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Datasheet for the decision of 22 August 2023

Case Number: T 1578/19 - 3.2.06

Application Number: 13732417.4

Publication Number: 2863767

IPC: A41D13/018

Language of the proceedings: EN

Title of invention:
LINING MOUNTED INFLATABLE PROTECTOR AND PROTECTIVE CLOTHING ASSEMBLY.

Patent Proprietor:
Alpinestars Research S.p.A.

Opponent:
Dainese S.p.A.

Headword:

Relevant legal provisions:
EPC Art. 100(c), 83, 54, 56
RPBA Art. 12(4)

Keyword:

Grounds for opposition - extension of subject-matter (yes - main request and auxiliary requests 1 to 7)
Sufficiency of disclosure - (auxiliary request 8 - yes)
Novelty - (auxiliary request 8 - yes)
Inventive step - (auxiliary request 8 - yes)
Late-filed evidence - submitted with the statement of grounds of appeal - admitted (no)

Decisions cited:

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

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Case Number: T 1578/19 - 3.2.06

D E C I S I O N
of Technical Board of Appeal 3.2.06
of 22 August 2023

Appellant: (Opponent)	Dainese S.p.A. Via Louvigny, 35 36060 Colceresa (VI) (IT)
Representative:	Manfrin, Marta Società Italiana Brevetti S.p.A. Stradone San Fermo 21 sc. B 37121 Verona (VR) (IT)
Respondent: (Patent Proprietor)	Alpinestars Research S.p.A. Via Alcide De Gasperi 54 Frazione: Coste 31010 Maser (TV) (IT)
Representative:	Marri, Luca Dragotti & Associati S.r.l. Via Paris Bordone, 9 31100 Treviso (IT)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 22 March 2019 rejecting the opposition filed against European patent No. 2863767 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman	M. Dorfstätter
Members:	T. Rosenblatt
	W. Ungler

Summary of Facts and Submissions

I. The appellant (opponent) filed an appeal against the opposition division's decision rejecting the opposition against European patent No. 2 863 767 (hereinafter "the patent").

II. The appellant relied on the following evidence:

D1: US 2004/183283 A1
D2: WO 2005/036335 A2
D4: WO 00/51453 A1
D5: "Clothes that Coordinate Your Fashion Based on Previous Choices", M. Fukuda et al., SOTICS 2011
D9: WO 2007/123970 A2

III. The parties were summoned to oral proceedings before the Board. In a communication pursuant to Article 15(1) of the Rules of Procedure of the Boards of Appeal (RPBA), the Board informed the parties of its preliminary opinion on the case.

IV. Oral proceedings before the Board were held on 22 August 2023.

V. The appellant requested that the decision under appeal be set aside and the European patent be revoked.

The respondent (patent proprietor) requested that the appeal be dismissed (main request), or that the patent be maintained in amended form on the basis of one of the first to fourteenth auxiliary requests filed with the statement of grounds of appeal.

VI. Independent claim 1 of the patent reads as follows:

"Lining mounted inflatable protector (20) suitable for being removably fastened to the inside of a garment (10), the lining mounted inflatable protector (20) comprising:
at least one inflatable bag (22), said at least one inflatable bag (22) being housed in a seat (25) provided in the lining mounted inflatable protector (20);
at least one gas source (24) fastened to the lining mounted inflatable protector (20) and connected to said at least one inflatable bag (22);
said at least one gas source (24) being suitable, when it is activated, for inflating said at least one inflatable bag (22);
sensing means (30; 30A);
a control unit (26) fastened to the lining mounted inflatable protector (20) and suitable for processing the data provided by the sensing means (30; 30A) in order to identify a danger situation;
automatic enabling means (28) suitable for automatically switching the control unit (26) from a first operative mode to a second operative mode and viceversa; in the first operative mode the control unit (26) being suitable for ignoring any identified danger situation and in the second operative mode the control unit (26) being suitable for activating the at least one gas source (24) when a danger situation is identified,
characterized in that
the automatic enabling means (28) comprise receiving means suitable for acquiring data from the garment (10) used in conjunction with the lining mounted inflatable protector (20) so that the automatic enabling means (28) are suitable for

verifying if the garment (10) is provided with an identification code and wherein the automatic enabling means (28) are suitable for maintaining the control unit (26) in the first operative mode in case no identification code can be acquired from the garment (10) or the acquired identification code identifies a garment (10) incompatible with the lining mounted inflatable protector (20)."

Independent claim 4 of the patent reads as follows:

"Protective clothing assembly (1) comprising:
- at least one garment (10), said at least one garment (10) comprising identification means (12, 17, 50) suitable for identifying said at least one garment (10);
- a lining mounted inflatable protector (20) suitable for being removably fastened to the inside of said at least one garment (10), said lining mounted inflatable protector (20) comprising:
- at least one inflatable bag (22), said at least one inflatable bag (22) being housed in a seat (25) provided in the lining mounted inflatable protector (20);
- at least one gas source (24) fastened to the lining mounted inflatable protector (20) and connected to said at least one inflatable bag (22), said at least one gas source (24) being suitable, when it is activated, for inflating said at least one inflatable bag (22);
- sensing means (30; 30A);
- a control unit (26) fastened to the lining mounted inflatable protector (20) and suitable for processing the data provided by the sensing means (30; 30A) in order to identify a danger situation;
- automatic enabling means (28) suitable for

automatically switching the control unit (26) from a first operative mode to a second operative mode and viceversa, in the first operative mode the control unit (26) being suitable for ignoring any identified danger situation and in the second operative mode the control unit (26) being suitable for activating the at least one gas source (24) when a danger situation is identified;
characterized in that
said automatic enabling means (28) are suitable for recognizing the identification means (12, 17, 50) of the at least one garment (10) and for switching the control unit (26) to the second operative mode if the identification means (12, 17, 50) of the at least one garment (10) identifies a compatible configuration of said at least one garment (10) with respect to the lining mounted inflatable protector (20)."

Dependent claim 7 as granted reads as follows:

"Protective clothing assembly (1) according to claim 4, wherein the identification means (12, 17, 50) are suitable for identifying said at least one garment (10) by establishing a coupling shape between one component of the identification means (17, 50) and a corresponding component of the control unit (26)."

In the first auxiliary request the characterising portion of claim 1 has been amended to read as follows (emphasis added by the Board):

"... characterized in that the automatic enabling means (28) comprise receiving means suitable for

acquiring an identification code from the garment (10) used in conjunction ..."

Claim 1 of the second and fourth auxiliary requests is identical to claim 1 of the first auxiliary request.

In claim 1 of the third, fifth, sixth and seventh auxiliary requests, in addition to the amendment made in the first auxiliary request, the following feature has been inserted into the preamble of claim 1:

"first releasable fixing means (32; 23A) suitable for cooperating with second fixing means (34; 23B) of the garment (10) for temporarily fastening the lining mounted inflatable protector (20) to the garment (10);"

Claim 4 of the second to seventh auxiliary requests comprises amendments which are not relevant to the present decision and have therefore not been reproduced here.

In the eighth auxiliary request, all the claims relating to the lining mounted protector (claim 1 in the higher-ranking requests and its dependent claims) have been deleted. The former independent claim 4 of the main request has been made independent claim 1 and its dependent claims adapted accordingly.

The amendments to the claims according to the ninth to fourteenth auxiliary requests are not relevant to the present decision and have therefore not been reproduced here.

VII. The appellant's arguments, insofar as they are relevant to the present decision, may be summarised as follows.

Main request - Article 100(c) EPC

Compared with the original claim 1, in claim 1 as granted the receiving means comprised in the automatic enabling means were more specifically limited to being "suitable for acquiring data from the garment [rather than any external source] used in conjunction with the lining mounted inflatable protector so that the automatic enabling means are suitable for verifying if the garment is provided with an identification code". The amendments, which were considered to be based on paragraphs 62-63 as originally filed, not only led to a generalisation of the subject-matter, but to a different attribution or omission of the functions attributed in these passages specifically to the receiving means, in particular of the function of "verifying whether such garment is provided with an identification code".

First to seventh auxiliary requests - Article 123(2) EPC

The amendments to claim 1 still did not define the second function of the receiving means.

Eighth auxiliary request - Article 83 EPC

Paragraph 28 of the patent defined the term "automatic" in the expression "automatic enabling means" as implying a truly automatic process, without needing a user. The single embodiment disclosed in the patent in relation to the subject-matter of claim 4, specifically in paragraphs 105 and 106 in combination with Figure

10, however, relied on manual intervention by the user when establishing the shape-fit coupling between the two components of the assembly. The claimed recognition by the automatic enabling means of the identification means, embodied by the shape-fit coupling, was not realised in this embodiment, however. The fact that the automatic enabling means could "see" an electrical current after the coupling did not correspond to a recognition which clearly implied a more specific function. Consequently there was no single embodiment disclosed in the patent that demonstrated how to carry out the recognition of the identification means by automatic enabling means in the case in which the identification means were embodied by the features of dependent claim 4.

Eighth auxiliary request - novelty - D1

The novelty objection based on D1 was to be admitted into the proceedings. D1 had been fully dealt with during the opposition procedure. The novelty objection was motivated by a generic interpretation of the identification means and enabling means given by the opposition division, for example in point 2.3.6 of the impugned decision, holding that identification means could be mechanically implemented.

D1 indisputably disclosed the features specified in the preamble of claim 1. A protector having inflatable regions or chambers was housed in a garment or undergarment, the protector comprising a gas source, sensors and a computer or logic controller for activating the airbags; see for example paragraphs 12 to 14 and 42. Moreover, the waistband mentioned in paragraph 47 constituted identification means since detection of its tension made it possible to switch the

control unit between its on and off modes. The tensioning of the waistband made it possible to detect whether the garment was in a compatible configuration, i.e. whether it was correctly worn or fastened, within the meaning of the patent as envisaged in paragraphs 76 to 81, for example. The detection of a tension thus corresponded to the simple detection of an electric current as in the patent in suit for the embodiment based on identification means realised by a shape-fit coupling.

Eighth auxiliary request - novelty - D4

D4 disclosed coupling means on the garment and the airbag in the form of, for example, magnets and corresponding metal plates. The coupling means on the garment could be considered to represent an identification code, identifying whether the airbag was in the right position, or in fact whether or not the garment was a compatible garment. Once all couplings were correctly established between the airbag and garment and corresponding switches were closed, operational readiness ("*Betriebsbereitschaft des Airbags*", see page 9 of D4) was signalled by the lamp and the airbag switched to an enabled state. The expression "*die Schalter*" used in line 35 on page 8 of D4 related to a generic switch which could not be anything other than the switch for putting the airbag into an enabled condition, thus representing automatic enabling means. It would not have made technical sense to assume that the airbag remained in an enabled state, i.e. the state of operational readiness ("*Betriebsbereitschaft*"), even in the case of mismatched coupling means.

Eighth auxiliary request - inventive step

Claim 1 lacked an inventive step when starting from either of D1 or D4 as the closest prior art, each in combination with the common general knowledge, D2, D5 or D9.

In case the Board did not consider the tensioning of the waistband in D1 to be an identification means of the garment, identification means of a different technical nature had no technical effect if not that of identifying a suitable configuration. The claim was also intended to cover a purely mechanical implementation, as confirmed by dependent claim 7, which could be equated with the waistband tension in D1. Providing identification means other than the tensioning of a waistband in D1 was just a minor improvement falling within the capacity of the skilled person.

The difference between the assembly in D4 and that in claim 4 was that the garment had identification means and the automatic enabling means were based upon recognition of the identification means as associated with a configuration of the garment. The objective technical problem was therefore to improve detection of mismatching between the garment and protector (the two being separate items removably connectable to one another, as known from the prior art). In order to avoid such mismatching, using the reading of an identification code can be considered an obvious solution, or it was based on common general knowledge in order to verify compatibility of two items.

Moreover, as already stated in the notice of opposition, a different technical problem addressed by

D1 or D4 could be considered that of equipping the protective clothing assembly with technical means for recognising a compatible configuration of the garment with respect to the lining protector, whereby a compatible configuration meant either a garment having the same size as the protector, or a protector being suitable for use with the garment. In order to solve this problem, any skilled person would have considered D2, which related to a method and to a system for coordinating the use of wearable objects using wireless communications. All the arguments already provided in the notice of opposition relating to a "combination of D1 and D2/D5 or D4 or D2/D5 [were] confirmed".

Admittance of D9

D9 was filed in response to the written decision in regard to the reformulation of the objective technical problem and to the interpretation of claim 1 as also encompassing a mechanical implementation of the identification means. The reasoning in the impugned decision and the opposition division's preliminary opinion did not completely correspond (see for example point 2.5.1.4 of the opposition division's preliminary opinion), and the subject-matter of claim 4 was not even addressed in this opinion. Since D9 was filed at the earliest point in the appeal proceedings, the other party was fully informed and was not adversely affected. D9 came from the same technical field as the patent, related to protective devices and was more relevant to the outcome of the procedure than documents D2 or D5.

VIII. The respondent's arguments, insofar as they are relevant to the present decision, may be summarised as follows.

Main request - Article 100(c) EPC

The subject-matter of claim 1 of the patent was disclosed in the application as filed, notably by original claim 1 in combination with the passage from page 7, line 33 to page 8, line 4 (paragraphs 61 to 63 of the patent specification), on which the wording of claim 1 was literally based. The opposition division's reasoning in point 2.2.6 of the impugned decision was to be followed. According to claim 1 as granted, the automatic enabling means comprised the receiving means, so that ultimately the automatic enabling means as a whole also performed the verifying function attributed to the receiving means in the description as originally filed. Moreover, the entire application did not mention anything regarding any alternative embodiment or sub-units other than the receiving means. The interpretation of claim 1 as granted was thus not to extend to including undisclosed embodiments, see T 190/99.

Eighth auxiliary request - Article 83 EPC

The appellant's objection was merely a clarity objection. Paragraph 106 disclosed in particular that an electric current might circulate once the shape-fit coupling was correctly established. Such an electric current could then be recognised by the automatic enabling means.

Eighth auxiliary request - novelty - D1

The novelty of claim 1 (claim 4 as granted) over D1 was contested for the first time in the appeal proceedings, although this objection could already have been raised

before the opposition division. It was not to be admitted into the appeal proceedings according to Article 12(4) RPBA 2007.

The appellant's objection was furthermore based on an incorrect identification of the chambers 12 of the active protection device (APG) according to D1 with a lining mounted inflatable protector as defined in claim 1, since these chambers were parts of the outer garment. The garment also lacked identification means suitable for identifying the garment itself. The protector was not suitable for being fastened to the inside of the garment. Finally, the feature in the characterising portion was not disclosed either. The waistband disclosed in paragraph 47, containing only a generic disclosure without any reference to the embodiment of Figure 10 on which the appellant based its objection, was a part of the garment but could not identify the garment itself or a compatible garment configuration.

Eighth auxiliary request - novelty - D4

D4 lacked a disclosure for a lining mounted inflatable protector being removably fastened to the inside of said garment. The pocket holding the airbag in D4 was attached to the outside of the garment, as indicated in the Figures and described on page 9, lines 13 to 15. Moreover, the coupling means comprised on the garment and the airbag did not constitute identification means according to claim 1, since they did not make it possible to identify the compatibility of the garment with the airbag. They only made it possible to identify whether the airbag was correctly positioned. D4 lacked a direct and unambiguous disclosure that the actuation of the switches switched the control unit between two

modes. D4 did not mention anything whatsoever regarding the effects of improper positioning between the garment and airbag.

Eighth auxiliary request - inventive step

In view of the distinguishing features between claim 1 and D1, the technical problem faced and solved by the opposed patent remained that of providing a lining mounted inflatable protector suitable for being activated only if it was used in conjunction with a compatible outer garment. D1 gave no suggestion which might have assisted a skilled person in solving such a technical problem. D1 did not mention anything whatsoever regarding possible problems arising in view of the combination of an APG chamber incompatible with the outer shorts. Even if the skilled person decided to swap the waistband for a different means, they would not have arrived at the claimed invention, since D1 did not suggest a lining mounted inflatable protector which could be activated only if used in conjunction with a compatible outer garment. Consequently, D1 did not preclude claim 1 involving an inventive step, either alone or in combination with common general knowledge that had not been better defined.

Concerning the objection based on D4 as the closest prior art, similar comments applied as those with respect to claim 1 as granted. D4 did not give any indication that there should have been a connection between the evaluation circuit of the removable pockets and the undergarment or that a compatible undergarment should have been identified. D4 also lacked a disclosure of a protector suitable for being removably fastened to the inside of the garment and the claimed automatic enabling means. The technical problem was

still that of providing a lining mounted inflatable protector suitable for being activated only if used in conjunction with a compatible outer garment. D4 did not provide any information regarding whether the switches, once actuated, might also have somehow interacted with the evaluation circuit so as to switch it from a first operative mode to a second operative mode. Consequently, it only addressed the problem of avoiding incorrect positioning of the removable pockets with respect to the undergarment, but not that of activating an inflatable protector only if used in conjunction with a compatible outer garment.

As regards the combinations of D1 or D4 with D2/D5, all the arguments provided in the response to the notice of opposition were maintained.

Admittance of D9

D9 was not to be admitted into the proceedings since the question of the reformulation of the objective technical problem was already raised by the opposition division in point 2.5.3 of its preliminary opinion. The fact that the opposition division's preliminary opinion did not specifically address this issue with regard to claim 4 could not justify the admission of D9 at this late stage. On one hand, the same reasoning applied to claim 4 as for claim 1. On the other hand, D9 was used by the appellant in objections against both independent claims 1 and 4. Corresponding objections against claim 1 involving D9 could and should have already been raised in reply to the opposition division's preliminary opinion.

Reasons for the Decision

Main request

1. Article 100(c) EPC

Contrary to the conclusion reached by the opposition division in the impugned decision, the Board finds that the ground for opposition pursuant to Article 100(c) EPC prejudices the maintenance of the patent.

1.1 For the purpose of comparing the subject-matter of claim 1 as granted with the content of the application as originally filed, reference is made to the published international application underlying the patent in suit (WO-A-2014/001189).

1.2 Original claim 1 defines, *inter alia*, that

> "the automatic enabling means (28) comprise receiving means suitable for acquiring data from at least one external data source [and wherein ...]".

Compared with this wording, claim 1 as granted comprises the following amendment (emphasis added by the Board):

> "the automatic enabling means (28) comprise receiving means suitable for acquiring data from **the garment (10) used in conjunction with the lining mounted inflatable protector (20) so that the automatic enabling means (28) are suitable for verifying if the garment (10) is provided with an identification code** [and wherein ...]"

1.3 As the only basis for justifying this amendment, the respondent indicated a passage corresponding to page 7, line 33 to page 8, line 4 of the published application, which reads as follows:

> "Preferably, the automatic enabling means 28 comprise receiving means for acquiring data from at least one external source, like for example a garment, used in conjunction with the inflatable lining 20.
> Considering the case in which the wearable protector is used in conjunction with a garment, the enabling means 28 are suitable, for example, for verifying whether such garment is provided with an identification code.
> In the affirmative case, the receiving means are suitable for acquiring the identification code of the garment and for verifying whether the acquired code identifies a garment compatible with the inflatable lining 20."

According to the final paragraph of this passage, the receiving means are suitable for acquiring an identification code of the garment and for verifying whether the acquired code identifies a compatible garment.

1.4 The Board agrees with the appellant that this final paragraph attributes two specific functions to the receiving means, of which only the acquisition function is defined in claim 1 as granted as being attributed to the receiving means. Instead, claim 1 as granted defines that the automatic enabling means are suitable for verifying whether the garment is provided with an identification code. Since the receiving means are comprised by the automatic enabling means, the skilled

person would understand that the receiving means constitute a sub-unit of the automatic enabling means. The claim as granted thus encompasses two technically reasonable options as regards the performance of the verification function, i.e. that the function is carried out either by a portion of the automatic enabling means which is not the receiving means or indeed by the receiving means, as literally disclosed in the cited passage of the application. The first of these two options covered by the wording of claim 1 as granted is, however, not disclosed in the application as filed in accordance with the accepted standard applied by the Boards of Appeal, which requires that the claimed subject-matter must be directly and unambiguously derivable from the application as filed. Consequently, the subject-matter of claim 1 as granted extends beyond the content of the application as filed.

1.5 The respondent relied *inter alia* on the arguments made by the opposition division in the impugned decision, which considered the amendment to be allowable. The Board does not find these arguments convincing for the following reason.

The opposition division also acknowledged the above-identified difference between claim 1 as granted and the cited passage of the description with regard to the part which carries out the verification function. The division then questioned whether the claimed definition of the part carrying out the verification constituted an "unallowable generalisation of the originally filed subject-matter". The opposition division held that this should be assessed according to the Guidelines for Examination in the European Patent Office, November 2018 (GL), Part H, Chapter V.3.2.1. The amendment would only be allowable "if the feature is not 'related or

inextricably linked' to the remaining features and the overall disclosure justifies such a generalisation". The opposition division considered these criteria to be fulfilled because it was considered irrelevant "for the operation of the control unit" whether the receiving means itself or some other part of the automatic enabling means carried out the verification. Moreover, and as was also argued by the respondent during the oral proceedings before the Board, the application as filed gave no details of any other (possible) sub-units of the automatic enabling unit and their specific functions, and therefore it did not appear necessary to define a single specific function carried out by one sub-unit of the automatic enabling unit when no other functions were assigned to specific sub-units.

The Board finds this reasoning unconvincing because it is not based on the correct standard for the assessment of the question of whether an amendment introduces subject-matter extending beyond the content of the application as filed. The cited section of the Guidelines for Examination in the EPO, GL H-V-3.2.1 (November 2018), which is not binding to the Boards of Appeal anyway, also provides a reminder of the required standard in the paragraph immediately following the two cumulative conditions relied upon by the opposition division ("inextricability" and "overall disclosure") when it states (emphasis added by the Board): "These conditions should be understood as an aid to assessing, in the particular case of an intermediate generalisation, if the amendment fulfils the requirements of Art. 123(2). In any case it has to be ensured that the skilled person is not presented with information which is not directly and unambiguously derivable from the originally filed application, even when account is taken of matter which is implicit to a

person skilled in the art using his common general knowledge." As set out before, the skilled person is presented with such information.

The Board acknowledges that the paragraph bridging pages 7 and 8 of the application as filed also discloses the formulation "automatic enabling means are suitable for verifying if the garment (10) is provided with an identification code" used in claim 1 as granted. The first paragraph on page 8 that then follows is, however, directly attached to the bridging part ("In the affirmative case, ...") and specifically discloses, as a consequence of the preceding statement, the two functions to be performed by the receiving means (acquiring and verifying), without there being any direct and unambiguous indication that the receiving means may perform only the acquiring function. This is not directly and unambiguously derivable from the absence of any mention of other sub-units of the automatic enabling means, either.

The Board also cannot see that any part of the decision T 190/99, cited by the respondent during the oral proceedings (without reference to any specific passage of it), would be relevant to the present case and that the conclusions reached in this decision would lead to a different conclusion in the present case. Its catchword reads: "The skilled person when considering a claim should rule out interpretations which are illogical or which do not make technical sense. He should try, with synthetical propensity i.e. building up rather than tearing down, to arrive at an interpretation of the claim which is technically sensible and takes into account the whole disclosure of the patent (Article 69 EPC). The patent must be construed by a mind willing to understand not a mind

desirous of misunderstanding". The Board cannot see that this would support the respondent's contention to exclude any interpretation of a claim as granted encompassing undisclosed embodiments. If a granted claim were, as a matter of principle, to be interpreted in a way such that it was limited to disclosed embodiments, this would appear tantamount to cancelling the ground for opposition pursuant to Article 100(c) EPC. Concerning the first sentence of the recited catchword, the Board cannot see that its interpretation of claim 1 as granted would be illogical or technically unreasonable. The following two sentences are not interpreted by the Board as excluding logical and technically meaningful embodiments of a claim solely based on the reason that these were not disclosed in the patent.

1.6 Claim 1 thus contains subject-matter extending beyond the content of the application as filed. The ground for opposition pursuant to Article 100(c) EPC prejudices the maintenance of the patent.

The respondent's main request is thus not allowable.

First to seventh auxiliary requests

2. Article 123(2) EPC

The amendments to claim 1 of the first to seventh auxiliary requests are not suitable for overcoming the outstanding objection under Article 100(c) EPC considered in points 1.3 to 1.5 above, as was also acknowledged by the respondent during the oral proceedings before the Board. The subject-matter of these claims therefore does not meet the corresponding requirement of Article 123(2) EPC, and therefore the

maintenance of the patent according to any of these auxiliary requests cannot be allowed.

Eighth auxiliary request

3. In the eighth auxiliary request, claim 1 as granted and its dependent claims 2 and 3 have been deleted, and therefore the previous objections under Article 123(2) EPC no longer apply. Independent claim 4 as granted becomes independent claim 1 and its dependent claims 5 to 13 become dependent claims 2 to 10.

4. Article 83 EPC

The appellant's objection under Article 83 EPC against dependent claim 4 (corresponding to dependent claim 7 as granted) does not prejudice the maintenance of the patent in amended form. The Board finds that the invention defined by claim 4 is disclosed in a manner sufficiently clear and complete to be carried out by the skilled person.

The appellant argued that the automatic enabling means as defined in claim 1 had to be able to recognise the identification means automatically, i.e. without the need for intervention by a user, as was also stated in paragraph 28 of the patent; however, in the single embodiment of the invention disclosed in the patent, which was not based on the use of an identification code (as described in paragraphs 95 to 108 in relation to the embodiment of Figure 10), the identification means required the intervention of a user, and therefore there would be no (automatic) interaction between the automatic enabling means and the identification means in the sense defined by claim 1 and paragraph 28. Consequently, claim 4 was not

consistent with the embodiment disclosed in relation to Figure 10. Since no other embodiment was disclosed in the patent which could inform the skilled person of how the invention in claim 4 could be carried out, the requirement of Article 83 EPC was not met.

In the Board's view the appellant's objection does not cast serious doubt on the question of whether the patent provides sufficiently clear and complete information for the skilled person to carry out the invention defined by claim 4. As also explained by the respondent, the manual coupling required to establish the shape-coupled connection of the identification means may establish an electrical connection when the specifically shaped plug-and-socket-type identification means are joined. This is indeed confirmed by paragraph 106 of the patent. By establishing an electrical connection when the plug and socket are shape-fitted and coupled, an electrical current could then be detected or "recognised" by the automatic enabling means, as also argued by the respondent. The Board is not convinced by the appellant's counter-argument in this regard that detecting an electrical current when such shape-coupled identification means identify a compatible garment could not be considered as embodying "recognizing" an identification means by the automatic enabling means. The appellant did not provide any technically convincing argument as to the way in which the term "recognizing" in claim 1 required a specific function which would be more than detecting an electrical current once the plug and socket were coupled and, moreover, why the skilled person would not be able to carry out such an embodiment covered by claim 4. The Board therefore concludes that, contrary to the appellant's argument, there is at least one embodiment disclosed for the subject-matter of claim 4

and that the issue with the meaning of "recognizing" in claim 1 can be solved by claim interpretation and does not cast doubt on the sufficiency of disclosure.

5. Article 54 EPC

5.1 The Board decided to take into account the novelty objection against the subject-matter of claim 1 based on D1 which was raised for the first time in the statement of grounds of appeal (Article 12(4) RPBA 2007); however, detailed reasoning on this issue can be dispensed with since neither the appellant nor the respondent are negatively affected by this aspect of the Board's final decision as given in the following.

5.2 Indeed, the Board concluded that the subject-matter of claim 1 is novel over the protective clothing assembly disclosed in D1 (Article 54(1) and (2) EPC). Hence, the objection was considered, in line with the appellant's request, but rejected, according to the respondent's request.

5.2.1 D1 discloses a protective clothing assembly comprising a garment in the form of a pair of shorts, for example (see paragraph 12 of D1). The garment includes pockets. Airbags, which according to the Board correspond to the lining mounted inflatable protector in claim 1, may be removably fastened in said pockets (see paragraph 42 of D1). It was not disputed that the airbags comprise an inflatable bag, a gas source, sensing means and a control unit as defined in claim 1, see also paragraphs 14 and 42. The assembly can comprise an on-off switch for disabling activation during periods of unwanted functionality, which may be automatically triggered by the tension of a waistband, for example (see paragraph 47). This automatically triggered switch may be

considered to correspond to the automatic enabling means defined in the preamble of claim 1.

The critical question with regard to the novelty of claim 1 over D1 is thus whether D1 discloses identification means suitable for identifying said garment and whether the feature in the characterising portion is disclosed.

5.2.2 The Board accepts the appellant's argument that the functional feature defined in the characterising portion of claim 1, "if the identification means [...] identifies a compatible configuration", is to be interpreted broadly, so as to also cover identifying whether a garment is correctly worn or fastened, as also envisaged in paragraphs 76 to 81 of the patent.

However, the preamble of claim 1 requires, in addition to the function defined in the characterising portion, that the identification means are comprised by the garment and are suitable for identifying said garment, which the Board interprets as identifying said garment "itself". A tensionable waistband or an elastic strap on or in a garment, as mentioned in paragraph 47 of D1, is not considered by the Board to constitute an identification means that is comprised by the garment and is suitable for identifying said garment according to the preamble of claim 1. Such an extremely broad interpretation would go against a skilled person's understanding of the wording of claim 1. They would expect some additional means to be provided, beyond a garment's "normal" components, which, due to being common, cannot be distinguished from other garments. It is thus the additional means that should be suitable for identifying the garment and for interacting with a protector so as to allow a compatibility check, be it

in respect of the type of garment or in respect to its correct positioning, for example. It is noted that, in the patent, too, all the embodiments comprise additional means which are based on the transmission or exchange of coded data or on specifically shaped features intended to only couple with features of a mating shape on the lining mounted inflatable protector serving to allow an electric current to be transmitted (although the claim is not limited to these specific embodiments).

5.2.3 Paragraph 47 of D1 mentions the waistband and strap in a single sentence: "The on-off switch may be an automatic device triggered by tension of a waistband or other internal strap or elastic member". The Board considers this sentence to lack disclosure of any detail whatsoever with regard to the waistband or (elastic) strap, in particular with regard to their relationship with the garment, its airbag (corresponding to the lining mounted inflatable protector in claim 1) and its on-off switching device (corresponding to the automatic enabling means in claim 1) with appropriate monitoring means. It is not even excluded that the features mentioned in that single sentence could be provided independently from the garment, but so as to be associated with the airbag and its control device (on-off switch) so as to be mounted on the garment only when they are going to be used together, without thereby necessarily identifying the garment as required by the preamble of claim 1.

The Board therefore concludes that D1 does not make it possible to directly and unambiguously derive identification means that are comprised in or on the garment and are suitable for identifying said garment

"itself". The subject-matter of claim 1 is thus novel over D1.

5.3 The subject-matter of claim 1 is also novel over D4.

5.3.1 D4 also discloses a protective clothing assembly comprising a garment in form of underpants (Figure 1) and an airbag in the form of an inflatable chamber contained in a pocket 5 (see page 5, lines 8 to 12, and page 9, lines 10 to 19). The airbag received in the pocket can be equated with the lining mounted inflatable protector according to the preamble of claim 1.

The respondent contested that the pockets holding the airbags in D4 were suitable for being removably fastened to the inside of said garment, since the pocket of the garment in D4 was attached to the outside of said garment, as indicated in the Figures and described on page 9, lines 13 to 15; however, the Board is not convinced by this argument since the claim only requires suitability for the inflatable protector to be fixed to the inside of the garment. This suitability of the lining mounted inflatable protector in D4, in the form of the pockets holding the airbag for (removable) fixation to the inside of the garment, is also provided for the pockets 5 holding the airbags in D4. It is at least not apparent in what way this protector would not be suitable for such removable fixation to the inside.

It is otherwise uncontested that the airbag comprises sensing means and components necessary for its inflation according to the corresponding features in the preamble of claim 1, i.e. a gas source, sensing means and a control unit, as implied on page 9, lines 15/16 of D4, for example.

The Board notes that identification means for identifying the garment are not explicitly disclosed; however, it accepts (in the appellant's favour) that, for example, the magnets provided on the garment in D4 at certain positions so as to interact with correspondingly aligned switches ("... *entsprechend fluchtend angeordneten ... Schaltern*", page 8, line 28 of D4) on the separate and removably fastenable inflatable protector can be considered to constitute identification means, within the broadest technically reasonable meaning (see also point 5.2.2 above), which are suitable for identifying said garment, as specified in the preamble of claim 1.

5.3.2 The appellant's further contention that the magnetically activated switches corresponded to automatic enabling means as specified in the preamble and in the characterising portion of claim 1 is found to be unconvincing, however. D4 only discloses that these switches result in the activation of control lamps for signalling operational readiness ("*signalisieren Kontrolllampen 10 die Betriebsbereitschaft*", see page 8, lines 35 to 37 and page 9, lines 32 to 35). It cannot be directly and unambiguously derived whether the activation of the switches also switches the control unit between two operational modes as required by the functional definitions of the automatic enabling means according to the preamble and characterising portion of claim 1. The fact that operational readiness is signalled or established (see also page 5, line 22) does not necessarily mean that the control unit was in a first operative mode prior to the activation of the lamps in which it necessarily ignored an identified danger situation and was switched to a second operative mode

for being suitable for airbag activation only after the lamps signalled correct positioning. D4 does not give a clear definition of the state of operational readiness or of any operational details of the control unit and its connected components.

The appellant's further argument that a continuous on state of the control unit in the case of a mismatch between the magnet and switch would be technically meaningless is also found to be unconvincing. The only function of the magnetically activated switches disclosed in D4 is the signalling of operational readiness to the user by turning on control lamps; lamps which remain off could just signal to the user that some portions of the protective clothing assembly are not correctly placed and may not operate to offer full protection, without necessarily meaning that the control unit cannot operate at all, as also argued by the respondent. The fact that the lamps are not essential to that embodiment and could be dispensed with, as argued by the appellant during the oral proceedings with reference to page 8, lines 35 to 36 of D4, does not change the Board's conclusion. The lamps are indeed mentioned as an example ("*beispielsweise*") for signalling the activation of the switches to the user; however, this still does not allow for any conclusion on a change between two operational modes of the control unit.

6. Article 56 EPC

6.1 With regard to its objections based on D1 or D4 as the closest prior art in combination with either common general knowledge or with D2 or D5, the appellant stated during the oral proceedings before the Board that it would rely only on its written submissions. In

its communication pursuant to Article 15(1) RPBA, the Board stated that the appellant's corresponding written objections were not convincing.

6.1.1 On one hand the appellant argued in writing, based on D1 as the prior art closest to the subject-matter of claim 1, that identification means of a different technical nature had no technical effect if not that of identifying a suitable configuration and represented a minor improvement falling within the capacity of the skilled person, thus rendering this obvious.

As already indicated in the Board's communication pursuant to Article 15(1) RPBA, in point 2.2, last bullet point, with reference to the preceding section 2.1, this argument was not convincing since it was not apparent that the specific features and functions defined in the characterising portion of claim 1 as granted were rendered obvious by common general knowledge (for which there was no evidence), and this consideration would seemingly also apply to claim 4, which corresponds to the present claim 1. The appellant did not submit any further comments in this respect. Moreover, the discussion during the oral proceedings before the Board on the novelty of the subject-matter of the present claim 1 over D1 did not lead to the identification of a different distinguishing feature, but essentially confirmed the appellant's assumption underlying its objection pursuant to Article 56 EPC in the statement of grounds of appeal based on D1 as the closest prior art, namely that identification means on the garment were not disclosed. Evidence demonstrating that such identification means are indeed part of the common general knowledge of the skilled person has not been provided. The Board thus has no reason to change its provisional opinion that the subject-matter of the

present claim 1 is not rendered obvious by D1 alone or in combination with common general knowledge, which is hereby confirmed.

6.1.2 The written objection based on D4 as the closest prior art in combination with common general knowledge was drafted on the basis of the distinguishing features as also finally established during the discussion of novelty at the oral proceedings before the Board. In its communication pursuant to Article 15(1) RPBA, the Board indicated that it did not consider the specific features and functions specified in the characterising portion of claim 1 as granted to be rendered obvious by common general knowledge (for which there was no evidence) and that the same also applied with regard to claim 4 as granted, i.e. the present claim 1. The appellant has not submitted any further comments in this respect and in particular has not demonstrated or provided any evidence that such automatic enabling means as specified in claim 1 were indeed part of common general knowledge. The Board thus has no reason to change its provisional opinion that the subject-matter of the present claim 1 is not rendered obvious by D4 alone or in combination with common general knowledge, which is hereby confirmed.

6.1.3 Similarly, as regards the appellant's objections in its statement of grounds of appeal maintained against claim 1 and based on a combination of D1 or D4 with D2 or D5, the Board had stated in its communication pursuant to Article 15(1) RPBA that the appellant had failed to demonstrate why the opposition division's reasoning with regard to the objections based on the combination of D1 or D4 as the closest prior art to claim 1 as granted in combination with D2 or D5 was incorrect, and that similar considerations would also apply with

regard to claim 4 as granted, corresponding to the present claim 1. Again, in the absence of any further argument from the appellant in relation to this aspect, the Board has no reason to change its preliminary opinion in this regard. The Board thus confirms the opposition division's decision, which found that the subject-matter of claim 1 is not rendered obvious by a combination of D1 or D4 with D2 or D5.

6.2 The Board concludes that the subject-matter of claim 1 involves an inventive step in view of the prior art as available in the appeal proceedings and as evidenced by D1, D4, D2, D5 and common general knowledge.

7. The appellant raised further objections pursuant to Article 56 EPC, again based on either D1 or D4 as the closest prior art in combination with D9, which was filed for the first time with the statement of grounds of appeal.

The Board, however, exercised its discretion pursuant to Article 12(4) RPBA 2007 to hold inadmissible D9 and the objections under Article 56 EPC that were based on this document for the following reasons.

7.1 The Board cannot find any consideration which was brought to the appellant's attention for the first time in the written decision and to which an appropriate response could not have been submitted earlier.

7.2 In fact, the opposition division's concerns with regard to the appellant-opponent's formulation of the technical problem as including pointers to the solution and with regard to the relevance of the prior art on file to the question of obviousness of the claimed feature combination had already been raised in its

preliminary opinion in point 2.5.3 of the annex to the summons to oral proceedings. The Board accepts that these concerns are only raised with regard to the objection under Article 56 EPC against claim 1 as granted, whereas the preliminary opinion indeed does not mention anything with regard to claim 4 as granted. The passage in the impugned decision in point 2.5.1.4 relating to claim 4 as granted is, however, almost identical in content to that in the preliminary opinion in relation to claim 1, and therefore it cannot be considered to contain any new thoughts on the part of the opposition division. It is indeed relying on the corresponding considerations on hindsight due to a problem considered to include pointers to the solution and on prior art considered not to be relevant for demonstrating a lack of inventive step. Therefore, it did not come as a surprise that the opposition division deviated from the technical problem formulated by the patent proprietor. The new formulation of the objective technical problem was thus not a reason to file new evidence for the prior art.

7.3 If D9 were considered to be a response to the opposition division's objections against the formulation of an objective problem and with regard to a lack of relevant prior art, this would mean that it could and should have been filed in reply to the opposition division's preliminary opinion, in which these issues had been brought to the attention of the appellant-opponent. This is also not affected by the present focus shift during the oral proceedings before the Board to only the subject-matter of claim 4 as granted, since D9 was filed with the statement of grounds of appeal to attack both claims 1 and 4 as granted.

7.4 The appellant's further argument, put forward during the oral proceedings before the Board and relying on an allegedly surprising interpretation of the identification means by the opposition division to also cover mechanically implemented ("shape-fit coupling") identification means, cannot be accepted. It is not at all apparent that D9 specifically relates to such shape-fit coupled identification means.

7.5 In addition, the Board also cannot see that the document is *prima facie* relevant. Contrary to the appellant's argument, D9 does not appear to specifically relate to the field of protective clothing assemblies (or airbags). It instead relates to the field of "apparel and equipment (e.g., athletic apparel and athletic equipment) that may be used with and/or include one or more electronic modules" (see paragraph 1 of D9) and again mentions, rather generally, impact attenuation systems in some of the passages referred to by the appellant as possible applications, amongst other things.

7.6 Consequently, the Board finds that D9 and the objections based on it could and should have been filed before the opposition division and are therefore held inadmissible in the appeal procedure.

8. The Board concludes that none of the objections raised by the appellant prejudices the maintenance of the patent in amended form on the basis of the claims of the eighth 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 opposition division with the order to maintain the patent on the basis of claims 1 to 10 of the eighth auxiliary request and a description to be adapted thereto.

The Registrar: The Chairman:

D. Grundner M. Dorfstätter

Decision electronically authenticated