

OPINION UNDER SECTION 74A

Patent	EP (UK) 1498060 B1
Proprietor(s)	Elkington & Fife LLP
Exclusive Licensee	
Requester	Loven Patents & Trademarks
Observer(s)	
Date Opinion issued	01 September 2020

The Request

1. The Comptroller has been requested by Loven Patents & Trademarks (the Requestor) to issue an Opinion on whether EP (UK) 1498060 B1 (the Patent) is valid with regard to inventive step in light of the following documents;

D1	DE 3828008 A1
D2	US 6582595 B1
D3	US 6383375 B1
D4	WO 92/16272 A3
D5	US 5785848 A
D6	US 4212743 A
D7	US 2002/096525 A1
D8	FR 2660284 A1
D9	GB 369967 A

2. Observations were received from Elkington & Fife LLP (the Proprietor) on the 20th April 2020. The observations set out to refute the inventive step contentions of the Requestor. The observations further allege that the request contravenes Patent Rules 114(4), 113(1) and 94(1). The Proprietor submitted a further six documents in evidence;

D10	EPO search report for the Patent
D11	Third party observations filed with respect to the Patent
D12 & D13	Grounds for rejection of opposition & associated translation
D14 & D15	Provisional opinion of Board of Appeal & associated translation

3. Observations in reply were received from the Requestor on the 29th July 2020.

Preliminary matters

4. The Proprietor observes that translations were not filed with the request and therefore the request ought to be refused in light of Rule 114(4). The Proprietor additionally observes that translations of D1, D4 or D8 were not filed and therefore these documents ought to be set aside in light of Rule 113(1).

5. Furthermore, the Proprietor alleges that D1, D2, D3 and D5 have already been considered in prior proceedings for the Patent and therefore do not raise a new question. In particular the Proprietor observes that D1 and D3 were listed in the European Search Report (D10) and as such would have been considered during the pre-grant proceedings and therefore these documents ought to be set aside pursuant to Section 74(3)(b) and Rule 94(1).

6. The Proprietor further observes that the international publication of D3, WO 99/01220, was considered in a first instance opposition proceeding (D12 & D13) against the Patent and was found not to be prejudicial to the validity of the Patent.

7. The Proprietor further observes that D1 was considered in a second instance opposition proceeding (D14 & D15) against the Patent where the Board of Appeal did not find D1 to be prejudicial to the validity of the Patent.

8. The Proprietor further observes that D2 and D5 were listed in third party observations (D11) during post grant proceedings and as such would have been considered during the pre-grant proceedings.

9. The Requestor argues that that none of D1, D2, D3 and D5 were sufficiently considered in earlier proceedings.

Translations

10. The Requestor provided translations of the Patent, D1, D4 and D8 on the 23rd April 2020. The late filing of the translations has previously been accepted in light of the period of interrupted days starting on 24th March 2020. It is not necessary for me to consider Rule 114(4) or Rule 1113(1).

Is it a new question?

11. I will need to determine whether D1, D2, D3 and D5 can be taken into consideration in respect of Rule 94(1).

Rule 94(1)(b)

a. "The comptroller shall not issue an opinion if the question upon which the opinion is sought appears to him to have been sufficiently considered in any proceedings."

12. D1 and D3 were listed in the EPO search report in the A category, and D2 and D5 were brought to the examiner's attention with the 3rd party observations dated 28th July 2006. None of these documents provide the basis of any formal novelty or inventive step objection raised against any of the claims of the Patent. Therefore, particularly in light of Opinion 21/07, I am unable to assume that these documents have been sufficiently considered.

13. In the first instance opposition proceedings dated 7th July 2011 consideration is given whether WO99/01220, equivalent to D3, was considered with respect to EP0155645 B1. No consideration is given to D3, or an equivalent thereof with respect to D1 as is the basis of the request.

14. The second instance opposition dated 9th October 2014 (T2055/11) was withdrawn prior to conclusion. Nevertheless I have reviewed the case. DE19717054 and WO 99/01220, equivalent of D3, were considered with respect to D1. Acknowledging also the fact that four further documents are referred to in the present request, with respect to claim 1, I consider that the question upon which the present opinion is being sought is distinct from the question considered.

15. In my opinion the request raises a new question that has not been sufficiently considered in any earlier proceedings and therefore all submissions will be taken into account.

The Patent

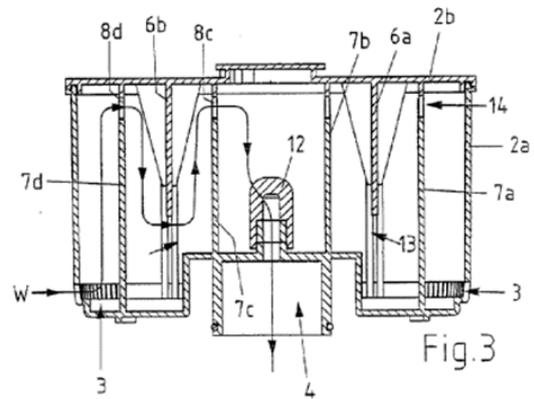
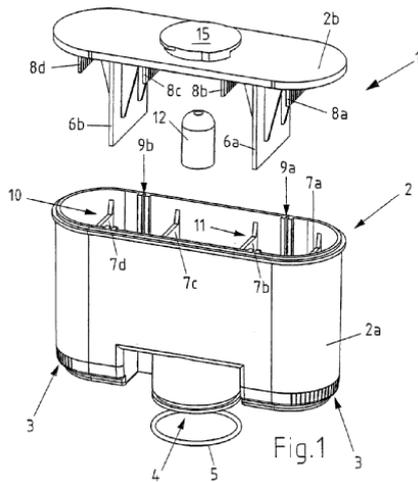
16. The Patent was filed 29th June 2004 and claims priority from CH patent application number 12492003, which has a filing date of 17th July 2003. The Patent was granted with effect from 20th December 2006 and remains in force.

17. The Patent is entitled 'Filter cartridge for water reservoir of coffee apparatus', and relates to a filter cartridge which, in use, would be installed in a coffee machine water tank in order to filter the water prior to brewing. The filter cartridge is provided with a housing 2 which would typically be filled with a granular filter medium, the housing has an outlet 4 which would cooperate with an outlet of the water tank to dispense filtered water.

18. The Patent is characterised by having an inlet arranged in a bottom portion of the filter cartridge, and a plurality of vertically orientated baffles which extend the flow path between the inlet and the outlet.

19. The alleged advantages of the Patent are three-fold;

- i. The vertically oriented baffles mitigate bed formation and bed compaction of the filter medium used in the filter cartridge.
- ii. The baffles extend the flow path allowing a compact cartridge to be used.
- iii. Placing the inlet at the bottom of the housing ensures that the entire content of the water reservoir may be used.



20. The Patent has a single independent claim, and 8 additional claims appended thereto. Claim 1 reads;

Filter cartridge (1) for use in water tanks of coffee machines, having a housing (2) which is provided with at least one inlet (3) and an outlet (4) and is intended for accommodating a filter medium, the outlet (4) being guided out of the housing (2) of the filter cartridge (1) in a downward direction, and a multiplicity of chicanes (6a, 6b; 7a, 7b, 7c, 7d) which extend the water flow path between the inlet and outlet (3,4) being arranged on the inside of the housing (2), **characterised in that** the housing (2) has a bottom part (2a) and a top part (2b), in which case the chicanes (6a, 6b; 7a, 7b, 7c, 7d) run essentially vertically and are arranged alternatively on the bottom part (2a) and top part (2b), and in each case one through-passage (13, 14) for the water remains free between the bottom part (2b) and the chicane(s) (6a) arranged on the top part (2b) and/or between the top part (2b) and the chicane(s) (7a) arranged on the bottom part (2a), and the inlet (3) is arranged in the bottom region of the filter cartridge.

21. I will consider the dependent claims should it become necessary after my assessment of claim 1.

Inventive step – the law

22. Section 1(1)(b) of the Act reads:

a. 1(1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say

(a) ...

(b) it involves an inventive step;

23. The provisions in relation to inventive step are found in section 3 which states:

3. An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above (and disregarding section

2(3) above).

24. The Court of Appeal in *Windsurfing*¹ formulated a four-step approach for assessing whether an invention is obvious to a person skilled in the art. This approach was restated and elaborated upon by the Court of Appeal in *Pozzoli*². Here, Jacob LJ reformulated the *Windsurfing* approach as follows:

(1)(a) Identify the notional “person skilled in the art”

(1)(b) Identify the common general knowledge of that person;

(2) Identify the inventive concept of the claim in question or if that cannot be readily done, construe it;

(3) Identify what, if any, differences exist between the matter cited as forming part of the “state of the art” and the inventive concept of the claim or the claim as construed.

(4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps that would have been obvious to the person skilled in the art or do they require any degree of invention?

Claim construction

25. Before I can determine whether the claims of the Patent lack an inventive step I must first construe them. This means interpreting the claims in light of the description and drawings as instructed by section 125(1) which reads:

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.

26. 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 claim to mean. This approach has been confirmed in the decisions of the High Court in *Mylan v Yeda*³ and the Court of Appeal in *Actavis v ICOS*⁴.

27. In order to interpret the claims through the eyes of the skilled person, they must first be identified.

28. The Proprietor explicitly identifies the skilled person as a designer of filter

¹ *Windsurfing International Inc. v Tabur Marine (Great Britain) Ltd*, [1985] RPC 59

² *Pozzoli SPA v BDMO SA* [2007] EWCA Civ 588

³ *Generics UK Ltd (t/a Mylan) v Yeda Research and Development Co. Ltd & Anor* [2017] EWHC 2629 (Pat)

⁴ *Actavis Group & Ors v ICOS Corp & Eli Lilly & Co.* [2017] EWCA Civ 1671

cartridges for use in water tanks of hot beverage brewing machines, particularly coffee machines.

29. The Requestor argues that the Patent is not strictly limited to a coffee machine filter cartridge but is limited to a filter cartridge that is *suitable for* use in a coffee machine. The Requestor argues that the reader is not taught anything about the interaction between the filter cartridge and the coffee machine or its water tank and further asserts that the adaptations necessary to accommodate a filter cartridge within a water tank of a coffee machine will depend on its particular design. The Requestor further argues that in the absence of any disclosure of a coffee machine, or a coffee machine water tank, the skilled person would be a designer of water filter cartridges rather than a designer of water filter cartridges specific to hot water beverage brewing machine.

30. The skilled person and their level of skill will depend on the scope of the subject matter of the Patent and, typically, any claim to an apparatus *for* a particular purpose is construed as a claim to an apparatus having features that are suitable for that purpose. Apparatus which possess the features specified in the claims of a patent but would require modification or adaptation to enable it to be used in the stated purpose would not typically demonstrate that the patent is known.

31. I am unable to identify any justification for departing from the normal interpretation of this component of the claim and therefore I understand that claim 1 is directed towards a filter cartridge that is suitable for use in water tanks of a coffee machine. Therefore the filter cartridge would be sized and shaped to be received in a water tank of a coffee machine and would be adapted such that the outlet of the filter cartridge would cooperate with corresponding feature of the water tank in order to dispense filtered water.

32. Therefore, in my opinion, the skilled person would be a designer of water filter cartridges particular to hot beverage brewing machines.

33. The Proprietor, in their observations, state an additional limitation of claim 1 is that the filter cartridge is fully immersed in the water tank. This statement is contested by the Requestor and I find myself in agreement. There is no requirement for the filter cartridge to be fully immersed in water. However, in order for the filter cartridge to operate, in the absence of any disclosure of a pressure feed, the filter cartridge must be submerged in water at least up to the height of the tallest chicane extending from the bottom part. This corresponds with the third advantage set out above wherein providing the inlet in the bottom region of the filter cartridge, i.e. below the height of the tallest chicane, ensures that the minimum depth of water is governed by the height of the tallest chicane rather than the height of the top part as it would be if the inlet were provided here. I understand, particularly in light of the advantage b. of the invention, that the 'bottom region' is at, or near, the base of the bottom part.

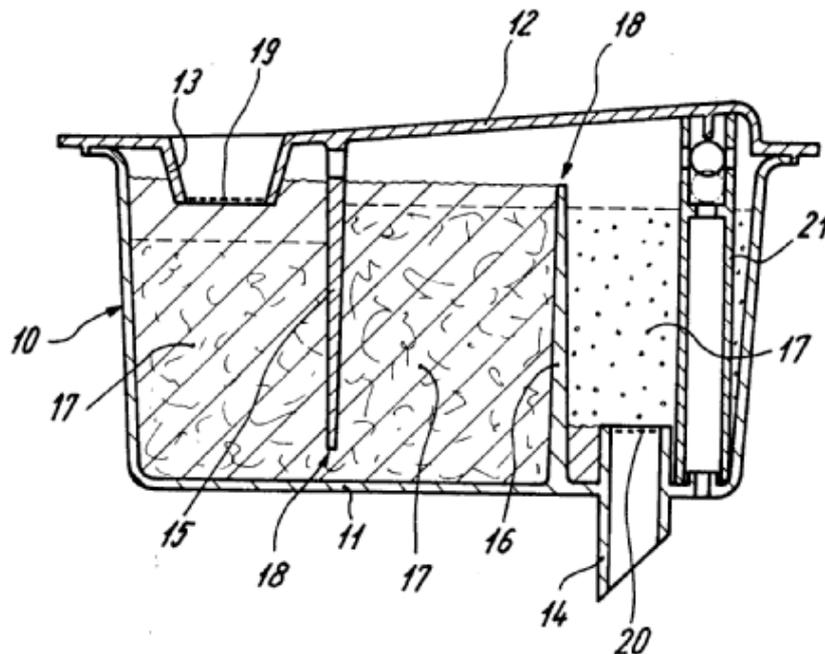
34. There is no further contention with regard to the construction of claim 1. I do not have any further issue with claim 1 and consider it to be clear when read in light of the description. In my opinion the skilled person would have no difficulty with understanding the meaning and scope of claim 1.

The inventive step argument

35. The Requester alleges that D1, in light of the common general knowledge as exemplified in D2, D3, D4, D5 and D6, impugns the inventiveness of claim 1.

The Prior art

36. D1 discloses an apparatus for filtering liquids, for instance filtering domestic drinking water for brewing coffee or tea. In particular the Requestor exclusively relies on the embodiment disclosed with regard to figure 1 of D1, reproduced below.



37. The filter cartridge comprises a container 10, and a lid 12 wherein an inlet 13 is provided on the lid and an outlet 14 is provided on a container bottom 11.

38. A guide bar 15 extends from the lid and terminates proximate to the bottom, a similar guide bar 16 extends from the bottom and terminates proximate to the lid. The guide bars define chambers 17 thereby extending the flow path between the inlet and the outlet.

39. The inlet is provided with a sieve 19 and, whilst vague, there is some indication of the advantages of incoming liquid running from the lid towards the bottom of the container.

40. In use, liquid is introduced into the filter cartridge via inlet 13 and transits chambers 17 to outlet 14 where filtered liquid may be collected in a suitable vessel. A vent pipe 21 is provided such that air can escape when liquid flows in via the inlet. The characterising feature of this particular embodiment is that the outlet projects into the container to provide an overflow such that a quantity of water is always retained inside the container; this ensures that quantity of water is retained in the final chamber 17 which is understood to be necessary to retain the effectiveness of a cleaning agent in that chamber. Whilst not explicit I understand the filter cartridge to

be a gravity filter.

41. D1 additionally discloses a flange or annular web running parallel to the guide webs 15, 16 formed on the outside of the base 11 for cooperation with a collecting container.

42. D1 discloses a further two embodiments. Neither of these additional embodiments are relied upon by either party, therefore I shall dismiss these.

43. D2, D3, D4, D5 and D6 all show water filter apparatus comprising a housing and having an inlet and outlet associated with the bottom portion.

Does Claim 1 lack an inventive step in light of D1 when viewed in light of the common general knowledge exemplified in D2, D3, D4 D5 or D6?

44. To determine whether the invention defined in claim 1 of the Patent is inventive over the prior art I will use the four-step test outlined in paragraph 24 above.

(1)(a) Person skilled in the art

45. The person skilled in the art has already been defined in my discussion of claim construction set out at paragraphs 32 above.

(1)(b) Common general knowledge

46. The Proprietor asserts that the skilled person would have a “*high-level understanding of the hydraulic components and structure of coffee brewing machines, and the general functioning and operation of water filter cartridges for use in water tanks of such machines. This would include the general structure of a filter cartridge as comprising an interior chamber of fluid receiving space, and the inclusion of a filtration means in the space*”.

47. The Requestor argues that the skilled person would have a far more general expertise and “*would be aware of the different options for design of water cartridges, including the options for top or bottom feed of the cartridge (the advantages of bottom feed area acknowledged in paragraph [0002] of the patent specification), as well as the configurations for optimising the use of space by extending the flow path with alternating baffles*.”

48. In my opinion the common general knowledge would be aligned with that defined by the Proprietor. However, the skilled person would additionally have knowledge of typical configurations of more generic water filters including inlet and outlet placement as alleged by the Requestor. The skilled person would additionally understand the limitations and advantages of the placement of inlets and outlets particularly in regard to gravity filters.

(2) Inventive concept of claim 1

49. The inventive concept is set out in claim 1 as construed above.

(3) What differences exist between the disclosure of D1 and the inventive

concept of claim 1?

50. The Requestor acknowledges that there are two distinctions between D1 and the Patent;

- i. the filter of D1 is not disclosed as being a filter for use in water tanks of coffee machines, and
- ii. the inlet of D1 is not provided in the bottom region of the device.

51. The Proprietor appears to agree with these distinctions. However, the Requestor further asserts that in the absence of any limitation regarding the water tank or coffee machine the filter cartridge of D1 is at least *potentially* 'suitable for' use as a filter cartridge of a coffee machine water tank as there is nothing to indicate that it is unsuited to such a use.

52. I have previously stated that a filter cartridge for use with a water tank of a coffee machine would be adapted to cooperate with said water tank. There is no disclosure in D1 that leads me to understand that the water filter is adapted in any way to cooperate with a water tank of a coffee machine and therefore I find myself in agreement with the distinctions outlined above.

(4) Are the differences inventive?

53. The Requestors argument with regard to the first distinction is based exclusively on a broad interpretation of the term 'suitable for', which I have already discussed. The Requestor makes no argument concerning whether the skilled person would specifically adapt the water filter of D1 to be suitable for use with a water tank of a coffee machine.

54. The Proprietor alleges that there is no teaching that D1 is a water filter cartridge for use with a water tank of a beverage making machine. The Proprietor relies on the shape and configuration of the drain connector 14, and the inlet 13 as well as the provision of the vent tube 21 to argue that D1 teaches away from the Patent.

55. D1 discloses a gravity filter cartridge; this is clearly implied throughout the description and in particular by the provision of inlet 13, and its particular geometry, at the lid 12. If the inlet were relocated to a bottom portion, for example the bottom 11, the filter cartridge would simply not work as intended and would require further modification such that liquid is introduced into the filter cartridge via a pressure feed. Therefore the skilled person would not be motivated to make this adaptation.

56. Furthermore, I am unable to identify anything in D1 that would motivate the skilled person to adapt the filter cartridge for use with a water tank of a coffee machine.

Opinion

57. It is my opinion that independent claim 1 of the Patent is both novel and involves an inventive step in light of the disclosures provided by the Requestor.

Sean OConnor
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.