SOME ASPECTS REGARDING METHODS UTILIZED IN PATENT VALORISATION

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Abstract—Paper presents some aspects regarding intangible assets evaluation principles, the necessity of companies' intangible assets evaluation, stages of valuation process, and the performance of scientific research due to the recovery of the patented invention

Keywords- evaluation, innovation, patent, valorisation

I. INTRODUCTION

N practice there are two options for framing intangible assets evaluation, recorded or unrecorded in the balance sheet. These are:

1) direct use in their own work; in this case it is natural that intangible assets should be considered as a component of capital and thus be evaluated together with other assets of the company;

2) indirect operation, which consists the transfer of an attribute or all attributes of ownership to another person. This transfer can be done by:

1) sale (transfer) all the rights to the intangible asset;

- 2) license agreements;
- 3) franchising;

4) joint venture contract.

II. EVALUATION PRINCIPLES OF INTANGIBLE ASSETS

Principles of evaluation of intangible assets are shown in Fig. 1.

For the valuation of intangible assets that are configured to be used in the current or in the near future entity activity, it may be recourse to the assumption of continued use of the asset / evaluation in use, while for assets that are not configured to be used in the current or future use, it is possible to begin from the exchange value premise and market participants willing to sell the intangible asset [1], [7].

This sale may be:

1) orderly sale of intangible assets in the state in which it is, active with active, after a normal market exposure, without regard to the usefulness resulting from the combination with other tangible or intangible assets; 2) forced sale of intangible assets, they are sold individually (active asset) by auction sale or other form of fast and after a short period of adequate market exposure.

Specifying the evaluation basis is depending on: market,

investment, usefulness, fair, liquidation and recovery value, as seen in Fig. 2.

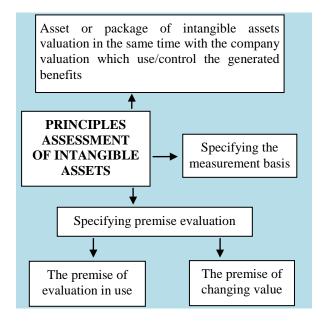


Fig. 1. Principles assessment of intangible assets

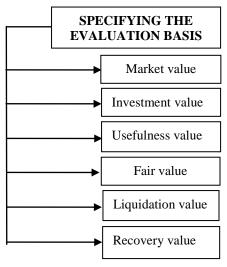


Fig. 2. Specifying the evaluation basis

III. NECESSITY OF COMPANIES' INTANGIBLE ASSETS EVALUATION

Valuation of intangible assets is required in the following situations [2], [5]:

1) Transactions - intangible assets are traded frequently as independents assets. Trademarks and patents are often sold to businesses, thus necessitating their evaluation;

2) The accounting requirements - following the

acquisition, the buyer must record the intangible asset in the balance sheet;

3) By associations of undertakings - often two companies are making an association in order to operate an object of intellectual property;

4) Licensing - the owner of the intangible asset obtain a licence, it must be calculated the licence value in the way to determine the amount of the license fee;

5) Financing - if the intangible asset represents a significant share in the assets of an entity, if a credit application, it is possible that the bank demand to request the evaluation of patents, trademarks and copyright in order to guarantee the loan;

6) Divorces - the division performed after a divorce is necessary, sometimes, the patents evaluation owned by one spouse;

7) Compensation for counterfeiting - is an increase in disputes caused by infringement of trademarks and patents and need assessments for determining compensation;

8) Transactions inside the company - the transfer of patents and trademarks, between entities of a group requires determining the fair value thereof;

9) The tax on property - patents, trademark or copyright, as parts of the property must be valued because they can be donated by the owner. Because they are carrying value, it must be known to determine taxes related to donation;

10) Bankruptcy - are necessary assessments of intangible assets on the premise of forced sale in order to determine the net asset liquidation.

IV. STAGES OF EVALUATION PROCESS

The evaluation process is a set of procedures carried out an appraiser to determine a specific type of intangible asset value.

In a general sense, any evaluation process involves four steps [6]:

1) Setting problem to be solved;

2) Obtaining and analyzing data;

3) Testing and / or evaluation;

4) Drawing conclusions.

Evaluation of intangible assets is no exception in this way, in the sense that involves steps shown in Fig. 3.

The first stage of the evaluation process is to identify the evaluator's mission. In this first step, it sets out to solve the problem, aiming to eliminate any ambiguity or misunderstanding on the valuation of the intangible asset. In general, this phase includes the following points [2]:

identification of the subject intangible asset valuation;
indication of ownership evaluated on the subject

intangible asset valuation;

3) identification of the owner of the intangible asset;

4) identify the characteristics of intangible asset, possibly the best use analysis;

5) valuation date;

6) assessment purposes;

7) customer and recipient of the evaluation report;

8) standard of value and valuation premise;

9) assumptions and limiting conditions.

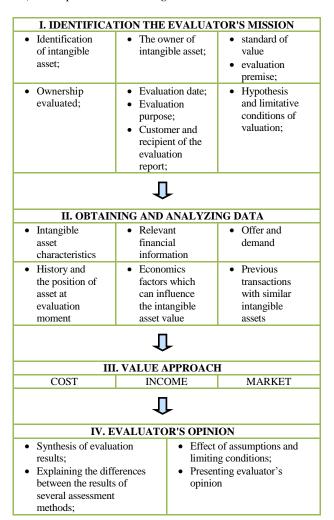


Fig. 3. Evaluation process stages

The second stage of the evaluation process is the collection and analysis of data. This stage refers to:

1) characteristics of the intangible asset;

2) history and its situation at the time of evaluation;

3) relevant financial information;

4) external economic factors that can affect the value of the intangible asset;

5) supply and demand variables that intangible asset and / or products and services made by contributing analyzed the intangible asset;

6) previous transactions with similar intangible assets (like).

The third step is to use toolbox assessor or application of the three approaches: cost, income and market.

The evaluation process is completed by setting the final opinion of the evaluator. This review is the result of professional judgment, based on previous experience in

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the field, estimated to be reasonable and justified, based on the results of the methods used in the evaluation process [5].

To become an important intangible business assets patents must meet several conditions such as:

1) To be applied accordingly to produce benefits;

2) The patent must be in consistence with consumer requirements;

3) The patent creates a new market segment or develops an existing segment;

4) Can be the subject of a transfer of rights under the license;

5) Costs of patenting procedures at OSIM, as well as maintaining existing ones are relatively small compared to the benefits obtained by applying the patented invention;

6) The subject invention / group have multiple uses patented invention;

7) The decisions of the courts as a result of litigation between the parties do not affect the value of the patent determined.

V.PERFORMANCE OF SCIENTIFIC RESEARCH DUE TO THE RECOVERY OF THE PATENTED INVENTION

Patented invention is an essential component of applied research that takes place in academia, as a tool to assess the scientific performance, but also an important indicator of the level of economic development [4].

In universities, departments of their research are conducted applicative research; their evaluation is performed and, in terms of patented inventions registration reflects the recognition of academic prestige of the university.

Performance evaluation of the academic community is made according to the following criteria:

- 1) The fundamental research, each teacher / researcher reports:
- *a)* number of books published in the country and abroad;
- *b)* number of publications in professional journals with impact factor best possible;
- *c)* number of scientific papers at national and international events;
- *d*) number of citations by other authors in their publica- tions.
- 2) In the applied research report:
- *a)* number of products and technologies developed;
- *b)* number of patents registered in the country and abroad;
- *c*) the number of technology transfers made.

In universities, scientific articles published taking into account innovative ideas coming from research is done by ensuring priority to patent activity and also with the agreement of the beneficiary research. In these cases, the only notification of scientific work carried out remains patent.

In recent years, in Romania the number of patent applications registered with the State Office for Inventions and Trademarks Bucharest increased from 1003 applications in 2000 to 1477 in 2002, marking a dramatic decrease in 2003, to only 881 patent applications the invention recorded.

Statement filed with OSIM patents in recent years is shown in Table.1.

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The analysis of statistical data shows the following: 1) A fluctuation of the number of CBI between 2009 and 2013, with increased compared to previous years (2000-2003);

- 2) The same growth of other objects of intellectual property, utility model registration, trademarks and designs, etc.;
- *3)* Not specified in this statistic how many patents are applied in practice;
- 4) Not specified what value was recorded in the accounting records related to intellectual property transferred products.

Years ago, academic work was oriented to research and transfer of knowledge and the interest in academics for making inventions was highlighted by the fact that their achievements were oriented high-tech fields.

Today, processes are more diverse research (basic research, applied research, development of new technologies).

In the polytechnic profile, applied research is focused on specific specializations departments/centers of excellence and relates to topical areas (public interest) to be economically justified. It is envisaged develop technical solutions, simulation manufacture, development and testing of experimental models, ending with their technological transfer of an undertaking. Among the results of scientific research, there is little applied research based on the achievement of a patented invention that are driven by industrial application, many of the patents obtained in phase leaving only potential source of technology transfer (licensing, assignment, etc.) or as indicators of scientific track record in the public domain [2], [3].

Scientific work is not subject to strict rules of writing in form and contents; therefore it may, without limitation, items that meet greater expectations on scientific foundations, methods of experimentation /case studies.

From the scientific point of view, the patent is as relevant as a publication with international circulation and from socio-economic point of view patent may be superior to publication.

For a correct benchmarking, must be analyzed a number of attributes (validation publication, public dissemination, support and authority regulations, the novelty and/or originality of the information, timeliness of scientific information, ensuring certainty of scientific priority, the degree of protection rights of the consistency of writing, valorization possibilities, expenses related to publishing, indexing).

Scientific papers submitted for publication in a professional journal (domestic/foreign) volume of a scientific or national/international is analyzed by a panel of scientific reviewers - specialists in that field within an academy/university/research institute/associations with levels of stringency more or less stringent, in order to validate publication.

In analyzing the work, reviewers have take into account the degree of novelty and originality of the information transmitted by the author revealed by the number and frequency of citations for publications value or prestige of the journal in which it appears.

To patent an innovative idea/novelty scientific information, it must be described according to strict procedures regulated by national legislation and international conventions, the description transmitted being analyzed, in panel, by specialists with uniform levels of stringency and exclusively by identification the elements of novelty and having an inventive contribution. From the moment of decision to publish summary description, it is made public in the Official Bulletin of Industrial Property. After substantive examination and verification of the claimed novelty in relation to all public documents known worldwide and highlighting the contribution inventive take decision to grant a patent to be published in the Official Bulletin of Industrial Property, and will be issued patent.

It's good as new scientific information to be recorded for the patent first and then made public in a professional journal or a scientific conference volume.

Degree of protection of the rights of the judicial function is high because of patent protection in comparison with the relatively low level of scientific paper published by the effect of copyright.

Consistency of writing a description of the patent is raised, as required by strict rules and require virtually

universal drafting net highlight (in claims) the novelty and original contribution.

Possibility capitalization of scientific papers published is reduced to exchange scientific prestige and affirmation, unlike patents that can be exploited by assignment, licensing, know-how, monopoly practices.

VI. CONCLUSIONS

Patents are the first and the most recent description of a product/process or method and usually precede publication.

Patent came to be ranked as a paper published in a international journal indexed ISI, being, at this point, in Thomson Reuters ISI database, but very little marked in the reporting sheets of scientific activity.

Rules CNATDCU of institutional assessment research provide patents recognized at national level and approved patents abroad, namely those awarded, in recognition of international prestige.

Some additional observations are:

1) ISI scientific papers are assigned as copyright organizers, who had done such a record / library of scientific data;

2) Order PhD disseminates research results in the early years of doctoral training lead to the disclosure of yet unprotected achievements;

3) Lack of clear procedures regarding "service invention" under L83 / 2014 and European regulations for Romanian researchers from universities, research institutes, and those working in organizations with foreign capital, creates confusion the rights deriving from the exploitation of the invention.

REFERENCES

- [1] F.C. Evans, Valuation for M & A: Building Value in Private Companies. Ed. John Wiley & Sons, 2001.
- [2] T. Iclănzan, Valorificarea invenției brevetate (Patent valuation). Timișoara: Editura Politehnica, 2005.
- [3] R.F. Reilly, Valuing Intangible Assets. Ed. McGraw Hill, 1998.
- [4] D. Săvescu, Proprietate intelectuală (Intellectual Property). Cluj -Napoca: Editura Risoprint, 2015.
- [5] G.V. Smith, Intellectual Property Valuation. Ed. John Wiley & Sons, 2005.
- [6] S.V. Stan, Evaluarea activelor necorporale (Intangible assets valuation). București: Ed. IROVAL, 1999.
- [7] *** SR 13547 1/2/3/4. Model de dezvoltare a afacerii prin inovare (Business Innovation Developing Model). Standard Român, Bucureşti, ASRO, 2012.