The request

1. The comptroller has received a request from Swindell & Pearson Ltd on behalf of Intatec Limited to issue an opinion as to whether the X-MAG (PRO) product of INTATEC Limited infringes claim 1 of EP 2964357 B1 (The Patent). In the event that the X-MAG (PRO) is considered to infringe claim 1, an opinion is requested as to whether the Patent is valid based on four patent documents. The requester has supplied five documents detailing the X-MAG (PRO) product and has also supplied a letter filed with the EPO by the Patent holder during prosecution of the application.

2. Observations were received from Bryers (“the observer”) on behalf of the patent proprietor, and observations in reply were subsequently received from Swindell & Pearson.

The Patent

3. The Patent relates to an apparatus for the treatment of fluid in a fluid circuit, such as closed circuit central heating system. A problem with this type of closed circuit system is the circulating fluid can become contaminated. The apparatus is usable for dosing the circulating fluid of the closed circuit system with an additive for preventing or re-solving contamination build up, and also usable (between dosing events) as a filter for the circulating fluid. The apparatus comprises a vessel 102 with a fluid inlet port 104 in a side wall 105 and a fluid outlet port 106 in the lower end 107 of the vessel. The inlet and outlet ports can be connected to inflow 201 and return 203 conduits respectively. The outlet port can also be connected to a drain conduit 205. The upper end 103 of the vessel has a removable lid 108. A permanent magnet collector 112 is also removably located in the vessel. Figure 2 of the Patent is reproduced below:
4. Claim 1 of the Patent reads:

Apparatus (101) arranged to be used in the treatment of fluid in a fluid circuit of a heating or cooling system, said apparatus (101) comprising:

a vessel (102) defining an open upper end (103) and comprising a lower end (107) providing an internal floor of the vessel (102), the vessel (102) defining a circulating fluid inlet port (104) in a side wall (105) thereof, for connection to a circulating fluid inflow conduit (201) of the fluid circuit, and a fluid outlet port (106) in the lower end (107) thereof, for connection to a circulating fluid return conduit (203) of the fluid circuit and a drain conduit (205), said open upper end (103) of said vessel (102) provided with a removable lid (108) defining a dosing port (109) and an air vent port (110); and

a permanent magnet collector (112) arranged to collect magnetic particles on an external collection surface (113) thereof, said permanent magnet collector (112) removably locatable within said vessel (102);

wherein, in use, fluid flowing through the vessel (102) from a circulating fluid inflow conduit (201) of the fluid circuit to a circulating fluid return conduit (203) of the fluid circuit enters the vessel (102) through the inlet port (104) in the side wall (105) of the vessel (102) and exits the vessel (102) through the fluid outlet port (106) in the lower end (107) of the vessel (102), characterized in that

the fluid outlet port (106) is open to the internal floor of the vessel (102).
Claim Construction

5. Before considering the issues in the request I need to construe claim 1 of the Patent, that is to say I must interpret it in the light of the description and drawings as instructed by Section 125(1). In doing so I must interpret the claims in context through the eyes of the person skilled in the art. Ultimately the question is what the person skilled in the art would have understood the patentee to be using the language of the claims to mean. This approach has been confirmed in the recent decisions of the High Court in Mylan v Yeda\(^1\) and the Court of Appeal in Actavis v ICOS\(^2\).

6. I consider the person skilled in the art to be a manufacturer or designer of fluid treatment systems.

7. In general I consider that claim 1 can be readily construed. However, there are a few points which need to be considered. In particular, I believe the person skilled in the art would construe the feature of

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\text{“wherein, in use, fluid...exits the vessel (102) through the fluid outlet port (106) in the lower end (107) of the vessel (102), characterised in that the fluid port (106) is open to the internal floor of the vessel”}
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such that fluid exiting the vessel to a circulating fluid return conduit flows through an opening in the internal lower surface of the vessel. This arrangement is shown in all the figures of the vessel in the Patent.

Infringement

8. Section 60 of the Act states 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.

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\(^{1}\) Generics UK Ltd (t/a Mylan) v Yeda Research and Development Co. Ltd & Anor [2017] EWHC 2629 (Pat)

\(^{2}\) Actavis Group & Ors v ICOS Corp & Eli Lilly & Co. [2017] EWCA Civ 1671
(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.

9. The request has only discussed whether claim 1 is infringed by the X-MAG (PRO), and my opinion shall also be limited to consideration of claim 1.

10. As claim 1 relates to a product, only part (a) of section 60(1) is relevant. Section 60(1)(a) and 60(2) cover the certain actions to which the request for opinion on infringement is addressed.

11. In the Supreme Court in Actavis v Eli Lilly 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:

   (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?

12. If the answer to either issue is “yes”, there is infringement; otherwise there is not.

   **X-MAG (PRO)**

13. The alleged infringing X-MAG (PRO) product is an apparatus for fluid treatment which comprises a vessel with inlet/outlet ports in the side walls, a removable lid with a chemical dosing point and a drain outlet at the bottom of the vessel. The vessel houses a magnetic filter and filtration basket. Fluid flows through the vessel from one of the top inlet ports in the side of the vessel to one of the bottom outlet ports in the side. Fluid passing through the X-MAG (PRO) is filtered by the magnetic filter and filtration basket. Example diagrams of the X-MAG (PRO) provided by the requester are reproduced below.

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3 Actavis UK Limited and others v Eli Lilly and Company [2017] UKSC 48
AUTOMATIC AIR VENT VALVE: to eliminate air at the filling stage, complete with the ball shut-off valve.

DOSSAGE POINT: to add treatment fluids. Easily accessible. Plugged when supplied G1/2" plug.

MAGNETIC FILTERING UNIT: Powerful neodymium magnet to capture ferrous particles such as rust that form due to corrosion during normal operation of a system, metal debris, processing residues, etc. The magnet is protected from direct contact with water by a removable conduit that facilitates cleaning the filter. For further details, see the "Maintenance guide" section of this data sheet.

SUDDEN SECTION INCREASE: It causes the fluid to slow down. The settling of particles due to the effect of gravity is favoured.

WALL FIXING BRACKET:

FILTERING MESH: Stainless steel stretched mesh (100 micron filtration degree) contained in a basket that can be easily pulled out from above. This is equipped with an automatic closing shifter, located at the bottom to prevent impurities from leaking during maintenance.

ACCUMULATION ZONE: Large and very far from the flow passage, resulting in less frequent maintenance work.

CONNECTION Closure CAP NOT USED.

DRAIN BALL VALVE: Size 3/4".

Dirty water

Clean water
Does the X-MAG (PRO) product infringe?

14. The requester has argued that the X-MAG (PRO) has no outlet open to the internal floor of the vessel. Instead it comprises two outlet ports in the side walls of the vessel and a drain valve 6. The requester states that, during use, the drain valve will always remain closed to ensure that fluid passing through the product is filtered and that any debris remains there. Furthermore, the requester notes that the drain valve would not be suitable for connecting a circulating fluid return conduit as any attempt to connect the conduit to the drain in use would result in the fluid exiting the product containing sludge, due to the fluid not being cleaned by the metallic filter. The requester further notes that the drain valve is a different size to all but one of the inlet/outlet X-MAG (PRO) products.

15. The requester has also made numerous references to a letter submitted by the Patent holder during prosecution of the application at the EPO. This letter contains discussion of why the claims (as now granted) were considered novel and inventive by the patentee in light of two patent documents (D1&D6). The requester has argued that if the Patent is novel and inventive over these patent documents (D1&D6), as well as two further documents (D2&D3), then the X-MAG (PRO) cannot infringe the Patent.

16. The observer argues that the X-MAG PRO product has an outlet that is open to the internal floor of the vessel and references, in particular, Annex 3 pages 8&9 (the diagram from page 8 is reproduced below) of the submitted documents. Furthermore, the observer disagrees that the bottom outlet port of the X-MAG (PRO) is only suitable for draining the chamber. They argue that if the circulating fluid enters through inlet 1, the fluid exiting the drain valve would have been cleaned by the magnetic filter 3, and that it is not necessary for the fluid to have passed through the mesh of metallic filter 4 to meet the requirements of claim 1. They further note that ‘sludge’ would be collected by the magnetic filter 3 and that it is possible for ‘sludge’ forming within the magnetic filter basket of the X-MAG (PRO) to flow through the holes and back into the system.

![Diagram of the X-MAG (PRO) product](image-url)
17. So does the X-MAG (PRO) infringe claim 1 as a matter of normal interpretation? It is my opinion that the X-MAG (PRO) is not apparatus which comprises, in use, fluid flowing through the vessel to a circulating fluid return conduit which exits the vessel to an outlet port which is open to the internal floor of the vessel. It is clear from all the submitted documents (A1-A5) that in use during fluid circulation the fluid flows through an outlet port in the side of the vessel.

18. Furthermore, I am of the opinion that the X-MAG (PRO) is not a variant which differs from the invention in a way which is immaterial. I consider that the idea of using the drain 6 of the X-MAG (PRO) during fluid circulation, which is neither disclosed or suggested in the documents A1-A5, is not how the product works and would (at the very least) lead to the product not collecting contaminants effectively.

19. It should be noted that my opinion is based on the Patent specification only. Infringement can be readily assessed based on claim 1 (as interpreted in light of the description and figures). Therefore reference to the prosecution history is not considered appropriate or necessary.

Opinion

20. In my opinion the X-MAG (PRO) product, as shown and discussed in the documents filed with the request, does not infringe claim 1 of the Patent. As claim 1 is not infringed by the product, I have not considered the validity of the Patent.

Application for review

21. 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.

Ben Widdows
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.