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**Datasheet for the decision
of 9 January 2007**

Case Number: T 0386/04 - 3.2.03

Application Number: 97100051.8

Publication Number: 0783057

IPC: E02F 9/22

Language of the proceedings: EN

Title of invention:

Hydraulic drive system for construction machines

Patentee:

HITACHI CONSTRUCTION MACHINERY CO.,LTD.

Opponent:

LINDE AKTIENGESELLSCHAFT

Headword:

-

Relevant legal provisions:

EPC Art. 54, 56

Keyword:

"Admissibility of main request (yes)"

"Novelty (yes)"

"Inventive step (yes)"

Decisions cited:

G 0009/91, G 0010/91, G 0009/92, G 0004/93, T 0064/85,
T 0123/85, T 0025/91, T 0528/93, T 0840/93, T 0900/94,
T 0373/96, T 1037/96, T 0065/97, T 0368/98, T 0564/98,
T 0168/99, T 0399/99, T 0473/99, T 0717/99, T 0755/00,
T 0825/00, T 0880/01, T 0794/02, T 0934/02, T 1018/02,
T 0178/03

Headnote:

An appellant-proprietor, whose patent has been revoked, is entitled to seek maintenance of the patent as granted even though its main request before the opposition division had only been the maintenance of the patent in more limited form. The exception to this is where to allow the proprietor to revert to the amended claims would amount to an abuse of procedure. This long-standing principle is not contradicted by decisions T 528/93 or T 840/93, which are concerned with new claims raising new issues, and is not contrary to the statement by the Enlarged Board of Appeal in decision G 9/91 concerning the purpose of an appeal.

Observed: In this context, there is no procedural logic in distinguishing between cases in which the patent has been revoked and cases in which the patent has been maintained.



Case Number: T 0386/04 - 3.2.03

D E C I S I O N
of the Technical Board of Appeal 3.2.03
of 9 January 2007

Appellant: HITACHI CONSTRUCTION MACHINERY CO., LTD.
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Respondents: LINDE AKTIENGESELLSCHAFT
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 13 January 2004
revoking European patent No. 0783057 pursuant
to Article 102(1) EPC.

Composition of the Board:

Chairman: U. Krause
Members: G. Ashley
K. Garnett

Summary of Facts and Submissions

- I. The grant of European patent EP-B1-0 783 057, which concerns a hydraulic drive system for construction machines such as excavators, was opposed for lack of novelty and/or inventive step.

In response to the notice of opposition, the patent proprietor argued for, and requested, maintenance of the patent as granted. In the summons to oral proceedings, the opposition division expressed a provisional opinion that the subject-matter of granted claim 1 lacks novelty. The proprietor then submitted a set of amended claims and requested maintenance of the patent on the basis of these claims, which were subsequently discussed as the sole request during the oral proceedings. At the end of the oral proceedings, the opposition division concluded that the subject-matter of amended claim 1 lacked novelty and consequently, according to the decision posted on 13 January 2004, revoked the patent.

The Appellant (patent proprietor) filed notice of appeal on 12 March 2004, paying the appeal fee on the same day. A statement containing the grounds of appeal was filed on 24 May 2004. Oral proceedings took place on 9 January 2007.

- II. Requests

The appellant requested that:

1. the decision under appeal be set aside;
2. the patent be maintained in the form as granted;

3. alternatively, the patent be maintained pursuant to the auxiliary request filed with the grounds of appeal.

The respondent (opponent) requested that:

1. the request that the patent be maintained in the form as granted be not admitted into the proceedings;
2. if the said request is admitted, the case be remitted to the opposition division for further prosecution;
3. alternatively, the appeal be dismissed.

III. Claims

Claim 1 according to the main request of the appellant corresponds to that of the granted patent and reads as follows:

"1. A hydraulic drive system for a construction machine comprising a hydraulic pump (1) driven by a prime mover, actuators (2, 3) driven by a hydraulic fluid delivered from said hydraulic pump, flow control valves (4, 5) for leading flows of the hydraulic fluid supplied from said hydraulic pump to said actuators, operation means (6, 7, 708, 709) for operating said flow control valves, a relief valve (10) for setting a relief pressure for limiting the maximum delivery pressure of said hydraulic pump, and relief pressure change means (30, 32, 85, 120, 220 ... 720, 618, 619, 731, 830) for increasing or decreasing said relief pressure set by the relief valve;
characterised in that said relief pressure change means increases or decreases said relief pressure in accordance with the input amount of said operation means."

Dependent claims 2 to 17 describe preferred embodiments of the hydraulic drive system of claim 1.

IV. Prior Art

In support of his arguments, the respondent referred to the following documents; these had all been cited, amongst others, in the notice of opposition:

D2: DE-C-3200416

D5: EP-A-384737

D6: EP-A-597109

V. Arguments of the Parties

(a) Admissibility of the Appellant's Main Request

The respondent, in its written and oral submissions, argued essentially as follows.

In the proceedings before the opposition division the proprietor had not sought to uphold the patent in the form as granted. Its only request at the oral proceedings had been to uphold the patent in the more restricted form of the amended claims filed with its letter of 10 November 2003. There had thus been no proper opportunity for the opponent to present arguments against the granted claims in those oral proceedings and a proper consideration of these claims had never therefore taken place. It followed that the opposition division had not dealt with these claims in its reasoned decision and the claims as granted had not formed the basis of the decision from which the

appellant now appealed. The purpose of appeal proceedings was essentially to challenge the decision taken by the tribunal at first instance and it was therefore wrong for the proprietor to attempt to widen the scope of the inquiry at the appeal stage. In this respect, the respondent referred to decisions T 528/93 (not reported in the OJ of the EPO) and T 840/93 (OJ EPO 1996, 335) and quoted from Case Law of the Boards of Appeal of the European Patent Office, 5th ed., paragraph VII.D.14.1. Unless the case were to be remitted to the opposition division with an order to come to a reasoned decision on the claims as granted, the respondent would lose the opportunity to have his case considered at two levels. However, to remit the case for this reason would cause an unwarranted delay and would be a procedural abuse,

The appellant, in its written and oral submissions, argued essentially as follows.

The patent as granted formed the basis of the opposition proceedings. Although the appellant had sought maintenance of the patent in restricted form in the course of those proceedings it had never abandoned any part of the granted patent. Since the patent as a whole had been revoked, the subject matter of the patent as a whole could be discussed on the appeal. This was not a case like T 840/93, where completely new claims, which had never been considered by the opposition division, were sought to be introduced at the appeal stage. Here, the claims were the subject of the original opposition.

(b) Novelty (Article 54 EPC)

The respondent contested novelty on the basis of D2, which, like the disputed patent, concerns a hydraulic drive system for construction machinery.

In particular, the respondent argued that logic valve 20 functions as a pressure relief valve, because it limits oil pressure at either a lower or a higher level in the following way. When selector valve 73 is in the open position, the pressure of the oil supplied by pump 15 is limited by spring 29 in logic valve 20. If the pressure exceeds this lower limit, oil flows through logic valve 20 and selector valve 73 into discharge tank 22. When selector valve 73 is closed, the flow of oil to tank 22 is blocked and logic valve 20 is set at a higher pressure, thereby allowing pump 15 to operate safely at a higher pressure.

Selector valve 73 controls logic valve 20 and adjusts the relief pressure from a lower to a higher value, and can therefore be considered to be a "relief pressure change means" as defined by claim 1. This is especially so, as the claim does not require any particular type of "relief pressure change means". In addition, remote control valve 69 is an operation means, since it is connected to valve 32; it is also connected, via pipeline 71, to selector valve 73; thus selector valve 73, or the relief pressure change means, is operated in accordance with the operation means, as required by claim 1.

The appellant, on the other hand, submitted that logic valve 20 is not a relief valve performing the same

function as valve 10 of claim 1, but is merely an on-off valve which allows oil to flow to discharge tank 10; such a valve does not allow limitation of the maximum pressure of hydraulic pumps. Consequently, D2 does not disclose a relief valve for setting a relief pressure, which would limit the maximum delivery pressure of the hydraulic pump.

D2 also fails to disclose a relief pressure change means for increasing or decreasing the relief pressure set by the relief valve. The appellant holds the view that selector valve 73 in D2 is also an on-off valve, which is used to operate on-off logical valve 20 when extra power is required and has nothing to do with setting a relief pressure. Since valve 73 is not a relief pressure change means, the feature of increasing and decreasing the relief pressure in accordance with the input of the operation means is not disclosed.

(c) Inventive Step (Article 56 EPC)

As set out in the notice of opposition division, the respondent argued that the hydraulic system of claim 1 lacks an inventive step in light of D5 and D6. Document D5 corresponds to JP-B-116731, which is cited in the introduction to the disputed patent; D5 discloses a hydraulic drive system corresponding to the preamble of claim 1 and to the prior art shown in Figure 24 of the disputed patent. According to D5, the maximum pressure at which the relief valve operates is changed manually using a selecting switch from P0 for light work to P1 for heavy work. Starting from D5, the problem to be solved is therefore how to adjust automatically the relief valve operating pressure without use of a switch.

In seeking a solution to this problem, the skilled person would turn to D6, which also concerns a hydraulic system for construction machinery. D6 discloses a system in which an adjusting valve 30 controls the flow and therefore the pressure of the hydraulic pump. The adjusting valve is connected to the flow control valves 3a and 3b that operate the actuators and also to the control lever unit 5. The skilled person is thereby taught the general principle that control of the pressure of the fluid from hydraulic pump can be done automatically on the basis of information from the control units and valves. Applying this teaching to D5, it would be obvious to operate the pressure relief valve of D5 automatically using a control signal from an adjusting valve, as in D6, instead of manually using a switch.

The appellant submitted that D5 does not disclose the state of the art as shown in Figure 24 of the patent, since D5 shows a different type of pressure relief valve from that of Figure 24. He also argued that D6 concerns a different concept for dealing with the varying load requirements of hydraulic equipment; according to D6, it is the flow rate and not the pressure of the hydraulic pump that is adjusted in response to the load sensing control and the bleed-off control (see the paragraph bridging columns 4 and 5); consequently, the skilled person would not consider combining the teachings of D5 and D6. The appellant disputed the respondent's assertion that D6 provides a general teaching on automation of hydraulic systems; if the skilled person were to replace the switch of D5 in accordance with D6, he would employ a control system as

described in D6, and not one based on relief valve pressure.

Reasons for the Decision

1. *Admissibility of the Main Request*

In numerous cases, stemming from decision T 123/85 (OJ EPO 1989, 336), the Boards of Appeal have permitted an appellant-proprietor, whose patent has been revoked, to seek maintenance of the patent as granted even though its main request before the opposition division had only been the maintenance of the patent in more limited form. The underlying reason for this is that in opposition proceedings a patentee cannot surrender his patent either in whole or part, but only request that the patent be amended. Further, "an action taken in opposition proceedings by the proprietor of a patent before the opposition division has issued any comments on the relevance of the grounds for opposition should, unless its finality is clear from the context, be prima facie considered as a mere proposal directed to the opponent and made with a view to reaching with him an early agreement on a form of the patent acceptable to both parties...". See decision T 64/85 (point 2.4 of the Reasons, not published) and applied, for example, in decision T 168/99. It follows that if a patentee, in response to objections made in opposition proceedings, requests that the patent be maintained in limited form, he does not thereby irrevocably surrender the subject matter of the patent as granted which lies outside the request. There is therefore nothing in principle to prevent a patentee from later seeking to amend his

request so as to ask for the patent to be maintained in the form as granted (or in more limited terms), either in the course of proceedings before the opposition division or on appeal. Indeed, he is entitled to as of right. See, eg, decision T 755/00 (points 5 to 9 of the Reasons). The exception to this principle is where it would amount to an abuse of procedure to allow the proprietor to revert to the granted claims.

This principle has not been affected by the decision of the Enlarged Board of Appeal in G 9/91 (OJ 1993, 408) and has continued to be repeatedly applied by the Boards of Appeal in cases decided since then (see, for example, decisions T 373/96, T 65/97, T 564/98, T 168/99 and the further decisions cited later in this paragraph). In G 9/91 the Enlarged Board observed (paragraph 18) that: "The purpose of the appeal procedure inter partes is mainly to give the losing party the possibility of challenging the decision of the opposition division on its merits". This statement was repeated by the Enlarged Board in G 9/92 and G 4/93 (OJ 1994, 875, para. 5). However, that observation and those decisions have nothing to do with the present situation, as was made clear in, for example, decisions T 900/94, T 368/98, T 717/99, T 794/02 and T 178/03. So, for example, in T 900/94 it was pointed out that decisions G /92 and G /94 were concerned with the rights of the non-appealing party, and the principle of *reformatio in peius*, whereas the present situation is concerned with the rights of an appellant-proprietor. The same point can be made in relation to decision G 9/91, where the Enlarged Board was concerned with the extent to which the power in opposition proceedings to

examine and decide on the maintenance of a patent was limited by the grounds of opposition.

As to the passage cited by the respondent from the Case Law of the Boards of Appeal, 5th ed., paragraph VII.D.14.1 (see paragraph Ia of the Facts and Submissions), above, the English version of the relevant passage states as follows:

"In T 840/93 (OJ 1996, 335) the board pointed out that, as noted by the Enlarged Board of Appeal in G 9/91 (OJ 1993, 408), the main purpose of the inter partes appeal proceedings was to enable the losing party to challenge the first-instance department's decision on its merits. A patentee who had lost before the opposition division thus had the right to have the rejected requests reconsidered by the board of appeal. The board added that it was at odds with the purpose of the appeal procedure to file an appeal which not only sought to reverse the decision on a request already considered by the opposition division but also made new requests raising issues which the division had never looked at. Admitting amended requests was justified only if the patentee would otherwise be deprived of an opportunity of still getting a patent. If however this "last chance" argument did not apply, the board should confine itself to its appellate role, deciding only on those requests already considered by the opposition division (see also T 25/91)."

This passage is not, however, concerned with the issue currently before the Board but rather with the issue of filing of amended claims, in particular claims which had never so far formed part of the opposition

proceedings. The passage from the Case Law book which concerns the present case can be found in the 5th edition at paragraph VI. J. 3.2.2, page 421, under the heading "Opposition Proceedings" and the subheading "(b) Reinstating broader claims in opposition appeal proceedings". There, the editors first point out, referring to decisions G 9/92 and G 4/93, that in opposition proceedings the extent to which the patent proprietor is entitled to make amendments depends on the result of the first instance proceedings and on whether the patent proprietor himself filed an admissible appeal or is merely the respondent. Taking first the case where the patent proprietor is appealing against the revocation of his patent, the editors observe that the proprietor "is entitled to revert to a more broadly worded version of the patent, and in particular the one as granted ...", citing a number of decisions of the Boards of Appeal, including some of those cited above. In the Board's view this statement correctly states the position.

As to decision T 840/93 which was relied on by the respondent and which contains a statement accurately summarised in the above citation from the Case Law of the Boards of Appeal, it is important to understand the factual basis which underlay this statement. In the course of the oral proceedings before the Board of Appeal the appellant-proprietor withdrew its original request in the appeal proceedings, which had been the request on which the decision of the opposition division had been based, and replaced it with one which had never been considered by the opposition division. In particular, this new request was not for the maintenance of the patent as granted. Rather, it was a

request raising new issues which had never been considered before, and it was on this basis that the request was not admitted into the proceedings. Decisions T 1037/96 and T 368/98, which both refer to decision T 840/93 without perhaps drawing the above distinction, nevertheless both confirm that a proprietor whose patent has been revoked would normally have good grounds for reverting to the granted claims on appeal.

The respondent also relied on decision T 528/93. Again, however, the decision must be understood in the context of its own facts. The appellant-proprietor, whose patent had been maintained in amended form before the opposition division, sought to have admitted into the appeal proceedings a request which had first been introduced only in the course of the oral proceedings before the opposition division but which had then been withdrawn before a decision was made. Again, this request was not for maintenance of the patent as granted. The Board of Appeal declined to admit the request into proceedings, citing decisions G 9/91, G 10/91 and T 840/93. The circumstances were thus quite different from those of the present case and its lack of application to the present kind of situation was made plain in decision T 755/00, in the following terms:

"6. The respondents argued that the claims as granted had not been the subject of the decision of the opposition division with the result that the patent proprietors are not entitled to revert to said claims. In support of their submission, they cited decision T 528/93 of 23 October 1996.

7. Decision T 528/93 (supra) relates to a very particular situation. A request had been considered as being only "virtual" because it had been filed during oral proceedings and then withdrawn at the same without having been assessed by the opposition division as to its patentability. In view of its virtual character, said request had been regarded as not being part of the decision of the opposition division (see point 1.3 of the decision) and, therefore, had not been admitted into the appeal proceedings. This is not the situation in the present case. The granted claims cannot be regarded as virtual. They have been challenged by the opponents in their notice of opposition, which means that, even if the opposition division did not express any opinion in their respect, because in reply to the notice of opposition the patent proprietors have replaced them by a new request, nevertheless they have been part of the proceedings. Therefore, decision T 528/93 (supra) is not relevant in the present case."

In passing it can be noted that in decision T 373/96 the distinction was made that in T 528/93 the patent had been maintained in amended form, which distinguished it from a case (such as T 373/96 and the present case) where the patent had been revoked. This apparent distinction in the case law was noted in decision T 368/98, with the implicit comment that it seem procedurally illogical. This Board shares that view and prefers the reasoning for distinguishing T 528/93 given in T 755/00, above. Indeed, in numerous cases the Boards have allowed an appellant-proprietor to revert to the granted claims, or a more restricted version of them, where the patent was only maintained in amended form. See, eg, T 399/99, T 473/99, T 825/00,

T 880/01, T 794/02, T 934/02, T 1018/02, and T 178/03. The point is confirmed in the Case Law of the Boards of Appeal (5th edition) at paragraph VI.J.3.2.2, p. 422, albeit with what appears to the Board to be an inappropriate qualification by reference to decision T 528/93. Finally, it can be noted that in decisions T 794/02 and T 880/01 the respective Boards observed that decision T 528/93 had been the only case cited against the otherwise consistent jurisprudence of the Boards of Appeal, stemming from decision T 123/85, and the Boards simply declined to apply it (see paragraphs 1.6 and 2.1 respectively).

The conduct of the appellant in the present case in seeking to return to the claims as granted does not amount to an abuse of procedure. Thus, the notice of opposition sought revocation of the patent as a whole. Originally, the proprietor had requested the rejection of the opposition and the maintenance of the patent in unamended form (see its letter of 27 November 2002). Only shortly before the oral proceedings before the opposition division had the proprietor sought maintenance of the patent in amended form (see its letter of 10 November 2003). In the appeal proceedings, the request to maintain the patent as granted was first made when the grounds of appeal were filed. The substantive objections made by the respondent on appeal to the granted claims are the same as those that were made in the notice of opposition, and were based on the same prior art.

For these reasons, the request of the respondent I not to admit the appellant's main request into the proceedings was refused.

2. The subject-matter of the claims of the appellant's main request does not raise new issues in the proceedings that require the case to be remitted to the opposition division. The request of respondent I for remittal was therefore refused.

3. *Novelty (Article 54 EPC)*

The discussion of novelty centres on whether logic valve 20 of D2 can be considered to be a pressure relief valve, and whether selector valve 73 functions as relief pressure change means for increasing or decreasing the relief pressure set by the relief valve in accordance with the input amount of the operation means.

The figure of D2 depicts a (first) multiple control valve 11. At the base of valve block 11 there is a logic valve 20 which, along with selector valve 73, controls the flow of hydraulic oil from pump 15 through multiple control valve 11 and along pipeline 31 to discharge tank 22. Logic valve 20 comprises a spool 27 that is forced into position by spring 29; when selector valve 73 is in the so-called neutral or open position, and the pressure of the oil from pump 15 exceeds the force of spring 29, oil is allowed to flow from multiple control valve 11 into discharge tank 22 (see D2, column 5, lines 11 to 26). It is thus apparent that when selector valve 73 is in the neutral position, logic valve 20 is functioning as a relief valve.

When selector valve 73 is closed, the route to discharge tank 22 is blocked, with the result that the

pressure of oil from pump 15 increases (see D2, column 5, lines 54 to 63). According to the invention described in D2, oil from pump 15 now flows via attachment valve 32 to the actuator of the bucket to supplement that from pump 52. In this situation, pipeline 31 is sealed by the closure of selector valve 73 and no oil can flow through logic valve 20, even if the pressure of oil from pump 15 rises considerably. Thus, with this high pressure arrangement of the valve system of D2, logic valve 20 is no longer operating as a relief valve, and there is no indication in D2 that it could operate as such; in fact it is not functioning at all.

The invention described in the disputed patent is directed to the control of the relief valve when the hydraulic pump is delivering both low and high pressures. Since logic valve 20 of D2 only functions as a relief valve at low pressures, it cannot be equated to relief valve 10 as defined in claim 1.

The characterising part of claim 1 requires that the relief pressure change means increases or decreases the relief pressure in accordance with the input amount of the operation means. The operation means is defined in claim 1 as being that which operates the control valves for supplying hydraulic fluid to the actuators. In D2 this corresponds to remote control valve 69 which, via pipelines 72 and 71 and valves 32, 48 and 11, controls the flow of oil to the actuators for the bucket. When remote control valve 69 is moved to the right in the Figure of D2 (see column 5, line 35), pressurised oil in pipe 71 acts on selector valve 73 to close it, with the result that the pressure of the oil from pump 15 is

increased, as described above. The effect of remote control valve 69 is therefore to enable or disable logical valve 20. In terms of the disputed patent, the operation means switches the relief valve on for low pressures or off for high pressures. Since the operation means of D2 simply switches the relief valve on or off, it cannot be said that the relief pressure itself is varied in accordance with the input of the operation means, contrary to the requirements of claim 1.

Given these differences, the subject-matter of claim 1 is novel.

4. *Inventive Step (Article 56 EPC)*

The respondent argued that the subject-matter of claim 1 lacks an inventive step in light of documents D5 and D6.

Whilst the appellant contested the respondent's submission that D5 corresponds to the state of the art depicted in Figure 24 of the disputed patent, D5 is nevertheless a member of the same patent family as JP-B-7 116731, which is cited in the introduction to the patent and forms an appropriate starting point for the assessment of inventive step.

D5 describes a hydraulic drive system in which the maximum pressure at which the relief valves operate is changed manually using selecting switch 30 from a lower value for light work to a higher value for heavy work (see D5, Figure 1 and column 8, lines 3 to 53).

Starting from D5, the respondent formulated the problem to be solved as how to adjust the pressure relief valve automatically without the need to press a switch; however, this definition of the problem provides a hint of the solution. A more objective definition is simply how to enable easier operation of the system of D5.

D6 also relates to hydraulic drive systems for excavators and discloses (see Figure 1 and column 16) a system in which the delivery rate of the hydraulic pump is controlled in response to the requirements of the actuators (see column 1, lines 1 to 8).

An adjusting valve 30 is connected to flow control valves 3a and 3b that operate the actuators, and also to control lever unit 5, which corresponds to the operation means of the patent; the adjusting valve thus functions in accordance with the input from the operation means.

Adjusting valve 30 is also connected to bleed line 105 for discharging hydraulic fluid into a reservoir. Bleed line 105 contains a fixed restrictor 8 that creates a control pressure, which is used to control the flow of hydraulic fluid from the pump. Thus, in the system of D6, it is not the relief pressure or the delivery pressure of the pump that is controlled by adjusting valve 30, but the flow rate delivered by the pump.

The respondent argued that since adjusting valve 30 controls the flow, it also controls the pressure. However, it is not always the case that an increase in flow rate inevitably results in an increase in pressure, as other variables play a role, and the respondent has

not shown that pressure and flow rate are directly linked in the system of D6.

The respondent also argued that D6 provides a general teaching that control of a hydraulic pump can be done automatically in accordance with an input from a control lever unit. Applying this teaching to the hydraulic system of D5, it would be obvious to operate the pressure relief valve of the pump automatically using a control signal derived from the operation means, instead of manually using a switch.

However, the Board does not share this view. Whereas D6, like the disputed patent, relates to a hydraulic system that responds to varying demands in load, this is achieved in D6 in a particular way. The system of D6 employs firstly a load sensing control, which establishes the difference between the delivery pressure and load pressure of the actuators, and secondly, monitors the bleed rate of hydraulic fluid in a bleed pipe running from the pump's supply line. On the basis of this information, the delivery rate of the hydraulic pump is controlled (paragraph bridging columns 4 and 5).

There is no mention in D6 of responding to varying actuator loads by automatically varying the pressure at which the relief valve operates; indeed, D6 has no relief valve at all. Starting from D5 and faced with the problem of making that system easier to operate, it is therefore unlikely that the skilled person would consult D6 in expectation of finding a solution and, as argued by the appellant, if D6 were to be consulted, the skilled person would replace the switch of D5 by a

control system as described in D6, and not one based on relief valve pressure.

In summary, on reading D6, the skilled person must firstly recognise that there is a general teaching on automation and that D6 does not just relate to controlling the flow rate of a hydraulic pump, and secondly recognise how the system of D5 might be adapted in order to vary automatically the pressure of the relief valve in response to load requirements. Since this is asking too much of the skilled person, the hydraulic system of claim 1 has an inventive step.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division with the order to maintain the patent as granted.

The Registrar:

The Chairman:

A. Counillon

U. Krause