

# The Implementation of Intellectual Property Strategies inside the organization: patent and brand's assessment, management and protection

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**Abstract**— The economic value of intellectual property assets is linked to the possibility that a company exploits ideas and knowledge in order to obtain future economic benefits.

Businesses, in fact, invest in research and development, innovate, create intellectual property assets and use them to achieve competitive advantage over their competitors, make extra profits and to be better positioned in the market .

In this sense, intellectual property evaluation provides the manager information of vital importance in enabling him to maintain or improve his competitive position as well as allowing him to continue to have access to the best creative content, technology and scientific materials.

The intellectual property evaluation process should take place continuously but in reality there are sporadic evaluations. In fact, an organization that does not value its own resources before implementing a plan is a not well-coordinated organization.

**Keywords**—Intellectual property, brand, patent, management, due-diligence, protection

## I. THE IMPLEMENTATION OF A COMPANY'S IP STRATEGIES

The implementation of IP represents the last phase of the intellectual property strategic management. Each organization needs a strategic plan that considers the mission of the organization, the activities of intellectual property, the personnel, the sources and the competitive environment.

The key to success lies in a simple plan, as stated by the philosopher Henry David Thoreau, "*Simplify, simplify*"[1].

Therefore, the intellectual property manager must select the innovations to be protected, choose the most appropriate tools and plan a path that will allow him to achieve this protection. The intellectual property manager must establish, in addition, if there are organizations that violate other people's intellectual property rights, if so he must find ways to overcome these obstacles.

Eventough the paper is the result of all Authors, the 4th, 5th and the 6th paragraphs are the result of Simone Manfredi's job and the 1st, 2th and 3th are the results of Fabio Nappo's job.

<sup>1</sup> H. D. THOREAU, *Walden or Life in the Woods*, Dover Publication, Devon, 1995.

The formal procedures can be very complex, even if the steps are very simple:

- selection of innovations;
- access to the outsider's innovations.

The selection process is a step in the implementation of a plan to manage intellectual property. This process can be seen as a "*decision tree*": the intellectual property manager identifies the innovation that he considers important to the organization[2].

If the innovation comes from a person outside the organization and there is no obligation to transfer the intellectual property rights to him, the intellectual property manager will have to focus on finding a way to access the innovation without incurring legal litigations, since the organizations must be very careful to respect other people's intellectual property rights. The process that identifies how to access innovation is defined as *freedom-to-operate analysis*.

A careless analysis of the circumstances makes the organization incur unpleasant situations. With attention and experience it is possible to find ways to circumvent intellectual

<sup>2</sup> The classification of innovations is the process by which the intellectual property manager considers the value of an innovation and the protection with a level of investment which he deems appropriate. Innovations are also evaluated according to the urgency of the investment, hence the name of this type of *triage* classification which is a type of injury and illness classification used in community medicine in relation to the urgency of treatment. Starting with an innovation considered interesting, the intellectual property manager will be asked whether it is currently able to serve the purposes of the organization. If the result is positive, the innovation will be considered "major. " The second question concerns the people outside the organization, even if this application is successful, the innovation will be included in a higher level of investment.

Innovation assessed by the organization as an important innovation, but not assessed as such by others outside of it, should fall within the lowest level of investment. If that innovation has no value to the organization but for others who do not belong to it, it should be in the lowest category of investment. However, over time an organization can change opinion about an innovation that previously had been considered important and in this case it is possible to consider the possible sale of the property. However, it is more appropriate to retain the intellectual property rights and maybe degrade it to a lower level of investment.

The most frequent mistake is to underestimate, not to give the fair importance to what is the true value of a property.

M. A. GOLLIN, *Driving Innovation, Intellectual Property Strategies for a Dinamyc World*, Cambridge University Press, New York, 2008;

property rights, as no intellectual property right is inescapable.

Intellectual property rights balance the exclusion and access to innovation, even if their existence doesn't necessarily preclude the access.

However, there may be situations in which access to innovation is not easily feasible. Consequently, the task of intellectual property manager is to find the weak point in the field of intellectual property rights.

The elements to be considered are the time factors, or the duration of such rights, the geographic ambit of validity and the existence of a variant that, given its diversity, could prevent the infringement.

If there is not an adequate alternative, a more complex search starts and it will lead to the determination of a bargaining chip. There are many bargaining chips such as:

- the legal defect; it occurs when, for example, the mark doesn't cover the product in hand;
- fair use; it occurs when the innovation is used for didactic purposes, for non profit or without mentioning the source;
- compulsory license or government's rights to use the innovation. According to copyright law, for example, there are extensive systems that allow the use of copyrighted works without the owner's permission.
- the right of veto; an organization "A" identifies its own intellectual property rights and tries to find out any violations of its intellectual property rights by the organization "B" holder of innovation to which "A" wants to access;
- finding a third party that may have access to the innovation or block its holder.

If it's possible to access the innovation using these options, the owner may re-evaluate the proposal for a fair deal. In each case, if it is possible to come to a fair agreement between the parties and if the rights holder does not sue the other party it is perfectly possible to close the deal.

## II. THE EVALUATION OF A RESEARCH PROJECT IN THE LIGHT OF ITS SUBSEQUENT PATENTING

As already argued extensively in the treatment of patent is the latest phase of a research project, which is the phase in which the achievement is recorded and therefore protected from any actions of third parties.

With regard to the management of these assets, recent studies have revealed some strategies for protection of both the final result, both intermediate results related to the discoveries from time to time reached.

Therefore, accounting for patent recognition of a research evaluation of these assets is characterized by a well-known uncertainty about the determination of a value that reflects the well-known requirements related to valuation practice.

It is therefore essential to adopt models and logical assessment to assign a specific value to the discretion of management to govern an investment project between threats and opportunities that characterize future scenarios.

However, if basic research is the defensibility to influence the valuation techniques, if applied research is the inability to allocate income or financial flows to certain forms of knowledge are characterized, as has been said, by high uncertainty would affect the 'valuation approach to use.

The practical nature of applied research, aimed at solving concrete problems of order, whose solution is required by the needs identified by management, making it comparable to any other investment under uncertainty.

According to some writers, the features just outlined would make the real option-based approach is particularly suitable to estimate the economic value of applied research because, first, the method will retain the characteristics of rationality, objectivity and neutrality and at the same time able to exploit the opportunities inherent in certain types of investment under conditions of high uncertainty.

Using the terminology of corporate finance, the term "option" is generally understood that the contract gives the buyer the right to buy or sell a financial asset at a predetermined price.

Therefore, if the underlying asset consists of an investment project, we speak of *real option*[3], which takes form as an option concerning a different activity from traditional financial assets.

It should also be noted that the analysis in terms of real options is presented effectively in situations where:

- the value of an investment is strongly influenced by contingent events;
- uncertainty incorporated in the investment object of

<sup>3</sup> On the topic of real options, see, among others, the contributions of M. AMRAM and N. KULATILAKA, *Real options*, cit., F. BLACK and M. SHOLES, *The pricing of options and corporate liabilities*, in *Journal of Political Economy*, V. 81, No.3, RM BOOKSTABER, *Option Pricing and Investment Strategies*, Probus, 1991; M. BANNAN and E. SCHWARTZ, *Evaluating natural resource investments*, in *The Journal of Business*, vol. 58, No2, 1985; E. BRUYS, M. BELLALAH, HM MAI, and E. DE VARENNE, *Options, futures and exotic comes tives.Theory, application and practice*, Wiley, 1998; F. BUTTIGNON, *business strategy and the economic value of capital*, Cedam, Padova, 1990; F. CAPARRELLI, *Derivatives*, McGraw-Hill, Milano, 2001, J. COX AND M. RUBINSTEIN, *Options Markets*, Englewood Cliffs, NJ, Prentice Hall, 1985; RT DAIGLER, *Advanced options trading*, Probus, 1994; A. DAMODARAN, *Evaluation of companies*, Apogee, Milan, 2001; A. DIXRR and R. PINDYCK, *The options approach to capital investment*, in *Harvard Business Review*, May-June, 1995; G. WOMEN, *Economic evaluation of business strategies*, Giuffrè, Milano, 1992; M. GALEOTRI, *Strategic evaluation in the event of sale of the company*, stogee Fre, Milan, 1995; AGZ KEMMA, *Case studies on real options*, in *Financial Management*, 22, No3, 1993, S. MAJD and R. PINDYCK, *Time to build, option value and Investment Decisions*, in *Journal of Financial Economics*, No18, 1987; RC MERTON, *The theory of rational option pricing*, in *Beli and Journal of Economics Management Science*, V. 4, No1, 1973; A. MICALIZZI, *Real Options*, cit., SC MYERS and S. MAJADA, *Applying to the abandonment value option pricing problems*, Sloan School of Management, MIT, 1983, DR SIEGEL and JL PADDOCK, L. SMITH, *Valuing offshore oil properties with option pricing model*, in *Midland Corporate Finance Journal*, vol. 5, No1, 1987, AND PERRIN, *E-Valuation.Evaluating Internet companies*, Mc Graw-Hill, Milano, 2000; L. QUIGG, *Empirical testing of real option pricing models*, in *Journal of Finance*, 1993, EI RONN (Ed.), *Real Options and Energy Management using options methodology to Enhance Capital Budgeting Decisions*, Risk Books, 2003; D. SIEGEL, J. SMITH and JL PADDOCK, *Option valuation of claims on real assets: the case of offshore petroleum leases in Quarterly Journal of Economics*, No5, 1988; N. TALEB, *Dynamic Hedging.Managing Vanilla and Exotic Options*, Wiley, 1997; L. TRIGEORGIS, *A real options application in natural resources investment*, in *Advance in Futures and Options Research*, 1990, JT WILLIAMS, *Pricing real estate assets with costly search*, in *Review of Financial Studies*, No8

esteem is so large that it is expedient awaiting further information;

- the value of the investment presents significant opportunities for growth conditional on the implementation of some strategies;

- investment has characteristics of flexibility such as to give to him who makes the right to opt for more alternative business;

- The investment estimation allows updates and strategy adjustments during construction.

On the basis of the above is possible to outline a classification scheme by which real options in valuation practice are most often divided into:

- a) *Real options for development*;
- b) *Real options for deferral*;
- c) *Real options for flexibility*;
- d) *Real options to abandon*.

In the first case, that is, real option development - expansion, connecting often considered prodromal to investments for the implementation of other investment projects, we generally speak of investment "platform" as it was intended to create opportunities for future development related the creation of new products.

In such cases, which occur frequently in the evaluation of applied research and development, traditional methods of investment is based on income or financial prospects of the project, can express a value that reflects the possibility that it achieves great results, although not seems able to isolate and properly appreciate the opportunities inherent in the implementation of appropriate strategies, which may constitute real potential of the project under consideration.

Regarding the options of deferment means the opportunity offered by some investment projects to a certain period of time, the decision to undertake further investment determinants.

With this objective in the investment operations related to the existence of legal or economic factors which enable the whole company to maintain, for a certain period of time a condition of competitive advantage, the presence of such licenses, patents, or the existence of barriers to entry for other competitors [4].

In such situations, traditional methods are able to express the value of research at the time of analysis, while accurate when they have their limitations must take into account the dynamic of income flows and finance.

It may well be that the investment in a patent can present at the time of negative values, intended, however, to become positive, the effect of events can materialize in time.

The flexibility options are typically associated with investments in research projects are characterized by the ability to change the final objectives with relative ease.

We can speak of flexibility options for those research projects that change during construction the size of the investment to be carried.

In the cases just outlined, the traditional methods, if applied exclusively, are inadequate not being able to "evaluate ex ante the potential value of an opportunity to conduct which is a function of the dynamics of the value of the base project and the alternatives flexibility of that perspective."

The options of abandonment[5] are inherent in research projects that give the performer the ability to stop within a certain period of time and favorable conditions, the project itself, assuming that the course of future events to develop features that make cost-effective to preserve the life of the investment.

The existence of this latter option is usually connected to the fact that between two investments with similar characteristics in research is preferred that shows a greater liquidity in the market, that is, a higher value of abandonment.

The estimation of this option cannot be adequately answered by traditional methods because they assume that the path of development and eventual abandonment is defined ex ante.

Some authors have suggested to exploit this option as an option to sell a stock where the exercise price shall be the liquidation value of the business.

It's obvious inability to contain real options within a framework defined uniquely, since the research and development has very dynamic features are not easy to define and interpret.

Therefore confirms the failure of traditional methods of valuation of investments to meet the needs of self-enhancement opportunities inherent in such investments.

An alternative method for estimating the patent requires the implementation of a process that consists of the following main stages: the identification of costs incurred for research activities related to the patent to be evaluated, and potential benefits and opportunities of perspective, in particular, these latter factors can be estimated when it is applied research and in doing so then represent the contribution to profit made from the ownership of the patent to the company complex.

This methodology is a harbinger of model estimates of the economic value of a patent, the foundations of which are attributable to the study by Likert in terms of assessment of human capital[6]. Later, this empirical methodology was used to estimate the human capital, hence the method Zanda-Lacchini[7].

<sup>4</sup> With regard to the options of deferment, A. MICALIZZI, *Options king wings*, Egea, Milano, 1997, p. 118, states: "The option of deferment respect to the decision about when to start the project. This opportunity could result, for example, the rights for the exploration of mineral reserves, a patent for launching a new product may be delayed in time without undermining the technical feasibility".

<sup>5</sup> According to G. Women, *Economic evaluation of business strategies*, Giuffrè, Milan, 1992, D.260, the options consist of neglect "in the possibility of abandoning a project or strategy in the course of its development, in relation to the occurrence of changes in competitive landscape that make them more convenient (an example can be found in a project of research and development of a pharmaceutical product that typically pass through different stages after which the company may decide to abandon the project or sell it to a ' other undertaking for which the partial result of the research is interesting."

<sup>6</sup> R. LIKERT, *The Human Organization: Its Management and Value*, McGraw Hill, 1967.

<sup>7</sup> G. ZANDA, M. LACCHINI, *Estimating the value of human capital for the purpose of company valuation*, in *Italian Journal of Accounting and Business Economics*, No.7-8 July-August, 1989.

An interesting application of this methodology, it is also the one used to estimate the economic value of rights to benefits of sports players[8].

Therefore, make the necessary changes and based on recent empirical studies such as the Pat Val-EU European survey[9] processes, the definition of a number of characteristics of the patent, hence the determination of the multiplier and then a methodology for estimating the economic value of a patent which has the advantage of representing the meeting point between methodologies qualitative and quantitative. In formula we have:

$$P = x \text{ Molt CMR \& S}$$

P patent's value  
 Molt represents the value of the multiplier, which usually varies from 1.7 to 5;  
 CMR & D average R & D costs incurred for the specific project.

QUALIFYING FACTOR	CHARACTERISTICS	MULTIPLIER VALUE
NUMBER OF CITATIONS	FROM 0 TO 100	0,25
	BETWEEN 100 AND 200	0,50
	OVER 200	1
NUMBER OF REWARDS	UP TO 10	0,25
	10 TO 20	0,50
	OVER 20	1
TECHNOLOGY	PROCESS	0,70
	PRODUCT	1
AREA OF VALIDITY	ITALIAN PATENT	0,3
	EUROPEAN PATENT	0,80
	INTERNATIONAL PATENT	1
REMAINING DURATION OF PROTECTION	UP TO 5 YEARS	0,20
	5 TO 15 YEARS	0,80
	15 TO 20 YEARS	1
MULTIPLIER VALUE	MIN	1,7
	MAX	5

Therefore, basing that estimate on an empirical multiplier that takes into account some of these qualifying factors.

This model aims to determine the value *in question* re-evaluated by multiplying the average amount of research and development costs directly attributable to the patented design for a factor between 1.7 and 5.

<sup>8</sup> See in this regard the contribution of S. MANFREDI and G. SIRLEO, *Economic valuation of rights to benefits of sports players: a theoretical and operational*, in Business Environment and Management, No2, 2007.

<sup>9</sup> For further information please refer to the study operated by ST. BRUSONI, G. CRESPI, D. FRANCOZ, A. GAMBARDILLA, W. GARCIA-FONTES, A. GEUNA, P. LEGAL, R. GONZALES, D. HARHOFF, K. HOISL, C. LEBAS, A. LUZZI, L. WAREHOUSES, M. MARIANI, L. NESTA, Ö. NOMALER, N. PALOMERAS, P. PATEL, M. ROMANELLI, B. VERSPAGEN, A. *The Value of European Patent GAMBARDILLA evidence from a survey of European Inventors, Final Report of the Val EU Project Pat*, European Patent Office, 2005.

The coefficient is derived from the sum of the scores allocated to each patent on the basis of certain qualifying factors including:

- 1.number of citations;
- 2.number of prizes (rewards);
- 3.technology;
- 4.geographical area of validity;
- 5.remaining duration of protection.

It must be noted that in order to estimate the costs in a timely manner to the research and development, the evaluator will consider some problems concerning the determination of the same, namely, the direct and indirect costs attributable to the study and subsequently protected by patent.

In particular, if the costs incurred in seeking not represent cost object, and then they were not clearly recorded, the assessor must opt for the use of known techniques for analyzing costs, in order to determine the value in doing so useful for estimate the economic value of the patent.

Once these costs, the assessor must revalue the time of evaluation by applying the revaluation coefficients ISTAT (CPI - consumer price index) and then properly estimate the average value of the same.

It is worth noting that this methodology in the absence of the requirement of reasonableness should be operational use reasonable care to prevent the estimated values can be outside of normal market parameters, in the latter case, it would require a correction that takes into account the market *trends*.

### III. PATENT'S PROTECTION AND MANAGEMENT

The legal system gives the author of an invention the sole right to use it for a limited period of time. In this way the inventor can legitimately restrict a third part from the use and the reproduction of the patent[10].

The recognition of exclusivity is an incentive both for the inventor and for the community, which benefits from the information provided by the inventor, since the assignment of the patent involves the publication of the application and then the full knowledge of the invention[11]. Describing and advertising help to limit the sphere of exclusive protection.

<sup>10</sup> The first form of patent right has its origin in Ancient Greece, where a legal recognition was given to inventions reported to the state. In modern times, however, the first form of patent right is due to a decree of the Republic of Venice in 1474. During the same period, England recognized the *letters patent*, that granted a monopoly for the production of certain goods or the provision of specific services, with the payment of a sum of money. Afterwards James I, because of the illegal use of the law, decided to withdraw all monopolies granted until then, subordinating their recognition to the principle of novelty.

This principle was already present in the Venetian decree and was finally merged in the *Statute of Monopolies* of 1623. The requirement of the description written within the patent, which is essential for modern systems, is introduced only in 1700 in England, during the reign of Anne Stuart.

In the Constitution of the United States can be found the *Patent and Copyright Clause* according to which the condition for granting recognition lies in the importance of social and economic that the innovation process has, which finds its final outlet in the invention.

<sup>11</sup> G. GHIDINI, F. DE BENEDETTI, *Codice della Proprietà Industriale. Commento alla normativa sui diritti derivanti da brevettazione e registrazione*, il Sole 24Ore, Milano, 2006.

With regard to patents management, this may be done through their sale or their license.

When the right holder has no interest neither in a direct exploitation of the right nor in granting it through a license, the sale represents the best solution as well as more profitable from an economic standpoint.

Moreover, the assignment corresponds to a logic of wealth creation in the short term, as the economic interest of the owner runs out of its effects at the same time when the store is improved allowing to take over a fair payment from an exchange operation compared to the investments made and to the value added implied in the patented invention[12].

From the strategic point of view, transfer and licensing are closely related to the objectives of the company holding the patent[13].

Thus, if the firm wanted to increase its competitiveness, it could buy the external patent, as an alternative to an in-house implementation.

The external purchase involves a series of preliminary technical and legal tests. In particular it will be necessary to provide adequate due diligence that checks: the formal and technical validity and the requirements for patenting the invention[14]. Other factors to consider concern the ownership[15] of the right, the technology covered by the patent and the territorial dimension, in order to allow the person who buys the rights a full and legal exploitation.

Finally, it may be opportune to have a formal test on the clarity and extension of the description and of the claims contained in the patent, in order to ensure maximum protection to the technical solutions.

During the legal transaction of the autonomy, if the lack of requirements for patentability is found *ex post*, the doctrine tends not to recognize the existence of a guarantee obligation *ex lege* to the assignor and the purchaser must run the risk to patent it[16].

In Italy titled industrial property rights are subject to a general discipline of personal property with regard to the movement, the transcription of the acts of transfer. The patent

license allows to turn the idea into an economic factor and as such, subject to the rules governing the movement of goods[17].

Thus, the sale can be made by an act among living people, by inheritance *mortis causa*[18], for a valuable consideration or for free. The law also does not require the written form, except the obligation to respect the limits provided by the type of contract chosen by the parties, as well as the requirements regarding publication and registration of the transfer of title in order to be effective as against third parties. Non-observance of written form affects only on the transcription but not on the validity of the act.

Lastly, among the innovative ways of strategic management of patents it is pertinent to remember the formula of the sale or lease back, which is generally applied to the personal property and real estate, tangible and intangible assets and responds to two requirements for companies that can find financial flows through the sale of the property and at the same time, continue to exploit these assets within the sphere of its own production organization.

In conclusion, it is interesting to note that in recent years from the American landscape, another innovative way of managing patents has risen.

In particular, it is the possibility of creating negotiating systems dedicated to the trade of industrial property rights or to real price lists, through which it is possible to assess the intellectual property and make it negotiable[19].

Such intellectual property assets management provides ample opportunities to inventors and companies. Therefore, it is possible to consider that in future the phenomenon of patent auctions will allow an active management of intellectual patrimony of enterprises[20].

In alternative to the transfer of intellectual property rights by patent, it is possible to opt for granting licenses. The license is not a specific provision in our legal system. In particular, with the license, the patent holder (licensor) shall negotiate with a third party (licensee) the formation of the enjoyment of a right on the patent to use without transferring the legal ownership[21].

The license may be: exclusive, almost exclusive, non-exclusive or cross[22].

<sup>12</sup> See G. GHIDINI, *Intellectual Asset Management, gestione e valorizzare i beni immateriali*.

<sup>13</sup> The licensing or assignment of the patent may be justified under certain strategic decisions (the transferred technology concerns matters that don't interest the firm) or by opportunistic reasons and of sustainability of investments (the skills of the company don't permit the development of business and its not convenient to support economically the industrial application).

<sup>14</sup> Article. 45 paragraph 1 D.L. 30/2005 states that "new inventions involving an inventive activity and that are susceptible of industrial application can be the subject of patents. In order to be considered patentable, an invention must have the following characteristics: novelty, inventiveness or originality, industrial applicability, legality and sufficient description.

<sup>15</sup> It represents the degree of independence of the invention compared to other inventions or technologies even non-patented whose owner is the same or third parties. Monitoring can be done through patent databases. If the technology is covered by other patents we must be sure that the subject of negotiation - the sale or license- are all interested patents and not just a part of them.

<sup>16</sup> However by analogy with art. 77, paragraph 1, lett. b of the Industrial Property Code reproduces the provisions of art. 59 bis l. inv. "The declarative decision of the patent does not affect the contracts - the sale or license - that have as object the invention and concluded before the investigation of invalidity, where these contracts have been executed."

<sup>17</sup> In this regard, the Industrial Property Code art.63, echoing the previous provision of Article 7, paragraph. 1, R.D. June 29, 1939, n.1127 cd. Law inventions and art. 2589 of the Civil Code provides that the rights arising from industrial inventions, except the right to be recognized as the inventor of the invention, shall be freely alienable and transferable.

<sup>18</sup> In the event of transfer *mortis causa*, there will be applied the ordinary rules of inheritance law including those that regulate the community of heirs, article 6 of the Industrial Property Code.

<sup>19</sup> In Europe, this experience was recorded in London in July 2007 during the *Pan-European Live Intellectual Property Auction 2007*, organized by *Ocean Tomo*, the American *merchant bank* specialized in the increase in value of intellectual capital. During the London auction were made transactions of intangible assets for a total of over 6 million and € 40 000, Republic, Business and Finance.

<sup>20</sup> G. BALESTRI, *Brevetti come azioni, la nuova scommessa*, in *Il Sole 24Ore - Finanza e Mercati*, 10 Luglio 2007.

<sup>21</sup> S. SANDRI, *I contratti di licenza in Italia*, in *Rivista di diritto industriale*, 1996, p.43 e ss.

<sup>22</sup> V. MANGINI, *La Licenza di brevetto*, CEDAM, Padova, 1970.

With the exclusive license is granted the right to manufacture and sell the innovative product either directly or granting licenses to third parties[23] with a commitment from the licensor not to manufacture and sell the product in the licensee's territory[24].

In this way, the licensee is the only authorized party to exploit the invention in a given territory, for a certain time and for a determined period.

With an almost exclusive license, the licensor reserves the right to exploit the invention in the same ways as the licensee.

The non-exclusive license concerns the ability to sub-license the patent or not.

Finally, based on the logic of exchange and the agreement between undertakings, there is the cross licensing that is often used to avoid patent conflicts. Doing so, many companies in the same sector accord licenses mutually in order to overcome an obvious risk of violation of other people's rights.

From a purely legal point of view the license agreement must meet the requirements of atypicalness and durability.

For an atypical contract we mean a type of contract that isn't expressly governed by civil law, but created specifically by the parties according to their specific trading needs. However, in practice it is uncommon that a license agreement is not written, both for reasons of simplicity and of legal certainty. In fact, it is expected that the documents that transfer rights to the patents should be recorded at the Italian Patent and Trademark Office.

Moreover, these contracts are characterized by a limited time perspective, which may coincide with the period of legal protection of the patent.

On the issue of revocation of the license, the same rules provided for its sale, or the patent declared invalid prevents the continuation of the contract, but it doesn't have any effect on the work already performed.

This means that the licensee will not be required to pay royalties or other fees and at the same time, the licensor can't ask the restitution of sums already paid, then it is said that the nullity works *ex tunc*.

The legislature also refers to the court the determination in the an and in the quantum that will determine a fair compensation on the basis of each case, especially considering such factors as: the awareness of the licensor of invalidity of the patent, the elapsed time between the conclusion of the license and the unjudged passage of nullity sentence etc. Among others, we will have to assess the benefits achieved by the licensee as a result of the patent right.

Regulation 772/04/CE provides a uniform set of rules relating to technology transfer agreements.

<sup>23</sup> The exclusivity clause is an additional element of the license agreement which is of particular importance, also in consideration of the effects that may result. In fact, the exclusive licenses agreements may restrict competition between the parties concerning the parts in relation to the object, to the territory or the duration of exploitation of the invention.

<sup>24</sup> The clause of territorial exclusive rights has a limit in the so-called parallel imports; anyone is free to purchase products from the licensor or a licensee and then resell them in the exclusive territory of those. In areas where the phenomenon of parallel imports is widespread (import cars), the licensee can negotiate arrangements for the distribution of risk, such as variable royalties depending on the results.

This regulation aims at achieving a proper balance between protecting competition and intellectual property rights within a framework of certainty in law.

Although the license agreements have positive effects in terms of economic efficiency and stimulate innovation, technology diffusion and the competition itself, there are many cases of use of the institution for purposes of allocating markets or at least anti-competitive purpose. By passing the regulation n.240/96/CE, a model of "block exemption" was adopted, identifying categories of agreements which are exempted up to a certain level of market power. In addition to this there is a detailed list of restrictions or conditions where it is not possible to apply the above mentioned benefit[25]. The balance point is found in the level of market power of individual firms.

When the agreement has been made and the compatibility with the quota of exemption have been verified, the parties are required to verify that individual terms aren't at odds with art. 4 and 5 of Regulation n° 772/04/CE.

Finally, the parties should be free to set their selling prices of the products charged to third parties; (they) are ineligible those clauses that determine the prices, discounts for products, limits the production or sale of products or requiring the licensee to make the production in a single place.

As just seen, license conditions of a patent may be more or less simple in relation to a number of factors taken into consideration.

In fact, from a standard licensing contract with two parts, it is possible to arrive at multilateral agreements relating to patents, patents pool.

The European Commission in 2004 issued the guidelines for agreements on technology transfer[26]. In particular, it defines technology pools agreements whereby two or more parties assemble a package of technology which is licensed not only to those participating in the pool but also to third parties. From a structural standpoint, the pool may have the form of simple agreements between a limited number of parts, of complex organizational arrangements through which the organization of licensing and technology is entrusted to an independent person[27].

The reasons that can lead to the creation of a pool are different. From the practical point of view, the negotiation of

<sup>25</sup> If a certain patent license is included within the block exemption, the provision of certain clauses in the agreement considered anti-competitive could still lead to foreclosure. This is a *hard core restriction* clause which, if included in the contract, makes potentially illegal the agreement under article. 81 CE Treaty. These basic restrictions are listed in art. 4 of the regulation and differentiated according to the relationship that exists between the parties of the agreement.

The ratio for this prediction doesn't aim at ensuring the exemption of technology transfer agreements containing restrictions which are not essential for economic efficiency and, at the same time, have serious anticompetitive effects. COMMISSIONE EUROPEA, Comunicazione della Commissione, *Linee direttrici sull'applicazione dell'art. 81 del Trattato CE agli accordi di trasferimento di tecnologia* (2004/C, 101/02), 27 aprile 2004.

<sup>26</sup> See COMMISSIONE EUROPEA, Comunicazione della Commissione, *Linee direttrici sull'applicazione dell'art. 81 del Trattato CE agli accordi di trasferimento di tecnologia* (2004/C, 101/02), 27 aprile 2004.

<sup>27</sup> These legal transactions allow the joint exploitation of inventions by two or more patents holders, which put together their own technologies stipulating agreements.

voluntary licenses[28] often involves complex procedures and high transaction costs[29] that can be overcome through the establishment of a pool, which becomes a means for joint exploitation of the technologies patented by different people and unique reference point for external parties interested in the negotiation of agreements relating to technology transfer.

The establishment of a pool[30] can effectively simplify the issues arising from blocking patent[31].

A research conducted in 2001 in the U.S.A., demonstrated that the sales of products developed according to the patent that are subject of pools have reached a value of approximately 100 billion dollars[32].

It also happened that the pool in some cases have opened to competitive restrictions by creating or pushing the adoption of rules or industrial standards.

Concerning this, both the European Commission through the issuing of the guidelines and the American[33] Department of Justice (DOJ) urged the participants in the pool to avoid harmful situations of foreclosure for the development of an effective competition within the pool and with external people.

#### IV. BRAND'S ASSESSMENT

The trademark is an intangible asset that can be measured independently by methods used for the evaluation of other intangible assets.

From a qualitative point of view, assessment methodologies consider how the relationships between the company and its stakeholders are managed; from a quantitative point

assessment methodologies consider the value of meaningful relationships that the company establishes with the external environment.

Quantitative methods are divided as follows:

- methods based on empirical indicators;
- methods based on costs;
- financial methods;
- economic- income methods.

Methods based on empirical indicators, respecting the principles of rationality and generality, consider the data and information found on the market, for example, the price paid for the negotiations actually occurred. The indicator is a percentage or a multiplier applied to the size of the budget considered as a reference (eg revenue, net income, etc).

The use of such methods is recommended when application of other methods are impracticable but they are lacking in terms of rationality as lacking in theoretical basis. From a general point of view, they don't leave out of consideration the interests of the parties involved in the interaction.

Among the empirical methods recognized at the international level we find the Interbrand method: the brand value is determined by multiplying the flow of income that the it is able to generate for a given multiplication factor.

The multiplier expresses the potential future profitability of the brand and can be estimated through a detailed analysis of some critical factors that give strength to the brand; leadership; stability; reference market; internationality; trend; flexibility; marketing support, legal protection.

The methods based on costs estimate, in terms of costs incurred, the future economic benefits that can be generated by the resource being valued.

On the basis of cost configurations it is possible to identify some methods of estimation based on historical cost, on the revalued cost, on the replacement or reproduction cost and on the cost of the loss.

Historical cost[34] is represented by all costs directly attributable to the creation of the brand and to corporate image or all those factors that help to create confidence towards the company: the cost for the project design, the development, the registration, the life-sustaining, the penetration and the spread of the brand in the market.

The historical cost doesn't consider the changes in the purchasing power of money and other economic phenomena suitable for representing the current value of a business property, so it is necessary to define the revalued historical cost[35], which identifies the value of the brand by the re-

<sup>28</sup> The Industrial Property Code, paragraph IV of Inventions, according to article 81, Administrative procedures for voluntary license states: "1. - ' it is permitted to third parties that wish to produce for export active principles covered by supplementary protection certificates granted in accordance with Law 19 October 1991, n° 349, to start up with the holders of those certificates, at the Ministry of Industry, a procedure to issue voluntary licenses for a valuable in compliance with current legislation. - 2. - The licenses referred to the previous paragraph are valid only to export to countries where patent protection of its active principles is missing or has expired, including any supplementary protection certificate and in compliance with applicable regulations in the countries taken into consideration. 3. - The Ministry of Industry, after consulting the sector concerned, defines the criteria for the operation of the procedure referred to paragraph 1".

<sup>29</sup> There are frequent cases of *patent ticket*, or, holders of several patents, over which the negotiation of agreements for the sale / license of one or - as so often - more patents can become very complex from a point of view of content and timing, as well as economically burdensome. For any further information see among others: C. SAPHIRO, *Navigating the Patent Ticket: Cross Licenses, Patent Pools and Standard Setting, in Innovation Policy and the Economy*, vol. I, Adam Jaffe, Joshua Lerner, Scott Stern, Cambridge (USA), 2001.

<sup>30</sup> The establishment of a pool among several patent holders may be the only way to overcome the legal obstacles, regulating the use of different exclusive rights as well as the rights to exploit the inventions achieved.

<sup>31</sup> S.C. CARLSON defines the blocking patent as patents: « *which have claims that overlap each other in a manner that the invention claimed in one patent cannot be practiced without infringing the claims of the other patent and vice versa*».

<sup>32</sup> J. LERNER – J. TIROLE, *Public Policy toward Patent Pools*, draft prepared for NBER Innovation Policy and the Economy Conference, Washington D.C., 12 April 2007.

<sup>33</sup> US DEPARTMENT OF JUSTICE AND FEDERAL TRADE COMMISSION, *Antitrust Enforcement and Intellectual Property Rights. Promoting Innovation and Competition*, 2007.

<sup>34</sup> P. ONIDA, *Il bilancio d'esercizio nelle imprese*, Giuffrè, Milano, 1951, p. 57 e ss.; G. FERRERO, *La valutazione economica del capitale d'impresa*, Giuffrè, Milano, 1966, p. 149 e ss.

<sup>35</sup> See, among others, the contributions of A. AMADUZZI, *Contabilità e bilancio per l'inflazione*, in *Bilancio di esercizio e amministrazione delle imprese. Studi in onore di Pietro Onida*, Giuffrè, Milano, 1981; P.E. CASSANDRO, *Inflazione monetaria e bilanci annuali d'impresa*, in *Rivista dei Dottori Commercialisti*, 1975; U. DE DOMINICIS, *Svalutazione monetaria e rendiconti d'esercizio*, Bozzi, Genova, 1976; L. GUATRI, *Reddito e capitale in tempo d'inflazione: problemi di misurazione*, in *Scritti in Onore di Domenico Amodio*, Cedam, Padova, 1987; C. MASINI, *La dinamica economica nei sistemi dei valori d'azienda: valutazioni e rivalutazioni*, Giuffrè, Milano, 1963; A. PROVASOLI, *Adeguamento monetario e valori correnti nelle determinazioni di bilancio*, in *Rivista dei Dottori Commercialisti*, 1975; A.

expression, in current values, of the costs incurred in the past to develop the resource and not counted among the assets of the total assets. The value obtained represents the cost it would support today in order to have an intangible equivalent to that acquired in the past.

The reproduction cost is the sum of the charges which at the time of evaluation, it would be necessary to support in order to get a brand that has the same characteristics of the existing one and can boast the same reputation in the market.

There are two processes that allow the determination of this value: the analytical procedure that independently assesses all the information that are necessary to estimate, such as, unit prices, the temporal horizon over which to distribute the funds, the minimum required rate asked by the market for investments of equal risk level. The synthetic procedure is expressed in the formula, as follows:

$$V_r = MT \cdot C$$

where:

- $V_r$  is the replacement value "refurbished";
- $MT$  is the capitalization coefficient (or multiplier) expressed over the years. It indicates the duration of the process of rebuilding of the brand and varies in proportional measures to the value of it;
- $C$  is the configuration of the cost relative to the resources for the formation of a equivalent brand to the estimate one.

The method based on the cost of the loss has similar characteristics to economic income methods: the cost of the loss can be quantified as the difference between the income that the company makes using its own brand and that it would realize without it.

In the case of the mark, the use of such methods involves the determination of its value in function of the amount of past investments and not in function of future utility of the asset and the expected income.

Financial methods are based on discount cash flows that the mark can generate in future periods.

The difficulties in the precise identification of perspective financial flows that the mark will be able to generate has led some doctrines to prefer economic-income methods, which identify the mark value depending on the amount that it provides to the overall profitability of the company. For a number of years, it is necessary to discount back the differential result from the sale of a product with a mark and those attainable by the sale of a product without the mark taken into consideration.

The economic income method can be applied from the perspective of the seller and buyer using the following formula:

$$W_m = R_1 \cdot v + R_2 \cdot v^2 + \dots + R_n \cdot v^n$$

where:

- $W_m$  is the value of the mark;
- $R_1, R_2 \dots R_n$  are the differential incomes expected in the time;
- $v, v^2 \dots v^n$  are the discount coefficients of the expected differential incomes;
- $n$  is the number of predictable years of expected useful life of the mark; it expresses the life cycle of the brand, its protection and the predictable evolution of the market[36].

Substituting in the above formula the perspective middle income 'R', we will have the formula of the present value of n years:

$$W_m = R \cdot a_{n-i}$$

The royalty method[37] determines the value of the mark by using the data expressed by the market considering a brand's features, the economic sector and the features of market economy.

The value of royalties fluctuates between 2% and 20% of the sale proceeds in relation to the field of reference and it is applied to normal perspective billing, that are attainable through the sale of goods marked by the trade marks taken into consideration, in a period that fluctuates between 5 and 20 years.

The formula for determining the economic value of the brand is:

$$W_M = \sum_{t=1}^n \frac{F_t \cdot r}{(1+i)^t}$$

where:

- $W_M$  is the monetary value of brand;
- $r$  is the royalty;
- $F_t$  is the normalized value of the expected revenues;
- $n$  is the useful life of the intangible asset;

<sup>36</sup> W. KESSELRING, *La Valutazione dei Marchi*, Prisma, Marzo, 1990, pp. 10-11.

<sup>37</sup> Z. PAVRI, *Where a Value in a Trademark Lies*, CA Magazine, February, 1987.

TESSITORE, *Redditività dell'impresa in periodi d'inflazione*, Cedam, Padova, 1979.



$i$  is the discount rate

#### V. BRAND'S PROTECTION AND MANAGEMENT

Companies use brands as tools to communicate information to the market about the origin of goods marked or the quality of products offered. In the first case we talk of general marks, in the second one we talk about of special marks[38].

Trademarks can be seen as tools that serve the interests of entrepreneurs and consumers, acting as distinguishing marks because:

- entities capable of being separated from the product or service and this doesn't change the nature of the goods;
- entities capable of distinguishing the goods of a particular trader from the goods which, although they belong to the same class of products, are offered by other entrepreneurs.

Currently, consumers prefer a certain product, not only on the basis of objective information about the price and its main characteristics, but also because of the specific values that companies are able to associate using the tools of communication, such as merchandising, sponsorship and franchising[39]. In this sense, the marks feed two mechanisms: they induce farmers to maintain the quality of the products which they market and ensure the efficient functioning of the market.

The ability to identify the brand through a company and a contractor has increased the economic and social value of the latter inducing the legal doctrine toward a greater attention in issuing rules to protect it. Articles. 2569 Civil Code and 20 c.p.i., and art. 9 of Regulation n° 40/94 on the Community trademark shall recognize and protect the distinctive function of the brand. For those who undertake a specific administrative procedure in order to obtain recognition as a trademark is expected that:

- The right to exclusive use of the mark;
- The right to prosecute anyone who violates the patent right through specific measures against counterfeiting.

In fact, according to the letters b) of Art. 20 c.p.i. and art. 9 of Regulation No 40/94, a trademark owner has the right to prohibit third parties to "use in economic activity (...) an identical or similar sign to the registered trademark for identical or similar goods or services, if because of identity or similarity between the marks and identity or similarity between products or services, we can determine a confusion for the public, which may include a risk of association between the two signs".

<sup>38</sup> The general mark is a unique brand that is used for all products e.g. Fiat, Ferrero. The special mark is used by the entrepreneur when he wants to differentiate the various products of his company, or even different types of the same product, e.g. Panda, Nutella.

It is also possible the simultaneous use of both, so as to highlight both the unity of the source of production and product diversity.

<sup>39</sup> A. VANZETTI, *Osservazioni sulla tutela dei segni distintivi nel Codice della proprietà industriale*, in Rivista di Diritto Industriale, I, 2006

In order to have falsification due to confusion it is necessary to examine the similarity of the marks and affinity among products[40].

A mark owner can enjoy and dispose of the mark, like any landlord. Article. 23 c.p.i. provides that the mark may be sold or licensed.

In the first case, the patent right holder (donor) is stripped of his exclusive right to deliver it to another entity (assignee). In the second case the trademark owner (the licensor) agrees that a third party (licensee) uses the mark for a certain period of time and under certain conditions[41].

In addition, we can have full and partial assignments and licenses depending on the rights transferred. The licenses may be exclusive and non-exclusive, where the owner commits himself not to use it himself throughout the period of the license.

The contract of sale or license of brands is an act for a valuable consideration as it provides for the payment of a fee by the assignee or licensee. Usually that fee is paid in two payments: a minimum amount (minimum fee) and a periodic amount (royalties) that can be a fixed amount or may vary depending on sales.

The brand, if properly managed, can be an important source of wealth for its owner, since, as previously said, it includes the values of the company and of the entrepreneur .

In this regard, we have to remember that it is of public interest to ensure that the marks transmit correct information, as this information is based on the efficient functioning of the market.

In particular, as with art. 23 of the Code of Industrial Property, from the sale or license of a trademark there must not result deception about the character of goods or essential services in appreciation of the public.

Partial transfers involving similar products must also be considered illegal.

In conclusion, it should be noted that in recent years, the licensors of trademarks, especially of famous marks, have been worried to ensure that their licensees observed the social accountability through appropriate contractual clauses.

In fact, the most recent licensing agreements, through appropriate ethical clauses, provide that licensees don't take ethically unsustainable behaviors that may harm the good name of the licensor.

<sup>40</sup> Assessing the similarity of signs means submit them to a review in two phases:

- unitary and synthetic evaluation;
- assessment of control.

The first evaluation is intended to develop an overall appreciation about the similarity between the two marks, and it is focused on the elements that characterize them. The second assessment is a more analytical examination of the similarities and differences between the signs, to determine the salient features of the traits considered.

<sup>41</sup> The special rules relating to trademarks provides the free form for the transfer of the mark, even if the transcription requires the presence of a document in writing. So the in writing form becomes, for the sake of simplicity, the shape of the movement of the mark. At the European level art. 17 paragraphs 3 and 5, provides for the transfer the in writing form and the transaction with punishment of nullity.

## VI. CONCLUSION

In conclusion, it can be argued that the competitive advantage generated by certain immaterial part of corporate assets need to be protected and managed efficiently and effectively in view of the superior attractiveness of the business complex.

Therefore, this objective require the respect of two kind of conditions: subjective and objective

About the first, it is related to the role of the manager to implement a process of strategic planning and control within the company aims to create value through intellectual property management;

The second one is related to the role of institutions and the opportunity to modify legislation on intellectual property that has become obsolete, and less likely to present cases that occur gradually.

However, management, assessment and protection are the basic steps of the process to manage intellectual property, for this reason manager cannot withhold planning for the future of the entire organization.

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