tal role in assessing the "right price" to be paid to the right holder as a consideration for his contribution to the pool, also in terms of subsequent allocation of the corresponding portion of the royalty stream deriving from the third parties' licensing of the pooled technologies. Thus, a well-calibrated patent evaluation will provide the basis for negotiations for the terms and conditions to be agreed on with the interested right holders in view of entering into a technology pool.

- Once a preliminary agreement on the general features of participation into a pool has been reached, a legal expert will be primarily in charge of promoting negotiations to their subsequent stage, which is the eventual establishment of the patent pool consortium itself, for which all terms and conditions have to be finally agreed on by all parties involved, i.e. the patent pool members. The multiparty licensing agreement establishing the consortium is frequently referred to as the "Magna Charta" of the pool, as containing all the essential terms defining the internal collaboration mechanisms and functioning of the newly created entity.
- When the pool is finally established, it may act as a legal person towards third parties and thereby conclude valid licensing contracts through legal representatives. The execution of the patent pooling agreement, over the life of the consortium, will typically involve not only the expertise of numerous licensing attorneys, but also the management and supervision of independent experts in charge of the administration of the pool. The latter provides, as has already been outlined on other occasions, a good recommended guarantee of impartiality and fairness in the operation of the consortium which is mostly well received by competition authorities, thus pending decisively in favour of the pool, in case an antitrust scrutiny occurs.

In order to better understand this relatively new trend in the licensing methods, it may be useful to compare it with more traditional licensing techniques, namely bilateral negotiations.[25]

II. A Step Forward from:

1. Bilateral Negotiations

The key character of bilateral negotiations is their individuality. There is no formal framework and, at the outset, each party shall conduct their patent evaluations independently. Consequently, the two contractual parties directly involved may freely determine, outside any pre-defined scheme, their applicable licensing terms, most importantly those concerning their respectively due royalties and the specific rights

25 Goldstein L., Kearsey B., "Technology Patent Licensing: An International Reference on 21st Century Patent Licensing, Patent Pools and Patent Platforms", ed. Aspatore Books, "A comparison of Licensing Methods", p. 67 *et seq.*

thereby covered. Evidently, this entails higher costs of negotiations, which often involve the individual assessment of highly skilled, independent experts in order to overcome possible divergences arising among the parties, so that the conclusion of the agreement is likely to extend over a longer period. Nevertheless, this is the preferred approach where individualized licensing terms are required, this normally being the case when the underlying technology is quite simple.

A pool represents a step forward when the technologies involved are more complex, and it typically involves the combined contribution of multiple parties. The evaluation of patents deemed to be "essential" within the pool - i.e. covering the patented technologies necessary, in the absence of substitute technologies[26] inside or outside the pool, to carry out the processes or to produce the products to which the pool relates - is typically conducted by an independent person or group expert in the field. The selected patents are licensed within the pool as a package to every licensee, either for free, in consideration for their respective endeavours, or for a standard price. Thus there is normally no flexibility to adapt the licensing terms to individualized circumstances. However, for the same reasons, there is typically a significant saving in transaction costs in the negotiations, both within and outside of the pool, towards third interested licensees. Therefore, the pool may represent a way for licensors to maximize their royalty revenues, while minimizing the necessary costs and efforts during the negotiations, while, in the same time, managing to use essential patents on terms that would allow them to operate effectively.

2. Cross-Licensing Agreements

At this point, this contribution ought to spend still a few more words about some other possible "sharing solutions" for securing access to intellectual property rights. Namely, aside from simple bilateral arrangements, as outlined above, different parties may also enter into cross-licensing agreements, according to which they grant a license to each other for the exploitation of the subject-matter claimed in patents, thus allowing a mutual sharing of the respective rights without a corresponding exchange of license fees, at least up to the equal value of the patents at issue.

The basic difference to patent pools is that those agreements are limited in their scope to the participating parties that simply grant each other rights, without further investing in a common work to commercialise the contributed technology, as a package, to the benefit of third interested licensees operating in the market. In a cross-licensing scheme typically the organisational framework for inter-operation

26 "Substitute Technologies" are defined as such: "When either technology allows the holder to produce the product or carry out the process to which the technologies relate". Conversely: two technologies are considered "Complementary": "When they are both required to produce the product or carry out the process to which the technologies relate", in: Commission Notice - Guidelines on the Application of Article 81 of the EC Treaty to Technology Transfer Agreements, O.J. C 101 , 27 April 2004, Sect. 4 "Technology pools", para. 216.

towards external third parties is thus missing. In other words, simple cross-licensing arrangements between two patent holders, firms or individuals, do not involve any intention of cooperatively engaging in future licensing transactions, but are limited in their scope by the terms of the concluded agreement. Ultimately, cross-licensing solutions, on the one hand, focus merely on reciprocal access to IP rights while patent pools, on the other hand, aim at licensing the contributed technology package to third interested parties, thus taking a step further.

Moreover, although a portfolio cross-license, under which two companies agree to license large blocks of their respective patents to one another, may also provide a partial solution to the problem of overlapping IP rights, removing the need for patent-by-patent licensing, this bilateral licensing scheme is not adequate in case an investor requires licenses to a respective small number of technologies held by a multitude of other firms. In similar cases, patent pools might represent the only suitable solution, as they may generate substantial transaction efficiencies by enabling more right holders to pool their license technologies together and license them, through a joint entity, to third parties.[27] Consequently, pooling agreements, other than cross-licensing, reduce the transaction costs of multiple negotiations, mitigating royalty stacking and hold-up problems[28] that occur when multiple patent holders individually demand royalties from a licensee.[29]

Thus, the greater convenience of one licensing solution as compared to another greatly depends on the concrete business context in which it is deemed to intervene, rather than on merely conceptual legal considerations.

27 US Federal Trade Commission and Department of Justice, "Antitrust Enforcement and Intellectual Property Rights: Promoting Innovation and Competition" - Chapter 3: "Antitrust Analysis of Portfolio Cross-Licensing Agreements and Patent Pools", Joint Report, April 2007, p. 57 *et seq.*

28 Merges R., "Contracting into Liability Rules: Intellectual Property Rights and Collective Rights Organizations", 84 California Law Review, 1996, vol. 9, p. 1293 *et seq.*: "A hold-out is someone who refuses to agree to a bargain for strategic reasons. For example, if a city government needs to buy five parcels of land from property owners A, B, C, D, and E, E might wait until the other four (A-D) have sold their land. This puts E in the driver's seat in bargaining with the city: E can now charge a very high price—in theory, up to the total amount the city has to spend on the project, minus what was paid to A-D—for his or her land. Since this price will often be more than the average price paid to A-D, and in any event more than the price E could have obtained if he or she were not the last to sell, such a holdout strategy will be rational in many cases". See generally, Calabresi G. *et al.*, "Property Rules, Liability Rules, and Inalienability: One View of the Cathedral", Harvard Law Review, 1972, vol. 1089, p. 1106 *et seq.*

29 Merges R., "Institutions For Intellectual Property Transactions: The Case of Patent Pools", August 1999, in "Expanding the Boundaries of Intellectual Property - Innovation Policy for the Knowledge Society", Oxford University Press, 2001, also available at: http://www.law.berkeley.edu/institutes/bclt/pubs/merges/pools.pdf

C. *Patent Pools and Standards: Endeavors to Promote Access to Standard-Related Patents for Interoperability Purposes*

I. Overlaps and Demarcation between Patent Pools and Standard-Setting Organizations

In order to confute the too often generalized association between patent pools and standard-setting organizations, it shall be observed that, as a matter of fact, the scenario is much more heterogeneous and, while there might certainly be areas of overlaps, the actual demarcations in the scope and range of activities of such practices shall not be overlooked. On the one hand, standardization bodies,[30] i.e. institutions purposefully committed at the development of standards, which can be formally constituted at national, trans-national[31] and international levels,[32] tend to closely cooperate, rather than to fiercely compete with each other, both by seeking to define boundaries between their respective fields of activities and, in principle, by operating in a hierarchical fashion, as far as their geographical scope is concerned. On the other hand, a patent pool does not necessarily have to support a standard at all, or it may even, under some circumstances, encompass partly substitute specifications, thus not necessarily identifying itself with a particular technological solution; then again, different patent pools, each ideally implementing and commercialising one given technology of which it shall detain all rights, may eventually support alternative standards.

1. Interface / Interoperability Standards

So-called "interface or interoperability standards" detail how products, also from different manufacturers, shall interconnect with one another - as opposed to "quality or safety standards", which establish characteristics required for a good to be either

30 In this respect, very clear and illustrative is the presentation from Tirole J., "Pools, Standards and Access to Intellectual Property", Conference on "Guidelines for Merger Remedies - Prospects and Principles", January 2002, available at: http://www.cerna.ensmp.fr/cerna_regulation/Documents/ColloqueMetR/Tirole.pdf

31 In the EU, standards bodies are actually recognized under: Directive 98/34 of June 22, 1998, on "Technical standards and regulations", OJ L 204, July 21, 1998, p. 37 *et seq*.

32 For some instances of international standards organizations, see, *i.a.*:
ANSI - American National Standards Institute (http://www.ansi.org);
IEC - International Electro-technical Commission (http://www.iec.ch);
IEEE - Institute of Electrical and Electronics Engineers (http://www.ieee.org);
ISO - International Organization for Standardization (http://www.iso.org);
ITU - The International Telecommunication Union (http://www.itu.int/net/home/index.aspx);
IUPAC - International Union of Pure and Applied Chemistry (http://www.iupac.org);
OGC - Open Geospatial Consortium (http://www.opengeospatial.org);
W3C - World Wide Web Consortium (http://www.w3.org).