DECISION
of 8 May 2000

Case Number: T 0061/99 - 3.2.3
Application Number: 93630007.8
Publication Number: 0553055
IPC: E01B 5/18
Language of the proceedings: EN
Title of invention: Guard rail assembly
Patentee: ABC RAIL CORPORATION
Opponent: VAE Aktiengesellschaft
Headword: -
Relevant legal provisions: EPC Art. 56
Keyword: "Inventive step - confirmed"
Decisions cited: -
Catchword: -
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DECISION
of the Technical Board of Appeal 3.2.3
of 8 May 2000

Appellant: VAE Aktiengesellschaft
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 25 November 1998 rejecting the opposition filed against European patent No. 0 553 055 pursuant to Article 102(2) EPC.

Composition of the Board:
Chairman: C. T. Wilson
Members: J. B. F. Kollar
M. K. S. Aúz Castro
Summary of Facts and Submissions

I. European patent No. 0 553 055 was granted on 30 October 1996 on the basis of application No. 93 630 007.8 filed 21 January 1993.

Independent claims 1, 11, 12 and 13 read as follows:

"1. A guard rail assembly (10) for mounting a guard bar (12) having a vertical body element, a guard face (30) which extends laterally from said body element and a horizontal foot (46) which extends laterally from said body element comprising:

a guard rail plate (32);
a support bracket (36) affixed to said guard rail plate (32) having a front shelf (42) adapted to mount a guard bar (12), a front surface (48) which faces said guard bar (12) and a rear surface (54) which faces away from said guard bar (12), and

fastener means for mounting said guard bar (12) on said support bracket (36), said fastener means drawing said guard bar (12) toward said front surface (48) of said support bracket (36),

characterized in that:

said support bracket (36) has a horizontal hook support (56) and a rear shelf (52) adapted to receive a support block (100);
said guard rail assembly (10) further comprising a hook (70) having a front end (76) adapted to engage one of a lower horizontal foot (46) or a
vertical front surface (142) of the guard bar (12), a bottom surface (82) adapted to engage said horizontal hook support (56) and a fastener receptacle (88) at the rear end (78) thereof; and a support block (100) having a bottom surface (124) adapted to engage said rear shelf (52), a first vertical surface (116) adapted to engage a body portion (154) of an elastic fastener (150), a second vertical surface (122) adapted to engage a fastener toe (156) and a rear surface (106) which faces said rear surface (54) of said support bracket (36);

said fastener means (150) having a first end (152) adapted to be received in said fastener receptacle (88) of said hook, a body portion (154) adapted to contact said first vertical surface (116) and a toe end (156) adapted to contact said second vertical surface (122) of said support block (100) to simultaneously draw said hook (70) and said guard bar (12) toward said front surface (48) of said support bracket (36)."

"11. A support bracket for a guard rail assembly according to claim 1, characterized by

a pair of vertical side walls (38, 40) which are spaced laterally from each other, a front shelf (42) on each of said side walls (38, 40) adapted to mount a guard bar (12);
a horizontal hook support (56) which extends between and is attached to each of said sidewalls (38, 40);
a vertical hook guide (60) having a lower hook guide surface (62) which extends between said side walls (38, 40);
a front surface (48) which faces said guard bar
"12. A support block for a guard rail assembly according to claim 1, characterized by comprising:

a vertical rear wall having a front surface (104) and a rear surface (106);
a pair of legs (108, 110) which project laterally from said front surface (104);
wherein at least one of said legs (108, 110) has an inner side wall (120) and an outer side wall (118) with an outer end wall (122) therebetween; and
wherein one of said inner and outer side walls (120, 118) extends a greater distance from said front surface (104) than said other side wall such that said outer end wall (122) is non parallel to said front surface (104)."

"13. A hook for a guard rail assembly according to claim 1, characterized by comprising:

a longitudinally extending central section (72) having a generally flat top surface (80) and a generally flat bottom surface (82);
a vertical leg (84) at one end of said central section (72);
a horizontal leg (86) which extends from said vertical leg (84);
a fastener receptacle (88) projecting upwardly from the top surface (80) at the other end of said central section (72) and having a stepped vertical
bore (90); and
a reinforcing and guide rib (92) extending between the base of the fastener receptacle (88) and the top surface (80)."

II. An opposition was filed requesting the revocation of the patent in accordance with Article 100(a) EPC.

In the course of the opposition proceedings the following documents were cited:

D1: EP-B-0 402 351,

D2: US-A-947 317,

D3: DE-C-1 240 544,


III. By a decision dispatched on 25 November 1998 the Opposition Division rejected the opposition. The Opposition Division held that the subject-matters of the independent claims of the patent in suit were novel since none of the cited documents disclosed all features of any of these claims.

The Opposition Division further came to the conclusion that the combination of the features of each independent claim was not suggested by the available prior art, and that the subject-matter of said claims involved an inventive step as required by Articles 52(1) and 56 EPC.

IV. Notice of Appeal was lodged against this decision on 12 January 1999 with payment of the prescribed fee. The Statement of Grounds of Appeal based on Article 100(a)
EPC was received on 16 March 1999. In support thereof the Appellant (Opponent) introduced into the appeal proceedings a new document US-A-4 316 578 hereinafter referred to as D5.

V. The Appellant's arguments can be summarised as follows:

A guard rail assembly is known from document D1 which forms the nearest prior art. Claim 1 is however not correctly delimited with regard to D1. Reference is made to documents D3, D4 and D5 showing elastic fasteners and it is argued that all of the distinguishing features of claim 1 are obvious to one skilled in the art if an elastic fastener of the cited prior art such as a Pandrol clip is to be substituted for the clamping wedge 6 used in the embodiment of Figures 1 to 6 of document D1. The above reasons forwarded against claim 1 are valid against the independent claims 11, 12 and 13 the subject-matter of which thus lacks an inventive step as well.

VI. The Respondent's (Patentee's) counterarguments can be summarised as follows:

It is agreed that elastic fasteners, such as a Pandrol clip are known and have been used for mounting running rails for railway tracks but there is no suggestion in the cited state of the art to use an elastic fastener, such as a Pandrol clip to clamp a guard rail in position. The cited prior art thus provides no suggestion whatsoever to one skilled in the art as to how the guard rail assembly disclosed in D1 should be modified to permit the use of an elastic fastener such as a Pandrol clip.

VII. In the communication pursuant to Article 11(2) of the
rules of procedures of the Boards of Appeal the Board set out its provisional opinion that the Appellant's objection as to the delimitation of claim would appear to be concerned with clarity, Article 84 EPC, which is not an opposition ground, and that the subject-matter of the independent claims as granted would appear to be novel and inventive with respect to the available prior art.

IX. The Appellant requests that the decision under appeal be set aside and the patent be revoked.

The Respondent requests that the appeal be dismissed.

**Reasons for the Decision**

1. The appeal is admissible.

2. *Admissibility of late filed document D5*

Document D5 which the Appellant submitted for the first time in the appeal proceedings has been examined by the Board according to Article 114(1) EPC. It has been established that said document relates to clips for resiliently clamping a running rail to the rail plate and is thus not more relevant than documents D3 or D4 filed in time and does not disclose matter which could change the outcome of the decision. Therefore, it was decided to disregard it pursuant to Article 114(2) EPC.

3. *Novelty*

The Board's examination of the prior art documents mentioned during the proceedings revealed that none of those documents disclosed all of the features of...
claims 1, 11, 12 and 13, respectively. Since this has not been disputed by the Appellant there is no need for further detailed substantiation of the novelty objection.

4. Inventive step

4.1 The invention relates to a guard rail assembly for mounting a guard rail of the kind known from document D1 which is considered to form the nearest prior art. As to the Appellant's objection that claim 1 is not correctly delimited with respect to D1 the Board confirms the view expressed already in its communication that this objection concerns clarity, Article 84 EPC, which is not an opposition ground and as such is not to be dealt with in the appeal opposition proceedings. The invention is defined by the claim as a whole.

4.2 Document D1 discloses an assembly for the securement of guard rails, in which the guard rail is configured free from apertures and is back-gripped by hooks, which hooks are secured to a fastening part, said hooks being able to be guided through the apertures in the fastening part. In the assembly of D1 a shelf is provided on the guard rail part which is adapted to receive a resilient plate and a fastener means is received in a receptacle of the hooks to simultaneously draw said hooks and said guard rail towards the front face of the support plate. According to D1 the fastener means is either formed by a wedge 6 as in Figure 1, by a coiled spring 19 as in Figure 3 or by a wedge 20 as in Figure 5.

4.3 The problem to be solved by the present invention is to improve the guard rail assembly disclosed by D1 in
order to facilitate the assembling and the dismantling of such an assembly.

4.4 The Board is satisfied that this problem is solved by the features specified in claim 1 of the patent in suit, mainly in that the support bracket itself has a rear shelf adapted to receive a support block having a bottom surface adapted to engage the rear shelf, a second vertical face adapted to engage a fastener toe and a rear surface which faces the rear surface of the support bracket, with the fastener means having a first end adapted to be received in the receptacle of the hook, a body portion adapted to contact the first vertical surface and a toe end adapted to contact the second vertical surface of the support block.

These features by which the subject-matter of claim 1 of the patent in suit differs from the disclosure of D1 result in a guard rail assembly which allows the usage of an elastic fastener such as a Pandrol clip and which enables the use of replacement guard bars which may be installed and adjusted easily.

4.5 Although the Appellant's main argument is based on the assumption that all of the features mentioned in point 4.4 above are obvious since elastic fasteners were known before the filing date of the disputed patent, e.g. Pandrol clips of the kind disclosed in documents D3 and D4, and could be substituted for the clamping device used in D1 without exercising an inventive skill, it is the Board's view that this assumption is based on hindsight in the light of the invention according to the disputed patent.

Document D3 and D4 suggest the use of an elastic fastener of the type concerned in present claim 1 for
fastening a normal running rail to a rail support.
There is no hint in the prior art documents to apply such elastic fastener to a guard rail assembly. The use of an elastic fastener such a Pandrol clip in the guard assembly of D1 would, as can readily be seen from the Figures of D1, necessitate a redesign of the prior art system on a large scale and a modification of the respective components which would, because of absence of any teaching as to how to do it in the prior art, require the exercise of inventive skill in order not only to arrive at the claimed combination of the elastic fastener and the support block but also at the cooperation there between. In the Board's opinion the combination of features claimed in claim 1 of the patent in suit support the finding of an inventive step, which enables the invention to be efficient and superior over the conventional guard rail assemblies, with the advantages of an easy installation, adjustment and replacement of the guard rail.

4.6 In view of the above, the Board concludes that the subject-matter of claim 1 as granted involves an inventive step within the meaning of Article 56 EPC.

4.7 According to the Appellant the objections mainly based on D1 and forwarded against claim 1 are valid against claims 11, 12 and 13 as well. The Board does not agree with this opinion for the following reasons:

Regarding claim 11 directed to the support bracket, the known support bracket of D1 does not have a vertical hook guide having a lower hook guide surface which extends between the bracket side walls and a rear shelf adapted to receive a support block. There is no element in D1 which is comparable with the U-shaped support block as defined in claim 12. The hook claimed in
claim 13 differs from the hook of D1 in that the fastener receptacle projects upwardly at one end of the hook, has a stepped vertical bore, and guide rib extending between the base of the fastener receptacle and the top surface of the hook.

Since document D1 contains no hint towards the use of an elastic fastener of the type of claim 1, the skilled person has no incentive to modify the prior art components and to adapt them in the way as defined in claims 11, 12 and 13.

4.8 Summing up, the Board concludes that the subject-matter of claims 11, 12 and 13 as granted involves an inventive step as required by Article 56 EPC.

5. As claim 1 is allowable the same applies to dependent claims 2 to 10, which are directed to preferred embodiments of the guard rail assembly according to claim 1.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

A. Counillion C. T. Wilson