

Decision of Technical Board of Appeal 3.5.1 dated 5 December 2003

T 708/00 - 3.5.1

(Translation)

Composition of the board:

Chairman: S. V. Steinbrener
Members: R. R. K. Zimmermann
E. Lachacinski

Applicant: ALCATEL

Headword: Transmission frame/ALCATEL

Article : 82, 92(1), 111(1), 123(1), 164(2) EPC

Rule: 30, 44(1), 45, 46(1), 64(b), 67, 86(4) EPC

Keyword: "Admissibility of amendments under Rule 86(4) EPC (yes)" - "Admissibility of amendments under Rule 46(1) EPC (yes)" - "Procedural violation (yes)"

Headnote

I. Amended claims may only be refused on the basis of Rule 86(4) EPC if the subject-matter of the claims filed originally and that of the amended claims is such that, had all claims originally been filed together, a further search fee would have been payable - on top of the search fee payable in respect of the claims actually filed at the outset - in respect of the amended claims, relating to a different invention within the meaning of Rule 46(1) EPC (see Reasons, points 3 to 8).

II. The fact that a document is prejudicial to the novelty of a particular claimed subject-matter is not sufficient reason to establish lack of unity "a posteriori" between claimed subject-matters. For there to be lack of unity, these claims would have to define a "group of inventions", ie different inventive alternatives or more concrete inventive embodiments initially forming part of the same known general concept. In any case Article 82 and Rule 30 EPC only apply to "inventions" within the meaning of these provisions, ie inventions which each make an inventive contribution to the state of the art as cited in the search report (see Reasons, point 16).

III. A subsequent amendment to limit the subject-matter of the main claim by additional features disclosed in the application as filed does not generally affect the notion of unity of invention under either Rule 86(4) or Rule 46(1) EPC. It is normal for an applicant to make such an amendment in respect of an objection to the patentability of the subject-matter in unlimited form. This allows the applicant to overcome the objection under Article 123(1) EPC (see Reasons, point 17).

Summary of facts and submissions

I. European patent application No. 94 401 988.4 (publication number: 0 642 242) with the priority dates 1993 and 1994 concerns an invention in the field of telecommunications.

II. The application as originally filed consisted of three independent claims relating to a transmission frame, a receiver and a transmitter for the transmission of data frames, and a dependent claim concerning a particular transmitter mode. The claims were as follows:

"(1) Transmission frame comprising a locking row (00...0), synchronisation bits (1) and data bits (B1 to B62), a synchronisation bit being placed immediately after the said locking row, characterised in that the frame terminates with a synchronisation bit.

(2) Receiver for receiving data frames, characterised in that these frames correspond to either a full-rate channel or at least one low-rate subchannel, each being assigned a specific synchronisation pattern, having means for synchronising to any frame received.

(3) Transmitter for transmitting frames, each of the said frames comprising a locking row (00...0), synchronisation bits (1) and data bits (B1 to B62), characterised in having means for setting a synchronisation bit at each end of the said locking row.

(4) Transmitter according to claim 4, characterised in that the said frames terminate with alignment bits identical in value to the said synchronisation bits (1), having means for eliminating the last of the said alignment bits on command only if the preceding data bit has the same value as a synchronisation bit."

III. The search division considered that the application contained two inventions which did not meet the unity of invention requirement. The first invention, defined by claims 1, 3 and 4, related to a transmission system that uses a frame according to claim 1 along with a corresponding transmitter; the second invention concerned the receiver defined in claim 2. The search division drew up a partial European search report under Rule 46(1) EPC with respect to the subject-matter of claims 1, 3 and 4 and, pursuant to this rule, invited the applicant to pay a further search fee to have the European search report cover the second invention, if so desired.

The applicant chose not to make this payment. However, on 2 May 1995, after receiving the European search report and prior to receiving the examining division's first communication, the applicant filed amended versions of claims 1 and 3, primarily to indicate that the frames transmitted by the transmitter were associated with a subchannel.

The applicant disputed the lack of unity of invention, and argued that the general inventive concept involved reducing the incidence of ambiguity arising when full-rate or low-rate frames are conveyed indiscriminately along the same transmission channel. Since the full-rate frame and corresponding transmitter were already known, the claims necessarily related to the low-rate frame, a receiver capable of distinguishing between the two types of frame, and a transmitter capable of handling low-rate frames.

After the first communication had been issued, the applicant filed a fresh set of claims on 19 January 2000, once again defining the frames and the transmitter, and including the following independent claims:

"(1) Data transmission frame comprising a locking row (00...0), synchronisation bits (1) and data bits (B1 to B62), characterised in that the said frame, which corresponds to a low-rate subchannel and is intended for transmission to

a receiver capable of receiving frames corresponding to either full-rate channel [sic] or at least one low-rate subchannel, each being assigned a specific synchronisation pattern, terminates with a synchronisation bit."

"(4) Transmitter for transmitting data frames, each frame comprising a locking row (00...0), synchronisation bits (1) and data bits (B1 to B62), characterised in that the said data frames correspond to a low-rate subchannel and are intended for transmission to a receiver capable of receiving frames corresponding to either full-rate channel [sic] or at least one low-rate subchannel, each being assigned a specific synchronisation pattern, the said transmitter having means for transmitting frames terminating with a synchronisation bit."

"(7) Receiver for receiving data frames, each frame comprising a locking row (00...0), synchronisation bits (1) and data bits, characterised in that the said data frames correspond to either a full-rate channel or at least one low-rate subchannel, each being assigned a specific synchronisation pattern, and also corresponding to a low-rate subchannel terminating with a synchronisation bit, the said receiver comprising means for synchronising to any frame received.

(8) Receiver for receiving data frames, each frame comprising a locking row (00...0), synchronisation bits (1) and data bits, characterised in that the said data frames correspond to either full-rate channel [sic] or at least one low-rate subchannel, each being assigned a specific synchronisation pattern, and also corresponding to a low-rate subchannel terminating with so-called alignment bits of the same value as the said synchronisation bits, the said receiver comprising means for synchronising to any frame received.

(9) Receiver for receiving data frames, each frame comprising a locking row (00...0), synchronisation bits (1) and data bits, characterised in that the said data frames correspond to either full-rate channel [sic] or at least one low-rate subchannel, each being assigned a specific synchronisation pattern, and also corresponding to a low-rate subchannel terminating with so-called alignment bits of the same value as the said synchronisation bits, with the last of the said alignment bits being eliminated only if the preceding data bit is of the same value as a synchronisation bit, the said receiver comprising means for synchronising to any frame received."

IV. At no point did the examining division expressly justify its assertion that unity was lacking. The first communication largely reaffirmed the search division's opinion, and the applicant was invited to remove from the application the other invention relating to the receiver, which had not been searched. The examining division considered that novelty was destroyed by prior art document D1 (US-A-4 651 319 published in 1987) with regard to the first invention only, ie the subject-matter of claims 1, 3 and 4, as filed originally. Otherwise, the amended claims dated 28 April 1995 were rejected under Rule 86(4) EPC because the notion of associating the frames with a subchannel appeared only in claim 2 as originally filed but not searched, and, in view of the said prior art document, their subject-matter and the searched subject-matter did not combine to form a single general inventive concept.

The new claims filed with observations on 19 January 2000 were rejected once again under Rule 86(4) EPC in the course of a telephone interview with the applicant, primarily for the same reasons as before. The applicant was warned in advance that the application might be rejected.

V. The application was refused in the decision of 27 April 2000, principally on the grounds that the new claims were not allowable under Rule 86(4) EPC.

The reasons for the decision referred to the opinion previously expressed by the examining division on unity of invention, arguing that there was a lack of general inventive concept and simply adding that claims 1, 3 and 4 as filed initially in no way defined the notion of full-rate and low-rate channels. The examining division considered that the new claim 1 dated 19 January 2000 consisted of "a combination of the originally filed claim 1 to which had merely been added features contained in claim 2 as originally filed" but not searched. The contested decision found that the only features common to the initial searched claims and the new claim 1 were the features of the originally filed claim 1 which had been fully anticipated by the available state of the art. The other four, new independent claims 4, 7, 8, and 9 were regarded as combining "the features of originally filed claims 1, 3, 4 and 2" and thus also related to

subject-matter that had not been searched and which was not linked to the initially claimed invention in such a way as to constitute a single general inventive concept.

VI. On 16 June 2000, the applicant filed an appeal against this decision and paid the appeal fee the same day. There is no explicit criticism of the contested decision in the single letter forming the appeal. On 20 June 2000, a statement of grounds of appeal was faxed.

VII. The appellant stated that the technical problem underlying the invention was to allow a receiver receiving frames, corresponding either to a full-rate channel or to at least one low-rate subchannel, each being assigned a specific synchronisation pattern, to recognise, without knowing in advance which type of channel it was to receive, the channel type in question without the risk of confusing the two channel types. To overcome this problem, frames that correspond to a low-rate subchannel need to terminate with a synchronisation bit.

Reasons for the decision

Admissibility

1. The appeal is admissible.

The appeal meets the admissibility criteria set out in Articles 106 to 108 EPC and in Rules 1(1), 64(a) and 64(b) EPC having regard to board of appeal case law, under which all circumstances culminating in the contested decision, and the objective content of the notice of appeal, have to be taken into account to establish the objective intention of the appellant at the time of filing the appeal (see "Case Law of the Boards of Appeal of the European Patent Office", fourth edition 2001, EPO 2002, pages 526 ff).

Allowability

2. Since the examining division disadvantaged the applicant by incorrectly not admitting the amended claims, the appeal is also allowed on the merits.

Admissibility of amendments under Rule 86(4) EPC

3. The examining division rejected the application on the basis of Rule 86(4) EPC. This rule, which was incorporated into the Convention in 1995 by a decision of the Administrative Council of 13 December 1994, reads as follows:

"Amended claims may not relate to unsearched subject-matter which does not combine with the originally claimed invention or group of inventions to form a single general inventive concept."

4. There are problems with the legal interpretation of this rule in all three official languages, especially the phrase "unsearched subject-matter". The applicant is only sent the outcome of the search in the form of a search report containing the information stipulated in the Convention. Leaving aside the case of an incomplete search governed by Rule 45 EPC, the search report does not reveal the full extent of the search. Under Rule 44(2) EPC, the search report must certainly cite the parts of the opposing document relating to the claims, but this information only indicates which claims the searched documents relate to.

At the same time, the provisions of Article 92(1) EPC, whereby "the Search Division shall draw up the European search report on the basis of the claims, with due regard to the description and any drawings", must not have the effect of limiting the search solely to the subject-matter of the claims, even if this would simplify matters for the search division.

Nor does this imply that the sole purpose of the description and drawings is to help interpret the claims. It does, however, mean that the search division has to be discerning in the use of its discretionary power so as to ensure that the search is in complete accordance with the subject-matter of the patent application (see Rule 44(1) EPC), ie the invention, even if the essential features are not all defined in the claims at the time of search but are disclosed for example in the description or drawings. The Guidelines for Examination in the EPO (see Part B, Chapter III, 3.2 and 3.6) expressly lay down that the search should be concerned with what appear to be the essential features of the invention and cover the entire subject-matter to which the claims relate or to which they might reasonably be expected to relate after they have been amended.

However, applicants are never informed of exactly what subject-matter is searched, which means that the examining division and board of appeal are also without any information in this regard. It is therefore impossible - since negative proof is out of the question - to establish what subject-matter went "unsearched" under Rule 86(4) EPC.

Another problem with interpreting Rule 86(4) EPC is the combination of negatives in the wording. This creates a situation where an amended claim is deemed allowable even if the subject-matter of the claim has not been searched, ie where the amendments are unitarily linked to the invention or group of inventions in the original claims.

5. The regulatory context and wording of Rule 86(4) EPC mean that the aforementioned interpretation problems cannot be overcome, and there is no direct guidance in the Convention as regards the intention and purpose of this rule. This rule therefore has to be interpreted using alternative means such as the preparatory documents or the documents published regarding the adoption of the rule. Secondary means of interpretation have already been used in board of appeal decisions on Rule 86(4) EPC, for example in decisions T 613/99, Reasons, point 2.1, and T 443/97, Reasons, point 2.3 (neither published in the OJ EPO), which draw on a communiqué issued by the European Patent Office on 1 June 1995 (OJ EPO 1995, 409) and on CA/12/94 submitted to the Administrative Council, among others, in order to obtain its approval for the introduction of Rule 86(4) EPC into the Implementing Regulations to the Convention.

According to these documents, there was a need for the Convention to provide for the situation arising when amended claims relating to unsearched subject-matter were filed in response to the examiner's first communication. The documents refer to the practice of the Office and the case law of the Enlarged Board of Appeal, which held that where amendments had been made to initial claims but the applicant had not paid additional search fees as requested by the search division under Rule 46(1) EPC, the subject-matter in respect of which no search fee had been paid would not be examined further (opinion G 2/92 - Non-payment of further search fees, OJ EPO 1993, 591). The Office however lacked the means to react appropriately when such subject-matter was claimed only after the search. Rule 86(4) EPC accordingly made it clear that applications could not be amended if the principle had been circumvented whereby an invention would not be examined unless a search fee had been paid.

6. As is the case for the unity of invention requirement in general, closing the loophole with this rule only has the status of an administrative provision in the context of the search and grant procedures. In any case Rule 86(4) EPC should be interpreted in a manner favourable to the applicant along the lines of the provisions relating to unity of invention or to payment of a further search fee under Rule 46(1) EPC (see for example the Guidelines for Examination in the EPO, Part C, Chapter III, 7.7).

7. Rule 86(4) EPC must be interpreted so as to fairly balance the objective of this rule, namely the Office's interest in collecting, in return for services rendered, search and examination fees, and the fundamental right conferred by the Convention on the applicant to make amendments at least once to the description, claims and drawings that prove necessary during the grant procedure. This right is governed by Article 123(1), second sentence, of the Convention, and pursuant to Article 164(2) EPC this right must necessarily prevail over an interpretation of provisions in the

Implementing Regulations. The applicant's right would have been infringed if he had not been allowed, as was the case here, to overcome the objection of lack of novelty or inventive step by giving more concrete expression to his invention.

The intention and purpose of Rule 86(4) EPC and the interference with the applicant's fundamental right to amend the application at least once calls for a strict interpretation of Rule 86(4) EPC and limitation of its scope to the avoidance of payment of the required search and examination fees as described above, ie to the extent that the above-mentioned case law of the Enlarged Board of Appeal does not apply with regard to Rule 46(1) EPC. This case law and Rule 86(4) EPC therefore have strictly complementary roles.

This means that Rule 86(4) EPC does not apply when the applicant has not paid the search fee in respect of a non-unitary invention relating to the originally filed claims in spite of being invited to do so under Rule 46(1) EPC. In this case, the application could not be examined further, and a divisional application would have to be filed if protection were sought (see the aforementioned opinion G 2/92). Similarly, the boards in T 319/96 (not published in OJ EPO), Reasons, point 8, and T 631/97 - Doped regions/TOSHIBA (OJ EPO 2001, 13), Reasons, point 3.9.1, made a clear distinction between applying the provisions of Rule 86(4) and a situation where search fees are not paid in spite of an invitation to do so under Rule 46(1) EPC.

8. In view of the Rule 86(4) EPC limitation to prevent the applicant from avoiding the payment of search and examination fees for successively claimed non-unitary inventions, amended claims may only be refused on the basis of this rule if the subject-matter of the claims filed originally and that of the amended claims is such that had all the claims originally been filed together, a further search fee would have been payable - on top of the search fee payable in respect of the claims actually filed at the outset - in respect of the amended claims, relating to a different invention within the meaning of Rule 46(1) EPC.

9. Here, as outlined in the above analysis, it would seem that Rule 86(4) EPC should not have applied because the subject-matter of the independent claim 2 in the initial filing and the independent claims in the version dated 19 January 2000 was a group of inventions linked in such a way that the unity of invention requirement was met and only one search fee was payable.

The stated aim of the invention is to make efficient use of a full-rate data transmission channel, or the several low-rate subchannels obtained by subdividing the channel, to transmit information in the form of an unchanged and known frame of data packets (see published document, column 1, line 26 to column 2, line 24 of the description).

The general inventive concept is that the information required by the receiver regarding the transmission mode, ie the information to determine if the data packet is from a full-rate transfer or a multiplex low-rate transfer, had to be encoded and transmitted to the receiver with the data packet by means of an appropriate amendment to a known data format (for example V110, see column 2, lines 34 ff and column 8, lines 6 ff of the published specification). The claimed features of the data format are technically closely linked to the functional features of both the transmitter, which define its capacity to generate and send data packets in the desired format, and of the receiver of these data packets, which has to have the necessary technical features to identify the data packets correctly.

In its decision, the examining division cites no prior art to show that the general inventive concept is obvious or to destroy its novelty, or any corresponding features that would clearly establish a technical link within the meaning of Rule 30 EPC between the data packet, the transmitter and the receiver claimed in independent claim 2 (original version) and in the independent claims of the amended version.

10. Consequently, the (hypothetical) combination of the claims dated 19 January 2000 and the original claims should not have prompted the examining division to apply Rule 46(1) EPC and invite the appellant to pay a further fee. The decision not to admit the amended claims on the basis of Rule 86(4) EPC was therefore unfounded.

Admissibility of the amendments under Rule 46(1) EPC

11. In view of the complementary nature of Rule 86(4) EPC and Rule 46(1) EPC as the latter must be interpreted according to the case law of the Enlarged Board of Appeal, the amended claims should have been deemed inadmissible, since a further search fee was not paid in respect of the subject-matter of claim 2 as requested by the search division, and the procedure was carried out solely on the basis of the "first invention", ie in respect of the subject-matter of the original claims 1, 3, and 4.

In this case, the new subject-matter claimed is defined in substance by the essential features of the two non-unitary inventions alleged by the department of first instance. It is therefore crucial to verify this allegation to determine the admissibility of the amended claims under Rule 46(1) EPC.

Requirement to pay a further search fee

12. The Board is exercising the power of the examining division, and in this sense is obliged to examine the validity of the communication dated 29 December 1994 provided for under Rule 46(1) EPC.

13. The examining division (and, consequently, the Board) is authorised to carry out this examination even if - as in this case - the appellant did not act on the invitation to pay a further search fee. The Board agrees in this regard with the legal argumentation in T 631/97 - Doped regions/TOSHIBA (OJ EPO 2001, 13), Reasons, points 3.5 ff.

The search division considered that the application (original version) related to two inventions, the subject-matter of claims 1, 3 and 4 being one, and that of claim 2 being the other, and consequently failed to meet the requirement for unity of invention. This view was shared by the examining division.

14. The original claims 1 and 3 contain features connected to the aforementioned special technical features in claim 2, but these are not referred to explicitly. Conversely, claims 1 and 3 define a precise position of the two synchronisation bits, a definition of which does not feature in independent claim 2.

The differences in the claims do not, however, render non-unitary the inventions claimed therein.

15. As explained with the aid of figures 1 and 2 of the description, these synchronisation bits avoid the signal ambiguity that can arise when the receiver has to receive data packets by another transmission method. Avoiding this ambiguity enables the general objective of the invention to be achieved, which is to make efficient use of a full-rate data transmission channel by subdividing this channel into one or more subchannels. For this simple reason, in itself the deciding factor, the conclusion cannot be drawn with certainty that unity is lacking. In case of doubt, however, the issue of unity should be settled in the applicant's favour (see above, point 6). Consequently, the "a priori" objection to the initial claims raised by the search division and confirmed by the examining division was not justified.

16. In addition, the examining division deemed document D1 to be novelty destroying with regard to the subject-matter of claims 1 and 3. However, even this was not sufficient reason to establish lack of unity ("a posteriori") between the claimed subject-matters. For there to be lack of unity, these claims would have to define a "group of inventions", ie different inventive alternatives or more concrete inventive embodiments initially forming part of the same known general concept. In any case Article 82 and Rule 30 EPC only apply to "inventions" within the meaning of these provisions, ie inventions which each make an inventive contribution to the state of the art as cited in the search report (the same applies to the legal situation under the PCT, see W 11/99 - Percarbonate (OJ EPO 2000, 186), Reasons, point 4, last sentence, and W 13/02, not published in OJ EPO, Reasons, point 6).

Having established that the subject-matter of claims 1 and 3 (in the initial version) was devoid of novelty, the examining division should not have taken these claims into account in assessing lack of unity.

Since the additional features of dependent claim 4 (initial version) also belonged to the state of the art (see decision of the examining division, in particular Reasons, point 2), there would have been reason to doubt whether claim 4 defined an "invention" within the meaning of Article 82 EPC or "special technical features" within the meaning of Rule 30 EPC. The examining division should therefore also have decided the question of unity in the appellant's favour in this case.

17. In the Board's view, this line of reasoning leads to the conclusion that a subsequent amendment to limit the subject-matter of the main claim by additional features disclosed in the application as filed does not generally affect the notion of unity of invention under either Rule 86(4) or Rule 46(1) EPC. It is normal for an applicant to make such an amendment in response to an objection against the patentability of the subject-matter in unlimited form. This allows the applicant to overcome the objection under Article 123(1) EPC.

18. The invitation to pay a further search fee under Rule 46(1) EPC was consequently not justified. The search division should have included the subject-matter of claim 2 in the search and prepared a complete search report. The examining division should have concluded that there was unity of invention and should not therefore have refused to continue with the procedure regarding the subject-matter of claim 2 on the grounds that the further search fee in respect of the so-called second invention had not been paid.

Remittal to the examining division

19. A substantive examination has not yet been carried out on the amended claims. It would therefore be expedient to remit the case to the examining division for further prosecution (Article 111(1) EPC).

Procedural violations and reimbursement of the appeal fee

20. It was the examining division's duty to verify the search division's findings regarding the inventions' lack of unity and, if unity was found not to exist, to inform the appellant of the grounds so that it could respond.

Neither the communications nor the examining division's decision go beyond a list of the features appearing or lacking in the claimed inventions (see in particular the examining division's decision, Reasons, point 1), which was obviously not an appropriate way to substantiate the lack of unity of invention.

Since lack of unity was a central issue in these proceedings and an important reason for refusing the application, this lack of substantiation must be regarded as a substantial procedural violation, justifying, in the interests of equity, the reimbursement of the appeal fee under Rule 67 EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the examining division for further prosecution.
3. The appeal fee is to be reimbursed.