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**Datasheet for the decision  
of 24 March 2021**

**Case Number:** T 1504/18 - 3.5.05

**Application Number:** 08858269.7

**Publication Number:** 2232775

**IPC:** H04L12/28, G06F9/46, H04L29/06

**Language of the proceedings:** EN

**Title of invention:**  
DYNAMIC COMMUNICATION STACK

**Applicant:**  
Roche Diabetes Care GmbH  
F. Hoffmann-La Roche AG

**Headword:**  
Communication stack assembling/ROCHE

**Relevant legal provisions:**  
EPC Art. 56  
RPBA Art. 12(4)

**Keyword:**  
Inventive step - (no)  
Late-filed auxiliary requests

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**

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**Chambres de recours**

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**Case Number: T 1504/18 - 3.5.05**

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.05**  
**of 24 March 2021**

**Appellant:** Roche Diabetes Care GmbH  
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**Appellant:** F. Hoffmann-La Roche AG  
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**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 2 February 2018  
refusing European patent application No.  
08858269.7 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chair** A. Ritzka  
**Members:** P. Cretaine  
E. Mille

## **Summary of Facts and Submissions**

- I. The appeal is against the decision of the examining division posted on 2 February 2018 refusing European patent application No. 08858269.7. The application was refused for lack of inventive step (Article 56 EPC) of a main request and first and second auxiliary requests over the disclosure of:
- D1: WO 99/35856.
- II. Notice of appeal was received on 3 April 2018, and the appeal fee was paid on the same date. With the statement setting out the grounds of appeal, received on 31 May 2018, the appellant filed third and fourth auxiliary requests and requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request or one of the first to fourth auxiliary requests. In the alternative, oral proceedings were requested.
- III. A summons to oral proceedings was issued on 11 November 2020. In a communication pursuant to Article 15(1) RPBA sent on 15 December 2020, the board gave its preliminary opinion that the main request and the first and second auxiliary requests did not meet the requirements of Article 56 EPC in the light of the disclosure of D1. Further, the board explained why it was not minded to admit the third and fourth auxiliary requests into the appeal proceedings under Article 12(4) RPBA 2007.
- IV. The appellant did not respond in substance to the objections raised by the board.

V. Oral proceedings were held on 24 March 2021 by videoconference. The appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the main request or, alternatively, of one of the first to fourth auxiliary requests; the main request and the first and second auxiliary requests being those on which the appealed decision was based and the third and fourth auxiliary requests being those filed with the statement setting out the grounds of appeal. The decision of the board was announced at the end of the oral proceedings.

VI. Claim 1 of the main request reads as follows:

"A method of transferring data between a computer (10) and a resource (12) comprising the steps of:

- establishing a connection between the computer (10) and the resource (12);
- determining the type of resource (12);
- selecting a communication protocol from a file stored on the computer (10) that is based upon the type of resource (12) connected to the computer (10);
- assembling a communication stack (50, 52, 54, 56) based upon the communication protocol, the assembled communication stack (50, 52, 54, 56) providing the communication protocol allowing a software application run on the computer (10) to communicate with the resource (12); and
- transferring the data from the resource (12) to the computer (10) based upon the communication protocol provided by the communication stack (50, 52, 54, 56);

**characterized in that**

- the communication stack (50, 52, 54, 56) is dynamically assembled by the software application run on the computer (10); and

- the communication stack (50, 52, 54, 56) is deleted from a memory of the computer (10) once the interaction between the computer (10) and the resource (12) has been completed."

Claim 1 of the first auxiliary request adds to claim 1 of the main request the feature "from at least two layers of an Open Systems Interconnection Basic Reference Model" after the wording "the communication stack (50, 52, 54, 56) is dynamically assembled by the software application run on the computer (10)".

Claim 1 of the second auxiliary request differs from claim 1 of the main request in that the characterizing part has been replaced by the following wording:

"- the communication stack (50, 52, 54, 56) is dynamically assembled by the software application run on the computer (10), the dynamic assembling comprising  
- once the communication between the computer (10) and the resource (12) has been completed, removing the communication stack (50, 52, 54, 56) from a memory of the computer (10);  
- at a later time, constructing another communication stack (50, 52, 54, 56) by the software application, thereby, allowing the resource (12) to be connected to the computer (10); and  
- deleting the other communication stack (50, 52, 54, 56) from the memory of the computer (10) once the communication between the computer (10) and the resource (12) has been ceased."

Claim 1 of the third auxiliary request and claim 1 of the fourth auxiliary request differ from claim 1 of the main request and from claim 1 of the second auxiliary request, respectively, in that the preamble has been replaced by the following wording:

"A method of transferring data between a computer (10) and a resource (12) comprising, the steps of:

- establishing a connection between the computer (10) and the resource (12);
- determining the type of resource (12);
- selecting a sequencer (40,42,44, 46) from a file stored on the computer (10) that corresponds to the type of resource (12) connected to the computer (10);
- assembling a communication stack (50, 52, 54, 56) based upon the selected sequencer (40, 42, 44, 46), the assembled communication stack (50, 52, 54, 56) providing a communication protocol allowing a software application run on the computer (10) to communicate with the resource (12); and
- transferring data from the resource (12) to the computer (10) based upon the communication protocol provided by the communication stack (50, 52, 54, 56)."

## **Reasons for the Decision**

### 1. Main request

D1 discloses an audio video (AV) network which allows a new device to be connected to the network and be able to communicate with the network (see page 5, lines 24 and 25 and page 6, lines 12 to 18). Once a connection is established between the network and the device, the type and the capabilities of the device are determined (see page 21, lines 10 and 22 to 23; page 57, lines 5 to 8). Then a software module, denominated device control module DCM, is generated by the network based on the type of the device, in particular its self-describing data structure SSD (see page 38, lines 4 to 7 and page 58, lines 4 to 15). The DCM may be a generic level 1 DCM or a level 2 DCM (see Figures 13 to

15 and the corresponding passages on pages 57 to 59). The DCM may be seen as a dynamically assembled communication stack based upon a communication protocol selected from a file stored on the computer of the network, since:

- it is a software created by the network upon the establishment of the connection between device and network (see page 56, lines 7 to 9),
- it enables (bidirectional) communication between the network and the device (see page 38, lines 21 to 26), and
- it implements an IP stack (see page 54, lines 23 to 27).

Thus, the only difference between the subject-matter of claim 1 and D1 is that the communication stack is removed from memory once the interaction between the computer and the resource, i.e. the device, has been completed.

The appellant argued that the technical effect of this distinguishing feature was, besides the fact that memory space in the computer memory may be saved, that the communication stack was updated for each interaction between the device and the computer. According to the appellant, this enabled that at any time a correct and up-to-date communication stack was present at any time for the data transfer. It went on to argue that it would not be reasonable in the AV system of D1 to delete a DCM once a communication between the system and the device had been completed, because an AV device is generally connectable to the same AV network for a long period. Deleting a DCM for the device would thus let the device disappear for the home AV network, which was not desirable for AV networks. By contrast, medical devices mostly needed



temporary connections and might be frequently updated, leading to the need for a dynamic assembly of a communication stack at each connection.

However, the board is not convinced by these arguments for the following reasons. Firstly, claim 1 does not specify that the resource is a medical device; it specifies only that the resource connects to the computer and transfers data to it, without defining the content of the data. Secondly, it cannot be excluded that an AV device is upgraded and later reconnected for a new interaction with the AV network. In that case, it would make sense to recreate a DCM for the device at reconnection.

The skilled person, trying to obtain, at any time, a correct and up-to-date communication stack for the device of D1 would obviously make use of the possibility given in D1 to remove DCMs at appropriate times (see page 48, lines 22 to 27) in order to recreate an up-to-date DCM at the next use of the device. As a consequence, memory space would be saved in the computer memory.

For these reasons, the board holds that the subject-matter of claim 1 does not involve an inventive step in the light of the disclosure of D1 (Article 56 EPC).

2. First auxiliary request

Claim 1 differs from claim 1 of the main request in that the communication stack is assembled from at least two layers of an OSI basic reference model.

Assembling a communication stack from layers of an OSI model is a common measure for the person skilled in the

art of digital data communications. This feature is also hinted at in D1, which discloses that the devices and the network communicate via a mechanism implemented above the Transport Layer, which is an OSI layer (see page 24, lines 1 to 9).

For these reasons, the board holds that claim 1 does not involve an inventive step, having regard to the disclosure of D1 and the common general knowledge (Article 56 EPC).

3. Second auxiliary request

Claim 1 adds in substance to claim 1 of the first auxiliary request the repetition of the steps of constructing and removing a communication stack at each communication session between the device and the computer. Since D1 discloses the removal of a DCM, i.e. a communication stack, at appropriate times, it is obvious that a new DCM has to be created in order to enable the device which had its DCM previously removed to communicate with the network.

For these reasons, the board holds that claim 1 does not involve an inventive step, having regard to the disclosure of D1 (Article 56 EPC) and the common general knowledge.

4. Third and fourth auxiliary requests

These requests have been filed with the statement setting out the grounds of appeal. The new RPBA entered into force on 1 January 2020 (Article 25(1) RPBA 2020). However, Article 12(4) to (6) RPBA 2020 does not apply to any statement setting out the grounds of appeal filed before 1 January 2020. Instead,

Article 12(4) RPBA 2007 continues to apply with respect to these submissions (Article 25(2) RPBA 2020).

Claim 1 of the third auxiliary request and claim 1 of the fourth auxiliary request have been amended with respect to claim 1 of the main request and claim 1 of the second auxiliary request, respectively, to recite that, instead of a communication protocol, a sequencer that corresponds to the connected resource is selected and that the communication stack is assembled based upon the selected sequencer.

The appellant did not provide, either in the statement setting out the grounds of appeal or during the oral proceedings before the board, any argument why these amendments, in particular the function and use of a sequencer, could contribute to inventive step and would overcome the objections on which the decision under appeal was based.

Moreover, the third and fourth auxiliary requests are not convergent with the previous requests on file, contrary to the requirement of the case law of the boards of appeal in respect of requests submitted in the appeal proceedings, due to the replacement in the claims of a communication protocol by a sequencer, meaning one feature has been replaced by another feature. Further, claim 1 of the third auxiliary request does not comprise the steps defining the dynamic assembly of the stack present in claim 1 of the second auxiliary request. The third auxiliary request is thus not convergent with the second auxiliary request on file for this reason either.

The board also noted that the then applicant did not attend oral proceedings before the examining division

and requested a decision on the state of the file instead. The third and fourth auxiliary requests could have been submitted in the examination phase such that a decision on these requests could have been taken by the examining division.

For these reasons, the board decided at the oral proceedings not to admit the third and fourth auxiliary requests into the appeal proceedings under Article 12(4) RPBA 2007.

5. Conclusion

The main request and the first and second auxiliary requests are not allowable under Article 56 EPC. The third and fourth auxiliary requests are not admitted under Article 12(4) RPBA 2007.

Therefore, the appeal has to be dismissed.

**Order**

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

The appeal is dismissed.

The Registrar:

The Chair:



K. Götz-Wein

A. Ritzka

Decision electronically authenticated