

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 12 January 2026**

Case Number: T 1019/24 - 3.2.01

Application Number: 17864438.1

Publication Number: 3533558

IPC: B23K26/32, C22C38/04

Language of the proceedings: EN

Title of invention:

STEEL WELDING COMPONENT WITH ALUMINUM OR ALUMINUM ALLOY
COATING, AND PREPARATION METHOD THEREFOR

Applicant:

Baoshan Iron & Steel Co., Ltd.

Headword:

Relevant legal provisions:

EPC Art. 84, 52(1), 54, 111
RPBA 2020 Art. 11

Keyword:

Product Claim - clarity - main request (no)
Novelty - auxiliary requests (yes)
Remittal - (yes)

Decisions cited:

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

Case Number: T 1019/24 - 3.2.01

D E C I S I O N
of Technical Board of Appeal 3.2.01
of 12 January 2026

Appellant: Baoshan Iron & Steel Co., Ltd.
(Applicant) No.885 Fujin Road
Baoshan District
Shanghai 201900 (CN)

Representative: Maiwald GmbH
Elisenhof
Elisenstraße 3
80335 München (DE)

Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted on 5 March 2024
refusing European patent application No.
17864438.1 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman G. Pricolo
Members: V. Vinci
O. Loizou

Summary of Facts and Submissions

- I. The appeal filed by the appellant (applicant) is directed against the decision of the Examining Division to refuse the European patent application No. 17 864 438.

In the contested decision, the Examining Division found that independent claim 8 of the main request did not meet the requirements of Article 84 EPC. Furthermore, it held that the subject-matter of independent claim 1 of each of the auxiliary requests 1 to 3 lacked novelty within the meaning of Article 54 EPC in view of the following prior art document:

D6: US 2014/003860 A1

- II. In its communication dated 17 September 2025, the Board informed the appellant that, on the basis of its preliminary opinion, it was minded to set aside the contested decision and to remit the case to the Examining Division for assessment of inventive step of auxiliary request 1.

By letter dated 1 October 2025, the appellant agreed with the Board's proposal to remit the case to the department of first instance and withdrew its request for oral proceedings.

- III. The appellant requested that the decision of the Examining Division be set aside and that the European patent be granted on the basis of the main request or, in the alternative, on the basis of one of the auxiliary requests 1 to 4 filed with the statement of

the grounds of appeal.

- IV. Independent product claim 8 according to the main request, which corresponds to the main request filed on 14 June 2023 and on which the decision under appeal is based, reads as follows:

"A steel welding component with an aluminum or aluminum alloy coating, wherein the steel welding blank with an aluminum or aluminum alloy coating according to any one of claims 1-7 is tailor-welded by welding in the area (3) to be welded of the welding blank where the coating (2) has been completely removed"

Independent claim 1 according to the auxiliary request 1 filed with the statement of the grounds of appeal, which corresponds to the auxiliary request 1 underlying the decision under appeal, reads as follows:

"A steel welding blank with an aluminum or aluminum alloy coating, which is composed of a steel substrate (1) and coatings (2, 2'); the coating (2) comprises an intermetallic compound alloy layer (21) in contact with the substrate (1), and a metal alloy layer (22) on the intermetallic compound alloy layer (21); wherein on at least one of coating surfaces of the welding blank, the coating (2) within an area (3) to be welded of the welding blank has been totally removed, and an end face (23) of the coating (2) on the side of the coating within the area (3) to be welded removed has an angle of β with a plane (100) vertical to a surface (11) of the substrate (1) which is parallel to a welding seam, characterized in that β is 5-60°, and the area (3) to be welded of the welding blank where the coating has been removed has a width (W) of 0.4 mm to 1.2 mm."

Reasons for the Decision

MAIN REQUEST

Article 84 EPC - Lack of Clarity

1. The subject-matter of independent product claim 8 of the main request lacks clarity, as correctly found by the Examining Division.
 - 1.1 With their appeal, the appellant (applicant) contested these findings.
 - 1.2 The issue under discussion is essentially whether, on the basis of the product as such, it can be assessed beyond reasonable doubt a posteriori whether the claimed steel welding component has been manufactured by welding a blank according to any one of claims 1 to 7, as required by independent product claim 8.
 - 1.3 In this respect, the Examining Division took the view that a person skilled in the art could not unambiguously determine a posteriori and based on the observation of the product as such:
 - 1) whether the coating had been completely removed from an area of the steel welding blank,
 - 2) whether the width of the area from which the coating had been removed fell within the range specified in claim 1, and
 - 3) whether the angle β of the welding blank lay within the range of 5° to 60° .

On this basis, the Examining Division concluded that the scope of protection conferred by independent product claim 8 was not clearly defined, contrary to the requirements of Article 84 EPC.

- 1.4 The appellant contended that, contrary to the findings of the Examining Division, it was possible, by means of combined offline inspection or online optical inspection based on photomicrography techniques, to ascertain a posteriori whether the welding blank used to manufacture the steel welding component according to claim 8 complied with the features of claim 1.
- 1.5 The Board is not convinced by these arguments. As correctly noted by the Examining Division, since independent product claim 8 is not limited to any particular welding technique, it also encompasses welding processes involving the use of filler material. As convincingly argued by the department of first instance, when filler material is applied, it is not possible, even using the inspection techniques referred to by the appellant, to reliably determine a posteriori whether the extent of the area of the steel welding blank from which the coating had been removed falls within the range specified in claim 1. Furthermore, the Board concurs with the argument of the Examining Division that, even if the angle β could be measured after welding of the claimed component, it cannot be ensured that the angle β of the original welding blank remained unchanged in the finished component.
- 1.6 In view of the above, the decision of the Examining Division that independent product claim 8 of the main request lacks clarity within the meaning of Article 84 EPC is to be confirmed.

AUXILIARY REQUEST 1

2. In this request, claim 8 of the main request has been reformulated as a method claim using the product (steel welding blank with an aluminum or aluminum alloy coating) of claim 1, thereby overcoming the objection pursuant Article 84 EPC raised against the main request. Indeed, lack of clarity has not been longer objected by the Examining Division in respect of any of the auxiliary requests which contain the same amendment.

Articles 52(1) and 54 EPC - Novelty

3. Contrary to the findings of the Examining Division, the Board comes to the conclusion that the subject-matter of independent claim 1 of auxiliary request 1 is novel over the cited prior art within the meaning of Articles 52(1) and 54 EPC.
 - 3.1 With their appeal, the appellant contested the assessment of the Examining Division that the subject-matter of independent claim 1 of the auxiliary request 1 lacked novelty over document D6.
 - 3.2 In the contested decision, the Examining Division noted that paragraph [0029] of D6 disclosed a range for the width of the area from which the coating has been removed, namely 0.5 mm to 4 mm. This fact was not longer contested by the appellant. The Examining Division acknowledged that document D6 did not explicitly disclose an angle β within 5° and 60°, but only the possibility to ablate the coating by applying a laser beam "*forming a non-zero angle of incidence with the sheet metal piece*" (reference was made in this respect to paragraph [0023] and to the embodiment

depicted in Figures 2 and 3 of D6]. However, the Examining Division implicitly inferred from this passage that an angle β ranging from 5° to 60° was "an unavoidable consequence of the laser ablation process disclosed in D6", i.e. of the application of the disclosed non-zero inclination of the laser beam, whereby also this feature was directly and unambiguously derivable from this prior art document. The Examining Division also argued that a person skilled in the art had no doubt that the information of paragraph [0029] regarding the width of the ablated area had to be read in combination with the information of paragraph [0023] regarding the angle of incidence of the laser beam and this because both these teachings clearly referred to the same embodiments of Figures 2 and 3. In view of all the above, the Examining Division concluded that the subject matter of claim 1 of the auxiliary request 1 lacked novelty over D6.

3.3 In their statement of grounds of appeal, the appellant held that, contrary to the conclusions of the Examining Division, document D6 did not directly and unambiguously disclose, either explicitly or implicitly, an angle β measured as specified in claim 1 within the range of 5° to 60° , let alone in combination with the claimed range for the width (W) of the area from which the coating has been removed.

3.4 The Board cannot follow the reasoning of the department of first instance:

The Board agrees with the Examining Division that the person skilled in the art promptly recognizes that the width of the area from which the coating is to be removed, as suggested in paragraph [0029] of D6, may be combined with the optional non-zero inclination of the

laser beam mentioned in paragraph [0023]. However, the Board does not share the assumption of the Examining Division that the disclosed generic non-zero inclination of the laser beam, hence for example an inclination of 2° or 80°, inevitably results in an angle β within the range of 5° to 60° as recited in claim 1. In this respect, the Board notes that D6 does not teach that a non-zero inclination of the laser beam is adopted specifically to achieve an angle β different from 0°. Furthermore, the person skilled in the art is aware that the resulting angle depends not only on the laser beam inclination but also on other laser parameters. A direct and unambiguous causal relationship between a non-zero angle of the laser beam and the range defined in claim 1 for the angle β cannot be thus established.

- 3.5 For these reasons, and contrary to the findings of the Examining Division, the feature that the claimed angle β ranges from 5° to 60° cannot be directly and unambiguously derived, either explicitly or implicitly, from the technical information contained in D6.

AUXILIARY REQUESTS 2 to 4

- 3.6 This conclusion equally applies to the subject-matter of independent claim 1 of the remaining auxiliary requests 2 to 4, which also includes the limitation that the angle β ranges from 5° to 60°.

REMITTAL

4. Under these circumstances, the Board considers it appropriate to remit the case to the Examining Division for further prosecution pursuant to Article 111 EPC, namely to assess inventive step of the auxiliary

requests over the cited prior art. The Board considers that a special reason for the remittal within the meaning of Article 11 RPBA exists, since compliance with the requirements of Articles 52(1) and 56 EPC has not yet been examined and decided by the department of first instance. Also with their letter dated 1 October 2025, the appellant explicitly expressed its agreement with the remittal of the case to the first-instance department.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the Examining Division for further prosecution.

The Registrar:

The Chairman:



D. Grundner

G. Pricolo

Decision electronically authenticated