



**SIEMENS**

WIPO Conference on Green Technologies

6 September 2013

**IP, Technology Transfer and Dispute Resolution in the Energy Sector**  
**Contract Negotiations, IP and Dispute Resolution**

# Agenda

**Why IP matters in the Wind Power Industry**

**Where IP matters in Commercial Contracts**

**An approach to Dispute Resolution**

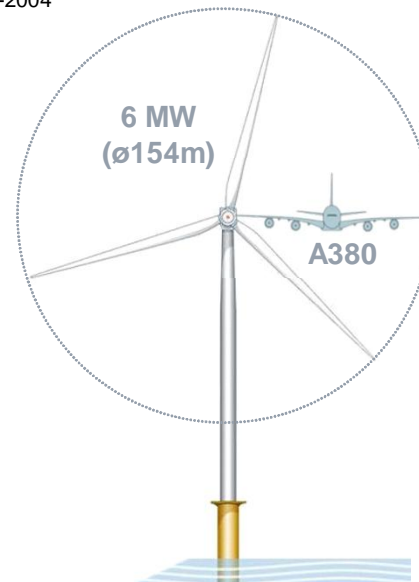
# Evolution of the Wind Power Industry

Facts at a glance*	1980	1995	2004	2012
WTG nominal capacity	50 kW	500/600 kW	2/3 MW	up to 7 MW
WTG rotor diameter	15 m	40/50 m	90/100 m	up to ~171 m
Installed base worldwide		3.400 MW	48.000 MW	282.275 MW
% of total electricity consumption in Europe			2,5 %	7,0 % (231 TWh)

\* Source: BTM Consult Aps, Ten Year Review of the International Wind Power Industry 1995-2004  
 WWEA World Wind Energy Report 2012  
 EWEA Wind in Power 2012 European Statistics



450 kW  
(ø35m)



# Evolution of the Wind Power Industry

## Prospects and challenges

Levelized cost of electricity for wind power plants in average have been and are still higher than for conventional power plants (e.g. oil, gas)

Past evolution was substantially driven by political targets and government subsidies

Although political targets are upheld, government subsidies are starting to get reduced

Hence reaching **price parity** with conventional energy production by getting down the cost of wind power energy remains the major challenge

Key to get down the cost of wind power energy is **innovation** and **industrialization**

Protection of IP ensures, that efforts on innovation will be made by the industry.



# Getting the costs of energy down - Innovations

## Example 1: World's largest integral rotor blade

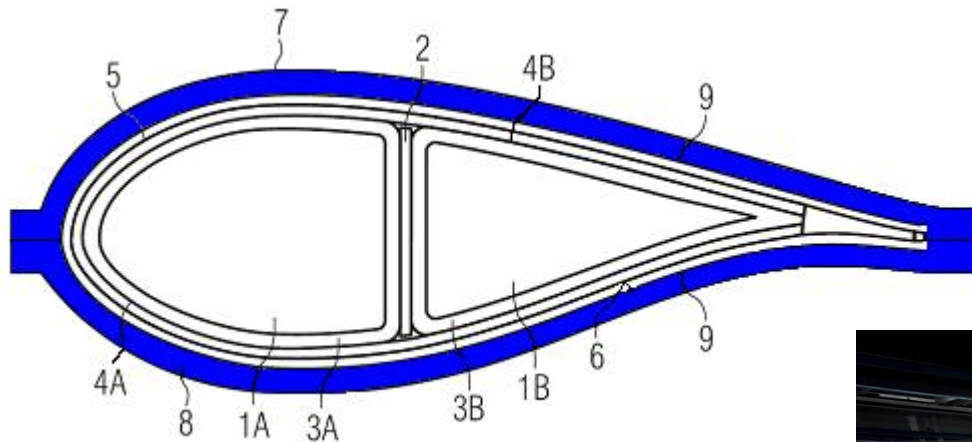


- Increased rotor-swept area harvests more wind and is thus crucial for the annual energy yield of the turbine.
- IntegralBlade™-Technology: the world's largest fiberglass component cast in one piece.
- No seams or glued joints and no adhesive, all of which saves weight.

# Getting the costs of energy down - Innovations

## Example 2: One Shot Blade Manufacturing

### Claimed Manufacturing Method (EP 1 310 351 B1 )



Filing Date: 07.11.2002  
Granted in: DK, DE, ES, FR, GB,  
NL, SE, US

#### Method for making a blade

- [...] in one piece [...]
- [...] using a closed mould [...]
- [...] mould cavity is subjected to vacuum [...]



## Getting the costs of energy down - Innovations

### Example 3: Nacelle – Direct Drive Technology



- Gearless drive train increases reliability and availability
- 50% less parts reduces maintenance time
- 30% less weight facilitates installations offshore
- Higher energy yield

## Getting the costs of energy down – Industrialization: Example 4: Moving line



- By introducing line production for nacelles, the production time was reduced by more than 50%, from 36 hours to 15 hours.
- Another way to lower the cost of energy is to produce a larger number of wind turbines.



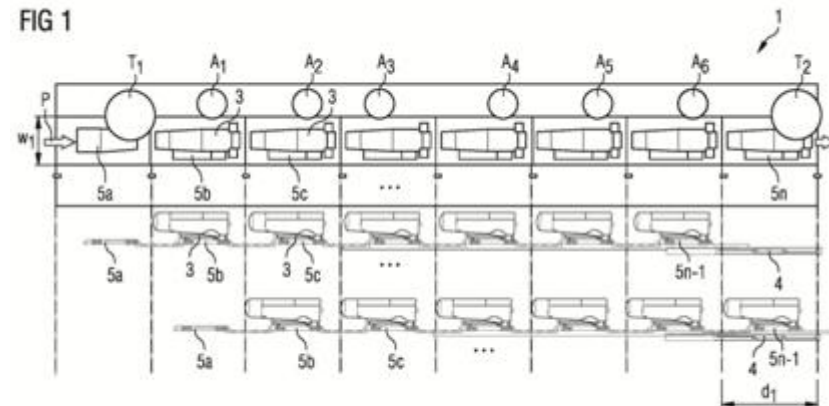
# Getting the costs of energy down – Industrialization: Example 4: Moving line

## Claimed Method (EP 2 493 653 A1)

A method of operating a flow line (1) comprising two or more assembly stations ( $A_n$ ) ...,

the method comprising the steps of:

- installing a prepared assembly trailer ( $5_n$ ) in the flow line (1) before or at a first assembly station ( $A_1$ ),
  - connecting the said prepared assembly trailer ( $5_n$ ) to at least one flow line tow bar (37),
  - if the prepared assembly trailer ( $5_n$ ) is installed before said first assembly station ( $A_1$ ) then: moving the said assembly trailer ( $5_n$ ) to said first assembly station ( $A_1$ ),
  - else: moving all the flow line assembly trailers ( $5_n$ ) to the next assembly station ( $A_{n+1}$ ),
- whereby the steps of moving the flow line assembly trailers ( $5_n$ ) are performed time wise stepwise.



## Getting the costs of energy down - Innovations

### Example 5: 6 MW offshore gearless wind turbine

- Direct Drive wind turbine with 6 MW rated power and a 154 m rotor diameter designed specifically for the harsh offshore environment
- Simple and straightforward design based on and benefiting from experience with smaller Siemens Direct Drive turbines
- Towerhead mass less than 350 tons – a new low-weight standard for offshore turbines. This will contribute significantly to reduced cost of offshore wind energy, including Balance of Plant
- Turbine design optimized for offshore installation and commissioning
- High emphasis on safe and comfortable working environment, and cost effective service and maintenance



Prototype installation Høvsøre, Denmark

# Agenda

- ▶ **Why IP matters in the Wind Power Industry**
- ▶ **Where IP matters in Commercial Contracts**
- ▶ **An approach to Dispute Resolution**

## Non Disclosure Agreements (NDAs)

### Subject of the Agreement

Exchange of (proprietary) information for a specific purpose

### Typical range of Interests

Disclosing Party:

- Ensure all relevant information is covered
- Limit rights of use to specific purpose
- Prohibit/limit further disclosure
- Ensure that ownership is retained

Receiving Party:

- Ensure that information received can be used as required for specific purpose

## Sale and Purchase Agreements (Goods and Services)

### Subject of the Agreement

Purchase of goods and/or services for own use or distribution to third parties

### Typical range of Interests

**Purchaser:**

- Ensure that goods/services can be used for the intended purpose
  - requires transfer of ownership or license
  - may require escrow
- Ensure confidentiality for proprietary information

**Seller:**

- Limit rights granted to what is required for intended purpose
- Pass on third party license conditions (contractual, OSS)
- Define escrow release events and scope of extended license
- Ensure confidentiality for proprietary information

## (Contract) Manufacturing Agreements

### Subject of the Agreement

Engagement of third party with manufacturing of goods in accordance with own designs, specifications and/or technologies

### Typical range of Interests

Employer:

- Limit license grant outbound
- Provide for license grant inbound (incl. escrow) if required
- Ensure that products are free from third party rights
- Ensure confidentiality for proprietary information

Seller:

- Ensure sufficiency of license grant inbound
- Define escrow release events and scope of extended license
- Ensure confidentiality for proprietary information

## R&D and Cooperation Agreements

### Subject of the Agreement

(Joint) research in specific fields of work and/or development of products, technologies, procedures etc.

### Typical range of Interests

Contract Research: To be ensured that

- Employer obtains all right and title in and to all results
- Employer obtains right to background IPR for exploitation of results
- development results are free from third party rights
- proprietary information (incl. results) is kept confidential

Joint R&D works: - Balanced licensing regime depending on business targets  
- Ensure confidentiality for proprietary information (incl. results)

## Sale and Purchase Agreements (IP)

### Subject of the Agreement

Permanent transfer of Intellectual Property Rights

### Typical range of Interests

**Purchaser:**

- obtain ownership and all other rights appertaining to the sold IP
- obtain all related documentation
- Ensure that sold IP is free from third party rights

**Seller:**

- Retain rights required in regard to Seller's earlier use
- Ensure that remuneration will be paid  
(e.g. by making transfer conditional upon receipt of payment)



## Licensing Agreements

### Subject of the Agreement

License grant against consideration (e.g. remuneration, cross-license)

### Typical range of Interests

Licensee: - Obtain all rights required for achievement of business target

Seller: - Limit rights granted to what is required for intended purpose

**In Licensing Agreements the business target determines the scope of the license.**

**Targets and hence license scope as well as licensing regime can vary substantially.**

# Agenda

 **Why IP matters in the Wind Power Industry**

 **Where IP matters in Commercial Contracts**

 **An approach to Dispute Resolution**

## An approach to Dispute Resolution

### How to solve the dispute with least harm?

“Least harm” means to find a

contemporary solution

Time



involving only limited cost and

Cost



being acceptable to all parties

Quality



By amicable settlement or voluntary ADR procedures.

# An approach to Dispute Resolution

## Amicable Settlement / ADR failed. What next?

Arbitration	Ordinary Courts	
only one instance ✓	several instances	Time
usually time based	based on value in dispute	Cost
participation in nomination of arbitrators possible ✓	no participation in nomination of judges	Quality
cross-border enforcement possible (NY Conv.) ✓	cross-border enforcement limited	Misc.

## Preference for Arbitration

## An approach to Dispute Resolution

### What to consider when choosing institution and rules?

Acceptability and reliability of institution

Track record and expertise of institution

Rules to suit all disputes that may result from the legal relationship

Rules to consider your procedural needs / preferences

**DIS, ICC, SIAC, LCIA, WIPO, UNCITRAL, Vienna Rules**

# An approach to Dispute Resolution

## Summary

3 step approach

1<sup>st</sup> step – amicable settlement

2<sup>nd</sup> step – ADR procedure

3<sup>rd</sup> step - arbitration

Main focus / subject matter of the Agreement determines  
Rules and Institution for arbitration proceedings

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**Thank you very much  
for your attention!**