

**OPINION UNDER SECTION 74A**

Patent	GB2405921
Proprietor(s)	The Linden Shield Limited
Exclusive Licensee	-
Requester	Mr Sean Linden
Observer(s)	Peerless Gas Controls, Leaksafe
Date Opinion issued	20 March 2019

**The request**

1. Mr Linden has requested an opinion on whether Leaksafe Solutions Wireless Water Switch infringes GB2405921. GB2405921, the patent, was granted on 23 March 2007, and is currently in force.
2. Observations have been received from Mr Steve Crutchley of Peerless Gas Controls, and from Mrs Sarah Wakley of Leaksafe. Both of these observations include prior art, which the observers suggest might invalidate the granted Patent. Since this opinion request relates to infringement, I shall not be able to consider the question of validity, though of course it is open to either of the Observers to request an opinion on validity, if they so wish.
3. For completeness, I should perhaps note that there was an earlier opinion issued on this case in relation to validity.
4. Mr Linden has provided observations in reply, where he provides responses interleaved with the observations from Peerless Gas Controls and Leaksafe. That means that all of the response to Peerless Gas Controls and much of the response to Leaksafe’s observations focusses on the arguments made in relation to prior art and validity, which I shall not need to consider here. However, part of it does relate to the question of infringement, and I shall return to that part later.

**The Patent**

5. The Patent relates to a valve assembly for opening and closing a fluid transmission line. There are two independent claims which relate respectively to:
  1. *A fluid transmission line for transmitting fluid from a fixed supply to a fixed end user, the fluid transmission line comprising a safety valve*

*assembly which has a motor driven valve, a region for pressurised fluid, the region having an outlet, wherein the motor driven valve is arranged to be remotely, wirelessly, and electrically operable by a portable radio control fob.*

5. *A fluid transmission line for transmitting fluid from a fixed supply to a fixed end user, the fluid transmission line comprising a safety valve assembly which has a motor driven valve, a region for pressurised fluid, the region having an outlet, wherein the motor driven valve is arranged to be remotely, wirelessly, and electrically operable by a telephone.*
6. In Mr Linden's request, he makes reference to page 2 line 7 and 8 in suggesting that the aim of the present invention is to provide a valve assembly (for the closing and opening of a fuel line) which is wireless and remotely operable. He makes no reference to the WaterSwitch2 device providing a telephone connection, and having read the documentation provided, on the WaterSwitch2 device, I think that there is no suggestion of that using a telephone. That means the discussion in the request, observations and Mr Linden's reply focusses on claim 1. I think that I can therefore concentrate solely on claim 1, at least in the first instance.

### **Claim Construction**

7. In the earlier opinion, the examiner suggested that claim 1 is relatively straightforward and unambiguous. He suggested that it meant a fluid transmission line and valve having the stated features, with the valve capable of being actuated (opened or closed) by a radio control signal from a portable fob. Since that opinion, there has been new case law, principally *Actavis v Eli Lilly* [2017] UKSC 48 which has been confirmed in the High Court decisions in *Mylan v Yeda*<sup>1</sup> and *Actavis v Icos*.<sup>2</sup> I must therefore interpret claim 1 in the light of the descriptions and drawings as instructed by Section 125(1), in context and through the eyes of a person skilled in the art. That means what the person skilled in the art would have understood the patentee to be using the language of the claims to mean.
8. Leaksafe make reference to the passage in the earlier opinion that suggests that the remote fob should be construed as a portable radio control fob such as an automatic garage door actuator, noting that the earlier opinion examiner suggested this as one way in which a portable fob would be understood at the time. I think it is fair to say that this is only one example, and that key fobs, for example for cars or houses might equally be examples. As Leaksafe note, there are a couple of mentions of the fob in the description on pages 7 and 8 which suggest that:

*“The solar valve can be set up for a site engineer or petrol attendant to carry a fob button that in the event of ....dangerous conditions they would be able to close down the service by means of pointing the fob at the valve relay. “*

9. And that it is at least in one example a “key ring fob”.

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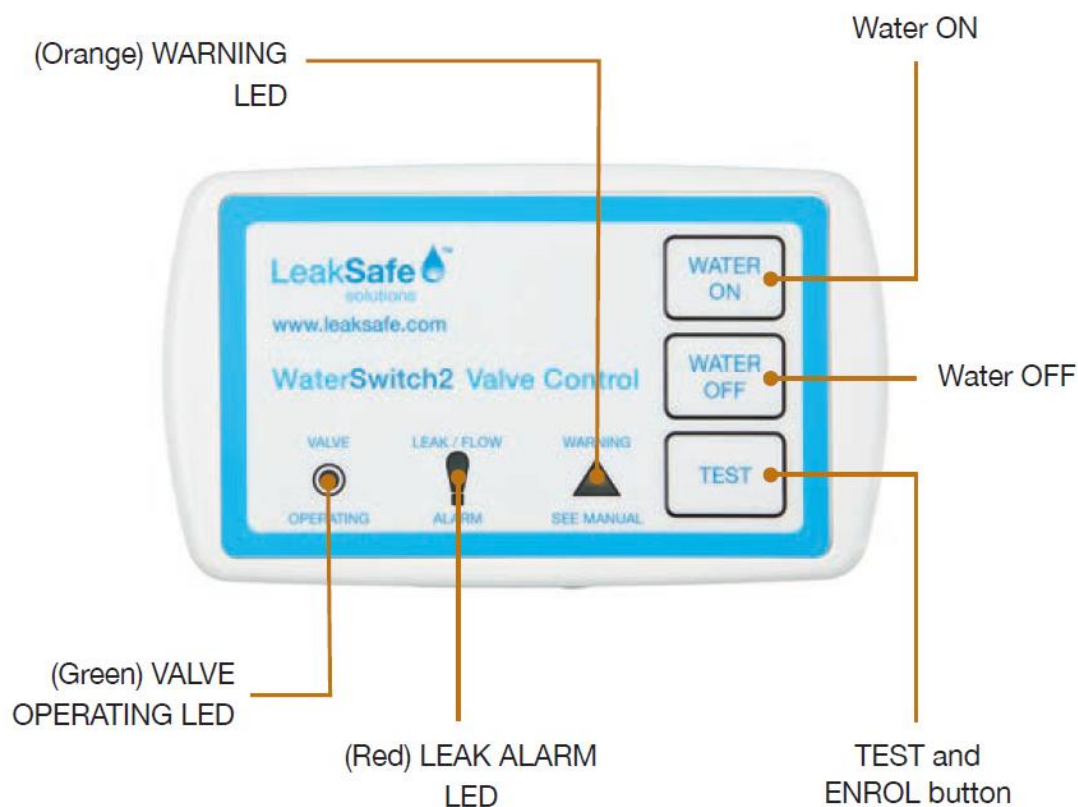
<sup>1</sup> *Generics UK Ltd v Yeda Research and Development Co. Ltd. & Anor* [2017] EWHC 2629 (Pat)

<sup>2</sup> *Actavis Group & Irs v ICOS Corp and Eli Lilly & Co* [2017] EWCA Civ 1671

10. Mr Linden in the request only discusses the question of the meaning of this term in the discussion of Leaksafe's WaterSwitch2, where he suggests that the fob is "a unit housing a button that can be pushed to send the wireless signal to the receiver to remotely activate the valve." In his observations in reply, Mr Linden suggests that a literal interpretation of the term fob as only being a key fob is too narrow. As I set out in paragraph 7 above, of course a literal interpretation is not appropriate, rather I should follow the construction process set out in Actavis.
11. I think that Mr Linden's construction of the term fob here is too broad, I think that the skilled man would have understood something more than that a fob is any unit housing a button that can be pushed to send a wireless signal. I believe that the fob is a device which is portable, perhaps attached to a key ring, but perhaps simply small enough that it might for example be carried in a pocket and/or easily hand held.

## The Product

12. Leaksafe, who are based in the UK, produce a valve control for a water pipe (shown in the following figure from the document Mr Linden has retrieved from: <https://www.leaksafe.com/assets/documents/WaterSwitch2.pdf>) using a remote switch.



13. As Mr Linden sets out, the switch is wireless and is paired with a leak detector transmitter, and the water control valve operates the motorised valve by receiving a

wireless signal from the Wireless switch or leak detector transmitter. Figure 6 shows the wireless switch:

Figure 6.



14. The installation guide suggests that the wireless switch can be installed up to 25m away (with a range extender if necessary) and can be screwed to a surface or standard black box, or fixed to the wall using the double sided adhesive fixing pads supplied.

## Infringement

15. Following the approach set out in *Actavis v Eli Lilly* [2017] UKSC 48, first, I should consider whether the product falls within the normal construction of the claims as I have construed them above.
16. Here, Leaksafe note a number of design differences with the Patent, that:
  - *Our control equipment and actuated valve are housed separately.*
  - *The valve we use is a 5 V DC motorised ball valve*
  - *We power our valve either by mains power (12V DC mains power transformer) or 4.5V DC battery (3 x AA batteries)*
  - *We do not have a removable joint/spring in our valve.*

- *Our valve does not have a region for pressurised fluid*
- *Does not have a safety outlet*
- *Does not operate based on bar pressure.*

17. Here Mr Linden argues that the Patent does not rely on these elements in totality, suggesting these are examples of how the concept can be achieved. It seems to me that the details of the power supply, the separation of valve and control, the use of a removable joint/spring, or bar pressure and motor voltage are just that – and the claim does not restrict the invention to those particular levels.

18. However, the use of a pressurised fluid and an outlet (not restricted to being a safety outlet), are required by the claim. There is also the question of the use of a portable radio control fob, as required in the claim.

19. So to take these three suggested differences in turn. First, is the water in the WaterSwitch2 system, a pressurised fluid? – yes, I think that it is, be that as a result of gravitational pressure or a pump, a standard water supply is a pressurised system, so I think that this criterion is met. Second, is there an outlet in the WaterSwitch2 system? - yes the valve has an inlet and outlet side, so again this criterion is met.

20. Finally, I come to the question of whether the switch amounts to “a portable radio control fob.” In Leaksafe’s observations where they state:

*Leaksafe do not use a portable key ring type radio control fob. We do have an optional wireless On/Off and delay timer switch that is designed to be screwed to a wall or electrical back box and is the same size as a light switch. It is neither portable nor a fob in the commonly accepted sense. Instructions for testing the switch from its intended location and permanent mounting of the wireless on/off switch are found in our Installation Manual (section 2.3).*

21. Leaksafe suggest that the switch is neither portable nor a fob, and I have some sympathy for this argument, as a wall mounted switch cannot be said to be portable. Even in the examples described of it being installed, or mounted to a box, I do not see a suggestion that it is envisaged that the switch would be carried around by an operative.

22. I do not therefore believe that the WaterSwitch2 device falls within that normal construction of claim 1 (or of claim 5).

23. Secondly, I should turn to the question of equivalents, where in paragraph 66 of the Actavis v Eli Lilly decision, the test was reformulated as the following:

- i) *Notwithstanding that it is not within the literal 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, ie the inventive concept revealed by the patent?*
- ii) *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?*

- iii) *Would such a reader of the patent have concluded that the patentee by the nonetheless intended that strict compliance with the literal meaning of the relevant claim(s) of the patent was an essential requirement of the invention?*

24. However, I note also what was said at the end of that paragraph:

*In order to establish infringement in a case where there is no literal infringement, a patentee would have to establish that the answer to the first two questions was “yes” and that the answer to the third question was “no”.*

25. Mr Linden has not presented an argument that the wall switch amounts to an equivalent to a telephone or to fob, nor whether it does so in a way that meets these three questions. I am therefore hesitant to say too much about this question. However, my provisional view would be that using a wall switch might achieve the same result in terms of remote control of the valve, but it does not provide the portability that is also required by the claim. This seems to me to be a materially different objective to the claimed invention.

## **Opinion**

26. It is therefore my opinion that the Leaksafe product, WaterSwitch2, as illustrated in the documents supplied in Mr Linden’s request, does not infringe the patent, GB2405921.

## **Application for review**

27. Under section 74B and rule 98, the proprietor may, within three months of the date of issue of this opinion, apply to the comptroller for a review of the opinion.

Robert Shorthouse  
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.*