Patents Act 1977 **Opinion Number** **10/19**

OPINION UNDER SECTION 74A

Patent	GB 2460111 B
Proprietor(s)	OTS Group Limited
Exclusive Licensee	
Requester	Ledbury Welding and Engineering Limited
Observers	i) S J Hague Limited T/A Simon Engineering ii) Wynne-Jones IP Limited
Date Opinion issued	19 July 2019

The request

1. The Comptroller has received a request from Ledbury Welding and Engineering Limited (the requester) to issue a validity opinion in respect of patent GB 2460111 B (the patent) in the name of OTS Group Limited. The request questions the validity of the patent on the basis that the claims are either not novel or lack an inventive step based principally on the disclosure of EP 0008949 A1 (EP 949).

2. The patent has a filing date of 19 May 2008 and it was granted on 6 June 2012 and remains in force.

3. Observations were received from Wynne-Jones IP Limited and Simon Engineering. Observations in reply were subsequently received from the requester.

Preliminary Matters

4. The observations from Simon Engineering referred to further examples of equipment apparently relevant to the validity of the patent, although no argument regarding their relevance was made. In any event, the observations should be confined to issues raised in the request and the further examples referred to are considered to go beyond such issues. I therefore decline to consider these observations further.

5. References to the observer and the observations in the remainder of this opinion are to Wynne-Jones IP Limited and their observations.

The Patent

6. The patent relates to equipment for bulk storage and dispensing of fuel for vehicles

along with storage and dispensing of other vehicle consumables.

7. The patent starts by describing prior art systems for storage and fuelling of vehicles. Most commonly the fuel is stored in underground tanks and connected by pipes to separate filling pump units. Alternatively, fuel may be stored in above ground tanks which are similarly connected by pipes to remote filling points.

8. The invention of the patent is designed to overcome certain limitations of the prior art systems by providing an integrated tank and dispensing system. Figure 1 of the patent (below) provides an overview of the equipment which includes tanks (22, 23, 24 and 25) for containing liquid consumables including vehicle fuel such as diesel, biofuels or gas oil (red diesel). The tanks are connected to a pumping and dispensing unit (40). Significantly both the tanks and the pumping and dispensing unit are held within a leakage containment tray (26) designed to prevent leakage of liquids to the environment.

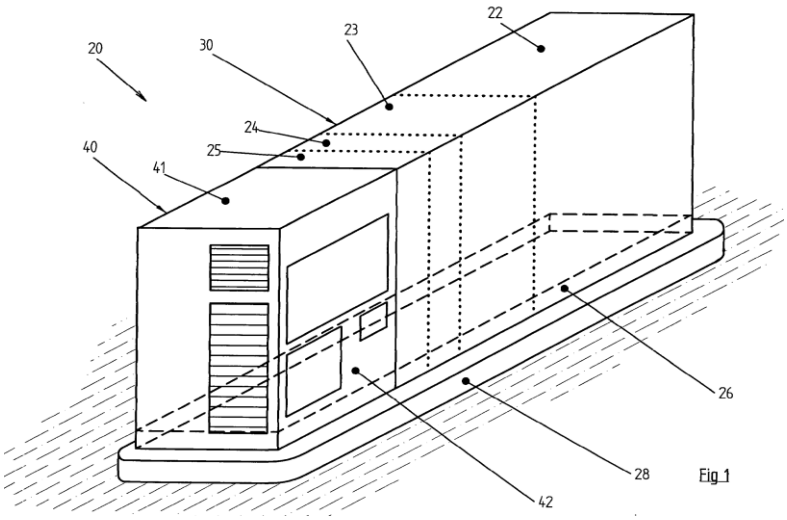

Fig 1

Claim construction

9. As a first step in determining the validity of the patent I must correctly construe the claims. This means interpreting them 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 decisions of the High Court in *Mylan v Yeda*[1] and the Court of Appeal in *Actavis v ICOS*[2].

10. I consider the skilled person would be an engineer (or small team of engineers) familiar with the design, construction and operation of vehicle fuel filling stations.

11. There are two independent claims 1 and 9 (and an omnibus claim – claim 10) which read as follows:

[1] *Generics UK Ltd (t/a Mylan) v Yeda Research and Dev. Co. Ltd & Anor* [2017] EWHC 2629 (Pat)
[2] *Actavis Group & Ors v ICOS Corp & Eli Lilly & Co.* [2017] EWCA Civ 1671

> *1. A storage and dispensing station for vehicle consumables, including at least one bulk fuel storage tank, at least one further storage tank and a dispenser for each of the respective tanks, said tanks and said dispensers having a common bund area even in operation.*
>
> *9. A vehicle fuel filling station including at least one fuel storage tank and a fuel pump, said storage tank and said fuel pump having a common bund area, even in operation, the station further including a fuel dispensing unit including a housing, the housing at least partially containing or providing support for one of more of the following services: a fuel delivery managements system; a compressed air dispenser; a water dispenser; a litter bin; spillage containment or cleaning means; fire fighting equipment; automated lighting; electrical supply isolation means; a liquid level gauge; a liquid level warning means; a mains powered bund alarm; and/or a battery powered bund alarm.*

12. The observer has referred to the claim construction principle asserted by the Court of Appeal in *Virgin Atlantic v Premium Aircraft Interiors*[3] that the patentee would not be expected to have claimed as new that what he had expressly acknowledged was old. This principle is no doubt helpful although I do not consider it strictly necessary to invoke it when construing the claims of the patent. A straightforward purposive construction based on reading the claims in the context of the specification as a whole is sufficient.

13. The invention identifies a number of problems with prior art filling stations as follows:

    i) the space taken up by filling station infrastructure

    ii) the cost to install and maintain such infrastructure

    iii) the potential for vandalism

    iv) underground pipework between tanks and pumps is vulnerable to damage

    v) pumps are not located within the bunded area of the tank

14. The invention solves these problems by creating an integrated structure containing both a storage tank and dispensing means with a common bund and that is the context for construing the claims.

15. I would also add that I consider that the skilled person would understand the term *dispensing* to have a particular meaning in the art and that it means controlled dispensing for the purpose of filling a vehicle tank. It does not refer to the transfer of liquids more generally and the skilled person would distinguish dispensing from draw-off.

16. Accordingly, and largely in agreement with the observer's construction of claim 1, "*a storage and dispensing station for vehicle consumables*" means a discrete unit or

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[3] *Virgin Atlantic Airways Ltd v Premium Aircraft Interiors Group Ltd* [2009] EWCA Civ 1062

structure that contains both storage facilities and a dispensing system suitable for dispensing of fuel directly into a vehicle.

17. Similarly, "*a dispenser for each of the respective tanks*" means a device for dispensing of fuel or other consumables into a vehicle; and "*said tanks and said dispensers having a common bund area even in operation*" means a common bund is provided as part of the discrete unit or structure. "*Even in operation"* means the integrity of the bund is not compromised during dispensing operations, although parts of the dispensing means, e.g. a hose and nozzle, may lie outside the area of the bund.

18. I also consider that *tank* in the claims should be construed broadly as any suitable storage container, whether embodied as a discrete unit or as a chamber or compartment of a larger container.

19. Neither the request nor the observations provide much detail regarding the construction of claim 9. In general, terms in the claims are to be construed in the same manner, such that the fuel dispensing unit of claim 9 is construed as a unit for controlled delivery of fuel to a vehicle. Although claim 9 requires only the fuel pump to be in the common bund area (rather than the dispensers) this difference is not considered significant as in practice some part of the dispensing means will lie outside the bunded area when filling a vehicle. Claim 9 also requires only a single tank which contains fuel.

Prior art

20. The prior art evidence relied on by the requester to demonstrate lack of novelty and/or lack of inventive step comprises the following documents:

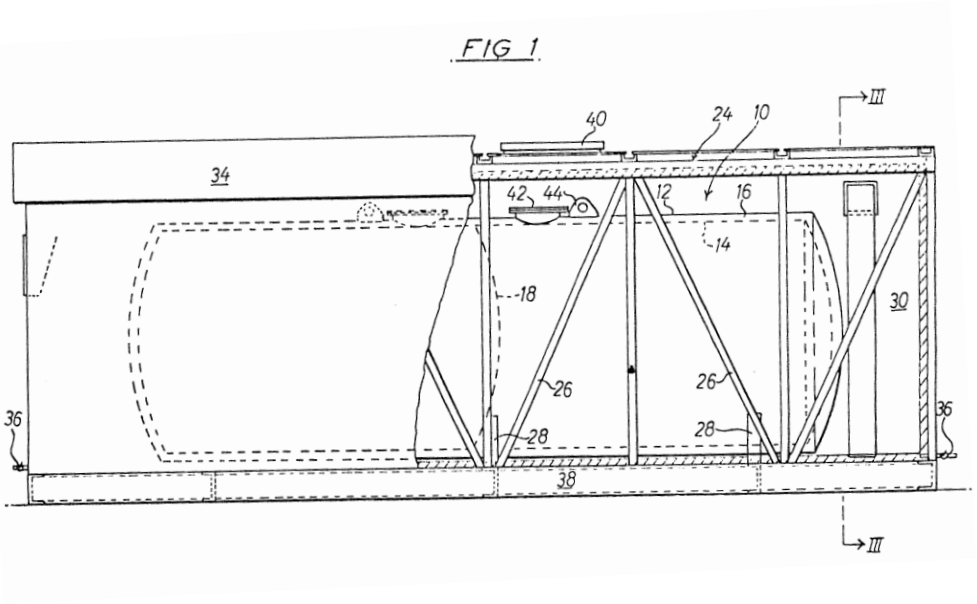
    EP 0008949 A1 (EP 949) Petrofina (UK) Ltd; published 19 March 1980.

    "*Guidance note for the Control of Pollution (Oil Storage) (England) Regulations 2001"*, DEFRA; October 2001. (The Guidance Note)

21. The Guidance Note is relied upon as representing the common general knowledge of the skilled person for the purpose of demonstrating lack of inventive step in combination with EP 949. This is general guidance relating to regulations which cover the storage of all oils including petrol, solvents, mineral oil, heating oil, vegetable oil, etc.

22. EP 949 relates to a fuel storage and dispensing tank for above ground storage of vehicle fuels at a station providing a dispensing service.

23. Figure 1 (reproduced below) shows the general arrangement which comprises a double-skinned fuel tank (10) divided into two separate compartments by a membrane (18) and housed in an outer protective housing (24). The outer protective housing also functions as a bund with its lower half being internally sealed to a height sufficient to retain the entire contents of the tank in the event of a leak.



Novelty – independent claims

24. EP 949 clearly discloses a fuel storage and dispensing station in the broadest sense. However, the main point of contention is whether or not the arrangement of EP 949 includes dispensers for fuelling a vehicle located within the same housing as the tank as required by claim 1 as construed.

25. The requester points to the consistent use of the phrase "*storage and dispensing tank*" as indicative of the fact that a dispenser is included. They also point to the passages on page 2, lines 4 to 10 and page 3, line 17 to 22 which state respectively (my emphasis):

> *"Conveniently, if it is desired to store and dispense different grades of fuel, the inner of the two containers is divided into an appropriate number of compartments by one or more membranes, each compartment being provided with its own filling, dispensing and venting means.* ***One or more pumps and auxiliary equipment, constituting the dispensing means, may be accommodated within the outer housing, in a chamber constructed with appropriate safety features.****"*
>
> *…*
>
> *"Provision is made at one end of housing 24 for a chamber 30 to accommodate pumping and other equipment and access to this chamber is by means of lockable doors 32. This chamber 30 can also house filling and drainage connections, fire extinguishers and an electrical earthing connection."*

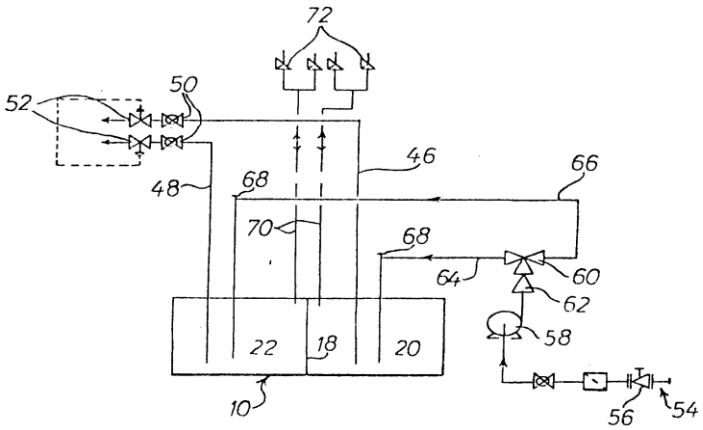
26. The observer argues in reply that the use of the term "dispensing tank" is simply a reference to the fact that fuel must be conducted from the tank to a remote station where it is dispensed to the user and that this document is concerned only with the tank. They refer to the following statement from the opening paragraph of EP 949

which certainly implies that the tank is separate from the vehicle fuelling facility:

> *"This invention concerns a portable fuel storage and dispensing tank, and more particularly relates to an above-ground tank for petroleum products at a station providing a dispensing service for motor vehicles."*

27. The observer further relies on the details illustrated in figure 4 of EP 949 (reproduced below). It will be noted that the only pump (58) illustrated is for filling the tank compartments. As illustrated, the draw offs (46, 48) from the tank compartments terminate in a slam shut valve (50) operated by a fusible link and a "*magnetic valve (52) (to prevent syphoning) energised to open*" (page 4, line 21). Solenoid anti-syphon valves are a well-known feature of fuel storage tanks and are designed to open only when they receive a signal (indicated by the dashed line box), e.g. from a dispensing pump, to prevent siphoning-off of the whole content of the tank in the event of damage to the fuel line downstream of the tank. As such the embodiment illustrated in figure 4 does not include dispensing pumps and is typical of an arrangement for supplying remote dispensing equipment.

FIG 4



28. Nevertheless, just because the illustrated embodiment does not explicitly disclose dispensing pumps, the unequivocal statement on page 2 regarding the provision of dispensing means in the form of pumps and auxiliary equipment must be taken into consideration. The observer has not provided any specific argument in relation to how this passage should be interpreted.

29. Whilst many of the references to dispensing in EP 949 are vague and may relate to the fact that the tank is connected to a separate dispensing station, as set out in the opening paragraph, I consider that the skilled person would interpret the phrase *"One or more pumps and auxiliary equipment, constituting dispensing means*" as referring specifically to direct vehicle fuelling means, i.e. a pump, a hose and a nozzle. In particular and as with the construction of claim 1 of the patent, I consider that dispensing has a particular meaning in the art and should be construed largely in the same way for both the patent and EP 949.

30. The passage from page 2 quoted above goes on to specify that the dispensing means may be accommodated within the outer housing in a chamber. Page 3, lines 17 to 20 specify that a chamber is provided to accommodate pumping and other

equipment and access is by means of lockable doors. The final paragraph of EP 949, which describes the bunding, makes clear that the bunding extends up to the lower edge of the doors. It is accordingly clear that the dispensing means, comprising pumps and auxiliary equipment located in the chamber, is protected by the same bunding which protects the tank.

31. I therefore consider that EP 949 discloses a storage and dispensing station having a first tank for storing a first fuel, a second tank for storing a second fuel, pumps and auxiliary equipment constituting dispensing means for each tank, and a common bund area. These are all the features required to fall within the scope of claim 1 of the patent and accordingly I consider that claim 1 is not novel.

32. Much of the observations and observations in reply were devoted to the prior art referred to in both EP 949 and the patent. Both documents refer to both underground and above-ground storage of fuel which is then fed to separate remote dispensing apparatus. Such arrangements are clearly very well-known and both documents are intended to be developments of such well-known arrangements. However, I do not consider that either document is limiting the background prior art to such arrangements nor that the documents themselves should be construed on the basis that this is the only background prior art. These arguments did not therefore seem helpful. All of the skilled person's common general knowledge forms the background for construing the disclosure of EP 949. The observations in reply introduced further evidence in an attempt to show that there were indeed alternative well-known arrangements. However, as I have not found it necessary to consider these arguments in detail and nor has the observer been able to comment on the new evidence, it has not been considered.

33. The observer has also suggested that the chamber as illustrated in EP 949 (see in particular figure 3) could not contain dispensing equipment because it is too high and would be unreachable in use. The observer's argument is based on a standard 9' (2.75m) tank diameter. I do not believe too much can be read into the illustrated embodiment, which represents a specific example of undisclosed dimensions. As argued by the requester a 6' (1.8m) tank would yield an illustrated door threshold height of only 1.2m. Ultimately I do not consider that the skilled person's understanding of this document would be influenced by the illustrated height of the door. The skilled person would understand that the door height would vary based on the length and width of the housing for any given tank size, and the length and width could be selected to give an appropriate door height to access dispensing equipment.

34. In relation to claim 9 and based on the interpretation set out above, I consider that EP 949 discloses a fuel filling station with a fuel storage tank and a fuel pump within a common bund area. The disclosure is further considered to extend to a fuel dispensing unit within a chamber, and the chamber may additionally include fire extinguishers. EP 949 is therefore considered to disclose all the features of claim 9 such that it too lacks novelty.

35. As I have found that claims 1 and 9 are not novel I do not need to consider the question of their inventiveness. I would observe that the Guidance Note relied on by the requester does not seem particularly helpful as it does not relate specifically to

vehicle fuelling, for which much more specific guidance is available[4]. The common general knowledge of the Guidance Note therefore seems partial and it may not be appropriate to rely on such limited information.

Novelty / inventiveness - dependant claims

36. Having found that the independent claims lack novelty I shall now go on to consider the novelty and inventiveness of the dependant claims.

37. Claims 2 and 3 read as follows:

> *2. A storage and dispensing station as claimed in claim 1, wherein said at least one further storage tank includes at least one tank for containing an engine coolant and/or at least one tank for containing pollution reducing liquids, such as urea based liquids.*
>
> *3. A storage and dispensing station as claimed in claim 1 or 2, wherein said at least one fuel storage tank includes a tank for storage of biofuel as well as a tank for medium fuel oil.*

38. These claims specify that the tanks are *for containing* particular liquids. Such wording is construed as requiring that the tanks are *suitable for* containing those liquids. Any tank is *capable* of storing a wide range of liquids subject only to material compatibility, but something more is needed for a particular tank to be *suitable* for storing a particular liquid. In particular, I consider that the size of the tank is a factor. In the case of EP 949 the exemplary tank compartments are both for storing vehicle fuel and are roughly the same size. They are not considered suitable for something which is required in much smaller quantities such as engine coolant. The mild steel specified for the tank of EP 949 would also seem to be unsuitable for the storage of urea due to the potential for corrosion. The tank compartments would however be suitable for storing biofuel at least. On this basis claim 2 is considered novel but claim 3 not.

39. The requester has also suggested claim 2 is not inventive based on EP 949 as the choice of tanks and their contents lacks an inventive step. Nevertheless, EP 949 deals solely with the storage and dispensing of fuels and based on the evidence before me I am not satisfied that it would be obvious to provide a tank for a non-fuel consumable. Claim 2 is therefore also considered to be inventive.

40. Claim 4 to 8 read as follows:

> *4. A storage and dispensing station as claimed in any one of the preceding claims, wherein the dispensers each include a nozzle and a pump.*
>
> *5. A storage and dispensing station as claimed in claim 4, wherein each pump and at least a part of each nozzle are contained within a housing.*

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[4] E.g. "*Design, construction, modification, maintenance and decommissioning of petrol filling stations" ("The Blue Book");* Association for Petroleum and Explosives Administration (APEA); 2nd Ed., 2005.

6. A storage and dispensing station as claimed in claim 5, wherein said housing includes also a means for supplying one or more of: compressed air; screen wash; and/or spillage containment or clearing articles.

7. A storage and dispensing station as claimed in claims 5 or 6, wherein said housing provides a mounting for one or more of: a fuel management system including dispensing recording means, costing means, or information display means; a litter bin; fire extinguishing articles; PIR operated lighting; access means, such as roller shuttering.

8. A storage and dispensing station as claimed in claims 5, 6, or 7, wherein the housing includes filling points for filling said tanks.

41. EP 949 refers to *pumps and auxiliary equipment constituting the dispensing means.* The requester has argued that the provision of a nozzle is implicit because the longstanding practice is to dispense fuel via nozzles. The observer relies on much the same reasoning in relation to claim 4 as they do in relation to claim 1, i.e. that EP 949 relates only to remote dispensing. Having concluded that EP 949 discloses an integrated structure including a tank, a pump and dispensing means, I agree with the requester that it implicitly discloses dispensing means in the form of a nozzle being the ubiquitous means for dispensing fuel. Accordingly claim 4 is also considered to lack novelty.

42. Claim 5 further requires that the pump and nozzle of claim 4 are contained in a housing. In view of the disclosure of EP 949 that "*the dispensing means may be accommodated within the outer housing, in a chamber"* (page 2, line 11), I consider this claim is also not new.

43. The requester has suggested that the bund constitutes the spilling containment of clearing articles of claim 6. However, I consider this reflects an incorrect construction of the claim and the skilled person would interpret it on the basis that it requires additional spilling containment articles and would be for dealing with spills outside the bunded area, and would include, for example, absorbent granules. It is not clear that it is obvious to provide any of the additional items of claim 6 *in the housing* and this claim is therefore considered to be novel and inventive.

44. EP 949 specifies that *"chamber 30 can also house filling and drainage connections, fire extinguishers and an electrical earthing connection."* In view of this disclosure I consider that claims 7 and 8 also lack novelty.

Novelty – omnibus claim

45. Claim 10 is an omnibus claim as follows:

10. A storage and dispensing station or a vehicle fuel filling station substantially as described herein with reference to the drawings.

46. Omnibus claims of this form are to be construed narrowly such that it is limited to the embodiments described and illustrated in the patent. The requester has argued that

all the features disclosed in the patent are either known from EP 949 or are common general knowledge features which would be obvious. On this basis they suggest claim 10 lacks either novelty or inventive step. However, as I have found that claims 2 and 6 are novel and inventive I do not agree with this analysis. In particular, the embodiment of figure 2a includes an automatic tyre inflator (6) and a spill kit (1) which are features of claim 6. I therefore consider that claim 10 is novel and inventive.

Opinion

47. Based on the evidence and argument provided, it is my opinion that claims 1, 3, 4, 5, 7, 8 and 9 of GB 2460111 B are not novel based on the disclosures of EP 0008949 A1.

48. It is further my opinion that, based on the evidence and argument put forward, claims 2, 6 and 10 are novel and inventive.

Application for review

49. 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.

Matthew Jefferson
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.