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**Datasheet for the decision
of 12 May 2017**

Case Number: T 2410/11 - 3.5.07

Application Number: 08800974.1

Publication Number: 2093929

IPC: G11B33/12, G11B33/02, H04L12/02

Language of the proceedings: EN

Title of invention:
A rear panel of a blade server, a blade server and inserting
frame device

Applicant:
Huawei Technologies Co., Ltd.

Headword:
Rear panel of blade server/HUAWEI

Relevant legal provisions:
EPC Art. 14(1), 14(2), 56, 84, 111(1), 153(2), 153(3), 153(4)
EPC R. 115(2)
RPBA Art. 13(1), 13(3), 15(3)

Keyword:

Correction of error - error of translation (yes)
Inventive step - main request and auxiliary requests AR to AR3
(no)
Claims clarity - auxiliary request AR4a (no)
Remittal to the department of first instance - auxiliary
request AR4b (yes)

Decisions cited:

T 0700/05, T 1483/10

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 2410/11 - 3.5.07

D E C I S I O N
of Technical Board of Appeal 3.5.07
of 12 May 2017

Appellant:
(Applicant)

Huawei Technologies Co., Ltd.
Huawei Administration Building
Bantian
Longgang District
Shenzhen, Guangdong 518129 (CN)

Representative:

Kreuz, Georg Maria
Huawei Technologies Duesseldorf GmbH
Riesstrasse 8
80992 München (DE)

Decision under appeal:

**Decision of the Examining Division of the
European Patent Office posted on 8 July 2011
refusing European patent application
No. 08800974.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman R. Moufang
Members: P. San-Bento Furtado
M. Jaedicke

Summary of Facts and Submissions

- I. The appeal lies from the decision of the Examining Division to refuse European patent application No. 08800974.1, which was filed as international application PCT/CN2008/072501 in the Chinese language with the State Intellectual Property Office of the People's Republic of China. The international application was published as WO 2009/059515. The translation of the present application was published as EP 2 093 929 in accordance with Article 153(4), first sentence, EPC. The application claims a priority date of 5 November 2007.

The Examining Division decided that the subject-matter of independent claim 1 of the only request then on file, which had been submitted at the oral proceedings, was not inventive within the meaning of Article 56 EPC over prior-art document

D3: Astute Networks: "Astute Networks Unveils Industry's First 10Gb iSCSI AdvancedTCA (ATCA) Storage Blade", News Release, 16 October 2007.

- II. In the statement of grounds of appeal, the appellant requested that the decision be set aside and that a patent be granted on the basis of a main request (MR) or, alternatively, on the basis of an auxiliary (AR) request, both filed with the grounds of appeal. The claims of the main request correspond exactly to those of the request on which the decision under appeal was based. Amended description pages 2, 3 and 3a were also filed for the auxiliary request.

With the grounds of appeal the appellant additionally requested to amend description page 4 in order to

correct the English translation of the original PCT application in Chinese.

III. In a communication accompanying a summons to oral proceedings, the Board cited further documents including the following:

D2: PCI Industrial Computers Manufacturing Group (PICMG): "Advanced TCA PICMG™ 3.0 Short Form Specification", January 2003.

The Board informed the appellant that a certification of the translation might be necessary and raised preliminary objections with regard to clarity and lack of inventive step against both requests.

IV. In reply to the Board's preliminary opinion, in a first letter dated 12 April 2017 the appellant maintained the previous requests on file and submitted sets of claims according to eleven new requests: Main Request' (MR'), Auxiliary Request' (AR'), and auxiliary requests 1a, 1b, 2a, 2b, 3, 4a, 4b, 5a and 5b (AR1a, AR1b, AR2a, AR2b, AR3, AR4a, AR4b, AR5a and AR5b). It submitted a new version of page 4 of the description and a signed verification of the correctness of the amendments of page 4 with regard to the original text in Chinese.

With letter of 8 May 2017, the appellant informed the Board that it would not attend oral proceedings.

In a last letter dated 9 May 2017, the appellant filed amended description pages for each of the requests. It requested an interlocutory decision from the Board if any of the independent claims was found to overcome the reason for refusal but there were other unresolved issues and, as an auxiliary procedural request, remittal to the department of first instance.

- V. Oral proceedings were held on 12 May 2017 in the absence of the appellant. At the end of the oral proceedings, the chairman pronounced the Board's decision.
- VI. The Board understands the appellant's final requests (see letters of 12 April 2017, points I.2-4, and of 9 May 2017, page 1, points 1 and 2, page 2, point 4) to be that
- the correction of page 4 of the translation of the application be allowed, and that
 - the decision be set aside and a patent be granted on the basis of the main request MR, or of one of the twelve auxiliary requests AR, MR', AR', AR1a, AR1b, AR2a, AR2b, AR3, AR4a, AR4b, AR5a and AR5b; or that, if any of the independent claims of the main request or of one of the twelve auxiliary requests was found to overcome the reason for refusal,
 - an interlocutory decision be issued; or
 - the decision be set aside and the case be remitted to the department of first instance for further prosecution.

VII. Claim 1 of the main request MR reads as follows:

"A rear board of a blade server, wherein, a connector (22 or 23) configured to connect hard disks (37) is set on the rear board (21), at least two hard disks (37) are connected to the connector (22 or 23), characterized by

an extended portion of the rear board (21) is [sic] extended from an extended side of the rear board (21) along the extended side of the rear board (21) so as to accommodate the at least two hard disks (37), the extended side faces away from a front board (31) of the

blade server; the extended portion protrudes beyond the other portion of the extended side; the rear board (21) further comprises a standard interface of Advanced Telecommunications Computing Architecture, ATCA, and the rear board (21) is connected to the front board (31) of the blade server by the standard ATCA interface."

Claim 1 of auxiliary request AR reads as follows:

"A rear board of a blade server, wherein,
the lower portion of the rear board (21) is extended to the right, and two paralleled connectors (22 or 23), are set longitudinally on the lower portion of the rear board (21) being extended, so as to accommodate at least two hard disks (37);
the rear board (21) is connected to a front board (31) through a standard ATCA interface, and the standard ATCA interface is set on the upper-left of the rear board (21)."

Apart from the use of a different formatting, claim 1 of auxiliary request MR' differs from that of the main request in that the comma after "wherein" was removed, "characterized by" was amended to "characterized in that" and "is extended" was amended to "extends".

Claim 1 of auxiliary request AR' differs from that of auxiliary request AR in that the comma after "wherein" was removed and the word "and" was introduced after the text "two hard disks (37);".

Claim 1 of each of auxiliary requests AR1a and AR1b has been drafted on the basis of claim 1 of each of corresponding auxiliary requests MR' and AR' by

inserting the text "A blade server, comprising a front board (21) and" at the beginning of the claim.

Claim 1 of auxiliary request AR2a differs from that of AR1a in that each of the three first occurrences of the text "extended side" (twice in "extended side of the rear board" and once in "extended side faces") was amended to "side".

Claim 1 of auxiliary request AR2b has been drafted on the basis of that of auxiliary request AR2a, by deleting the text "along the side of the rear board (21)".

Claim 1 of auxiliary request AR3 adds the text "wherein right and upper left define directions on a component side of the rear board in a vertical orientation" at the end of claim 1 of auxiliary request AR1b.

Claim 1 of auxiliary request AR4a differs from that of auxiliary request AR1a in that it additionally describes the following feature:

"wherein a CPU heat sink is set in the installed position of hard disks defined in the ACTA [sic] standard on the front board."

Claim 1 of auxiliary request AR4b reads as follows:

"A blade server, comprising a front board (21) and a rear board of a blade server, wherein
the lower portion of the rear board (21) is extended to the right, and two paralleled connectors (22 or 23), are set longitudinally on the lower portion of the rear board (21) being extended, so as to accommodate at least two hard disks (37); and

the rear board (21) is connected to a front board (31) through a standard ATCA interface, and the standard ATCA interface is set on the upper-left of the rear board (21);

wherein a CPU heat sink is set in the installed position of hard disks defined in the ACTA [sic] standard on the front board."

The set of claims according to auxiliary request AR4b also includes claims 2 to 7, further defining features of a blade server, and claim 8 directed to a subrack comprising a power, a fan and a blade server according to claims 1 to 7, where "the power is configured to provide power for the blade server, the fan is configured to dissipate heat for the blade server".

Auxiliary requests AR5a and AR5b are not relevant to the present decision.

VIII. The appellant's arguments relevant to this decision are discussed in detail below.

Reasons for the Decision

1. The appeal complies with the provisions referred to in Rule 101 EPC and is therefore admissible.

Correction of translation error

2. The appellant submitted amended page 4 as a request for correction of the translation of the Euro-PCT application.

2.1 The international patent application corresponding to the present application was filed in the Chinese language and designated the European Patent Office for

several contracting states. It is therefore equivalent to a regular European application (Euro-PCT application) pursuant to Article 153(2) and (3) EPC.

A translation into English of this international application was provided to the EPO, as prescribed by Article 153(4) EPC in conjunction with Article 14(1) EPC.

According to Article 14(2) EPC, the translation of a European application may be brought into conformity with the application as filed throughout the proceedings before the European Patent Office. The present application is deemed to be a European application pursuant to Article 153(2) EPC and must hence be treated as a regular European application. As a consequence, the provision of Article 14(2) EPC equally applies to the present application and, by analogy, the translation may be corrected throughout the proceedings before the EPO (see also decisions T 700/05 of 18 September 2008, reasons 4, and T 1483/10 of 28 February 2013, reasons 2.1 to 2.3).

- 2.2 Amended description page 4 replaces the following original text in the last three lines of that page
- "The lower portion of the rear board 21 is extended outward, and two paralleled connectors, i.e., connector 22 and connector 23, are set longitudinally on the lower portion of the rear board 21",
- with the text (amendments underlined by the Board)
- "The lower half portion of the rear board 21 is extended to the right, and two paralleled connectors, i.e., connector 22 and connector 23, are set longitudinally on the lower portion of the rear board 21".

The appellant provided a signed "verification of translation" confirming that the two amendments on page 4 correspond to a correct translation of the Chinese text.

The Board is thus satisfied that the two amendments reflect a correct translation of the Chinese text, and that amended page 4 indeed corrects translation errors.

- 2.3 Consequently, the amendment introduced by page 4 as submitted with the appellant's letter of 12 April 2017 is in conformance with Article 14(2), second sentence, EPC.

The invention

3. The invention concerns a rear board of a blade server having two connectors configured to connect two hard disks set on it, and a lower portion of the rear board on which the connectors are set being extended to the right so as to accommodate the two hard disks (see paragraphs [0007], [0019], original claim 1 and Figure 2 of the English translation of the original application). According to the description, by using the invention to remove the two hard disks from a prior-art front board and place them on the rear board, the dissipating ability of the front board is greatly increased. Better heat dissipation is required for supporting central processing units (CPUs) with better performance but higher power consumption, e.g. superpower CPUs (paragraphs [0004] and [0012]).

The application also describes a blade server and a subrack using the rear board of the present invention, and the rear board having at least two hard disks. In

some embodiments described in the application the rear board includes a standard Advanced Telecommunications Computing Architecture (ATCA) interface, through which it is connected to the front board. The application also describes the connectors being longitudinally aligned, a slot set on the rear board, a handle bar set on each of the hard disks, a heat sink set on the front board, or the two hard disks being hot pluggable (see translation of original claims 2 to 6 and paragraphs [0026] and [0029]).

Admission of the requests filed in response to the Board's communication

4. Using its discretion under Article 13(1) and (3) RPBA, the Board admits auxiliary requests MR' to AR3 into the proceedings because the issues raised by those claims can be dealt with without adjournment of the oral proceedings. Furthermore, with those requests the appellant attempted to overcome new issues raised by the Board and provided arguments supporting the allowability of the independent claims.

5. Claim 1 of each of auxiliary requests AR4a and AR4b is directed to subject-matter identified in the application as making a major contribution to the prior art. In the Board's opinion, the appellant should be given the opportunity to overcome the inventive-step objections by adding such subject-matter to the independent claims. Since, furthermore, those requests do not introduce new deficiencies, exercising its discretion under Article 13(1) and (3) RPBA the Board also admits auxiliary requests AR4a and AR4b into the proceedings.

Requests MR to AR3 - Overview

6. In the following, the Board first assesses inventive step with regard to the main request and auxiliary requests MR', AR1a, AR2a and AR2b which were drafted on the basis of the main request. It then assesses inventive step with regard to auxiliary request AR, and similar auxiliary requests AR', AR1b and AR3.

7. In view of the conclusion that the subject-matter of claim 1 of none of the above requests involves an inventive step, they cannot be the basis for ordering the grant of a patent. Nor can the Board, with respect to any of them, accede to the appellant's auxiliary procedural requests for an interlocutory decision or a remittal for further prosecution (see above Section VI) since the condition under which these procedural requests were made, namely that the respective substantive request overcomes the reason for refusal by the Examining Division (i.e. lack of inventive activity) is not met.

As a further consequence, the Board does not have to decide whether the above requests meet other requirements of the EPC even though some of the clarity objections raised against auxiliary request AR4a (see point 14 below) *prima facie* appear to also apply to some of the higher ranking requests.

Main request and auxiliary requests MR', AR1a, AR2a and AR2b

8. *Inventive step - claim 1 of the main request*
 - 8.1 Document D3 discloses an ATCA storage blade including a rear board with two drives (see page 1, first paragraph

and page 2, last paragraph, "Rear Transition Module (RTM)", "ATCA storage blade"). It is therefore an adequate starting point for the inventive-step assessment of the present invention.

- 8.2 The appellant contested that document D3 referred to hard disks being set on the rear board, arguing that the meaning of "2-drive" was not disclosed and did not unambiguously mean two hard disks. The storage could be a memory chip, USB disk or otherwise.

The Board however finds that in the context of document D3, which describes hardware devices and discloses a blade server with "a high performance RAID controller", two drives on the rear board in addition to "four hot-swappable enterprise SAS drives", and "900 GBytes of storage in a single ATCA slot", the skilled reader understands that the "drives" refer to hard drives. In that context, the skilled person assumes that the 900 GB of storage correspond to the total of six SAS (serial-attached SCSI) hard disk drives of 150 GB capacity each, which were commonly known at the time.

On the basis of the passages of document D3 cited above and those describing the ATCA compatibility of the blade server (see e.g. page 2, third paragraph, first line), the Board agrees with the decision under appeal that it is implicit from document D3 that connectors are used to connect the two hard drives of the rear board to the rear board.

The ATCA compatibility features of the storage blade are also clearly disclosed in the last paragraph of document D3, which refers to "the ATCA option 9 chassis" and states that the disclosed technology

"brings together [...] a high performance storage RAID controller onto a single ATCA storage blade". The last sentence reads "With the addition of a 2-drive Rear Transition Module (RTM), Caspian offers up to 900 GBytes of storage in a single ATCA slot".

The Board further notes that an RTM board according to the ATCA standard includes connectors for communication with the front board (see document D2, page 3, last four paragraphs and page 4, Figure 1).

That is of relevance with regard to the following feature of claim 1:

- "the rear board (21) further comprises a standard interface of Advanced Telecommunications Computing Architecture, ATCA, and ... is connected to the front board (31) of the blade server by the standard ATCA interface".

That feature is shown on the upper-left of the depicted rear board of Figures 2 and 3 of the present application (see paragraph [0027]) and hence corresponds to the Zone 3 connectors of the ATCA specification (see document D2, page 4, Figure 1, page 8, "Zone 3 includes space ...").

Since the storage blade of document D3 follows the ATCA specification and an RTM is a standard feature of the ATCA specification, which is "mated with a Front Board through Zone 3 connectors" (see document D2, page 3), that feature is implicitly disclosed in document D3.

- 8.3 The subject-matter of claim 1 therefore differs from the rear board of document D3 in that:
- (a) an extended portion of the rear board is extended from an extended side of the rear board along the

- extended side of the rear board so as to accommodate the at least two hard disks;
- (b) the extended side faces away from a front board of the blade server;
- (c) the extended portion protrudes beyond the other portion of the extended side.

In order to formulate the objective technical problem solved by the invention over the rear board of document D3, it is necessary to establish which technical effects are achieved by these distinguishing features, which, notwithstanding the rather unclear claim language (see below point 15), will be interpreted by the Board in the light of the description and the drawings.

- 8.4 With regard to the technical effects, the appellant argued in its reply to the Board's preliminary opinion that the rear board of the invention met some special complex requirements: "(1) the rear board with two hard disks should not occupy the location of the standard ATCA interface connected to the front board; (2) the data transmission rate between the hard disks on the rear board and the front board should meet the requirement of the data transmission rate; and (3) the end of the rear board with two hard disks should not be beyond the shell of the blade server".

In the Board's opinion, it is implicit from document D3 that the rear board disclosed in that document also meets requirement (1), since it follows the ATCA standard. With regard to the other requirements, the claim is silent about the data transmission rates and the dimensions of the rear board, so that the claimed invention does not solve problems (2) and (3).

- 8.5 Document D3 does not provide any details about the way the two hard disks are mounted on the rear board.

The Board is therefore of the opinion that distinguishing features (a) to (c) solve the problem of finding an advantageous way to mount the two hard disks on the rear board disclosed in document D3.

- 8.6 The skilled person faced with that problem would contemplate different alternatives to mount the disks within the restrictions imposed by the ATCA specification which is followed by the RTM disclosed in document D3. Using ordinary skills, that person would consider extending the RTM compared to the standard (see document D2, page 4, Figure 1) in order to accommodate two hard disks of common large sizes.

Due to the connectors and interface of Zones 1 to 3 of ATCA, the skilled person would consider extending in the direction opposite to the front board, as defined by feature (b).

The skilled person would also be aware that the rear board could be enlarged along the whole length or only in the area of the two disks (as recited in feature (c)).

It is well within the normal abilities of the skilled person to assess different alternatives and choose one depending on well-known design requirements, such as those of heat dissipation or easier access for connecting cables mentioned by the appellant in the grounds of appeal or at the oral proceedings before the Examining Division (see document D2, page 7, last paragraph and page 21, "Thermal" to page 24). The skilled person would recognise the advantages of each

of the alternatives, for example that a board extended along the whole length would be able to accommodate more components, and that a board with a protrusion for the disks would provide easier access to other parts of the board. It would be obvious for the skilled person to choose one of those alternatives and to arrive at features (a) to (c).

- 8.7 In the appealed decision the Examining Division argued that considering the dimensions of the ATCA RTM board and the size of a hard disk drive as used in document D3, the skilled person would have no choice but to let the hard disk drives protrude from the rear; the provided space would simply not be sufficient to contain such hard disks in any other mounting configuration. The appellant contested these arguments of the decision under appeal.

Even assuming that the disks of the RTM of document D3 were too big to fit in an RTM with standard dimensions, the Board does not consider that there would be no other choice but to let the hard disk drives protrude from the rear in such a manner that an extended portion of the rear board protruded beyond the other portion as defined in feature (c). The decision under appeal is silent about the specific dimensions of the ATCA RTM board leading to the conclusion that there was only one solution. As explained above, there was e.g. also the possibility of extending the board along the whole length.

Given that the above inventive-step reasoning is based on the choice among possible alternatives, it is nonetheless immaterial whether the skilled person had no other option and whether those assertions of the

Examining Division with regard to the disclosure of document D3 and the ATCA constraints were correct.

8.8 The subject-matter of claim 1 of the main request is therefore not inventive (Article 56 EPC).

9. *Inventive step - auxiliary requests MR', AR1a, AR2a and AR2b*

9.1 Since claim 1 of auxiliary request MR' merely introduces some minor text improvements, the above inventive-step reasoning for the main request also applies to auxiliary request MR'.

9.2 Claim 1 of auxiliary request AR1a is directed to a blade server comprising a front board and a rear board as defined in claim 1 of auxiliary request MR'. Claim 1 of auxiliary request AR2a introduces minor amendments to claim 1 of auxiliary request AR1a in order to improve the text.

Document D3 also discloses a blade server comprising a front board and a rear board (see e.g. page 1, first paragraph and page 2, last paragraph), the rear board accommodating two hard disks as explained above. The distinguishing features and objective technical problem are the same as for the main request. For essentially the same reasons as given for claim 1 of the main request, the skilled person would, without exercising inventive skills, also consider adding features corresponding to distinguishing features (a) to (c) to the rear board of the blade server of document D3 in order to mount the two hard disks on the rear board.

9.3 Claim 1 of auxiliary request AR2b differs from that of auxiliary request AR2a in that "along the side of the

rear board (21)" was deleted. This amendment does not change the result of the inventive-step assessment.

- 9.4 The subject-matter of claim 1 of each of auxiliary requests MR', AR1a, AR2a and AR2b therefore lacks inventive step (Article 56 EPC).

Auxiliary requests AR, AR', AR1b and AR3

10. *Inventive step - claim 1 of auxiliary request AR*

10.1 Claim 1 of auxiliary request AR defines a rear board of a blade server wherein:

- (d) the lower portion of the rear board is extended to the right, and
 - (d.1) two paralleled connectors are set longitudinally on the lower portion of the rear board being extended, so as to accommodate at least two hard disks;
- (e) the rear board is connected to a front board through a standard ATCA interface, and
 - (e.1) the standard ATCA interface is set on the upper-left of the rear board.

Interpreting "lower" and "to the right" with respect to a vertical orientation of the rear board as depicted in Figures 2 and 3 of the present application, features (d) and (d.1) specify that the portion of the rear board corresponding to Zones 1 and 2 of the ATCA specification (see document D2, page 4, Figure 1) is extended away from the front board in order to accommodate at least two hard disks.

Feature (e.1) refers to the ATCA interface discussed under point 8.2 above and further specifies its "upper-left" position on the rear board, which corresponds to

that of the Zone 3 connectors of the ATCA specification.

- 10.2 For the reasons given above for claim 1 of the main request, the Board is of the opinion that the rear board of document D3 includes a standard ATCA interface as defined by feature (e).

Since the storage blade and RTM of document D3 follow the ATCA specification, which establishes that the rear board is connected to the front board through Zone 3 (see document D2, page 3, third row of the table), the Board considers feature (e.1) to be implicitly disclosed in document D3.

- 10.3 The subject-matter of claim 1 of auxiliary request AR hence differs from the rear board of document D3 in that it includes features
- (d) the lower portion of the rear board is extended to the right, and
 - (d.1) two paralleled connectors are set longitudinally on the lower portion of the rear board being extended, so as to accommodate at least two hard disks.

Distinguishing features (d) and (d.1) correspond to a combination of distinguishing features (a), (b) and (c) of the main request with the additional specification that the portion being extended is the lower portion and that the connectors are paralleled and set longitudinally on that lower portion (features underlined in (d) and (d.1) above).

- 10.4 In the grounds of appeal the appellant argued that the additional features had the advantage of lowering the barycentre of the rear board, thereby improving its

stability. However, this advantage was not mentioned in the application and cannot be derived from the claimed features.

Even though distinguishing features (d) and (d.1) give more information regarding the placement of the hard disks on the rear board, the corresponding problem solved over the disclosure of document D3 is the same as given under point 8.5 above.

10.5 As explained with regard to the main request, the skilled person faced with the problem of mounting the two hard disks on the rear board of document D3 would consider extending one portion of the board to the right in order to accommodate the hard disks.

Since the standard ATCA interface for connection with the front board is in the upper portion of the rear board, it would be evident to include the disks and the connectors for the hard disks on the lower portion as defined in feature (d).

Furthermore, it is standard practice to set components and connectors parallel to each other on boards, and parallel to the sides of the board. The placement of the two connectors implicitly known from document D3 longitudinally on the lower portion as specified by feature (d.1) would be one of a few possible alternatives that the skilled person would immediately recognise.

Using ordinary skills the skilled person would therefore consider mounting the two hard drives in the rear board of document D3 in the way described by the distinguishing features (d) and (d.1).

10.6 Consequently, the subject-matter of claim 1 of auxiliary request AR does not involve an inventive step within the meaning of Article 56 EPC.

11. *Inventive step - auxiliary requests AR', AR1b and AR3*

11.1 Claim 1 of auxiliary request AR' introduces some minor text improvements which do not change the subject-matter of the claim.

11.2 Claim 1 of auxiliary request AR1b is directed to a blade server comprising a rear board as recited in claim 1 of auxiliary request AR'. For reasons analogous to those given for auxiliary request AR1a, that feature does not confer inventive step to the claimed subject-matter.

11.3 Compared to auxiliary request AR1b, the additional feature of claim 1 of auxiliary request AR3 merely clarifies how "right" and "upper left" are to be interpreted. Since this corresponds to the way the Board interpreted claim 1 of auxiliary requests AR, AR' and AR1b, this does not change the inventive-step assessment.

11.4 Consequently, auxiliary requests AR', AR1b and AR3 do not comply with Article 56 EPC either.

Auxiliary requests AR4a and AR4b

12. Claim 1 of each of auxiliary requests AR4a and AR4b additionally recites that

- a CPU heat sink is set in the installed position of hard disks defined in the ATCA standard on the front board.

This additional feature is disclosed on page 7, lines 1 to 4 of the translation of the description as originally filed, when read in combination with other passages of the description, such as page 7, lines 9 to 12.

13. *Inventive step - auxiliary requests AR4a and AR4b*

According to the description on page 7, lines 9 to 15, the additional feature has the advantage of increasing the heat dissipation ability of the front board. The Board does not dispute that effect.

Document D3 is completely silent about heat dissipation. The additional feature is not disclosed in document D3 and has not been dealt with by the Examining Division. The reasons on which the contested refusal decision was based with respect to the then pending requests are therefore not sufficient to conclude that auxiliary requests AR4a and AR4b lack inventive step. Since, however, it is not clear to which extent the search covered the additional feature, the Board refrains from deciding itself on inventive step for auxiliary requests AR4a and AR4b.

14. *Clarity - claim 1 of auxiliary requests AR4a and AR4b*

In the following the Board examines whether claim 1 of each of auxiliary requests AR4a and AR4b complies with the requirement of clarity according to Article 84 EPC. In its preliminary opinion, the Board had indicated with respect to the then pending requests that clarity might have to be discussed at the oral proceedings and mentioned some of the issues causing concern. The appellant had therefore to expect that clarity issues would be assessed in the appeal decision. The Board is

not obliged to delay any step in the proceedings, including its decision, by reason only of the absence at the oral proceedings of any party duly summoned who may then be treated as relying only on its written case in accordance with Article 15(3) RPBA (see also Rule 115(2) EPC). The Board would not comply with the principle of procedural efficiency, if it acceded in this situation to the appellant's auxiliary procedural requests for an interlocutory decision or a remittal (see above Section VI) insofar as they aim at preventing a final decision by the Board on the clarity of claim 1 of auxiliary requests AR4a and AR4b.

15. *Clarity - claim 1 of auxiliary request AR4a*

15.1 The features "an extended portion of the rear board (21) extends from an extended side of the rear board (21) along the extended side of the rear board (21)" and "the other portion of the extended side" in claim 1 of auxiliary request AR4a do not comply with the requirement of clarity (Article 84 EPC).

In particular, it is not clear what is exactly meant by "extended side" in the context of the claim. The phrase "extended portion extends ... along the extended side" could be understood as meaning that the right side of the rear board is extended in the vertical direction.

The feature "the other portion of the extended side" in the phrase "the extended portion protrudes beyond the other portion of the extended side" is likewise ambiguous. The qualifier "the other" implies that there is a first "portion of the extended side". However, the claim does not refer to a first "portion of the extended side", but only to an "extended portion of the

rear board". It is therefore not clear what "the other" refers to.

15.2 Claim 1 recites the features

- "a rear board .. , wherein a connector (22 or 23) configured to connect hard disks (37) is set on the rear board (21)",
- "at least two hard disks (37) are connected to the connector (22 or 23)".

In the embodiments described in the present application and depicted in the drawings, the rear board has two paralleled connectors 22 and 23 and each of the two hard disks is connected to a connector (paragraph [0019], Figures 2 and 3). Claim 1 however only refers to "a connector" and therefore covers other configurations of the two hard disks being connected to a single connector. It is unclear how two hard disks could be connected to a single connector, a configuration which extends beyond the embodiments clearly described in the application.

15.3 Claim 1 of auxiliary request AR4a therefore infringes Article 84 EPC.

16. *Clarity - claim 1 of auxiliary request AR4b*

In its preliminary opinion, the Board questioned whether the terms "lower", "upper", "left" and "right" in claim 1 of auxiliary request AR were clear. These terms are also contained in claim 1 of auxiliary request AR4b. However, the objection is not pursued any more since the Board has come to the conclusion that the skilled person, taking into account the standard terminology and the knowledge of the ATCA standard, unambiguously understands those terms as explained

under point 10.1 above. Those features are therefore clearly defined in the claim.

17. *Added subject-matter - claim 1 of auxiliary request AR4b*

The features of claim 1 of auxiliary request AR4b are disclosed in original claims 7, 10 and 11, Figure 2, paragraphs [0019] and [0020], Figure 3, paragraph [0025], as well as in the above mentioned passages on page 7, lines 1 to 4 and 9 to 12 in paragraphs [0029] and [0031].

The Board is thus satisfied that the subject-matter of claim 1 of auxiliary request AR4b can be directly and unambiguously derived from the application as originally filed.

Further prosecution

18. With regard to auxiliary request AR4b, the Board is satisfied that claim 1 meets the requirements of Article 123(2) EPC and overcomes all the clarity issues discussed in the proceedings thus far, only minor clarity issues remaining to be solved (e.g. "ACTA" to "ATCA"). The case should therefore be remitted to the department of first instance in accordance with Article 111(1) EPC for further prosecution on the basis of auxiliary request AR4b.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance for further prosecution.

The Registrar:

The Chairman:



I. Aperribay

R. Moufang

Decision electronically authenticated