Datasheet for the decision
of 5 November 2010

Case Number: T 0319/09 - 3.2.06
Application Number: 04004513.0
Publication Number: 1428789
IPC: B66F 9/22
Language of the proceedings: EN

Title of invention:
Method of operating a hydraulic system for wheeled loader

Patentee:
J.C. Bamford Excavators Ltd.

Opponents:
MANITOU BF
Deere & Company
CNH Belgium N.V.
Merlo Project S.r.l.

Headword: 

Relevant legal provisions: RPBA Art. 13(1)
Relevant legal provisions (EPC 1973): 

Keyword: 

Decisions cited: 

Catchword: 

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DECISION
of the Technical Board of Appeal 3.2.06
of 5 November 2010

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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 5 December 2008 revoking European patent No. 1428789 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: G. Pricolo
Members: M. Harrison
W. Sekretaruk
Summary of Facts and Submissions

I. The appellant (patent proprietor) filed an appeal against the opposition division's decision revoking European patent No. 1 428 789 which patent was based on European application No. 04004513 and which was a divisional application of European application No. 01304608 (hereafter referred to as the "parent" application).

The opposition division found that claim 1 of the main request and the auxiliary requests contained subject matter which extended beyond the content of the parent application as filed and therefore that none of the requests was allowable with respect to Article 76(1) EPC 1973.

II. Together with its grounds of appeal, the appellant requested that the patent should be maintained on the basis of claim 1 of the main request or on the basis of the further auxiliary requests considered by the opposition division.

III. The respondent/opponent OI requested dismissal of the appeal. The further respondents/opponents OII, OIII and OIV did not supply a response to the appeal grounds.

IV. Subsequent to summoning the parties to oral proceedings, the Board issued a communication dated 7 September 2010 stating its provisional opinion. In particular, the Board noted that the subject matter of claim 1 of all the requests appeared to constitute an unallowable intermediate generalisation of the disclosure in the parent application as filed.
V. With its letter dated 15 September 2010, respondent/opponent OIV informed the Board that it would not be represented at the oral proceedings.

VI. Respondent/opponent OIII requested that the appeal be dismissed with its letter dated 20 October 2010.

VII. In its submission dated 25 October 2010, the appellant maintained its main request and replaced all previous auxiliary requests by new first to fifth auxiliary requests.

VIII. During the oral proceedings of 5 November 2010 held before the Board, and in the absence of the respondent/opponent OIV (as announced), the appellant replaced all its requests by a sole request entitled "new fourth auxiliary request", upon which basis it was requested that the decision under appeal be set aside and that the European patent be maintained in an amended form.

IX. The respondent/opponents OI, OII and OIII each requested that the appeal be dismissed.

X. Claim 1 of the sole request (i.e. the request entitled "new fourth auxiliary request") reads as follows:

"1. A method of operating a hydraulic system of a wheeled loader, the loader having a loader arm assembly (16) connected to a body (10) so that in a lowered position of the loader arm assembly (16), a working implement (18) carried at an outer end of the loader arm assembly (16) is disposed in front of the body (10),
the loader arm assembly (16) is connected at, or adjacent, the rear end thereof to the body (10) at, or adjacent to, the rear end thereof, which loader arm assembly (16) is movable between raised and lowered positions by means of a hydraulic ram means (20) of the hydraulic system, the hydraulic system further including a ride improvement means including a hydraulic accumulator (30) which is connected to the hydraulic ram means (20), the hydraulic ram means (20) including a piston rod (22) which is pivotally connected to an outer part (16a) of the loader arm assembly (16) and a cylinder part (21) which is pivotally connected to a part of the body (10), and a selection valve means (40) connected to each of a first and second chamber of the hydraulic ram means (20) adapted to feed fluid under pressure to the first chamber (25) of the hydraulic ram means (20) and to receive fluid at a lower pressure from the second chamber (26) of the hydraulic ram means (20) in order to raise the loader arm assembly (16) or to feed fluid under pressure to said second chamber (26) of the hydraulic ram means (20) and receive fluid at a lower pressure from said first chamber (25) of the hydraulic ram means (20) to lower the loader arm assembly (16), the hydraulic system including further a first and a second control valve (32, 33), and a hose burst check valve (39) connected between the first chamber (25) and the selection valve means (40) such that the hose burst check valve (39) is normally closed to prevent fluid under pressure passing from the first chamber (25) to the selection valve means (40), and the hose burst check valve (39) being a pilot valve, the pilot valve having hydraulic fluid responsive means responsive to hydraulic fluid pressure in the second chamber (26) to
open the pilot valve and there being a line (41) to connect said hydraulic fluid responsive means to said second chamber (26), the first control valve (32) is connected by a rigid pipe (37) to a line (38), which line comprises a rigid pipe (38a) and a flexible line (38b), the rigid pipe (38a) being connected to the first chamber (25) and to the hose burst check valve (39) and the line (38) being connected to a first port (40a) of the selection valve means (40), the line (38) being connected between said first chamber (25) and the selection valve means (40), and the first control valve (32) being connected to said accumulator (30) by a pipe (31), the first control valve (32) being an electrically operated solenoid valve movable between a first position in which the passage of hydraulic fluid therethrough to the accumulator (30) is prevented, to a second position in which the passage of fluid therethrough is permitted, the first control valve (32) being spring biased by a spring means (36) to the first position, and the second control valve (33) is connected between said second chamber (26) and a low pressure region (35), the second control valve (33) being an electrically operated solenoid valve movable between a first position in which the passage of hydraulic fluid therethrough to and from the low pressure region (35) is prevented, to a second position in which the passage of fluid to or from the low pressure region (35) is permitted, the second control valve (33) being spring biased by a spring means (36) to the first position, the hose burst check valve (39) being in the line (38) between the first chamber (25) and the selection valve means (40), between the selection valve means (40) and the connection of the first control valve (32) to the said line (38) between
the first chamber (25) and the selection valve means (40), such that the pilot valve is normally maintained closed in the direction to prevent flow of fluid under pressure from the first chamber (25) to the selection valve means (40) but may be opened by a supply of pilot pressure on the line (41) connecting said hydraulic fluid responsive means to said second chamber (26), comprising a rigid pipe from a line (42), comprising a rigid pipe (42a) and flexible hoses (42b), which extends between a second port (40b) of the selection valve means (40) and the second chamber (26) of the hydraulic ram means (20) and is connected by a line (43) to the second control valve (33), there being a one way check valve within the hose burst check valve (39), wherein the first control valve (32), the accumulator (30), and the hose burst check valve (39) are all disposed on the cylinder part (21) of the hydraulic ram means (20), the method including operating the selection valve means (40): to feed fluid under pressure from the first port (40a) of the selection valve means (40) along the line (38) between the first chamber (25) and the selection valve means (40), through the one way check valve within the hose burst check valve (39) to the first chamber (25) of the hydraulic ram means (20) and to receive fluid at a lower pressure at the second port (40b) of the selection valve means (40) from the second chamber (26) of the hydraulic ram means (20) along the line (42) which extends between a second port (40b) of the selection valve means (40) and the second chamber (26) of the ram means (20), in order to raise the loader arm assembly (16) or to feed fluid under pressure through the second port (40b) of the selection valve means (40) along the line (42) which extends between a second port
(40b) of the selection valve means (40) and the second chamber (26) of the ram means (20), to the second chamber (26) of the hydraulic ram means (20) and to receive fluid at a lower pressure at the first port (40a) of the selection valve means (40) from said first chamber (25) of the hydraulic ram means (20) along the line (38) between the first chamber (25) and the selection valve means (40), through the pilot valve, to lower the loader arm assembly (16), the pilot valve being maintained in an open position by virtue of a supply of pilot pressure on the line (41) connecting said hydraulic fluid responsive means to said second chamber (26), characterized in that the method includes operating the ride improvement means and operating the selection valve means (40) to raise or lower the loader arm assembly (16) with the ride improvement means engaged, when the selection valve means (40) is operated to raise the loader arm assembly (16) with the ride improvement means engaged, further permitting the passage of hydraulic fluid between the first chamber (25) of the hydraulic ram means (20) and the accumulator (30), and whilst permitting the passage of hydraulic fluid from the second chamber (26) to a low pressure region (35), an electrical supply being provided to the first control valve (32) to move the first control valve (32) to the second position and an electrical supply is provided to the second control valve (33) to move the second control valve (33) to the second position such that fluid can flow both to or from the accumulator (30) and to or from the low pressure region (35) such that the loader arm assembly (16) is supported by the action of the accumulator (30), and when the selection valve means (40) is operated to lower the loader arm assembly (16) with the ride
improvement means engaged, further permitting the passage of hydraulic fluid between the first chamber (25) of the hydraulic ram means (20) and the accumulator (30), and preventing the passage of hydraulic fluid from the second chamber (26) to the low pressure region (35), an electrical supply being provided to the first control valve (32) to move the first control valve (32) to the second position and an electrical supply to the second control valve (33) being collapsed, by virtue of a switch (44) which senses the position of the selection valve means (40), to move the second control valve (33) to the first position such that the loader arm assembly (16) is supported by the action of the accumulator (30), and when it is desired to operate the ride improvement means providing an electrical supply to the first control valve (32) and to the second control valve (33) to move the first control valve (32) to the second position and to move the second control valve (33) to the second position such that fluid can flow both to the accumulator (30) and also to the low pressure region (35) in accordance with external forces imposed on a piston (27) of the hydraulic ram means (20) to displace fluid to or from the first (25) and second (26) chambers of the hydraulic ram means (20)."

XI. The appellant's arguments may be summarised as follows:

The new sole request had been filed to take account of the Board's comments made at the start of the oral proceedings, where the Board had stated that the parent application as filed appeared only to disclose a method of operating a specific system in all of five distinct modes. Only the fifth operational mode disclosed with
regard to Figure 4 had been inserted into the claim when compared to the previous fourth auxiliary request filed with letter of 25 October 2010, apart from some minor corrections. The further amendments in the claim compared to the initial requests made when filing the appeal grounds were necessary in view of decision T 69/08 in the parent case, where all amendments made there to overcome Article 123(2) EPC objections had been included in the sole request. Additionally, to take account of the Board's comment in the provisional opinion that the previous claims related to an unallowable intermediate generalisation, it had been necessary to include lengthy formulations in the claim, taken from the descriptive text. The use of these lengthy formulations was unavoidable. Even though the text insertions were not annotated to indicate where the insertions had been made, the amendments were however all based on the parent application as filed which disclosed in various paragraphs the five modes, and the meaning of the introduced text was clear to a skilled person. The objection of respondent/opponent OIII that there was for example no clear disclosure of a loader arm assembly supported by the action of the accumulator was incorrect because the claim terminology had to be read by a mind willing to understand and, when read in that way, it clearly corresponded to the sprung nature of the loader arm that was described. Since a serious attempt had been made to overcome the objections raised by the Board and since the request also dealt with the extra matter raised by the Board during the oral proceedings, the request should be admitted into proceedings.
XII. The arguments of the respondents may be summarised as follows:

Respondent/opponent OI:
The amendments were numerous and extremely complex, and the claim was over three pages long in close type. Moreover it had not been explained in the submission of 25 October 2010 where the basis existed for these; the work was instead given to the Board and the respondents. The amendments were not simple additions, but involved large reformulations of the claim. The request was very late filed and did not overcome the objection to the complexity of the requests which had now been replaced during the proceedings, but simply gave rise to new objections.

Respondent/opponent OII:
The parent application did not disclose a method at all; the amendments made all related to distinct operating states rather than a method. Claim 1 was directed to a method of operating a hydraulic system, but no such general method was disclosed. The amendments, which came from the description, were too complex to be considered at such a late stage of proceedings. The request should not be admitted.

Respondent/opponent OIII:
It was not possible to determine where the basis lay for the amendments made in the claim of the fourth auxiliary request filed with the letter of 25 October 2010; no explanation had been given by the appellant despite the short time available and the large number of amendments made. The new fourth auxiliary request filed during oral proceedings just compounded this
problem further. Taking only one example, there was no unambiguous disclosure in the parent application of a loader arm assembly supported by the action of the accumulator in the way now defined in the claim. At such a late stage with such a complicated and lengthy request, which was not immediately allowable, the request should not be admitted into proceedings.

Reasons for the Decision

1. Non-admittance of the sole request

1.1 Article 13(1) of the Rules of Procedure of the Boards of Appeal (RPBA) states the following:

"Any amendment to a party's case after it has filed its grounds of appeal or reply may be admitted and considered at the Board's discretion. The discretion shall be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy."

1.2 With its grounds of appeal, the appellant filed no new requests in comparison to those which had been examined by the opposition division. The appellant instead chose to defend those requests. Five amended auxiliary requests were filed for the first time with the appellant's response dated 25 October 2010.

1.3 The appellant stated during oral proceedings that its sole request, i.e. the request labelled "new fourth auxiliary request", was based on the fourth auxiliary
request filed with its submission of 25 October 2010, whereby the additional features relating to operation of the ride improvement means in accordance with Figure 4 had been added, so as to include all five modes of operation.

Admittance of the new fourth auxiliary request into proceedings would constitute an amendment of the appellant's case. Thus, in accordance with Article 13(1) RPBA, the request may only be admitted and considered at the Board's discretion.

1.4 Considering firstly the fourth auxiliary request filed with the appellant's submission of 25 October 2010, which the appellant stated had been used as a starting point for the sole request to be considered during the oral proceedings, it is evident from the written reasons (albeit given in relation to the first auxiliary request filed at that time) that amendments had been included in light of the decision of the Board (in a different composition) in case T 69/08 regarding the patent resulting from the parent application. However, the submission of 25 October 2010 contained no statement as to where the included features could be found in the parent or divisional applications, nor indeed where the amendments had been introduced into the claim. Instead, in the comments made to the first auxiliary request (which can be understood as relating also to the fourth auxiliary request of that submission), the following was stated: "The method steps have been further limited to include explicit statements regarding the passage of hydraulic fluid during operation of the apparatus. It is specifically noted that the claim recites that the first control
valve, the accumulator, and the hose burst check valve are all disposed on the cylinder part of the hydraulic ram means."

In regard to the appellant's comments supplied with respect to the fourth auxiliary request filed on 25 October 2010, only the following statement was added: "In the Fourth Auxiliary Request, further limitations regarding the control valves have been incorporated into claim 1".

1.5 The amendments made in claim 1 of the fourth auxiliary request (which are essentially the same as those appearing in the new fourth auxiliary request, but which are limited to defining four modes of operation rather than five modes) were however very extensive when compared to claim 1 of each request considered by the opposition division, and it was not apparent to the Board from where all the amendments could be derived in the parent application. The amendments did not for example involve a simple word-for-word inclusion of specific sections of the description in relation to the four operational states, and nor indeed was this argued to be the case by the appellant, but instead involved terminology taken from different parts of the application seemingly adapted and inserted into the claim at differing locations. The mere reference to decision T 69/08 as an explanation of why certain amendments had been made as regards the apparatus features of the method claim, was not sufficient to enable the Board, without significant work, to ascertain exactly which amendments were meant and why they had been included in the method claim. Also, even when referring to decision T 69/08, this anyway does
not contain any indication concerning the basis of the disclosure of all the particular elements which were introduced into the apparatus claim dealt with in that appeal case.

1.6 With no explanation from the appellant as to where each feature of the claim could be found in the parent application as filed, the task of identifying the basis of the amendments was thus particularly onerous, all the more so since the explicit wording of the parent application was not used throughout the claim and also since the filed claim had a text which was more than three A4 pages of single line spacing in length.

Although the appellant argued that a lengthy claim was required in order to overcome the Board's objections in the provisional opinion, this did not alter the fact that an explanation of where the amendments were to be found in the parent application was entirely lacking.

1.7 The example objection raised by respondent/opponent OIII in regard to the feature that "the loader arm assembly is supported by the action of the accumulator" is not wording found in the text of the parent application. For example in paragraph [0024] of the parent application, a different disclosure is made, namely: "As a result the loader arm is supported by the action of the accumulator on the hydraulic fluid and it is, in effect, sprung.". Also, in relation to the mode of lowering the arm assembly with the ride improvement means engaged, as described in paragraph [0026] of the parent application, there is no explicit disclosure of any support by the action of the accumulator of the loader arm assembly even though the wording "the loader
arm assembly is supported by the action of the accumulator" is again used in the claim to define this mode of operation.

The appellant's response to this, to the effect that the amendment was disclosed in the parent application as long as the claim was read by a mind willing to understand, did not however solve the problem that no identification had been made of where the basis existed for the amendments, and - as stated supra - it was not immediately apparent to the Board either where such a basis exists.

1.8 With the sole request made by the appellant, i.e. the "new fourth auxiliary request" filed during the oral proceedings, the aforementioned situation with the fourth auxiliary request filed with the submission of 25 October 2010 was not overcome. The basis for the amendments present in the fourth auxiliary request which were still present in the "new fourth auxiliary request" remained, as before, unexplained. Although it is understood that the filing of the appellant's request was an attempt by the appellant at overcoming the Board's objection to a lack of a fifth mode of operation having been defined in the claim, the amendment itself however resulted in a further set of features being introduced from the description, which itself not only complicated the claim terminology but required further consideration with regard to clarity and the basis for the disclosure of such a set of features.

1.9 When considering the sole request of the appellant remaining at the end of oral proceedings, i.e. the new
fourth auxiliary request, the Board therefore exercised its discretion not to admit the request into proceedings because the subject matter was particularly complex due to the length of the claim combined with the lack of explanation as to where each amendment could be found in the parent application and since the Board could not immediately identify the basis of the amendments either.

2. **No requests in proceedings**

Since the sole request made by the appellant was not admitted into the proceedings, there is no request in the proceedings upon which the EPO can take a decision regarding maintenance of the patent. Absent any request in the proceedings, the appeal must therefore be dismissed.

**Order**

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

The appeal is dismissed.

The Registrar:  The Chairman:

S. Sánchez Chiquero  G. Pricolo