



T142/84

TO: Recipients of Decision T142/84

There has now been an amendment to the headnote of this decision. Please therefore substitute the original front page by the page attached.

Barbara A. Norman

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Registry

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Enc.

Veröffentlichung im Amtsblatt	Ja/Nein
Publication in the Official Journal	Yes/No
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Aktenzeichen / Case Number / N^o du recours :

T 142/84

Anmeldenummer / Filing No / N^o de la demande :

79 301 883.9

Veröffentlichungs-Nr. / Publication No / N^o de la publication :

9 373

Bezeichnung der Erfindung:

Title of invention:

Titre de l'invention :

A tongue and buckle fastener for a
safety belt harness

Klassifikation / Classification / Classement :

A 44 B 11/25, B 60 R 21/10

ENTSCHEIDUNG / DECISION

vom / of / du

8 July 1986

Anmelder / Applicant / Demandeur :

Patentinhaber / Proprietor of the patent /
Titulaire du brevet :

BRITAX (WINGARD) LTD.

Einsprechender / Opponent / Opposant :

AUTOFLUG GmbH

Stichwort / Headword / Référence :

EPÜ / EPC / CBE

Articles 56, 114(2)

Inventive step - problem and solution approach

Introduction of extremely relevant new
citation in appeal proceedings

Leitsatz / Headnote / Sommaire

- I. When the problem and solution approach is being applied to the determination of the question of inventive step, it is not necessary that the problem solved by the subject-matter of a prior document in the same specialised technical field should have been stated **expressis verbis** in that document, in order to establish that an inventive step is lacking on the basis of the disclosure in that document.
- II. An extremely relevant document disclosing the combination of features forming the characterising part of a two-part claim may be admitted after the period for opposition has expired even in appeal proceedings, in the exercise of discretion under Article 114(2) EPC. (Considerations affecting the exercise of such discretion mentioned in case T 271/84 applied).

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- I. When the problem and solution approach is being applied to the determination of the question of inventive step, it is not necessary that the problem solved should have been stated **expressis verbis** in a prior document in the same specialised field, in order to establish that an inventive step is lacking on the basis of the disclosure in that document.
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Summary of Facts and Submissions

- I European patent No. 9 373 was granted on 21 April 1982 on European patent application No. 79 301 883.9 filed 13 September 1979 claiming priority from the utility model application No. 78 282 14U in the Federal Republic of Germany (DE), on 22 September 1978.
- II The opponents filed an opposition against the European patent on 20 January 1983 requesting that it be revoked on the grounds of lack of inventive step. The opposition was supported by ten publications including DE-A-2 752 091 cited in the search report.
- III In the Interlocutory Decision within the meaning of Article 106(3) EPC, dated 16 April 1984, the Opposition Division maintained the patent as amended on the basis of the documents specified in the communication pursuant to Rule 58(4) EPC, dated 15 November 1983, and incorporating two claims. Claim 1 reads as follows:

"A fastener for a safety belt harness, the fastener comprising a tongue (1), a buckle (2) in which a passageway (14) is provided for receiving the tongue (1), a latching member (20) movable transversely of the passageway (14) between a latching position in which a latching surface (27a, 27b) thereof extends perpendicularly in the passageway (14) for engagement with a corresponding latching surface (3a, 3b) on the tongue (1) to retain the tongue (1) in the passageway (14) and a release position in which the tongue is removable from the passageway (14), first spring means (30) for biasing the latching member (20) into its latched position, a spring-loaded push button (6) displaceable longitudinally of the passageway (14) and operative when depressed to move the latching member (20) to its release position, the latching member co-operating

with ramp means (39a, 39b) on the push button (6) which move the latching member (20) into its release position when the push button (6) is depressed, a spring biased ejector (17) to eject the tongue (1) when the push button (6) is depressed, and second spring means (45) for biasing the push button into its non-depressed position to permit said first spring means (30) to move the latching member (20) into its fully latched position when the push button (6) is not fully released, characterised by blocking means (43) fast with the push button (6) and located so as to move into the path of the latching member (20) when the latching member (20) is in its fully latched position and the push button (6) moves into its fully released position, to block movement of the latching member (20) to its release position unless the push button (6) is depressed, the ejector (17) being slidable under the latching member (20), when the tongue (1) is ejected, to maintain the latching member (20) in its release position until the tongue (1) is reinserted.

IV The appellants (opponents) appealed against the decision on 17 June 1984, paying the appropriate fee, and filing the grounds for the appeal on 27 August 1984. This statement of grounds referred to four new documents, namely:

US-A-4 100 657
GB-A-1 275 571
US-A-3 763 523
US-A-3 955 056.

The appellants argue essentially that it would be obvious for the person skilled in the art to combine the teaching of such exemplary documents as US-A-3 376 523 and US-A-3 955 056 with that of US-A-4 100 657 to arrive at the subject-matter of Claim 1, particularly since US-A-4 100 657 discloses not only most of the features of the

precharacterising part of Claim 1 but also the two combination features of the characterising part of Claim 1 and the essential problem to be solved by the present invention.

- V The respondents (proprietor of the patent) contested this view and submitted with their letter of 30 November 1984 an amended Claim 1 in which it is more clearly specified that the engagement between the latching surface of the latching member and the corresponding latching surface on the tongue is perpendicular to the direction of movement of the tongue along the passageway and also that the ramp means actually move the latching member rather than merely permitting it to move.
- VI The respondents also raised objections to the admissibility of the new citations filed by the appellants with their Statement of Grounds for the appeal. Whilst recognising that the admissibility of the new citations is entirely at the discretion of the Board under Article 114 EPC, the respondents observe that the reason for the belated submission, (the opponent only became aware of the citations three weeks before filing his Statement of Grounds), is of very little substance.
- VII In response to a communication from the Board, the respondents drew the Board's attention to two earlier decisions of the Technical Boards of Appeal and to a decision of the English Court of Appeal.
- VIII The appellants request cancellation of the decision against which they are appealing and revocation of the European patent in its entirety. The respondents (proprietor of the patent) request that the appeal be dismissed and the patent be maintained either as amended on the basis of the

documents specified in the communication pursuant to Rule 58(4) EPC, dated 15 November 1983 (main request), or as amended in accordance with the proposals contained in the letter of 30 November 1984 (alternative request).

Reasons for the Decision

1. The appeal complies with Articles 106 to 108 and Rule 64 EPC and is therefore admissible.

2. As far as the admissibility of the new citations is concerned (which were filed with the Statement of Grounds and clearly well outside the nine-month period for opposition), it is pointed out that the US-A-4 100 657 is an extremely relevant document disclosing the combination of features forming the characterising part of Claim 1 of the main request. Moreover, it does not form the basis for a new line of attack on the patentability of the claimed fastener, but rather fills the missing-link in the argumentation presented by the opponents in support of their grounds for opposition, this link being pointed out and relied upon by the Opposition Division in the Interlocutory Decision appealed against.

Whilst the Board recognises that the introduction of new documents after the expiry of the nine month opposition period might in certain cases be objectionable (depending especially upon the degree of relevance and the lateness), in the present appeal proceedings the Board decided to admit US-A-4 100 657 into the appeal having regard to what is set out above. Moreover, since the document does not form the basis for a new line of attack on the patentability of the claimed fastener, as pointed out above, the Board does not consider it necessary to remit the case to the Opposition Division for further prosecution.

The question of the admissibility of the other documents introduced with the Statement of Grounds may be left open since the appeal is successful without reference to these documents.

3. After examination of the cited prior art the Board is satisfied that the subject-matter of Claim 1 and of the alternative Claim 1 is novel. Since this has never been disputed, there is no need for further detailed substantiation of this matter.
4. The precharacterising portion of Claim 1 of the main request comprises only features also disclosed in combination in the prior art as demonstrated in DE-A-2 752 091, (see particularly the alternative embodiment described on page 14, at lines 9-11).

According to the present patent, in fasteners of this type, there are three partial problems to be overcome namely, to provide a minimum reaction against insertion of the tongue in the buckle, to facilitate fastening, to prevent accidental release due to wear or failure of components and to minimise the possibility of achieving a so-called "false-latch" condition in which the tongue is merely in edge-to-edge engagement with the latching member rather than in full face-to-face engagement. For example, with regard to the second partial problem, the fastener may need to meet a safety standard which requires that the tongue should not be released autonomously from the buckle when the fastener, in the worst possible orientation, is subjected to, say 60 g force. This is taken to represent a peak in an acceleration/deceleration curve where the buckle receives a severe impact as in a particularly bad vehicle accident. Moreover, a dangerous situation could exist, for example, if there is a breakage of the spring means biasing

the latching member into its latched position. Such partial problems present conflicting requirements since strong spring means may be provided to prevent autonomous or accidental release, but this in turn could increase the reaction against the tongue when inserted into the buckle under conditions of normal use. Regarding the third problem, it is desirable to provide some lost motion between the latching member and the push-button so that obstruction of outward movement of the latter does not impede movement of the former into its fully latched position.

5. These three partial problems are overcome by the features in the characterising portion of Claim 1.
6. Since the elimination of deficiencies in an object which come to light during use is a constant preoccupation in technical circles, the aims set by the present application cannot be regarded as contributing to the inventive merits of the solution.

If the person skilled in the art working on the development of fasteners for safety belt harnesses does not possess the technical knowledge to overcome such difficulties, he can be expected to consult the relevant prior art for components which perform the same function and are better able to meet the requirements.

Such consultation would reveal US-A-4 100 657 in which a shallow portion (22) integral with the push button is located so as to move into the path of the latching member (17) in its fully latched position when the push button moves into its released position as becomes readily apparent from Fig. 3A and 3B. Only when the push button is fully depressed can the latching member (17) move to its

release position. The ejector is also slidable under the latching member when the tongue is ejected, so that it is maintained in its release position until the reinsertion of the tongue occurs.

The skilled person would be led by this citation to provide the inclined ramp as disclosed in DE-A-2 752 091 with a locking means in the form of an adjacent horizontally extended ramp surface as known from the shallow portion of US-A-4 100 657 for facing the sliding bolts of the latching member of the former document when they are moving into their terminal location coordinate to the locking position of the latching member. In this way uncontrolled upward movement of the latching member with the danger of accidental release, e.g. due to lateral shock would be prevented. There would also be some lost motion between the latching member and the push-button, thus the risk of false latching would be avoided. Likewise failure of components such as the first spring acting upon the latching member of the device DE-A-2 752 091 would not allow the latter to move clear of the tongue and thus would no longer have any fatal consequences. Further, no non-obvious contribution can be seen in the ejector feature additionally stated in the terminal phrase of the characterising clause, since such feature is likewise already known from US-A-4 100 657 and the skilled person would readily recognise that this enables fastening with a minimum reaction when inserting the tongue. It would accordingly be obvious for the skilled person to combine these teachings to arrive at the solution of the problem as set forth in the subject-matter of the claim, which accordingly lacks an inventive step as required by Article 56 EPC.

Therefore, Claim 1 cannot be allowed having regard to Article 52(1) EPC.

7. With respect to the alternative Claim 1 it must be stressed that all the features of the preamble are known from DE-A-2 752 091 save the perpendicular plane of the latching member. There is clearly disclosed therein a cylindrical latching surface on the latching member (9) for engagement perpendicular to the direction of movement of the tongue (1) along the passageway (8) and the ramp means (19) likewise cooperate with means on the latching member (guide bolts 22) to either move or guide it into its release position.

To modify the latching surface and of course the corresponding latching surface of the tongue to include a plane perpendicular to the direction of movement of the passageway seems to be a simple matter of choice, since plate-like latching members are legion in the art of safety belt buckles and in view of US-A-4 000 548, column 4, lines 48 to 52, a simple matter of choice.

Since no further distinguishing features are contained in the characterising part of Claim 1 of the alternative request compared with that of Claim 1 of the main request, alternative Claim 1 is likewise deemed to lack an inventive step in its subject-matter for precisely the reasons already stated in point 6.

The alternative Claim 1 also cannot be allowed having regard to Article 52(1) EPC.

8. The further arguments submitted by the respondents in support of inventiveness are not sufficiently persuasive to reverse the above conclusion of obviousness.

8.1 The respondents are of course correct when they state that the mere fact that a skilled person would not encounter unsurmountable difficulties in providing a characterising feature of a claim does not lead (necessarily) to the conclusion that there is no inventive step. However, when the feature is known from a document in the same specialised field, and solves the same problem, then the fact that the skilled person would not encounter unsurmountable difficulties in applying this known feature to a known apparatus from a second document does demonstrate that the documents are not conflicting (see T 02/81, OJ EPO 10/1982, 401), and that an inventive step is lacking. The problem solved does not have to be stated *expressis verbis* in the prior art.

8.2 The respondents refer further to the earlier decision T 39/82 OJ EPO 11/1982, 423. In that case it was decided that the problems to be respectively solved with a known measure in the known case and in the case to be decided must be taken into account. Since the problems differed fundamentally from one another it could not be considered obvious for the skilled person to use this known measure in a different context.

Since however the purpose of the features known from US-A-4 100 657 is the same as in the present case, it cannot be denied that the problems do not differ fundamentally and this prior art gave the skilled person an indication for applying these features in the present case.

8.3 The above argumentation is entirely consistent with the problem/solution approach advanced in the cited English Court of Appeal decision (in *Killick v. Pye* - (1958) R.P.C. 377) and as followed and developed by the Boards of Appeal.

Order

For these reasons, it is decided that:

- (1) The decision of the Opposition Division is set aside.
- (2) The European Patent No. 9373 is revoked.

The Registrar:

The Chairman:

LRD.
●
f.

J. P.

G. P. Müller