The reasons for evaluating and valuing patents

*Patent valuation and commercialisation – making the most of patents for business*

*European Patent Academy, Athens, Greece, 20-21 March, 2014*

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BGW AG – Spectrum of Competences

The IP and Innovation Management Spin-off from University of St. Gallen

Strategic Business Development
- Business Model Innovation
- Creating Blue Oceans
- Culture of Innovation and Leadership

Innovation Management
- Open Innovation and Crowdsourcing
- Early Innovation Phase and Lean Innovation
- Service Innovation

Intellectual Property (IP) Solutions
- IP Strategy and Processes
- St. Gallen Patent Index™ (SGPI™)
- Evaluation, Valuation and Exploitation of IP

Consulting
Network Projects
Benchmarking Audits
Interim Management
Coaching
The Impact of a Patent Portfolio on Company Success

What value has a valuable patent portfolio for the company?

Generation, valuation and exploitation of patents

Company success

Creation of competitive advantages through systematic product management
- Strategy
- Processes
- Methods
- Structure
- Culture

Using competitive advantages by the company
- Market dynamics
- Competitive Environment
- Product characteristics
- Technology maturity
- Country specifics
- War chest

Patent portfolio
1. Strategic position
2. Quality
3. Quantity

Linking patents with products and technologies

Source: Gassmann & Bader, 2011

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European Patent Academy, Athens, Greece, March 20-21, 2014 | The reasons for evaluating and valuing patents
**BGW’s St. Gallen IP Management Navigator™**

A holistic approach based on a focused strategy is the recipe for success – Continuous performance analysis supports the implementation

<table>
<thead>
<tr>
<th>IP Management Levels</th>
<th>Analysis / Controlling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IP Strategy</strong></td>
<td><strong>St. Gallen Patent Index™</strong></td>
</tr>
<tr>
<td>→ Framework and Target Setting</td>
<td></td>
</tr>
<tr>
<td><strong>Core Dimensions of an IP Strategy</strong></td>
<td><strong>IP Benchmarking</strong></td>
</tr>
<tr>
<td>I. Freedom to Operate</td>
<td></td>
</tr>
<tr>
<td>II. Differentiation</td>
<td><strong>IP Audit</strong></td>
</tr>
<tr>
<td>III. Multiplication</td>
<td><strong>KPI</strong></td>
</tr>
<tr>
<td><strong>Processes, Organisation / Infrastructure</strong></td>
<td></td>
</tr>
<tr>
<td><strong>St. Gallen Patent Portfolio Mgmt. Approach</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Operational Level</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Innovation and IP Culture/ Communication</strong></td>
<td></td>
</tr>
<tr>
<td>→ Sustainable Change</td>
<td></td>
</tr>
</tbody>
</table>

**Core Dimensions of an IP Strategy**

- Freedom to Operate
- Differentiation
- Multiplication

**Processes, Organisation / Infrastructure**

- Conceptual Design

**St. Gallen Patent Portfolio Mgmt. Approach**

- Concrete Results

**Operational Level**

- Conceptual Level

**Innovation and IP Culture/ Communication**

- Sustainable Change
IP creation as an important aspect of value creation

Which of the listed IP related challenges are the most important for your company? (max. 3 answers)

- Internal creation of IP: 67%
- Value maximization of existing IP: 50%
- Valuation of IP: 41%
- Filing / registration of IP: 33%
- Acquisition of IP: 26%
- Management of IP portfolio risks: 22%

Source: Study "Exploiting intellectual property in a complex world", PwC 2007
There are numerous reasons for valuing patents

- **Management driven reasons**
  - Allocation of budgets
  - Monitoring and control of research and development
  - Management of patent portfolio
  - Remuneration for employee inventions

- **Financing and accounting driven reasons**
  - External financing / equity capital financing
  - Patents as securities for loans
  - External reporting (accounting)
  - Voluntary capital market information

- **Tax driven reasons**
  - Shifting of business functions
  - Transfer prices

- **Transfer driven reasons**
  - Acquisition / disposal / merger / joint venture of companies holding patents
  - Cross-licensing
  - Strategic alliances

- **Conflict driven reasons**
  - Determination of compensation
  - Liquidation, insolvency
Study on Patent Valuation Practices in Europe

- Study on 'The practice of evaluation of technologies and patents'
- Collaborative research conducted for PricewaterhouseCoopers (PwC) by the Institute of Technology Management at the University of St. Gallen (ITEM-HSG), Switzerland and its Innovation and IP Management spin-off BGW AG, and Shearman & Sterling LLP
- Europe's top 500 applicants before the European Patent Office
- http://www.bgw-sg.com/
Five Theses on Patent Valuation Practices:

1. In the knowledge economy, technologies and patents are still expected to be important.

2. Patents are highly assessed but treated modestly.

3. Nature and scope of the valuation occasions indicate that there is considerable untapped value.

4. Income-based valuation approaches are the most widely used in companies.

5. Companies would welcome a generally recognized valuation approach.

Thesis 1: In the knowledge economy, technologies and patents are still expected to be important

![Bar Chart]

1 = is negligible
2 = is important
3 = is quite important
4 = is important
5 = is one of the most important drivers of success


Figure 2. Patents as drivers of success
### Thesis 2: Patents are highly assessed but treated modestly

#### Figure 3. Occasions for valuation of patents and technologies

<table>
<thead>
<tr>
<th>Occasion</th>
<th>1 (never)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (often)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance of patent PF</td>
<td>1.6%</td>
<td></td>
<td></td>
<td></td>
<td>3.8%</td>
</tr>
<tr>
<td>Remuneration of employees</td>
<td>3.3%</td>
<td></td>
<td></td>
<td></td>
<td>3.6%</td>
</tr>
<tr>
<td>Control of R&amp;D</td>
<td>6.7%</td>
<td></td>
<td></td>
<td></td>
<td>3.3%</td>
</tr>
<tr>
<td>Distribution of budgets</td>
<td>6.7%</td>
<td></td>
<td></td>
<td></td>
<td>3.3%</td>
</tr>
<tr>
<td>Cross-licensing</td>
<td>8.3%</td>
<td></td>
<td></td>
<td></td>
<td>2.8%</td>
</tr>
<tr>
<td>Strategic alliances</td>
<td>10.0%</td>
<td></td>
<td></td>
<td></td>
<td>3.1%</td>
</tr>
<tr>
<td>Purchase/Sale of company</td>
<td>10.0%</td>
<td></td>
<td></td>
<td></td>
<td>2.6%</td>
</tr>
<tr>
<td>External reporting</td>
<td>21.7%</td>
<td></td>
<td></td>
<td></td>
<td>2.5%</td>
</tr>
<tr>
<td>Compensation for damages</td>
<td>22.0%</td>
<td></td>
<td></td>
<td></td>
<td>2.5%</td>
</tr>
<tr>
<td>Loan Collateral</td>
<td>23.3%</td>
<td></td>
<td></td>
<td></td>
<td>1.4%</td>
</tr>
<tr>
<td>Voluntary information</td>
<td>30.0%</td>
<td></td>
<td></td>
<td></td>
<td>2.1%</td>
</tr>
<tr>
<td>Debt/Equity financing</td>
<td>30.0%</td>
<td></td>
<td></td>
<td></td>
<td>2.1%</td>
</tr>
<tr>
<td>Liquidation, insolvency</td>
<td>31.7%</td>
<td></td>
<td></td>
<td></td>
<td>1.3%</td>
</tr>
<tr>
<td>Transfer pricing</td>
<td>32.8%</td>
<td></td>
<td></td>
<td></td>
<td>2.5%</td>
</tr>
<tr>
<td>Transfer of functions</td>
<td>34.5%</td>
<td></td>
<td></td>
<td></td>
<td>2.0%</td>
</tr>
</tbody>
</table>

Thesis 3: Nature and scope of the valuation occasions indicate that there is considerable untapped value...

Figure 5. Patents with blocking effect and patents used by the companies themselves

… However, the companies' perception is that value-oriented innovation management is well established.

Figure 6. Value-oriented innovation management

Valuation approach types should not be seen as opponents

In this section, we present a table comparing the strengths and weaknesses of monetary and non-monetary valuation approaches.

<table>
<thead>
<tr>
<th>Valuation approach</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
</table>
| Monetary           | - Can be used for all valuation occasions.  
                    - Has the potential of being standardized and is comparable in different companies.  
                    - Can fundamentally be aligned to the needs of both the capital market and the company. |
|                    |           | - Many different methods  
                    - Standardization and comparability not yet fully developed |
| Non-monetary       | - Often tailored to the circumstances of the particular company  
                    - Can easily be adjusted to changes in requirements |
|                    |           | - Not suitable for capital markets or accounting purposes  
                    - Isolated solution |

All main valuation approaches are used in practice

How often are monetary valuation methods applied?

<table>
<thead>
<tr>
<th></th>
<th>1 (never)</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5 (often)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.6</td>
</tr>
<tr>
<td>Reproduction costs</td>
<td>26.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Re-purchase costs</td>
<td>35.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.8</td>
</tr>
<tr>
<td>Market prices in an active market</td>
<td>30.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analogy method</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income Approach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.5</td>
</tr>
<tr>
<td>Direct cash flow forecast</td>
<td>24.5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relief from royalty</td>
<td>27.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-period excess earnings method</td>
<td>28.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incremental cash flow method</td>
<td>22.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.1</td>
</tr>
</tbody>
</table>

Figure 7. Frequency of use of monetary valuation approaches and methods
Thesis 4: Income-based oriented valuation approaches are the most widely used in companies

Figure 8. Occasions for valuation of patents and technologies

Thesis 5: Companies would welcome a generally recognized valuation approach...

Figure 11. Importance of generally recognized valuation methods

Summary
The Five Theses on Patent Valuation Practices Based on the Valuation Study

1. In the knowledge economy, technologies and patents are still expected to be important.

2. Patents are highly assessed but treated modestly.

3. Nature and scope of the valuation occasions indicate that there is considerable untapped value.

4. Income-based oriented valuation approaches are the most widely used in companies.

5. Companies would welcome a generally recognized valuation approach.

The new value question:
'What is beyond classical IP protection and its exploitation as value basis?'

Some anonymised quotes:

- "We are not interested in the $-value of our IP: It is meaningless – it changes from day to day."

- "The new question is: 'Is IP right?' – Should one instead of building IP fortresses build other fortresses?"
Thank you for your attention.

Dr. Martin A. Bader
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