

Internal distribution code:

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

**Datasheet for the decision
of 28 November 2025**

Case Number: T 1244/24 - 3.5.05

Application Number: 14718033.5

Publication Number: 2983960

IPC: B61L21/06, B61L27/00

Language of the proceedings: EN

Title of invention:

Method for releasing overlaps in a railway signalling system

Patent Proprietor:

Siemens Mobility Limited

Opponent:

ALSTOM Holdings

Headword:

Releasing overlaps in a railway system /SIEMENS MOBILITY

Relevant legal provisions:

EPC Art. 56, 83, 100(a), 100(b)

RPBA 2020 Art. 13(2)

Keywords:

Inventive step - main request and auxiliary request 1 (no):
arbitrary/non-functional modification of the prior art
Admittance of claim requests filed after Art. 15(1) RPBA
communication - auxiliary requests 1 and 2 (yes)
Inventive step - auxiliary request 2 (yes)

Decisions cited:

T 0287/23



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 1244/24 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 28 November 2025

Appellant: ALSTOM Holdings
(Opponent) 48 rue Albert Dhalenne
93400 Saint-Ouen-sur-Seine (FR)

Representative: Lavoix
2, place d'Estienne d'Orves
75441 Paris Cedex 09 (FR)

Respondent: Siemens Mobility Limited
(Patent Proprietor) Sixth Floor, The Lantern,
75 Hampstead Road,
London, NW1 2PL (GB)

Representative: Siemens Patent Attorneys
Postfach 22 16 34
80506 München (DE)

Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 14 August 2024
rejecting the opposition filed against European
patent No. 2983960 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chair K. Bengi-Akyürek
Members: N. H. Uhlmann
F. Bostedt
K. Peirs
C. Heath

Summary of Facts and Submissions

- I. The opponent (appellant) appealed against the opposition division's decision to reject the opposition against the present European patent. The opposition was based on the grounds under Articles 100(a) and (b) EPC.
- II. The following documents are referred to in this decision:
- D13:** "Improving capacity - The KCRC solution" of Terence Law, John N. Benson and Vincent Passau, December 1998;
- D17:** "Improving capacity" - Power Point presentation of Terence Law, John N. Benson and Vincent Passau, December 1998.
- III. The board summoned the parties to oral proceedings and set out its preliminary opinion under Article 15(1) RPBA indicating that none of the claim requests then on file appeared to be allowable under Article 56 or 123(2) EPC.
- IV. In response to the board's communication, the respondent submitted new auxiliary requests 1 and 2, to replace the first to third auxiliary requests, with a letter dated 4 November 2025, while the appellant submitted further arguments with a letter dated 25 November 2025.
- V. Oral proceedings before the board were held on 28 November 2025. The parties' final requests were as follows:

- The appellant (opponent) requested that the decision under appeal be set aside and that the patent be revoked. It also requested that the new auxiliary requests 1 and 2 not be admitted into the proceedings.

- The respondent (patent proprietor) requested that the opposition be rejected, i.e. that the appeal be dismissed (**main request**) or, in the alternative, that the patent be maintained on the claims of **new auxiliary request 1** or **new auxiliary request 2**, filed on 4 November 2025 in response to the board's communication pursuant to Article 15(1) RPBA.

At the end of the oral proceedings, the board's decision was announced.

VI. Claim 1 of the **main request** (patent as granted) reads as follows (board's labelling):

- (a) "A method for releasing an overlap in a railway signalling system, the system comprising
- (b) a signalling interlocking,
- (c) trackside processing equipment and
- (d) at least one signal,
- (e) the overlap being a section of railway located past the signal in the direction of train movement, characterized in that the method comprises:
- (f) configuring both the interlocking and the trackside processing equipment to treat the overlap as an individual overlap route,
- (g) such that a train would require a movement authority to be granted to proceed into that route,

- (h) wherein the method further comprises the step of configuring the trackside processing equipment with:
- (i) a first route leading up to the signal, having an end of authority proximate the signal and a danger point beyond the signal, and
- (j) the overlap route including only the overlap section with an end of authority at or proximate to the signal and a danger point at the end of the overlap."

VII. Claim 1 of the **new auxiliary request 1** is based on claim 1 of the main request. The following features have been added to claim 1 (board's labelling):

- (k) "wherein the method further comprises the step of configuring the interlocking with:
- (l) a proceed indication for the overlap route, and
- (m) providing the proceed indication to the trackside processing equipment if the overlap is available for use by an approaching train,
- (n) wherein if a request to release the overlap is received by the interlocking, the interlocking removes the proceed indication for the overlap from the trackside processing equipment."

VIII. Claim 1 of the **new auxiliary request 2** is based on claim 1 of the new auxiliary request 1. The following features have been added to claim 1 (board's labelling):

- (o) "wherein, following removal of the proceed indication, the trackside processing equipment sends a request to shorten the movement authority to an approaching train which specifies the end of

authority and danger point associated with the first route,

- (p) wherein, following sending of the request, if the train accepts the shorten request, then the trackside processing equipment indicates to the interlocking that the overlap can be released."

Reasons for the Decision

1. The patent in suit pertains to a method in a railway signalling system. An "overlap", i.e. a section of the railway located past a signal which section is locked for an approaching train in case it overruns a red signal, is treated as an "individual overlap route".

2. Main request - claim 1 - interpretation

The board interprets the subject-matter of claim 1 in view of the understanding of the reader skilled in the technical field of "railway technology" as follows.

- 2.1 "Signalling interlocking" and "trackside processing equipment" are both (distributed) devices which are involved in coordinating the movement of trains. The skilled reader would, in this context, understand the term "interlocking" mentioned in **feature (f)** to mean "signalling interlocking".
- 2.2 A "route" (cf. **features (f), (g), (i) and (j)**) is a piece of information used for "configuring" the "signalling interlocking" and the "trackside processing equipment". The information specifies a start of a railway track section, an "end of authority" (EoA)

point for the section and a "danger point" (DP) for the section.

- 2.3 An "overlap" is defined in **feature (e)** in clear terms as "*being a section of railway located past the signal in the direction of train movement*". The intended use of an "overlap" according to the description as filed (see page 2, lines 4 to 9), namely "*a safety margin [...] locked for the train in case the train overruns the red signal*" is however not reflected in claim 1. Therefore, the board does not interpret the claimed "overlap" in a more limited manner than suggested by the definition provided in claim 1.
- 2.4 A "movement authority" (MA) might be sent to a train according to **feature (g)** and authorise the train to proceed onto a "route". The EoA specifies the point of the track at which the train should stop (unless a further MA has been granted to the train). The DP, which is located past the EoA in the direction of train movement, is a point beyond which the train must be prevented from going, for safety reasons.
- 2.5 The start of the "first route" is broadly specified in **feature (i)** as being somewhere before the at least one signal (i.e. "*leading up to the signal*" in feature (i)), while its EoA is "proximate the signal" and the DP is "*beyond the signal*".
- 2.6 The "(individual) overlap route" begins "*past the signal*". Its EoA is "at or proximate to the signal" and the DP is "at the end of the overlap" (cf. **feature (j)**).

2.7 The two routes set out in claim 1, i.e. the "first route" and the "overlap route", start at different points of a track. Yet, the definitions of their EoA and DP in **features (i) and (j)** do overlap, i.e. claim 1 encompasses embodiments in which these routes have the same EoA and/or the same DP. Furthermore, claim 1 encompasses embodiments in which the two routes do overlap at least in the section between the signal S13 and the danger point labelled "DP" (cf. Figure 6 of the opposed patent), to which the respondent referred to.

2.8 The board notes that, contrary to the appellant's view, claim 1 does not set out any state of the overlap, be it occupied ("*occupé*") or released/cleared/free ("*libéré*", "*libre*").

2.9 The respondent argued that the appellant's arguments regarding claim interpretation were not maintained in the course of the first-instance proceedings, because the objection under Article 83 EPC was not maintained during the oral proceedings before the opposition division. Thus, these arguments should not be admitted into the appeal proceedings under Article 12(4) RPBA.

The board disagrees and points to section 7 of the minutes of the first-instance oral proceedings, which sets out the discussion on sufficiency of disclosure and refers specifically to claim interpretation and paragraphs [0021] to [0026] of the opposed patent. Furthermore, this claim interpretation was also addressed in the decision under appeal, Reasons 2.3.

3. Main request - claim 1 - sufficiency of disclosure

The board considers that the skilled person would be able to carry out the claimed subject-matter. In particular, the configuration of the "signalling interlocking" and the "trackside processing equipment" according to **features (f) and (j)** does not pose any difficulties to the skilled person. Furthermore, claim 1 does not include any features pertaining to the generation of an MA.

4. Main request - claim 1 - novelty

4.1 The appellant argued that the subject-matter of claim 1 was anticipated by both the **prior use "East Rail Line"** and by document **D13**.

4.2 The respondent agrees with the appealed decision that both the prior use and document D13 do not disclose **features (f) and (j)** and further argues that they do not disclose **features (a) and (g)**, either.

4.3 In that regard, the board considers that these pieces of prior art do not disclose that the "signalling interlocking" and the "trackside processing equipment" are configured with an "overlap route" as set out in features (f) and (j), i.e. that the overlap is treated "*as an individual overlap route*" and that "the overlap route" includes "*only the overlap section*".

4.4 In particular, neither the situation "T3" on slide 25 of **D17** nor sections 4.1.5 and 4.2.2 and Figures 4 to 6 of **D13** disclose a "route" which includes "*only the overlap section*".

- 4.5 Regarding **feature (a)**, the board holds that D17 discloses that the "overlap" is released (see in particular page 23 at point T2 and page 25 at point T3).
- 4.6 **Feature (g)** amounts to the general safety rule that a train needs a movement authority to proceed in any route. Thus, it is disclosed implicitly in both documents D13 and D17.
- 4.7 The respondent argued that document **D17** was correctly not admitted by the opposition division as "written prior art". Thus, this document should not be admitted into the appeal proceedings under Article 12(6), first sentence, RPBA.

Conversely, the appellant requested that D17 should be admitted as "written prior art".

The board concludes that D17 was admitted into the proceedings as part of the prior-use documentation and was dealt with in the impugned decision. In addition, the technical content of this document was considered by the parties and by the opposition division. Furthermore, the appellant refers to D17 only in the context of the invoked prior use. Hence, there is no need to decide on this request of the appellant.

- 4.8 The appellant referred to specific sections of the minuted witness statement of *Mr Radomiak* (cf. statement of grounds of appeal, page 12, section II.D.1.a, last paragraph). However, it is not apparent that these sections of the witness statement pertain specifically

to features (f) and (j). The appellant did not submit any explanations in this regard.

4.9 In view of the above observations, the subject-matter of present claim 1 is novel over the cited prior art (Articles 100(a) and 54 EPC).

5. Main request - claim 1 - inventive step

5.1 Both the prior use and document D13 disclose all features of claim 1 except **features (f) and (j)**, as also found by the opposition division.

5.2 Technical effect

The board holds that the technical effect of the distinguishing features, as set out by the appellant, namely

to allow the train's progress to be adjusted according to the availability of the overlap. This allows the overlap to be released before the end of the overlap timer (translated by the board from the original "*l'effet technique de ces caractéristiques est de permettre d'adapter l'avancée du train en fonction de la disponibilité du chevauchement. Cela permet au chevauchement d'être libéré avant la fin du délai de chevauchement*")

and by the opposition division (referring merely to paragraphs [0004] and [0008] of the patent description), with which the respondent agreed, i.e.

"the splitting of the route with overlap into a first route without any overlap and a second overlap route makes it possible to have a train accepting a shortened movement authority, which allows the overlap to be released before the end of the overlap timer",

is not credibly caused by distinguishing features (f) and (j).

- 5.2.1 In particular, bearing in mind that the "overlap route" and the "first route" could overlap at least in part (cf. point 2.7 above), it is not apparent how introducing such an "overlap route" could have any impact on the processing carried out in the "signalling interlocking" and "trackside processing equipment". Indeed, the releasing of the "overlap route" would not release this shared range and would not contribute towards the technical effect suggested by the respondent, because the "first route" includes (a part of) the "overlap route".
- 5.2.2 Furthermore, claim 1 does not refer to any "overlap timer" and to any communication with a train. In particular, no specific action or "management" takes place according to the wording of claim 1, at least no sending of a "release request" or sending a "movement authority", nor using any "timer". Consequently, no technical effect can be credibly derived from the subject-matter of claim 1, let alone that "overlap management" is supposed to be "improved", as argued by the respondent. For these reasons, the board considers that the distinguishing features of claim 1 do not lead to any technical effect.

5.3 Hence, it is not possible for the board to formulate an objective technical problem that is derivable from effects directly and causally related to the technical features of the claimed invention. In the absence of a credibly solved objective technical problem, the underlying distinguishing features may only be considered arbitrary or non-functional modifications of the available prior art, which would thus be obvious to the person skilled in the art. Hence, no inventive step can be acknowledged on account of distinguishing features (f) and (j) (see e.g. **T 287/23**, Reasons 2.8).

5.4 Therefore, the subject-matter of claim 1 of the main request does not involve an inventive step (Articles 100(a) and 56 EPC). Thus, the ground for opposition under Article 100(a) EPC prejudices the maintenance of the patent as granted.

6. New auxiliary request 1 - admittance

6.1 This auxiliary request was filed *after* the board's communication under Article 15(1) RPBA was notified. Hence, the provisions of Article 13(2) RPBA apply.

6.2 The respondent convincingly justified that "exceptional circumstances" within the meaning of Article 13(2) RPBA were present, explaining that the line of attack under Article 56 EPC presented in the board's communication under Article 15(1) RPBA was not raised during the opposition proceedings or by the appellant in its statement of grounds of appeal. The board considers that in this particular situation, also in view of the principle of equal treatment of the parties, it was

appropriate to admit the new auxiliary request 1 into the appeal proceedings.

7. New auxiliary request 1 - claim 1 - inventive step

7.1 The board agrees with the respondent that the prior art at hand does not disclose features (k) to (n).

7.2 The respondent submitted that the distinguishing **features (f) and (j) to (n)** contribute to the same technical effect as argued for the main request (cf. point 5.2 above).

7.3 The board is not convinced and holds that the further distinguishing features in claim 1 do not overcome the objections raised in points 5.2.1 and 5.2.2 above.

7.4 Furthermore, features (k) to (n) do not relate to a "shortened movement authority" as invoked by the respondent.

7.5 Consequently, for the reasons given in points 5.3 and 5.4 above, the new auxiliary request 1 is not allowable under Article 56 EPC, either.

8. New auxiliary request 2 - admittance

8.1 The new auxiliary request 2 was filed at the same time as the new auxiliary request 1.

8.2 The board decided to admit this claim request into the appeal proceedings for the same reasons as given above for the new auxiliary request 1.

9. New auxiliary request 2 - claim 1 - sufficiency of disclosure

The board holds that the skilled person would be able to carry out the claimed subject-matter, for the reasons set out above with regard to the main request.

10. New auxiliary request 2 - claim 1 - inventive step

10.1 The prior art at hand does not disclose **features (o) and (p)** added to claim 1. This is because none of documents D13 and D17 teach any communication between a *train* and the *trackside processing equipment* in the context of a "shorten request".

10.2 The board agrees with the respondent that the **distinguishing features (f) and (j) to (p)** provide a practical implementation of releasing at least a part of an "overlap route". In particular, the communication with the train (cf. features (o) and (p)) contributes towards achieving this effect. Hence, the issues raised in points 5.2 and 5.3 above are addressed and reflected in present claim 1.

10.3 The objective technical problem to be solved by present claim 1 can thus be seen as "*how to practically implement the release of at least a part of an overlap route in the system of D13 or D17*".

10.4 The appellant argued that the skilled person would have included the distinguishing features into the known method for releasing an "overlap route", based on their common general knowledge in the field of railway management. It submitted that the skilled person would

have been motivated to do so by simply looking for operational efficiency.

The respondent counter-argued that while communication between a *train* and a *trackside processing equipment* was generally known at the relevant date, there was no hint in the prior art or in the skilled person's common general knowledge towards using the specific combination of features in claim 1.

10.5 The board holds that none of the prior-art documents on file and the prior use suggest the application of the distinguishing features to the system of D13 or D17. Indeed, no details of an "overlap releasing process" are disclosed in the cited prior art. Furthermore, it is not apparent that the quite specific communication between the *train* and the *trackside processing equipment* and the use of a "shorten request" according to features (o) and (p) belongs to the skilled person's common general knowledge, and the appellant did not provide any evidence in this regard.

10.6 For these reasons, the board holds that the skilled person would not have come up with an amended method as claimed in an obvious manner. Thus, the subject-matter of claim 1 of the new auxiliary request 2 involves an inventive step and complies with Article 56 EPC.

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 as amended in the following version:

Claims:

No. 1 to 7 of new auxiliary request 2 filed with the letter of 4 November 2025

Description and drawings:

of the patent specification

The Registrar:

The Chair:



B. Brückner

K. Bengi-Akyürek

Decision electronically authenticated