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Datasheet for the decision of 18 July 2024

Case Number: T 2517/22 - 3.2.04

04795549.7 Application Number:

Publication Number: 1678421

IPC: F03D7/02

Language of the proceedings: EN

Title of invention:

WIND TURBINE SYSTEM CONTROL

Patent Proprietor:

GENERAL ELECTRIC COMPANY

Opponents:

Nordex Energy GmbH Vestas Wind Systems A/S

Headword:

Relevant legal provisions:

EPC Art. 54(2), 56, 113(1) EPC 1973 Art. 117(1) RPBA 2020 Art. 11, 12(2), 12(6), 15(1)

Keyword:

Novelty - availability to the public

Inventive step - (yes)

Right to be heard - substantial procedural violation (yes)

Remittal - fundamental deficiency in first-instance

proceedings (yes)

Taking of evidence - not hearing offered witness

Late-filed evidence - should have been submitted in first-instance proceedings (yes) - admitted (no)

Decisions cited:

T 0906/98, T 0474/04, T 0314/18

Catchword:



Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 2517/22 - 3.2.04

DECISION of Technical Board of Appeal 3.2.04 of 18 July 2024

Appellant: Nordex Energy GmbH

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 31 October 2022 rejecting the opposition filed against European patent No. 1678421 pursuant to Article 101(2)

EPC.

Composition of the Board:

Chairman A. Pieracci
Members: S. Hillebrand

T. Bokor

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Summary of Facts and Submissions

I. The appeals were filed by both opponents against the decision of the Opposition Division to reject their respective opposition filed against the patent in suit.

In this decision, the Opposition Division held i.a. that the subject-matter of the claims as granted was novel and involved an inventive step. The user manual D2 was considered not to be part of the prior art.

- II. In a communication according to Article 15(1) RPBA, the Board expressed its preliminary opinion that
 the subject-matter of claim 1 was novel and involved an inventive step with regard to the prior art documents that had been substantiated in appeal;
 the Opposition Division's decision on the public availability of D2 without hearing a witness amounted to a procedural violation in opposition proceedings.
- III. Oral proceedings were held before the Board in the presence of all parties.
- IV. The appellants (opponents) 1 and 2 request that the decision under appeal be set aside and that the patent be revoked.

They further request remittal to the Opposition Division for examination of the public availability of D2 due to a violation of the right to be heard.

The respondent (proprietor) requests the dismissal of the appeals, i.e. rejection of the oppositions, alternatively to set aside the decision under appeal and to maintain the patent in amended form according to one of auxiliary requests 1 to 9 filed with the reply - 2 - T 2517/22

to the opponents' grounds of appeal dated 14 July 2023, re-filing earlier requests. They further request the non-admittance of D6.

- V. Claim 1 of the main request reads as follows (numbering of features as introduced by the Opposition Division):
 - 1. A system for managing a wind farm having a plurality of wind turbines comprising:
 - 2. a Supervisory Command and Data Acquisition (SCADA) element (234, 244) at each wind turbine to collect data from the respective wind turbine (230, 240),
 - 2.1 said wind turbine SCADA element being configured to store a first subset of the data locally and transmit the first subset of data according to non-real-time intervals and
 - 2.2.1 to transmit a second subset of data over a wind farm network to provide approximately real-time data,
 - 2.2.2 wherein the second subset of data is stored until successfully transferred;
 - 3. a SCADA element (214) at each of one or more meteorological sites (210) configured to collect meteorological data;
 - **4.** a SCADA element (226) at each of one or more substations (220) electrically connected with the plurality of wind turbines (230, 240); and
 - **5.** a server (252) coupled to communicate with the wind turbine, meteorological, and substation SCADA elements (226, 234, 244, 214) via the wind farm network,
 - 5.1 said server being configured to receive and to store data received from the elements at predetermined intervals and
 - **5.2** to perform database management on the received data,
 - **5.3** the server being further configured to gather and maintain current and historical data as to the inputs, operating conditions, and outputs of the plurality of

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wind turbines.

VI. In the present decision, reference is made to the following documents:

E6a: Bibliographic citation of E6b in ETDEWEB

E6b: "Wind power communication - Design and

implementation of test environment for IEC61

850/UCA2", Elforsk rapport 02:16,

A. Johnsson, J. Svensson, April 2002

E6c: Email correspondence with Energiforsk

E6d: Written statement from Lund University Library

E6d Annex: various annexes to E6d

D1: US 2002/0029097 A1

D2: "VGCS Vestas Graphical Control & Supervision Operating Manual", Item no.: 947263.R2, September 2001

D2a: First affidavit by Keld Rasmussen

D2b: Second affidavit by Keld Rasmussen

D2c: Excel annex referred to in D2b

D6: "VGCS Vestas Graphical Control & Supervision General Description", Item no.: 947214.R3,
July 1998

D6a: Affidavit by Bjarne Iversen

D6b: Print-out of webpage http://www.vestas.com/nyheder/presse/1998/UK/pr30398uk.html

D6c: "Integration of wind power in the power system"
H. Bindner and P. Lundsager, pages 3309 - 3316,
IEEE 2002

VII. The appellants' arguments can be summarised as follows:
E6b discloses at least implicitly the claimed system or
this would be derived by the skilled person in an
obvious manner from E6b. The claimed subject-matter
also lacks inventive step in the light of the
disclosure of D1. D6 does not open a fresh case, but
describes the same VGCS as D2 in a corresponding

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manner, only having been undisputedly public. D6 also supports public availability of D2 as further evidence. In the second oral proceedings, the Opposition Division had suddenly changed their mind with regard to the reliability of the information presented in D2a and denied public availability of D2 without hearing the witness offered for corroborating the content of D2a. Because of this violation of their right to be heard, the decision under appeal had to be set aside and the case remitted to the Opposition Division.

The respondent's arguments can be summarised as follows:

E6b describes merely a test application implemented within a single wind turbine. Its focus lies on improving real time data communication over a wind farm network by introducing a communication standard. There is neither a hint in E6b nor any motivation to communicate in non-real time intervals.

D1 discloses non-real time intervals, but not with regard to wind turbines, but to other components.

D6 is a document on its own and thus a new piece of prior art which should not be admitted in appeal proceedings in the absence of special circumstances.

That the Opposition Division eventually decided against public availability of D2 does not represent a special

As no substantive case was based on D2 in appeal it can be disregarded. The Opposition Division took into account that the witness might fully confirm his statements made in D2a but considered the evidence provided for public availability not sufficient to meet the standard "up to the hilt". In particular, further sales documentation and contracts without a non-disclosure agreement had not been provided. Moreover, it had not been specified, which further information

circumstance.

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beyond a mere confirmation of D2a's content the witness could give and not indicated why he would be in a position to do so. Therefore, appellant's 2 right to be heard had been respected with regard to all evidence they choose to present in opposition proceedings.

Reasons for the Decision

1. Background

1.1 The patent in suit deals with a SCADA (supervisory command and data acquisition) architecture for a wind park.

SCADA is a hierarchic control system with a central monitoring and command computer unit (SCADA master element) and at least one subordinated level of decentralised controllers (SCADA master or slave elements), which are arranged at devices to be monitored and controlled (e.g. manufacturing machines, fluid or traffic circulation managing units). In wind farms, SCADA elements are provided at the individual wind turbines, meteorological sites and substations, which latter provide the interface between the wind farm and the power grid.

According to the invention, communication between the wind turbine SCADA elements, which collect data from the respective wind turbines, and the central server is organised at two levels. A first subset of data is stored locally and transmitted according to non-real-time intervals. A second subset of data is transmitted approximately in real-time and stored locally until successfully transferred.

1.2 In a first case T 0699/18, the Board, albeit in different composition, had only to decide about novelty of the subject-matter of claim 1 with regard to the

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disclosure of D1, which had been denied by the Opposition Division, but confirmed by the Board. This previous case also hinged on the feature "non-real time intervals", in which a subset of data is sent from a wind turbine SCADA element to a wind park server in communication with the SCADA element via a wind park network (as in features 2.1, 5.1). The deciding Board in T 0699/18 concluded that non-real time transmission of first subsets occurred at "predetermined, regular intervals or periods of time", see reason 3.1. In this context, paragraph [0041] of the patent was cited, which gives examples for two different time resolutions at which data is sent from the local SCADA elements: "at a relatively high degree of time resolution (e.g., approximately real time, each second, each two seconds, or at sub-second resolution) and at a relatively low degree of time resolution (e.g., several seconds, minutes)". Paragraph [0043]

explains the data processing at the receiving end at

the server: "Real time data is received on a continuous basis as the data is provided by the wind turbines, ... Data is also gathered periodically as described above."

2. E6b - public availability

2.1 In its communication according to Article 15(1) RPBA, the Board had established the following preliminary opinion with regard to this issue (see point 2.1):

"There seems to be consistent evidence that E6b has been published in April 2002. This date is indicated in the document itself (cover page, page 3, page 7, pages 149 - 165 of the pdf) and confirmed by E6a ("Publication Date", "Resource Relation"), E6c, E6d (in the document specification) and page 5 of the annex to E6d ("publication details").

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1 April 2002 specifically mentioned in E6a as publication date appears to be a default date for April 2002, a part of E6b being actually dated 6 April 2002 (pages 146 - 165).

As far as the later dates of "accession" of E6b in the year 2003 according to E6d and its annex are concerned, the Board understands these as being related to the formal entry of an object (here: printed item) in a collection (here: library) and its record in the register. This understanding seems to be in line with the sequence of events according to E6d. Since the university library of Lund had access to the E6b on 15 September 2003, E6b must have been published and publicly available before this date, i.e. before the priority date of the patent at 22 October 2003. By the same token, the "Announcement Date" 13 April 2005 in E6a seems to tell the date at which the full text of E6b has been made accessible on the website ETDEWEB together with the bibliographic information, notwithstanding an earlier publication of E6b in April 2002 in print and on-line at the Elforsk website (E6c)."

2.2 All parties referred to their arguments in writing on this issue during oral proceedings. After having reconsidered all the relevant legal and factual aspects of the case the Board does not see any reason to deviate from its preliminary opinion and confirms that E6b forms part of the state of the art within the meaning of Article 54(2) EPC.

3. Main request - novelty

3.1 It is common ground that E6b discloses a system for managing a wind farm having a plurality of wind turbines, each comprising a SCADA element for

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collecting data, figures 1 and 3, sections 2.1, 3.4. The SCADA element is a Master-PC in each wind turbine receiving and storing data from the wind turbine controller via a RS232 link. The wind turbine controller periodically sends four different data packages, one of them called 04H and containing statistical or historical data every 10 s, thus in non-real time intervals, section 2.2, figure 2. However, this data exchange occurs within the wind turbine, both the wind turbine controller and the Master-PC being located in the wind turbine and any reference to a RS232 link indicating a physical proximity of the linked elements.

The SCADA element/Master-PC communicates in turn with a control centre via a local Ethernet-LAN. The control centre retrieves as a client data from the Master-PC, in particular from its ComServer over TCP/IP, and operates the wind turbine, i.e. sends control commands to the SCADA element/Master-PC. Originally, the communication between control centre and wind turbines had been proprietary, that is in a specific "language" involving a proprietary protocol and proprietary software on the client side, which necessitated sending a kind of dictionary with every message in order to enable a "common understanding" of the data transmitted, see section B6, upper part of figure 1.

The aim of the project described in E6b was to replace this proprietary communication by a standardized approach according to IEC 61850. To this end, a standard or "test" server has been installed on the Master-PC in a wind turbine named "Sigvards2" and a standard client in the control centre, as shown in the lower part of figure 1. According to section 4.1.2, functions and subroutines of the existing ComServer for receiving data packets from the wind turbine controller

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and storing them in ordered lists (section 2.2) were re-used as Visual Basic program (VB) or "Application". For testing purposes this seems to have been simulated by filling up the packets with "dummy values", Fig. 10 and text below. These "packets (1, ...4)" were copied to the newly installed VB test server program, which is also called Visual Basic Mita-MMS Comserver Adapter (VB-MMCA) in section 4.1 and mapped then the raw data values in line with the existing lists into corresponding nodes representing wind turbine aspects and parts as shown in figure 2, B7 and figure 5, section 3.4. It is not clearly disclosed that the packets Vp01 - Vp04 in figure 10 represented these copies and were copied at different real time intervals and at a non-real time interval of 10s as allegedly suggested by figure 8 as well. In particular from this figure it can be taken that this data copying took place in the wind turbine anyway, the test server having been connected to the controller via RS232. On the other hand, when looking at figure 8 of B13, which corresponds to figure 9 of section 4.1.1, it seems that the real process data offered by the Visual Basic application in the PC of the wind turbine were organised into several packets and sent every 100 ms ("real time data", as mentioned also in figures 9 and 10 of section 4.1.1) albeit most packets were only updated (by the wind turbine controller) in longer time intervals, see "Specification of the packets". Since the packets were named 01H - 04H and contained data of different nodes they were not yet mapped by the VB-MMCA or VB Test Server to model-specific packets (e.g. WTur) or nodes as shown in figure 2 of B7 (see also the text under figure 9 of section 4.1.1 and in figure 10). These packets appear thus to have originated from the existing SCADA element in the wind turbine and to have been provided in real time intervals for further

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processing in the test server.

- 3.3 The test in E6b was carried out for preparing the application of IEC 61850 standard in the wind park according to a centralised topology shown at the top of figure 3, section 3.1.1. Also in this wider application, the communication between a centralised server (proxy) and the wind turbines via interface (1) were unchanged and remained proprietary. The mapping of the process data by VB-MMCA took place in the centralised local control test server. The wind turbines and their communication system could be used "as is", meaning that the wind turbine controller still sent data packets H01 - H04 in real time and non-real time intervals to the SCADA element in the wind turbine, and its ComServer sent the process data on to the new centralised server via Ethernet-LAN according to figure 1, section 2.1.
- 3.3.1 In which time and intervals the ComServer would have done so is, however, not disclosed. If it were in the same manner as with the Test Server within the wind turbine, a clear and unambiguous disclosure of this manner would be missing in E6b, as set out in point 3.2, above. If the former way of direct communication to the control centre in the existing proprietary system over TCP/IP (see above and B4, page 7) and via Ethernet were maintained for the envisaged communication to the proxy server in the local control system via interface (1), there would not be any further information about this way in E6b either.
- 3.3.2 Whether it would be "sensible" to keep the real and non-real time intervals of the data communication within the wind turbine also for transmitting the data via a wind farm network is not a question of direct and

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unambiguous disclosure. It is also not at all uncommon to send complete data sets in real time (intervals) even if nothing or only one value has changed so that this option cannot be discarded as being obviously unrealistic. This is for instance done in cyclic integrity checks (possibly "cycle internally all data every 100 ms" within the wind turbine in figure 2).

- 3.3.3 It is therefore not directly and unambiguously disclosed in E6b that the SCADA element in the wind turbine sends a subset of data over a wind farm network to the proxy server in the local control system of a centralised topology in non-real time intervals as required by features 2.1 and 5.1.
- 3.4 This applies also for the data transmission from the server DLL representing a SCADA element when located in the wind turbine as in the test or proposed for the mixed and seamless topology shown in figure 3.
- 3.4.1 The server includes a web server for HTTP access providing values in a non-real time manner, section 3.5 and figure 6, sections 2.1, 2.2 and figure 6 on page 156 of the pdf. First of all, the Board notes that the web server does not appear to communicate over the existing wind farm network. Secondly, a non-real time manner does not imply any predetermined, regular interval. To the contrary, the web server supports the GET service, in which the web browser as client requests data when icons on a web page are clicked, figure 8 on pdf page 158. The web server creates corresponding HTML and XML files containing the requested data immediately after receipt of the request and returns the requested values, which are shown in the example window for "Environment" data of figure 9 on the following page. Consequently, the web server

provides a set of data upon request, i.e. in an irregular non-real time manner.

Fig. 9 also shows an "Update Rate" value in a white box without any explanation. This might relate to a rate at which the web server updates the values shown by sending further sets of data as long as the window of figure 9 is open. But even then the unit of the rate and therefore the exact rate is not known. Assuming [ms] as unit, 250 ms would be a real time interval in the sense of the patent. Because of the missing unit, the value of 250 might as well refer to a bit rate, i.e. a transmission speed. Therefore, it is not directly and unambiguously disclosed as representing a non-real time interval, in which the web server as wind turbine SCADA element transmits data to a server coupled to communicate with the SCADA element via a wind park network according to features 2.1, 5.1.

A second Tamarack IEC 61850/UCA/MMS server or "DLL" of 3.4.2 the SCADA element serves at least a Tamarack IEC 61850/ UCA/MMS client in the control centre for real time information exchange, section 3.5, figure 6. The DLL runs only, i.e. can only communicate with the client, when called by the VB-MMCA application implemented in the test server, even if the client had requested service from the DLL, e.g. by GET (variables). The VB-MMCA calls (openDLL) the DLL every 75 ms, thus in real time intervals, for storing the mapped real time values in a buffer for process values (storeDLL), which are then further processed by adding meta data such as units, scales, time stamp, reported and logged (serviceDLL), before the DLL is closed again (closeDLL), see section 4.1.1, figures 8 - 10, B13, figure 8. A report to the client is sent at least ("min" in figure 10) every 75 ms, thus in real time, or more often, if changes require a report or upon

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request, as long as the DLL is "open".

It is correct, that in a revised version of the server DLL, incoming requests will also call/open the DLL, see "Note" on top of figure 9 in section 4.1.1. Incoming requests are, however, requests from the client side (GET), not sets of data provided by the wind turbine controller in non-real time intervals. They do thus not occur in regular intervals and they trigger an immediate server response, i.e. in real time.

Figure 13 in B14 appears to illustrate better than Fig. 10 the various forms of regular or event-driven communication between the DLL and the client, namely reports and responses to request and queries. Figure 10 seems to mix up effects and options. Even if figure 10 suggested - in contradiction to the remaining disclosure - that communication would only take place when triggered by events, there would still be no clear indication of a sequence of trigger events in predetermined, regular non-real time intervals. In particular, a low frequency integrity scan appears to be a cyclic integrity check of data transmission, wherein a suggested low frequency is 100 ms in figure 2, thus a real time interval.

Figures 18 and 19 on pdf pages 163, 164 show the windows for representing a report and a retrieved log entry in the client. It is not disclosed that log files are queried by the client at regular intervals. It might be derived from figure 19 that following such a query ("connect"), the log files in the server DLL are polled at a rate of 5000 (whatever this number stands for). Such polling involves real time data access and retrieval, see B4, bottom paragraph on page 6.

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- 3.4.3 Therefore, communicating data sets in non real-time intervals is also not disclosed for the (test) server in the wind turbine representing the SCADA element and the client in the control centre representing the server in features 2.1 and 5.1 of claim 1.
- 3.5 With regard to features 3 and 4, further SCADA elements provided at a meteorological site and a substation of the wind park, the Board had expressed the following preliminary opinion in point 3.1 of its communication.

"From figure 3, it can be derived that a SCADA element is also provided at a meteorological site depicted as meteorological mast, which is an example for "other components" of the wind farm having a SCADA element. This is confirmed in figure 5, where, apart from meteorological "Environment" data at the wind turbine, "Met mast" data from a separate meteorological mast are shown. Although it can be assumed that the wind farm comprises some kind of substation for handing over the generated power to the grid, there does not seem to be implicit disclosure of a SCADA element at the substation. The "Grid" data in figure 5 contains values produced by the wind turbine "Sigvards 2", not by a complete wind farm. In particular, only an adapter/ application for integrating the SCADA element of a meteorological station appears to have been added in a later stage, but none for a substation, sections A.2, B.8."

At oral proceedings the parties referred to their written submissions concerning these features. After having reconsidered all the legal and factual aspects of the case, the Board does not see any reason to change its preliminary opinion.

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3.6 For the above reasons, the subject-matter of claim 1 differs from the system of E6b in that the wind turbine SCADA element is configured to transmit a first subset of data according to non-real time intervals, that the system comprises a SCADA element at each of one or more substations, that the server is coupled to communicate with substations SCADA elements and configured to receive data from the elements at predetermined non-real time intervals (as in features 2.1, 4, 5, 5.1). Consequently, the subject-matter of claim 1 according to the main request is new in the sense of Article 54(1), (2) EPC with regard to the disclosure of E6b.

4. Main request - inventive step

4.1 With regard to the substation, the parties referred again to their submissions in writing and the Board, after having reconsidered all the legal and factual aspects of the case, does not see any reasons to change its preliminary opinion established in point 4.2 of the communication pursuant to Article 15(1) RPBA as follows.

"The integration of the wind farm's substation into the modified SCADA system as one of the "other components" in figure 3 appears to be straightforward in order to complete the tested SCADA monitoring system. As the meteorological information model has been added retroactively, any other could be defined using the same services, see B.8.

Consequently, also the server would be coupled to the substation so that adding related features 4 and 5 to the system of E6b does not appear to involve an inventive step."

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- 4.2 In the existing centralised architecture of E6b, figure 1, data storage capability in the wind turbine Master-PC is limited and central collection of wind turbine data for storage and archiving in the control centre risks to fail if transmitted data is lost due to loss of connectivity between control centre and wind turbine. These drawbacks and risks are also described in paragraph [0004] of the patent and already overcome by the distributed server and database architecture proposed in E6b, in particular by the logging functions of the server DLL. Thereby, the impact on bandwidth can be minimised as mentioned in figure 10 of B14. Furthermore, the number of reports triggered by a change is limited by deadbanding, which saves bandwidth as well. Since bandwidth problems as such do not seem to be an issue in E6b, the Board considers the more general problem defined by appellant 1 as a more appropriate objective technical problem, i.e. how to upscale the implementation of IEC 61850 tested with a single test server in a single wind turbine to the centralised topology of figure 3, in which a number of wind turbines and other components deliver data to the proxy server in the local control system, which results in a much higher number of reports to be sent on to the client in the control centre.
- 4.3 The appellants argue that it would be a simple and straightforward approach for the server DLL in the wind turbine (test server or mixed or seamless topology of figure 3) to send data subsets received from the wind turbine controller in non-real time intervals (10 s for packet 04H), which are thus less critical for the operation of the wind turbine, in the same non-real time interval to the control centre. This would avoid useless repeated communication of unchanged data sets and leave more capacity or bandwidth for reporting

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subsets of operational data in real time.

- 4.3.1 As mentioned above, the server DLL can send reports every 75 ms, when opened by the VB-MMCA, in a revised version additionally on request of the client in the control centre. A report appears to contain all values and metadata of all nodes in corresponding files, see figure 10. Even if only some files were reported, these would still contain data mapped from various packets. Data from packet 04H provided by the wind turbine controller every 10 s go into the node WTur together with data from packet 02H updated every second or when entries change ("Specification of packets" in B13). Therefore, it appears to be impossible to send packet 04H on to the control centre in a 10 s interval - it does not exist anymore in the DLL. Since the values for WTur are provided by the VB test server on a regular real time basis (figure 10, every 75 ms and/or 100 ms), this change would also trigger a report on a regular real time basis even if reports were only sent upon changes.
- 4.3.2 In the Board's view, E6b already addresses the above problem and proposes solutions, which lead, however, in another direction than claim features 2.1 and 5.1.

 A maximum reporting interval of 75 ms, resulting in approximately 12 reports per second is considered only to be sufficient for test purpose, see the paragraph on top of figure 9. In order to integrate the IEC 61850 standard in a more powerful way, an upgrade to other platforms and IPCs (inter-process-communications) is envisaged, which would allow to send and receive up to 1000 reports per second, figure 7 and surrounding text. Reporting would also be possible with a standard Internet browser and a high efficient software, the message rate for receiving reports may then also be

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several hundreds per second, bottom of pdf page 163 (below figure 18). This appears to be a more logical reaction to upscaling, which is compatible with the mapping of data from different source packets and the real-time data exchange by the MMS services.

- 4.4 The revised version of the server DLL and the polling of the log files have already been discussed in point 3.4.2 above. On the basis of the Board's understanding of the related disclosure in E6b, neither of these processes could or would suggest transmission of data sets in non-real time intervals.
- 4.5 For the above reasons, a person skilled in the art would not obtain the subject-matter of claim 1 in an obvious manner when starting from the system of E6b as closest prior art.
- 4.6 Starting from D1, the Board had established the following preliminary assessment in point 4.6 of its communication.

"In D1, data from different components of a wind farm, i.e. wind turbines 62, substations 52 and meteorological masts 42 (see figure 1), are requested and sent in different specific time intervals, paragraphs [0033] - [0035]. It seems that the time intervals depend on the necessity to control the response to changes with a suitable timing, namely real time (high frequency such as once a second) for wind turbines and substations, but only once every 30 seconds for meteorological data. Furthermore, the frequency of data transmission seems to correspond to the frequency of data sampling, see paragraph [0079]. Unlike in E6b, all relevant wind turbine data provided by the wind turbine controller are grouped together in a single datafile 2, paragraphs [0062] - [0074]. It

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appears therefore not to be a straightforward option to send this wind turbine data in differing time intervals, i.e. in real time and non-real time intervals, instead of sending datafile 2 once a second.

In fact the Board presently concurs with the Opposition Division (see impugned decision, page 12, second complete paragraph) and the patent proprietor (see the reply to the statement of ground of opponents 1 and 2, point 1.4.2.1, pages 48 and 49) that an indication in D1 for modifying the system therein described according to feature 2.1 does not seem to be apparent."

In the oral proceedings, the appellants referred to their written submissions with regard to D1. The Board, after having reconsidered all the legal and factual aspects of the case, does not see any reason to change the above opinion.

4.7 Therefore, the subject-matter of claim 1 as granted (main request) involves an inventive step in the light of the prior art dealt with in appeal proceedings.

5. Admittance of D6

Appellant 2 filed document D6 together with their grounds of appeal. D6 allegedly relates to the same VGCS control system as D2, whose public availability has been put into question in the contested decision, section 3.3 as it was classified in its header as "2", i.e. possibly requiring a non-disclosure agreement (NDA). D6 is classified "1" meaning that distribution of D6 was unrestricted.

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5.2 Appellant 2 did not claim prior use of the VGCS control system as such and did not explain when and under which exact circumstances VGCS has been sold or offered to whom. They merely relied on the content of D2 as a document which was handed over to customers of VGCS and thereby made publicly available. There is thus no proof for a direct link between these documents and a specific version of VGCS which both documents would describe and which would have become public itself. Rather, D6 is a technical document on its own, as is D2. At a first glance, it is not quite the same document as D2, just differently classified. D6 would have to be examined from the scratch for determining which features of claim 1 were disclosed therein.

It is therefore not considered to merely represent a supplement to facts and evidence already on file.

5.3 D6 emanates from appellant 2 and appears to have been available to them already during opposition. They sought to justify its admittance partly by arguing that it was also highly relevant, possibly novelty destroying for the subject-matter of granted claim 1, and moreover "more public" than D2 because of unlimited distribution. Such reasons do not appear to the Board as such circumstances of the appeal case in the sense of Article 12(6) RPBA that would justify to present D6 as further prior art document only in appeal proceedings. Rather, such reasons would appear to dictate that D6 ought have been filed already before the Opposition Division. That other facts and arguments, in particular based on document D2 allegedly relating to the same prior use object, did not convince the Opposition Division, and as such does not open up the possibility of changing to a new attack in appeal

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proceedings whose primary object is the review of the first instance decision in a judicial manner (Article 12(2) RPBA).

5.4 Consequently, the Board did not admit documents D6 and D6a - D6c to the appeal proceedings under Articles 12(4) and (6) RPBA. Whether D6 together with D2b and D2c also filed with the appeal brief of appellant 2 might serve as further evidence for the public availability of D2 is a question that is possibly to be decided by the Opposition Division, as set out, below.

6. Procedural violation

6.1 The appellant 2 had submitted documents D2 and D2a together with their notice of opposition and argued lack of inventive step with regard to the disclosure of D2 (sections 4.2.2, 4.2.3, 4.3).

D2 is an operating manual for a graphic control and

D2 is an operating manual for a graphic control and supervision system VGCS delivered by appellant 2 (Vestas Wind System A/S, see page 4). VGCS "provides service for supervision and control of wind farms with Vestas Wind Turbines (WT)" and further optional components such as meteorological masts and substations.

In the affidavit D2a, an employee of appellant 2, Mr. Rasmussen, stated that

- he was responsible for VGCS between 1995 and 2005;
- D2 has been handed over to customers having purchased the VGCS between September 2001 and October 2003 and was not subject of a confidentiality agreement;
- D2 "was offered and/or supplied" to 19 customers who had purchased a VGCS in this period.

Already in the notice of opposition and again in their reply of 13 February 2017, after the patentee had put into question the probative value of the affidavit D2a,

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appellant 2 offered to hear Mr. Rasmussen as witness (page 3, fourth paragraph).

6.2 In section 3.2.2 of the annex to the first summons, the Opposition Division considered D2a to be sufficient evidence for public availability of D2 and did not summon Mr. Rasmussen as witness. This was confirmed and corroborated with further arguments in section 3.2.1 of the annex to the second summons, in which moreover a discussion of novelty over D2 was envisaged for the oral proceedings (section 2.1.1.1). The Opposition Division changed its mind and announced after discussion of public availability of D2 during the second oral proceedings that D2 was not part of the prior art (last paragraph on page 1 of the minutes) albeit without taking into account the previous offer to hear a witness on the topic. The reasons for this change of mind can be found in sections 3.2 - 3.6 of the contested decision: "There is therefore a doubt about whether Mr. Rasmussen's recollection of events after 15 years is correct". In the absence of further written evidence and documentation relating to the alleged sales of VGCS and hand-overs of D2, "a person's memory alone ...does not constitute sufficient proof of prior public disclosure" 15 years ago. In particular, it was questionable how Mr. Rasmussen as SCADA specialist would have known about the details of the sales agreements including or not a non-disclosure agreement (NDA) for D2, which was possibly required according to its classification "2" (see point 5.1, above). In the absence of any evidence to prove that there was not an implicit NDA

associated with the distribution of D2, reasonable doubts concerning its public availability pertained.

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- 6.3 In the Board's view, the above-mentioned statements in the affidavit D2a represent facts which are a priori of high relevance for the establishment of whether or not D2 was part of the prior art in the sense of Article 54(2) EPC, therefore of the patentability of the claimed invention and thus in the end of high relevance for the outcome of the opposition proceedings. An offer to hear the undersigned of the affidavit D2a as a witness for confirming these facts represents a further relevant and appropriate offer of evidence for these facts. It is a party's choice to present whatever means of evidence it considers to be suitable and it is an Opposition Division's duty to take its decision on the basis of all the relevant evidence actually available rather than to expect the presentation of more preferred pieces of documentary evidence, to speculate on the reasons of and draw conclusion from their absence (see sections 3.2, 3.6. of the impugned decision). The Opposition Division is of course free to evaluate any evidence provided by a party, but this freedom cannot be used to disregard evidence which has been offered, and might turn out to be decisive for a case, in particular not with the argument that some better evidence would have been expected, see CLBA, 10th edition, III.G.4.1.
- Instead of accepting the evidence offered by appellant 2, the Opposition Division appears to have based its decision on general assumptions made on the capability of persons to recollect events after a certain time period and specific assumptions made on the witness' personal capability, knowledge and experience, thus implicitly on assumptions made on the veracity of his statements and on his credibility. By making these assumptions without hearing the offered witness in

person, the Opposition Division in fact assessed evidence without examining it (similarly in T 0314/18, Reasons 6.4, also T 0906/98, Reasons 2.3.1 to 2.3.3).

6.5 According to the respondent, the offer to hear Mr. Rasmussen was not substantiated, since it did neither set out in detail why Mr. Rasmussen was in a position to know about the non-existence of a NDA, nor under which circumstances exactly 19 VGCS had been sold and delivered, nor why he could remember this exact number and these circumstances. Thus Mr Rasmussen could only have been expected to merely confirm what he had already stated in D2a, what was already known to the Opposition Division and considered not to be sufficiently proven by the affidavit D2a alone. A witness hearing merely confirming the same facts could then only lead to the same conclusion and the same decision on public availability of D2 and was therefore not necessary.

As mentioned above, the affidavit D2a as such appears already to contain the factual information which is relevant for the outcome of the case. With regard to the personal circumstances of the witness, according to D2a, Mr. Rasmussen dealt not only with the technical development of VGCS, but was generally "responsible for" VGCS after its development until 2005, when it was already sold and delivered. Moreover, before the oral proceedings, the Opposition Division had not shared the concerns about the veracity of D2a expressed by the respondent (proprietor).

Appellant 2 did therefore not have to address these concerns and had no obligation to announce in their offer, how exactly the witness would be able to corroborate his own statements, e.g. by answering in advance hypothetical questions that might possibly

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arise with regard to the background of his knowledge of the facts and why his statements should be accepted as true. Such questions are normally asked during witness hearings in order to assess the credibility of the witness and the exactness of his memory, which is one of the main purposes of the hearing. Other than assumed by the Opposition Division, this cannot be figured out and a sufficiently exact recollection of various events 15 years later cannot be denied beforehand without a hearing in person since there is always the possibility that a witness remembers very well certain details because of personal records or special events having occurred at the same time. Neither is it common to inform the witness before the hearing about the questions he will be asked, nor does the party offering the witness have to guess and answer these question in advance already in their offer in order to substantiate even further why the witness is to be heard.

- In the oral proceedings before the Board the respondent submitted that appellant 2 did not base any patentability objection in appeal on D2 so that there was no case to decide, which depended on its public availability. Consequently, the Board was in a position to decide on the appeal directly, without considering D2, irrespective of whether a procedural violation might have occurred or not. The Board understands this as an argument against the substantial nature of the alleged procedural violation of not hearing the witness.
- 6.6.1 The respondent's argument might have been pertinent if the Board, for whatever reason, would have decided that it needs to examine the issue of novelty and/or inventive step over D2 still in the appeal proceedings. However, absent particular procedural situations, it is

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normally sufficient for a Board to concentrate and decide on the explicitly formulated procedural and substantive requests of the parties.

- In the present case, appellant 2 requested to set aside 6.6.2 the decision due to a violation of their right to be heard and to remit the case, not to decide on novelty or inventive step in the light of D2. It had also explicitly stated that the ultimate substantive legal effect that it sought to achieve, namely the revocation of the patent, was also part of its case. The request for remittal had been sufficiently substantiated for the Board to decide on it. As set out below, the Board also found this request allowable. There was no need for the Board to examine the question in depth whether the totality of the submissions on appeal permitted the conclusion that the novelty and/or inventive attack based on D2 had been implicitly part of appellant 2's appeal case. Even if this had not been the case, there was still the theoretical possibility, even if small, to introduce this attack in the appeal later under Article 13(2) RPBA. However, this question need not be decided in the present case.
- 6.6.3 The Board observes that the respondent itself did not argue in its reply to the appeals that a substantive attack based on D2 did not form part of the appeal case, but rather argued in depth why there had been no procedural violation and why the Opposition Division's finding on the prior art status of D2 was correct. This is seen by the Board at least as an indication that also the respondent considered the attacks based on D2 to be implicitly part of the opponent 2's appeal case and as such maintained on appeal.

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- 6.6.4 The Board considers it undisputed that if the Opposition Division had reached another conclusion on public availability of D2, possibly also taking into account further evidence, it would have decided on the patentability of the claimed invention also by taking into account the disclosure of D2. However, the division left this question open, and the contested decision only dealt with the public availability of D2. Even the respondent seems to have never defended patentability in the light of D2 and countered the objections raised in opposition proceedings, but only denied its public availability. On this basis, apart from its prior art status, there were no substantive counter-arguments against D2 in the proceedings which the appellant opponent could have been expected to address in detail already in its grounds of appeal. Nor is there anything to suggest that a novelty and/or inventive step attack based on D2 would have been manifestly unsuccessful, in which case a remittal to the Opposition Division would appear to serve no purpose. Rather, patentability over D2 is to be examined by the Opposition Division.
- 6.6.5 In summary, the Board concludes that the absence of an explicitly substantiated novelty and/or inventive step attack based on D2 in opponent 2's statement of grounds of appeal in the present case does not lead to the conclusion that the procedural violation before the division had not been substantial because it had been without consequence for the outcome of the proceedings. Rather, the Board is in the position to issue a final decision without having to deal in depth with the issue of patentability over D2.

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- 6.7 Since it is the primary object of appeal proceedings to review the content of decisions, Article 12(2) RPBA, the Board dealt with the way in which the Opposition Division came to its conclusion on public availability of D2 and found a procedural violation. This fundamental deficiency leads as a rule to a remittal of the case according to Article 11 RPBA, and specific circumstances for doing otherwise have not been put to the Board. A prolongation of the procedure as a whole is not a special circumstance but an inherent consequence of a remittal and as such accepted by the legislator. Furthermore, the parties have the possibility of requesting acceleration of the proceedings.
- 6.8 Therefore, the Board concludes that the failure to consider appellant's 2 offer to hear a witness on the public availability of D2 constitutes in the circumstances of the present case a substantial procedural violation, in that it deprived appellant 2 of their basic rights enshrined in Article 117(1) and 113(1) EPC, see CLBA, 10th edition, III.B.2.6.4, in particular headnote of T 474/04, and III.G.3.3.4, and the decisions there cited.

Due to this procedural violation, the decision of the Opposition Division to reject both oppositions has to be set aside in order to allow re-examining of public availability of D2 taking into account all the evidence admissibly submitted by appellant 2.

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7. Result

With their appeals both opponents contest without success the findings of the Opposition Division that the subject-matter of granted claim 1 (main request) is novel with respect to E6b and involves an inventive step with regard to prior art E6b and D1.

The failure to hear a witness offered by appellant 2 in order to prove public availability of further prior art D2 represents, however, a substantial procedural violation of the right to be heard of appellant 2, which leads to setting aside the Opposition Division's decision to reject both oppositions and to a remittal to the Opposition Division for further prosecution, Article 11 RPBA.

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Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the Opposition Division for further prosecution.

The Registrar:

The Chairman:



G. Magouliotis

A. Pieracci

Decision electronically authenticated