

Internal distribution code:

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

D E C I S I O N
of 29 January 1997

Case Number: T 0463/95 - 3.5.2

Application Number: 82111126.7

Publication Number: 0083727

IPC: H03F 3/217

Language of the proceedings: EN

Title of invention:
Amplitude modulator

Patentee:
HARRIS CORPORATION

Opponent:
O1: ABB Management AG
O2: Daimler-Benz Aktiengesellschaft

Headword:
-

Relevant legal provisions:
EPC Art. 54, 56, 82, 84, 100, 107, 111, 114, 123(2)(3)
Rules 57(1), 57a, 58(2)

Keyword:
"New claim filed in opposition proceedings one week before oral proceedings - scope restricting combination of features taken from claims which had been opposed - claim admissible"
"Inventive step - yes, after amendment"
"Non republished documents filed late during the appeal proceedings as circumstantial evidence - not admissible"
"Prior art which had been referred to in connection with a novelty objection which no longer applied, and then not further pursued, until oral proceedings before the Board of Appeal - not relevant - inadmissible"

Decisions cited:

G 0001,/91, T 0153/85, T 0051/90, T 0270/90, T 0252/92,
T 1002/92

Catchword:

-



Case Number: T 0463/95 - 3.5.2

D E C I S I O N
of the Technical Board of Appeal 3.5.2
of 29 January 1997

Appellant:
(Proprietor of the patent) HARRIS CORPORATION
1025 West NASA Boulevard
US-Melbourne, Florida 32912 (US)

Representative:
Liesegang, Roland Dr., -Ing.
Boehmert & Boehmert, Nordemann und Partner
Franz-Joseph-Strasse 38
D-80801 München (DE)

Respondent:
(Opponent) ABB Management AG
CH-5041 Baden (CH)

Representative:
Ottow, Jens M., Dr.
Hug Interlinzenz AG
Nordstrasse 31
Postfach 127
CH-8035 Zürich (CH)

(Opponent): Daimler-Benz Aktiengesellschaft
D-70327 Stuttgart (DE)

Representative:
Fröhling, Werner, Dr.
Daimler-Benz Aerospace AG
Wörthstrasse 85
D-89077 Ulm (DE)

Decision under appeal: Interlocutory decision of the Opposition Division
of the European Patent Office posted
31 March 1995 concerning maintenance of the
European patent No. 0 083 727 in amended form.

Composition of the Board:

Chairman: W. J. L. Wheeler
Members: A. G. Hagenbucher
C. Holtz

Summary of Facts and Submissions

- I. In the decision under appeal the opposition division rejected the proprietor's main request to maintain European patent No. 83 727 in amended form, including, inter alia, a claim 29 filed on 5 December 1994, and granted the first auxiliary request to maintain the patent with claims 1-27 filed in oral proceedings on 12 December 1994.
- II. The impugned decision refused the main request for the reason that claim 29 had been submitted merely one week prior to the oral proceedings, and was not clearly allowable because the subject-matter of claim 29 did not involve an inventive step having regard to the following prior art:
- D1: US-A-4 205 241
D2: US-A-3 480 881
D4: IEEE Transactions on Broadcasting, Vol. BC-26, No. 4, December 1980, pages 99 to 112; H. Ideka, "Development of a Solid State Radio Transmitter with MOS/FET".
- III. The proprietor contests the decision under appeal only in so far as claim 29 of the main request was not allowed. Neither of the opponents has appealed.
- IV. With the grounds of appeal the appellant filed claims 1 to 27 which correspond to claims 1 to 27 of the first auxiliary request allowed by the opposition division and an independent claim 28 which corresponds to claim 29 filed with the letter of 5 December 1994, and requested maintenance of the patent on the basis of these claims 1 to 28.

- V. The respondents argued that claim 28 should be rejected because of its belated submission, or alternatively because of its lack of clarity, incorrect two-part form with respect to document D1, being in conflict with Article 123(2)(3) EPC and lack of an inventive step in view of D1 and D2, if necessary together with D4.
- VI. After a communication from the Board, accompanying the invitation to oral proceedings, the appellant filed an amended claim 28 with the letter dated 22 November 1996. Claim 28 according to an auxiliary request was filed with the letter dated 18 December 1996.

Claim 28 (main request) is worded:

"Apparatus for generating an amplitude modulated carrier signal including means (14) for providing an input signal; a single common carrier signal source (34) providing a carrier signal; and means (26-32, 44-50) responding to said input signal and said carrier signal for providing a plurality of first carrier signals (0_1 to 0_N) of like frequency and phase and equal amplitude; and means (22) for combining said first carrier signals so as to provide a combined carrier signal which is modulated as a function of said input signal, wherein the number of said first carrier signals (0_1 to 0_N) being provided is dependent upon the amplitude of said input signal and wherein said means for combining (22) serves to combine a selected number of said first carrier signals in dependence on the level of said input signal so as to provide said combined carrier signal having an amplitude modulated in accordance with the amplitude of said input signal,

characterised by means (24) responsive to said input signal for providing a plurality of digital signals which change in accordance with said input signal; and in that said means (26-32, 44-50) for providing said plurality of first carrier signals comprises a plurality of power amplifiers (26-32) each responsive to the carrier signal for providing or not providing an amplified carrier signal in accordance with said digital signals, wherein each power amplifier (26-32) comprises four switching elements (70-76) connected in a bridge arrangement across a DC power supply (V_{DC}) and means (82-90) for operating said switching elements (70-76) in accordance with said carrier signal such that said carrier signal appears in amplified form across two junctions of said bridge arrangement."

VII. In response thereto, one respondent (ABB) cited for the first time the following documents:

- D13: US-A-4 336 615 (application filed 2 October 1980 at the US patent office);
- D14: US-patent application Serial-No. 217 795 (filed 18 December 1980 at the US patent office);
- D15: Official action of United States Department of Commerce Patent and Trademark Office concerning document D14;
- D16: US-A-4 399 558 (application filed 29 June 1981 at the US patent office).

The respondent (ABB) argued that although these documents were not published before the priority date of the patent in suit, they showed that bridge amplifiers for carrier frequency amplification were available to persons working in the transmitter field

more than one year before the priority date (24 December 1981) of the present patent and that according to document D15 these amplifiers were not considered to be inventive by the US-Examiner.

VIII. Oral proceedings were held before the Board on 29 January 1997. During these oral proceedings respondent ABB wanted to introduce into the appeal proceedings document

D17: DE-A-2 129 884

as a starting point for an inventive step objection.

This document had been cited in a reply dated 22 January 1990 to a previous communication of the opposition division, i.e. not within the time limit prescribed in Article 99(1) EPC, as another document showing the principle behind the subject-matter of independent claims 1 and 20 as granted.

IX. The appellant argued essentially as follows:

The patent should be maintained not only with claims 1 to 27 but additionally with independent claim 28. As indicated in the letter dated 5 December 1994, claim 28 could be easily recognised as reciting a combination of features contained in granted claims 1, 2, 11 and 15 and should thus be considered as an admissible restriction. Therefore decisions T 153/85, T 51/90, T 270/90, cited by the respondents, were not applicable. Claims 1 and 20 as granted could not be maintained in view of document D1 and amendments were necessary in the sense of Rules 57(1) and 58(2) EPC. The reason for introducing this new independent claim only one week before the oral proceedings before the opposition division was that the patent holder had only then become aware of a possible infringement. Claim 28

concerned subject-matter which had been searched and also attacked in the opposition briefs in connection with granted claims 1, 2, 11 and 15. The preamble of claim 28 comprised the wording of granted claim 1. Its characterising part was based on parts of granted claims 2, 11 and 15 with the exception that the words "amplifier elements" were replaced by "switching elements" in accordance with column 5, lines 12 to 24 of the patent specification. Claim 28 met the requirements of Article 123(2) and (3) EPC, was clear, and its subject-matter involved an inventive step with respect to documents D1, D2 and D4.

The appellant argued that the Board should examine the patentability of the subject-matter of claim 28 and not remit the case to the opposition division as this would cause undue delay. As could be seen from Section II, 2.2 of the reasons for the impugned decision, the opposition division had already considered the admissibility and patentability of the subject-matter of claim 28 in respect of novelty and inventive step.

Documents D13, D14, D15 and D16 should be disregarded because they were filed late and not relevant. They did not form part of the prior art under Article 54 EPC. Document D17 should not be admitted into the appeal proceedings because it had not been referred to in the appeal proceedings before the oral proceedings. In the proceedings before the opposition division, it had not been cited against the subject-matter of claim 28.

X. The respondents' arguments can be summarised as follows:

They had not delayed the proceedings in this case. Delay was caused by the late filing of claim 29 (now claim 28) only one week before the oral proceedings before the opposition division. Any party must be given

enough time for a proper consideration of a new topic. During examination proceedings a new independent claim such as claim 28 would have led to a divisional application requiring a separate examination because it lacked unity with respect to claim 1. Moreover, the appellant had not given adequately detailed reasons for the late filing of the claim because no facts concerning a real infringement had been filed. Claim 28 was an arbitrarily handcrafted patch-work from several granted claims without an indication of the underlying problem so that at least one month appeared to be necessary for a thorough consideration before the oral proceedings. In their replies to the grounds of appeal, the respondents argued that claim 28 did not meet the requirements of Article 123(2) and (3) EPC and that moreover claim 28 was not inventive in view of documents D1, D2 and D4. Should the Board of Appeal decide to admit claim 28 into the proceedings, the case should be remitted to the opposition division for further prosecution because the opposition division had not sufficiently considered the question of inventive step of the subject-matter of present claim 28. Documents D13 to D16 were not prior art but could serve as back ground information showing that bridge amplifiers were available to a person skilled in the art before the priority date of the present patent.

XI. The appellant requested that:

- (a) claim 28 (main and auxiliary request) be admitted into the proceedings and decided upon by the Board;
- (b) citations D13 to D17 be rejected as inadmissible;
- (c) the decision under appeal be set aside and the patent be maintained on the basis of:

Claims: claims 1 to 27 as filed with the grounds of appeal received on 19 July 1995 and claim 28 as filed on 22 November 1996 (main request) or as filed with the letter of 18 December 1996 (auxiliary request),

Description: columns 1 and 2 of EP-B-83 727 as filed in the oral proceedings before the Board, columns 3 to 17 of EP-B-83 727 as maintained by the opposition division,

Drawings: as maintained by the opposition division.

XII. The respondents requested that:

- (a) claim 28 be rejected as inadmissible, or, if it were admitted into the proceedings, that the case be remitted without further ado to the opposition division for further prosecution of that claim;
- (b) the citations D13 to D17 be admitted into the proceedings;
- (c) the appeal be dismissed.

Reasons for the Decision

1. *Admissibility of Appeal*

The appellant is adversely affected (Article 107 EPC) by the decision of the opposition division not to allow the main request filed with the letter dated 5 December 1994 including claim 29 (now claim 28). The

impugned decision has not been appealed as far as the subject-matter of claims 1 to 27 is concerned. The appeal is admissible.

2. *Admissibility of Claim 28 (main request)*

2.1 Granted claim 1 could not be maintained in opposition proceedings due to an objection under Article 100(a) EPC. In this situation the patentee has the right to file amended claims directed to particular embodiments irrespective of whether the amended patent meets the requirement of unity according to Article 82 EPC; see G 1/91 (OJ EPO, 1992, 253) and Rule 57a (which entered into force on 1 June 1995, after the date 31 March 1995 of the appealed decision).

In the letter dated 5 December 1994 the appellant indicated that claim 29 contained in addition to the features of granted claim 1 features taken from granted claims 2, 11 and 15.

In the notices of opposition opponent 2 (AEG, now Daimler-Benz) specifically attacked granted claims 1, 2, 11 and 15 and opponent 1 (ABB) specifically attacked claims 1, 2 and 11 under Article 100(a) EPC for lack of novelty and/or inventive step.

2.2 *Admissibility of claim 28 (main request) in view of Article 123(2) and (3) and Article 84 EPC.*

2.2.1 Claim 28 of the main request is based on the granted patent as follows:

Apart from the insertion of means (14) for providing an input signal (which is shown in Figure 1) and a clarification concerning the single common carrier signal source (34) (which is taken from granted

claim 11), the preamble of claim 28 corresponds to granted claim 1. The first paragraphed section of the characterising part of claim 28 is taken from granted claim 2. The second paragraphed section of the characterising part is taken from granted claims 11 and 15, with the exception that the words "amplifier elements" in granted claim 15 have been replaced by "switching elements" (in agreement with column 5, lines 21 to 24 of the patent specification).

Thus, claim 28 of the main request comprises the technical features of granted claim 1, further restricted by features from granted claims 2, 11 and 15 and the description and drawings. These features are also disclosed in the application as filed; see claims 1, 2, 7, 11 and 15, description page 9, line 20 to page 10, line 23 and Figures 1 and 2. Therefore, claim 28 does not infringe Article 123(2) EPC and being narrower in scope than granted claim 1 does not contravene Article 123(3) EPC.

2.2.2 The respondent ABB drew attention to certain unclarities in claim 28 as filed with the grounds of appeal. An antecedent for "the carrier signal" in the characterising part of claim 28 has been supplied by amending the preamble of the claim. Furthermore, the amplifying function of the bridge arrangement of switching elements has been clarified. Claim 28 as filed on 22 November 1996 meets the requirements of Article 84 EPC.

2.3 It follows from the paragraphs under point 2.2 above that neither claim 29 filed before the opposition division with the letter dated 5 December 1994 nor claim 28 filed on 22 November 1996 is distinguished in its subject-matter in any material way from the

subject-matter of the combination of granted claims 1, 2, 11 and 15 and that these claims 29 and 28 are clear enough to be understood by a person skilled in the art. Nevertheless the impugned decision did not allow "the main request" (with claim 29) for two reasons:

- (i) the request had not been submitted at least one month prior to the oral proceedings,
- (ii) in the opinion of the opposition division the subject-matter of claim 29 was not clearly inventive.

The opposition division derived the applied criteria (i) and (ii) from decisions T 153/85, T 51/90 and T 270/90. These decisions mainly concern amended claims filed during appeal proceedings. The boards of appeal developed these criteria from the "Guidance for appellants and their representatives" (OJ EPO 6/1981, 176 and OJ EPO 8/1984, 376) and based them on Article 111(1) EPC, as explained in T 153/85, paragraphs 2.1(b) and (d) (OJ EPO, 1988, 1).

According to decision T 153/85 (cf. paragraph 2.1(d)) also the opposition division exercises a discretionary power in relation to requests for amendment in oppositions before them.

If a new or amended independent claim results from a combination of features taken from granted claims which have been specifically opposed there is normally no need for searching for further prior art. Consideration of such a new or amended claim can therefore reasonably be expected, since the opponents should already be

familiar with the subject-matter concerned: see the non-published decision T 0252/92 (dated 17 June 1993) referred to in "Case Law of the Boards of Appeal of the European Patent Office" edited 1996, section 12.3.1, page 350, lines 3 to 7 of English edition.

In the present case the appellant (patent proprietor) indicated that he became aware of a possible infringement only at a late stage and that he had to defend his legal interest within the scope of granted claims 1, 2, 11 and 15. The Board sees no reason for doubting this explanation, or for requiring the appellant to file evidence concerning the possible infringement, because the appellant is in any case acting within the normal framework to salvage as much as possible after granted claim 1 had fallen.

Under these circumstances the opposition division should not have immediately allowed the request from opponent 1 (ABB) dated 5 December 1994, but rather it should have asked the parties to comment on whether the subject-matter of claim 29 was distinguished in any material way from the subject-matter of the combination of granted claims 1, 2, 11 and 15, which had already been attacked. If no material difference was established, the opponents and the opposition division should have been able to consider the inventiveness of claim 29, in view of the statement of grounds under Rule 55(c) EPC. If necessary, the opposition division could have reserved a decision concerning claim 29. Only if there was a substantial difference in the subject-matter of claim 29, could it have been rejected as inadmissible for reason of not being clearly allowable.

In fact, the opposition division stated in paragraph 2.2 of the impugned decision that the subject-matter of claim 29 of the main request then on file was novel but did not involve an inventive step. The opposition division accepted that claim 29 consisted of a combination of the subject-matter of claims 1, 2, 11 and 15 as granted. They were of the opinion that the subject-matter of claims 1 and 2 (the pre-characterising part of claim 29) was disclosed in document D1 and that the skilled person would find it obvious to include amplifiers if there was a need for more amplitude or power, and would, in view of D4 (Figures 3c and 3e) self-evidently use a bridge mode amplifier in order to obtain the most amplification. They concluded that the skilled person would consequently arrive at the combination of the features of claim 29 without the exercise of inventive skill. In their opinion the skilled person would also come to the conclusion that the newly introduced claim 29 did not involve an inventive step with regard to document D2 (Figure 1).

Hence, the opposition division has clearly expressed its opinion as far as Article 123(2)(3) EPC and Articles 54 and 56 EPC are concerned.

Therefore, the Board admits claim 28 according to the main request into the appeal proceedings.

3. *Admissibility of late filed evidence*

- 3.1 Documents D13 to D16 were cited for the first time in a reply to the communication from the Board and it was argued that although these documents were not prepublished they should be considered as circumstantial evidence showing that bridge amplifiers

for carrier frequency amplification were available to persons working in the transmitter field more than one year before the priority date of the present patent and that according to document D15 such amplifiers were not considered inventive by the US-Examiner.

Documents D13 to D16 are not prepublished and do not represent prior art in the sense of Article 54(2) or 54(3) EPC. Apart from the fact that a US-Examiner's opinion on inventive step is of little relevance to the judgment of subject-matter of European patents it has to be considered that present claim 28 does not concern bridge amplifiers for transmitters per se but as part of an apparatus together with other circuits.

Therefore, these documents are not considered to be relevant and they will be disregarded in accordance with Article 114(2) EPC.

- 3.2 During oral proceedings before the Board on 29 January 1997 respondent 1 (ABB) wanted to introduce document D17 into the appeal proceedings as the most relevant document (instead of D1) for an inventive step objection. D17 had been cited for the first time in a reply dated 22 January 1990 to a previous communication of the opposition division, i.e. not within the time limit prescribed in Article 99(1) EPC, in order to supplement "for the sake of good order" the opposition division's conclusion that the subject-matter of independent claims 1 and 20 as granted lack novelty in view of document D1. In the respondent's view D17 was another document showing the principle behind the subject-matter of granted claims 1 and 20. Thereafter those claims 1 and 20 had been given up by the proprietor and document D17 had not been

referred to again, neither during the oral proceedings before the opposition division nor in the decision under appeal nor in the appeal proceedings prior to the oral proceedings.

It has been decided in decision T 1002/92 (OJ 1995, 605, reasons, point 3.4) that in proceedings before the boards of appeal, new facts, evidence and related arguments, which go beyond the "indication of facts, evidence and arguments" presented in the notice of opposition pursuant to Rule 55(c) EPC in support of the grounds of opposition on which the opposition is based, should only very exceptionally be admitted into the proceedings in the appropriate exercise of the board's discretion, if such new material is prima facie highly relevant in the sense that it can reasonably be expected to change the eventual result and is thus highly likely to prejudice maintenance of the European patent; and having regard also to other relevant factors in the case, in particular whether the patentee objects to the admissibility of the new material and the reasons for any such objection, and the degree of procedural complication that its admission is likely to cause.

In the notices of opposition only documents D1, D2, D4 and DE-A-3 044 956 (belonging to the same patent family as GB-A-2 064 901, acknowledged in column 1 of EP-B-83 727) were cited against claims 1, 2, 11 and 15. The opposition division based its finding of lack of inventive step for the subject-matter of claim 29 (now claim 28) on documents D1, D2 and D4. In the reply to the grounds of appeal these reasons were further developed by respondent 2 (Daimler-Benz, successor to AEG). Document D17 was not previously used in combination with other documents for attacking inventive step, and a fortiori not against the combination of claims 1, 2, 11 and 15. In the letter

dated 22 January 1990, opponent 1 (ABB) drew specific attention to a modulation method for a single side band radio telegraphy acknowledged as prior art on page 2, third paragraph of D17, according to which the generating curve of a signal envelope is presented by means of a logical circuit in digital form for controlling several parallel elementary high power circuits. Nothing is said there about the specific construction of these high power circuits. Nor is there any mention of carrier signals, let alone their frequency, phase and amplitude. According to D17 this method has the disadvantage of requiring complicated high power circuits, which disadvantage should be overcome by a different solution taught and claimed in that document. Therefore, D17 points away from the solution according to the present claim 28. Document D17 cannot destroy novelty of the subject-matter of present claim 28 and is not likely to prejudice the maintenance of claim 28. Moreover, the appellant objected to the admissibility of document D17. The Board therefore decided not to consider document D17 any further, and to judge inventive step of the subject-matter of claim 28 vis-a-vis documents D1, D2 and D4.

4. *Inventive step of the subject-matter of Claim 28 having regard to documents D1, D2 and D4.*

4.1 Document D1 constitutes the closest prior art and discloses an apparatus for generating an amplitude modulated carrier signal, as set out in the precharacterising part of claim 28.

D1 (see figure 3) shows an apparatus for generating an amplitude modulated carrier signal including means (80, 81, 82) for providing an input signal, means (carrier generator 120, windings 109, 110 and sensors 83 to 91) responding to the input signal for

providing a plurality of first carrier signals of like frequency and phase and equal amplitude, and means (windings 109 and 121) for combining said carrier signals, wherein the number of first carrier signals provided is dependent upon the amplitude of said input signal. In the circuit shown in D1, the amplitude of the input signal is not converted into a digital signal for switching a plurality of first carrier signals of equal amplitude. The apparatus known from D1 does not use power amplifiers so that the carrier generator 120 has to provide the necessary modulation power. In view of the distinguishing features in the characterising part of claim 28, especially the use of specific power amplifiers, the objective problem addressed by the present invention can be regarded as the one stated in the patent in suit at column 2, lines 29-32, i.e. to provide a new and improved modulator which uses smaller amounts of modulator signal power than generally required in the past.

- 4.2 For an apparatus according to the preamble of claim 28 and known from D1 this problem is solved by providing digitizing means for generating a plurality of digital signals in response to the input signal and in that said means for providing said plurality of first carrier signals comprises a plurality of power amplifiers, each responsive to the carrier signal for providing or not providing an amplified carrier signal in accordance with said digital signals, wherein each power amplifier comprises four switching elements connected in a bridge arrangement across the dc power supply and means for operating said switching elements in accordance with said carrier signal such that said carrier signal appears in amplified form across the junctions of said bridge arrangement.

It is clear from the claimed function "providing or not providing" that the bridge arrangement requires an on/off control means for its enabling and disabling by the digital signals. If the bridge is enabled, a d.c. supply voltage is passed in alternating directions to an output winding in response to the state of the four switching elements which are controlled by the carrier signal. An a.c. signal can thus be applied across the output winding by cyclically switching the switches between two alternative states.

4.3 In the apparatus known from D1 the amplitude of the input signal is measured by resistors 92-99. That one of sensors 83 to 91 corresponding to the a.c. input signal amplitude serially connects the respective number of impedance sections of the winding 109 to the winding 121. Since just one sensor is selected in dependence on the respective analog value of the input signal no digital signal representation is involved. No power amplifiers but just one output transformer with several winding taps is used. Therefore the solution defined in claim 28 cannot be derived from document D1.

4.4 From document D2 an apparatus for generating an amplitude modulated carrier signal is known in which a modulating signal wave form is digitally coded and the digitally coded modulation signal enables gating circuits to drive binarily related amplifiers for providing respective binarily weighted amplified carrier signals. The amplifiers of document D2, however, are completely different from the power amplifiers according to claim 28 as they comprise neither a bridge arrangement nor a d.c. power supply. Further, the power amplifiers of this document always provide an amplifier carrier signal which either contributes to the power of the output circuit (for digital signals with a first polarity) or absorbs power from the output circuit (for digital signals with the

opposite polarity). There is no on/off control of the power amplifiers. Thus, even a combined consideration of D1 and D2 does not lead to the subject-matter of claim 28.

4.5 Even the additional consideration of document D4 does not lead to the subject-matter of claim 28 in an obvious way, although D4 shows in Figure 7 an RF power amplifier modulator with a bridge design similar to that according to the last characterising feature of claim 28. Either such a single solid state power amplifier or a power amplifier divided into modules (figure 23) is used. The modular power amplifier according to figure 23 does not produce a plurality of carrier signals, the number of which is dependent upon the amplitude of the input signals, but is used to improve reliability and maintainability. There is no on/off control of the amplifiers. Each module of figure 23 consists of a single-ended push pull (SEPP) amplifier and an attached modulator. Since D4 does not disclose bridge amplifiers which are on/off controlled by digital signals, D4 cannot destroy the inventiveness of the subject-matter of claim 28 even in combination with documents D1 and D2.

4.6 Hence, the Board is of the opinion that the subject-matter of claim 28 (main request) is not derivable in an obvious way, even from a combined consideration of documents D1, D2 and D4. Therefore, the subject-matter of claim 28 involves an inventive step.

5. It follows from the above considerations that the patent can be maintained with claims 1 to 27 filed with the grounds of appeal and claim 28 according to the main request.

6. There is thus no need to consider the auxiliary request.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance with the order to maintain the patent on the basis of:

Claims: claims 1 to 27 as filed with the grounds of appeal dated 18 July 1995 (received 19 July 1995);

claim 28 as filed on 22 November 1996;

Description: columns 1 and 2 as filed in the oral proceedings of 29 January 1997; columns 3 to 17 as maintained by the opposition division, and

Drawings: as maintained by the opposition division.

The Registrar:



M. Kiehl

The Chairman:



W. J. L. Wheeler

