

**OPINION UNDER SECTION 74A**

Patent	<b>GB 2271058</b>
Proprietor(s)	Mr Don Henry Dawson
Exclusive Licensee	
Requester	Mr Don Henry Dawson, on 15 September 2006
Observer(s)	
Date Opinion issued	13 December 2006

**The Request**

1. This opinion relates to a request as to whether patent number GB 22271058 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 FPFEJ).

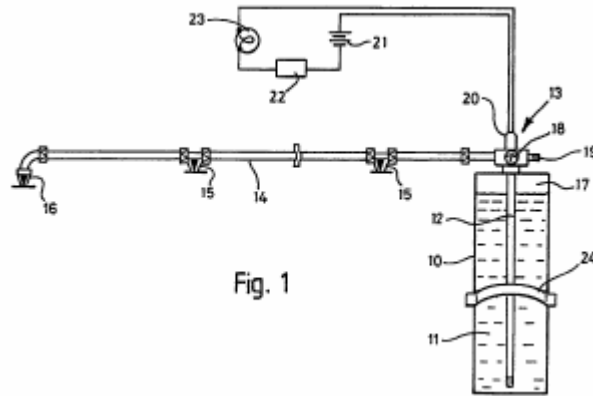
**Observations**

3. No observations were received.

**The Patent**

4. The patent was granted on 4 September 1996 and is still in force. The application was filed on 20 August 1993, with a priority date of 21 August 1992, and published on 6 April 1994. Thus the patent was in force at the time of the publication of the article in FPFEJ.

5. The patent relates to a fire extinguishing system, especially, but not exclusively for use in vehicles and machinery. The preferred embodiment is best illustrated by figure 1:



A cylinder 10 contains water 11 and is connected via a distribution tube 14 to heat sensitive sprinkler heads 15,16, which release the water in response to excessive heat. A connector assembly 13 connects the distribution tube to the cylinder. Sprinkler head 16 can be loosened to bleed air from the system to ensure that when the system is primed there is no air in the sprinkler heads or distribution tube.

6. The patent has fourteen claims, of which claim 1 is an independent claim and claims 12 and 14 are omnibus claims. Furthermore, claim 13 defines a method of utilising a system as defined in any of claims 1-12. The request does not specify which claims are allegedly infringed so I will assume that the request pertains to all claims.

7. Claim 1, which relates to a fire extinguishing system reads as follows:

*A fire-extinguishing system comprising:*

*(i) A vessel containing a fire-extinguishing material;*

*(ii) At least one heat-sensitive delivery means for controllably releasing the said fire-extinguishing material in response to the presence of excessive heat;*

*(iii) A distribution tube connecting the said vessel with the said heat-sensitive delivery means;*

*(iv) A connector assembly adapted to connect the said vessel and said distribution tube;*

*(v) A bleed means adapted to bleed air or gas from the distribution tube;*

*Wherein the system is adapted for positioning the said external heat-sensitive delivery means in close proximity to areas most likely to overheat or catch fire:*

*The above components being arranged such that when the system is primed and ready for use the distribution tube and delivery means contain fire-extinguishing material but substantially no air*

8. Claim 13 also relates to a method of extinguishing a fire using such a fire extinguishing system and reads:

*A method for extinguishing fires or protecting against fire damage comprising the steps of:*

*(a) Providing a fire-extinguishing system as claimed in any of Claims 1-12;*

*(b) Installing said system in a vehicle, machinery or item to be protected, positioning the heat-sensitive delivery means in close proximity to the areas most likely to overheat or catch fire;*

*(c) Pressurizing the system with a compressed gas whilst bleeding air from the delivery means/distribution tube;*

*(d) Activating the alarm device (if fitted)*

9. There is one thing to note regarding the clarity of this claim, and this is the phrase '(if fitted)'. This presents the presence and activation of an alarm device as optional, an alarm device only being mentioned in claim 11 of claims 1-12. Therefore I have not considered the alarm to be an essential part of this claim.

### **The Aquamist Sprinkler**

10. 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 is accompanied by a photograph of what is presumably the sprinkler being unloaded from a red van.

11. 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.*

12. 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.*

13. 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 this cannot be determined with certainty. Indeed, there is no definite indication that the 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.

## **Discussion**

14. My task is to determine whether the Aquamist sprinkler infringes the patent. To do this I must first decide how to construe claims 1 and 13. 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.

15. 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.*

16. 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.*

17. 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*”.
18. So what would a skilled person have understood Mr Dawson to have meant? I will start with claim 1. The claim is directed to a fire-extinguishing system having certain features and which is “*adapted for positioning... in close proximity to areas most likely to overheat or catch fire*”. All evidence in the description suggests that this phrase should be interpreted as meaning the system must be portable and not permanently installed. The photograph in FPFEJ shows that the Aquamist is portable and therefore can be placed in proximity to danger areas.
19. I now need to look at each of the particular features of the fire-extinguishing system set out in claim 1, construe what each means and then decide whether the feature is present in the Aquamist sprinkler.
20. I start with “*(i) A vessel containing a fire-extinguishing material*”. The article in FPFEJ states that the Aquamist sprinkler has ‘extinguishers filled with water’ which clearly shows that a vessel containing a fire-extinguishing material is present.
21. The next feature of claim 1 is “*(ii) At least one heat-sensitive delivery means for controllably releasing the said fire-extinguishing material in response to the presence of excessive heat*”. The article states that the sprinkler is ‘*activated by a heat sensor*’. This would satisfy the definition of a heat sensitive delivery means. Although no delivery means is specified, one must exist for the fire-extinguishing material to move from the vessel to the fire.
22. The next features of the claim are “*(iii) a distribution tube connecting the said vessel with the said heat-sensitive delivery means*” and “*(iv) A connector assembly adapted to connect the said vessel and said*

*distribution tube*". Having regard to the remainder of the claim and the description I take this to mean that between the vessel and the delivery means there is a tube and a connector assembly. The photograph in the article does seem to show something extending from the cylinder but it is not clear that anything flows through it. However, while the evidence before me does not clearly show that this feature is present in the Aquamist sprinkler, I have to expect that the delivery means is connected to the vessel somehow. This connection would obviously need to allow the fire-extinguishing material to flow from the vessel to the delivery means and therefore it is most likely to have some form of tubular construction. I therefore conclude that these particular features will almost certainly be present.

23. I turn finally to the feature that is I believe at the heart of the invention claimed in the patent, namely the *"bleed means adapted to bleed air or gas from the distribution tube"*. As a result, *"when the system is primed and ready for use the distribution tube and delivery means contain fire-extinguishing material but substantially no air"*. There is absolutely no evidence that the Aquamist sprinkler has any form of bleeding means. Furthermore, standard fire-extinguishers do not have such an arrangement, and consequently, when ready for use, the tubes are filled with air.
24. 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 any form of bleed means. It follows that I must conclude that the Aquamist sprinkler as presented to me does not infringe claim 1. Claim 13 also requires that the method defined utilises a system as claimed in any of claims 1-12. Hence if claim 1 is not infringed then neither is claim 13. The patent also includes two omnibus claims, claims 12 and 14, 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**

25. I conclude that the Aquamist sprinkler, as presented by the evidence provided, does not infringe patent number GB 2271058.

### **Application for review**

26. 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.
27. 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