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**Datasheet for the decision  
of 13 November 2023**

**Case Number:** T 1018/21 - 3.2.01

**Application Number:** 15786635.1

**Publication Number:** 3137345

**IPC:** B60R19/02, B60R19/18, E04C3/04

**Language of the proceedings:** EN

**Title of invention:**  
MULTI-STRIP BEAM-FORMING APPARATUS, METHOD, AND BEAM

**Patent Proprietor:**  
Shape Corp.

**Opponents:**  
Kirchhoff Automotive Deutschland GmbH  
BMW AG

**Headword:**

**Relevant legal provisions:**  
EPC Art. 54, 56, 100(c), 100(b), 87, 89, 84  
RPBA 2020 Art. 12(4), 12(6)

**Keyword:**

Main request - admitted (yes)  
Priority - granted claim 16 - (no)  
Novelty - main request - (no) - auxiliary request I - (yes)  
Late-filed request - auxiliary request I - circumstances of appeal case justify admittance (yes)  
Grounds for opposition - added subject-matter (no) - insufficiency of disclosure (no)  
Late-filed objection - should have been submitted in first-instance proceedings (yes)  
Inventive step - auxiliary request I - (yes)  
Description - adapted to the claims (yes)  
Alleged substantial procedural violation - irrelevant for decision

**Decisions cited:**

G 0003/14, G 0002/98, G 0002/10

**Catchword:**



**Beschwerdekammern**

**Boards of Appeal**

**Chambres de recours**

Boards of Appeal of the  
European Patent Office  
Richard-Reitzner-Allee 8  
85540 Haar  
GERMANY  
Tel. +49 (0)89 2399-0  
Fax +49 (0)89 2399-4465

Case Number: T 1018/21 - 3.2.01

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.01**  
**of 13 November 2023**

**Appellant:** Shape Corp.  
(Patent Proprietor) 1900 Hayes Street  
Grand Haven, MI 49417 (US)

**Representative:** Müller Schupfner & Partner  
Patent- und Rechtsanwaltspartnerschaft mbB  
Bavariaring 11  
80336 München (DE)

**Appellant:** Kirchhoff Automotive Deutschland GmbH  
(Opponent 1) Am Eckenbach 10-14  
57439 Attendorn (DE)

**Representative:** Haverkamp Patentanwälte PartG mbB  
Gartenstraße 61  
58636 Iserlohn (DE)

**Party as of right:** BMW AG  
(Opponent 2) Petuelring 130  
80788 München (DE)

**Representative:** Wittemer, Stefan  
Bayerische Motoren Werke  
Aktiengesellschaft  
Patentabteilung, AJ-5  
80788 München (DE)

**Decision under appeal:** **Interlocutory decision of the Opposition  
Division of the European Patent Office posted on  
14 May 2021 concerning maintenance of the  
European Patent No. 3137345 in amended form.**

**Composition of the Board:**

**Chairman**            G. Pricolo  
**Members:**            J. J. de Acha González  
                              S. Fernández de Córdoba

## **Summary of Facts and Submissions**

I. The appeals of the patent proprietor and of the opponent 1 lie against the interlocutory decision of the Opposition Division, which found that the contested patent, as amended in accordance with the auxiliary request 2a filed during the oral proceedings, complied with the requirements of the EPC.

II. The following documents are relevant for the present decision:

D1: JP 2010-019414 A;  
D1': machine translation of D1;  
D2: DE 20 2009 003 526 U1;  
D8: US 2014/0151140 A1;  
D14: US 2012/0043772 A1; and  
P1: US 61/985029.

III. Oral proceedings before the Board were held on 13 November 2023.

The appellant (patent proprietor) requested that the decision under appeal be set aside and the patent be maintained as granted (main request), or, in the alternative, that the patent be maintained in amended form on the basis of any of the auxiliary requests I to IV filed with the statement of grounds of appeal, or further in the alternative, that the appeal of the opponent 1 be dismissed (i.e. the patent be maintained in the version found allowable by the Opposition Division, in the following numbered as auxiliary request V), or, further in the alternative, that the patent be maintained in amended form according to any

of the auxiliary requests I to V filed with the reply to the statement of grounds of appeal of the opponent 1 (numbered auxiliary requests VI to X in the following).

The appellant (opponent 1) requested that the decision under appeal be set aside and the patent be revoked.

The other party (opponent 2) requested in writing that the decision under appeal be set aside and the patent be revoked. At the oral proceedings the Chairman stated that, after withdrawal of their appeal, opponent 2 could only request that the appeal of the patent proprietor be dismissed.

The opponent 2 further requested in writing that the case be remitted to the Opposition Division due to a substantial procedural violation.

IV. Independent granted claims 1 and 16 read as follows (feature numbering according to the patent proprietor and differences with respect to originally filed claim 1 underlined by the Board):

- 1.1 *1. A reinforcement beam article constructed for impact on a vehicle comprising:*
- 1.2 *at least three separate elongated metal sheets,*
- 1.3 *wherein at least one of the sheets includes preformed structure thereon,*
- 1.4 *wherein the sheets are positioned and interconnected to define an elongated tubular beam (100),*
- 1.5 *having a non-linear length and transverse cross sections,*
- 1.6 *wherein the transverse cross sections are defining front (101) and rear walls (102) and*
- 1.7 *at least two shear walls (103, 104, 105) connecting the front (101) and rear walls (102),*

**characterized in that**

- 1.8 at least two of the sheets having edges that abut side surfaces of adjacent others of the sheets to form non-radiused perpendicular welded corners (106); and
- 1.9 wherein end portions of the tubular beam (100) being configured to facilitate attachment to a vehicle.

1. A reinforcement beam article constructed for impact on a vehicle comprising:  
at least three separate elongated metal sheets,  
wherein at least one of the sheets includes preformed structure thereon,  
wherein the sheets are positioned and interconnected to define an elongated tubular beam (100), having a non-linear length and transverse cross sections,  
wherein the transverse cross sections are defining front (101) and rear walls (102) and at least two shear walls (103, 104, 105) connecting the front (101) and rear walls (102),  
**characterized in that** at least two of the sheets having edges that abut side surfaces of adjacent others of the sheets to form non-radiused perpendicular welded corners (106); and  
wherein end portions of the tubular beam (100) being configured to facilitate attachment to a vehicle.

16. A beam article comprising:  
elongated metal sheets each having an elongated body and opposing edges, the bodies arranged and secured together to form an elongated closed tubular beam (100) having a length with non-constant transverse cross sections along the length, with some of the edges abutting adjacent ones of the bodies to form non-

*radiused corners (106), the body of at least one of the sheets being planar.*

The claims of auxiliary request I differ from those of the granted patent in that granted claims 16 to 21 have been deleted.

## **Reasons for the Decision**

### *Main request - granted patent*

#### 1. *Admissibility*

1.1 The main request corresponds to the main request underlying the decision under appeal and consequently is admissible.

1.2 Opponent 1 contended that the main request of the patent proprietor was inadmissible under Article 12(6) RPBA (Rules of Procedure of the Boards of Appeal OJ EPO 2021, A35). In particular, they argued that it was apparent from the minutes of the oral proceedings before the Opposition Division (see points 97 and 98) that, when discussing the version found allowable by the Opposition Division (former auxiliary request 2A), the patent proprietor no longer intended to defend the granted claims 16 to 21, because they had decided to delete those claims. Since the patent proprietor did not address the substance of the subject-matter of those claims, it was now precluded from reopening the discussion on claims 16, 20 and 21 as granted at the appeal stage.



Furthermore, the patent proprietor did not take a position on the patentability of the granted claims 16, 20 and 21 in their statement of grounds of appeal as regards the main request. The objections raised during the opposition proceedings were neither addressed nor overcome by the main request, since the novelty of the subject-matter claimed in the main request was not substantiated overall. The patent proprietor's appeal was therefore unsubstantiated in this respect and the main request was also inadmissible for this reason.

- 1.3 None of the opponent 1's arguments hold. According to Article 12(6) RPBA, the Board shall not admit requests, facts, objections or evidence which were not admitted in the proceedings leading to the decision under appeal, unless the decision not to admit them suffered from an error in the use of discretion or unless the circumstances of the appeal case justify their admittance. The Board shall also not admit requests, facts, objections or evidence which should have been submitted, or which were no longer maintained, in the proceedings leading to the decision under appeal, unless the circumstances of the appeal case justify their admittance.

In the present case, none of the conditions of this provision applies, since the main request - the patent as granted - is a request underlying the contested decision. Accordingly, opponent 1's argument based on this provision cannot succeed.

With regard to the allegation that the patent proprietor's appeal is unsubstantiated, the following should be noted. As stipulated in Article 12(3) RPBA, the statement of grounds of appeal shall contain a party's complete appeal case. Accordingly, it shall set

out clearly and concisely the reasons why it is requested that the decision under appeal be reversed, amended or upheld, and should specify expressly all the requests, facts, objections, arguments and evidence relied on.

In the case at hand, the Opposition Division found that the ground for opposition of novelty for the subject-matter of granted claim 1 in view of D1 was prejudicial to the maintenance of the patent as granted. The decision does not contain any further negative grounds for the main request, in particular for the subject-matter of granted claims 16 to 21. Accordingly, it is sufficient for the patent proprietor, as appellant, to substantiate their appeal as regards the main request only with respect to novelty over D1. There was no need for the patent proprietor to comment on the grounds for opposition raised by the opponents during the opposition proceedings against claims 16 to 21, since the decision under appeal is not based thereon.

## 2. *Priority and prior art*

2.1 The priority of documents P1 is not validly claimed for the subject-matter of granted claim 16 (Article 87(1) EPC). Consequently, D8 (published on 5 June 2014) represents state of the art under Article 54(2) EPC, because the resulting earliest possible effective date for the subject-matter of granted claim 16 under Article 89 EPC is that of the next earliest priority document, which is 15 July 2014.

2.2 The patent proprietor essentially argued that an elongated closed tubular beam having a length with non-constant transverse cross sections along the length was directly and unambiguously disclosed in P1. This followed from figures 1 and 4 and claim 4 of P1, which

clearly showed a closed cross section of the bumper beam and a varying sweep along the length of the beam.

2.3 It is established case law of the Boards of Appeal that the criterion for assessing whether the requirement of the "same invention" referred to in Article 87(1) EPC is met is the gold standard, namely, whether the claimed subject-matter derives directly and unambiguously either explicitly or implicitly and using common general knowledge from the previous application as a whole (see G 2/98 headnote and G 2/10 points 4.3 and 4.6).

2.4 This criterion is not met in the present case. Opponent 1's assessment is correct for at least two reasons. First, the patent proprietor equates a closed section of the bumper beam with a closed tubular beam. This is not correct. A tubular beam exhibits a closed cross section since it is a tube shaped beam. A closed tubular beam means that the tube forming the beam is closed at its ends. Secondly, the sweep of the tubular beam present in claim 4 and shown in figure 1 of P1 does not necessarily mean that the cross section of the beam is non-constant. The sweep in P1 merely represents a curvature of the bumper beam in a horizontal plane (i.e. a xy plane of the vehicle in which the beam is mounted, see in this respect the beam on the left of figure 1 of P1). However, the disclosure of P1 leaves open the question of whether the cross section of the beam varies along its length.

### 3. *Novelty - Article 54 EPC*

3.1 The subject-matter of claim 16 is not new in view of the beam disclosed in E8.

3.2 As regards the features of claim 16, the patent proprietor only disputed that the beam shown in figure 4 of D8 did not disclose the feature of the non-constant transverse cross section along the length of the tubular beam because the cross section of the closed central portion of the beam between the first and second inner walls 68 remained constant.

3.3 However, as depicted in figure 4 of D8, the inner end wall 70 of the central closed tubular beam (made up of plates 50, 68, 72 and 70) is bent at its lateral ends to join the first and second inner walls 68. At these ends the transverse cross section of the beam is not constant, so that overall this elongated tubular beam has a length with non-constant transverse cross sections along its length.

*Auxiliary request I*

4. *Admissibility*

4.1 The Board, exercising its discretion under Article 12(4) and (6) RPBA, admitted auxiliary request I in the appeal proceedings.

4.2 Auxiliary request I was filed together with the patent proprietor's statement of grounds of appeal. The claims of the auxiliary request I correspond to the granted claims with the deletion of claims 16 to 21.

4.3 Both opponents requested not to admit the request under Article 12(4) and (6) RPBA. In particular, they argued that the request constituted an amendment since it was filed for the first time at the appeal stage. The patent proprietor had already filed more than 70

auxiliary requests during the opposition proceedings, but had never submitted a request corresponding to auxiliary request I, although granted claims 16, 20 and 21 had been attacked. Accordingly, the patent proprietor could and should have filed the auxiliary request I at first instance, but did not do so. The patent proprietor also did not attempt to justify why this amendment was not made until the appeal proceedings. An acceleration of the proceedings, as alleged by the patent proprietor, would have been appropriate already at first instance.

- 4.4 Under Article 12(4) RPBA, any part of a party's appeal case which is not directed to the requests, facts, objections, arguments and evidence on which the decision under appeal was based shall be deemed to be an amendment. Any such amendment may be admitted only at the discretion of the Board, which shall exercise the discretion in view of, inter alia, the complexity of the amendment, the suitability of the amendment to address the issues which led to the decision under appeal, and the need for procedural economy. Further, under Article 12(6) RPBA the Board shall not admit requests, facts, objections or evidence which should have been submitted, or which were no longer maintained, in the proceedings leading to the decision under appeal, unless the circumstances of the appeal case justify their admittance.

In the present case, the Board considers that the amendment of the patent by the sole deletion of granted claims 16 to 21 is not complex and is not detrimental to procedural economy. Indeed, the subject-matter of granted claim 1, being the sole remaining independent claim, was decided upon in the decision under appeal and is open to review in the context of the appeal of

the patent proprietor. Accordingly, the subject of discussion remains the same, namely the objections raised to granted claim 1 by the opponents as respondents.

As regards Article 12(6) RPBA, the Board concurs with the opponents that the patent proprietor could have filed the present request during the opposition proceedings. Yet, there was no procedural aspect specifically prompting the patent proprietor to do so because the Opposition Division had concluded, in the annex to the summons for oral proceedings as well as during the oral proceedings before it, that the subject-matter of granted claim 1 lacked novelty in view of D1. Furthermore, as explained above, the circumstances of the appeal case justify admitting the request because the only issues to be discussed are the grounds for opposition directed to granted claim 1, on which all parties had extensively submitted their cases and which are addressed in the decision under appeal.

5. *Inadmissible extension - Article 100(c) EPC*

5.1 The subject-matter of granted claim 1 does not go beyond the content of the application as originally filed.

5.2 Opponent 1 maintained their objection directed to the following wording of granted claim 1:

*"...at least three separate elongated metal sheets, wherein at least one of the sheets includes preformed structure thereon, wherein the sheets are positioned and interconnected to define an elongated tubular beam (100),...*",

which is based on the wording of claim 1 as originally filed, that corresponds to the exact wording above without the underlined parts.

In particular, it was argued that the inclusion of "*wherein the sheets are*" constituted an inadmissible extension of subject-matter. This followed from the fact that the words "*positioned and interconnected*" in the originally filed claim 1 could refer not only to the sheets but also to the preformed structure. This was confirmed by the Opposition Division in its decision (see point 20 ff.), which nevertheless did not recognise any infringement under Article 100(c) EPC, since both interpretations were equally valid and the amendment did not introduce any additional information, but only a clarification.

However, this approach did however not stand up to legal scrutiny, according to opponent 1. The fact that there were two equally valid interpretations meant that the wording in question was ambiguous. As a result, neither of the two possible interpretations could be said to derive directly and unambiguously from the original documents. Such an interpretation would require a great deal of thought. Therefore, it failed already on the criterion that a person skilled in the art would be able to derive such a possible interpretation directly from the originally filed documents. A fortiori, a skilled person would not be able to unambiguously identify the chosen interpretation in the amended claim wording. If there were two possible interpretations, it could hardly be said that they could be unambiguously derived from the application as originally filed.

This is incorrect for the following reasons. Claim 1 as originally filed does not leave room for the two

possible equally valid interpretations shared by opponent 1 and the Opposition Division. It derives directly and unambiguously from the wording of claim 1 as originally filed that the features "*positioned and interconnected to define an elongated tubular beam*" can only refer to the at least three separate elongated metal sheets previously defined in the claim and not to the preformed structure. This results from the fact that the at least one preformed structure, even if it is capable of being positioned, certainly cannot be "*interconnected*" by itself to define an elongate tubular beam. The other elements or parts to which the preformed structure connects are missing in the claim. Such a phrase only makes technical sense when referring to the at least three separate elongated metal sheets which can indeed be positioned and interconnected (joined together) to define an elongated tubular beam. In fact, the wording between the two commas "*at least one of which includes preformed structure thereon*" is a relative phrase qualifying the metal sheets. After the last comma, the sentence continues to be equivalent to writing "*...at least three separate elongated metal sheets [,...], positioned and interconnected to define an elongated tubular beam...*".

Accordingly, the amendments to claim 1 as originally filed are only of a clarifying nature and do not provide the skilled reader with any further technical information which is not directly and unambiguously derivable from the application as originally filed.

- 5.3 The objection under Article 100(c) EPC submitted by opponent 2 in their statement of grounds of appeal and in the reply to the grounds of appeal of the patent proprietor is disregarded.



Opponent 2 referred only to their written submissions in the opposition proceedings.

Under Article 12(5) RPBA, the Board has discretion not to admit any part of a submission by a party which does not set out clearly and concisely the reasons why it is requested that the decision under appeal be reversed, amended or upheld, and which do not specify expressly all the requests, facts, objections, arguments and evidence relied on.

It is established case law of the Boards of Appeal that this criterion is not met where a party merely refers in general terms to their written submissions during the opposition proceedings without explaining why the Opposition Division erred in its decision on that point. Consequently, this objection of opponent 2 is unsubstantiated and is disregarded.

6. *Insufficiency of disclosure - Article 100(b) EPC*
- 6.1 The patent discloses the invention according to claim 1 in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.
- 6.2 Opponent 2 was the only party to pursue this ground for opposition in appeal. They merely argued that it was not possible for a person skilled in the art to produce a perpendicular welded corner which was not rounded, since the welding of a corner, i.e. the welding of two panels together, inevitably produced rounded corners. Reference was also made to the arguments in the opposition proceedings.
- 6.3 The Opposition Division duly considered those arguments in its decision and opponent 2 again failed to provide

any reasoning as to why the Opposition Division erred in its decision in that regard (see points 26 to 38 of the contested decision).

For the same reasons as set out above in respect of opponent 2's objection under Article 100(c) EPC, the submissions of opponent 2 in this respect are disregarded as unsubstantiated (Article 12(5) RPBA).

6.4 Since none of the opponents has contested the Opposition Division's reasoning on this point, the Board has no reason to question the correctness of the contested decision on this ground for opposition.

7. *Novelty - Article 54 EPC*

7.1 The subject-matter of claim 1 is new over the beam article disclosed in D1, D2, D8 and D14.

7.2 The Opposition Division found that the subject-matter of claim 1 was not new in view of example 1 (beam 1) and comparative example 1 (beam 9) of **D1** (see figures 1, 2, 3 and 4; paragraph [0015] of D1', machine translation of D1). It considered that feature 1.8 of claim 1 was not limited to a 90° connection for the non-radiused welded corners. This derived from paragraphs [0017] and [0023] of the patent, which did not limit "perpendicular" to its well established usual common meaning but encompassed a lot and was not even limited to 75 to 105 degrees. Furthermore, paragraph [0015] of D1'disclosed various manufacturing methods for the beam of D1, welding being one possible alternative and sufficient for disclosing welded corners at the abutting edges of the metal sheets in D1.

This view was followed by both opponents in appeal.

However, paragraphs [0017] and [0023] of the patent define the term "*non-radiused corners*" and not "*non-radiused perpendicular corners*". The only part of the description where both expressions are used and compared is in paragraph [0037] of the patent when describing figure 24. Said description distinguishes between both terms clearly and keeps the usual meaning of perpendicular. In particular, the intermediate and bottom horizontal shear walls form non-radiused perpendicular corners and the top shear wall forms a non-radiused corner in general terms that includes also about 1 to 10 degrees off from a perpendicular angle. Accordingly, contrary to the Opposition Division's reasoning and in line with the submissions of the patent proprietor, the patent does not give a definition of the term perpendicular, which is notorious knowledge, but of "*non-radiused corners*".

Figure 1 of D1 cannot thus disclose the feature "*non-radiused perpendicular corners*" since the shear walls are not perpendicular to the front and rear walls of the beam. In figure 3, on the contrary, the shear walls are perpendicular to the front and rear walls. However, the patent proprietor is right in that out of paragraph [0015] of D1' it does not derive directly and unambiguously where and how the welding is performed and to which structural parts of the beam, if welding is used as a processing method. It is not excluded that sheets could be rolled and welded as shown in figure 28 of the contested patent to form a beam as shown in figures 1 and 3 of D1. As conceded by opponent 1, the beams as depicted in figures 1 and 3 (which as such are schematic drawings) may be of a single piece and obtained by extrusion molding, i.e. without any welded parts or sheets.

Consequently, neither the beam 9 of figure 3 nor beam 1 of figure 1 of D1 disclose directly and unambiguously "*non-radiused perpendicular corners*" and "*non-radiused corners*" according to the patent since it is not directly and unambiguously disclosed which of the sheets referred to in the embodiments are formed initially as separated sheets, if any, and how and where welding in order to form the beams is carried out, when used as a joining method.

- 7.3 Regarding **D2**, features 1.8 (non-radiused perpendicular welded corners) and 1.9 (end portions of the tubular beam configured to facilitate attachment to a vehicle) are in dispute. Both opponents, however, argue following the interpretation for "*non-radiused perpendicular welded corners*" of the Opposition Division presented above.

Considering that non-radiused perpendicular corners are non-radiused corners in which the sheets forming the corners are abutting at 90° as explained above, the sheets 2 and 3 in figure 9 of D2 (see figure 12 as well) are not perpendicular to the sheets 1 and 16. The only tubular beam in D2 is that of the embodiment of figures 9 to 11. Accordingly, at least feature 1.8 of claim 1 is not disclosed in D2.

- 7.4 Opponent 1 also argued that the beam in figures 3 and 4 of **D8** also disclosed the subject-matter of claim 1. According to a first line of argumentation, the beam was defined by the metal sheets 46, 48, 66, 70, 72, 74, i.e. the whole bumper beam shown in figure 4 of D8, which the opponent considered to form an elongated tubular beam (feature 1.4).

According to a second line of argumentation, the tubular beam, like under novelty for the subject-matter of granted claim 16 above, was seen to be made out of the closed tubular central part of the bumper beam delimited by portion of sheets 70, 68, 46, 48 and outer end wall 72. Said closed tubular beam included end portions configured to facilitate attachment to the vehicle, which corresponded to the rear portions of the first and second inner walls 68 (feature 1.9).

However, as pointed out by the patent proprietor, the whole bumper beam of D8 is not an elongated tubular beam in the sense of the patent because it is not a bumper beam forming a tube. Consequently, the first line of argumentation of opponent 1 does not disclose at least feature 1.4.

When considering the central portion of the whole bumper beam forming the elongated tubular beam, there are no end portions of said closed elongated beam which facilitate attachment of the vehicle. Said attachment is carried by the box-like shaped structures which are placed beyond the closed elongated tubular central beam considered. Therefore, the second line of argumentation fails to disclose feature 1.9 of granted claim 1.

It follows from the above that the question of the admissibility of the novelty objection in view of D8, raised for the first time on appeal, can remain unanswered.

- 7.4.1 Opponent 2 also argued that the beam in figures 1 and 3 of **D14** also disclosed the subject-matter of claim 1. Edges of the front wall 2 formed with each of the walls 4, 5 and 6 non-radiused perpendicular corners with legs at right angles to each other. Further, one of the possible joining methods for the different parts of the

beam according to paragraph [0091] is welding. It followed that D14 disclosed also feature 1.8.

However, as put forward by the patent proprietor, the disclosure in paragraph [0091] of D14 leaves open where and how the welding is exactly performed in order to join the different plates. Accordingly, feature 1.8 is not disclosed in D14 since it does not derive directly and unambiguously therefrom that the welding is performed in the non-radiused perpendicular corners.

8. *Inventive step - Article 56 EPC*

8.1 In their notices of opposition, the opponents raised the following inventive step attacks against the subject-matter of granted claim 1:

- D3 or D4 with D2; and
- D8 with D4, D9, D10 or D11.

In the appeal proceedings, they raised the following inventive step attacks:

- D1 with common general knowledge or D2;
- D3 or D4 with D2; and
- D8 with common general knowledge, D4, D9, D10, D11 or D14.

Accordingly, the attacks based on D1 as the closest prior art and the combination of D8 with D14 were raised for the first time in the appeal proceedings.

Since none of the opponents has provided any reason for filing these attacks at such a late stage of the proceedings, and considering that the matter under discussion remains the subject-matter of granted claim

1 and that nothing during the opposition proceedings justifies raising the attacks based on evidence already submitted at that stage, the Board exercised its discretion under Article 12(4) and (6) RPBA (see point 4.4 above) and did not admit the newly filed attacks. Clearly, the circumstances of the case do not justify their admittance, as the objections should have been raised already in the notice of opposition.

- 8.2 The subject-matter of claim 1 is not rendered obvious by the combination of D3 or D4 with D2 or by the combination of D8 with common general knowledge of any of D4, D9, D10 and D11.
- 8.2.1 Opponent 1's inventive step objections starting from D3 or D4 in combination with D2 are based on the assumption that "*non-radiused perpendicular welded corners*" are the same as "*non-radiused welded corners*". As explained above, this interpretation is flawed. Since none of D2, D3 and D4 disclose at least two sheets having edges that abut side surfaces of adjacent others of the sheets to form non-radiused perpendicular welded corners, these inventive step attacks cannot succeed.
- 8.2.2 Starting from D8 and considering feature 1.9 to represent the difference between the subject-matter of granted claim 1 and the bumper disclosed in D8, the opponents essentially argued as follows.

The technical effect of this differentiating feature was that the bumper could be easily attached to the longitudinal side members of the vehicle body, which were typical of passenger cars.

The resulting objective technical problem to be solved could therefore be considered to be the adaptation of the type of bumper beam disclosed in D8 for use with a vehicle body with longitudinal side members.

The skilled person, taking into account the common general knowledge, would already be prompted to provide the beam of E8 with attachments holes in order to facilitate its assembly to the longitudinal side members of a typical passenger car body structure.

In order to solve the problem posed, the skilled person, having set himself the task of adapting the bumper of D8 for use with a vehicle frame having external longitudinal side members, would also refer to document D4 and take the teaching of paragraph [0016] in conjunction with figure 1 (adaptor 39) to configure the end portions of the bumper beam of E8 for attachment to a frame of the vehicle. In particular, the person skilled in the art would locate the support webs 76 further outwardly in an outer region of the bumper beam 30 for that purpose.

Alternatively, the skilled person would also find such motivation in D9, which taught to provide mounting holes 15 near the ends of the bumper cross-beam in order to attach it to a vehicle by means of shock-absorbing elements (see, for example, column 6, lines 4 to 8 and figure 1). By analogy, D10 or D11 would suggest the subject-matter of claim 1, since they also taught providing mounting holes at the end of the bumper cross-beam (see figures 16A and B of D10 and figures 1 and 4 of D11).

8.2.3 However, the objections to inventive step starting from D8 are based on hindsight, because the structure and



construction of the bumper beam in D8 as a whole are substantially different from those disclosed in any of D4, D9, D10 and D11. There is no indication in those documents which would lead the skilled person to take the mounting brackets of D4 or any of the mounting holes shown in D9 to D11 in isolation and provide them in the bumper beam of D8 in order to facilitate its attachment to a vehicle frame comprising longitudinal side structural members.

In addition, the skilled person would not be able to see where the brackets of D4 should be mounted in the bumper of D8 and, furthermore, the skilled person would have no incentive to move the support webs outwards, since this would compromise the function of increasing the strength of the beam in their shown position.

Regarding common general knowledge, it should be borne in mind that the manner in which the bumper 30 is attached to the vehicle frame 12 in D8 is by welding plates 52, 68 and 66 to abutting plates 56 and 58 and to unnumbered vertical plates at different fore/aft locations relative to the lower plate 48. This overlapping nature of the seams provides increased vertical support strength to the bumper 30.

Accordingly, the skilled person will not find any motivation in common general knowledge to modify said attachment of the bumper 30 in D8 to provide it in one plane (with holes or by a bracket as in D4) as argued by opponent 1.

Because of this significant difference in design and construction of the vehicle structure in D8, the arguments of the opponents are based on an ex post facto approach.

9. The question of the validity of the priority of the invention according to claim 1 can therefore be left

aside, since none of the objections on novelty or inventive step are successful in the substance.

10. *Adaptation of the description*

10.1 The description as amended by the patent proprietor (deletion of paragraphs [0007], [0008] and [0009]) during the oral proceedings before the Board is correctly adapted to the set of claims of auxiliary request I.

10.2 Opponent 1 contested that the description still needed to be amended. In particular, paragraphs [0010] to [0013] had to be deleted as they no longer supported the claims (Article 84 EPC), since a method of constructing a beam was not claimed. In addition, paragraphs [0017] and [0021] needed to be amended to specify that the angle defined by the abutting structure at the corner is exactly 90°.

10.3 According to the decision G 3/14 of the Enlarged Board of Appeal, when considering whether a patent as amended complies with the requirements of the EPC for the purposes of Article 101(3) EPC, the claims of the patent can only be examined for compliance with the requirements of Article 84 EPC if and only to the extent that the amendment introduces a non-compliance with Article 84 EPC.

In the case at hand, paragraphs [0010] to [0013] were already present in the granted patent specification and the set of claims of the granted patent did not include a method claim either. Accordingly, the issue raised by opponent 1 was already present in the granted patent and thus the amendment according to auxiliary request I does not introduce a non-compliance with Article 84 EPC

that was not already present in the granted patent. Consequently, this objection is not open for examination.

As regards paragraphs [0017] and [0021], it is not necessary to specify an angle of exactly 90°. Paragraph [0017] merely provides the definition of "non-radiused corner" and not that of the claimed non-radiused perpendicular corners.

Paragraph [0021] deals with the disclosure of an apparatus capable of producing a wide range of different beam shapes and not specifically with the claimed beam article as such.

11. It follows from the above that the documents according to the auxiliary request I form a suitable basis for the maintenance of the patent in amended form.
12. *Alleged substantial procedural violation of opponent 2*
  - 12.1 In their statement of grounds of appeal, opponent 2 requested that the case be remitted to the Opposition Division for further prosecution by reasons of a fundamental deficiency incurred by the Opposition Division during the oral proceedings with regard to the version found allowable by the Opposition Division in its decision.
  - 12.2 Given that opponent 2 withdrew their appeal by letter of 7 September 2023 and thus no longer has the status of appellant but only that of respondent to the appeal of the patent proprietor, and that, as explained above, a request different from that found allowable by the Opposition Division and underlying the appeal of the patent proprietor is found to comply with the

requirements of the EPC, this question is no longer relevant to the present decision.

13. It also follows from the above that the question of the admissibility of opponent 1's appeal can remain unanswered.

## **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 15 of the auxiliary request I filed with the patent proprietor's statement of grounds of appeal dated 13 September 2021,
  - the description of the patent as granted without paragraphs [0007], [0008] and [0009], and
  - the figures of the patent as granted.

The Registrar:

The Chairman:



A. Voyé

G. Pricolo

Decision electronically authenticated