



PATENTS ACT 1977

BETWEEN

Tox Olaopa

Proprietor

and

WABAG Water Technologies Ltd

Opponents

PROCEEDINGS

Request under section 74B of the Patents Act 1977
for a Review of Opinion 22/14 issued
on patent number EP1196354

HEARING OFFICER

Peter Slater

DECISION

Introduction

- 1 This decision relates to a request for a review of opinion 22/14 (“the Opinion”) under section 74B of the Patents Act (the “Act”). The Opinion was requested by Tox Olaopa (“the Proprietor”) in relation to whether his patent, EP1196354 B1 (“the Patent”) was being infringed by the BIOPUR-DN tank, one of a range of biological filters supplied by Aker Kvaerner and WABAG, would constitute an indirect infringement of the patent and whether the subsequent use of the BIOPUR-DN tank in a wastewater treatment system as illustrated in the request would similarly infringe the patent as claimed. The Opinion, which was issued on 14 January 2015, concluded that there was no infringement of the patent.
- 2 The proprietor of the patent requested a review of the Opinion under section 74B of the Act on 12 February 2015. WABAG Water Technologies Ltd filed a counter statement contesting the application on 31 March 2015. Since neither party has asked to be heard, I have based my decision upon the papers currently on file.

The Law

- 3 The law governing reviews of opinions is set out, so far as is relevant here, in section 74B and Rule 98 of the Patent Rules 2007. These read:

Section 74B Reviews of opinions under section 74A

(1) Rules may make provision for a review before the comptroller, on an application by the proprietor or an exclusive licensee of the patent in question, of an opinion under section 74A above.

(2) The rules may, in particular-

(a) prescribe the circumstances in which, and the period within which, an application may be made;

(b) provide that, in prescribed circumstances, proceedings for a review may not be brought or continued where other proceedings have been brought;

....

Rule 98.

(1) The patent holder may, before the end of the period of three months beginning with the date on which the opinion is issued, apply to the comptroller for a review of the opinion.

(2) However, such proceedings for a review may not be brought (or if brought may not be continued) if the issue raised by the review has been decided in other relevant proceedings.

(3) The application must be made on Patents Form 2 and be accompanied by a copy and a statement in duplicate setting out the grounds on which the review is sought.

(4) The statement must contain particulars of any relevant proceedings of which the applicant is aware which may be relevant to the question whether the proceedings for a review may be brought or continued.

(5) The application may be made on the following grounds only—

(a) that the opinion wrongly concluded that the patent in suit was invalid, or was invalid to a limited extent; or

(b) that, by reason of its interpretation of the specification of the patent in suit, the opinion wrongly concluded that a particular act did not or would not constitute an infringement of the patent.

(Emphasis added)

- 4 It is important to note that the grounds on which an opinion on infringement can be reviewed are quite narrowly prescribed in Rule 98(5)(b). The reason for this is that in most circumstances where a party feels aggrieved by an opinion, there will be a clear route for addressing that grievance. For example a party who is deemed by an opinion to be infringing a patent can seek a declaration of non-infringement. Equally where an opinion has concluded that no infringement is taking place and the patent proprietor disagrees, he may sue for infringement. This could include the circumstances where the patent proprietor disagrees with the way that the claims have been construed. But suing for infringement is not possible if the opinion was sought on a potential or hypothetical act, and in such circumstances it would be unfair to deny the patent proprietor a chance to overturn an infringement opinion based on a construction of the claims which is adverse to him. Thus the rules allow a review of an infringement opinion but only if the opinion came to a wrong conclusion on infringement as a result of how it interpreted the specification of the patent in suit.
- 5 It is also I believe worthwhile for me to briefly say something here about the nature of reviews under S74B. This was considered in the Patents Court in the case of DLP where the judge, Kitchen J, noted:

“In the case of an appeal under rule 77K [now Rule 100], the decision the subject of the appeal is itself a review of the opinion of the examiner. More specifically, it is a decision by the Hearing Officer as to whether or not the opinion of the examiner was wrong. I believe that a Hearing Officer, on review, and this court, on appeal, should be sensitive to the nature of this starting point. It was only an expression of an opinion, and one almost certainly reached on incomplete information. Upon considering any particular request, two different examiners may quite reasonably have different opinions. So also, there well may be opinions with which a Hearing Officer or a court would not agree but which cannot be characterised as wrong. Such opinions merely represent different views within a range within which reasonable people can differ. For these reasons I believe a Hearing Officer should only decide an opinion was wrong if the examiner has made an error of principle or reached a conclusion that is clearly wrong. Likewise, on appeal, this court should only reverse a decision of a Hearing Officer if he failed to recognise such an error or wrong conclusion in the opinion and so declined to set it aside. It is not the function of this court (nor is it that of the Hearing Officer) to express an opinion on the question the subject of the original request.”

- 6 It follows that the remit of any review is quite narrow. It is not a rehearing that would necessarily allow for example for new evidence not available to the examiner to be considered. Rather it is simply a review of whether the original opinion reached a conclusion that is clearly wrong on the basis of the material available at the time.

The patent

- 7 The patent in suit relates to a process for treating wastewater comprising essentially three stages as illustrated in figure 1 below. The stages are a de-nitrification stage (13), a nitrification and oxidation stage (3), and a clarifying stage (7). The de-nitrification stage is carried out in a tank having both anoxic and anaerobic zones and a proportion of the effluent from the nitrification and oxidation stage is recycled (16) to the de-nitrification stage. This combination also serves to remove phosphorous.

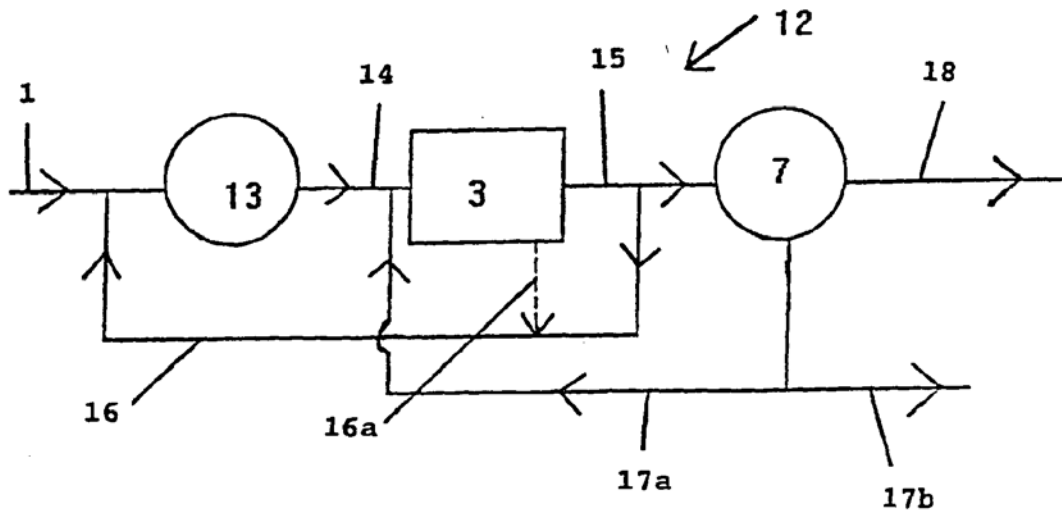


Figure 1 - Flow diagram for wastewater treatment process of the Patent (figure 2 of the Patent).

- 8 The first tank (13) insofar as it comprises a converted primary settlement tank is of particular interest. An example of a converted primary settlement tank according to the invention is shown in Figure 4 of the patent reproduced below and is described in paragraph [0017] of the patent as follows:

Alternatively, the first step may comprise a converted primary settlement tank 13, an example of which is shown in Figure 4. In a non-converted primary settlement tank the wastewater 1 enters the tank 13, the central baffles 19 are in a raised position as indicated by the dotted lines forcing the wastewater 1 downwards as indicated by the dotted arrows 20, sludge 21 settles at the bottom and is periodically removed by means of the outlet 22, which has a stop tap 23. The effluent for further treatment flows over the top of the sides of the tank as indicated by the dotted arrows 24. In a converted primary settlement tank 13 the central baffles 19 are lowered allowing the wastewater 1 to flow over them and an anoxic zone A is created where the wastewater 1 enters the tank 13. The surface layer of liquid may form an oxic zone C and in the remainder of the tank 13 an anaerobic zone B occurs. The secondary effluent 14 for removal from the tank 13 to the second step in tank 3 is removed via the outlet 22 to which a flow control valve (not shown) may be connected.

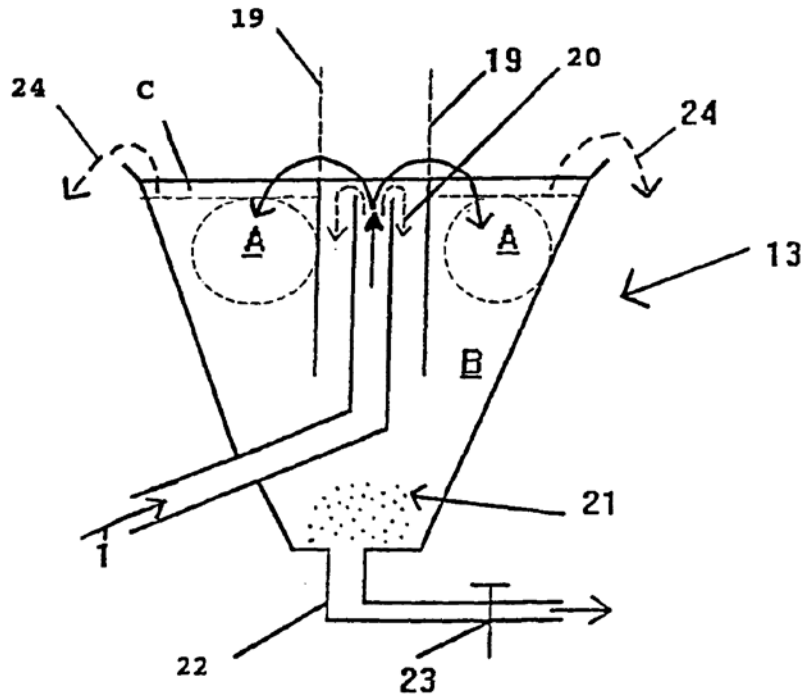


Figure 2 - a cross-section of a converted primary settlement tank (figure 4 of the Patent)

- 9 The patent was granted on 23 August 2006, and has an earliest priority date of 2 June 1999. The granted specification contains a single independent claim which reads as follows:

1. A biological process for the removal of nitrogen and phosphorous from municipal or industrial waste water, comprising a first reaction step in a tank (13) providing anoxic and anaerobic conditions, a reaction step in a separate tank (3) providing an aerobic condition for nitrification and oxidation of a liquor (14) received from said first reaction step, and a clarifying step, liquor from said separate tank being recycled back to said first tank (13),

characterised in that

said first tank (13) is a balancing tank or converted primary settlement tank providing an anoxic zone (1) around an entry point receiving an incoming flow of waste water and an anaerobic zone (B) in the surrounding area, that liquor (14) from said first tank (13) is conducted to said separate tank (3) for the aerobic reaction step at a controlled balanced feed rate, and that nitrified mixed liquor (15) is recirculated (16) from said separate tank (3) to said first tank (13).

Arguments and analysis

- 10 In the opinion, the examiner appears to have focussed his attention on whether the marketing of the BIOPUR-DN tank, one of a range of biological filters supplied by Aker Kvaerner and WABAG, would constitute an indirect infringement of the patent and whether the subsequent use of the BIOPUR-DN tank in a wastewater treatment system as illustrated in the original request would similarly infringe the invention as claimed. He

identifies the first tank referred to in claim 1 as being an essential element of the invention, and that in order for the BIOPUR-DN tank to infringe the claim, it must comprise at the very least, a balancing tank or converted primary settlement tank having an anoxic zone and an anaerobic zone. He concludes that the BIOPUR-DN tank is not a converted primary settlement tank or a balancing tank within the meaning of the claims and hence that there is no infringement.

- 11 The proprietor argues that the examiner reached the wrong conclusion because he erred in his construction of the claim particularly in respect of his interpretation of the expression "*converted primary settlement tank*" and failed to identify the essential elements of the invention as required by section 60(2) of the Act.
- 12 In essence, the proprietor's argument is that the first tank, at least insofar as it comprises a converted primary settlement tank, is an essential element of the invention. He argues that the use of a converted primary settlement tank as described is what distinguishes the invention from the prior-art where separate tanks were required to carry out the anoxic and anaerobic stages of the process. In the converted primary settlement tank according to the invention, both anoxic and anaerobic reactions take place in the same tank, the influent entering through an inlet at the top of the tank and the effluent being discharged from an outlet at the bottom of the tank, there being an anoxic zone around the inlet and an anaerobic zone beneath it.
- 13 The proprietor argues therefore that in order to be considered a converted primary settlement tank all that is required is for the tank, in this case the BIOPUR-DN tank, to have an inlet at the top of the tank, an outlet for the effluent at the bottom of the tank and a so-called "Top Water Level (TWL)". He provided some additional evidence in support of his arguments in the form of a number of magazine articles and an extract from a textbook published by the Water, Engineering and Development Centre (*WEDC*) at *Loughborough University*. He concludes that the BIOPUR-DN tank has all of these features and hence must infringe claim 1. However, I am conscious that this additional material was not available to the examiner at the time of the opinion and I will treat it accordingly.
- 14 So was the examiner's conclusion a reasonable one or was it clearly wrong? Whilst I find the examiner's approach to be somewhat difficult to follow at times, he appears to have rightly identified the *first tank* referred to in claim 1 as being an essential element of the invention, and that in order for the BIOPUR-DN tank to infringe claim 1, it must comprise at the very least, a balancing tank or converted primary settlement tank providing an anoxic zone and an anaerobic zone within the same tank. I will begin therefore, as the examiner did, by looking at what constitutes a converted primary settlement tank.
- 15 In paragraph 22 of the opinion, the examiner goes to some length to describe the features of a conventional settlement tank drawing upon the description at paragraph [0017] of the patent but says little or nothing about the nature of the conversion that is required to produce a converted primary settlement tank within the meaning of the claims, other than to say that "only one example is provided in the patent". I therefore assume that the examiner has used that example as the basis of his opinion, and in doing so has come to the conclusion that the BIOPUR-DN tank is not a converted primary settlement tank as it does not have all the features referred to in that example. Paragraph 22 reads as follows:

22. *The requester's observations in reply refer to a converted primary tank. The suggestion appears to be that the BIOPUR-DN tank is a converted primary tank. The claim however refers specifically to a converted primary settlement tank. The various forms of settlement tanks would be well known to the skilled person and a primary settlement tank is a standard feature of many wastewater treatment processes. A brief description and illustration (see figure 4 below) of one such settlement tank is provided in the Patent (paragraph [0017]). Settlement tanks are generally characterised by having an inlet in an upper part of the tank surrounded by vertical baffles (19) to minimise disturbance to and mixing with the remainder of the tank, a liquid outlet (24) in an upper part of the tank to draw off clarified wastewater for further treatment and an outlet (22) for periodic removal of sludge (21) which accumulates in the bottom of the tank. On account of the description and illustration of such a settlement tank in the Patent, the skilled person would be in no doubt that, despite other references to a primary tank (e.g. paragraph [0020]), the reference to a primary settlement tank in the claims was deliberate and should be construed as such. Furthermore, although the nature of any conversion may be wide-ranging and only one example is provided in the patent, it is nevertheless quite clear that the BIOPUR-DN tank is not a converted primary settlement tank.*

- 16 So, what to my mind is meant by the expression "converted primary settlement tank"? Clearly, the only definition available to the examiner at the time of the opinion was that which was contained in paragraph [0017] of the specification namely:

"In a converted primary settlement tank 13 the central baffles 19 are lowered allowing the wastewater 1 to flow over them and an anoxic zone A is created where the wastewater 1 enters the tank 13. The surface layer of liquid may form an oxic zone C and in the remainder of the tank an anaerobic zone B occurs. The secondary effluent 14 for removal from the tank 13 to the second step in tank 3 is removed via the outlet 22 to which a flow control valve (not shown) may be connected."

- 17 I therefore think it would have been entirely reasonable for the examiner to consider that, at the very least, a converted primary settlement tank must have, as the proprietor says, an inlet at the top of the tank and an outlet for the effluent at the bottom of the tank. However, in accordance with the only example given in the specification, I think it would also have been reasonable for him to conclude that the tank must have a set of baffles which have been lowered in comparison to a conventional settlement tank in order to create the anoxic zone, as this would appear to be the nature of the conversion disclosed in the specification.
- 18 Is it necessary for the BIOPUR-DN tank to have all of these features in order to infringe claim 1? The proprietor does not think so. Indeed, he would have me believe that the presence of the baffles, for example, is immaterial as they do not contribute to the teaching of the invention and serve only to hold the inlet pipe in place. However, I would have to disagree. The nature of the conversion is that which is defined in the example, and there is nothing in the evidence to suggest otherwise. Indeed, the example seems to imply that the lowering of the baffles is required to allow wastewater to flow over them and thereby create the anoxic zone essential to the working of the invention. Given that the BIOPUR-DN tank has no baffles, I do not think it can be considered a converted primary settlement tank within the meaning of

claim 1, particularly when read in light of the example given in paragraph [0017] and as illustrated in figure 4 of the patent. I therefore think it was entirely reasonable for the examiner to conclude that the BIOPUR-DN tank as supplied by Aker Kvaerner and WABAG and/or its subsequent use in the wastewater treatment process as described does not infringe claim 1.

- 19 The proprietor in his request for a review at paragraph 6 on page 6, points out that *“the original request for an opinion specifically asked for comparison of the BIOPUR-DN tank with a “converted primary settlement tank” of patent EP1196354 and not a balance tank...”*, I therefore do not think it necessary for me to consider whether the BIOPUR-DN tank constitutes a balancing tank within the meaning of the claims. Suffice to say, that I agree with the examiner when he concludes that the tank is not a balancing tank and again does not infringe claim 1 (see paragraphs 23-25 of the opinion).

Conclusion

- 20 I conclude that the examiner in his opinion did not make an error in principle or reach a conclusion that is clearly wrong. I therefore make no order to set the opinion aside.

Appeal

- 21 Any appeal must be lodged within 28 days after the date of this decision.

P R SLATER

Deputy Director acting for the Comptroller