#### **OPINION UNDER SECTION 74A**

Patent	GB 2423365 B
Proprietor(s)	Richard John Wragg
Exclusive Licensee	
Requester	Barker Brettell LLP
Observer(s)	Murgitroyd
Date Opinion issued	25 April 2022

# The request

- 1. The comptroller has been requested by Barker Brettell (the Requester) to issue an opinion as to whether GB 243365 B (the Patent) is infringed by the IS Log (Product A) and SpillSens (Product B) distributed by HWM-Water and represented by Murgitroyd (the Observer). The Requester makes a primary request asking whether Product A and Product B, in combination, infringe the Patent under Section 60(1) of the Patents Act 1977 (the Act). The Requester makes a secondary request asking whether Product A, in isolation, infringes the Patent under Section 60(2) of the Act.
- 2. The Patent was filed 21<sup>st</sup> October 2005 having an earliest priority of 26<sup>th</sup> January 2005. The patent was granted 24<sup>th</sup> February 2010 and remains in force.
- 3. The request provides several references;

Reference A: https://hwmglobal.com/is-log

Refence B: https://www.hwmglobal.com/spillsens

Reference C: SpillSens product brochure downloaded from <a href="https://www.hwmglobal.com/uploads/brochures/Product%20Four%20Page%2">https://www.hwmglobal.com/uploads/brochures/Product%20Four%20Page%2</a> <a href="https://www.hwmglobal.com/uploads/brochures/Product%20Four%20Page%2">https://www.hwmglobal.com/uploads/brochures/Product%20Four%20Page%2</a> <a href="https://www.hwmglobal.com/uploads/brochures/Product%20Four%20Page%2">https://www.hwmglobal.com/uploads/brochures/Product%20Four%20Page%2</a> <a href="https://www.hwmglobal.com/uploads/brochures/Product%20Four%20Page%2">https://www.hwmglobal.com/uploads/brochures/Product%20Four%20Page%2</a> <a href="https://www.hwmglobal.com/uploads/brochures/Product%20Four%20Page%2">https://www.hwmglobal.com/uploads/brochures/Product%20Four%20Page%2</a> <a href="https://www.hwmglobal.com/uploads/brochures/Product%20Four%20Page%20P

Reference D: Waste water product brochure, downloaded from <a href="https://www.hwmglobal.com/uploads/brochures/Waste%20Water%20Brochure%20%28Summer%202021%29.pdf">https://www.hwmglobal.com/uploads/brochures/Waste%20Water%20Brochure%20%28Summer%202021%29.pdf</a>

Reference E: Screen captures of a video found at https://www.youtube.com/watch?v=5P7mWtwjvnc

4. Observations were received 16<sup>th</sup> March 2022 and observations in reply were received 28<sup>th</sup> March 2022. The observations were received late however an

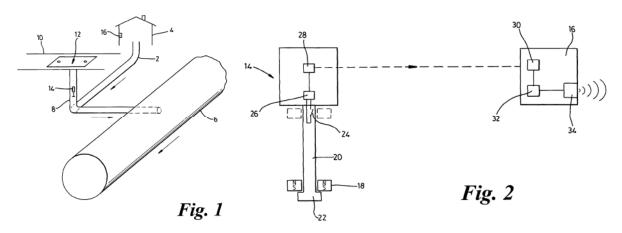
extension of time had been sought and granted.

# **Preliminary matters**

- 5. The observations filed 16th March 2022 assert that the Patent is invalid due to a lack of novelty. However, it is noted that no supporting evidence is provided. Nevertheless, Section 74A of the Act provides for the procedure where the Comptroller can issue, on request, non-binding opinions on questions of validity relating to novelty and inventive step, and on questions of infringement. Any observations should be confined to the issues raised by the request and should not broaden the scope of the opinion by raising new issues. Consequently, if the observer wishes to explore validity issues not raised by the requestor then they must file a separate request.
- 6. I will therefore not consider the validity of the patent at this time.
- 7. The request additionally asks whether Product A and Product B infringe the Patent as set out in dependent claims 2, 3, 8, 6 and 9 of the Patent. Rule 94 reads;
  - 94.—(1) The comptroller shall not issue an opinion if—
  - (a) the request appears to him to be frivolous or vexatious; or
  - (b) the question upon which the opinion is sought appears to him to have been sufficiently considered in any relevant proceedings.
  - 8. The validity of the Patent is not in question therefore if I find that the Product(s) infringe the main claims it is not necessary for me to consider later claims. If the Product(s) do not infringe the main claims then, as claims 2, 3, 8, 6 and 9 depend on the main claims, the Product(s) will not infringe the Patent regardless to whether they embody the features of these dependent claims. There is no question, at this point, in regard to the validity of the main claims and therefore specific consideration of the dependent claims is purely academic and considered to be frivolous. I have therefore set aside any consideration of the dependent claims.

#### The Patent

- 9. The Patent is entitled 'Drain blockage warning system capable of sending a warning directly to a mobile phone' and relates to a device and method for detecting a blockage in a drainage system and transmitting a signal over a mobile telephone communications network. The Patent provides an early warning system of a possible downstream blockage in a pipe.
- 10. The device, illustrated in figures 1 and 2 below, comprises a detection unit 14 comprising a means for detecting rising fluid level in a drainage system, arranged in the drainage system, and a transmitter 28 configured to transmit a signal.



- 11. In the embodiment illustrated above the means for detecting rising fluid is provided by a magnetised captive float 18 that actuates a switch 24 when lifted by rising fluid levels in the drainage system. Actuation of the switch is received by a processor 26 and transmitted by transmitter 28 to a remote unit 16, such as a mobile telephone.
- 12. The patent has two independent claims and two omnibus claims. Claim 1, adopting the references used by the Requester reads;
  - 1a A warning system comprising a detection unit arranged to be located within a drainage system,
  - 1b the detection unit comprising a detection device
  - 1c and a transmitter.
  - 1d wherein the detection unit is arranged to detect a rising fluid level in the drainage system
  - 1e and in response to transmit a warning signal over a mobile telephone network
  - 1f to a warning device which comprises a mobile phone.
- 13. Claim 10 reads;

A method of detecting a blockage in a drainage system, comprising detecting a rising fluid level in the drainage system by a detector unit and transmitting a signal in response thereto, over a mobile telephone network.

## The Products

14. Product A is an ATEX¹ certified data logger comprising Narrowband Internet of Things (NBIoT) and 2G cellular telemetry. Product A is compatible with a variety of sensors, including product B as well as ultrasonic sensors, capacitance sensors and depth transducers. Product A is additionally certified for use in Zone 0 hazardous

<sup>&</sup>lt;sup>1</sup> ATEX is the name commonly given to the two European Directives for controlling explosive atmospheres: Directive 99/92/EC & Directive 2014/34/EU

areas<sup>2</sup>.

15. Product B is a multialarm digital float sensor which attaches to product B and is installed at a critical height inside a sewer chamber. When the sewer level rise past a pre-determined level, the contents of the sewer disturbs the sensor causing actuation of a tilt sensor.



- 16. Both products, shown in the figure above, with product A on the left and Product B on the right, operate in association with a dedicated user portal SpillGuard such that, when the tilt sensor of product B reaches a specified angle, product B uses NBIoT, or 2G, cellular telemetry to transmit alert messages to the user portal.
- 17. It is not clear from the references provided in the request how SpillGuard is presented although it seems to be browser/app based hosted on a desktop, laptop or tablet/phone as shown at page 9 and 11 of reference D.

#### Claim construction

18. Before considering the documents put forward in the request I will need to

<sup>&</sup>lt;sup>2</sup> "The zones with gas or vapor explosion hazard are indicated by zone 0, 1 or 2. An Atex zone 0 place is characterised by a continuously explosive atmosphere. The air is mixed with dangerous substances, like a form of gas, vapour or mist." ATEX industries, <u>Atex Proof</u> - <u>Atexindustries</u>

construe the claims of the patent following the well-known authority on claim construction which is Kirin-Amgen and others v Hoechst Marion Roussel Limited and others [2005] RPC 9. This requires that I put a purposive construction on the claims, interpret it in the light of the description and drawings as instructed by Section 125(1) and take account of the Protocol to Article 69 of the EPC. Simply put, I must decide what a person skilled in the art would have understood the patentee to have used the language of the claim to mean.

19. Section 125(1) of the Act states that:

For the purposes of this Act an invention for a patent for which an application has been made or for which a patent has been granted shall, unless the context otherwise requires, be taken to be that specified in a claim of the specification of the application or patent, as the case may be, as interpreted by the description and any drawings contained in that specification, and the extent of the protection conferred by a patent or application for a patent shall be determined accordingly.

20. And the Protocol on the Interpretation of Article 69 of the EPC (which corresponds to section 125(1)) states that:

Article 69 should not be interpreted in the sense that the extent of the protection conferred by a European patent is to be understood as that defined by the strict, literal meaning of the wording used in the claims, the description and drawings being employed only for the purpose of resolving an ambiguity found in the claims. Neither should it be interpreted in the sense that the claims serve only as a guideline and that the actual protection conferred may extend to what, from a consideration of the description and drawings by a person skilled in the art, the patentee has contemplated. On the contrary, it is to be interpreted as defining a position between these extremes which combines a fair protection for the patentee with a reasonable degree of certainty for third parties.

- 21. I consider the person skilled in the art to be a designer and manufacturer of drainage monitoring systems including associated telematics.
- 22. The single point of contention in relation to claim construction appears to be restricted to element 1e of claim 1 relating to; '...and in response to transmit a warning signal over a mobile telephone network...'.
- 23. The Observer contend that the Product(s) transmit to a server for presentation, interpterion and other functions, wherein the server provides information to the dedicated user portal SpillGuard. The Observer acknowledges that SpillGuard may be used to forward alarm messages via email or SMS, however they argue that "...this is not the same as the detection unit sending a warning signal over a mobile telephone network as it is the server, which is a separate entity to the detection unit, which forwards the alarm messages."
- 24. The Requester argues that element 1e ought to be construed as providing a network with or without an intermediary server or other device being present.

- 25. It is my understanding that, at the time of filing of the patent, a mobile telephone network would include any known local area network (LAN) or wider area network (WAN) and would include relevant intermediary devices such as terminals, processors and servers where necessary. I am unable to identify anything in the Patent that would justify deviating from a normal interpretation of the term limiting the term to a direct communication link between a transmitter, associated with a detector unit, and a warning device or other end terminal.
- 26. There is no contention over how the remainder of claims 1 or 10 ought to be construed and I find the language of the claims plain, presenting no further issues regarding construction.

# Infringement – the law

- 27. Section 60(1) of the Act states, in respect to substantive infringement, that:
  - (1) Subject to the provisions of this section, a person infringes a patent for an invention if, but only if, while the patent is in force he does any of the following things in the United Kingdom in relation to the invention without the consent of the proprietor of the patent, that is to say-
    - (a) Where the invention is a product, he makes disposes of, offers to dispose of, uses or imports the product or keeps it whether for disposal or otherwise:
    - (b) Where the invention is a process, he uses the process or he offers it for use in the United Kingdom when he knows, or it is obvious to a reasonable person in the circumstances, that its use there without the consent of the proprietor would be an infringement of the patent;
    - (c) Where the invention is a process, he disposes of, offers to dispose of, uses or imports any product obtained directly by means of that process or keeps any such product whether for disposal or otherwise.
  - (2) Subject to the following provisions of this section, a person (other than the proprietor of the patent) also infringes a patent for an invention if, while the patent is in force and without the consent of the proprietor, he supplies or offers to supply in the United Kingdom a person other than a licensee or other person entitled to work the invention with any of the means, relating to an essential element of the invention, for putting the invention into effect when he knows, or it is obvious to a reasonable person in the circumstances, that those means are suitable for putting, and are intended to put, the invention into effect in the United Kingdom.
- 28. In the Supreme Court in Actavis v Eli Lilly<sup>3</sup> Lord Neuberger stated that the problem of infringement is best approached by addressing two issues, each of which is to be considered through the eyes of the notional addressee of the patent in suit, i.e. the person skilled in the relevant art. Those issues are:

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<sup>&</sup>lt;sup>3</sup> Actavis UK Limited and others v Eli Lilly and Company [2017] UKSC 48

- (i) does the variant infringe any of the claims as a matter of normal interpretation; and, if not,
- (ii) does the variant nonetheless infringe because it varies from the invention in a way or ways which is or are immaterial?
- 29. If the answer to either issue is "yes", there is infringement; otherwise, there is not.
- 30. Section 60(2) of the Act states, in respect to contributory infringement, that:

Subject to the following provisions of this section, a person (other than the proprietor of the patent) also infringes a patent for an invention if while the patent is in force and without the consent of the proprietor, he supplies or offers to supply in the United Kingdom a person other than a licensee or other person entitled to work the invention with any of the means, relating to an essential element of the invention, for putting the invention into effect when he knows, or it is obvious to a reasonable person in the circumstances, that those means are suitable for putting, and are intended to put, the invention into effect in the United Kingdom.

31. In the Court of Appeal in Grimme v Scott<sup>4</sup> Jacob LJ set out the following criteria for interpreting the requirements of s.60(2) for knowledge and intention:

"In short, the knowledge and intention requirements of ... section 60(2) are satisfied if, at the time of supply or offer of supply, the supplier knows, or it is obvious in the circumstances, that ultimate users will intend to put the invention into effect. That is to be proved on the usual standard of balance of probabilities. It is not enough merely that the means are suitable for putting the intention into effect (for that is a separate requirement), but it is likely to be the case where the supplier proposes or recommends or even indicates the possibility of such use in his promotional material."

## **Arguments and analysis**

- 32. The Requester alleges that products A and B in unison directly infringe the Patent, and further alleges that Product A, in isolation, indirectly infringes the Patent.
- 33. The Observer contests that the Product(s) do not "...transmit a warning signal over a mobile telephone network...", as required by element 1e of claim 1, and additionally present in claim 10. The Observer goes on to argue that, instead, the Product(s) transmit a signal to a server (the user portal SpillSens) which may forward alarm messages via email or SMS. In their argument, the Observer claims that the server, which transmits an email or SMS over a mobile phone network, is distinct from a detection unit transmitting a similar signal over a mobile phone network.
- 34. The Requester, in response, asserts that the use of an intermediary server between the detection device and the warning device falls within the scope of the

<sup>&</sup>lt;sup>4</sup> Grimme v Scott [2010] EWCA Civ 1110

claim.

- 35. It is my understanding, as set out at paragraph 25 above, that a mobile telephone network as required by both claims 1 and 10, is a communications network that wirelessly links two end nodes via some wireless protocol or interface. The link between the two end nodes may be facilitated directly or indirectly using any number of intermediary servers or base stations; this is entirely typical of mobile telephone networks.
- 36. The Product(s) may use a mobile telephone network to transmit an SMS between the dedicated user portal SpillGuard and a user device. Furthermore, Product A is configured to transmit a signal over both NBIoT and 2G networks to the user portal, both networks are understood to be mobile telephone networks. Therefore, in my opinion, the Product(s) clearly demonstrate that they are configured to "...transmit a warning signal over a mobile telephone network..." as a matter of normal interpretation. There is no contention regarding the remaining elements 1a-1d, 1f of claim 1 or the remaining features of claim 10.
- 37. Therefore, the answer to the first Activis question is 'yes', it is not necessary for me to consider the second Activis question. The Product(s) in my opinion directly infringe the patent.
- 38. The Observer provides no arguments in respect to indirect infringement.
- 39. Product A does not comprise a detection device as require by claim 1, or a detector unit as required by claim 10. Product A is, however, configured to transmit a signal in response to a signal indicative of the detection of a rising fluid level in a drainage system. Therefore, the only distinction between Product A and the Patent is in relation to the absence of an associated detection device.
- 40. References A-D are promotional material produced by HWM-Water. Reference A states "IS Log is compatible with a variety of sensors, including SpillSens", whilst reference B reads "SpillSens can be connected to, and is powered by, a variety of HWM data loggers. For an intrinsically safe, robust and cost-effective solution we recommend IS Log.". Furthermore, page 2 of Reference C illustrates Product A alongside Product B and the dedicated user portal SpillGuard, whilst page 11 of Reference D illustrates both products A and B in a drain environment. Therefore, references A-D each teach that Product A is not only suitable for putting the invention of the Patent into effect but is explicitly intended for this purpose.
- 41. It follows where HWM-Water has recommended Product A to be used with product B then the knowledge and intention requirements of section 60(2) of the act are satisfied. Therefore, I am of the opinion that product A, in isolation, indirectly infringes the Patent.

## **Opinion**

42. It is my opinion that the Products in combination, and Product A in isolation, fall within the scope of claim 1 and claim 10 as a matter of normal interpretation.

Accordingly, it is my 60(1)(a) or Section	opinion that Product(s) infringe GB 2423365 under Section 60(2) of the Act.	on
Sean OConnor		
Examiner		
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# NOTE

This opinion is not based on the outcome of fully litigated proceedings. Rather, it is based on whatever material the persons requesting the opinion and filing observations have chosen to put before the Office.