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**Datasheet for the decision  
of 25 September 2014**

**Case Number:** T 0365/11 - 3.5.03

**Application Number:** 03701197.0

**Publication Number:** 1466076

**IPC:** E21B44/00

**Language of the proceedings:** EN

**Title of invention:**

Data transmission system

**Patent Proprietor:**

Atlas Copco Rock Drills AB

**Opponent:**

Sandvik Mining and Construction Oy

**Headword:**

Data transmission system/ATLAS COPCO ROCK DRILLS

**Relevant legal provisions:**

EPC Art. 56, 113(1)

**Keyword:**

Inventive step - all requests (no)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**  
**Boards of Appeal**  
**Chambres de recours**

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Case Number: T 0365/11 - 3.5.03

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.03**  
**of 25 September 2014**

**Appellant 1:** Atlas Copco Rock Drills AB  
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**Representative:** WSL Patentanwälte Partnerschaft mbB  
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**Decision under appeal:** **Interlocutory decision of the Opposition  
Division of the European Patent Office posted on  
17 December 2010 concerning maintenance of the  
European Patent No. 1466076 in amended form.**

**Composition of the Board:**

**Chairman** F. van der Voort  
**Members:** A. Madenach  
M.-B. Tardo-Dino

## Summary of Facts and Submissions

- I. The present appeal arises from the decision of the opposition division posted on 17 December 2010 according to which it was found that, account having been taken of the amendments made by the patent proprietor during the opposition proceedings, European patent No. 1466076 and the invention to which it relates met the requirements of the Convention.
- II. The opposition was based on the ground under Article 100(a) EPC in combination with Articles 52(1) and 54 and 56 EPC.

In its decision, the opposition division referred inter alia to the following documents:

D3: US 6 101 445 A  
D5: EP 0 825 330 A1  
D9: EP 1 466 075 A1 and  
D12: WO 01/35373 A1.

- III. A first appeal against this decision was filed by the patent proprietor (appellant 1). The appropriate fee was paid and the corresponding statement of grounds of appeal was filed. Appellant 1 requested that the decision of the opposition division be set aside and that the European patent be maintained as granted (main request) or, in the alternative, that the patent be maintained in amended form on the basis of one of seventeen auxiliary requests (hereinafter referred to as auxiliary requests 1-17), all as filed with the statement of grounds of appeal. Appellant 1 further requested that the priority of the patent be considered valid.

IV. A second appeal was filed against this decision by the opponent (appellant 2). The appropriate fee was paid and the corresponding statement of grounds of appeal was filed. Appellant 2 requested that the decision be set aside and that the patent be revoked in its entirety. Oral proceedings were requested as an auxiliary measure. A further document was introduced.

With its reply to the first appeal, received on 1 September 2011, appellant 2 introduced further documents.

With its reply to the second appeal, received on 6 September 2011, appellant 1 filed arguments contesting those submitted by appellant 2 in its statement of grounds of appeal.

With a further letter received on 2 February 2012, appellant 2 introduced further documents.

V. In a communication accompanying a summons to oral proceedings the board gave its preliminary opinion, *inter alia*, on the matter of inventive step in respect of all requests.

VI. In reply to the summons, appellant 1 informed the board that it would not attend the oral proceedings and filed arguments in support of its requests.

VII. The board subsequently informed the parties that the oral proceedings were cancelled and that the procedure would be continued in writing.

VIII. Claim 1 of the main request, which is identical to claim 1 as granted, reads as follows:

"System, for transmission of data between drilling equipment (20) and remote location means arranged to be connected to a communication system (24; 41), wherein

- the system comprises first server means (22), in communication with the drilling equipment (20), arranged to extract data from the drilling equipment (20) and convert this data to a format suitable for presentation to a user (29, 30) at the remote location (26) by means of a general purpose program, and  
- which first server means (22) is arranged to be connected to the communication system (24; 41), such that the remote location means and the first server means (22) may communicate via the communication system (24; 41), characterised in that the first server means (22) is integrated in the drilling equipment."

Claim 1 of auxiliary request 1 further specifies that the system is for transmission of data between rock drilling equipment for underground mining and/or tunnelling. Further, the term "first" in "first server means" is put in brackets.

Compared to claim 1 of the main request, in claim 1 of auxiliary request 2 after the first hyphen, the wording "the drilling equipment (20)" (first occurrence), is replaced by "a drilling equipment (20) control system (21)" and "the drilling equipment (20)" (second occurrence) is replaced by "the drilling equipment (20) control system (21)". Further, the term "first" in "first server means" is put in brackets.

Claim 1 of auxiliary request 3 combines the amendments of claims 1 of auxiliary requests 1 and 2.

Compared to claim 1 of the main request, in claim 1 of auxiliary request 4, the term "data" is twice replaced by "status information data". Further, the term "first" in "first server means" is put in brackets.

Claim 1 of auxiliary request 5 essentially combines the amendments of claim 1 of auxiliary requests 1 and 4.

Compared to claim 1 of the main request, in claim 1 of auxiliary request 6, the term "data" is twice replaced by "drilling associated status information data". Further, the term "first" in "first server means" is put in brackets.

Claim 1 of auxiliary request 7 essentially combines the amendments of claim 1 of auxiliary requests 1 and 6.

Claim 1 of auxiliary request 8 is identical to claim 1 of auxiliary request 2, except that the following feature is added: "the drilling equipment further comprising an MMI interface for use by an operator to communicate with the drilling equipment (20) control system".

Claim 1 of auxiliary request 9 essentially combines the amendments of claim 1 of auxiliary requests 1 and 8.

Compared to claim 1 of the main request, claim 1 of auxiliary request 10 additionally comprises the feature "the drilling equipment comprising one or more drilling booms and means to control movement and function of the drilling booms". Further, the term "first" in "first server means" is put in brackets.

Claim 1 of auxiliary request 11 essentially combines the amendments of claim 1 of auxiliary requests 1 and 10.

Compared to claim 1 of the main request, claim 1 of auxiliary request 12 additionally comprises the following feature:

"- the system further comprising second server means (40), located near the drilling equipment (20), and arranged to receive status information from the first server means (22)".

Further, the term "first" in "first server means" is put in brackets.

Claim 1 of auxiliary request 13 combines the amendments of claim 1 of auxiliary requests 1 and 12.

Compared to claim 1 of the main request, claim 1 of auxiliary request 14 additionally comprises the following feature:

"- the system further comprising second server means (40), located near the drilling equipment (20), and arranged to receive status information from the first server means (22), the second server means (40) being arranged to receive data from the first server means (22) at regular intervals and/or at initiation by either of the server means".

Further, in the remaining part of the claim, the term "first" in "first server means" is put in brackets.

Claim 1 of auxiliary request 15 essentially combines the amendments of claim 1 of auxiliary requests 1 and 14.

Claim 1 of auxiliary request 16 is identical to claim 1 of auxiliary request 1, except that the following feature is added:

"-the system further comprising second server means (40), located near the drilling equipment (20), and arranged to receive status information from the first server means (22), the second server means (40) allowing centralisation of status information of a number of drilling equipment (20)".

Claim 1 of auxiliary request 17, which is identical to claim 1 of the patent in the form as intended to be maintained by the opposition division, reads as follows:

"System, for transmission of data between drilling equipment (20) and remote location means arranged to be connected to a communication system (24; 41), wherein the system comprises (first) server means (22), in communication with the drilling equipment (20), arranged to extract data from the drilling equipment (20) and convert this data to a format suitable for presentation to a user (29, 30) at the remote location (26) by means of a general purpose program, and - which (first) server means (22) is arranged to be connected to the communication system (24; 41), such that the remote location means and the (first) server means (22) may communicate via the communication system (24; 41), wherein the (first) server means (22) is integrated in the drilling equipment (20), wherein the (first) server means (22) is connected to a modem (42)



for enabling communication with the remote location means, the system further comprises second server means (40), located near the drilling equipment (20), and arranged to receive status information from the first server means (22), and the second server means (40) is arranged to receive data from the first server means (22) at regular intervals and/or at initiation by either of the server means."

### **Reasons for the Decision**

1. *Procedural matters (Articles 113(1) EPC)*

1.1 The present decision is solely based on the inventive step objections as set out in the board's communication accompanying the summons to oral proceedings and takes into account appellant 1's arguments as set out in its statement of grounds of appeal, its reply to the second appeal and its reply to the board's communication.

Further, since appellant 1 did not request oral proceedings, the board was in a position to take the present decision in accordance with the requirements of Article 113(1) EPC and Article 12(3) RPBA after having cancelled the oral proceedings.

2. *Auxiliary request 17 (subject-matter of the decision under appeal): inventive step (Articles 52(1) and 56 EPC)*

2.1 Claim 1 of auxiliary request 17 is directed to a system for transmission of data between drilling equipment and remote location means.

As already indicated in its communication, the board considers rock drilling equipment as described in the patent in suit (see, e.g., paragraphs [0003] - [0006]) as the closest prior art. Status information collected by the rock drilling equipment may be retrieved by docking the rock drilling equipment to a service computer or connecting an instrument to the drilling equipment. The drilling equipment may also be connected to a local wireless network at a work site which enables wireless transmission of the status information to an equipment service center (paragraph [0006]). Hence, according to the prior art discussed in the patent in suit, the known rock drilling equipment also comprises a system for transmission of status information between drilling equipment and on-site means. This prior art does not provide for a transmission of status information to remote location means. Instead, according to the board's understanding, this information had to be carried from on-site means to remote location means (paragraph [0009]).

Hence, the claimed system for transmission of data between drilling equipment and remote location means as claimed in claim 1 differs from the prior art cited in the patent by being a system for transmission of data between drilling equipment and **remote** location means, as further specified by the remaining features of claim 1.

- 2.2 These features solve the technical problem of facilitating retrieval of status and other information of remotely located equipment (column 1, lines 53-55, of the patent in suit). The board considers the formulation of this problem as being obvious to the skilled person, since aiming at a reduction in time

needed to get access to status information is generally beneficial (cf. patent in suit, paragraph [0009]).

2.3 D12 relates to a system which is provided for the exchange of information and data between movable objects or objects in remote areas, like cars, trucks or other vehicles, on the one hand and a central station on the other hand and for the purpose of operating, controlling, observing or monitoring these objects by the central station (page 1, 2nd paragraph). Further, the time span between data acquisition and validation is shortened (page 1, 3rd paragraph, penultimate sentence). The teaching of D12 thus relates to the above technical problem and the skilled person would, therefore, at least consider it in order to solve the above technical problem, irrespective of the fact that the field of the patent relates to drilling equipment. In any case, the fact that drilling equipment is often mounted on trucks (see, e.g., Figures 2-4 of the patent in suit) and that D12 relates to trucks would also give the skilled person an additional incentive to consider the solutions of D12.

2.4 In detail, D12 discloses a system for transmission of data between a vehicle (reference numeral 10 in Figure 1, which shows a first diagram of the components of an inventive system for a vehicle) or mobile platform (reference numeral 20 in Figure 2, which shows a second diagram of the components of an inventive system for a vehicle), which can also be a remote stationary object (page 13, last paragraph), and a central station (reference numeral 11 in Figure 1) which is, in relation to a remote object, a remote location means. The board understands Figure 2 of D12 to show in more detail the components of the inventive system shown in Figure 1 (see page 3, penultimate paragraph, first

three lines), in particular with respect to the telecommunication unit and the computer of the mobile platform and of the central station and, thus, to be complementary to Figure 1. A second embodiment is shown in Figure 4 of D12 (page 3, penultimate paragraph, penultimate line).

The vehicle or mobile platform and the central or supervisor station are connected to a communication system (page 2, 3rd paragraph; page 4, 2nd full paragraph, and page 5, 1st paragraph). The system comprises server means (reference numerals 21, 22 and 23 in Figure 2), in communication with the mobile platform (reference numeral 20 in Figure 2), arranged to extract data from the mobile platform and in particular of the unit under test (reference numeral 30 in Figure 2; see also page 5, 1st and 2nd paragraph) and to convert this data to a format suitable for presentation to a user at the remote location by means of a general purpose program (*loc. cit.*). The server means is arranged to be connected to the communication system (reference numerals 34, 40 and 41 in Figure 2 and page 5, first paragraph), such that the remote location means and the server means may communicate via the communication system. The server means is integrated in the mobile platform (see Figure 2) and is connected to a modem (reference numeral 34 in Figure 2, it being implicit that the transmitting and receiving means, which may be based on GSM or GPRS, includes a modem (page 5, lines 1-5)).

The board further agrees to appellant 2's argument that the central station of D12 comprises second server means for encryption, compression and storage of a file before it is downloaded to the mobile platform (page 9, 4th full paragraph) and for decompression and

decryption of data uploaded from the mobile platform (page 11, 4th paragraph). The second server means of D12 is thus arranged to receive status information from the first server means. Further, the system of D12 provides the option of viewing data, which is generated by a sensor of the mobile platform, on a homepage generated by the mobile platform or logging this data within the mobile platform (page 9, 1st full paragraph). It is also possible to view only certain data (e.g. every tenth value) (page 9, 2nd full paragraph). This implies that the second server means is arranged to receive data from the first server means at regular intervals ("every tenth value") for display of the data at the central station.

The board notes that in claim 1 of auxiliary request 17, the feature that the second server means is "located **near** the drilling equipment" is of such a nature that it does not allow a determination of the actual position of the second server means. Since in D12 the second server means may equally be considered as being located near the mobile platform, this feature is also known from D12.

D12 thus discloses all features of claim 1 which relate to the data transmission. It would have been obvious to the person skilled in the art, when starting out from the known rock drilling equipment referred to in the patent in suit, to include these features in order to solve the problem of reducing the time needed to get access to status information, thus arriving at the subject-matter of claim 1 of auxiliary request 17 without exercising inventive skill.

2.5 Appellant 1 essentially argued that D12 could not be considered as the closest prior art for consideration

of inventive step, contrary to the decision of the opposition division. Further, the skilled person would not consider D12 in combination with rock drilling equipment, since this document only dealt with vehicles or mobile platforms. Drilling equipment was so specific in nature that the skilled person would not consider a teaching related to more general devices such as D12. Further, the solution provided by D12 would not allow communication to underground drilling equipment as it relies on over-the-air communication. It was further argued that the term "near" in "second server means (40), located near the drilling equipment" should be considered in relation to the term "remote" in "remote location means", with the consequence that the second server could not be identical to or integrated in the remote location means as in D12. The board's interpretation of "near" as "near enough to set up a communication" was said to be based on hindsight. Further, the argument that the second server means of D12 as "front-end" of the D12 central station's computer would be placed nearer the mobile device than the computer itself would assume that the vehicle would always be located in such a physical direction that the "front-end" location in the building is closer than the central station computer.

The board is not convinced by these arguments for the following reasons:

With respect to the first argument, the board notes that the reasoning set out at points 2.1 to 2.4 above starts out from a rock drilling equipment as the closest prior art for assessing inventive step and considers document D12 as providing the solution to the problem found with this prior art. Hence, appellant 1's argument does no longer apply.

The further argument that the skilled person, when starting out from known rock drilling equipment, would not consider D12 as providing a useful teaching as it related to vehicles and had nothing to do with drilling equipment does not take into account the objective technical problem solved by the claimed subject-matter (see point 2.2 above), which is, apart from the fact that drilling equipment is often located in remote places, otherwise unspecific to drilling equipment. The remote location problem is, however, at the very base of the problem considered in D12. Therefore, the skilled person would consider the teaching of D12 for solving this problem also in connection with rock drilling equipment, in particular since the solution provided by D12 encompasses particularly distant areas to which communication can be provided via satellite (page 3, last paragraph). He would do so all the more because drilling equipment often includes carriers to support mobility, as confirmed by appellant 1 (see appellant 1's reply to the summons), which make them similar to the mobile platforms considered in D12. The fact that drilling equipment is constructed for very extreme working conditions has no bearing on the claimed subject-matter and does not therefore prevent the skilled person from considering the teaching of D12.

The argument that the solution provided by D12 would not allow communication to underground drilling equipment as it relies on over-the-air communication is moot as no underground drilling equipment is claimed. Drilling equipment in general can also be located above ground. In this respect, the board notes that it was already known to connect rock drilling equipment to a local wireless network to enable wireless transmission of status information (paragraph [0006] of the patent in

suit). Thus, the skilled person would have considered wireless solutions as provided by D12.

With respect to the argument relating to the term "near" as in "second server means (40), located near the drilling equipment", the board notes firstly that the "remote location means" is not part of the claimed system, in contrast to the second server means. Therefore, "remote location means" cannot be understood to mean that the location means are formed remotely from any of the features of the claimed system. In its most general meaning, it can be considered a term for an external means with which the claimed system is arranged to transmit data to. Furthermore, the second server means is only claimed in relation to the drilling equipment and the devices integrated with it. The claim is silent about its connection to the remote location means or its location with respect to it. Hence, the term "near" has no relation to the "remote location means" and must be interpreted in its broadest meaning, including a meaning which refers to the signal chain between the first server means and the second server means rather than implying a specific spatial arrangement.

Hence, in the present instance, the board understands the term "remote" in the sense of being difficult to access (as seen from the central station) (see paragraph [0009] of the patent in suit) rather than as implying a specific distance. Likewise, the term "near", which is otherwise not specified in the patent, is in the present context understood in the sense of "near enough to set up a communication". With this interpretation in mind, the second server may be part of the remote central station, as in D12. In any case, the skilled person would consider the second server of D12, which provides



en-/decryption, (de-)compression and storage, as a front-end of the central station's computer, which would, therefore, be placed nearer to the mobile device than the computer itself as far as the signal chain is concerned. This does not necessarily mean that it is physically located nearer to the mobile device.

Therefore, after due consideration of appellant 1's further arguments, the board maintains its analysis already set out in its communication.

Consequently, the subject-matter of claim 1 of auxiliary request 17 does not involve an inventive step (Articles 52(1) and 56 EPC).

3. *Main request, auxiliary requests 1 to 16: inventive step (Articles 52(1) and 56 EPC)*

3.1 Claim 1 of the main request is identical to claim 1 as granted. Claim 1 of auxiliary request 12 combines the subject-matter of claim 1 as granted and the additional feature of claim 7 as granted. Claim 1 of auxiliary request 14 combines the subject-matter of claim 1 as granted and the additional features of claims 7 and 8 as granted. Since claim 1 of auxiliary request 17 is a combination of claims 1, 6, 7 and 8 as granted, the subject-matter of claims 1 of the main request and auxiliary requests 12 and 14 is comprised by the subject-matter of claim 1 of auxiliary request 17. The scope of these claims is thus broader than that of claim 1 of auxiliary request 17, and the above reasoning equally applies to these claims.

Hence, the subject-matter of claims 1 of the main request and auxiliary requests 12 and 14 does not

involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

- 3.2 The additional feature of claim 1 of auxiliary request 1 as compared to claim 1 of the main request, *i.e.* that the drilling equipment is a rock drilling equipment for underground mining and/or tunnelling, is referred to in the background section of the description (paragraph [0003]) as follows: "Rock drilling equipment may be used in a number of applications, for example in tunnelling, underground mining, rock reinforcement and raise boring".

Hence, rock drilling equipment for underground mining and/or tunnelling was generally known at the priority date.

According to appellant 1, the skilled person would not consider D12 as a viable system for the transmission of data, since it relies on wireless or satellite communication which would not be functional for rock drilling equipment for underground mining and/or tunnelling, which would be arranged underground.

The board does not accept this argument, since the additional feature does not imply that the drilling equipment is completely underground. The scope of the claim comprises instances in which the drilling equipment used for the applications mentioned is placed in the open air, such that the teaching of D12 would provide a viable solution to the problem of connecting the drilling equipment to a remote location station. Hence, the inventive step objection as set out at point 2 above with respect to claim 1 of auxiliary request 17 applies, *mutatis mutandis*, to claim 1 of auxiliary request 1.

Consequently, the subject-matter of claim 1 of auxiliary request 1 does not involve an inventive step (Articles 52(1) and 56 EPC).

- 3.3 Compared to claim 1 of the main request, in claim 1 of auxiliary request 2 the term drilling equipment is essentially replaced by the term drilling equipment control system, which the board understands to be part of the drilling equipment. The board interprets the computer with web server 124 of Figure 1 of D12 (see page 6, third full paragraph, last line) within the vehicle as representing a control system in the sense of this claim (D12, page 2, 3rd paragraph: "... testing, checking, monitoring, operating and/or **controlling** of components and/or the entire object ...") (emphasis by the board).

Hence, the subject-matter of claim 1 of auxiliary request 2 does not involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

- 3.4 Claim 1 of auxiliary request 3 combines the features of claim 1 of auxiliary request 1 and claim 1 of auxiliary request 2. No combinatorial effect resulting from the combination of the features of these claims is apparent to the board. Neither did appellant 1 argue otherwise.

Hence, the subject-matter of claim 1 of auxiliary request 3 does not involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

- 3.5 Claim 1 of auxiliary request 4, compared to claim 1 of the main request, adds the feature that the data is status information data. Transmitting status information data from rock drilling equipment was,

however, well-known at the priority date (cf. the patent in suit, paragraphs [0005] and [0006]). Hence, it would have been obvious to the person skilled in the art, when starting out from the known rock drilling equipment, to extract and convert status information data for presentation to a user, using the teaching of D12, as argued at point 2 above.

Hence, the subject-matter of claim 1 of auxiliary request 4 does not involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

- 3.6 Claim 1 of auxiliary request 5 combines features of claim 1 of auxiliary request 1 and claim 1 of auxiliary request 4. No combinatorial effect resulting from the combination of the features of these claims is apparent to the board. Neither did appellant 1 argue otherwise.

Hence, the subject-matter of claim 1 of auxiliary request 5 does not involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

- 3.7 In claim 1 of auxiliary request 6, compared to claim 1 of auxiliary request 4, the feature "status information data" is specified as "drilling associated status information data". Transmitting drilling associated status information data, like oil temperatures, hydraulic pressures, drilling rate, from rock drilling equipment was, however, well-known at the priority date (cf. the patent in suit, paragraph [0005]). Hence, it would have been obvious to the person skilled in the art, when starting out from the known rock drilling equipment, to extract and convert drilling associated status information data for presentation to a user, using the teaching of D12, as argued at point 2 above.

Hence, the subject-matter of claim 1 of auxiliary request 6 does not involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

- 3.8 Claim 1 of auxiliary request 7 combines features of claim 1 of auxiliary request 1 and claim 1 of auxiliary request 6. No combinatorial effect resulting from the combination of the features of these claims is apparent to the board. Neither did appellant 1 argue otherwise.

Hence, the subject-matter of claim 1 of auxiliary request 7 does not involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

- 3.9 Claim 1 of auxiliary request 8 comprises, compared to claim 1 of auxiliary request 2, the further feature that the drilling equipment further comprises an MMI interface for use by an operator to communicate with the drilling equipment control system. This feature is, however, part of the teaching of D12 (page 4, 2nd full paragraph). Further, no combinatorial effect resulting from the combination of this feature and the features of claim 1 of auxiliary request 2 is apparent to the board. Neither did appellant 1 argue otherwise.

Hence, the subject-matter of claim 1 of auxiliary request 8 does not involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

- 3.10 Claim 1 of auxiliary request 9 essentially combines the amendments of claim 1 of auxiliary requests 1 and 8. No combinatorial effect resulting from the combination of the features of these claims is apparent to the board. Neither did appellant 1 argue otherwise.

Hence, the subject-matter of claim 1 of auxiliary request 9 does not involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

- 3.11 Claim 1 of auxiliary request 10 comprises, compared to claim 1 of the main request, the further feature that the drilling equipment comprises one or more drilling booms and means to control movement and function of the drilling booms. This feature is part of the rock drilling equipment as was known at the priority date (see, e.g., D5, Fig. 1). The skilled person would thus have considered this feature as one of the features of the prior art rock drilling equipment referred to in the patent in suit. Hence, this additional feature does not overcome the inventive step objection as set at point 3.1 above with respect to claim 1 of main request.

Hence, the subject-matter of claim 1 of auxiliary request 10 does not involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

- 3.12 Claim 1 of auxiliary request 11 combines features of claim 1 of auxiliary request 1 and claim 1 of auxiliary request 10. No combinatorial effect resulting from the combination of the features of these claims is apparent to the board. Neither did appellant 1 argue otherwise.

Hence, the subject-matter of claim 1 of auxiliary request 11 does not involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

- 3.13 Claim 1 of auxiliary request 13 combines the features of claim 1 of auxiliary request 1 and claim 1 of auxiliary request 12. No combinatorial effect resulting from the combination of the features of these claims is

apparent to the board. Neither did appellant 1 argue otherwise.

Hence, the subject-matter of claim 1 of auxiliary request 13 does not involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

- 3.14 Claim 1 of auxiliary request 15 combines features of claim 1 of auxiliary request 1 and claim 1 of auxiliary request 14. No combinatorial effect resulting from the combination of the features of these claims is apparent to the board. Neither did appellant 1 argue otherwise.

Hence, the subject-matter of claim 1 of auxiliary request 15 does not involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

- 3.15 Claim 1 of auxiliary request 16 comprises the features of claim 1 of auxiliary request 1 and claim 1 of auxiliary request 12 and specifies the further feature that the second server means is capable of allowing the centralisation of status information of a number of drilling equipments. This further feature is obvious to the skilled person due to the fact that the teaching of D12 relates to one or more vehicles (page 2, 2nd and 3rd paragraphs). Further, no combinatorial effect resulting from the combination of the features of these claims is apparent to the board. Neither did appellant 1 argue otherwise.

Hence, the subject-matter of claim 1 of auxiliary request 16 does not involve an inventive step (Articles 52(1) and 56 EPC) for the reasons set out above.

The above reasons rely on what the board had already set out in its communication and take due account of the appellant 1's further arguments.

4. Since none of appellant 1's requests is allowable, the patent is to be revoked.

### **Order**

#### **For these reasons it is decided that:**

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



G. Rauh

F. van der Voort

Decision electronically authenticated