BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

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 27 September 1995

Case Number: T 0393/93 - 3.2.2

Application Number: 88102265.1

Publication Number: 0276027

IPC: B26F 1/38

Language of the proceedings: EN

Title of invention:
Apparatus for cutting sheet material

Patentee:
Gerber Scientific Products, Inc.

Opponent:
Aristo Graphic Systeme GmbH & Co. KG
MAX CO. LTD

Headword:
-

Relevant legal provisions:
EPC Art. 56

Keyword:
"Inventive step (no)"

Decisions cited:
-

Catchword:

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0393/93 - 3.2.2

D E C I S I O N
of the Technical Board of Appeal 3.2.2
of 27 September 1995

Appellant: (Proprietor of the patent)
Gerber Scientific Products, Inc.
151 Batson Drive
Manchester, CT 06040 (US)

Representative:
Schaumburg, Thoenes & Thurn
Mauerkircherstrasse 31
D-81679 München (DE)

Respondent: (Opponent 01)
Aristo Graphic Systeme GmbH & Co. KG
Schnackenburgallee 41
D-22525 Hamburg (DE)

Representative:
Suchantke, Jürgen
Uexküll & Stolberg
Patentanwälte
Beselerstrasse 4
D-22607 Hamburg (DE)

Respondent: (Opponent 02)
MAX CO. LTD
Chuo-ku
Tokyo (JP)

Representative:
Turi, Michael, Dipl.-Phys.
SAMSON & PARTNER
Widenmayerstrasse 5
D-80538 München (DE)

Decision under appeal: Decision of the Opposition Division of the European Patent Office dated 27 January 1993 with written reasons posted on 1 March 1993 revoking European patent No. 0 276 027 pursuant to Article 102(1) EPC.

Composition of the Board:

Chairman: H. J. Seidenschwarz
Members: M. Bidet
M. Aúz Castro

Summary of Facts and Submissions

I. On 27 April 1993 an appeal was filed against the decision of the Opposition Division, issued on 1 March 1993 revoking European patent No. 0 276 027 filed on 23 June 1985 and claiming the priority of US application No. 401 722 of 26 July 1982, because of lack of inventive step with regard to documents US-A-3 495 492 (R4), US-A-3 555 950 (R5) and a prior use based on a prospectus "Zeichenanlage ARISTOMAT 401, Ausgabe 1280.1, Liste TD MAT 401 (D1) completed by drawings having the references numbers 41.00.266.30.B1.1 and 41.00.295.10.B1.1, (hereafter drawings 266.30 and 295.10 respectively), the availability to the public of these latter documents having not been contested by the Appellant (Patentee). The appeal fee was paid also on 27 April 1993 and the Statement of Grounds of Appeal was received on 9 July 1993.

II. Oral proceedings were held on 27 September 1995 in which the Appellant relied on 3 sets of Claims 1 to 7 all filed on 30 August 1995 as main request and auxiliary requests 1 and 2, subject to an amendment in Claim 1 of the second auxiliary request filed during oral proceedings by which in feature "(p)", the wording, "by the weight of the tool", was added after the word "biased".

Claim 1 according to the main request reads as follows:

"Apparatus for cutting text in sheet material (M) including

(a) a support having a support surface for holding the sheet material (M) during a cutting operation;

(b) a cutter having a cutting tool (40) suspended by means of a tool support (60) over the support surface and the sheet material (M) for cutting sign text characters as a group in the sheet material;

(c) motors controls (80,86) for moving the sheet material (M) and the cutting tool (40) relative to one another as the cutting tool (40) cuts each sign text character in the sheet material (M);

(d) a memory (182, 184, 186) connected with the motor controls (80, 86) for storing vectors and other data defining a font of text characters for guiding the relative movement of the cutting tool (40) and sheet material (M) during the character cutting operations;

(e) a text entry selector for selecting the text characters in the memory (182) and the character arrangement in a sign to be cut in the sheet material (M), wherein

(f) the support surface engages an underlying release liner (L) to which an elongated strip of the sheet material (M) is secured for movement in a first direction relative to the cutting tool (40);

(g) and the cutter includes a tool carriage (12) supporting the cutting tool (40) for movement along the support surface in a second direction orthogonal to the first direction whereby the sheet material (M) may be cut along paths having components in the first and second directions;

(h) the cutting tool comprises a knife blade (120, 121) mounted over the support surface to cut the sheet material (M) resting on the support surface; and

(i) a mechanism for limiting the penetration of the cutting tool (40) to cut through the sheet material (M) without penetrating the underlying release liner (L),

characterised in that

(k) said support includes a roller (20) having a hard support surface;

(l) said roller (20) is rotatably driven by means of a servomotor (80) which is actuated in response to command signals from a data processor (180);

(m) said sheet material (M) is adhesively secured to said release liner (L) by a pressure sensitive adhesive;

(n) said memory (182, 184, 186) stores vectors and other data defining a font of two dimensional text characters to be cut from the sheet material (M) and then pulled from the release liner (L)."

Claim 1 according to the auxiliary request 1 differs from above Claim 1 in the following additional feature:

"(o) said memory (182, 184, 186) comprises a header portion (190) containing an identifying code and standardised information for all font characters, an index portion (192) including kerns for adjusting the standard spacing between font characters, a listing of each font character and its geometric shape and a pointer identifying the address in a bulk data file (194) containing vectors fully defining the profiles of each character."

Claim 1 according to auxiliary request 2 corresponds to Claim 1 of the auxiliary request 1 including the additional feature:

"(p) said mechanism for limiting the penetration of said cutting tool (40) is a support arm (60) hingedly connected to said tool carriage (12) and serving as a light weight platform biased by the weight of the tool toward a lower engaging position on said roller (20) under a pressure sufficient to cut through said sheet material (M) but not through said release liner (L)."

III. In the oral proceedings the Appellant did not accept that document D1 was made available to the public before the priority date of the patent in suit and that the drawings 266.30 and 295.10 contained features of the device according to document D1 which would have been made available to the public when inspecting the device.

The Board decided therefore to take evidence by hearing Mr. Eduard Claus Schütt offered as a witness by Respondent 01 and present at the oral proceedings. The witness produced the following documents as evidence:

(1) a copy of the maintenance contract dated 12 December 1979 between the Respondent 01 and the Firm Zimex GmbH, Leipzig on behalf of the Firm Typoard Dresden;

(2) a copy of the order dated 5 November 1981, delivery note and the invoice both dated 22 January 1981 for printing the prospectus "Aristomat 401, Ausgabe 1280.1";

(3) a copy of the confirmation of order and the invoice both dated 9 October 1981 for the delivery of a machine "Aristomat 401" to the Firm Ericsson in Sweden, of the contract of providing staff for assembling the delivered machine dated 8 October 1981 and of the pro forma invoice dated 22 October 1981 for delivering accessories for an automatic drawing machine.

As regards the result of taking evidence, reference is made to the interlocutary decision of the minutes of the oral proceedings.

IV. During the oral proceedings, in addition to the above mentioned documents D1, R4 and R5 (see point I) the parties referred further to the following documents cited during the opposition proceedings:

GB-A-2 057 957 (R1)
DE-A-2 551 744 (R2)
US-A-3 857 525 (D2/R3)
DE-A-2 929 560 (R6)
US-A-3 964 591 (R9)

V. In writing and during the oral proceedings the Appellant argued as follows:

(i) As to the main request

Document R2 disclosed an apparatus for cutting text as it was defined in the precharacterising portion of Claim 1 according to the main request.

This known apparatus was distinguished from the apparatus according to Claim 1 mainly in that a flat support surface held the sheet material during cutting operations. According to the invention, the support for

the sheet material essentially included a roller rotatably driven by a servomotor thus allowing text to be formed on the sheet material.

Document D1 showing an apparatus as defined in the preamble of Claim 1 of each request and its two drawings did not belong to the state of the art according to Article 54(2) EPC. If this were not accepted, it was argued that the apparatus according to document D1 was a drawing machine which was not able to cut signs or characters and that the skilled person would therefore never combine the teaching of document R2, namely the use of a sheet material appropriate to obtain characters, in the drawing apparatus according to the teaching of document D1, and if ever this sheet material were used, the drawing apparatus was not adapted for cutting characters since it was designed for producing prints for printed circuits.

Document R1 disclosed an apparatus for cutting fabric material using a flat support surface for the cutting operations which did not allow the cutting of letters. Document D2/R3 related to an apparatus for plotting in which the sheet material was held on a rotatable roller. Therefore, nowhere in the state of the art was a sheet material cut on a rotatable roller and there was no hint to proceed this way.

(ii) As to the auxiliary requests

With regard to auxiliary request 1, the structure of the memory delivering signals for the control of various changes in the characters, such as the font, the form or shape, and the space between the characters was novel in view of the state of the art, particularly with respect to the apparatus according to document R2.

Concerning the second auxiliary request, the hinged arm support through which the cutting tool is mounted on the movable tool carriage was not to be found in the available documents and was not derivable therefrom. There was an important difference between the cutting tool of the apparatus according to document R5 and the hingedly supported tool claimed in the new feature, since in document R5 the force applied on the tool changed under weaveness of the sheet material to be cut due to the leaf spring acting on the shaft of the tool. It resulted that by the additional provision of the foot at the end of the cutting blade which bore on the upper surface of the sheet material, the penetration of the cutting blade in the sheet material remainded constant. This was in contrast to the variable penetration of the cutting blade in the sheet material when variable forces were applied on the cutting tool according to the patent in suit.

There was therefore no hint leading the skilled person to modify the apparatus according to document R2 in order to provide a rotatable roller as support surface as claimed in the main request or, additionally to this, to construct the memory controlling the cutting operation as recited in Claim 1 of the first auxiliary request, or to suspend the cutting tool over the roller by the hinged support arm as specified in Claim 1 of the second auxiliary request.

VI. The Respondents (Opponents 01 and 02) contested the Appellant's submissions as follows:

Document D1 together with the cited drawings was part of the prior art so that the drawing apparatus disclosed by it was suitable to cut sheet material of the type referred to as "Rubilith" being a stripping foil, listed in page 5 of document D1.

The subject-matter of Claim 1 differed from the apparatus according to document D1 in that a rotatable roller was used instead of a flat support surface. Since document R2/D3 showed a plotting roller in a plotting apparatus and the drawing apparatus of document D1 allowed also plotting operations according to the tools mentioned on pages 3 and 4 of document D1, it would have been obvious to provide a roller in such a plotting apparatus. As this plotting apparatus was additionally able to cut a sheet material as for example the stripping foil, the cutting of a stripping foil supported by a roller was therefore obvious.

Document R2 represented also a plotting apparatus on which was mounted a cutting tool, disclosing all the features of Claim 1. If it were not acknowledged that Claim 1 lacked novelty, the statement of cutting characters in a sheet material by a knife placed on the X coordinate axis of **a plotter** (see lines 18 to 22 of page 4) would have clearly been interpreted by the skilled person as concerning all of the plotters known in this technical field, these plotters being either of the flat type or the roller type. It was therefore obvious to the skilled person to use a roller in the case where the length of flat support was not large enough for supporting an elongated sheet material as it was intended in Claim 1.

As regards Claims 1 of the auxiliary requests, there was no functional relationship between the structure of the memory according to the additional feature "(o)" of Claim 1 of the first auxiliary request and the mechanism for limiting the penetration of the cutting tool in the sheet material according to the additional feature "(p)" of Claim 1 of the second auxiliary request.

The feature relating to the memory and to the ability to change the space between two characters was known from the font selection system according to document R9 or from the teaching of documents D1 and R2. The hingedly supported tool compared to the cutting tool according to the apparatus disclosed by document R5 in which the cutting tool was vertically guided and biased downwardly under its own weight did not bring any valuable contribution to the state of the art.

VII. The Appellant requested that the decision under appeal be set aside and that the patent be maintained on the basis of Claims 1 to 7 (main request) or on the basis of Claims 1 to 7 (first auxiliary request) or on the basis of Claims 1 to 7 (second auxiliary request), all requests filed on 30 August 1995 with the amendments in Claim 1 of the second auxiliary request filed during oral proceedings that in feature "(p)" of the characterising part the words "by the weight of the tool" be added after the word "biased".

The Respondents requested that the appeal be dismissed.

Reasons for the Decision

1. The appeal is admissible.

2. *Amendments*

2.1 Main request

The features added to Claim 1 of the patent as granted for the definition of Claim 1 according to the main request relate to feature (k) to (n) which refer to

- the roller having a hard support surface (feature (k) being disclosed on page 11 of the application as filed, first sentence of the last paragraph and in column 5, lines 17 to 19 of the patent specification;

- the roller being rotatably driven by a servomotor actuated in response to command signals from a data processor (feature (l)) being supported on page 12, second paragraph and on page 23, second full paragraph of the application as filed or in column 5, lines 26 to 32 and column 9, line 35 of the patent specification,

- the sheet material (M) being adhesively secured to the liner (L) by a pressure sensitive adhesive (feature (m)) finding its support on page 7, lines 22 to 27 of the application as filed and in column 3, lines 56 to 59 of the patent specification;

- memory storing vectors and other data defining a font of two dimensional text characters to be cut from the sheet material (M) and then pulled from the release liner (feature (n)) being supported on page 3, last paragraph and on page 8, first paragraph of the application as filed and in column 2, lines 28 to 34; column 3, line 65 to column 4, line 7 and Figure 15 of the patent specification.

The wording "**hard** support surface" is supported by the description (see page 11, last paragraph of the application as filed and column 5, lines 18 to 25 of the patent specification) insofar as it is clear that the surface of the roller being a "hard rubber sleeve" has a sufficient hardness able to resist the applied forces

and to allow an effective performance of the cutting operation.

2.2 First auxiliary request

The new feature added to Claim 1 of the main request for the definition of Claim 1 of the first auxiliary request is the feature "(o)" relating to a more precise definition of the structure of the memory in relation to the characters or signs such as the font, the spacing and geometric shape. This is disclosed on page 24, last two lines to page 25, lines 1 to 16 of the patent application as filed and in column 10, lines 7 to 24 of the patent specification.

2.3 Second auxiliary request

Feature "(p)" of Claim 1 of the auxiliary request 2 relating to the mechanism for limiting the penetration of the cutting tool is supported by the description on page 11, first paragraph of the application as filed and in column 4, line 60 to column 5, line 6 of the patent specification insofar as it is disclosed that the cutting tool suspended over the support surface by the hinged support arm penetrates the sheet material under the weight of the tool, cf. the above cited references with the text on page 4, lines 4 to 8 of the application as filed and in column 2, lines 37 to 40 of the patent specification, and not that the penetration of the cutting tool is limited by the support arm.

In these circumstances, the above amendments are supported by the description as originally filed and also reduce the scope of the protection. There are therefore no objections under Article 123(2) or 123(3) EPC to the amended claims.

3. *Prior use according to document D1 and its drawings*

According to the statement of the credible witness, the Board considers the following to be established:

Machines of type Aristo MAT 401 have been presented at exhibitions, among them the "Hannover exibition", the CEBIT and Productonica in Munich. In 1973 the machines were named "MCT2023" and since 1978 their name was changed to "Aristomat 401" having a new control system.

The reference "Ausgabe 1280.1" on document D1 means the month and the year. According to the evidence (2), over 2000 examples of document D1 "Ausgabe 1280.1" have been printed and delivered. These documents have been distributed to clients at the exibitions.

From the documents produced in evidence (1) and (3) (paragraph III above), it follows that a machine of the type "Aristomat 401" had been delivered to the firms

- Typoart in Dresden (Germany) in 1979, and

- LM Ericsson in Norrköping (Sweden).

The purchasers were provided with assembly drawings including the drawings 266.30 and 295.10, which were included with the above mentioned deliveries. The purpose of including the assembly drawings was that as the Respondent 01 produced four different types of drawing machine at that time, purchasers needed to be able to identify and order replacement parts in accordance with these drawings. The purchasers could also open the machine and replace or change the cutting tool at any time.

The drawing 266.30 related to the lifting device of a four signs tool corresponding to part 20 of the drawing on page 2 of document D1 and it was possible to mount part 15 with part 20. Together on the machine they have the reference numeral 23. As to drawing 295.10, it concerns a control device cited in document D1 as part 10a (Tangentialgesteuerte Schneideeinrichtung).

The Board is therefore satisfied that machines "Aristomat 401" as disclosed in document D1 have been made available to the public before the priority date of the patent in suit. Therefore, document D1 is part of the prior art in the sense of Article 54(2) EPC.

4. State of the art

4.1 Document D1 discloses a drawing apparatus for cutting text in sheet material including

(a) a support having a support surface for holding the sheet material during the cutting operation (see page 2, "Zeichenfläche" und "Zeichenverfahren");

(b) a cutter having a cutting tool 10a suspended over the support surface and the sheet material for cutting sign text characters as a group in the sheet material (see page 3 upper part, left side, page 4, Figur-Nr. 10a and page 8, "Buchstabengenerator" and "Symbolgenerator", first paragraph);

(c) motors controls (see page 2, "Antrieb", page 6, "Leistungselektronic") for moving the sheet material and the cutting tool relative to one another as the cutting tool cuts each sign text character in the sheet material;

(d) a memory connected with the motor controls for storing vectors and other data defining a font of text characters for guiding the relative movement of the cutting tool and sheet material during the character cutting operations (see page 6, "Bedienung" and "Datenformat");

(e) a text entry selector (keyboard TAS 2, page 6, "Bedienung") for selecting the text characters in the memory and the character arrangement in a sign to be cut in the sheet material (M); wherein

(f) the support surface engages an underlying release liner to which the sheet material is adhesively secured by a pressure sensitive adhesive (resulting from the fact that a stripping foil of the typ "Rubilith" is used, see page 5, Artikel-Nr. BM STFO 1) for movement in a first direction relative to the cutting tool;

(g) a tool carriage 15 supporting the cutting tool for movement along the support surface in a second direction orthogonal to the first direction, whereby the sheet material may be cut along paths having components in the first and second directions;

(h) the cutting tool comprises a knife blade mounted over the support surface to cut the sheet material resting on the support surface (see page 3, upper part of left side);

(i) a mechanism for limiting the penetration of the cutting tool to cut through the sheet material without penetrating the underlying release liner.

With respect to the last paragraph of above point 2.1, the support surface should be hard enough to allow the cutting operation to be properly performed (part of feature (k). It is also clear that from the feature (d) relating to the "vectors and other data defining a font of text characters", the text obtained is necessarely two dimensional (part of feature (n)).

The apparatus according to document D1 differs from the subject-matter of Claim 1 according to each request in that it does not include a roller as support surface, which roller is driven by a servomotor.

4.2 Document R2 discloses a plotting apparatus on which a cutting blade 18 is mounted in order to cut text in sheet material (see page 4, lines 18 to 22). The apparatus includes a support surface for the sheet material and a tool carriage in order to achieve cutting of text characters by a relative movement between the tool and the sheet material by means of two pulsmotors displacing the tool in the coordinate directions X and Y perpendicular to each other. A further pulsmotor controls the movement of the cutting blade along the third coordinate axis Z. The blade is controlled so that the resin film 21 of a stripping foil with its adhesive layer is cut, without cutting the protective layer on which the resin film is adhesively secured, (see page 4, last but one line to page 5, first line; page 8, lines 1 to 14, column 9, second paragraph; Fig. 2 and 3). The apparatus is equipped with a computer system 8 responsible for selecting stored data relative to the font of text characters, for delivering signals controlling the pulsmotors and for modifying the characters or changing their sizes (see page 4, lines 14 and 15; page 6, lines 15 to 20; line 24 to page 7, line 4; page 8, first full paragraph). As regards the sign cut in the resin film, it is mentioned that it is

stripped from its support or liner (see page 10, first paragraph).

The apparatus according to document R2 differs from that according to Claim 1 of each request in that its support surface is not a roller which is rotatably driven by a servomotor actuated by command signals from the data processor for cutting an elongated strip of the sheet material.

4.3 Document D2/R3 shows a plotting apparatus using a rotatable roller for supporting the sheet material such as paper or plastic film to be plotted (see column 5, lines 27 to 43 and Fig.1). A driving motor rotates the drum in response to command signals from a tata processor in such a manner that the sheet material is fed back and forth in a first direction. The plotter head comprises a tool carriage moved over the sheet material in a second direction parallel to the axis of rotation of the roller and perpendiculaire to the first direction. The composite movements of the plotting head and the roller generate a relative movement between the plotting head and the sheet material in the two coordinate directions and enable two dimensional graphic information to be plotted on the sheet material in accordance with a program defined by an input device. The drum plotter is designed for high response operation and accurate data recording or reading (see column 6, lines 29 to 41).

Document D2/R3 is not concerned with an apparatus for cutting text in sheet material but for plotting graphic informations on elongated sheet material as needed for example in the clothing industry.

4.4 The other documents cited during the opposition procedure are less relevant with respect to the subject-matter of the patent in suit than the above cited documents.

5. *Novelty*

From the above, it follows that there is no document disclosing in combination all the features specified in Claim 1 of the main and auxiliary requests.

The subject-matter of Claim 1 according to each request is therefore considered to be new within the meaning of Article 54(2) EPC.

6. *Inventive step*

6.1 Main request

6.1.1 In the apparatus known from document D1, which comes closest to the subject-matter of Claim 1, the cutting operation has to be interrupted when the length of the sheet material to be cut is greater than the dimensional capacity of the flat support surface. The steps for achieving the cutting operation, i.e. to displace both the tool and the sheet material over the support surface and then continue the cutting operation, are cumbersome and difficult as regards the additional steps and the risk of loss of accuracy.

Therefore, the technical problem to be solved is the provision of an apparatus which is compact and which permits cutting text rapidly with high accuracy in an elongated strip of a sheet material.

6.1.2 According to the characterising part of Claim 1, this is achieved by using a roller as support surface which is rotatably driven by a servomotor. The elongated strip of sheet material is thereby delivered on the roller from one side and the rotation of the roller in a direction displaces the sheet material to the other side of the roller, thereby allowing the cutting operation on the sheet material more easily than on a flat support surface, which would require a long stroke or movement of the support surface, and correspondingly greater space for the apparatus.

6.1.3 As mentioned above under point 4.3, document D2/R3 teaches the use of drum plotter for high response operation and accurate data plotting, recording or reading. The rapid motions of the roller generated by the drive motor of the roller are accomodated without moving a large flat support surface, which in turns reduces the inertia of the support element during movement and allows rapid and accurate plotting of two dimensional shapes on large sheets.

For the person skilled in the art knowing the two possibilities of supporting the sheet material in a plotting apparatus as known from document D2/R3 and in a plotting/cutting apparatus as known from document R2 (see above point 4.2) or in a drawing apparatus as known from document D1, it is obvious to select one of these two solutions according to the circumstances in which the plotting/drawing apparatus is to be used. Therefore, the skilled person having to cope with the problem of cutting text in an elongated strip of sheet material rapidly and with a high accuracy, will find a solution to the problem in document D2/R3. It would be self-evident to the skilled person to transfer the teaching of document D2/R3 to an apparatus known either from document D1 or R2 - which apparatuses are suitable to

perform plotting or cutting operations - and adapt the transferred rotatable roller support for elongated strip of material and it driving means. Such an adaptation results automatically in a compact apparatus.

6.2 Auxiliary requests

6.2.1 The additional feature "(o)" of Claim 1 according to the auxiliary request 1, namely the memory comprising header portion for all font characters, index portion for adjusting space between font characters, a list for each font, with the geometric shape as well as vectors fully defining the profiles of each characters, is also known from document D1 (see page 8: "Buchstabengenerator", "Symbolgenerator" and "Verzerren, Neigen und Spiegeln von Schriften"; page 9: "Eingabemedium"). This feature only relates to a more detailed description of the function of the memory which has no functionel relationship with the mechanical structure of the cutting apparatus. Futhermore, it is within the usual activities of the skilled person (cf. e.g. document R9) to adapt the memory of the drawing apparatus in document D1 in such a manner that it can be used to cut sign text with an appropriate control of character spacing and positioning to vary the appearance of the text.

6.2.2 As regards the additional feature "(p)" of Claim 1 according to the auxiliary request 2, which concerns the mechanism for limiting the penetration of the cutting tool in the sheet material, it lacks any functional relationship with the features necessary for solving the problem as set above in a compact apparatus. i.e. feature "(p)" does not contribute in any way to solving said problem and consequently must be considered as non-essential for the solution.

7. For the above reasons the subject-matter of Claim 1 according to the main request and the auxiliary requests 1 and 2 does not involve an inventive step as required by Article 56 EPC.

8. Therefore the patent in suit cannot be maintained.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman

S. Fabiani H. Seidenschwarz