**Internal distribution code:**

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

# Datasheet for the decision of 14 October 2014

**Case Number:** T 0453/12 - 3.2.03

**Application Number:** 05734048.1

**Publication Number:** 1733096

**IPC:** E01B29/17

**Language of the proceedings:** EN

**Title of invention:**
RAILWAY RAIL HANDLING APPARATUS AND METHOD

**Patent Proprietor:**
W & D McCulloch Ltd.

**Opponent:**
QTS Limited

**Headword:**

**Relevant legal provisions:**
EPC Art. 100(c), 123(2)
RPBA Art. 13(1)

**Keyword:**
Amendments - added subject-matter (no)
Late-raised objection - admitted (no)
Remittal to the department of first instance - (yes)

**Decisions cited:**
T 0567/08

**Catchword:**

Europäisches Patentamt
European Patent Office
Office européen des brevets

**Beschwerdekammern**
**Boards of Appeal**
**Chambres de recours**

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

**Case Number: T 0453/12 - 3.2.03**

# D E C I S I O N
# of Technical Board of Appeal 3.2.03
# of 14 October 2014

| | |
|---|---|
| **Appellant:** (Patent Proprietor) | W & D McCulloch Ltd.<br>Craigiemains<br>10A Main Street<br>Ballantrae, Ayrshire KA26 0NB (GB) |
| **Representative:** | Murnane, Graham John<br>Murgitroyd & Company<br>Scotland House<br>165-169 Scotland Street<br>Glasgow G5 8PL (GB) |
| **Respondent:** (Opponent) | QTS Limited<br>Rench Farm<br>Drumclog<br>Strathaven<br>ML10 6QJ (GB) |
| **Representative:** | HGF Limited<br>Delta House<br>50 West Nile Street<br>Glasgow G1 2NP (GB) |
| **Decision under appeal:** | **Decision of the Opposition Division of the European Patent Office posted on 7 February 2012 revoking European patent No. 1733096 pursuant to Article 101(3)(b) EPC.** |

**Composition of the Board:**

| | |
|---|---|
| **Chairman** | G. Ashley |
| **Members:** | V. Bouyssy |
| | M. Blasi |

## Summary of Facts and Submissions

I. European patent No. 1 733 096 (in the following: "the patent") relates to a railway rail handling apparatus and a method of handling a railway rail by means of a railway rail handling apparatus.

II. The patent as a whole was opposed on the grounds of Article 100(c) EPC and Article 100(a) EPC for lack of novelty and inventive step. The Opposition Division decided that the ground of opposition under Article 100(c) EPC prejudiced the maintenance of the patent as granted and that the auxiliary requests filed before it contravened Article 123 EPC.

III. This decision has been appealed by the patent proprietor (here appellant).

IV. With the summons to oral proceedings, the Board sent a communication pursuant to Articles 15(1) and 17(2) of the Rules of Procedure of the Boards of Appeal (RPBA) indicating to the parties its preliminary, non-binding opinion of the case and its intention to remit the case to the Opposition Division for further prosecution in the event that claims 1 and 28 were found to meet the requirement of Article 123(2) EPC.

V. Oral proceedings before the Board were held on 14 October 2014.

VI. Requests

The appellant (patent proprietor) requested that the decision under appeal be set aside and the patent be maintained as granted (main request), or alternatively as amended on the basis of one of the auxiliary

requests 1 and 2, as filed with the letter dated 15 June 2012.

The opponent (here respondent) requested that the appeal be dismissed and the patent be revoked.

VII. Claims of the main request

Independent claim 1 of the main request, i.e. as granted, is directed to the following subject-matter (a comparison is made with claim 1 of the application as originally filed, with added features indicated in bold, and deleted features in strike-through):

"1. Railway rail handling apparatus **(10)** configured for track side operation comprising ground engaging wheel means **(28)** and rail moving means **(12)**, which is configured to engage a railway rail **(80)** along part of its length, the rail moving means **(12)** being further configured for its progressive movement longitudinally along the rail **(80)** as the railway rail handling apparatus **(10)** moves on the ground engaging wheel means **(28)** and, as the rail moving means **(12)** so moves, for progressive bending of the rail **(80)** laterally of an unbent part of the rail **(80)** to thereby move the rail **(80)** from a first position to a second position, **characterised in that** ~~the railway rail handling apparatus defining a footprint over the ground, and~~ the rail moving means **(12)** ~~being~~ **is**, in use, operative within the footprint **of the apparatus on the ground, to reduce imbalances in the railway rail handling apparatus (10) that may be caused by forces exerted in handling a rail, the footprint being defined by the ground engaging wheel means (28).**"

Independent claim 28 of the main request, i.e. as granted, is directed to the following subject-matter (compared with method claim 32 as originally filed, added features are in indicated bold, deleted features in strike-through):

"28. A method of handling a railway rail **(80)** by means of a railway rail handling apparatus **(10)**, which is configured for track side operation and comprises ground engaging wheel means **(28)**, the method comprising: engaging a railway rail **(80)** along part of its length by a rail moving means **(12)** of the railway rail handling apparatus **(10)**, and moving the railway rail handling apparatus **(10)** on the ground engaging wheel means **(28)** to progressively move the rail moving means **(12)** longitudinally along the rail **(80)** to progressively bend the rail **(80)** laterally of an unbent part of the rail **(80)** to thereby move the rail **(80)** from a first position to a second position, ~~in which~~ **characterised in that** the rail moving means **(12)** is operated within a footprint ~~over the ground of the railway rail handling apparatus~~ **on the ground of the ground engaging wheel means (28), to reduce imbalances in the railway rail handling apparatus (10) that may be caused by forces exerted in handling a rail.**"

VIII. Cited evidence

With the statement of grounds of appeal, the appellant filed the following documents for the first time:

Annex A: Extract from European Commission document 2009/0173 (COD) "Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL: Setting emission performance standards for new light commercial

vehicles as part of the Community's integrated approach to reduce $CO_2$ emissions from light-duty vehicles"
Annex B: US 5,927,423
Annex C: US Department of Energy Fact Sheet No 388
Annex D: Extract from US Department of Transport Regulation Part 523
Annex E: Online article from www.bdca.org.uk "Breakdown Crane Design and Development", updated 26 June 2011
Annex F: signed statements and CVs of Messrs J. Scott, M. Thornley, D. McCallum, F. Saunders and G. Moy

With its reply to the statement of grounds of appeal, the respondent filed the following documents for the first time:

Annex G: Online article from www.bdca.org.uk "About the Breakdown Crane Association", updated 7 May 2011
Annex H: Espacenet search results for "footprint" and "vehicle" in the title, 10 December 2012
Annex I: US 6,161,431
Annex J: DE 199 22 312 A1
Annex K: DE 299 24 414 U1
Annex L: DE 10 2004 062 343 A1
Annex M: US 7,066,226 B1
Annex N: US 2009/0205414 A1

IX. The relevant arguments of the parties in the written and oral proceedings can be summarised as follows:

a) Added subject-matter - Claims 1 and 28 as granted

Appellant's case:

The definition of the term "footprint" in claims 1 and 28 would be the obvious, everyday understanding of a reader skilled in the relevant art, i.e. a railway

engineer having knowledge in the stability of wheeled maintenance apparatuses, when reading the term "footprint" as used in the application as filed: as usual in the art of wheeled vehicles, the "footprint" is the area defined by those parts of the vehicle which are in contact with the ground, here "the ground engaging wheel means", see Annexes A to F.

In the light of the application as a whole, the skilled reader would readily recognise that this obvious understanding of the term "footprint" is in fact the only technically sensible understanding of this term in the application as filed: the rail moving means is operative above a point within the area bounded by the ground engaging wheel means, so that the forces exerted on the rail moving means during bending of a rail as well as the rail weight are distributed between the ground engaging wheel means, thereby overcoming the problem of imbalance experienced with the road-rail crane of the prior art (see e.g. the paragraph bridging pages 2 and 3 in the application as originally filed).

The skilled reader knows that this measure cannot completely exclude the need of counterbalance in practice, e.g. in steep slopes or railway cants, and this explains the relatively broad wording in the sentence bridging pages 2 and 3.

Respondent's case:

The definition of the "footprint" in claims 1 and 28 represents subject-matter that cannot be derived from the application as originally filed. In fact, the term "footprint" or rather the expression "the footprint over the ground" as used in the application as filed can have various meanings and is open to

interpretation, as proven by Annexes G to N and decision T 567/08. The definition of the "footprint" as introduced in claim 1 is a possible interpretation thereof but it is not the one and only possible interpretation. In particular, as reasoned by the Opposition Division in its decision, the "footprint" is defined only in reference to the apparatus and a skilled reader may well understand that the "footprint" of the apparatus "over the ground" is the vertical projection on the ground of the entire apparatus, whereby any possible extendible boom of the apparatus does not form part of this projection. This interpretation is technically sensible: by operating the rail moving means within the vertical projection on the ground of entire apparatus, albeit outside the area bounded by the ground engaging wheel means, one would inevitably "reduce imbalances in the railway rail handling apparatus that may be caused by forces exerted in handling a rail, whereby the need for a counterbalance is at least reduced", as promised in the sentence bridging pages 2 and 3. This interpretation is also in conformity with Figure 4 which shows a plan view of the apparatus.

On the contrary, if the appellant's interpretation of the "footprint" were followed, the handling forces and the rail weight would always be distributed between the ground engaging wheel means, so that imbalances would always be excluded and no counterbalance would ever be needed. This would contradict the wording of the sentence bridging pages 2 and 3.

The specific embodiments as illustrated in the drawings do not provide an adequate basis for the claimed subject-matter: claim 1 as granted lacks the further features of these embodiments that the rail moving

means 12 depends from a chassis 18, which is supported on two spaced apart apparatus support members 14 and 16, a continuous chain treads 28 being provided at the end of each of the two spaced apart apparatus support members 14 and 16.

Finally, claims 1 and 28 as granted refer to the footprint of the apparatus "on the ground" and this differs from the footprint of the apparatus "over the ground" as defined in claims 1 and 32 as originally filed, because the prepositions "on" and "over" are not synonymous.

b) Added subject-matter - Claim 5 as granted

During the oral proceedings before the Board, the respondent raised an objection under Article 123(2) EPC against claim 5 as granted.

## Reasons for the Decision

1. Added subject-matter - claims 1 and 28 as granted

1.1 The subject-matter of claims 1 and 28 as granted differs from that of claims 1 and 32 as originally filed in that

(a) the "footprint" of the apparatus is defined "by the ground engaging wheel means" instead of by the apparatus over the ground;

(b) the rail moving means is, in use, operative within the footprint of the apparatus "on the ground", instead of the footprint of the apparatus "over the ground";

(c) the functional feature "to reduce imbalances in the railway rail handling apparatus ... that may be caused by forces exerted in handling a rail,

the footprint being defined by the ground engaging wheel means" has been introduced.

1.2 Amendment (c) is supported by the explicit teaching at page 3, lines 1 and 2 of the application as filed.

1.3 Amendments (a) and (b) result in the "footprint" being defined as the area bounded by the ground engaging wheel means. It is in dispute among the parties whether or not this definition of the "footprint" can be derived from the application as originally filed.

1.4 According to Article 123(2) EPC, an application may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed. It is established case law that the content of the application as filed encompasses what is directly and unambiguously disclosed therein, be it explicit or implicit; that the application is directed to a person skilled in the art with a mind willing to interpret what is disclosed therein in a technically sensible manner (see e.g. Case Law of the Boards of Appeal of the EPO, 7th edition, September 2013, II.E.1.1).

1.5 In the present case, the application as filed is concerned with mobile railway rail handling equipment with ground and/or rail engaging wheels for handling rails in maintenance operations, in particular for lifting worn rails and laying replacement rails, such as a road-rail plant/crane (see the application, page 1, paragraphs 2 and 4; page 2, paragraphs 2 and 3; page 3, lines 28 to 31). The application as filed is thus directed to a railway engineer having experience in the design of such equipment.

1.6 This skilled reader knows from his general knowledge of physics that the stability of such a wheeled apparatus is dependent on the position of its center of gravity relative to the base of support, i.e. usually the area bounded by its ground engaging wheels. If the center of gravity is inside this area, the apparatus is stable, if it is outside, the apparatus will topple. The skilled reader also knows that, when lifting large loads with the boom of a crane, a counterbalance is generally used to shift the center of gravity of the crane back over its base, or alternatively the base is extended by means of outriggers or the like. The skilled person knows that the stability of the apparatus is also dependent on the inclination and the condition of the ground: the apparatus could still topple despite using a counterbalance, e.g. when used on an inclined surface or when the ground is not stable.

1.7 This common general knowledge is documented, at least in part, in Annex B (column 1, lines 15 to 18), Annex C, Annex D (definition of "footprint" in section 523.2), Annex E (section "Tailweight", in particular page 2, paragraph 2). Annex B was published before the priority date of the contested patent (11 January 2006), while Annexes C, D and E were made public after that date. Contrary to the respondent's view, however, Annexes C, D and E cannot be disregarded on the sole ground that they were post-published: these documents confirm, together with pre-published Annex B, that the term "footprint" had and still has the meaning mentioned in point 1.6 above for wheeled apparatuses or vehicles, in particular when addressing their stability. The respondent's search results showing there to be other meanings for "footprint" indicate that term may be used in a different sense in other

fields of technology, such as pneumatic tyres for vehicles (Annexes H to N).

1.8 The afore mentioned common general knowledge is also mentioned in the introductory section of the application as filed, on page 1, lines 15 to 24 and page 2, lines 23 to 32, where reference is made to a road-rail plant/crane of the prior art, provided with both ground engaging wheels and railway engaging wheels, which makes use of an extendible boom to grab, raise and move rails, and which is usually provided with a counterbalance to neutralise the weight of the boom and the rail being moved.

1.9 The reader is taught in the paragraph bridging pages 1 and 2 of the application that the railway rail handling apparatus according to the invention has been devised to overcome the shortcomings of this known road-rail crane, whereby "the railway rail handling apparatus (defines) a footprint over the ground, and the rail moving means (is), in use, operative within the footprint" (see page 2, lines 7 to 8). It is apparent that the expressions "a footprint over the ground" and the "footprint on the ground" have the same meaning. Indeed, this paragraph refers to the "footprint over the ground" of the apparatus because it describes the movement of the apparatus on the ground; while the apparatus moves, the rail moving means remains operative within the footprint of the apparatus on the ground, which also moves over the ground.

1.10 The subsequent paragraph bridging pages 2 and 3 of the application as filed provides the skilled reader with a clearer understanding of the "footprint". There it is explicitly taught that, when using a heavy counterbalance, the road-rail crane of the prior art

"tends to disturb the railway ballast, sink into the ground beside the railway or at least grip the ground in an unsatisfactory manner providing for uneven movement of the plant"; and that "disturbance of the ballast supporting the railway sleepers is undesirable because it can necessitate time consuming work to remedy the disturbance"; in addition, "operation within the footprint according to the present invention reduces imbalances in the railway rail handling apparatus that may be caused by forces exerted in handling a rail, whereby the need for a counterbalance is at least reduced".

In the light of this paragraph and of common general knowledge, as set out above, the skilled reader would immediately understand that, according to the invention, the rail moving means is operative above a point within the apparatus's base or footprint, i.e. the area bounded by its ground engaging wheel means on the ground, so that the forces exerted on the rail moving means during bending of a rail as well as the rail weight are safely transmitted to the ground engaging wheel means, thereby overcoming the problem of imbalance experienced with the road-rail crane of the prior art.

The skilled person knows that such a measure cannot exclude any imbalance nor the need for counterbalance at all times (see point 1.6 above): the apparatus could still topple when used in steep slopes or railway cants or when the ballast has trouble supporting it. In fact, in the application as filed, imbalances due to disturbance of the ballast are addressed by another measure, namely by using ground engaging wheel means in the form of continuous chain tread means having

sufficient length (see e.g. page 8, lines 4 to 11 of the application).

Thus, when reading paragraph bridging pages 2 and 3 of the application as filed in its context, it is implicit to the skilled reader that the footprint is the area bounded by the ground engaging wheel means on the ground.

1.11 This understanding is confirmed by the preferred embodiments as disclosed in the description and illustrated in the drawings:

1.11.1 Preferred embodiments of the apparatus defined on pages 1 and 2 are described on page 4, line 24 to page 5, line 2. Here the reader is taught that, when the rail moving means is located between two spaced apart support members, the forces exerted on the rail moving means during bending of a rail as well as the rail weight can be distributed between the support members. The ground engaging wheel means are preferably provided at the bottom end of the support members (page 8, lines 1 to 3), so that these forces can be properly and controllably transmitted to the ground via the support members and the ground engaging wheel means.

1.11.2 Figures 1a, 1b, 3a and 3b show such a preferred railway rail handling apparatus 10, which comprises rail moving means 12 located half-way between the two spaced apart apparatus support members 14 and 16 (page 10, line 23); ground engaging wheel means in the form of continuous chain treads 28 are provided at the end of each of the two spaced apart apparatus support members 14 and 16. It is thus clear that the forces exerted on rail moving means 12 during bending of a rail as well

as the rail weight are transmitted to the ground via the support members 14 and 16 and the ground engaging wheel means 28.

1.11.3 Figure 4 provides a plan view of the railway rail handling apparatus of Figures 1a to 3b in operation, and shows that "the rail moving means 12 is operative within a footprint defined by the railway rail handling apparatus 10 over the ground" (page 10, line 16; page 13, line 30; page 14, lines 10 to 12). This drawing shows only a rail 80 and a large rectangle enclosing the rail moving means 12. Since neither the block and tackle arrangement 26 nor the long continuous chain treads 28 of the apparatus are shown in Figure 4, it is clear that the large rectangle in Figure 4 cannot be the projection of the entire apparatus on the ground. Instead, the rail moving means 12 is located half-way between support members 14 and 16 in Figures 1a to 3b and is placed at the center of the large rectangle in Figure 4, and hence the large rectangle must be the area bounded by the support members 14 and 16. Thus Figure 4 simply confirms that the rail moving means 12 is operative within the area bounded by the support members 14 and 16, which are enclosed in the area bound by the ground engaging wheel means 28. The skilled reader would also reach the same conclusion when considering Figure 5b which shows a plan view of the alternative railway rail handling apparatus of Figure 5a.

1.12 The respondent contends that, in the application as filed, the "footprint" of the apparatus "over the ground" could also well be the vertical projection on the ground of the entire apparatus, although any extendible boom of the apparatus is excluded from this projection. This alternative interpretation was adopted

by the Opposition Division in the decision under appeal. The respondent submits that this interpretation is consistent with the application as filed, in particular with the teaching in the sentence bridging pages 2 and 3: it was argued that the stability of the apparatus would be improved to a certain extent if the rail moving means was located within the vertical projection on the ground of entire apparatus, even if the rail moving means was positioned outside the area bounded by the wheels.

1.13 This interpretation, however, cannot be derived from the application as filed because it is not technically sensible:

1.13.1 Firstly, in the application as filed, the rail moving means is consistently presented as being comprised within the apparatus; it must therefore be positioned above a point within the vertical projection of the entire apparatus on the ground at any time. If the respondent's interpretation of the "footprint" were followed, the footprint feature according to the invention would thus not result in any technical limitation for the apparatus.

1.13.2 Further, the respondent's interpretation of the term "footprint" essentially relies on the sentence bridging pages 2 and 3, which promises only a reduction of "imbalances" and "of the need for a counterbalance". According to the respondent, this contradicts the appellant's interpretation of the "footprint" as being the area bounded by the ground engaging wheel means, since in this situation imbalances would always be excluded and a counterbalance could be completely omitted. However, as explained above (see point 1.10), this goes beyond the disclosure, which teaches that

imbalances can be reduced, but not necessarily excluded by positioning the rail moving means between the ground engaging wheel means; a counterbalance may still be needed in particular circumstances, such as when working on an incline or an unstable ground.

1.13.3 The respondent contends that the expression "footprint over the ground" makes sense only if the footprint refers to the projection of the entire apparatus on the ground and thus includes overhanging parts, such as the overhang of the ground engaging wheels beyond the point where their contact with the ground ends. However, when read in its context in the application as filed, the expression "footprint over the ground" is clearly synonymous with the wording "footprint on the ground" (see point 1.9 above).

1.13.4 Finally, the respondent refers to the decision in case T 567/08 in support of its interpretation of the term "footprint". In that case the contested patent concerned an invention in the technical field of roll-on applicators for cosmetics and the issue at stake was whether the term "base footprint" in granted claim 1, which had not been disclosed in the application as filed and was introduced during examination, added new subject-matter. The Board considered that the term "footprint" could equally be interpreted in the sense of "the area of contact between a tyre and the ground", or alternatively of "the area of a surface taken up by a microcomputer on a desktop" and concluded that claim 1 as granted infringed Article 123(2) EPC as the second interpretation was not disclosed in the application. T 567/08 can be distinguished from the present case because its technical field is remote from that of the rail handling equipment, and more importantly because in the present case the term

"footprint" is explicitly disclosed in the application as filed and, as explained above, there is only one interpretation which makes technical sense for a skilled reader.

1.14 The Board therefore concludes that, contrary to the Opposition Division's decision, the definition of the "footprint" in claims 1 and 28 as granted and thus the subject-matter of these claims can be directly and unambiguously derived from the application as originally filed.

2. Added subject-matter - claim 5 as granted

2.1 During the oral proceedings before the Board, at the very end of an extensive debate on added subject-matter, the respondent raised a new objection under Article 123(2) EPC against claim 5 as granted for the first time. This objection had not been raised before during either opposition or appeal proceedings.

2.2 Considering the state of the proceedings at which this new objection was raised, the need for procedural economy and the right of the appellant to fair proceedings, the Board exercised its discretionary power under Article 13(1) RPBA and decided to not admit this objection into the proceedings.

3. Hence, the ground for opposition according to Article 100(c) EPC does not prejudice the maintenance of the patent as granted.

4. Under these circumstances, there is no need to consider the auxiliary requests of the appellant.

5. Remittal

In the decision under appeal, the Opposition Division only dealt with objections under Articles 100(c), 123(2) and 123(3) EPC.

The Board therefore exercises its discretionary power under Article 111(1) EPC to remit the case to the Opposition Division for further prosecution, in particular for consideration of the objections under Article 100(a) 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 for further prosecution.

The Registrar: The Chairman:

C. Spira G. Ashley

Decision electronically authenticated