

Internal distribution code:

- (A) [] Publication in OJ
(B) [] To Chairmen and Members
(C) [X] To Chairmen

D E C I S I O N
of 22 June 1999

Case Number: T 0752/95 - 3.2.3

Application Number: 88850060.0

Publication Number: 0298057

IPC: D21G 1/00

Language of the proceedings: EN

Title of invention:

Method and device for the control of a zone roll

Patentee:

Valmet Corporation

Opponents:

Eduard Küsters Maschinenfabrik GmbH & Co. KG
Sulzer-Escher Wyss GmbH

Headword:

-

Relevant legal provisions:

EPC Art. 52, 54, 56, 96, 100, 111, 114
EPC R. 55

Keyword:

"Admissibility of the Notices of Opposition (yes)"
"Novelty and inventive step (no)"

Decisions cited:

T 0222/85, T 0328/87, T 0541/92

Catchword:

-



Europäisches
Patentamt

European
Patent Office

Office européen
des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 0752/95 - 3.2.3

D E C I S I O N
of the Technical Board of Appeal 3.2.3
of 22 June 1999

Appellant: Valmet Corporation
(Proprietor of the patent) Panuntie 6
00620 Helsinki (FI)

Representative: Rostovanyi, Peter
Awapatent AB
Box 5117
200 71 Malmö (SE)

Respondent: Eduard Küsters
(Opponent 01) Maschinenfabrik GmbH & Co. KG
Gladbacher Strasse 457
47805 Krefeld (DE)

Representative: Palgen, Peter, Dr. Dipl.-Phys.
Patentanwälte
Dipl.-Phys. Dr. Peter Palgen
Dipl.-Phys. Dr. H. Schumacher
Mulvanystrasse 2
40239 Düsseldorf (DE)

Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 30 June 1995
revoking European patent No. 0 298 057 pursuant
to Article 102(1) EPC.

Composition of the Board:

Chairman: C. T. Wilson
Members: J. du Pouget de Nadaillac
M. K. S. Aúz Castro

H. Andrä
J. P. B. Seitz

Summary of Facts and Submissions

I. Two oppositions were filed against the European Patent EP-B-0 298 057, which was granted on 4 December 1991 and claims the priority date of 23 February 1987.

II. Claim 1 of this patent reads as follows:

"1. Method for the control of the distribution of pressure load applied to a material web (W) passed through a nip (N_o) formed between a roll (10) adjustable in zones and having loading elements, such as glide shoe groups (16) inside the roll, and its counter member, such as a counter-roll (20), in a direction transverse to the direction of running of the material web (W), said loading elements acting upon the roll (10) being supported against the central axle (11) of the roll (10), a pressure-effect actuator (400) of said loading elements being controlled by means of a regulating unit (300), and a set value unit (100) being used, by means of which a series $Q(Z)$ of set value signals (A) is produced, which are passed directly or via a processing unit (200), such as a limiter block, to the regulating unit (300) so as to constitute set values (B) for its regulating circuits, characterized in that a number (N) of set load values ($Q_1...Q_N$) are used, by means of which the set value distribution $Q(Z)$ of the pressure profile of the nip (N_o) is set, wherein $Z = 1...N$; that the number (N) of set load values ($Q_1...Q_N$) is chosen higher than the number (K) of the separately adjustable zones of the roll (10), $N > K$; and that the set load values ($Q_1...Q_N$) set in the set value unit (100) or passed to the set value unit from a feedback block (500) are passed into a zone conversion

block (120), in which, on the basis of a mathematical model of an adjustable nip (N_0), a conversion to set zone pressure values ($P_1 \dots P_K$) being carried out so that, by means of the regulating unit (300), the zone conversion block (120) and said pressure-effect actuator (400), in the material web (W), a linear-load profile can be accomplished whose deviations from the set value profile $Q(Z)$ are substantially minimized."

Claim 9 reads as follows:

"9. Equipment for the treatment of a material web (W), such as a paper web, in a press nip (N_0), such as a dewatering nip or a calendering nip, comprising a variable-crown roll (10) and a counter-member for same, such as a counter-roll (20), which together form the nip (N_0) through which the material web (W) to be treated is passed, said variable-crown roll (10) comprising a stationary part (11) and a cylinder mantle (13), and a series of glide shoes (15) arranged between the stationary part (11) and the mantle (13) and grouped as pressure loading zones (16), each of which group being loaded by a zone pressure (P) controlled by a valve (410), said equipment also including a regulating system, which comprises a set value unit (100) or a processing unit, such as a limiter block (200), a regulating unit (300) and a pressure effect actuator (400), which has a series of pressure valves (410) and a series of P/I-converters (420), from which feedback signals are passed to the regulating unit (300), characterized in that the set value unit (100) includes a set zone unit (110), in which the number (N) of said set load values ($Q_1 \dots Q_N$) that can be set by means of the unit is higher than the number (K) of

separately adjustable zones in the variable-crown roll (10), and that the set value unit (100) further includes a zone conversion block (120), in which the set load values ($Q_1 \dots Q_N$) are converted to set zone pressure values ($P_1 \dots P_K$) so that, in the material web (W), a linear-load profile can be accomplished that differs from the set value profile $Q(Z)$ as little as possible."

III. Lack of novelty and inventive step were the grounds of opposition:

In his notice of opposition, Opponent I essentially referred to an alleged public prior use consisting of the sale by the opponent of a Vario-S-Roll to the firm PWA in June 1984. As evidence therefor, he named Dr. Brendel as witness and filed the following documents:

D7: US-A-4 307 501

D9: "The Vario Swimming Roll Küsters", Information Bulletin No. 1 for the paper industry, October 1985.

D10: Küsters VARIO computer control Betriebsanleitung

D11: Referenzliste Küsters VARIO-S-Walzen

D12: Auftragsunterlagen

He also referred to the prior art considered during the examining proceedings, in particular D4: GB-A-2 091 44, which is cited in the patent publication.

In his notice of opposition, Opponent II based his opposition mainly on an alleged public prior use named "project Biron" consisting of the delivery in October 1986 by the opponent of several calendar rolls to the firm Consolidated Paper, Wisconsin, USA. He filed as evidence the following documents:

D13: "Automatische Feuchtequerprofilkorrektur mit dem NIPControl-System", Escher Wyss,

D14: "Advances in NIPCO Roll Applications" (Publication in 1978, certified by a witness),

D15: Inbetriebnahmebericht "Projekt Biron",

and gave the names of two witnesses.

After the opposition period according to Article 99(1) EPC, he filed the following documents relating not only to the above prior use, but also to two further similar prior uses:

D16: Anlage 1 to 4 (project Biron)

D17: Anlage 5 to 8 (project Rauma-Repola, 1986)

D18: Anlage 9 to 15 (project Gretesch PM1, January 1987)

Mr. Weber was offered as witness for these other two projects.

V. Oral proceedings before the Opposition Division took place on 5 April 1995. During these proceedings, the

admissibility of both oppositions, novelty and inventive step were discussed and Mr Weber as witness was heard.

At the end of the oral proceedings, the Opposition Division decided that the prior uses Rauma-Repola, Nymölla (a simultaneous delivery of Nipco-Rolls in Sweden, for the first time mentioned by Mr Weber), and Gretesch PM1 formed state of the art according to Article 54(2) EPC, so that the patent had to be revoked. In the written decision, which was sent on 30 June 1995, the grounds are essentially based upon documents D4 (closest prior art), D13 and D17.

- VI. The Patentee (Appellant) lodged an appeal on 1 September 1995, paying the appeal fee at the same time. In the Statement of grounds received on 9 November 1995, he still contended that the Notices of Opposition were to be deemed inadmissible, so that the patent should be maintained as granted. Moreover, he filed a new set of claims as auxiliary request.
- VII. The wording of Claim 1 of this set is the same as that of granted Claim 1, however with the addition of the following wording:

"that an intelligent regulating unit (300) is used, which is arranged as operating so that it diagnoses the operation of the system and on that basis controls any abnormal operation situations of the regulating circuit; the intelligent regulating unit (300) is used for controlling the zone pressures (P) in the variable-crown roll (10) so that, on the basis of error situation reports received from a diagnostic block

(310) of the regulating unit, the set values of single channel regulators (340) are controlled by means of a protection logic part (320) belonging to the regulating unit (300) to a state suitable in view of protecting the variable-crown roll (10) and possibly the web (W) to be treated."

The wording of the independent equipment Claim 7 of this set is the same as that of Claim 9, as granted, however with the addition of the following wording:

"that the regulating unit (300) is an intelligent regulating unit, which comprises a diagnostic block (310), a protection logic part (320), and a series of regulators (340) connected in parallel and operating independently from each other and having a number (K) equal to the number of adjustable zones, including loading members (12a, 12b), if any, acting upon the ends of the variable-crown roll (10)."

VIII. Opponent II withdrew his opposition on 17 April 1996.

Oral proceedings before the Board of appeal were held on 22 June 1999.

IX. The Appellant essentially argued as follows:

Admissibility of the opposition I:

The Notice of Opposition from Opponent I showed no link between documents D7, D9 and D10. Moreover, it was not possible to derive from this notice how the disclosures of these documents should be combined to attack the patentability of the subject-matters of the claims: D7

and D9 say nothing about set load values for an adjustable-crown roll having pressure zones, and D10, which on page 81 discloses seven zones for such a roll, mentions only six set load values - see pages 11 and 81, so that the condition $N > K$ of the claims is not satisfied. The notice of opposition moreover contained no evidence for the public availability of D9. Therefore, the Patentee was left at a loss as to the reasons of the attack upon the patent.

Patentability of the granted claims:

In the decision under appeal a wrong interpretation of "Anlage 7" of D17 is made. In the schematic drawing of this document, the counter zones of the roll are also to be considered, so that contrary to the statement of the Opposition Division the number N of the set load values equals the number K of pressure zones. Thus, the claimed solution is not disclosed.

With regard to the alleged prior use "Gretesch", "Anlage 14" shows that the roll concerned by this prior use was in fact not operational until 23 February 1987, that is to say on the priority date. That the roll was mounted before is irrelevant, since only the date on which the machine was made available to the public is relevant and clearly, this prerequisite for a public prior use is not fulfilled.

Claims according to the auxiliary request:

In his testimony, Mr Weber has not stated that, in the prior use devices, an intelligent regulating unit was used, which reacts in case of abnormal situations. It

may be that the zone-pressure values were passed through a limiter block, but, when the roll operates abnormally, the present invention goes further by controlling the set values all together and not one after the other, since an intelligent regulating unit is provided.

- X. The Respondent (Opponent I) replied by means of the following arguments:

As far as the issue of admissibility of the oppositions is concerned, a difference must be made between admissibility and allowability. If an opponent interprets wrongly a document or makes an error, then it is not admissibility, but allowability which is concerned.

As indicated during the opposition proceedings, the "Gretesch" equipment was already in use at the end of December 1986 and only the protocol was written later on. Mr Weber has clearly testified to this fact. Moreover, the roll according to this public prior use had six pressure zones, whereas eight or more set load values were set. Thus, the subject-matter of the granted claims is anticipated.

A limiter unit works in all situations, whether the situations are normal or abnormal. Such a limiter unit with a feedback line is shown on the drawing concerning the "Gretesch" device and the witness has emphasized that the "Hydraulikmoog-Walze" unit shown in "Anlage 7" had the same functions as the regulator unit and the pressure-effect actuator of the present invention. Moreover, as soon as automatic control units in the

form of microprocessors are involved, the person skilled in the art has to provide controls for abnormal situations.

XI. The Appellant requested that the decision under appeal be set aside and that:

- (1) both Notices of Opposition be deemed inadmissible,
- (2) at least the Notice of Opposition of Opponent II be deemed inadmissible,
- (3) the case be remitted to the Opposition Division for fair treatment of the appellant,
- (4) the patent be maintained as granted, and
- (5) a patent be maintained in amended form on the basis of Claims 1 to 8 filed on 9 November 1995.

The Respondent requested that the appeal be dismissed; Should the appeal not be dismissed, he requested that the witness Weber be heard again and Mr Brendel be heard as witness.

Reasons for the Decision

1. The appeal is admissible.
2. *Admissibility of the opposition of the Respondent (Opponent I)*

- 2.1 The Appellant has challenged the admissibility of the opposition of the Respondent. The admissibility of the opposition is an indispensable procedural requirement which can be examined at any stage of the proceedings.
- 2.2 The requirements of an admissible opposition as to the content of the notice of opposition are laid down in Rule 55c EPC according to which the Opponent needs to have submitted not only a statement of the extent to which the patent is opposed, and of the grounds on which the opposition is based but above all he must also have given sufficient indication of the facts, evidence and arguments presented in support of his opposition.

In the present case, as far as the extent is concerned the patent is opposed in its entirety and as to the grounds the opposition is based on lack of novelty or at least inventive step (Article 100(a) EPC). As to the indication of facts, evidence and arguments, this is only submitted with respect to an alleged public prior use.

For the admissibility of an opposition based solely on public prior use the jurisprudence of the boards has developed certain criteria. The requirement of admissibility is met if the indication of facts, evidence and arguments is objectively comprehensible from the point of view of the average person skilled in the art and can be evaluated in such a way that it becomes possible

- (a) to examine the time or period of public prior use in order to establish whether any use occurred

before the priority date of the patent concerned;

- (b) to establish the subject-matter of use in such a way that it is possible to examine whether it is identical to the subject-matter of the patent in suit, and
- (c) to examine the circumstances of the use and to establish whether the items used have been made available to the public or not (see e.g. T 328/87, OJ 1992, 701; T 541/92).

The evidence itself can be submitted later, since Rule 55(c) EPC only requires that it be indicated.

- 2.3 Whereas the time of the various alleged prior uses is initially indicated too vaguely by the term "before the priority date", it is submitted on page 7 of the notice of opposition that a number of items were delivered to various clients according to a list - D11 - which was filed together with the notice of opposition. In that list the dates of delivery to the various clients or of start of working of the items delivered are indicated. Furthermore, from that list the Respondent has chosen one example for which all the relevant dates starting with the order and ending with the invoice were indicated and the corresponding documentation - again D11 and D10 - was submitted together with the notice of opposition.

The subject-matter of the use is explained in detail and compared to the subject-matter of the patent in suit. The explanation is completed by reference to two documents - D7 and D9 - which were as well annexed to

the notice of appeal.

Contrary to the Appellant's allegations a link is made between the cited documents D7, D9 and D10. Namely, it is contended that the delivery consisted of a Vario-roll, that the principle of that roll was described in D7 and in D9 and that with the delivery operating instructions (D10) were forwarded. Contrary to the Appellant's contentions, the date of the public availability of D9 is not relevant here. D9 is only used as a means to describe the Vario-roll which was delivered. The structure of that roll and its date of delivery are the decisive moments for the allegation of a public prior use.

As to the circumstances of the use, sale was alleged and delivery without any obligation to secrecy, the above mentioned list indicating the various clients.

Further to the submitted written documentation the giving of evidence by a witness was offered the name of whom was indicated in the notice of opposition.

By that the Respondent has given **sufficient** indication of the **relevant** facts, evidence and arguments for the reasoning and merits of the **Respondent's** case to be properly understood by the Opposition Division and the Appellant (see Decision T 222/85 OJ, EPO 1988, 128). It may well be that the Appellant evaluates the documents indicated by the Respondent differently. This concerns however the substance of the Respondent's case, namely the allowability of his opposition and not its admissibility.

- 2.4 In conclusion, the Board is satisfied that the Respondent's opposition is admissible.
- 2.5 The Appellant has also challenged the admissibility of the opposition of Opponent II. But since Opponent II is no longer a party to the appeal proceedings due to the withdrawal of his opposition, there does not exist any reason for the Board to decide on the admissibility of this opposition as a decision thereupon would have no repercussion on the decision to be taken on this appeal as a whole. This is due to the fact that still another Opponent, whose opposition is considered to be admissible, is present as a party to the appeal proceedings. Because of this admissible opposition the merits of the case could even be examined if the opposition of Opponent II were inadmissible. Therefore, the corresponding request of the Appellant has to be rejected.
- 2.6 The facts and evidence presented by Opponent II in support of his opposition can however be relied upon by the Board. This is a consequence of Article 114(1) EPC which provides the examination of the facts by the European Patent Office of its own motion.

3. *Remittal to the Opposition Division*

As a further auxiliary request the Appellant wants the case to be remitted to the Opposition Division for "fair treatment of the Appellant". No reasons for this request have been forwarded. According to Article 111(1) EPC it depends on the discretion of a Board of Appeal whether a case is remitted to the first instance.

In the case under consideration, the Board cannot see any reason for a remittal. Neither has the Opposition Division committed a substantial procedural violation nor have the facts and evidence alleged changed or have been supplemented so that a so called fresh case would have arisen.

Therefore, the request for remittal has to be rejected.

4. *Claims as granted (Appellant's request 4)*

- 4.1 In the decision under appeal, it was stated that, in D17 concerning the prior use of "Rauma-Repola", in particular in "Anlage 5" and "Anlage 7", the number of set load values is higher than the number of the adjustable zones of the Nipco-roll. "Anlage 5", which is a mere specification sheet for the control diagram of this roll, only mentions the main roll data, and among them a zone division comprising eight zones. On the Nipco-Software diagram according to "Anlage 7", ten set load values are indicated on the left side (box DB 80 DW 202), but on the right side eight zones are shown along the roll with, moreover, one counter zone at each end of the roll. In the statement of Mr Weber, page 6,

this fact is acknowledged, but according to the protocol of the hearing, no question about a possible connection between these additional (counter) zones and the set values had been raised. Therefore, it is not sure whether the ten set values on the left side concern the eight (positive) zones only or ten zones, namely the eight zones and the two counter zones.

4.2 The Opposition Division had however stated that also the prior use "Gretesch" belongs to the state of the art according to Article 54(2) EPC. The Appellant did not contest the relevance of this prior use itself, but only its availability to the public because of the date of "Anlage 14" (D18), said date corresponding to the priority date of the patent in suit. The Appellant has however recognised that the roll could have been mounted several months before and Mr Weber has testified that, in fact, the Nipco-Roll according to prior use "Gretesch" was put into operation for the first time on 23 December 1986, producing marketable paper, and that the report thereof was written two months later, since some improvements were still realized in January 1987. In this report (Anlage 14), it is moreover confirmed that at least from 20 November 1986 to 29 January 1987, several problems and deficiencies occurred, considered as usual in the start phase. Some of them were concerning the valves of the "hydraulik Moog-Ventile" block, the converter block and the software program. It follows that the equipment according to the prior use "Gretesch" was delivered and worked before the priority date of the patent in suit, so that it was made available to the public.

4.3 In the software diagrams according to "Anlage 11" and

"Anlage 12", respectively dated 12 February 1987 and 16 February 1987, ten set load values can be seen in the boxes on the left side, whereas six zones and two counter zones are given on the right side, so that in any case the number of set load values is higher than the number of zones, even when adding the counter zones.

Thus, having regard to this prior use, the Board arrives at the same conclusion as that reached in the decision under appeal, namely that the subject-matter of claims 1 and 9 of the patent in suit, as granted, is not new (Articles 52 and 54 EPC).

5. *Claims filed on 9 November 1995 (Appellant's request 5)*

5.1 The features additionally introduced in the new independent Claims 1 (method) and 7 (equipment) are those of the granted dependent Claims 5 and 6 and of the granted dependent Claim 10 respectively. Thus, these new claims are admissible under Article 123 EPC.

5.2 These features essentially specify that the regulating unit is intelligent in that it controls the zone pressures by means of diagnostic and protection logic parts which notice abnormal situations and maintain the set values of the pressures at a level suitable for protecting at least the roll. According to the arguments of the Appellant during the oral proceedings, the fact that the regulating unit is intelligent implies also that all data are simultaneously controlled.

5.3 This last meaning of the term "intelligent" is however

not disclosed in the patent in suit and, moreover, the Board can see no inventive step in the sole choice of a processing unit which can treat data either all together or one after the other.

All the software diagrams according to the above mentioned prior uses show a pressure-effect actuator (Hydraulic Moog-valves) controlled by the converter unit and including a feedback line to said converter unit. Signals are also passed from a pressure ramp unit and a median pressure line limiter unit through the regulating unit to the converter unit. Mr Weber has testified that the Hydraulic Moog-valves unit according to these prior uses is functionally comparable to the intelligent regulator and pressure-effect actuator units of the present invention. Therefore, in the Nipco-Rolls according to the prior uses, abnormal pressure situations as well as normal pressure situations are controlled. Moreover, when automatic controls or regulating systems for a device are provided, it would be obvious, for security reasons at least, to simultaneously provide control means which diagnose the operation of the device and avoid abnormal situations.

5.4 For all these reasons, no inventive step can be seen in the subject-matter of Claims 1 and 7 according to the fifth and last request of the Appellant (Articles 52 and 56 EPC).

6. Under these circumstances, there is no need to consider the auxiliary request of the Respondent relating to the hearing of witnesses.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

N. Maslin

C. T. Wilson