

**EIP**

# Alcon puts the brakes on patent protection for AP Racing due to added matter

## AP Racing Limited v Alcon Components Limited [2013] EWPC 3

Two rival suppliers of brake calipers used in racing cars in the motorsport industry recently went head to head in the Patents County Courts. AP Racing brought action against Alcon for allegedly infringing one of their patents relating to brake calipers. At the hearing before HH Judge Birss, Alcon denied infringement and counterclaimed that AP Racing's patent was invalid, arguing that the claimed invention was obvious, insufficient and involved added matter.

### Background

AP Racing's patent GB2451690 was for an improved disc brake caliper body that could provide equivalent structural rigidity to that of conventional caliper bodies but using less material. The patent described a caliper body with "peripheral stiffening bands" which increase the stiffness of the caliper body when it is subjected to a bending moment when the brakes are applied. Their presence enabled material elsewhere in the caliper body to be removed, reducing the caliper weight and material to a minimum.

Five Alcon calipers were alleged to infringe claim 1 of the GB '690 patent. Alcon argued that claim 1 was obvious over two publications: JP 2003-65367 (Hatagoshi) and JP 9257063 (Baba), and common general knowledge. They also argued that there was added matter in relation to a feature of claim 1 "in which each of the stiffening bands has a profile that is asymmetric about a lateral axis of the body when viewed in plan". Their insufficiency argument was based on alleged ambiguities in the "asymmetry" and "lateral

axis” references of claim 1.

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The skilled person in the respect of the patent was defined as a mechanical engineer specialising in brakes, working in motorsport. Both parties agreed on most of the information that should be considered as forming part of the common general knowledge. The parties disagreed on the status of structural optimisation software that would have been available at the date of priority of August 2007. This software uses a technique that removes material from a given volume or shape of material to reach a target weight for the component, whilst satisfying parameters input by the operating engineer. Birss J evaluated that at the date of priority the skilled person would have known about optimisation software, but that the use of this software in brake caliper design was not common general knowledge.

### Invalidity

The Windsurfing/Pozzoli steps were used to assess the obviousness of the claimed invention over the two prior art documents. The first prior art document JP 2003-65367 (Hatagoshi) disclosed “stiffening bands” but these were not considered “peripheral”. Alcon argued that it should be considered obvious for the skilled person to produce a caliper structure that would be within claim 1. Birss J said that their argument appeared to rely on hindsight but in any event he rejected Alcon’s argument because the disclosure as a whole taught in the opposite direction from the claimed invention. For the second prior art document JP 9257063 (Baba), Alcon argued that this document disclosed “peripheral stiffening bands” and AP Racing argued that it did not. Birss J agreed with AP Racing that Baba did not disclose peripheral structures and to modify Baba to bring it into claim 1 would be an exercise in hindsight and he rejected Alcon’s argument that claim 1 was obvious over Baba. Birss J then considered the obviousness of AP Racing’s invention over common general knowledge alone and was not convinced that, even if the skilled person had used the optimisation software to design a brake caliper, the resultant caliper would have been that of claim 1 of the patent.

The question of added matter was judged comparing the disclosure of the application as filed against the patent as granted. The application as filed disclosed that the caliper body was asymmetrical but did not disclose the asymmetry as a property of the stiffening bands. It was considered that the skilled person reading the application would be taught that the body of the caliper as a whole had an asymmetric appearance. Birss J explained that a narrow disclosure of hockey stick or J-shaped stiffening bands in the application as filed (Figure 4) did not in this case support a generalisation to the asymmetric nature of stiffening bands as recited in claim 1, since this represented a broader concept which was not supported in this case. Birss J therefore accepted that claim 1 disclosed matter

extending beyond that disclosed in the application as filed.

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Alcon also argued that the patent did not provide sufficient directions for a skilled person to perform the invention because some of the terms of the patent were unclear but Birss J did not agree.

Decision

Birss J concluded that four out of five Alcon caliper shapes infringed AP Racing's patent, but that the patent was found to be invalid on the ground of added matter (s72(1)(d) of PA 1977).

This decision demonstrates the need for good patent drafting and shows how important it is for the claimed subject matter to be explicitly supported by the application as filed.

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