IP valuation case study

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Case study: Valuation of *"Research Microscope Technology"*

Client:

Hungarian research institute

Specialisation:

Optical and microscopy equipment + software development

Technology market:

Cutting-edge brain research and pharmaceutical development

Potential products using the technology:

Custom built laser scanning microscopes + software











"Research microscope technology"

- Patented technology and associated know-how/trade secrets
- Technology was already fully developed and demonstrated
- Operational prototypes existed
-but technology was not integrated into any microscope products

Research & Development phase			Commercialisation phase
-Research -Technology development	-Introducing technology into product -Software		-Licensing-out of the technology -Establishing spin-off company
-Testing	programming -Testing		

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Technology development level on the date of valuation



Decision-making (management)

- Specfic portfolio management decisions
- Resource allocation decisions
- Support the decision to further invest into prototyping, testing

	Research & Development phase	e	Commercialisation phase
1.	Technology development and testing	Introducing technology into product, software programming, testing	Licensing-out of the technology, establishing spin-off company
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2.	Technology development and testing	Introducing tech <mark>nolo</mark> gy into product, software programming, testing	Licensing-out of the technology, establishing spin-off company
3.	Technology cevelopment and testing	Introducing technology into product, software programming, testing	Licensing-out of the technology, establishing spin-off company
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4.	Technology development and testing	Introducing technology into product, software programming, testing	Licensing-out of the technology, establishing spin-off company

Decision-making (licensing)

- Is licensing-out worthwhile?
- Acceptable terms and conditions for licensing agreement
- Benchmark value for use in negotiations



III. Communication

Communicating the significance of IP to potential partners,

licensees

Independent opinion about value



. Value Creation

- Identifying key uncertainties surrounding the technology
- Adding value to IP assets before negotiating with potential license partners





Challenge:

How do we assess the value of technology / intellectual property?



Choosing the appropriate IP valuation methods

The valuer must consider a number of key aspects:

What exactly is the IP asset being valued?	
What will the valuation results be used for?	
Client (For whom is the valuation being done?)	
Valuer (Who is doing the valuation?)	
The date of the valuation	
Information available and accuracy of information / available sources	



Commonly used IP asset valuation approaches

quantitative

qualitative

Assessment of the monetary value of IP

Cost Based	Market Based
approaches	approches
Income Based approaches	(Option pricing based approaches)

Analysis of IP based on factors which influence it's value.

Value driver based approaches

Cost based approaches



The cost to create IP asset = IP value

Calculation of costs incurred in the development of;

- the IP asset under valuation,
- a similar IP asset in-house, or
- a similar IP asset externally.

Result: IP value in EURO / \$ / HUF

Market based approaches



Price of comparable IP traded between parties = IP asset value

Comparison with prices achieved in recent comparable transactions

Result: IP value in EURO / \$ / HUF

Income based approaches



Future income from IP asset

= IP asset value

Estimating the potential future income

from IP asset and associated risks

Result: IP value in EURO / \$ / HUF

Value driver based appoaches



Scoring of IP based on the quality of related factors

Provides a value guide through scoring of different factors related to the IP.

These factors or "value drivers" can influence the value of the IP asset both positively and negatively .

Result: IP value displayed as a score

Choosing the appropriate IP valuation methods



What exactly is the IP asset being valued?		
What will the valuation results be used for?		
Client (For whom is the valuation being done?)	7	
Valuer (Who is doing the valuation?)	Z	
The date of the valuation		
Information available and accuracy of information / available sources	7	



Our working group

- Inventor, project team leader
- Technology / industrial property professional
- Legal professional
- Market professional





Model commercialisation scenario





"Qualitative analysis using value drivers" method





Results:

"Qualitative analysis using value drivers" method

- Uncertainty-opportunity "profile"
- Analysis and scoring of 50 value drivers
- Uncertainty opportunity matrix

Indicates issues that should be addressed

• Highlight uncertainties which could pose a problem in the development and commercialisation of the technology

Identify opportunities that could be further elaborated



Discounted cash flow (DCF) method



 Determined the potential cash flow from the technology using the model commercialisation scenario

 Discounted the future cash flow using appropriate discount rate related to the perceived level of risk





Results: Discounted cash flow (DCF) method

- Model commercialisation scenario
- Key data about forecasted costs
- Forecasted income information
- IP asset value in Euros /HUF

- Projections of future costs of IP asset
- Projections of future income from IP asset
- Estimations of development and commercialisation risks



Graphical results of discounted cash flow method







Decision-making (management)

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- Resource allocation decisions
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Decision-making (management)

- Specific portfolio management decisions
- Resource allocation decisions
- Support the decision to further

invest into prototyping, testing



Results supported the

decision to further invest

into the technology



Results supported the

decision to go ahead with

licensing activity



Decision-making (licensing)

- Is licensing-out worthwhile?
- Acceptable terms and conditions for licensing agreement
- Benchmark value for use in

negotiations



The valuation created a viable

commercialisation scenario



Results provided data about potential

partners



Monetary results gave benchmark values

for future license negotiations



III Communication

- Communicating the significance
- of IP to potential partners, licensees
- Independent opinion about value



The results will be used to communicate the significance of the technology to potential partners



· IV. Value Creation

- Identifying key uncertainties
 surrounding the technology
- Adding value to IP assets before negotiating with potential license partners

Highlighted uncertainties related to the technology, which could have been
 potential hurdles during license
 negotiations



Management team were able to isolate

and remove a number of uncertainties





The value of the IP was increased

The optimisation of the technology transfer process towards value creation can lead to more successful transfers and increased income from IP assets

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Thank you

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Useful links

Hungarian Patent Office website:

www.mszh.hu (Hungarian), www.hpo.hu (English)

IPScore[®] software launch page:

http://www.epo.org/patents/patent-information/business/valuation/ipscore.html

United Kingdon Intellectual Property Office IP Healthcheck:

http://www.ipo.gov.uk/iprpricebooklet.pdf

WIPO IP Panorama:

http://www.wipo.int/sme/en/multimedia/

IP Valuation Forum:

http://ipvaluation.hpo.hu/

