

OPINION UNDER SECTION 74A

Patent	GB 2320681
Proprietor(s)	Mr Don Henry Dawson
Exclusive Licensee	
Requester	Mr Don Henry Dawson on 22 August 2006
Observer(s)	Merseyside Fire and Rescue Service
Date Opinion issued	22 November 2006

The Request

1. This opinion relates to a request as to whether patent number GB 2320681 is infringed by a portable sprinkler system designed by Merseyside chief fire officer, Tony McGuirk, developed by Aquamist and used by Merseyside Fire and Rescue Service, as reported in *Fire Prevention Fire Engineers Journal* (January 2006 page 4).

2. The request is accompanied by colour copies of the front cover and page 4 of the January 2006 issue of *Fire Prevention Fire Engineers Journal* (henceforth referred to as the *FPFEJ*).

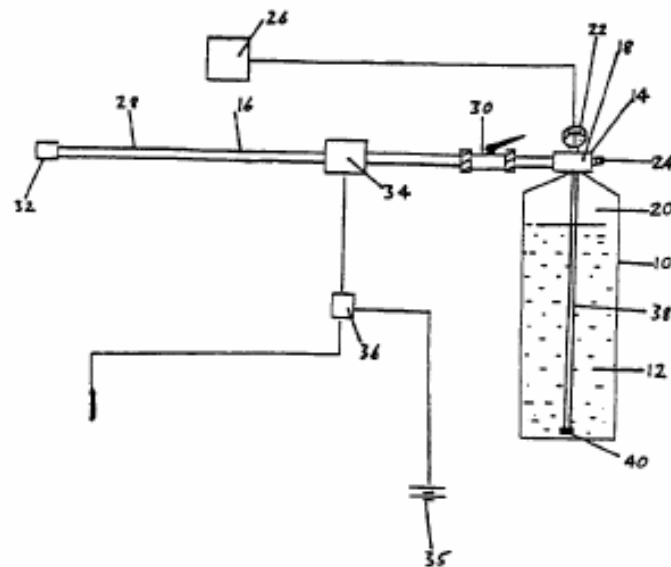
Observations

3. Observations in response to the request were filed on 13 October 2006 by D. Wright LL.M D.P.A Solicitor (Hons), Clerk to the Authority Executive Director of Law and Human Resources, Merseyside Fire and Rescue Service. The letter was dated 10 October 2006.

The Patent

4. The patent relates to a discharge head assembly for use in a portable automatic fire extinguishing system. The specification has only the following drawing:

Figure 1



5. The discharge head assembly 16 comprises a nozzle 32 on the end of a flexible distribution hose 28. A valve 34 controls the flow of fire extinguishing material 12 from a pressurized cylinder 10 to the head assembly. The valve 34 is automatically opened when a programmable thermostat 36 reaches a pre-set temperature.

6. The patent has twenty claims, of which claims 1, 10 and 11 are independent claims and claims 19 and 20 are omnibus claims. The requester argues that the patent is infringed which I take to mean that he believes that one or more of the claims is infringed.

7. Claim 1 reads as follows:

A head assembly when used in a portable automatic fire extinguishing system comprising:

- i. a dispensing means for a fire extinguishing material*
- ii. a distribution tube in the form of a flexible hose*
- iii. a valve which controls the flow of fire extinguishable material within said distribution tube:*

wherein said valve is connected to a programmable thermostat and automatically opens to allow the flow of material through the hose and out of said dispensing means when the thermostat reaches a pre-set temperature.

8. Claim 10 relates to a portable automatic fire extinguishing system incorporating a head assembly. The head assembly is identical to the one defined in claim 1. The claim reads:

A portable automatic fire extinguishing system incorporating a head assembly comprising:-

- i. a dispensing means for a fire extinguishing material*
- ii. a distribution tube in the form of a flexible hose*
- iii. a valve which controls the flow of fire extinguishable material within said distribution tube:*

wherein said valve is connected to a programmable thermostat and automatically opens to allow the flow of material through the hose and out of said dispensing means when the thermostat reaches a pre-set temperature.

9. Claim 11 also relates to a portable automatic fire extinguishing system. It is the same as claim 11, but with additional features relating to a vessel containing fire extinguishing material and connections thereto. The claim reads:

A portable automatic fire extinguishing system comprising:

a) a head assembly comprising:-

- i. a dispensing means for a fire extinguishing material*
- ii. a distribution tube in the form of a flexible hose*
- iii. a valve which controls the flow of fire extinguishable material within said distribution tube:*

wherein said valve is connected to a programmable thermostat and automatically opens to allow the flow of material through the hose and out of said dispensing means when the thermostat reaches a pre-set temperature;

- b) a vessel containing fire extinguishing material:*
- c) a connector assembly adapted to connect said vessel to said head assembly; and*
- d) optionally, a bleed means adapted to bleed air or gas from said distribution tube;*

wherein components are arranged such that when the system is primed and ready for use said head assembly contains fire extinguishing material but subsequently no air or other propellant gas.

10. There are two things to note regarding the clarity of claim 11. Firstly, the particular feature set out in part d) is optionally. Secondly, "us" in the last paragraph should clearly be read as "use".

The Aquamist Sprinkler

11. The only evidence of the Aquamist sprinkler provided by the requester is a four paragraph article in the January 2006 issue of *Fire Prevention Fire Engineers Journal*. The article includes a photograph of what is presumably the sprinkler being unloaded from a red van.

12. In the article only two sentences address the technical features of the sprinkler. They read as follows:

The stand-alone system contains three extinguishers filled with water. When activated by a heat sensor, the unit produces a fine mist that contains a fire-retardant chemical which quickly extinguishes the fire.

13. The article also outlines the advantages of the Aquamist sprinkler, as follows:

It has the advantages over fixed sprinkler systems, being more flexible and cost effective; if an individual moves home or their risk reduces, the sprinkler can be moved to a new location.

14. The photograph shows a system comprising a cylinder approximately one metre in height. There is also a pole or tube. This appears to protrude from the top of the cylinder, but cannot be determined with any certainty. Indeed, there is no definite indication that pole or tube is part of the unit. There is also no way of telling if the photograph shows the unit in its fully constructed state.

15. The observations of Merseyside Fire and Rescue Service add that the Aquamist sprinkler is a mist system which extinguishes fire by essentially smothering the flame. The observations also note, without going into any technical detail, that the head of the Aquamist sprinkler is “*engineered in a completely different way*” to that of the patent.

Discussion

16. My task is to determine whether the Aquamist sprinkler infringes the patent. To do this I must first decide how to construe claims 1, 10 and 11. Then I must decide whether the Aquamist sprinkler falls within the scope of the claims so construed. The latest guidance on how to construe claims is given by Lord Hoffmann in *Kirin-Amgen Inc v Hoescht Marion Roussel Limited [2005] RPC 9*. The guidance in the judgement is to put a purposive construction on the claims, interpret the claims in the light of the description and drawings as instructed by section 125(1) of the Act and take into account the Protocol to Article 69 of the EPC.

17. 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.

18. The Protocol to Article 69 of the EPC 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.

19. Lord Hoffmann summarised the approach by saying “*The question is always what the person skilled in the art would have understood the patentee to be using the language of the claim to mean*”.

20. So what did Mr Dawson intend the claims to mean. I will start with claim 1. The claim is directed to a head assembly having certain features “when used in a portable fire extinguishing system”. The words “when used in” have the effect of limiting the scope of the claim to a head assembly having those features when actually used in a portable fire extinguishing system. The claim would not for example cover the use of a head assembly having those features in a different application. In the event this is not significant since the Aquamist sprinkler is clearly a portable fire extinguishing system.

21. I now need to look at each of the particular features of the head assembly set out in claim 1, construe what each means and then decide whether the feature is present in the Aquamist sprinkler.

22. I start with “*i) a dispensing means for a fire extinguishing material*”. The article in *FPFEJ* states that the Aquamist sprinkler has “extinguishers filled with water... and produces a fine mist.... which quickly extinguishes the fire”. Therefore, although it is not explicitly mentioned, some sort of dispensing means for the extinguishing material must be present.

23. The next feature of the claim is “*ii) a distribution tube in the form of a*

flexible hose". Having regard to the remainder of the claim and the description I take this to mean that between the valve and the dispensing means there is a flexible hose. I do not need to go further and decide whether the claim requires the dispensing means to be connected directly to the valve only by a flexible hose without the interdiction of for example a rigid hose. I say this because there is simply no clear evidence in either the FPFEJ article or in the observations of there being any flexible hose in the Aquamist sprinkler. The photograph in the article does seem to show something extending from the cylinder however it does not appear flexible nor is it clear that anything flows through it. I must conclude therefore that the evidence before me does not clearly show that this feature is present in the Aquamist sprinkler.

24. The next required feature of the head assembly is "*iii) a valve which controls the flow of fire extinguishable material within said distribution tube*". The article in FPFEJ states that when "activated by a heat sensor, the unit produces a fine mist that... quickly extinguishes the fire". Although it is possible that the Aquamist system could be activated without a control valve, the likelihood is that this feature is present in the Aquamist sprinkler.

25. I turn finally to the feature that is I believe at the heart of the invention claimed in the patent namely that the "*valve is connected to a programmable thermostat and automatically opens to allow the flow of material through the hose and out of said dispensing means when the thermostat reaches a pre-set temperature*".

26. The patent, in discussing the benefits of the invention notes on page 3 that "*the system of the present invention is particularly flexible as it can be installed in a variety of situations and the temperature at which it will be activated can be chosen according to its particular situation*".

27. So does the Aquamist sprinkler have this feature? Again the evidence is extremely thin. The article in the FPFEJ states that the sprinkler is "*activated by a heat sensor*". This sensor could be a programmable thermostat, equally it could be something completely different for example a thermal switch operable only at one temperature. The observations from Merseyside Fire and Rescue Service also don't help. These state that Mr Dawson's system uses a trigger based on a glass vial of liquid, while the Aquamist sprinkler does not. However the claims are not limited to a particular type of programmable thermostat and as the description on page 3 makes clear the thermostat "*may be of any suitable type*". What matters is whether any thermostat in the Aquamist sprinkler is programmable and on that I do not have any evidence to say whether it is or is not.

28. In short, from the information available to me, I am not satisfied that the Aquamist sprinkler has all the features set out in claim 1. In particular I have not been convinced that the Aquamist sprinkler has a distribution tube in the form of a flexible hose or, more importantly, a programmable thermostat. It follows that I must conclude that the Aquamist sprinkler as

presented to me does not infringe claim 1. Claims 10 and 11 also require that the head assembly has all the features of claim 1 as do claims 2 to 9, and 12 to 18 which are all dependent on one of claims 1, 10 or 11. Hence if claim 1 is not infringed then neither is any of these claims. The patent also includes two omnibus claims, claims 19 and 20, however the scope of these is limited to the particular embodiment shown in the figure. Since this embodiment requires all the features of claim 1 it follows that neither of these is infringed.

Opinion

29. I conclude that the Aquamist sprinkler, as presented by the evidence provided, does not infringe patent number GB 2320681.

30. Application for review

31. Under section 74B and rule 77H, the proprietor may within three months of the date of issue of this opinion, apply to the comptroller for a review of the opinion.

32. Under rule 77H(5) such an application for review may be made by the proprietor only on the grounds that by reason of its interpretation of the specification of the patent the opinion wrongly concluded that a particular act would not constitute an infringement of the patent.

Note

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

Richard Nicholls
Examiner