

# Kluwer Patent Blog

## Getting a telehandle on the issues of obviousness and equivalence – Bamford v Manitou

Eden Winlow (Bristows) · Thursday, July 21st, 2022

### Introduction

In a ruling by Hacon HHJ on 4 July 2022, [\[here\]](#) the English Patents Court has invalidated three patents belonging to J. C. Bamford (JCB) while finding a fourth valid and infringed by Manitou UK Ltd and its parent company Manitou BF (Manitou). The judgment followed a six-day trial in November last year. Parallel proceedings are taking place in Italy and in France, with a hearing in the latter expected to take place in Paris late in 2023.

In the UK, JCB had alleged that European Patent (UK) Nos. 1 532 065 B2 (“EP 065”), 2 263 965 B9 (“EP 965”) and 2 616 382 B3 (“EP 382”), and UK Patent No. GB 2 390 595 B (“GB 595”) were infringed by Manitou. Manitou counterclaimed for revocation of each of the patents.

JCB and Manitou are longstanding rivals in the European market for construction and agricultural vehicles. At issue in this case were vehicles known as telehandlers. Telehandlers have a longitudinal arm that can be raised or lowered, and extended beyond the front of the vehicle chassis. They emerged in the 1970s as modified forklift trucks, but as their arm or “boom” enables a longer reach than a forklift truck they have a significant and distinct market of their own.

Under certain circumstances, telehandlers will become unstable and tip forwards on the axis of the front wheels, raising the rear wheels off the ground. This is due to the load at the end of the arm creating a force (i.e. a turning moment) tending to tip the telehandler in the direction of the load.

The inventions of the patents are broadly concerned with safety features relating to what is known as the “tipping moment” – as this tipping moment approaches zero, the vehicle becomes unstable.

### EP 065 and GB 595

The EP 065 and GB 595 patents were treated at trial as if they were the same. They share a priority date of 12 July 2002 and, whilst a UK patent and an EP (UK) patent cannot be for the “same invention” ( see s.73(2) of the Patents Act 1977) the differences between them were considered to be irrelevant in this case.

The invention claimed was referred to as “soft-stop”. In short, it concerned a control system that senses the approach of the tipping moment limit and slows the operation of the arm, bringing it to a complete stop; this provides an appropriate safety margin.

Manitou argued that EP 065 lacked inventive step separately over two items of prior art: Kruger (US Patent No. 4,006,347) and Tadano (Japanese Patent No. 3,252,006).

In relation to Kruger, essentially the question was whether the disclosure of a soft-stop system in Kruger would have led the skilled person to contemplate using an automatic system in a telehandler instead of leaving it to the experience of the operator to achieve a soft stop manually.

Hacon HHJ commented at [41] that JCB had an uphill task to prove inventiveness. As the Boards of Appeal of the European Patent Office have pointed out on several occasions, the replacement of a manual operation by an automatic one will not generally (if ever) be inventive, see for example *T 234/96 Waschmaschine mit einer Waschmittelschale* and more recently *T 771/14 Verfahren und Vorrichtung zum Management von milchgebenden Tieren*.

The main argument brought by JCB was that Kruger would have been dismissed by the skilled person as being of no interest because it concerned a crane, rather than a telehandler. In some instances a technical concept contained within a piece of prior art is so intertwined with the disclosure as a whole that an issue can arise as to whether the skilled person would realise that it is a concept with alternative application, technically applicable outside that particular context. This argument was unsuccessful, and Hacon HHJ commented at [45] that this was not the case here, as the notion of an automatic soft stop for the arm of a load-carrying vehicle is a simple one and on the evidence not uniquely tied up with or dependent on other features of a crane.

Another argument brought by JCB was that the 25 years between Kruger's publication and the priority date of EP 065 suggested a failure on the part of those in the telehandler field to appreciate that Kruger's soft-stop system feature could be used in a telehandler. They drew an inference of long felt want and emphasised the importance of avoiding hindsight.

The law in this regard was summarised by Arnold J in Jarden Consumer Solutions (Europe) Ltd v SEB SA [2014] EWHC 445 (Pat) at [103]:

“[103] As Kitchin LJ and Sir Robin Jacob said in their joint judgment in Gedeon Richter plc v Bayer Pharma AG [2012] EWCA Civ 235, [2013] Bus LR D17 at [61], ‘it is trite law that... the older (from the priority date of a patent under attack) a piece of prior art said to render a patent obvious, the harder it is to show obviousness’.”

In response Manitou emphasised a point made in Brugger v Medicaid Ltd [1996] RPC 635: the failure of those in the art to carry out an alleged invention for a long period after it became technically possible to do so does not *necessarily* mean that the invention cannot have been obvious throughout that period.

Hacon HHJ was not convinced by JCB's argument, stating (see [56]) that where the evidence otherwise suggests that a claimed invention was obvious at the priority date, an argument of long felt want can only negate that evidence if there is no plausible reason, other than that the invention was not obvious, for the invention having not been performed during the relevant period. He commented that there was no evidence that Kruger was considered by anyone in the telehandler industry. This was strengthened by the fact that one of the expert witnesses considered that relevant individuals in the industry would not look at patents, thus providing an alternative explanation for the failure of the industry to incorporate the solution into a telehandler. Thus, the long felt need argument did not apply because the starting point, Kruger, would not necessarily have been seen by those in the industry, regardless of its age. This suggests that long felt need

arguments might be more persuasive in patent-active fields, where those in the industry would be aware of competitors' patents.

Ultimately, EP 065 was found to lack inventiveness in its entirety over Kruger. For similar reasons it was also found to lack inventive step over Tadano.

### EP 965

EP 965 has a priority date of 19 June 2009. It claims a further safety feature: a method of operating a telehandler which includes sensing the travelling speed of the vehicle and above a threshold speed disabling the control system that limits movement of the arm.

The only citation raised by Manitou against EP 965 was Japanese Patent Application No. 2000-329073 ("Aichi I"), and they argued that the patent lacked inventive step over this document.

The main question was whether it would be obvious for a longitudinal load moment control system ("LLMC") described in Aichi I (which related to cranes) to be incorporated into a telehandler.

By 2009, it was considered that there had been a significant addition to the common general knowledge, which was the publication of a standard for telehandlers: EN 15000. In light of this, the skilled person knew in 2009 that by the end of 2010 it would not be possible to sell a telehandler unless it had an LLMC system compliant with EN 15000. Thus, Hacon HHJ concluded that EN 15000 would have provided a strong incentive to install an LLMC into telehandlers and a skilled person reading Aichi I would have believed that this was one system that could be used.

On this basis, it was ultimately concluded that EP 965 lacked inventive step over Aichi I.

### EP 382

EP 382 has a priority date of 14 September 2010. Again, it claims a safety feature limiting movement of the arm. The safety concern addressed is the greater potential instability of the machine when the arm is at certain angles. The specification expressly refers to the soft-stop LLMC of EP 065, and explains that a single limit to the permitted tipping moment is over-restrictive at certain arm angles. The purpose of the invention of EP 382 is to have a control system that allows more flexibility in movement of the arm when it is at an angle less likely to result in tipping. In other words, the threshold varies according to arm angle so that the safety margin is appropriate to the angle.

EP 382 was attacked on the ground of inventive step based first on JCB's earlier GB 595 patent and then based on Tadano.

Both of these attacks ultimately failed, mainly due to Hacon HHJ being unconvinced that the skilled person would perceive a need to vary the threshold value and in the case of the GB 595 starting point, that systems without a variable threshold could satisfactorily be used without varying the load angle, e.g. by relying on the experience of operators, who would be aware that the risk changes with load angle.

EP 383 was therefore held to be valid.

Full details on infringement were not available due to confidentiality but the doctrine of

equivalents was of relevance. Hacon HHJ referred to his earlier decision in Kwikbolt Limited v Airbus Operations Limited [2021] EWHC 732 (IPEC), where he suggested that focussing on the variant by reference to the integers of the claim can be a useful way of considering an alleged equivalent:

“[99] The doctrine of equivalents as explained in Actavis requires the variant to be specified. This will be the invention of one of the claims of the patent in suit with one or more integers missing or modified. In the simplest case one integer of the claim is missing in the variant – this will be the integer in issue. The parties will know what that integer is and each may tend to tailor its inventive concept accordingly. If so, the integer in issue is liable to be irrelevant to the inventive concept advanced by the patentee but central to the inventive concept advanced by the alleged infringer.”

JCB raised a point on equivalents, submitting that the simplest case Hacon J had referred to in Kwikbolt (see above) was just that and that in a more complex case there may be many differences between the variant and the claim in suit and in principle the variant may not embody any of the integers of the invention of the claim, yet still be an equivalent of that invention and so infringe.

Hacon HHJ agreed that this is true in principle, and gave a helpful clarifying explanation at [107] that “...the integers of the claim which are different in the variant may not be independent of each other. If one changes, they all change. It may be that the variant can be characterised as in truth embodying only one difference from the claim in issue, albeit leading to differences across several integers, and therefore presenting a more promising candidate as an equivalent.”

### Other Matters

Both Manitou and JCB have indicated that they will appeal the ruling and with the proceedings ongoing in Italy and France, we have certainly not heard the end of this dispute.

### Comment

This decision is interesting for several reasons. First, the judgment contains further dicta on the question of ageism and whether the fact that the prior art relied upon is rather long in the tooth really makes a difference. There are observations from experienced judges going in either direction and all that can really be said with confidence is that it depends on the circumstances of the case including the industrial field in question. Also on validity, the English Court has confirmed its alignment with the EPO that generally speaking, replacement of a manual operation with an automatic system will not involve inventive activity. Finally, the decision of HHJ Hacon adds another level of analysis on the issue of equivalence – the conclusion being that in complex cases the variant may differ from the relevant claim in respect of more than one integer and that the relevant integers may not be independent from each other. There is no hard and fast rule which lays down that where numerous integers are variants there can be no infringement by equivalence although as the Judge observed, “it would be a big ask if all or most of the integers in the variant were different from those in the claim.”

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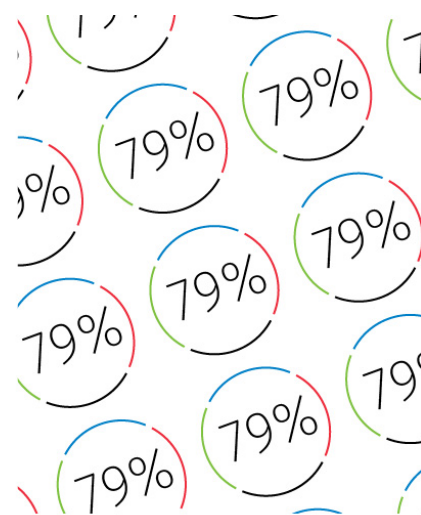
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This entry was posted on Thursday, July 21st, 2022 at 5:20 pm and is filed under (Indirect) infringement, Case Law, literally fulfil all features of the claim. The purpose of the doctrine is to prevent an infringer from stealing the benefit of an invention by changing minor or insubstantial details while retaining the same functionality. Internationally, the criteria for determining equivalents vary. For example, German courts apply a three-step test known as Schneidmesser's questions. In the UK, the equivalence doctrine was most recently discussed in *Eli Lilly v Actavis UK* in July 2017. In the US, the function-way-result test is used.">Equivalents, Infringement, Inventive step, Patents, Scope of protection, United Kingdom

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