

# *Patents for Windpower Technology – Introduction and Guidelines from a Patent Authority*

## **Overview of the Tutorial**

This tutorial session offers you the opportunity to learn directly from patent examiners, as they share their experience and knowledge of patent protection issues. Topics will include novelty, inventive step, computer-based patents, infringement/opposition case study and grace period. The tutorial is directed at professionals working within the field of intellectual property (IP), researchers at universities and people at R&D departments in the windpower industry. The purpose of the tutorial is to improve your IP knowledge and raise your IP awareness.

## **Summary of Topics**

The following general topics will be covered in the tutorial. Please refer to the attached agenda for more information.

1. *Introduction to the world of patents*
2. *Research*
  - *Avoiding problems with early publication*
3. *Industry*
  - *Wind turbine modelling – a computer-based patent*
  - *A potential solution to avoid infringing on others' IP rights*
4. *Case study*

## **Organization of the Tutorial**

The topics listed above will be covered in a half day session. This gives you an opportunity to discuss important intellectual property questions and issues with a patent examining authority. The speakers are patent examiners from the Swedish Patent and Registration Office (PRV) handling applications within the fields of power and systems, electronics and windpower technology.

PRV is a fee-financed central government agency that is based in Stockholm and has around 450 employees. PRV is over 100 years old and was one of the first Patent Cooperation Treaty (PCT) authorities in the world.

The Patent Department handles national and international patent applications, and develops and maintains the patent system in Sweden. Through international partnerships, we ensure that Sweden plays a key role in international developments. The task of the Patent Department also includes disseminating information and knowledge about the patent system.

The Patent Department comprises eight search and examining divisions which perform the novelty searches and the substantive examination. We have approximately 160 patent examiners at our disposal. PRV also has a specific department, PRV InterPat, which offers a wide range of consultancy services. PRV InterPat has more than 60 years of experience in supporting the industry by providing knowledge and information.

## **Abstract of the Tutorial**

Windpower is expanding phenomenally in Sweden, as well as in the other Nordic countries, and future prospects for export and green trade look very bright. Patent applications concerning wind power technology have also increased dramatically during the recent years.

In today's commercial world, significant investment is made in research and development work, e.g. within windpower technology. A solid patent policy, therefore, provides crucial investment protection while also opening up IP resources for broad implementation across the industry, as well as at universities.

Topics will include novelty, inventive step, computer-based patents, infringement/opposition case study and grace period. These, and other important questions and issues, will be discussed from the perspective of a patent examining authority.

# *Patents for Windpower Technology – Introduction and Guidelines from a Patent Authority*

## **Introduction**

Intellectual Property (IP), in general, concerns the protection of tangible and intangible property. IP provides material awards and recognition to both inventors and contributors in return for their investments. IP also motivates the dissemination of scientific and technological information, which in turn stimulates research and development that improves our quality of life.

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The Swedish Patent and Registration Office (PRV) as a national and Patent Cooperation Treaty (PCT) authority has built up a strong solid knowledge of this technical area. In 2007 a dedicated windpower team was formed to create a bridge between PRV and the industry. The team members have visited leading international companies in the wind energy sector and participated in a variety of workshops, in order to gain a deeper insight into the technical problems, future trends and state of the art of windpower technology.

A key problem within academia is a lack of IP awareness. At the European Patent Forum 2009, Gillian McFadzean, Director of Technology & Research Services at the Heriot-Watt University in Edinburgh, said that academia in particular feels a disconnection within the innovation system. This highlights the need to bridge the gap between the industry, which traditionally has a stronger IP awareness, and academia.

This tutorial session offers you the opportunity to learn directly from patent examiners, as they share their experience and knowledge of patent protection issues. Practical strategies and an informative case study will be presented in order to improve your IP knowledge and raise your IP awareness. If you feel that any important questions or issues are missing, please do not hesitate to contact Mr Giannoccaro.

## Preliminary Programme

**Session 1** (45 min): Introduction to the world of patents

- PRV and PRV InterPat (our place and role in the world)
- Our services (PCT, SIS, national applications, etc.)
- A short introduction to patents (novelty, inventive step, etc.)
  - How do we work as examiners (databases and strategies)?
- Discussion

**Session 2** (60 min): Research

- Avoiding problems with early publication
  - First publish and then apply for a patent OR apply first and then publish?
  - Would a grace period be a solution? What is the situation in the rest of the world compared to Europe?
- Discussion

..... **Break** .....

**Session 3** (60 min): Industry

- Wind turbine modelling – a computer-based patent
- A potential solution to avoid infringing on others' IPR rights
  - Freedom to operate
- Discussion

**Session 4** (60 min): Case study

- Infringement or opposition within the windpower industry
  - Strategies
- Enercon vs. Vestas
- Discussion

## Speaker Details

### Rune Bengtsson

Mr Bengtsson received the degree of M.Sc. in Electrical Engineering from the Technical University of Lund (LTH) in 1985, and has worked at the Swedish Patent and Registration Office (PRV) in Stockholm since then. His technical fields today are mainly antenna and microwave technology, but over the years he has been responsible for different technical fields. He is active in the development of guidelines for the examiners at PRV, and is a senior patent examiner. He is also part of a special group of examiners whose aim is to get a deeper insight into the upcoming windpower technology in order to meet future needs at PRV.

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### Dr Ervin Dubarić

Dr Dubarić received the degree of Ph.D. in Solid State Electronics from the Royal Institute of Technology (KTH) of Stockholm in 2002. His main research area was the development of simulation models for semiconductor devices in silicon carbide and gallium arsenide. In 2002, he joined the Electronics Design Division at the Mid Sweden University in Sundsvall (Sweden) as a Senior Lecturer. During the period 2003-2006 he worked as a simulation expert at Qimonda AG in Dresden (Germany). Since 2007, he has worked at the Swedish Patent and Registration Office (PRV) as a patent examiner. His technical fields today are solid state technology, electronics and semiconductor devices. He is also part of a group of special examiners whose aim is to get a deeper insight into the upcoming windpower technology in order to meet future needs at PRV.

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### Dimitris Giannoccaro

Mr Giannoccaro received the degree of M.Sc. in Electrical Engineering (with a major in electric power systems) from the Royal Institute of Technology (KTH) of Stockholm in 2006. After his studies, he worked with the consulting company Ecofys GmbH in Berlin specializing in renewable energy. Since 2007, he has worked at the Swedish Patent and Registration Office (PRV) as a patent examiner. His technical fields today are power and systems, electronics and windpower technology. He is also part of a special group of examiners whose aim is to get a deeper insight in the upcoming windpower technology in order to meet future needs at PRV.

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## Keywords

Novelty, inventive step, obviousness, skilled in the art, freedom to operate, licensing, patent strategies, grace period, infringement, opposition