Datasheet for the decision
of 21 July 2009

Case Number: T 1927/07 - 3.2.07
Application Number: 99907792.8
Publication Number: 1066124
IPC: B09B 1/00
Language of the proceedings: EN

Title of invention:
System for the fast and removable covering of loads of waste with sheets of adsorbing and transpiring material

Patentee:
Simoni, Giuliana

Opponent:
HELSA-WERKE, HELMUT Sandler GmbH & Co. KG

Headword:
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Relevant legal provisions:
EPC Art. 56

Relevant legal provisions (EPC 1973):
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Keyword:
"Inventive step (all requests): no"

Decisions cited:
-

Catchword:
-
Case Number: T 1927/07 - 3.2.07

DECLISION
of the Technical Board of Appeal 3.2.07
of 21 July 2009

Appellant: Simoni, Giuliana
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 1 October 2007 revoking European patent No. 1066124 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: H. Meinders
Members: K. Poalas
E. Dufrasne
Summary of Facts and Submissions

I. The appellant (patent proprietress) lodged an appeal against the decision of the Opposition Division revoking European patent No. 1 066 124.

II. Opposition had been filed against the patent as a whole based on Article 100(a) EPC on the grounds of lack of novelty (Article 54 EPC) and lack of inventive step (Article 56 EPC).

III. The Opposition Division found that the subject-matter of claims 1 and 2 of the patent as granted did not involve an inventive step (Article 56 EPC).

IV. The following documents of the opposition proceedings are relevant for the present decision:

E1: GB 2 288 598 A
E2: WO 95/13147 A
E3: DE 295 16 797 U
E4: DE 195 34 874 A.

V. Oral proceedings before the Board of Appeal took place on 21 July 2009.

(a) The appellant requested that the decision under appeal be set aside and that the patent be maintained as granted or, in the alternative, on the basis of one of the auxiliary requests 1 to 3 filed with letter dated 19 June 2009.

(b) The respondent (opponent) requested that the appeal be dismissed.
VI. Independent claim 1 according to the main request (claim 1 as granted) reads as follows:

"Method for the fast and removable covering of loads of waste with sheets of transpiring material comprising the operation of periodically laying and removing to protect the waste and to allow the fast periodic removal of the same sheets, characterized by that the sheets are adsorbing to neutralize any odorous exhalation".

Claim 1 according to auxiliary request 1 is for the method with all the features of claim 1 as granted together with the additional feature "after having removed the covering sheet, on the load of waste other layers of waste and thereon the same covering sheet, which had been removed, are placed".

Claim 1 according to auxiliary request 2 is for the method with all the features of claim 1 as granted together with the additional feature "that the adsorbing and transpiring sheets are rolled sheets which are unrolled and laid down on a load of waste and then kept flat by elastic tension wires, and pickets being used to fix the adsorbing and transpiring sheet’s edges to the ground".

Claim 1 according to auxiliary request 3 is a combination of claim 1 of auxiliary request 1 with claim 1 of auxiliary request 2.
VII. The appellant argued essentially as follows:

*Claim 1 according to the main request: inventive step (Article 56 EPC)*

El teaches the use of hessian cloth which does not inhibit the extraction and control of gas and leachate but which can be provided with a deodoriser to slowly release deodorant, see page 7, last paragraph. At the same time El criticises the use of clay stating that clay is a material generally impermeable to gas and liquid, see page 2, lines 6 to 25.

On the other hand in E3 a composite material based on clay and bitumen supported by a carrier is used, see page 1, fourth paragraph to page 2, second line; page 2, last paragraph. Since the exact percentage of clay disclosed in said composite material is not mentioned in E3, it is not evident to the person skilled in the art that said composite material is an adsorbing one. E3 does not indicate that clay is an adsorbing material. The use of clay alone is not foreseen in E3. For covering waste an impermeable material is thus provided and the odours are trapped beneath said covering, see page 3, last paragraph.

The two contradictory teachings of E1 and E3 cannot be combined for arriving in an obvious way to the subject-matter of claim 1 of the patent in suit which suggests to allow the passage of the gases through a sheet which, in its turn, simultaneously achieves the function to adsorb and neutralize the malodorous exhalation.
From E4 a skilled person learns that a pulverized clay material provided at a layer thickness of 1 to 5 mm can be used for neutralizing the odours, see column 1, lines 28 to 36. The fact that the material described in E4 is in powder form excludes the use of such material for a "fast and removable covering" as claimed in claim 1 of the patent in suit.

Therefore, there is no hint in the art to combine the teachings of E1, E3 and E4 for arriving without any inventive effort at the subject-matter of claim 1 of the patent in suit. On the contrary, in particular E1 and E4 are incompatible with each other because E1 describes the use of fast and removable covering sheets, whereas E4 is focused on a powdered material used in situ and which is covered every day with another layer of waste.

Furthermore, the teachings of E1 and E3 are not compatible with each other, since the skilled person would not try to combine clay as an impermeable material with a permeable sheet.

Finally, neither E3 nor E4 suggests the combination of the teachings of these two documents with each other.

Claim 1 according to auxiliary request 1: inventive step (Article 56 EPC)

The arguments presented above for claim 1 according to the main request apply also to claim 1 of auxiliary request 1.
Claim 1 according to the auxiliary request 2: inventive step (Article 56 EPC)

The elastic tension wires keeping the sheet flat ensure a better contact between the cover sheet and the waste allowing thereby an effective adsorption of the malodorous exhalations of the waste material. The cited prior art does not disclose any hint concerning the use of elastic tension wires together with pickets fixing the sheet's edges to the ground.

Claim 1 according to auxiliary request 3: inventive step (Article 56 EPC)

The arguments presented above for claim 1 according to auxiliary request 1 and for claim 1 according to auxiliary request 2 apply also to claim 1 of auxiliary request 3.

VIII. The respondent argued essentially as follows:

Claim 1 according to the main request: inventive step (Article 56 EPC)

E1 describes a method according to the preamble of claim 1. Claims 4 and 9 of E3 relate to a transpiring sheet for covering loads of waste having clay as an adsorbing material. The well known capacity of clay to adsorb odours arising from waste is documented in E4. The skilled person would combine the teachings of E1 and E3 and would arrive at the subject-matter of claim 1 without exercising an inventive activity.
Claim 1 according to the auxiliary request 1: inventive step (Article 56 EPC)

The arguments presented above for claim 1 according to the main request apply also to claim 1 of auxiliary request 1.

Claim 1 according to auxiliary request 2: inventive step (Article 56 EPC)

Elastic tension wires and pickets are fixing means well known to the person skilled in the art and their selection in accordance with the circumstances does not demand from the person skilled in the art any inventive skills.

Claim 1 according to auxiliary request 3: inventive step (Article 56 EPC)

The arguments presented above for claim 1 according to auxiliary requests 1 and 2 apply also to claim 1 of auxiliary request 3.

Reasons for the Decision

1. Claim 1 - main request: inventive step (Article 56 EPC)

1.1 El provides a method of operating a landfill site for waste disposal, in which a cover of gas and liquid permeable sheet material is laid over the deposited waste material, whereby the sheet is a biodegradable material formed of natural fibres like hessian or it is a textile material. The covering is reusable, as it is
removed at the start of the day and relaid over the waste material at the end of the day; it may also be left in place if damaged and covered with the next day's refuse, see page 4, first to fifth complete paragraphs; page 5, first paragraph and claims 1, 10, 12 and 13.

It is therefore established that El, considered to represent the closest prior art, discloses a method according to the preamble of claim 1 of the contested patent. El furthermore states that the emission of odours from landfill sites must be avoided and discloses treating the sheet for covering the waste with a deodoriser to slowly release deodorant, see page 1, last paragraph to page 2, first paragraph and page 7, last paragraph.

The method of claim 1 of the contested patent thus differs from the method known from El in that the sheets used to cover the waste are adsorbing to neutralize any odorous exhalation.

1.2 The objective problem to be solved is therefore the provision of an alternative method to that of using a deodorant to neutralize odorous exhalation from waste.

1.3 Seeking an alternative to a known solution is not considered to be inventive per se, since the skilled person is always looking for ways of improving on known techniques. Thus, the skilled person can be expected to look for alternative ways of neutralizing odorous exhalation from waste without necessarily resorting to inventive skill.
1.4 Furthermore, the claimed solution, namely the provision of sheets which adsorb odorous exhalation from waste, is considered by the Board to be suggested in an obvious manner by the further disclosure of E3.

From E3 the skilled person learns that it is possible to apply clay-containing material as a coating to carrier sheets for covering landfill or waste sites, see page 1, first paragraph to page 3, last paragraph. Although E3 suggests the use of non-transpiring sheets for covering waste so that odours are trapped, see page 3, last paragraph, the skilled person knows from E1 that an impermeable covering of a waste site would cause problems by trapping gas or causing leachates to migrate sideways across the site, see page 2, lines 22 to 25 and page 5, lines 1 to 5. Consequently, according to the Board the skilled person would keep the waste covering material transpiring/permeable as taught by E1, for maintaining the required gas and leachate control.

1.5 The reason why the skilled person would consider the teaching of E3 is because it is part of his general technical knowledge that thin clay containing layers have the capacity of adsorbing odours. Evidence of this knowledge is for instance E4, see column 1, lines 37 to 42: "bekanntermaßen", which states that finely dispersed clay containing material adsorbs odours exhaled from waste and that application of a thin layer of such clay-containing material on waste can neutralize odours, see column 1, lines 3 to 18 and 28 to 42; claim 1: "Verfahren zur Eliminierung von Geruchsemissionen aus Mülldeponien".
1.6 The appellant argues that since no reference exists in E3 to any adsorbing characteristics of the clay containing composite material and since also no information concerning the exact percentage of clay comprised in said composite material is given in E3, the required amount for the sheet for covering waste, so as to have an adsorbing capacity for odours, is not known from E3.

As has, however, been shown under point 1.5 above with reference to E4, it is part of the knowledge of the person skilled in this art that clay-containing material adsorbs odours, and accordingly the clay containing coating as applied according to E3 to the sheet for covering waste according to E1 possesses automatically such an adsorbing capacity and, when applied in sufficient quantity and quality, will neutralize odours ("Eliminierung"), as evidenced by E4.

The appellant's contention that the clay/bitumen-composite material proposed by E3 could theoretically consist mainly of bitumen so that the clay is encapsulated within such a large amount of bitumen and would not be able to provide any adsorbing effect, cannot be followed by the Board either. Firstly, the appellant could not support its contention by further evidence. Secondly for covering waste sites the application of the material proposed by E3 is mentioned in relation with the reduction or prevention of odours, i.e. to take profit of the inherent capability of clay to adsorb odours exhaled from waste, see page 3, last paragraph. The skilled person with his knowledge as evidenced by E4 would not encapsulate it within a large
amount of bitumen counteracting thereby the effect for which it is actually part of the product of E3.

1.7 The appellant argues that E1 and E4 are incompatible with each other since E1 concerns fast removable covering sheets whereas E4 focuses on a powdered material which is used in situ and covered every day with another layer of waste (and is, thus, not removable).

The argument that E1 and E4 are incompatible cannot hold, as E4 is not used in the argumentation of the Board, see point 1.5 above, for its teaching to the skilled person trying to solve a problem, but as evidence of that person's technical knowledge regarding the adsorptive capacity of clay to neutralize odours, when used in sufficient quantity and in proper form.

In any case, E1, E3 and E4 all relate to the problem of odours originating from waste deposits and how to cope with it. E1 and E3 concern cover sheets for waste and address the problem of odours arising from the waste, see E1, page 2, line 3 and E3, page 1, second paragraph, while E4 concerns the problem of odours arising from waste and discloses that clay-containing material can be applied in finely dispersed form to the waste to adsorb and thus neutralize such odours, see E4, column 1, lines 14 to 15 and lines 33 to 34.

1.8 In respect of the appellant's argument that the sheet proposed by E3 for covering waste is non-transpiring the Board follows the respondent's argumentation that the subject-matter of the combination of claims 1, 3, 4 and 9 of E3 in fact defines a layer for covering waste
which is water and/or gas permeable and which, by virtue of the fact that it includes clay, by definition also adsorbs odours, whereby said layer comprises a carrier. The Board considers that since a combination of these claims provides for a permeable sheet covering the waste it cannot be convincingly argued, as it was done by the appellant, that E3 teaches away from such a sheet because it indicates on page 3, final paragraph that a non-permeable sheet for covering waste is advantageous. In fact, the use of the term "advantageous" in the final paragraph on page 3 of E3 clearly indicates to the skilled person that a permeable sheet might at least in certain circumstances still be used to cover waste.

1.9 For the above mentioned reasons, the subject-matter of claim 1 according to the main request does not meet the requirements of Article 56 EPC.

2. Claim 1 - auxiliary request 1: inventive step (Article 56 EPC)

According to the additional feature of claim 1 of auxiliary request 1 "after having removed the covering sheet, on the load of waste other layers of waste and thereon the same covering sheet, which had been removed, are placed". Said additional feature is known from E1, see the paragraph bridging pages 4 and 5; page 6, third paragraph to page 7, first paragraph; claims 10 and 13. Thus, the feature cannot help in distinguishing the method defined in claim 1 from the one of E1, the closest prior art.
Consequently, the subject-matter of claim 1 according to auxiliary request 1 does not meet the requirements of Article 56 EPC for the same reasons as given for the main request.

3. Claim 1 - auxiliary request 2: inventive step (Article 56 EPC)

3.1 The adsorbing and transpiring sheets known from E1 are rolled sheets which are unrolled and laid down on a load of waste, whereby the sheet's edges are fixed to the ground by using for example sandbags, see page 6, second to fourth paragraphs. For the Board sandbags and pickets are equivalent fixing means reaching the same result, see also for example claim 11 of E2 (also relating to removable sheets covering odorous waste) proposing the use of pegs for fixing the edges of the removable sheets to the ground by penetrating the refuse. The person skilled in the art would apply one or the other according to the circumstances, without exercising an inventive activity.

3.2 The remaining question is therefore whether the skilled person would use elastic tension wires to keep the cover sheet flat.

As it is stated in E1 the performance criteria that the covering for the waste material needs to satisfy, besides the reduction of the emission of odours, are that it must present an acceptable and uniform visual appearance, eliminate the problem of wind blown refuse and limit the ingress of vermin, see page 1, last paragraph and page 2, first paragraph.
All these criteria are fulfilled by maintaining the covering sheet flat on the waste material. To achieve this there are several possibilities well known to the person skilled in the art such as the use of sandbags, ropes, normal wires, elastic tension wires or similar fixing means. These are all equivalent fixing means which can be applied according to circumstances without the need for the skilled person to exercise an inventive activity. Furthermore, the selection of a specific fixing means, like elastic tension wires, can only come close to be regarded as inventive if it presents unexpected effects or properties in comparison to those described in the state of the art. However, no such special effects or properties were proposed by the appellant.

Accordingly, the additional features of claim 1 according to auxiliary request 2 do not provide any inventive contribution to the subject-matter of claim 1 according to the main request. Claim 1 according to the auxiliary request 2 does not meet therefore the requirements of Article 56 EPC.

4. **Claim 1 - auxiliary request 3: inventive step**  
* (Article 56 EPC)  

Since claim 1 according to auxiliary request 3 is a combination of claim 1 according to auxiliary request 1 and of claim 1 according to auxiliary request 2, the reasons presented under points 2 and 3 above apply equally to claim 1 of this request. As a result, claim 1 according to auxiliary request 3 also does not meet the requirements of Article 56 EPC.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: 

The Chairman:

G. Nachtigall 

H. Meinders