it? However, the proof of every pudding is in the eating, and your royalty clause may leave you with either a sweet or bitter aftertaste when the latter has to be reduced to practice on the operational battleground: oh so sweet when you have adopted a meticulous drafting approach that has taken heed to the particulars of the business deal and that is tailor-made to face the various accounting and legal implications of the royalty structure that has been agreed upon; oh so bitter when you have resorted to the dreadful drafting approach where the royalty clause is copied from the first source available on the Internet without caring to adapt and relocate the latter in its proper context, and for which John Ramsay has already provided multiple examples in this journal. Depending on your pudding recipe, and taking the liberty of a little exaggeration, you may find out that your royalty clause has either become the source of a business windfall, or has laid the pillars for a business pitfall.

The present article provides an illustration of 30 business items that, when inappropriately converted into contractual language, may give rise to the creation of a fundamental gap between business expectations and business realities.

1. Gross Revenue or Net Revenue

When discussing a licensee fee on the basis of percentage royalties, the latter are often expressed as a percentage of revenue. We all understand that when a reference to revenue is made, we refer to the inflow of money resulting from the sales of goods and services. However, where interpretations may differ under an agreement, is whether this revenue should be assessed at the level of gross income (*i.e.* money generated by all sales of goods and services, before deductions for expenses) or at the level of net income (*i.e.* money generated by all sales of goods and services, after deductions for expenses). Any contractual definition of revenue should therefore specify whether it extends to the gross amount or the net amount of income. Where (as is often the case) the parties opt for net revenues as a basis to calculate royalties, it is important to determine what are the deductibles that are allowed to be taken into account in order to establish the net revenues.

■ Erik Verbraeken,
IFP Energies, Nouvelles,
Associate Director,
Contracts Division,
Rueil-Malmaison, France
E-mail: erik.verbraeken@ifpen.org

It is generally recognized that the definition of allowable deductibles is limited to the determination of appropriate categories of expenditures, and does not extend to so-called internal costs of the licensee. This is logical since if the contract allows for cost deduction, this implies that the royalty clause be converted into a profit-based royalty payment, instead of a turnover-based royalty payment.

The important issue for the respective draftsmen (on licensor's and licensee's side) is to carefully determine the expenditures that are eligible for deduction. Common cost deductions that are allowed under license agreements are sales taxes, storage costs, transport costs, packing costs, insurance fees, customs duties, etc. This method of assessment is generally referred to as a royalty calculation on the basis of the "ex works" sales price of the product—although we must bear in mind that this reference originates from the Incoterms and designates a term of delivery, rather than a term of cost determination. Consequently, a mere reference to the definition of the royalty payment on the basis of the "ex works" sales price may leave room for differing points of view between licensor and licensee regarding the admissibility of certain cost items—for example, marketing expenses, discounts, and agent commissions.

In particular when the licensor allows for the deduction of cost items over which the licensee maintains a certain control, *e.g.* discounts or agent commissions, the licensor may have interest in capping the deduction at a certain percentage of the sales price. This may be done in order to avoid unexpected discrepancies between the sales perspectives, that were initially sketched by the licensee, and the corresponding net revenue attached to these sales figures as a result of unanticipated cost deductions.

In addition, a malevolent licensee might choose to circumvent the burden of the royalty clause by establishing himself a "virtual" wholly-owned subsidiary in a given country with which he concludes an agency agreement remunerated at a particular elevated commission rate. This will be to the detriment of the licensor confronted with corresponding excessive cost deductions, while neutral to the licensee who recovers the commission payment made to the agent through future dividend payments or liquidation proceeds of its subsidiary.

2. Price Invoiced or Price Received

Whether the royalty should be assessed on the basis of the amounts that have been invoiced or on the basis of the amounts that have effectively been received by the licensee is principally a commercial discussion. However, if the agreement is based on the amounts received by the licensee, the licensor should be aware that he excludes from royalty payments: (a) sales orders that were received but which have been subsequently cancelled or annulled by the client, (b) invoices that were sent by licensee but not paid by the client, (c) invoices that were sent by licensee but that are contested by client and paid in escrow. The reference to "payments received" may also present interpretation problems when the royalty payments are not physically received by the licensor; for example, when a licensee decides to set-off his royalty payment obligation under the license agreement with concurrent payment obligations which are allegedly owned to it by licensor. The risk of different interpretations as to whether such compensatory mechanisms applied by the client constitute a payment received under the license agreement will be increased when the licensor contests the legality of this set-off practised by the client.

Although the calculation of the royalty on the basis of the price effectively received by the licensee is a commonly accepted practice in technology transfer transactions, the licensor may have interest in limiting the extent to which the licensee is authorized to declare royalties on the mere basis of income received. For example, the licensor may accept to share the risk with the licensee if the non-payment is the result of the incapability of the client to pay the invoiced amount, since he has become subject of bankruptcy proceedings. However, if the refusal to pay the invoice is directly related to a default in the product or service that results from a deficiency in the licensee's manufacturing process, rather than from the teachings of the technology file that the licensee received from the licensor, the latter may reasonably argue that the royalty payment remains due on the unpaid invoice. The same is true if for the sake of convenience, the licensee refrains to further pursue the matter with the client, for instance, in order not to compromise parallel negotiations on an ongoing business deal with this same client.

A particular issue is the treatment of annulled sales orders, in particular when these annulments are the result of a commercial favour granted by the licensee to the client in order to maintain an ongoing trade relationship bearing on other business interests. Since on the one hand the licensed technology has been exploited by the licensee, but on the other hand the licensee has not received the corresponding price on this exploitation, the question arises whether royalties should be declared over these sales. The licensor may be less inclined to use "price received" as a royalty-triggering device when the annulment of sales orders follows from a decision of mere convenience, and has no direct relationship with the performance of the licensed technology.

3. Direct and Indirect Income

Sales and supply of licensed products/services to the ultimate client/end-user do not necessarily all occur through a direct relationship between licensee and client; especially when the license has a worldwide geographical reach, and the licensee chooses to sell / supply the licensed product / service though a distribution network, or through the designation of sublicensees (whether within or outside the corporate group of companies controlled by the licensee) in order to favour the commercialization of the product or service. If the licensee decides to set up additional commercial outlets, his revenues deriving from the sales of the products or services through these intermediaries will necessarily be less than if he had made these sales directly. When the sale transits through a distributor, the latter will purchase the products from the licensee at a reduced price corresponding to the market price at which the licensee could sell himself, so that the distributor will be able to reserve a profit margin for himself. When the commercialization is performed by setting up a manufacturing subsidiary, the subsidiary, as a sublicensee, will himself pay a royalty fee to the licensee on the sales of the product.

Consequently, where the gross revenue of the licensee when he sells himself the product to a third party may correspond to a sum of 100, it may well be that his gross revenue when he sells the product to a distributor may be half this sum; whereas in the case of a sublicense, his gross revenue may altogether dwindle to a sum of 5 when the sublicensee pays only a 5 percent royalty to the licensee. In order to avoid the erosion of the royalty payments that the licensee undertook to pay to the licensor under the license agreement, the licensor has to precisely determine the market level at which the royalty payment will be assessed. In those circumstances where the licensor cannot get access to the required financial reporting, for example because he has no "long arm jurisdiction" to obtain the sales figures that were occasioned at the ultimate wholesale level, the licensor may wish to vary the royalty rate in accordance with the type of arrangement entered into by the licensee. For example, he may set 5 percent royalty rate on direct sales, and an 80 percent royalty on sublicensing revenues.

4. Cash and Non-Cash or Diluted Income

Non-cash income and its accounting treatment when determining royalty payments will mostly occur when the licensee has a barter trade activity; although in today's modern system of economic transactions, this method of exchange by which goods or services are directly exchanged for other goods or services becomes more and more rare. It should not be ignored. For example, the annual value of barter trade by North American companies expanded to $12 billion in 2008 from $7.78 billion in 2001, according to the International Reciprocal Trade Association, a non-profit group that promotes barter as a form of commerce (source: *http://sloanreview.mit.edu*).

However, apart from barter trade that will remain a rather foreign species in most commercial transactions, non-cash income may be generated by the licensee under more orthodox commercial circumstances such as the following:

1. The licensee enters into a business deal where the licensed product is offered at a significant discount to the purchaser in consideration of a commitment made by the latter to confer the product regular maintenance services and repair operations exclusively to the licensee.

2. The licensee enters into a global deal with a customer under which discounts are triggered on the basis of the overall turnover realized by the customer with the supplier; thus, increased sales of "main" products manufactured by the supplier that are not subject to royalty payments may reduce the price level of "accessory" products that fall under the terms of the license agreement, and consequently, erode the royalty income of the licensor.

3. The licensee enters into a cross-license deal with a third party, where license rights are exchanged permitting each party to produce and sell the product without accounting to the other party. Of course, such a general cross-license deal supposes that the licensee has the right to grant sub-licenses on the licensed technology.

4. Non-cash income may also be generated by the licensee under settlement agreements concluded with his clients that put a term to certain commercial disputes, where the licensee, in consideration of his waiver to pursue certain commercial claims (some of which may be subject to royalty payments), buys peace of mind and avoids having to enter into protracted court proceedings with respect to these same claims.

The difficulty for the licensor (as well as for the licensee for that matter) is to put value on these non-cash items. Since non-monetary business dealings are relatively rare, though not uncommon, it is recommended to set forth the principle of royalty payments on cash and non-cash consideration, while leaving the valuation of these non-cash items to future discussions between licensor and licensee, assisted if need be with the support of independent outside valuation consultants.

5. Currency of Royalty Payments

As a result of the globalization of commercial transactions, a license deal for a technology where the resulting products can be expected to be sold on a worldwide basis, should address the currency in which royalty payments are to be made, if one wishes to avoid any possible misunderstandings that may arise as a result of currency fluctuations on the international monetary market. Basically, three options are available: (1) royalty payments are made in the same currency as the one in which the licensee received payment from the client for the products sold, (2) royalty payments are made in the currency under which the licensee organizes its financial accounts, (3) royalty payments are made in the currency under which the licensor organizes its financial accounts. Whatever option is chosen (there is no recommended option for either of the above alternatives), depending on the currency of payment that has been retained, the risk of currency devaluation is attributed differently: to the licensor under option (1), to the licensee under option (3), and shared between the licensor and licensee under option (2).

When in order to hedge his monetary interests, the licensor has contractually secured that the licensee will pay the royalties that have accrued under the license agreement in the currency of the country of licensor, a full protection of his monetary interests will also require that the licensor defines the exact date under which the conversion sales currency to royalty currency will be determined. The wider the time span between the moment of sale and the moment of royalty payment (under annual royalty declarations, royalty payment for a sale that has occurred in January of the year *n* may only give rise to royalty payment in May/June of the year $n+1$, when one counts 60 days to send the royalty report, 30 days to prepare the invoice, and 60 days to pay the invoice), the bigger the risk that the royalty value will be diluted as a result of currency devaluation (as it would have been the case of a sale that occurred in January 2007 when one U.S. $ amounted to 0, 77, and the royalty payment was made in May 2008 when the same U.S. $ only amounted to 0, 64). When the date of conversion is contractually defined, the licensor can protect his currency risk by having recourse to credit sales of the royalty amount. Possible conversion dates that can be used by the parties (here as well, there is no recommended option for either of the following alternatives, as long as you pick one): date of product sale; date of product invoice; date of receipt of sales price; date of royalty payment; and average exchange rate over a certain accounting period).

6. Late Payment

A license agreement will normally provide for interest payments if licensee fees are paid beyond the due date; for example: "If payment is not received within said period, Customer will be assessed a late charge equal to *x* percent of the unpaid amount per month."

However, what is often ignored in license agreements is that the belated payment does not necessarily stem from a failure of the licensee to respect the contractual payment schedule, but from a failure by the licensee to provide the licensor on time with the regular sales reports (and corresponding royalty reports). If those reports are 3 months overdue, even if the licensee pays the royalties in accordance with the contractual payment period, the licensor will still have suffered a treasury deficit of 3 months for which no contractual remedy has been provided. Besides this treasury deficit, the licensor may also have suffered additional monetary losses if he receives the royalty fees in a currency that is different from his national currency; for example, the current fluctuations on the U.S.$ - exchange market may result in a significantly lesser royalty revenue if the licensee has retarded the issuance of his royalty reports (*cf.* paragraph 6 above).

Consequently, late payment penalties should not only apply downstream to payments received after the invoice has been issued, but likewise downstream to royalty declarations that are required to be provided under the reporting process; in addition, late penalties should not only extend to interest charges, but also, if applicable, to currency devaluation.

7. Sliced Royalties

It may happen that different royalties apply on different slices of revenue. In that case, royalties may either be digressive or progressive. Although the principle of sliced royalties is common, the drafting of the sliced royalty clause is a particularly awkward exercise, since an oversimplified wording may easily give rise to different interpretations on the functioning of this mechanism.

Take the following clause: "Licensee will pay a royalty of 5 percent on revenues between $1 and $1,000,000, of 3 percent on revenues between $1,000,001 and $3,000,000, and 1 percent on revenues over and beyond $3,000,000." Let's suppose the licensee declares a revenue of $2,500,000. What will be the royalty sum that the licensor will subsequently charge to the licensee? The licensor will probably argue that the royalty sum corresponds to $95,000 (5 percent x 1,000,000 and 3 percent x 1,500,000), but the licensee might argue that the royalty sum should instead be $75,000 (3 percent x 2,500,000).

Let's suppose that the next year the licensee declares again $2,500,000. In the same way, the licensor may claim payment of $95,000, but the licensee might argue that for this subsequent year, the royalty sum should be $35,000 (3 percent x 500,000 and 1 percent of 2,000,000).

Both parties are probably acting in good faith when proposing their respective royalty declarations; it is the oversimplified wording of the sliced royalty clause that makes it near to impossible to determine what computation mechanism the parties really intended to establish, *i.e.* whether the slices should be applied cumulatively (in amount and/or in time) or separately.

8. Stacked Royalties

Royalty stacking occurs when a licensee, in order to legitimately manufacture and sell the same product, needs to acquire a license under multiple patents (for example, although various combinations are possible, a patent affecting the production process, a patent affecting the product formula, and a patent affecting the means of implementation of the product), or needs to gain access to various technologies owned by different parties. Since each license will be subject to a corresponding royalty, the licensee may find itself compelled to incorporate royalty cost upon royalty cost into the final sales price of the product. In the extreme, royalty stacking may create an "overkill effect," and make the commercial price of the product overall uncompetitive.

In order to avoid that the licensee thus prices itself out of the market, the license agreement may provide for anti-stacking measures, *e.g.* a global royalty ceiling. If the ceiling would be exceeded, a royalty revision mechanism would be triggered under which the licensee and the licensor (individually) or licensors (collectively) agree on a *pro rata* reduction of the royalty rate. The difficulty will reside in determining the "*pro rata*" part of each patent when various licensors are involved, each one considering that its respective patent contributes the lion's part of the licensee's commercial proceeds. Care should also be taken to distinguish between "essential license rights" (related to strong patent claims that effectively prohibit the manufacture and sale of the product without the consent of the patentee) and "comfort license rights" (related to weak patent claims for which the licensee prefers to negotiate a license right in order to avoid protracted court proceedings) when determining the respective "*pro rata*" reductions.

9. Royalty Basis

Besides the royalty rate, every license agreement needs to define the royalty basis. Brought back to its roots, "in fine" every license fee is merely the outcome of the multiplication: royalty rate x royalty basis. A licensor may boast to have obtained a royalty rate of 10 percent under a particular technology deal, but without knowledge of the royalty basis, this information bears no intrinsic value whatsoever: 10 percent x 1 has the same commercial interest as 1 percent x 10. Consequently, besides the royalty rate, licensor and licensee need to focus on the royalty basis.

Frequently, a royalty rate is expressed as a percentage of net sales of the licensed product. Although the simplicity of the formula may be attractive for the purpose of facilitating a "meeting of minds" during business discussions, this same simplicity may result in a legal nightmare if reproduced as such in the license agreement.

Suppose the license agreement covers a computer system with both hardware components and software components. If the agreement provides that royalty payments are due on sales of the said computer system, the first question that comes immediately to mind will then be: what particular commercial transaction is to be considered a "sale" under this clause? In fact, various sources of revenue may be generated by the licensee under the license that do not, as such, qualify as resulting from a "sale." Although these revenues are intimately related to the licensed product and consequently, might legitimately be considered as royalty bearing revenue streams by the licensor, the particular reference to "sales" under the agreement as royalty triggering transactions may raise doubt whether these revenues, since they derive from alternative forms of commercialization, are subject to royalty payments. To name the most important amongst them: (i) what about the rental of the computer system, (ii) what about the lease of the computer system, (iii) what about the internal use of the computer system by the licensee for the purpose of consultancy services, (iv) what about the associated services related to the sales of the computer system (installation, training), (v) what about the maintenance services provided in respect of the software?

Likewise, the definition of "licensed product" may raise queries. With respect to the hardware, are the sales of spare parts of the computer system subject to royalty payments? With respect to the software, are the sales of upgrades to the software subject to royalty payments (especially when the latter are offered under maintenance agreements)? With respect to the computer system, are "debundled" sales (*e.g.* sales of the hardware without software or sales of the software without hardware) subject to royalty payments?

In addition, even if the legal definition of the "licensed product" is properly framed, it may be that for accounting purposes the "licensed product" cannot be easily determined. This exercise presents no particular difficulties when the computer system is commercialized as a single, indivisible unit. However, the exercise may become more tantalizing when the computer system is sold as a modular product, to be customized in accordance with the specifications of the client. For example, the software may be offered as part of a package by the licensee, the latter bundling several software functionalities gathered in order to respond to a particular operational thematic (*e.g.* fuel consumption calculation). The issue will then be to ponder the relative commercial value of the licensed software product within the full software package in order to extract the corresponding royalty obligation.

The exercise may give rise to a serious headache when the technology under license is a scientific tool that may be employed for the design of products (*e.g.* a screening tool capable to determine a suitable chemical composition on the basis of the input operational data), or a method of application useful in the supply of services (*e.g.* a method capable to calculate the trajectory of a drilling bit). Let's suppose that the software tool of licensor optimizes the prediction of the composition of hydrocarbon accumulations in accordance with its migration history, and negotiates a license for this product either with a service company (*e.g.* a geosciences consulting firm) or a petroleum company. In the first case, since for all practical purposes, the percentage royalty can only be calculated on the price of the study performed by the consulting firm, the heterogeneity of the scope of work of each single study (comprising, besides the run-time of the software, the additional processing of the data by consultant, the interpretation of the said data, the writing of the report, the application of alternative or complementary software or methodologies by the consultant, ...) makes the size or *pro rata* importance of the licensed software with respect to the overall perimeter of the study will constantly vary in accordance with the individual "*ad hoc*" requirements of the client. In the second case, the "per use" percentage royalty that the licensor may demand from the petroleum company may be grossly underestimated compared to the end value realized by the said company through the use of the software tool, while a demand for a "reach through" royalty on future oil production that was predicted through the usage of the software tool would probably be sternly downturned by the petroleum company.

The definition of the perimeter of "licensed product" may also be an awkward exercise to perform in relation to ongoing R&D activities that may give rise to future improvements of the licensed product, or even additional spin-off applications of the latter. If the licensee is at the origin of such developments, he may wish to question the application of the royalty clauses to such independent developments. If the license agreement is a mere patent license, the issue is normally quickly resolved. Either the improvements or other results conceived by the licensee continue to depend on the patent claims and the royalty payments remain due, or the improvements or other results do not depend on the patent claims and the licensee should be free to exploit these developments as he deems fit (in the absence of an improvement assignment clause in the license agreement, although such clause may be subject to antitrust scrutiny). However, under a technology transfer transaction, where the licensor has no IP title to oppose, the licensee may object that he is no longer exploiting the technology that was provided under license, but a new technology that he developed himself, although (admittedly) on the basis of the technology that he received under license. In order to counter such allegations from the licensee, the agreement should provide for a flexible definition of the "licensed product" in order to place the latter in a dynamic (instead of static) environment. For example, the definition could be completed as follows: "A product shall continue to be considered to be a "Product" as defined herein when, as a result of independent research performed by licensee, complementary improvements, additional enhancements or extended functionalities have been brought to the Product; but a product shall no longer be considered to be a "Product" as defined herein when and to the extent that, as a result of independent research performed by licensee, fundamentally different design concepts or industrial applications have been conceived for the Product."

With respect to the exception that the draftsman has carved out in the above definition of "licensed product," the licensor should take care to correlate the freedom that he leaves (and that he is obliged to leave under competition law) to the licensee to independently carry out further research and development, with the restrictions that are imposed under the confidentiality clause, in order to avoid that the licensee uses the original technology as a springboard to develop a new technology, without having had to spend the R&D efforts underlying the original technology. This can be done in two ways: either the licensor strictly forbids the licensee to use the technology for any other purpose than the manufacture of the licensed product, or the licensor widens the above definition to include any improvements, enhancements and functionalities that derive from the original technology. The prime difficulty will be to set the limits of what can still be considered to be a derivative application: is the motorcycle a derivative application from the bicycle? Is the chemical formula ABC + 5 percent calcium carbide a derivative application of the chemical formula BCD + 6 percent calcium carbide?

Related to the definition of "licensed product" is the "licensed field of use." The broader the potential commercial applications of a certain technology, the more important it is for the licensor to ring-fence the applications that are licensed out on a case-by-case approach, on the basis of the merits of each singular business case (a biotechnology that has both veterinary and human applications is not necessarily licensed out to one and the same licensee or under one and the same commercial conditions).

However, in all of the above situations, whatever the craft of the draftsman to provide a precise designation of the contours of the licensed product and hence, the royalty basis, the draftsman should also examine whether the agreed definition is a workable and practical means for the purpose of calculating royalty payments in relation with the anticipated commercialization methods of the licensed product—although it is probably unavoidable to leave a certain leeway in the terminology used to define this perimeter.

10. Multiple Royalties

Section 35 U.S.C. § 271(a) provides that "whoever without authority…sells any patented invention within the United States…during the term of the patent… infringes the patent." Based on the literal reading of this provision, since any sale of a patented invention is considered an infringing act, the patentee would be able to extract a royalty payment on each and every sale of the product throughout the full product lifecycle, from the moment it was sold for the first time on the marketplace, up and until the moment that the product finds its grave on the scrap heap.

It is generally recognized that once the patentee has made first sale of the product (or with the consent of the patentee), he has thereby fully exercised and thus, "exhausted" the right embedded in the patent. As from the first authorized sale by, through or under the patentee, all future sales become likewise authorized and are no longer subject to the exclusionary rights of the patentee. Thus, the patentee can extract remuneration under his patent only once, either through the extraction of a profit margin when the patentee himself commercializes the patented product, or through the levy of royalty payments when the commercialization is confided to a licensee. This concept of the exhaustion of patent rights (or, in general, intellectual property rights) is applied both in the United States since the 1873 *Adams vs. Burke* decision (84 U.S. 453) and the 1895 *Keeler vs. Standard Folding Bed* decision (157 U.S. 659), and in the European Union since the *Deutsche Grammophon* decision (1971 ECR 1147). As the Supreme Court stated in the *Adams vs. Burke* case, "when the patentee, or the person having his rights, sells a machine or instrument whose sole value is in its use, he receives the consideration for its use and he parts with the right to restrict that use."

However, the exhaustion doctrine prevents the patentee from being remunerated twice, or multiple times, for what comes down to one and the same transaction, *i.e.* the sale (including resale) of one and the same patented product under one and the same patented claim. The application of this doctrine is less straightforward where the chain of transactions is not simply homogeneous but presents heterogeneous elements, *e.g.* where the product, subject of the resale, is "reworked" (as in *Mallinckrodt vs. Medipart*, 24 USPQ 2d 1173) or where the patent at issue reads on a method of application, rather than on a product design (as in *Quanta Computer vs. LGE Electronics*, 128 S. Ct. 2109, 2008). It may also be that the royalty payments demanded by the patentee follow from a business model under which the patentee seeks to optimize the financial returns of his invention by "taxing" various marketing stages; the intention of the royalty scheme is not to duplicate royalty payments, but to diversify royalty payments.

Take the (fictitious) example of a patentee who, following a series of experiments carried out on samples from an oil wellbore suffering from asphaltene deposits, develops an acid formula that is capable of eliminating such asphaltene formation, and applies for a patent on this invention. Let's suppose that the manufacturing price for this chemical is only 10$/kg, but that the potential economy for an oil and gas operator is valued at 1000$/kg (because the use of the product avoids having to call upon expensive well clean-out operations). In order to commercialize its invention, the patentee decides to structure its licensing operations as a two-tier operation, through the application of a "low value" manufacturing royalty from the chemical producer, whilst the bulk of the royalty is to be recovered from the operations where the "big bucks" reside, *i.e.* in the oilfield implementation. Thus, under the license agreement with the chemical producer, the patentee provides that sales may only be made to oil and gas companies that have previously entered into a license agreement with the patentee authorizing the use of the product for their respective oil and gas operations. Although this royalty scheme can be considered as a means to optimize royalty payments all over the value chain, this business model could be easily frustrated if the oil and gas company could simply invoke the exhaustion of the patent right of the proprietor after he has legitimately acquired the chemical compound from the manufacturer—even if the oil and gas company has accepted the license restrictions under which the compounds were sold. If the mere sale of the product exhausts the associated patent claims, the existence of a "reserved right" to a patent privilege that is no longer available under the workings of the exhaustion theory would be deprived of any legal sanction.

Multi-tiered licensing transactions occur often in the pharmaceutical industry, where early stage inventions that need further development, tooling up and clinical tests, are licensed under generally low royalty fees, while with each step of scientific validation and identification of possible applications, such royalty fees increase.

Straightforward royalty extractions down a homogeneous sales chain are thus clearly considered as an illicit overstretching of the protective span of the patent right. The answer is less evident where the various royalty payments down the chain are part of a business model where the patentee does not seek to duplicate royalty payments but to optimize royalty payments. It is certainly a thin line between what should be considered an illegitimate multiplication of royalty revenues on the one hand, and a legitimate diversification of royalty revenues on the other hand; but, whereas the reach of a patent should not be overstretched to where the patentee could continue to monitor every subsequent commercial transaction following the introduction of the patented product on the marketplace. Neither should the exhaustion theory itself be overstretched to an extent where the patentee has only a "one shot" approach to the license structure that he chooses to set up for the introduction of the patented product on the market place.

11. Progressive Royalties

The license agreement may very well provide for progressive royalties in accordance with increased sales figures of the licensed product. A progressive royalty is particularly interesting when licensing out to a start-up company, or when important initial investments have to be made by the licensee to make the invention industrial. By submitting the product to low initial royalties (sometimes even zero royalties through what is called a "royalty holiday"), the licensor (and licensee) smoothes the introduction of the licensed product on the market by reducing the impact that royalties will have on the sales price of the said product. Once the introduction of the product on the market has proven to be a success and the sales of the latter steadily increase, the licensor may elect that, in consideration of the shared risk of market failure that he adopted with the licensee, he will now take a larger share of the pie and augment his royalty rate on the sales.

At the same time, the licensor should beware that he does not define his progressive royalty scheme in such a way that the contractual royalty structure may be considered a means to restrict competition on the marketplace. For instance, according to the European Commission Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements (JOCE 2004, C 101), price fixing can be implemented by applying disincentives to deviate from an agreed price level. For example, providing that the royalty rate will increase if product prices are reduced below a certain level. Progressive royalties may also have the effect of limiting output between competitors, for instance where reciprocal running royalties per unit increase as output increases.

12. Taxation

When discussing royalty rates and evaluating potential future revenue streams, every licensor will have to discount the effect of taxation on the net income that he will ultimately derive from the transfer of technology. Apart from the standard fiscal impositions that he will have to support in his home country, in particular tax on income, the licensor may have to account for several charges that may be levied in the host country, like withholding taxes on technology transfer, service taxes on technical assistance, import duties on equipment importation, expatriation taxes on expatriate personnel—in some cases the extended presence of licensor personnel at the site of licensee may even be considered to give rise to the creation of a permanent establishment in the host country and hence, attract corresponding taxation.

In some countries, these taxes may represent an excessive burden for the licensor. This is especially true in Latin American countries where they tend to impose unusually high rates of withholding taxes—25 percent in Brazil, 33 percent in Argentina, 42 percent in Columbia (source *www.unctad.org*, based on 2005 figures). In order to obtain the same net rate of return, the licensor may feel compelled to charge a higher royalty, to compensate for the excessive withholding tax. This will be even more true where (a) there are no treaties for the avoidance of double taxation in place between home country and host country, implying that the licensor has to pay "twice the bill" (although not necessarily in the same amounts), or (b) the licensor is a university or research institution not subject to income taxation in his home country and hence, not eligible to compensate the taxes withheld in the host country from taxes payable in the home country. Under these circumstances, only the license agreement will provide an appropriate instrument for the licensor to make sure that the net income that he anticipates to generate from the license will correspond to the net royalty fee charged to the licensee; this is particularly true under "one shot" license fees that are expressed at a lump sum, rather than as a percentage of future cash flow. An adequate clause could be phrased as follows: "All payments hereunder shall be made in such a manner that, after deduction of any taxes, fees, levies or other duties that may be imposed in the host country against payments made, the remainder actually received by licensor shall be the full amount as defined in article *x* of the license agreement. If any taxes, fees, levies or other duties are intended to be withheld by licensee on the payments to be made to licensor, licensee will timely inform licensor thereof, in order to allow the latter to gross up the invoiced sum in such a manner that, after deduction of any withholding sums, the total net remainders received by licensor shall correspond to the full amounts as defined in article *x* of the license agreement. Licensee shall reimburse licensor for any remaining liabilities whenever licensee has not timely informed licensor."

Otherwise, companies may have recourse to creative structuring of their IP deals in order to avoid or minimise taxation of royalty payments. Probably the best publicized example of such creative structuring is the "Double Irish" construction in relation with the "Dutch Sandwich" payment channels, set up by Google to significantly reduce its tax bill. The structure is called "Double Irish" because it uses two Irish corporate entities to manage the licensing of the IP deal: (1) a first Irish company holding the IP rights that, although registered in Ireland, is considered a tax resident in a tax haven because under Irish law, tax residency is located in the country where the management of the company is organized, and (2) a second Irish company that exploits the IP under license from the first company, in consideration of (significant) royalty payments to the first Irish company, that can be offset (as deductible expenses) from profits made in Ireland. In between, the two Irish companies channel the payments through a Dutch company (therefore, the "Dutch sandwich"), since outgoing payments from Ireland to The Netherlands are not subject to withholding taxes, and likewise, the Netherlands does not levy a withholding tax on outbound royalty payments. By shuttling its payments over various stepping stones, Google thus succeeded in slashing its tax bill by 2.2 billion over the last three years.

13. Audit

Like the protective value of a patent right that is significantly reinforced if the patentee has the required means to monitor and survey potential infringing acts, so will the protective value of a royalty clause be significantly increased if the licensor has the required means to monitor and survey the royalty reports issued by the licensee. Consequently, the logical sequel of any royalty clause will be the insertion of an audit clause.

The audit clause is not necessarily the expression of a sign of mistrust on behalf of the licensor. Royalty computations may be complex, if only because the input data required to make these computations are not easy to obtain from the various company departments that may be involved in such an exercise, or because the computer systems have not been programmed in a way that a simple press on the button will sort out the required data. Human error may thus easily slip in during the process of royalty computation and audit procedures are an adequate means to correct and redress, if necessary, such errors.

Audit clauses tend to be rather standardized contract clauses and do not, in general, present any particular negotiation issues. However, licensor and licensee should be attentive to certain issues that are frequently addressed by these audit clauses and not simply bypass the audit clause as boilerplate language. For example, items that may need a tailor-made approach under the audit clause will be: the auditable documents and/or the audit conclusions that may be communicated to licensor (the licensee may not wish to provide insight to the licensor on his pricing policy, and merely provide the "black-box" documents or conclusions); the periodicity and duration of the audits (it being understood that an audit procedure may immobilize part of the personnel of licensee in order to produce documents and answer questions); and, payment of audit costs (who will bear the cost of the audit fees, especially if the audit has revealed important errors or omissions).

In addition, when licensor and licensee are (or are likely to become) actual or potential competitors on certain relevant product and geographical markets, audit clauses bear the risk that they will be considered as tools that facilitate the exchange of sensitive business information which enables the licensor to determine the pricing policy of his licensee, and hence may give rise to antitrust problems. In these situations, the audit clause should be drafted in a way that access to sensitive information is only given to an independent accountant, and the recommendations of the latter shall be limited to such information that allows the licensor to establish discrepancies between royalties reported and royalties due.

14. Duration of Agreement

The duration of the license agreement will necessarily condition the duration of the revenue stream. Both licensor and licensee need, therefore, to evaluate whether the duration of the agreement satisfies their respective expectations. The licensor may wish to negotiate a long term duration in order to obtain a commitment from the licensee to use his best efforts to commercialize the licensed products on the marketplace, which will bring a visibility to the licensor's technology and secure a technology market share for the licensor; the long term duration may also be a suitable contractual means to avoid that the licensee terminates the license agreement at will as soon as the licensee starts to reap the benefits from the commercialization. From the viewpoint of the licensee, a long term duration of the license agreement is often a necessity to induce him to make the required investments in the licensed technology (manufacturing facilities, distribution outlets, marketing campaigns). In order to secure a return on investment, the license agreement should have a minimum duration that stretches beyond the break-even point that has been defined under the business plan for the commercialization of the licensed product.

On the other hand, although a long term schedule may befit the expectations of both the licensor and the licensee, a long term commitment may also have unwanted side-effects when either party wishes to get rid of its obligations under the agreement. For example, the licensor may come to the conclusion that he has misjudged the capacity of the licensee to effectively bring the licensed technology to market, and designate another licensee on an exclusive basis, implying that the existing license agreement needs to be terminated. Likewise, the licensee may consider that the licensed technology does not have the potency that he anticipated and wish to enter into an alliance with a competitor of the licensor, which he is prohibited to undertake under the terms of the agreement as a result of a non-competition clause to which he subscribed.

With respect to the particular interaction between the duration of the agreement and the royalty payments to be made under the agreement, licensor and licensee should both beware of the consequences that the market introduction of the licensed product will have on the market behaviour of actual or potential competitors. This will particularly be the case in the presence of a non-patented technology, but the same issue should be addressed when the technology is patented or hybrid.

The easier it will be for a third party to identify the innovative element of a licensed product through the reverse engineering of the latter, the sooner licensor and licensee will be confronted with the possibility that a competitive offer will arrive on the marketplace for the same product. In particular when the licensor does not benefit from a patent protection on the licensed technology, the occurrence of a competitive offer will be a question of "when" rather than "whether." In such a context, the duration of the license agreement will directly impact the duration of the royalty payments.

On the one hand, in the absence of a termination clause within the agreement, the licensee will be obliged to continue to make royalty payments to the licensor. This can degrade his competitive position with respect to unlicensed third parties that take a so-called "free ride" on the licensed technology as a result of its acquisition through the reverse engineering of the corresponding product following its first sale on the marketplace. As the court held in the Listerine case (*Warner-Lambert Pharmaceutical Co. vs. John J. Reynolds, Inc.*, 178 F.Supp. 655 (S.D.N.Y. 1959), aff'd 280 F.2d 197 (2nd Cir. 1960)), "(a trade secret) may be discovered by someone else almost immediately after the agreement is entered into. Whoever discovers it for himself by legitimate means is entitled to its use. But that does not mean that one who acquires a secret formula or a trade secret through a valid and binding contract is then enabled to escape from an obligation to which he bound himself simply because the secret is discovered by a third party or by the general public."

Consequently, if the licensee fears that the technology may be easily acquired by third parties following the commercialization of the product, it will be in his direct interest to negotiate a duration of the license that will not leave him exposed to co-exist under unfavourable conditions with competitors that, since they are not required to pay a royalty fee to the licensor, are capable of seriously undermining his market share.

On the other hand, in the presence of a termination clause, the licensor may be confronted with the unpleasant surprise that as soon as a competitive offer arrives on the marketplace, the licensee terminates the agreement in order to be released from his royalty payment obligations towards the licensor, and thus secure that he participates on the same level playing field as his competitors. The early termination of the agreement may deprive the licensor of a substantial part of his anticipated benefits from the license deal, and ruin his financial forecasts.

It is true that the termination of the license agreement by the licensee does not necessarily authorize the latter to freely exploit the licensed technology; in many cases, the license agreement will contain a confidentiality clause that will prohibit the continued use of the licensed technology by the licensee after the termination of the agreement. However, although this clause will offer a certain protection to the licensor, the main flaw of such clause is that its protection only extends to such information that remains confidential, excluding such information that is in the public domain. If the information has become accessible to the public through the availability on the marketplace of the licensed product, where a simple operation of reverse engineering can teach the workings of the licensed technology, the licensee can probably rely on the public domain argument to escape from any further royalty payments. In addition, it is possible that the licensee may legitimately invoke the competition legislation by arguing that the agreement has anticompetitive effects when it requires one party to pay a royalty where other parties can freely access the same technology.

Where patented technology is concerned, the question is whether the licensee can be compelled under the agreement to continue paying royalties to the licensor where the patent is either expired, or in countries where the licensor holds no patent protection. These questions are respectively addressed in chapters 15 and 16.

15. Duration of Royalty Payments

Since the lifetime of a patent is limited to 20 years, the license of a patented technology is likewise limited to 20 years. Patent legislation creates exclusionary rights for patent holders in order to reward the innovative efforts of inventors or, more correctly, to induce potential inventors to continue to invest in innovative research by reserving proprietary rights on novel discoveries. On the other hand, since patent legislation has not been enacted to serve only the private good, but also (and foremost) the public good, the patent protection is granted only for a period of 20 years and subject to full disclosure of the patented invention to the public. After the expiry of the 20-year term, the invention should become accessible to the public at large, thereby paving the way for scientific progress.

Patent legislation will therefore prevent the patent holder from claiming royalty payments from a third party that starts to exploit the patented invention following the moment that the patent life has come to expire. However, does the expiry of the patent term likewise prevent the patentee from continuing to claim royalty payments from a third party that, in its capacity as licensee, has commenced to exploit the patented invention through contractual authorization from the patentee when the patent was still in place, and carries on to exploit the same invention following the expiry of the patent?

Contractual interests may interfere with public interests when the parties entered into the agreement on the basis of certain clearly identified business desiderata, which require that the agreement continues to exercise its effects for a certain period of time, irrespective of the concurring lifetime of the patent on which the license is structured. For instance, a potential licensee may contact the licensor with the request for a patent license shortly before the expiry of the patent term. Suppose that the licensor is willing to grant the license to the licensee if the latter can demonstrate a potential to generate $1M of royalty revenue. In this scenario, if we exclude the case where the license is remunerated through a lump-sum payment, the licensor has mainly two options to secure his anticipated earnings: (a) either by setting the royalty fee at a relatively high level where, on the basis of the short term of the license agreement, the licensor can be expected to recoup the royalty revenue on the licensed technology during the life of the patent, (b) or by setting the royalty fee at a relatively low level but extending the applicability of the license agreement beyond the expiry date of the licensed patents. The latter option will become particularly attractive, both for licensor and for licensee, when in the absence of such extended term, the parties would be compelled to charge a higher royalty rate to compensate for the short term of the license agreement, thus carrying the risk of fragilizing the competitiveness of the licensed technology.

On the basis of current case-law, patent misuse and antitrust legislation limit the freedom of the parties to define the duration of the royalty payments as they deem fit. Under the *Scott Paper Co. vs. Marcalus Manufacturing Co.* decision (326 U.S. 249), it has been held that since the patent monopoly procures the inventor the opportunity to secure the material rewards for his invention through an exclusive right of exploitation, this monopoly has been granted on condition that he make full disclosure for the benefit of the public of the manner of making and using the invention, and that upon the expiration of the patent the public be left free to use the invention. Thus, the limited grant of the patent monopoly promotes the progress of science and the arts, not only by providing an incentive to the patentee to exploit the patent during the lifetime thereof and reap the corresponding benefits, but also through the full disclosure of the patented invention and its dedication to the public on the expiration of the patent. Hence any attempted reservation or continuation in the patentee or those claiming under him of the patent monopoly, after the patent expires, whatever the legal device employed, runs counter to the policy and purpose of the patent laws.

It is thus that the Supreme Court has ruled that a patentee's use of a royalty agreement that projects beyond the expiration date of the patent is unlawful per se: if that device were available to patentees, the free market visualized for the post-expiration period would be subject to monopoly influences that have no proper place there (*Brulotte vs. Thys Co.*, 379 U.S. 29). This is even the case where the parties expressly agree in their license agreement that in exchange for a lower royalty rate, royalties would continue (for a limited time) to be extracted on patents that had already expired: in *Scheiber vs. Dolby Laboratories Inc.,* 293 F. 3d 1014, the U.S. Court of Appeals, Seventh Circuit held that although charging royalties beyond the term of the patent does not lengthen the patentee's monopoly, but merely alters the timing of royalty payments, the Court has no authority to overrule a Supreme Court decision, "no matter how dubious its reasoning strikes us, or even how out of touch with the Supreme Court's current thinking the decision seems."

It is likely that the above U.S. case law that restricts the liberty of the parties to freely determine the duration of the royalty payment obligations cannot be extrapolated as such to the playfield of the European Union (if only since the European Union has no such instrument as a "patent misuse law," although individual member countries of the European Union can draw similar conclusions from such common law concepts as the theory of consideration or civil law concepts founded on the presence of "la cause"). According to the European Commission Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements (JOCE 2004, C 101), the parties can normally agree to extend royalty obligations beyond the period of validity of the licensed intellectual property rights without falling foul of Article 81(1). Once these rights expire, third parties can legally exploit the technology in question and compete with the parties to the agreement. Such actual and potential competition will normally suffice to ensure that the obligation in question does not have appreciable anti-competitive effects. It is only in the case 320/87 of *Ottung vs. Klee* that the European Court implied that such obligations are liable, "having regard to its economic and legal context," to restrict competition if the agreement is not freely terminable by the licensee on giving reasonable notice following expiry of the licensed rights, or where otherwise the agreement restricts the licensee's freedom of action after termination.

The public policy considerations that are valid for patent law protection do not, however, apply to confidential know-how or trade secrets. Since the latter do not confer absolute property right protection against all (but merely relative confidentiality right protection against those who contracted such confidentiality obligations, or who abusively usurped such confidential information), contracting around know-how leaves more leeway to the parties than contracting around patents. As the Supreme Court ruled in the Listerine case quoted above in chapter 14: in the absence of plain language that restricts the term of the agreement, the payments thereunder will continue indefinitely so long as the know-how is used by the licensee in the manufacture of products.

Likewise, it is not certain that this decision can be extrapolated as such to the European environment. Neither the 2004 Technology Transfer Block Exemption Regulation nor the corresponding Commission Guidelines explicitly address this item (other than the general admittance in the Guidelines that royalty obligations can legitimately be extended beyond the period of validity of the licensed intellectual property rights), but a previous Block Exemption Regulation n° 556/89 on the application of Article 85(3) of the Treaty to certain categories of know-how licensing agreements authorized the continuation of royalty payments, independently of whether or not the know-how has entered into the public domain, only "throughout an agreed reasonable period." There is to my knowledge no case law that illuminates the residual margin of manoeuvre that contracting parties have to freely determine the duration of know-how royalty payments, even where the know-how has become part of the public domain and is freely exploited by competing firms of the licensee.

For the sole purpose of illustration, a French Court of Appeals has validated in 1963 an express contract clause that extends the obligation to pay a royalty beyond the expiry date of the patent (decision of the Paris Court of Appeals of January 29, 1963).

16. Territorial Scope

It is not uncommon to find that license agreements are concluded on a worldwide basis, *i.e.* rights are granted for the exploitation of the licensed technology throughout the whole world, and correspondingly, royalties are paid for sales of the product throughout the whole world.

Such deals are perfectly understandable when the license in question is principally a technology transfer deal, whereby the licensor transfers to the licensee his knowledge, expertise, and assistance, in order to teach the required skills and competencies under which the licensee will be able to make and sell the products under the technology of the licensor.

However, such a deal is less understandable when the license in question is principally a patent immunity deal, whereby the licensor agrees not to oppose his patents against the licensee when the latter makes and sells products that fall under any of the patented claims. Since patent rights are national rights only, with a limited protection only in those countries where a patent has been applied for and awarded, patent protection cannot extend beyond those countries, and a licensee does, therefore, not necessarily require patent immunity rights over the world.

At the same time, a certain nuance is required. Since a patent right bestows upon the patentee the exclusive right to make, use, offer to sell, sell, or import (into the United States) any patented invention, causing any third party that carries out any of these acts without the permission of the patentee to be an infringer of that patent (35 U.S.C. 271), a patentee can legitimately deny any of these rights (subject only to patent misuse and antitrust restrictions) to a third party who otherwise would be in infringement. Consequently, when a patentee holds only a U.S. patent, and a third party wishes to manufacture in the U.S. a certain product whose features fall under any one of the claims of the said patent, the payment of royalties on products manufactured in the U.S. and exported to third countries on a worldwide basis can find their justification in the fact that these very products were manufactured in a patented country. On the other hand, if at the same time the licensee wishes to set up manufacturing facilities in Indonesia in order to serve the Far Eastern market, the justification seems to be absent, for neither the manufacture nor the sale would be in infringement of the patentee's U.S. patent—with the sole exception of those products intended to be re-exported to the USA, when such exportation would give rise to contributory patent infringement or process patent infringement under any of the applicable provisions of 35 U.S.C. 271.

The question is, therefore, whether patent misuse laws or antitrust regulations oppose the application of worldwide royalty provisions when the licensee manufactures, uses and sells the licensed product in a country where the patentee has no patent protection, and thus uses the contract as a leverage in order to extract royalties beyond the territorial perimeter where the licensee would otherwise be in infringement.

Under U.S. law, a claim for royalty payments related to the manufacture, the usage or the sale of a product incorporating the patented invention in a country where no patent has been issued or has expired, must in principle be considered to be beyond the scope of the patent: *Tulane Educational Fund vs. Debio Holdings,* S.A., 60 USPQ2d 1901. This decision can be considered in line with the teachings of *Brulotte vs. Thys* stating that public policy prevents that an inventor continues to extract revenue from a patent when, apart from the licensee under contract, the invention is freely accessible to other economic actors on the same level playing field. However, at the same time, it has been held that claiming worldwide royalty payments becomes permissible when it is almost impossible on a patent-by-patent, country-by-country, product-by-product basis to determine whether someone is using a company's patents in a given country: *Texas Instruments vs. Hyundai Electronics,* 49 F. Supp. 2d 893, 916 (E.D. Tex. 1999).

Under EU law, although to my knowledge there is no Court or Commission decision that specifically addresses this issue, we may probably rely on the same reasoning of the Commission set forth in its 2004 Guidelines related to royalties payable beyond the validity period of the technology: since third parties can legally exploit the technology in question and compete with the parties to the agreement, there are no competition issues involved under worldwide royalty strictures that would require the scrutiny of the European Commission. The prior Block Exemption Regulation of 1996 (n° 240/96) specifically opined in that sense by holding that "as a rule, parties do not need to be protected against the foreseeable financial consequences of an agreement freely entered into, and they should therefore be free to choose the appropriate means of financing the technology transfer and sharing between them the risks of such use."

17. Hybrid Technology Royalties

A transfer of technology often consists of a transfer of know-how accompanied with an undertaking of the licensor not to sue the licensee under one or more of his patent rights; as the case may be, additional rights may be granted to the licensee, *e.g.* the right to use proprietary software of the licensor (copyright license) and to use the trademark of the licensor (trademark license). Likewise, a license may be granted covering several patents, each with a different territorial scope and each with a different duration. In consideration for such multiple right licenses (aka package license), the licensor will often charge a royalty on all sales made by the licensee, regardless whether or not a particular type of technology is used, for as long as at least one (substantial) element of the technology package is being exploited.

Since the contents of the package may be variable (in particular, patents and trademarks have expiration dates or may be annulled by court decision), should the royalty likewise be considered a variable item, in function of the fluctuations occurring within the technology package?

For pure patent package royalties, it has been held that a license agreement containing no diminution of the license fee at the expiration of the most important patent and no termination clause at the will of the licensee constitutes an effort to continue to collect royalties on an expired patent, and hence should be considered unlawful (*American Securit vs. Shatterproof*, 122 U.S.P.Q. 167; *Rocform Corp. vs. Acitelli,* 367 F.2d 678 ; for a decision holding the contrary, see *Hull vs. Brunswick*, 704 F.2d 1195). However, an important exception to these rulings has been made in the *Automatic Radio vs. Hazeltine Research* decision (339 U.S. 827), where the court conditioned the above findings to those circumstances where the patentee employed patent leverage in order to coerce the licensee to pay royalties on products not practicing the teachings of the patent; if convenience of the parties rather than patent power dictates the total sales royalty provision (for example, because the parties would find it easier and more efficient to base royalties on total sales rather than to face the burden of figuring royalties based on actual use of the patents), there is no misuse of the patents and no forbidden conditions attached to the license. Likewise, in *Well Surveys vs. Perfo-log*, 396 F.2d 15, the Court held that the relative importance of patents has no significance if a licensee is given the choice to take a patent alone or in combination on reasonable terms. Freedom of choice is the controlling question; misuse is evidenced when a licensor conditions the grant of a license to an "all-or-nothing" deal, or insists upon receiving a fixed royalty regardless of the number of patents desired.

The same reasoning goes for combined know-how and patent packages. Since after *Lear vs. Adkins*, 395 U.S. 653, a licensee is not estopped from contesting the validity of the patent for which he contracted a right of license and thus, to free himself from the contractual obligation to pay royalties, a non-digressive royalty may withhold any incentive from the licensee to contest the validity of the patent, and in the absence of any monetary gain the patent would indeed be annulled by the courts. It is thus that the U.S. courts have held that "if the hybrid royalty were held enforceable, any licensor could undermine Lear by simply combining patent rights with other considerations in a royalty agreement and by providing no differentiation between the two considerations. If held enforceable despite patent validity, such an agreement would prevent the "unmuzzling" of royalties to aid the licensee in the expense of challenging patent validity, which achieves a result directly contradictory to that sought in Lear" (*Span-Deck vs. Fab-Con,* 677 F.2d 1237). In fact, one may assume that the value of the agreement to the licensee will not be as high after the patents expired; in which case it is reasonable to assume that at least some part of the post-expiration payment will constitute an effort to extend payments for patent rights beyond the patent period (*Pitney Bowes vs. Mestre,* 701 F.2d 1365).

However, while these arguments may be true in licensing deals where the patent right is of prime importance and where the associated know-how merely contributes to optimize the exploitation of the patented technology, the argument has less bearing under a technology-driven license arrangement where, basically, the licensee buys a right of access to the know-how in order to innovate his production processes or extend his product line. Under these technology-driven deals, the patent rights may serve as the cherry on the pie, but do not inspire the making of the licensing deal (although this statement may have to be somewhat mitigated under exclusive deals where the licensee obtains a strengthened market position through the patent position of the licensor, often accompanied with a warranty by the licensor to sue infringers, or at least to consent to the exclusive licensee suing the infringers if the licensor would refrain to do so). Even more so, where the license springs from a previous joint R&D collaboration where the partner has contracted for the right to exploit the results in consideration of a royalty to be paid to the other partner, the compensation paid to the said partner remunerates his R&D efforts and the corresponding financial share that he assumed in relation with the work program, coupled to the risk that the R&D project might not generate the anticipated results. In the latter case, if the R&D results prove to be patentable, whether or not these patents are then awarded and maintained should not affect in any way the royalty deal that the parties agreed upon, since the latter remunerates the "risk-and-reward" approach pursued by the partners under the R&D project rather than a straightforward license deal.

Generally, in order to shield off the license agreement from any criticism that the licensor seeks to extend payments for patent rights beyond the patent period, it is recommended to "compartmentalize" the license agreement into separate value blocks, a "modular" approach under which the disappearance of any particular (substantial) intellectual property right will give right to a revision of the royalty rate. *Cf. Chromalloy vs. Fischmann*, 716 F.2d 683, where it was held that "if payments required by the royalty agreement had distinguished between patent and non-patent rights transferred to the licensee, those latter payments could have been enforced." Likewise *Aronson vs. Quick Point*, 440 U. S. 257. Having regard to the above arguments that the nature of the deal may determine the nature of the royalty structure, it should not be condemned "per se" when the parties attribute only a symbolic value of $1 to the patent rights, provided that the economic perspectives under which the parties negotiated the contract supports this "*pro forma*" distinction.

In the context of the European Union, it would seem again that the European Commission is not concerned with the repartition of royalty payments over separate technology blocks, and whether or not there will be a reduction in royalty payments in accordance with the differing lifetimes of each intellectual property rights. Since these questions do not concern competition but, eventually, only competitors (provided licensor and licensee can be qualified as potential competitors), the European Commission holds in its Guidelines that "the parties to a licence agreement are normally free to determine the royalty payable by the licensee and its mode of payment without being caught by Article 81(1)."

18. Total Sales Royalties

A convenient method of determining royalty payments is to calculate the royalty on the basis of the total volume of sales of a certain product by the licensee. Although this method will facilitate the metering of the royalty payments, it will at the same time extract a royalty from the licensee that goes beyond the scope of the patent if the total volume of sales comprises both products that incorporate and do not incorporate the licensed technology. Like under the preceding paragraphs, these royalty mechanisms may give rise to patent misuse and antitrust interrogations.

In the two Hazeltine cases, the U.S. courts have ruled that the conditioning of the grant of a patent license upon payment of royalties on products which do not use the teaching of the patent amounts to patent misuse, where the patentee directly or indirectly "conditions" his license upon the payment of royalties on unpatented products. There is no conditioning if, as a result of the parties' negotiations, sound business judgment would indicate that such payment represents the most convenient method of fixing the business value of the privileges granted by the licensing agreement. An agreement may simply provide for the privilege to use the patents, and if the licensee chooses to use none of them, it has nevertheless contracted for the privilege of using existing patents (*Automatic Radio vs. Hazeltine Research*, 339 U. S. 827, 1950). Thus, if convenience of the parties, rather than patent power, dictates the total sales royalty provision, there is no misuse of the patents and no forbidden conditions attached to the license. Even under relatively straightforward licensing situations as in *Glen Manufacturing vs. Perfect Fit Industries*, 164 USPQ 257, where only a single patent was involved but where royalties were extracted on each sale of a particular device, irrespective of whether or not the latter was within the scope of the patent, "convenience" will be established if the royalty provision was bargained for (although in first instance, the District Court found that the royalty clause had the effect of lessening competition and led to patent misuse).

However, there is misuse if the patentee uses its patent leverage to coerce a promise to pay royalties on items not practicing the learning of the patent; such misuse inheres in a patentee's insistence on a percentage-of-sales royalty, regardless of use, and his rejection of licensee proposals to pay only for actual use (*Zenith Radio vs. Hazeltine Research*, 395 U. S. 100, 1969).

The inherent difficulty with the coercion doctrine formulated by the Supreme Court is that it needs to be applied on a market that is not characterized by the free encounter of offer and demand, but relates to a monopolistic offer and a constrained demand, since without the patent licence, the third party will be in infringement and forced to cease its production and sales of the infringing product. The margin of manoeuvre for the licensee to freely negotiate the royalty model is, therefore, often substantially reduced. Even more, aggressively negotiating the royalty breakdown in order to create a paper trace that the royalties were "coerced" upon the licensee may have the adverse effect that a prudent licensor, fully aware of the implications of the coercion doctrine, may after all renounce from concluding the deal since the contestations of file produced by the licensee expose the licensor to a future claim for patent misuse.

Nevertheless, federal circuit case law shows that the courts take a pragmatic approach to any allegation of coercion forwarded by a licensee. For example, in a study performed by Albert Kimball on this issue (*http://www.ipmall.org/hosted_resources/IDEA/pdf/14_IDEA_1970-19.pdf*), it was demonstrated that no coerced licensing occurred under the following situations: the purported infringer has failed to introduce any evidence of coercion to support his affirmative defense of misuse; the allegedly coerced licensee has in actuality insisted upon a package license; there were other licenses in effect for less than the entire package; the licensor proved that he is willing to negotiate licenses for less than the entire package; it was shown that it is commercially desirable to utilize the entire package; and it was impossible to produce a commercially acceptable device which does not infringe each patent in the package.

The European Commission will scrutinize total output royalties in particular when such clause is inserted in an agreement between competitors (whether as a single license or a cross license). When such royalty provision extends to products produced with the licensee's own technology, the provision is likely to be condemned as a restriction of the licensee's ability to exploit its own technology, which is considered a hardcore restriction. In general, such agreements restrict competition since the agreement raises the cost of using the licensee's own competing technology and restricts competition that existed in the absence of the agreement. It is less clear how the Commission evaluates such clause in the framework of an agreement between non-competitors, since the above hardcore restriction for agreements between competitors is not reproduced for agreements between non-competitors.

When the royalty clause extends to sales of products produced with technologies licensed from third parties, the Commission considers the extension covered by the block exemption when entered into by non-competitors (no instruction is given with respect to agreements between competitors), but outside the scope of said exemption, the arrangement may lead to foreclosure by increasing the cost of using third party inputs and may thus have similar effects as a non-compete obligation. Foreclosure may occur when the royalties will increase the cost of the latter products and hence reduce demand for third party technology. According to the Commission, in the case of appreciable foreclosure effects such agreements are caught by Article 81(1) and unlikely to fulfil the conditions of Article 81(3), unless there is no other practical way of calculating and monitoring royalty payments (*e.g.* where in the absence of the restraint it would be impossible or unduly difficult to calculate and monitor the royalty payable by the licensee, for instance because the licensor's technology leaves no visible trace on the final product and practicable alternative monitoring methods are unavailable).

19. Alternative Technology Royalties

When a license is offered by the patentee to a third party in order to cease an alleged infringement, the latter may, after a careful examination of the patent claims, conclude that his sales are not infringing, although a reasonable degree of doubt remains as to whether indeed the patent claims do or do not cover the sales of his product. When the patentee shares this vision, solving the insecurity can be settled under two different roadmaps. One is to bring the case before the court and have the latter conclude whether the sales are infringing or not. The other is to enter into a commercial deal under which the licensee, even though he may deny any infringement of the patentee's patent rights, accepts to pay a compensation to the patentee, for example royalties on his (non-infringing) sales in order to avoid protracted (and expensive) court proceedings. The third party may even be induced to enter into such discussions when, in addition to the patent immunity proposed by the patentee that as such (except for sheltering the licensee from protracted court proceedings) offers no inherent value to the licensee, the patentee proposes a business deal under which both parties share a commercial interest: such a mutually advantageous deal may be an exclusive license for the patent under which the licensee, by having access to an exclusive license, is able to exploit the licensed technology and to shield off competition with respect to sales of his own product (preventing the introduction on the market place of a substitute for his own products); and under which the licensor finds a source of revenue for his patent by extracting royalties on sales made by the licensee. Such a shared commercial interest may even occur outside the framework of potential patent infringement: by paying royalties on alternative technology (*i.e.* technology that is not subject to the patented claims), the licensee acquires a "safe haven" by retiring a competitive technology from the marketplace (while acquiring the privilege to exploit, if he wishes to do so, this competitive technology by expanding his product portfolio).

Another possible motivation for alternative royalties may appear when the licensed technology, by itself, is not generating the royalty-bearing product or otherwise incorporated in the royalty-bearing product; in other words, the technology under license and the product under royalty are technically disconnected, but may nevertheless be functionally correlated. An example of this may be a particular screening technology, *i.e.* a (patented) technology that allows to proceed to the determination of the appropriate product formula needed to obtain a desired result; this may be the case in oil and gas reservoir management applications, where for the purpose of the performance of a particular workover operation (fracturing, enhanced recovery, water shutoff), a chemical formula needs to be injected into the reservoir, the composition of which has to be compatible with the existing reservoir conditions. A screening technology may help to identify the most appropriate chemical formula. A technology transfer transaction under which this screening technology is made available to the customer in consideration of a royalty on the price of the chemical compounds used in the operation, or on the value of the (incremental) oil produced as a result of this operation, dissociate technology and royalty; neither the chemical compounds nor the oil production, subject to the royalty payment obligations, are in any way infringing on the patented screening technology, or present otherwise a link of incorporation with the technology. It is only the selection of the chemical compounds that has been made possible (in a cost-effective way) through the use of the technology; the products by themselves (which are existing "on-the-shelf" products) do not depend on the technology.

Like the dealings discussed under sections 13, 14 and 15 above, it would seem that as long as these agreements have been freely entered into, without coercion and without patent leverage, royalty payments that bear no relationship with the patented claims nevertheless correspond to a fair exercise of the patent rights by the patentee, to the extent that the consideration vests in the respective interests of the parties with respect to the rights of access to the patent, and thus can be said to be "within the scope of the patent grant or otherwise justified" (*Mallinckrodt vs. Medipart*, 24 USPQ 2d 1173). The European Court of Justice also seems to uphold the validity of such arrangements, having regard to its holding in the *Ottung vs. Klee* judgment (case n° 320/87) stating that "the possibility cannot be ruled out that the reason for the inclusion in a licensing agreement of a clause imposing an obligation to pay royalty may be unconnected with a patent. Such a clause may instead reflect a commercial assessment of the value to be attributed to the possibilities of exploitation granted by the licensing agreement."

However, although these contractual constructions do not seem to amount to patent misuse, there remain other booby-traps that the parties have to be aware of when structuring their patent license on alternative technology consideration.

First of all, antitrust concerns may weaken the foundation of such agreements, in particular when the licensee is an important market player and "artificially" condemns the appearance of a substitute product on the market; *cf.* the TetraPak case (T-51/89) where the European Court found that although the mere fact that an undertaking in a dominant position acquires an exclusive patent license and does not *per se* constitute abuse, the acquisition of an exclusive patent license for a new industrial process by an undertaking in a dominant position constitutes an abuse of a dominant position where it has the effect of strengthening the undertakings' already very considerable dominance of a market. Dominance of a market would be described as where very little competition is found and of preventing, or at least considerably delaying, the entry of a new competitor into that market, since it has the practical effect of precluding all competition in the relevant market.

Secondly, although under *Automatic Radio–Hazeltine Research*, an agreement may simply provide for the privilege to use the patents. The exclusive license rights that the licensee may have negotiated in order to shield off potential competition will only offer a relative protection to the licensee when he decides not to exploit the patented technology, since in the absence of working the patented invention himself, many legislations provide that any public or private legal person may be granted a compulsory license under the patent when he can show that he is in a position to work the invention in an effective and serious manner (*e.g.* article L. 613-11 of the French Intellectual Property Code, article 15 of the German Patent Law, section 48 of the UK Patents Act, with the notable exception of the USA where there is no compulsory licensing regime *per se*).

Finally, the licensee should carefully examine the wording of the license clause in order to set the latter properly in the context of the parties' intentions, and thus protect himself against a future termination of the license agreement at the initiative of the licensor on the basis of the implied obligation that many jurisdictions impose on any licensee (and in particular an exclusive licensee) to use all reasonable endeavours to work the patented invention—although again in the USA there is no implied duty or obligation under a non-exclusive license which requires that a licensee actively exploit the license.

20. Minimum Periodical Royalties

A licensor may expect the licensee to pay a certain amount of minimum periodical royalties, in order to incorporate a contractual incentive into the agreement inducing the licensee to exploit the technology (meaning that, in the absence of such exploitation, he'll be sanctioned through the payment of minimum royalties). This mechanism of minimum royalties is especially popular under exclusive license deals, where the royalty revenue of the licensor will exclusively depend upon the sales figures realized by the licensee.

The minimum royalty clause, both on the side of licensor and licensee, requires a precise understanding of what the minimum royalty clause intends to establish. To quote John Ramsay in his well known "Dreadful Drafting" presentations: "Drafting laziness should not detract from precision." Let's depart from the following clause: "The exclusive license grant under article *x* is subject to licensee paying to licensor a minimum annual royalty fee of *y* $." At a given year, the licensee does not pay his minimum royalty, and the licensor sues for payment of the amounts due. It is unlikely that the court will award his claim, since the agreement does not explicitly spell out that the minimum royalty payment is an unconditional due; it merely subjects the exclusivity of the license to the minimum payments being made. Sure, the licensor can cancel the exclusivity of the license; however, he cannot claim the minimum payment that he may have anticipated. On this basis, a Supreme Court decision in France held that where an agreement stipulated that in the absence of the payment of the minimum royalty, the licensor could either terminate the agreement or cancel the exclusivity rights, and said agreement excluded any possibility to claim the minimum amounts set forth in the agreement.

Consequently, if the licensor expects to receive minimum royalty payments throughout the duration of the exclusive license term, a more appropriate contract language would be: "Throughout the full term of the exclusive license as spelled out in article *x* hereof, licensee shall pay to licensor a minimum annual royalty fee of *y* $." Keep in mind that such minimum royalty payment clause should be in addition, and not in substitution, of a contractual obligation of the licensee to make its best efforts (or reasonable efforts) to exploit the licensed technology; otherwise, the minimum royalty clause may indeed procure the licensor with a minimum secured royalty income revenue, but will also prevent the licensor from prospecting more attractive licensing channels when the sales efforts of the licensee prove to be altogether disappointing. The minimum royalty clause could thus have the perverse effect that it would become practically converted into a maximum royalty clause.

Since the consequences of not attaining the contractual minimum royalty levels can be vital to the licensee, either because of the financial consequences when the licensor asks him to bridge the royalty deficit, or because of the impact on the license conditions (loss of exclusivity, loss of license rights), the licensee should carefully examine the minimum royalty clause and adapt the wording whenever necessary to protect its legitimate interests. For example, a licensee may reasonably request to spread the risk over several reporting exercises, in order to be able to offset a bad period with a good period. A licensee may also wish to strengthen the force majeure clause for this particular situation, in order to include a failure to make payment by a client or the impact of a cost increase of essential feedstock as an excuse for the failure by the licensee to reach the royalty objectives. Likewise, the designation by the licensor of additional licensees in the same geographical area, or increased competition from licensees in other countries that export to the geographical area attributed to the licensee, may be an argument for the licensee to oppose the mechanical application of the minimum royalty clause—this will even be more the case in the event of an alleged infringement, with the additional practical difficulty that an infringement is not supposed to exist unless a court has ruled without further appeal that infringement has occurred; such decision may often, in complex cases, be 5 to 10 years away from the date that the licensee submitted this defence.

Under exceptional circumstances, the legality of minimum royalty clauses may be attacked when the underlying royalty clause itself is considered illegal. For instance, a French Supreme Court decision held in 1986 that when the royalty clause itself is illicit, the auxiliary obligation to pay a minimum royalty is likewise unenforceable (Beyrard decision of July 22, 1986).

21. Minimum Product Royalties

Percentage royalties present the disadvantage for the licensor that his income may vary in accordance with the price variations that his licensee practices under his sales policy. In most circumstances, the commercial interests of the licensor will be safeguarded by the very fact that the licensee will seek to optimize his profit margin—and thus his sales price. Moreover, certain legislations have put in place price thresholds that secure that the vendor may not sell the product under the manufacturing cost price.

However, it may be that the licensee, instead of pursuing a strategy of profit optimization, pursues a strategy of market share increase or optimization of turnover. Under such strategies, aggressive sales policies may be initiated that exercise a downward pressure on sales prices practised by the licensee. It may even be that the licensed product is proposed to the public by the licensee at an introductory price or under promotional offers in order to draw the attention of the same public to his full range of (higher priced) products that do not fall under the license. In extreme cases, a licensee may even be tempted to offer the licensed product for free, for example as a bonus when the customer purchases the principal product from the licensee; for example, licensed software may be offered for free when the customer purchases the (unlicensed) hardware product from the licensee.

In order to avoid that royalties are thus underestimated, the licensor may have an interest to introduce threshold mechanisms in the license agreement, to make sure that each product sold by the licensee will generate a minimum royalty revenue, even if the sale is made at bargain prices. Since antitrust laws forbid that the licensor has its say in the determination of the sales price by the licensee, other than in the form of mere directives (the so-called "recommended prices" for which the legal consequences of disobeyance by the licensee are far from clear), such threshold mechanisms may be introduced on the royalty level. In order to avoid that the rigid setting of the minimum royalty amount deprives the licensee from any commercial margin of manoeuvre and thus contributes to an indirect means of price fixing, it is recommended that the minimum royalty amount is defined with respect to a bottom price (*e.g.* 80 percent of the catalogue price), and is not automatically applied but remains at the discretion of the licensor when the licensee cannot objectively justify the commercial reasons that are at the origin of the "excessive" deviation from the catalogue price.

22. Royalty Revision

The determination of the royalty figure in a long-term agreement is a delicate exercise, since the figures that the parties agree upon has been brought about by their current market knowledge and thus only reflects their consensus on the basis of the information that they possess at the day of signature of the agreement (the "static" environment of the license agreement). However, these market data are likely to change over time, and when competition becomes more harsh for the licensee, he may wish to renegotiate the royalty terms that were initially agreed upon; this means that the parties have to anticipate the "dynamic" environment of the license agreement and prepare a procedure that will apply when one of the parties (most often the licensee, but in exceptional circumstances, it may also be the licensor) requests a royalty revision.

The difficulty with royalty revision clauses is that they mostly do not go beyond mere procedural instructions; they provide for the possibility of a royalty revision, without in any way ascertaining this royalty revision. The royalty revision clause does therefore not bring about a particular end result, and the licensee cannot sue the licensor for breach of contract when the licensor does not agree with the revision proposed by the licensee.

The inconveniences that are inherent to these procedural clauses can be mitigated by introducing objective elements into the royalty revision clause that can be easily monitored and applied. For instance, if the licensee can demonstrate, on the basis of publicly available market data, that for similar licensing deals lesser royalty rates were applied on the market place, the contractual royalty rate needs to be substituted with the alternative royalty rate (which may be the average, lowest or highest royalty rate identified under this royalty benchmark study)—although the fundamental difficulty in conducting this exercise lies in the flaws of the comparative material that is used for this purpose, in order to avoid that apples are compared with pears. Another tool that conducts this same exercise more on a micro scale is to compare the license fee offered by the licensor to the licensee to the license fee offered by the licensor to other licensees ("most-favored-licensee" clause); but the same flaw remains, since the level playing field of each licensee is not necessarily the same and may justify the deviation in the license fee.

Beyond such license fee comparisons, whose implementation requires that the pertinent information is easily available, a simple accounting method that permits calculation of the royalty revision is to anchor the royalty rate on a pre-established cost-price ratio; for example, if the cost items represented in the licensed technology increase twofold but the sales price increases only by 1.5, the royalty rate may be reduced in such a manner that each party takes a 50:50 share of this deviation. If, for example, the cost-price ratio ("CRR") under a license agreement is determined as 0.6 and a royalty rate of 10 percent is reserved to the licensor, a new cost-price ratio of 0.8 may result in a revised royalty rate of 7.5 percent, in accordance with the formula [(1-0.6) / CRR x royalty rate] x 0.5.

However, in the absence of hard data, for example when general market demand lessens or where otherwise demand for the licensed product diminishes without a direct cause being identifiable, or in those situations where the licensor wants to reserve a subjective judgment instead of mechanically relying on automatic revision formulas, the procedural revision clause is a suitable instrument to invite the licensor to listen to the arguments of the licensee and to take these arguments in due consideration in his decision to revise (or not) the royalty. Whilst the licensee cannot contest the final decision of the licensor in this respect, he can contest the intellectual process under which this decision was reached when the licensor unreasonably ignored the arguments raised by the licensee. The introduction of an alternative dispute resolution mechanism in the agreement may strengthen the position of the licensee by securing a second opinion from an outside independent source.

23. Patent Annulment

Under a strict patent license, the monetary consideration that a licensee is willing to pay to the licensor finds its basis in the renunciation to sue for infringement made by the latter. The royalty clause that a licensee accepts under a strict patent license has, therefore, a different economic rationale than a similar royalty clause that said licensee might accept under a technology license, and is related to the different perspectives under which the licensee would enter into both licenses; while under a patent license, the licensee seeks to obtain an authorization from the patentee to do something to which otherwise he would not be entitled (the right to make, use or sell the patented invention). Under a technology license the licensee seeks to acquire the technical means from the licensor to do something that otherwise he would not be able to do (the ability to make, use or sell the patented invention). A patent license is the passive expression of the exercise of its right by the titleholder (a renunciation to sue for infringement), while a technology license is the active expression of its right by the beholder (the teaching of the technology to the acquirer). A patent license is merely a nuisance for the licensee (although I have the means to exploit the technology, I cannot legally proceed to such exploitation without such patent license), whereas a technology license is an attractive tool for the licensee (since I do not have the means to exploit the technology, a license procures me the resources to proceed to such exploitation).

If therefore, a patent licensee subsequently becomes aware that he has obtained an authorization that was not legally required, since the patent right was wrongfully awarded and consequently annulled by the courts, the licensee may legitimately query the basis under which he made royalty payments to the licensor and seek to recover the past payments made in relation with this deal. In contrast to a technology licensee who, even if the licensed technology appeared to be publicly accessible, acquired value through the teaching of a particular knowledge that he otherwise would not have acquired (or at least, would have acquired later in time), a patent licensee only acquires a commitment from the patentee not to oppose his patent right to the exploitation of the invention by the licensee, without any inherent value other than the access rights to such patent. When the latter then proves to be invalid, the patent licensee will likewise contest the validity of money payments made in relation with this patent.

Current U.S. case-law considers, however, that royalties paid under invalid patents nevertheless remain due and cannot be recovered. Allowing the licensee to recover paid royalties would contravene the policy of early litigation expressed in *Lear vs. Adkins* (395 U.S. 653); the licensee could simply wait for another party to contest validity, or delay suit until the patent neared its expiration date, thus enjoying the fruits of his licensing agreement, and suing for repayment of royalties near the end of the term of the patent (*cf. Troxel Mfr. Co. vs. Schwinn Bicycle Co.*, 465 F.2d 1253, and *St. Regis Paper Co. vs. Royal Indus.*, 552 F.2d 309).

An additional argument is that the licensee got "value for money" under the patent license; for as long as the patent has not been annulled, it remains valid and as such, shelters the licensee from competition on his market. Previous royalty payments did, therefore in a certain way, correspond to the purchase of the prerogative to exploit, since third parties that otherwise might have exploited the same invention may have refrained from doing so because of the very existence of the patent.

Similar judgments have been reached in Europe. In France, a patent license is considered to be an agreement "of successive execution," the annulment of which only has effect as from the date of judgment.

24. Transfer of Business

What is often neglected in license agreements is the fate of royalty payments when the licensee sells his business (*i.e.* his assets used to manufacture the licensed products) to a third party. This question arises especially when the licensed product is manufactured under a know-how license only; when the licensed product is a patented product, the patentee can always oppose his patent against a third party who exploits the patented invention without the authorization of the patentee. Consequently, a third party who purchases the assets with which to manufacture the patented products from the licensee, necessarily (at least if he wishes to avoid infringement proceedings by the patentee) needs to associate the patentee to the transaction, either through a novation agreement where the patentee guarantees continued performance of the contract and the purchaser assumes all obligations under the contract, or through a new license agreement under which the purchaser acquires the licensed rights under conditions to be agreed with the patentee.

However, when know-how is involved, the licensor does not have title rights to the know-how that, unlike a patent, he can oppose to a third party. This limitation may put the licensor in an awkward situation when a third party acquires the assets from the licensee without being innovated into the license agreement when (1) the know-how is no longer confidential information (since it has fallen into the public domain as a result of the introduction on the marketplace of the product, or as a result of the expiry of the contractual confidentiality term) but the licensee continues to pay royalties under the license agreement, (2) the know-how continues to be confidential information but is not, as such, transferred to the purchaser since the value of the know-how resided in tooling up the manufacturing process and not in the operation of the said process.

Since license agreements create personal rights (and not real rights) in the licensed object, the transfer of the licensed object to a third party does not implicate a transfer of the license agreement (and corresponding obligations under said agreement) to that third party. This is particularly true for know-how license agreements ; certain national legislations create specific real rights for patent license agreements. Consequently, under the above situations, the third party purchaser can freely exploit the know-how, without being bound by the corresponding royalty payment obligations that were, after all, personal obligations of the licensee towards the licensor that, in principle, are not opposable to the third party purchaser.

The standard non-assignment clause that we find in license agreements, *i.e.* "Licensee shall not assign any of its rights or duties to another party without Licensor's consent," is not effective in these situations since licensor wishes to establish exactly the opposite: licensee must transfer the contract obligations (in particular the continued obligation to pay royalties on the exploitation of the know-how) to the third party. In order to protect his interests, the licensor should include a transfer clause in his license agreement, obliging the licensee to transfer all contract obligations under the license agreement to a third party that acquires the assets that exploit the know-how.

25. Royalties for Negative Know-how

The cryptic expression "negative know-how," that may be defined as know-how that arose under "trial and error" and that informs on how something does not work, can be protected as a trade secret and consequently, can be the subject of commercial transactions, including a licensing deal. However, if a potential licensee may be interested in learning about research options that have proven ineffective, and may be willing to pay a license fee to obtain such information, it is extremely rare that such license be expressed as a royalty on sales (in the absence of a product that is built upon such know-how); the royalty will basically be expressed as a lump-sum payment.

However, it is not impossible that negative know-how may become the object of royalty deals, although the commercial setting of such deals often lacks the characteristics of a license transaction. Where probably no licensee in his right mind would accept to purchase access rights to an existing negative know-how (which is the basis of a license deal) in consideration of a royalty on sales of products that does not incorporate such know-how, it may be that this same party might be willing to consider such royalty with respective to a prospective negative know-how, *e.g.* within the context of a research study. Such a royalty deal might find its origin in an arrangement where the "licensor"(= the research contractor) agrees to perform the research program free of charge for the "licensee" (= the client), in consideration of a future consideration on the results that were obtained under the program. In fact, this transaction is no longer settled in a licensing environment, but rather in what may be called a "risk & reward" environment, under which one party accepts to submit his right to payment to the transfer of a future, uncertain, technology.

In most cases, the reward aspect of this deal will be reserved to those results obtained under the program that can positively be incorporated into the manufacturing process of the "licensee" and that generates a real added value to the business economics of the latter; the other side of the deal, *i.e.* the risk aspect, will be assumed by the research contractor when the results obtained prove to be ineffective. However, although more atypical, it is not unheard of that a "licensor" reserves some kind of monetary interest to the outcome of his R&D works if this outcome represents a mere negative value, since (as the word implies) even negative value constitutes value, as it may close off research paths that otherwise might have been further (and unsuccessfully) pursued by the "licensee."

This remuneration on negative know-how may be compared with what we referenced under Section 16 as "alternative technology royalties," where the "licensor" demands a certain compensation on a product that is not exactly the same as the one that he tested within his laboratories, but that may be considered to have inspired future commercial developments pursued by the "licensee." For example, if the work program consisted in testing the behaviour of certain blends of chemical components (ethers) in fuel additives in order to find out if such blends offer better combustion performance than existing commercial products, although the results of such tests may not have been conclusive, the "licensor" may have comforted the "licensee" in his belief that future development work should focus on the improvement of the combustion characteristics of pure ethers, and abandon any further development work on blended ethers. Another (somewhat more common) example may be where the parties engaged in a "risk & reward" deal that delivered no conclusive results, and where the research contractor is only willing to pursue the works under the same terms when some kind of financial interest is reserved to him, even when the subsequent results remain inconclusive.

Under such "risk & reward" schemes, the remuneration, if any, of the "licensor" with respect to mere negative know-how will normally be inferior to a full reimbursement of the program cost; the major interest of the "risk & reward" scheme is, after all, to create an incentive for the licensor where his remuneration will depend on the development of a know-how that the licensee can positively exploit, in which case the royalty will indeed be based on the licensed product. However, it may be that at least partially, the remuneration be paid on sales of an unlicensed product.

Under these "risk & reward" deals, the drafting exercise becomes particularly important in order to avoid unintended side-effects. For example, suppose that under the aforementioned example, the intention of the client is to test a series of blended ethers and to pay a royalty to the contractor only when the tested blends result in a commercial product. Suppose that the lawyer translates this intention by incorporating into the agreement a definition of products as "those ether compounds tested under the program that have become the subject of a commercial sale." Although the intention of the parties may very well have been that the royalty remuneration be paid only with respect to the blends tested by the contractor, if at the same time, in order to set a benchmark for the test operations, the contractor has proceeded to a series of initial tests on the existing pure product samples supplied by the client, the literal wording of the clause will probably support a claim of the contractor for a royalty that is payable on the pure compounds, *i.e.* on the negative know-how.

The reverse may be true as well. From personal experience, where our company had to test certain chemical polymers that were used in the cosmetic industry in order to identify a combination that had acceptable petroleum demulsifier qualities, the corresponding contract clause read that a royalty be paid on those products sold by the client that were developed under the program. One of the conclusions of the program was that a particular polymer supplied by the client had good demulsification qualities with respect to a certain crude oil, but the client refused to pay a royalty related to this test result on the basis of the argument that although the program had permitted to establish this result, the product with respect to which the result was established had not been developed under the program.

26. Royalty Consideration

Consideration in the law of contracts is something of value that is given in exchange for getting something from another person. With respect to license agreements, this means that when the licensee accepts to pay a license fee or a royalty, he expects to get something of value in return that, without such payment, he could not have access to, or at least not under the same conditions.

We have already established under chapter 23 that when a patent is annulled, the licensee can no longer be held to his contractual obligation to pay a royalty to the licensor. With the disappearance of the patent, the fundament that induced the licensee to pay a royalty to the licensor likewise disappears; under Brulotte-Thys, public policy will preclude a continuation of the obligation to pay royalties. However, royalties already paid by the licensee, even in relation with an annulled patent, cannot be recovered since during the lifetime of the patent, even if adjudicated invalid, the licensee has reaped the benefit of the apparent existence of the patent.

The same question, but in a different perspective, can be asked for know-how licenses. Although know-how, in the absence of a title, cannot be annulled as such, the protection of know-how as a licensable IP asset requires that it represents a certain value, for only in the presence of value can a licensee be induced to enter into a license transaction with the licensor and commit to pay royalties in consideration of a license grant.

In order to avoid that licensees will suffer a competitive disadvantage by entering into a license deal with respect to a know-how that, once communicated, appears to be significantly less valuable than originally anticipated, the European Commission has established three prerequisites for know-how to be recognized as an object of technology transactions, *i.e.* "(i) secret, that is to say, not generally known or easily accessible, (ii) substantial, that is to say, significant and useful for the production of the contract products, and (iii) identified, that is to say, described in a sufficiently comprehensive manner so as to make it possible to verify that it fulfills the criteria of secrecy and substantiality." There will be no valid consideration when any of these elements are missing at the time when the parties entered into the transaction, in which case the licensee can contest the validity of the license agreement before the competent courts. For example, in France, various court decisions have held that in the absence of an original know-how, the corresponding contract can be annulled for lack of object or lack or consideration. However, the annulment can only be sought when the know-how does not respond to the above criteria at the date of conclusion of the agreement; where the know-how becomes publicly known as a result of action by the licensee, the exemption of the Technology Transfer Regulation shall apply for the duration of the agreement.

The structuring of the agreement may be important when drafting royalty clauses, in order to avoid that royalty payments are subsequently contested and claimed for recovery by a licensee. Especially in the pharmaceutical industry where the road from patent to product can be a long-term trajectory, and where any commercial outlets for the product are subject to obtaining regulatory approval from government agencies, the drafting of the consideration language can be important when a patent license is taken in the early stages of product development. In the absence of an imminent production and, consequently, revenue generating sales, the licensor will often require a certain down-payment for his patent, if only to contribute to the financing of the ongoing costs of patent maintenance and continuous research in the given field. The licensee will express an interest for the early license basically in order to make sure that, in continuing the development and industrialization process of the patented product and the related budget appropriations, the corresponding exploitation rights are firmly acquired and thus "the IP bird is in the cage."

To transpose this interest in contractual language in order to establish consideration for the payment of the initial lump-sum fee, requires that the corresponding value for the licensee is correctly expressed. Suppose that the contract clause reads as follows: "Licensee will make a down-payment of $100,000 to licensor in consideration of which licensor authorizes licensee to proceed to the performance of clinical tests under the Licensed Patent." Since many patent legislations exempt the use of a patented invention for the purpose of research & development from infringement, a contract clause that links the royalty obligation to a legally authorized use is liable to be contested before the courts for lack of consideration or patent misuse. For example, in *Micro-Chemicals vs. Smith Kline and French Inter-America* (1971) 25 D.L.R. 79 p.542, the UK Court of Appeals held that "trials carried out in order to discover something unknown or to test a hypothesis or even to find out whether something which is known to work in specific conditions will work in different conditions can fairly be regarded as experiments" and was covered by the research exception set forth is section 60(5) of the Patent Act.

Apart from linking the payment obligation to a valid consideration, the licensee will have to examine carefully whether an irrevocable payment obligation corresponds to his interest. The more an invention is remote from commercial application, the more corresponding milestone payments represent a risk to be considered as "sunk costs" when the invention appears to have major flaws, whether technically (difficulty to reduce to practice), economically (important industrial development costs) or administrative (requirement of regulatory approval). An IP bird that dies in the cage at the very outset is not necessarily the kind of bird you wish to trap! A prudent negotiation policy would, therefore, require that the licensee puts the item straightforward on the table: what will be the fate of the installment payments when the licensed technology does not meet the specifications that have been defined in respect thereof by the licensee. Apart from full reimbursement, a licensee might at least attempt to negotiate a mitigation of his exposure, *e.g.* by getting partial reimbursement, or (if other ongoing relationships exist between licensor and licensee) by offsetting the "sunk costs" against royalty obligations under those other agreements. The licensee may also consider entering into a "risk and reward" type of deal under which down-payments will be considered as an advance (if possible using a multiplier factor) on future royalty obligations with respect to this same product.

27. Royalties Received and Royalties Earned

The net royalties that the licensor will receive from the licensee will not necessarily be the net royalties earned by the licensor from the license deal. Apart from the fiscal levies that may be assessed on the royalty payments, either in the country of licensee (withholding taxes that may impact the amounts effectively paid by the licensee compared to the amounts reported by the licensee) or in the country of licensor, the royalty revenue that the licensor receives from the licensee may be diluted as a result of the contractual arrangements that the licensor has made with respect to the commercialization of the licensed technology. This may be because of joint ownership of the licensed technology, necessitating the sharing of the royalty payments with the joint owner, or because of marketing arrangements, where a commercial intermediary has contributed to the coming into being of the license deal.

The correct sequencing of these agreements with respect to the main agreement between licensor and licensee is essential if the licensor wishes to avoid being trapped between hammer and anvil because of the ambiguous or open-ended contract language that figures in his agreement with his commercial partners (co-owners or brokers). Of the utmost importance is the precise definition of the eligible accounting basis, in order to avoid that payments are claimed on elements of revenue that the licensor considers to be out of boundaries.

Suppose that the co-ownership agreement related to the licensed technology provides that the licensor shares the license revenue on a parity basis. The first question that comes to mind is: what exactly should be considered to be comprised in the term "license revenue"? Certainly, the royalty payments made by the licensee in consideration of the exploitation of the licensed technology clearly qualify as license revenue. But if in addition to such royalty payments, the licensee pays a sum of money to the licensor for teaching him the operational aspects of the licensed technology; for the contributions of the licensor to the definition of the basic design/detailed design/start-up of the industrial facilities under the licensed technology; for the software maintenance services that the licensor provides in relation with a licensed software. Since these items are directly related to the implementation or operation of the licensed technology, the co-owner may consider the corresponding remuneration to be part of the license revenue, although for the licensor, the items represent foremost a reimbursement of cost incurred by the licensor in relation with the technical assistance that he has brought to the licensee, rather than a particular royalty revenue that should be subject to sharing. Consequently, in order to avoid the disbursement to its commercial partners of sums of money that represented a cost for the licensor rather than revenue, the contract should stipulate that: (a) if direct payment is made by the licensee for these services provided by licensor, the corresponding sum of money is excluded from the license revenue, or (b) if indirect payment is made by the licensee, *i.e.* as part of the royalty payments, that licensor will not pay its partners until full cost recovery has been incurred under the royalty payments, or at least that part of the revenues are considered "cost royalties" retained by the licensor, and part of the royalties are considered "profit royalties" subject to sharing.

A second aspect that needs to be considered when drafting the sharing clause is that, like a marriage clause, a sharing clause should go "for better or for worse." While every sharing clause logically focuses on the sharing of the positive aspects of the license deal, *i.e.* the sharing of the royalty revenues, little is said about the sharing of the possible negative aspects of the license deal, *i.e.* the sharing of the penalties and liabilities that may be incurred under the license deal. Where the liability clause is triggered because of the defective features of the common technology, whether technically (failure to obtain performance specifications, creation of damages in neighbouring fields,…) or economically (operation of licensed technology is in infringement of third party patent rights, or in violation of governmental regulations,…), it will be relatively easy for the parties to agree on an overall sharing clause, "for better or for worse." However, the outcome of the negotiations will be more difficult to predict when the failure of the licensed technology to operate correctly is (partially or fully) attributable to the licensor. The latter may be reluctant to pay twice the bill: once against the client who withholds or recovers part of the license fee, and once against the partner who claims his full share of the license fee. A certain solidarity of the partner with the consequences of the negligent actions attributable to the licensor may be expected, as long as the negligence cannot be qualified as a gross negligence. For the purpose of illustration, in the oil and gas industry, it is common practice that the acceptance by one party of operatorship of oil and gas assets requires all participants in the project to contribute to the costs and liabilities incurred by the operator, except in cases of gross negligence. A parallel can be drawn to the acceptance of "licensorship" with respect to common IP assets.

At the same time, when a certain kind of solidarity can be expected from the joint technology owners, it is much more difficult to require the same kind of solidarity from commercial representatives who helped broker the deal. The remuneration of such middlemen is often based on the amounts received by the licensor; it is rare that a broker accepts to repay a prorated part of its remuneration to the licensor when the latter is confronted with a claim from its customer to pay part of the license fee. However, "in fine," it will be the respective negotiation strength and business needs of each party that will definitively determine the throw of the dice.

Thirdly, a licensor should beware to restrict the sharing regime to those revenues that can effectively be attributed to the common assets. From a technical point of view, this implies that if the common assets are only a part of the licensed technology, the parties should define, preferably from the outset, what revenues are properly attributable to the common assets and thus subject to sharing, and what revenues are properly attributable to the licensor's assets and are thus excluded from sharing. Much misunderstanding and litigation can be avoided when the parties define from the very beginning the attribution of value to each component of an encompassing technology. From a commercial point of view, the licensor may wish to extract a certain percentage or sum from the royalty revenues to compensate his marketing efforts to bring the licensed technology to market. It is not because the technology is technically innovative that its market potential is automatically confirmed; a licensor may need to invest considerable efforts (travel expenses, demonstration expenses, negotiation expenses) to persuade a licensee to enter into a license. In order to avoid that the "sleeping" partner takes a free ride on the commercial efforts of the licensor by sharing indiscriminately the license revenues, the licensor may contractually carve out a share of the royalty revenues in order to remunerate his commercial initiatives, before sharing the remainders with the partner. This contractual reservation may take the form of a percentage of revenues retained "*ab initio*" by the licensor, or a cost reimbursement on the basis of time spent and expenses incurred.

To conclude, the licensor should clearly define the net revenue that is subject to sharing. Take a complex license operation where parties A (licensor) and B (partner) have developed a common patented technology, and where the license is granted to a licensee C in a country where (i) A has a general exclusive representation agreement with D under which, for each transaction realized in that country, D perceives a commission, and (ii) B has decided to abandon the joint patent with A because it considers the potential to detect infringement in that country to be negligible. The question then inevitably arises: (i) can B be required to assume its *pro rata* share of the commission paid by A to D under what B can legitimately consider to be a private deal between A and D, and (ii) can B be reputed to have abandoned likewise its share of revenue originating from a country where it has abandoned its patent, although B may allege that the abandonment of his patent position in country C does not as such forfeit B's continuing beneficiary interest in the common technology?

28. Discriminatory Royalties

As in any other contract, in principle the licensor and the licensee are free to negotiate the terms and conditions that they deem most appropriate for their deal. The freedom to bargain the best available deal is an essential feature of a free market economy, and hence a licensor should not be considered to be "trapped" or stuck with duplicating the very first royalty he negotiated with a first licensee when he is contacted by a second licensee for the same subject-matter. Competition is an essential feature of the free market economy, and this same competition should play its full role in contract negotiations between licensor and its licensees. Where Brulotte-Thys holds that a licensor may lawfully exact "*in abstracto*" the highest payment for a license that he may negotiate, this implies that likewise, he may lawfully exact "*in concreto*" the highest payment for each and every license that he may negotiate.

The only limit to the exercise of the parties' free negotiation rights under a competitive environment resides in the application of competition law itself. Under U.S. law, it has generally been held that the price discrimination prohibition set forth in the Clayton Act and the Robinson-Patman Act does not apply as such to royalty discrimination (*cf. LaSalle St. Press vs. McCormick & Henderson,* 455 F.2nd 84); the only exception is the Shrimp Peelers case (260 F. Supp. 193 and 244 F. Supp. 9) where it is generally held that, if not altogether ruled on the wrong basis, the decision is of limited precedential value because of the particular factual context. The same reasoning goes for the European Union, where although article 101(1) of the Treaty condemns arrangements that "apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage," the Commission Guidelines on the application of Article 101 of the EU Treaty to technology transfer agreements declares that "the parties to a licence agreement are normally free to determine the royalty payable by the licensee and its mode of payment without being caught by Article 101(1)."

Only when the discriminatory features of the license deal have a clear anti-competitive object or effect, *e.g.* when they contribute to an artificial compartmentalization of the marketplace, would such differentiated rates amount to antitrust issues. It is generally not considered restrictive of competition to apply different royalty rates to different product markets, whereas there should be no discrimination within product markets (*cf*. §226 of the EU Commission Guidelines, or the Federal Circuit decision in *Congoleum Industries vs. Armstrong Cork*, 366 F. Supp. 220). This is also because one should not confuse "price" with "value," the first one being a market reference, the second one being a valuation reference. Thus, one and the same product may have the same value but not the same price, like the rate of a hotel room on 5th Avenue in New York will not be the same compared with the very same hotel room on Main Street in Columbus, Nebraska. Price discrimination (or rather, as business language wants it) price differentiation is a common practice in sales strategy, where prices are set in accordance with what sales managers expect the market to bear.

Anyway, when examining the legality of discriminatory royalties, it would be rather simplistic to consider the royalty to be the one and unique component of the license deal. The question should not be as much whether discriminatory royalties are offered to other interested parties, but whether discriminatory terms are offered to such parties. Royalties, although an important (and often the most important) item in any license negotiation, are part of an overall deal where every term conditions and construes the contents of other terms. When one licensee benefits from a lower royalty rate compared to another licensee, rather than this difference having been inspired by a discriminatory intention by the licensor, the lower royalty rate may simply be the result of an offset with other license terms that provide reduced commitments by the licensor to the licensee, *e.g.* absence or limitation of warranties, absence or reduced access to improvements of the licensor, or termination at will of the license agreement by the licensor. Vice versa, the lower royalty rate may be explained by additional advantages acquired by the licensor from the licensee, *e.g.* option to purchase the licensed goods discounted prices, access to improvements made by the licensee, or marketing and publicity efforts made by the licensee. The lower royalty rate may also be explained by different market conditions on the licensed geographical market, where the licensor (with the concurrence of the licensee) that some markets are likely to bear higher royalty rates than other markets. It may also be explained by the chronology of the license agreement, since the first licensee takes a higher risk in bringing the licensed technology to market (whether from a technical or economic perspective) than the second and subsequent licensees who have, in a certain way, the marketplace prepared for them by the efforts made by the first licensee. Finally, the lower royalty rate may result from a more ambitious business plan presented by the licensee, including threshold royalty revenues promised to the licensor, where the reduced royalty may be offset with increased sales (and revenue) perspectives.

Consequently, the royalty clauses of a license agreement can never be the sole benchmark under which to evaluate the discriminatory character of a license agreement. Contracts draftsmen should be particularly aware of this fact when preparing the so-called "most favoured licensee" clause in a license agreement at the demand of a licensee. It is near to impossible to consider whether a particular deal is more or less favourable to another licensee, taking into account the various reasons that may explain the different license conditions spelled out above. If the incorporation of the "most favoured licensee" clause is considered to be a deal-breaker by the licensee, the licensor should at least procure that the clause is written as an "all-or nothing" deal: either the licensee accepts the integrality of the license terms offered by the licensor to the other licensee, or the licensee remains with the license terms that he accepted himself with the licensor.

The discriminatory or most-favoured nature of a license is also awkward to assess with respect to alleged infringers of the licensed patent. Since third-party infringement can be considered to be a royalty-free license if the patentee does not undertake any curative action against the infringer, the contractual licensee may consider this implicitly granted royalty-free license to be a discriminatory or most-favoured license grant. On the other hand, the licensor may oppose that infringement is not established until a court has definitely and without further appeal ruled that the action of the third party qualifies as an infringing action. Consequently, for as long as there is no legal decision that confirms the existence of an infringement, there can be no question of an implied royalty-free license. Since only the patentee (or his exclusive licensee) has standing to sue for infringement, such discussions risk to degenerate into a stalemate, in the absence of a legal duty to sue, and the reluctance that a licensor may have to engage in court proceedings that, besides the cost aspects of such proceedings, also carries the risk of a counterclaim for patent annulment. However, some jurisdictions require a more proactive stance of the licensor on the basis of the right of the licensee to benefit from a "peaceful enjoyment" of the licensed rights; in such circumstances, the licensor should bring action against the infringer.

29. Excessive Royalties

If indeed, as the Supreme Court instructed in *Brulotte vs. Thys*, a patent empowers the owner to exact royalties as high as he can negotiate with the leverage of that monopoly, can we legitimately deduct that consequently, "the sky is the limit" in any license negotiations? In the absence of a monopoly or dominant position of the licensor on the relevant market, there has been, to my knowledge, no decision that has condemned the licensor for demanding excessive or exorbitant license fees from the licensee (*cf.* however *American Photocopy Equipment vs. Rovico,* 359 F. 2nd 745, remanded on appeal 384 F. 2nd 813). Although legal grounds exist for attacking disproportionate royalty clauses, especially under civil law legislations that use such concepts as a "just balance" between rights and obligations based on the fundamental rule of "la cause," licensor and licensee are normally well placed to negotiate and bargain for a fair deal that meets their respective business interests. Accordingly, "whether the percentage … is too high or too low involves no problem of monopoly or competition. The parties were free to accept or reject the price" (7-Eleven Franchise Antitrust case, CCH 75,429 N.D. Cal. 1974).

However, excessive royalties may become a patent misuse or otherwise give rise to antitrust claims when the patentee uses his leverage in a situation where the licensee has no reasonable alternative available; this is in particular the case under standard setting processes where fair, reasonable and non-discriminatory (FRAND) terms and prices are considered essential for maintaining a competitive level playing field on the relevant market. Hence, various lawsuits have been introduced against companies accused of abusing their industry standard prerogative by charging exorbitant royalties, both in Europe and the USA, the most widely-publicized of which are the Rambus case, the Qualcomm case and the *Apple vs. Nokia* case.

30. Lump Sum Payments

When discussing a licensee fee on the basis of lump sum payments, a fixed monetary sum is agreed upon by the parties, whether on an "all-in" basis or on a unit of production (or unit of sale) basis. However, the definition of the lump sum in the license agreement corresponds to the "value of the day" upon which the parties have reached agreement—whereas the license agreement itself will often have a duration that extends largely beyond the mood of the day. Therefore, without a corrective mechanism provided for under the agreement, the dollar value expressed in the agreement will still correspond to the same dollar value after 5–10–15 years following the date of signature of the agreement, although the purchase power attached to that same dollar value may have significantly decreased during this lifespan as a result of the inflation process.

The question is therefore: what corrective mechanism should be defined in the license agreement in order to procure to the licensor an equivalent money value throughout the term of the agreement? *A priori*, we might be tempted to correct the dollar amount expressed in the license agreement in accordance with the annual inflation rate. However, certain jurisdictions condemn an escalation rate that is calculated in accordance with the general inflation rate. For instance, under French law, no general inflation indexes may be used for the purpose of revising the price (including royalty fees) set forth in the agreement. The parties will, therefore, need to have recourse to "specialty" inflation indexes; in France, the SYNTEC index, used to determine the evolution of the manhour cost in the engineering industry, is often used to calculate the annual rate of escalation. ■