Patents Act 1977 **Opinion Number** **19/14**

OPINION UNDER SECTION 74A

Patent	GB 2491361 B
Proprietor(s)	Neil Johnson
Exclusive Licensee	
Requester	Neil Johnson
Observer(s)	
Date Opinion issued	15 December 2014

The request

1. The comptroller has been requested by Mr Neil Johnson ("the Requester") to issue an opinion as to whether the actions of Eclipse Magnetics Ltd regarding their heating system filter ("the Product") constitute a direct infringement of patent GB2491361 ("the Patent") under section 60(1) of the Patents Act 1977.

2. An initial request was received from the Requester on 15 September 2014 when the Requester claimed that the actions of three parties in relation to their products infringe the Patent. The request included a statement and accompanying documents substantiating these claims. The Requester was subsequently asked by the Office to restrict his request to a single product and also to provide more information regarding the alleged infringement. In response the Requester filed a further statement on 1 October 2014 requesting that the opinion should be limited to actions related to the Product and providing some further details. With the initial request, the Requester included a leaflet describing the Product and also extracts from Eclipse Magnetics' patent application, publication number GB2500908 A.

Observations & Observations in reply

3. No observations have been filed.

The Patent

4. The Patent entitled 'Magnetic filter apparatus' was filed on 31 May 2011, granted on 15 May 2013 and is still in force.

5. The Patent relates to a filter apparatus for the removal of magnetic and non-

magnetic particulate impurities from fluid flowing through a central heating system. The filter apparatus can be understood by referring to Figure 10 of the Patent reproduced below which depicts a side-on view of the apparatus. The filter apparatus 1000 comprises a housing formed of a housing back section 1002 and housing main body 1001. An inlet and outlet 1011 are located at opposing ends of the housing back section 1002 such that the filter apparatus can be fitted to an existing central heating system. The flow of fluid in and out of the filter apparatus causes a flowing motion directing fluid flow towards a magnet 1006 for filtration of magnetic impurities. The magnet 1006 is formed from individual magnets stacked on top of one another to form a single tubular rod-like structure. The magnet is inserted and retained within a magnet housing 1004 over which is fitted a protective magnet housing sleeve 1016. Any magnetic particulates in the fluid are attracted to and stick to this sleeve which can be removed for cleaning. The fluid also flows through a secondary filter 1008 which includes a grid of pores/channels to collect and filter both magnetic and non-magnetic particulates.

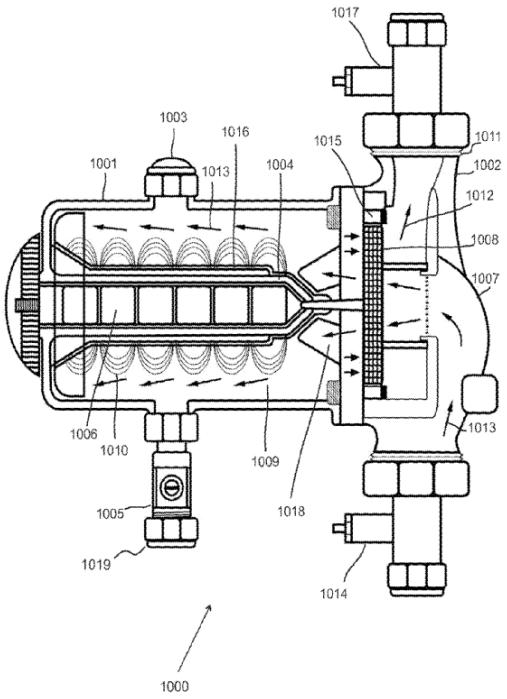


Fig. 10

6. The Patent has 25 claims with a single independent claim, claim 1, that reads as follows:

> *1.A magnetic filter apparatus comprising:*
> *a housing comprising an inlet for introducing a fluid, an outlet for removal of said fluid and a magnet housing locatable within a plastic sleeve; and*
> *a magnet locatable for encasement within said magnet housing configured to attract and filter magnetic particulates from said fluid flowing through said housing;*
> *wherein said magnetic filter apparatus further comprises a secondary filter configured to separate non-magnetic particulates from a suspension of said fluid flowing through said housing.*

Infringement-the law

7. Section 60 Patents Act 1977 governs what constitutes infringement of a patent; the relevant part of section 60(1) reads as follows:

> *Subject to the provision 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, ...*
> *(c) where the invention is a process, ...*

8. In order to decide whether there is any direct infringement of claim 1 of the Patent, I shall follow the usual approach in opinions of deciding whether or not the Product falls within the scope of claim 1. In other words I will determine whether or not the Product has all the features defined in claim 1 of the Patent.

Claim construction

9. Before I can do this I need to construe claim 1 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 claim, interpret it in the light of the description and drawings as instructed by section 125(1) of the Act 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.

10. I consider the person skilled in the art to be a person, or a team of persons, familiar with the design and manufacture of filtering apparatus for central heating systems.

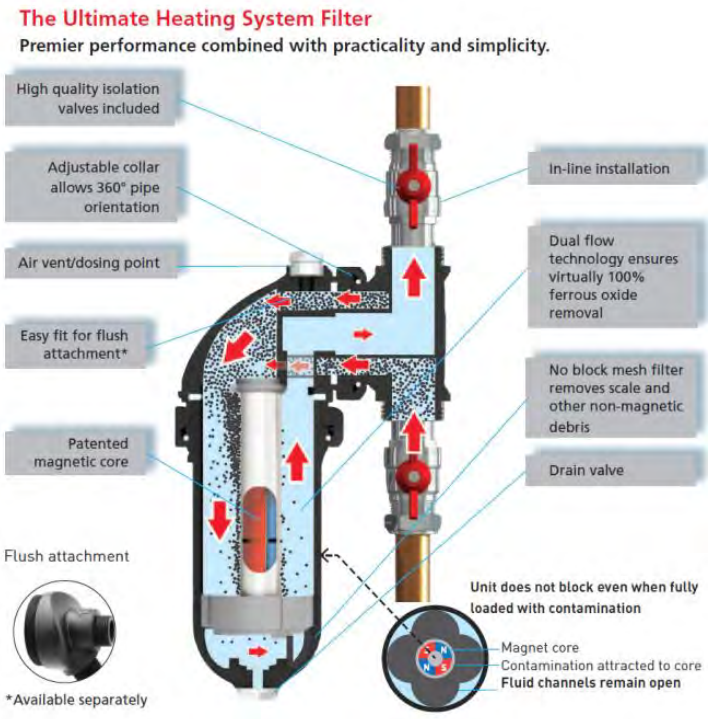
11. Claim 1 is generally straightforward to construe. It is useful to break down and rearrange claim 1 into a number of features:

> *(i)A magnetic filter apparatus comprising:*
> *(ii) a housing comprising an inlet for introducing a fluid, an outlet for removal of said fluid; and*
> *(iii) a magnet configured to attract and filter magnetic particulates from said fluid flowing through said housing;*
> *(iv) [the magnet] locatable for encasement within [a] magnet housing;*
> *(v) [the] magnet housing locatable within a plastic sleeve;*
> *(vi)wherein said magnetic filter apparatus further comprises a secondary filter configured to separate non-magnetic particulates from a suspension of said fluid flowing through said housing.*

12. I will take each feature of the claim in turn and decide whether the Product exhibits that feature or not and deal then with any term that requires particular consideration regarding construction.

Comparison of the Product with claim 1

13. The Product called the BoilerMag (RTM) is a filter apparatus designed to be installed within existing pipework of a central heating system. The Product is described in a leaflet provided by the Requester and also available on Eclipse Magnetics' website. According to the leaflet, the Product is used to extract both magnetic and non-magnetic debris. A diagram from the leaflet illustrating the Product is reproduced below. From this we see that fluid enters the apparatus, flows around a 'magnetic core' and then returns to the pipework of the heating system.



14. Regarding feature (i) of claim 1, the Product is clearly a magnetic filter apparatus and therefore exhibits this feature.

15. The Product also clearly comprises a housing with an inlet and outlet to allow fluid to enter and exit as required by feature (ii) of claim 1.

16. As mentioned above, the Product has a magnet which is referred to by the term 'magnetic core' in the diagram. It is clear from the diagram that fluid flows past the magnet with, we are told, 'contamination attracted to core'. The diagram schematically illustrates particulates being attracted to and thus being filtered by the magnet. This is sufficient in my view to satisfy feature (iii) of claim 1.

17. From the diagram the magnet appears to be encased in a tubular structure. This is supported by the 'Technical Data' section on Eclipse Magnetics' website which refers

in relation to the magnet to a stainless steel housing. Therefore in my opinion the Product also exhibits feature (iv) of claim 1.

18. Feature (v) requires the magnet housing to be locatable within a plastic sleeve. According to the Patent the sleeve fits securely over the top of the magnet housing. It serves in particular as a protective barrier to prevent the magnet housing from deteriorating. Looking closely at the diagram in the leaflet there is no sign of any additional structure surrounding the magnet housing of the Product. It appears that the fluid is in direct contact with the outer surface of this stainless steel housing. Moreover examining the rest of the related part of the website, I can see no reference to a sleeve or anything else surrounding the magnet housing. Therefore in my view the Product does not have feature (v) of claim 1.

19. The Requester was particularly concerned that the Product seems to include feature (vi), a secondary filter for separating non-magnetic particulates. He notes that at the bottom of the main housing of the Product there is located a 'No block mesh filter' which we are told 'removes scale and other non-magnetic debris'. Fluid appears to flow through this as it makes its way round the housing. This filter would seem to separate non-magnetic particulates from the fluid and therefore I agree performs the function required by feature (vi) of claim 1. Thus I consider the Product to also have feature (vi) of claim 1.

20. The Requester brought to my attention Eclipse Magnetics' patent application published as GB2500908 A. The application relates to a 'magnetic filtration device' which appears to be very similar to the Product discussed above and is therefore worthy of some consideration. The device as described in the patent application also exhibits features (i)-(iv) and (vi) of claim 1. In particular regarding feature (iii) the device includes a magnet in the form of 'an elongate magnetic core formed from a plurality of magnetic columns that extend along the length of the core'. Further, regarding the magnet housing of feature (iv), 'the device comprises an elongate tube to house the magnetic core'. However, there is no mention anywhere in the specification of a sleeve or anything similar covering the tube. Therefore the device described in the patent application also fails to exhibit feature (v) of claim 1.

21. In summary, in my view, the Product exhibits features (i)-(iv) and (vi) of claim 1 but does not exhibit feature (v) and therefore does not include all the features required by claim 1 of the Patent. It must also follow that the Product will not have all the features of the dependent claims 2-25.

Conclusion

22. Since in my view the Product does not have all the features required by the claims of the Patent, it is my opinion that the actions of Eclipse Magnetics Ltd regarding the Product would not constitute an infringement of the Patent.

Application for review

23. 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.

Susan Dewar
Examiner

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.