



## PATENTS ACT 1977

### PROCEEDINGS

Declaration of Non-Infringement under Section 71 of the Patents Act 1977  
in respect of Patent No. GB 2 545 879 B

International Safety Components Ltd

Claimant

and

DMM International Ltd

Proprietor

HEARING OFFICER

Stephen Probert

For the claimant: Richard R Halstead & Co. Ltd

Decision off the papers

### DECISION & DECLARATION

#### *The request*

1. This decision concerns a request for a declaration that three of the claimant's carabiners ("the products") do not infringe patent GB2545879B ("the patent"). The registered proprietor of the patent (DMM International Ltd) has chosen not to file a counter statement, and is therefore not a party to these proceedings.

#### *Background*

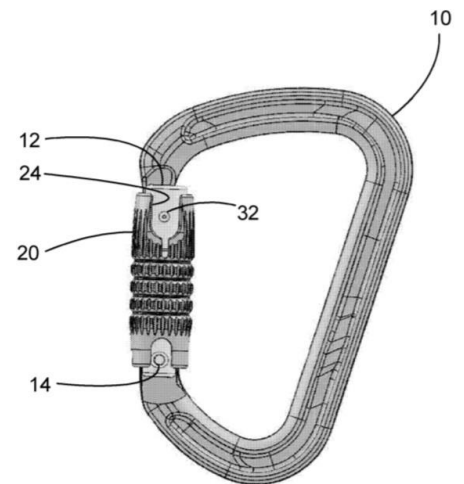
2. Carabiners are a particular class of shackle, typically a metal loop with a spring-biased gate, that can be used to quickly and reversibly connect components. The claimant's KL311 product is shown on the right. Although many of us will be familiar with low-cost carabiners, eg. for attaching key rings to a trouser belt, there are also more expensive versions that are used in safety-critical systems, such as where people are required to work at heights.
3. In safety critical applications like this, it is a requirement to uniquely identify equipment in order to monitor the entire life cycle of a product from manufacture, through use, inspection and maintenance, to eventual disposal. This would traditionally be achieved using unique serial numbers etched, stamped or engraved onto the carabiner. In some instances, the serial



number may become illegible, eg. through abrasion in use, and an otherwise serviceable carabiner may have to be scrapped if its history and maintenance cannot be traced.

### **The Patent**

4. The patent describes how the problem of reading the serial number has been addressed in the industry generally by using RFID tags. However, it says that conventional RFID tags have proven to have disadvantages, particularly when used with metal hardware items such as carabiners. The proximity to metal disrupts the electro-magnetic fields used to power and read the tags.



5. To overcome this problem, the invention in the patent involves placing the RFID tag (32) in a well in the surface of the carabiner, and surrounding the RFID tag with an 'electrically non-conductive' resin to protect the tag. The resin includes a magnetically-permeable material (eg. ferrite or particulate iron) to improve communication with the tag, and to increase the distance at which the tag can be read.

6. The patent contains one independent claim, reproduced here. I have emphasised two particular clauses that are especially significant in these proceedings.

1. A carabiner of metal, in which there is formed with the component a well that opens to a surface of the component, and which includes an RFID tag that is contained within the well such that it does not project from the well beyond the surface of the component wherein **the RFID tag is surrounded by electrically non-conductive resin** that serves to protect the tag and secure it within the well, **which resin includes a magnetically-permeable material.**

7. The patent has a filing date of 16<sup>th</sup> October 2015, and no priority date. It was granted on 18<sup>th</sup> April 2018 and remains in force.

### **The Law**

8. Declarations of non-infringement are governed by section 71 of the Act. Insofar as relevant to this decision, section 71 states:-

#### **Declaration or declarator as to non- infringement**

71.-(1) Without prejudice to the court's jurisdiction to make a declaration or declarator apart from this section, a declaration or declarator that an act does not, or a proposed act would not, constitute an infringement of a patent may be made by the court or the comptroller in proceedings between the person doing or proposing to do the act and the proprietor of the patent, notwithstanding that no assertion to the contrary has been made by the proprietor, if it is shown-

- (a) that the person has applied in writing to the proprietor for a written acknowledgement to the effect of the declaration or declarator claimed, and has furnished him with full particulars in writing of the act in question; and
- (b) that the proprietor has refused or failed to give such acknowledgment.

9. The claimant has provided, with its statement, copies of written correspondence between the claimant and the registered proprietor of the patent that effectively demonstrate that the proprietor has refused to provide a written acknowledgement of non-infringement. I am therefore satisfied that the comptroller has the necessary power under section 71 to make such a declaration.

### ***The products***

10. Three of the claimant's carabiners are involved. They are identified as models KL311, KL321 and KH212. The claimant's statement of grounds includes an illustration of KL311, but the copy available to me is a photograph in black and white that has not survived the scanning process very well. I have therefore taken the three photographs below from the claimant's website.



KL311



KL321



KH212

11. Each of these three models of carabiner includes an RFID tag that is located in a shaped recess (or well) in that part of the gate<sup>1</sup> that is furthest from the pivot pin. The claimant states that the RFID tag is retained within the shaped recess (or well) by means of a cyanoacrylate adhesive sold under the name of Loctite<sup>®</sup> 480.
12. Loctite<sup>®</sup> 480 is a rubber-reinforced adhesive. The claimant asserts that it is not a resin, and it does not contain ferrite or particulate iron. It is not magnetically permeable, according to the claimant, and cannot be said to be the equivalent of a magnetically-permeable resin.

### ***Do the carabiners infringe?***

13. The law on the scope of a patent claim in relation to infringement is as stated by the Supreme Court in *Actavis UK Ltd v Eli Lilly & Co*<sup>2</sup> and the Court of Appeal in *Icescape Limited v Ice-World International BV*<sup>3</sup>. Lord Kitchin summarised the position at paragraph 66 of the *Icescape* judgment:

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<sup>1</sup> The 'gate' of a carabiner is the part that swings open to allow access to the centre. The gate of a carabiner is usually spring-biased to the closed position.

<sup>2</sup> *Actavis UK Ltd v Eli Lilly & Co* [2017] UKSC 48; [2017] RPC 2

<sup>3</sup> *Icescape Limited v Ice-World International BV* [2018] EWCA Civ 2219; [2019] FSR 5

66. The whole approach to interpretation and scope of protection therefore involves the following steps, considered through the eyes of the notional addressee:

- i) Does the variant infringe any of the claims as a matter of normal interpretation?
- ii) If not, does the variant nevertheless infringe because it varies from the invention in a way or ways which is or are immaterial? This is to be determined by asking these three questions:
  - a) Notwithstanding that it is not within the literal (that is to say, I interpolate, normal) meaning of the relevant claim(s) of the patent, does the variant achieve substantially the same result in substantially the same way as the invention, i.e. the inventive concept revealed by the patent?
  - b) Would it be obvious to the person skilled in the art, reading the patent at the priority date, but knowing that the variant achieves substantially the same result as the invention, that it does so in substantially the same way as the invention?
  - c) Would such a reader of the patent have concluded that the patentee nonetheless intended that strict compliance with the literal meaning of the relevant claim(s) of the patent was an essential requirement of the invention?

*Normal interpretation — i)*

14. The products in question (the 'variants') are metal carabiners (KL311, KL321 & KH212) in which there is formed a well (or recess) that opens to a surface of the carabiner. Each of them contains an RFID tag secured within the well of the carabiner, such that the tag does not project from the well beyond the surface of the carabiner.
15. The statement of grounds says that in each case the RFID tag is not surrounded by resin — as specifically required by claim 1. Instead the tag is secured using a bonding adhesive. Moreover, the bonding adhesive is not magnetically permeable in the sense in which this expression is defined in the patent — eg. it does not include ferrite or particulate iron.
16. For these reasons, the claimant's products do not fall within the scope of claim 1 of the patent, on a normal interpretation of the claim. As claim 1 is the broadest claim in the patent, it follows that the products do not fall within the scope of any of the claims according to the normal interpretation.

*Immaterial variation — ii)*

17. As the answer to question i) above is 'no', I need to decide whether the products nevertheless infringe because they vary from the invention in a way or ways which are immaterial.
18. In different circumstances, I would have had the benefit of hearing argument before determining what is the inventive concept revealed by the patent. But as these proceedings are uncontested, and there has been no hearing, I must assess the

inventive concept by reading the patent specification, with only the claimant's statement of grounds to assist.

19. Fortunately the patent is quite brief, and well written. It appears to me that the inventive concept is the use of a resin including a magnetically-permeable material to encapsulate and secure an RFID tag in a metal component. I do not think it can be as broad as the use of an RFID tag to uniquely identify a metal component (such as a carabiner), because the patent says (top of page 2):

“However, conventional RFID tags have proven to have disadvantages when used in this context, particularly for metal hardware items such as carabiners.”

20. The patent makes it clear that surrounding the RFID tag with a resin including magnetically-permeable material (such as ferrite or particulate iron) improves communication between the RFID tag and reader device, thereby increasing the acceptable distance between the reader and the tag. The patent also says that the use of such a resin allows the tag to be recessed more deeply within the carabiner, so affording the tag greater physical protection and increasing its durability.
21. I can imagine that there might be circumstances where the use of a bonding adhesive (eg. such as Loctite<sup>®</sup> 480) to secure an RFID tag might achieve substantially the same result as encapsulating the tag in resin. But in this case, and specifically without the magnetically-permeable material (which is completely absent from the claimant's products), it cannot be said that the variants achieve the same result in substantially the same way as the invention.
22. On this basis, I conclude that the products are not immaterial variations from the invention. As the products do not infringe any of the claims as a matter of normal interpretation, and do not vary from the invention in a way or ways which is or are immaterial, I conclude that they do not infringe the patent, and the claimant is therefore entitled to the declaration sought.

### ***Declaration***

23. I hereby declare that the carabiners identified by the model numbers KL311, KL321 and KH212 manufactured and distributed by International Safety Components Ltd do not infringe patent GB 2545879B.

**Stephen Probert**

Deputy Director, acting for the Comptroller