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DECISION of 13 February 2003

T 0439/00 - 3.2.3 Case Number:

Application Number: 94909336.3

Publication Number: 0687329

E02B 3/16, A01K 63/00, B44C 5/06 IPC:

Language of the proceedings: EN

Title of invention:

FOIL

Patentee:

Schirris, Alphonsus Albertus

Opponent:

Genap B.V.

Headword:

Relevant legal provisions:

EPC Art. 54, 56

Keyword:

"Novelty and inventive step - (no)"

Decisions cited:

Catchword:



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Boards of Appeal

Chambres de recours

Case Number: T 0439/00 - 3.2.3

DECISION
of the Technical Board of Appeal 3.2.3
of 13 February 2003

Appellant: Schirris, Alphonsus Albertus

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted 4 April 2000 revoking European patent No. 0 687 329 pursuant

to Article 102(1) EPC.

Composition of the Board:

Chairman: C. T. Wilson
Members: U. Krause

M. K. S. Aúz Castro

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Summary of Facts and Submissions

- I. The appeal was lodged on 1 May 2000 by the Proprietor of European patent 0 687 329 which had been revoked by the decision of the Opposition division dated 8 December 1999 and posted on 4 April 2000. The Proprietor (hereinafter denoted Appellant) paid the appeal fee on 31 May 2000 and submitted the statement of the grounds of appeal on 27 July 2000.
- II. The opposition was based on the grounds of Article 100(a) EPC concerning lack of novelty and inventive step as well as exclusion from patentability under Article 52.2(b) EPC, the latter objection having been withdrawn before the decision under appeal was issued. In this decision, it was held that the subjectmatter of amended claim 1 of a main request and two auxiliary requests was not novel or was obvious in view of document D1 of the following evidence considered in the proceedings:

D1: JP-A-63-44008 (application No. 61-188198), English abstract and figure

D2: GB-A-1 602 400

D3: DE-A-38 15 762

D4: NL-A-257 017

D5: JP-A-62-33918 (application No. 60-173376), English abstract and figure

D6: US-A-3 930 088

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- D7: copy of page 391 of The Shorter Oxford English Dictionary, third edition, volume 1
- D8: Brochure "Garten Journal 1993" of Ubbink GmbH, printing date 1/1992, and price list "Prijslijst Ubbink Vijverprogramma" of 1 January 1992
- III. In response to a communication of the Board issued for preparation of oral proceedings the Appellant submitted on 13 January 2003 three fresh sets of claims according to a main request, a first auxiliary request and a second auxiliary request. The independent claims 1 of these first and second auxiliary requests were replaced by amended versions submitted during the oral proceedings held on 13 February 2003.

The independent claims 1 of the main request and of the auxiliary requests on file are worded as follows:

Main request:

"1. Prefabricated sheet of plastic film for use with a pond or watercourse and such like with a layer of granular material of a stony nature on one side thereof."

First auxiliary request:

"1. Prefabricated strip of plastic film for use with a pond or watercourse and such like with a layer of granular material of a stony nature on one side thereof."

Second auxiliary request:

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- "1. Prefabricated sheet of plastic film for use with a pond or watercourse and such like with on one side thereof completely a layer of granular material of a stony nature."
- IV. The Appellant requests that the decision under appeal be set aside and that the patent be maintained on the basis of claims 1 to 6 filed as main request on 13 January 2003 or on the basis of independent claim 1 according to the first or second auxiliary request filed in oral proceedings, together with corresponding dependent claims submitted on 13 January 2003.

The Respondent (Opponent) requests that the appeal be dismissed.

V. The essential arguments of the Appellant can be summarized as follows:

The amended claims were based on the bottom paragraph of page 2 of the application as filed, disclosing an embodiment whereby a sheet having a layer of granular material thereon was folded around the edges of an existing pond. This embodiment was the sole embodiment and implied that the sheet having the granular material thereon was prefabricated.

The subject-matter of the independent claim 1 of all requests was novel because D1 explicitly disclosed applying the gravels to the film after placing it into a hole for lining a pond, which is distinguished from a "prefabricated" sheet even in the case of reuse for another pond, and a similar concept was derivable from D3 where tall plants such as reeds were attached as a cover layer and could be removed and reused, as

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disclosed in the text bridging columns 3 and 4.

Claim 1 of the main request was inventive because it was evident from D8, showing uncoated flexible foils and prefabricated rigid watercourses with or without a cover layer of granular material in one and the same brochure, that a prejudice existed against covering a flexible foil with granular, stony material. It was expected that either the flexibility of the foil would be lost or that the granular material could not be permanently attached to the foil. This was confirmed by D2 where the root piercing preventive layer was attached to the foil only if this layer was made of flexible material such as rubber, whereas for rigid materials such as metal or concrete a separate ground layer was made underneath the foil. The application of the structured cover layer described in column 1, lines 59 to 64, and column 2, lines 36 to 40, of D3 served the different purpose of collecting sand and mud to enhance the settlement of plants and was not considered by a skilled person intending to provide a stony appearance to the edges of the foil. Further, this document taught away from the claimed solution because the sand was retained by the structure of a separate cover layer, rather than directly attached to the foil.

As to the auxiliary requests, the intended use of a strip shaped sheet for covering the edges of an existing pond by folding the sheet around the edges required a particular flexibility of the sheet which was not to be expected for a plastic film having a layer of granular material thereon, and a complete coating of the plastic sheet with the gravel on one side would not make sense in D1, bearing in mind the

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purpose of the gravel to protect the plastic sheet from UV radiation.

VI. The Respondent submitted essentially the following counterarguments:

Whereas a prefabrication of the sheet was derivable for the embodiment having a strip shaped sheet folded around the edges of an existing pond, a basis for this feature in its broader meaning encompassed by claim 1, for example for a plastic sheet lining a pond, could not be found.

As to novelty, the plastic film of D1 having the gravel attached thereon corresponded to a prefabricated sheet, especially if it was reused for another pond. Further, the structured cover layer of D3 was attached before use of the sheet for lining a pond and could, according to claim 5, consist of "Grad" which, if the letter "l" was added, would be a German word meaning small stones or gravel.

A suggestion for covering a plastic sheet for a pond with granular material could be found in D8 disclosing, on page 17, the alternatives of prefabricated uncoated or sanded watercourses having a rigid structure. Since prefabricated foils with a coating of gravel or sand were generally known from other technical fields such as roof sheetings, the skilled person would not have a prejudice against mechanically applying a gravel or sand layer to the sheets disclosed on pages 20 to 25 of D8 before use thereof, provided that a suitable glue was available and that the layer was thin enough to maintain the flexibility of the sheet, especially as the advantages concerning the expense of labor for

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attaching the gravel by hand, as in D1, and the problems in obtaining a uniform layer were obvious.

Since it was evident from D8, pages 20 and 24, that plastic sheets for ponds were supplied on rolls with a width of 2 to 8 meters and a length up to 50 meters, the additional limitation to strips, as included in the first auxiliary request, could not involve an inventive step. Further, the shape of the sheet would be selected according to the shape of the pond or watercourse to be lined, taking a strip shaped sheet for an elongated pond or watercourse. The subject-matter of the second auxiliary request was likewise not inventive because a prefabricated sheet would be covered on its entire surface, as shown in D2 and D8, for ease of production and versatility of the product.

Reasons for the Decision

- 1. The appeal meets the provisions mentioned in Rule 65(1) EPC and is, therefore admissible.
- 2. Amendments
- 2.1 The amended claim 1 of the main request differs from claim 1 as granted in substance by defining the sheet as being "prefabricated". This definition, which refers to the sheet as a whole, ie the sheet with the layer of granular material thereon, was not expressly mentioned in the application as originally filed. However, the use of the sheet in the form of a strip to be folded around the edges of an existing pond, as described in the bottom paragraph of page 2, can only be understood as referring to such a prefabricated or ready made

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sheet because it follows from this description that the desired effect of hiding the edge of the pond from view and obtaining a more natural and aesthetical look is achieved directly by folding the foil around the edges, excluding any further operations such as attaching the granular material after folding the foil. Further, a later application of the granular material would not require the additional foil because it could be attached onto the edges of the existing pond. Since the original application does not disclose specifically any other way of using the claimed foil with a pond, the skilled person will conclude that the characteristic of the sheet as being prefabricated applies to any sheet for use with a pond or watercourse, irrespective of its shape or size.

2.2 It follows from the reasons set out above that the further restriction, in Claim 1 of the first auxiliary request, to the strip shaped sheet is also based on the original disclosure. The additional limitation of Claim 1 of the second auxiliary request to a sheet which has one side completely covered by the layer of granular material is supported by the attachment of this layer onto at least one side of the plastic film "partly or completely", as defined in original claim 1.

No objection under Article 123(2) and (3) therefore arises in respect of the amendments.

3. Novelty

3.1 Document D1 discloses a plastic sheet, which is placed in a hole for a pond and serves as a liner for the pond, and then has a layer of small gravels bonded to the surface of the plastic sheet at the edges thereof

near the waterline to protect the edges from UV radiation. This description clearly relates to a plastic sheet which, as far as the gravel layer thereon is concerned, is not prefabricated. The argument of the Respondent that this plastic sheet, having the previously attached gravel layer thereon, would be "prefabricated" if reused for another pond, is irrelevant for the reason alone that no such reuse is derivable from D1. Further, the feature "prefabricated" relates to a characteristic of the plastic sheet, as a product, which is independent of its later use. Thus, the plastic sheet must have this feature regardless of whether it is used for the first time or reused a second time.

- 3.2 Document D2 relates to a plastic liner for ponds, the liner comprising a plastic sheet having a plant root piercing preventive layer bonded thereto. This layer may consist of flexible material such as PE, nylon or rubber, or may be rigid in the form of a metal sheet or a cement layer. None of these materials is a granular material of a stony nature.
- 3.3 A plastic sheet with a cover layer thereon is disclosed in document D3. The cover layer may extend either over portions of the sheet only, such as the edge portions forming the periphery of a pond, or over the entire surface of the sheet. The first embodiment with partial cover layer is disclosed in the figures and the associated description. In this case the cover layer may be formed of tall plants such as reeds or the like which may be attached to the plastic sheet and removed for reuse. As pointed out by the Appellant, this removal and reuse as well as the impossibility of handling a plastic sheet with a cover layer comprising

tall plants precludes a prefabrication of this embodiment. On the other hand, according to the second, more relevant embodiment which is disclosed in column 1, line 59, to column 2, line 3, the cover layer does not yet include the plants but has a thin profiled structure with depressions and projections to form a support for sand and mud to enhance the settlement of plants. As described in column 2, lines 36 to 40, this cover layer is attached to the sheet beforehand, whereby it forms a prefabricated sheet. According to claims 4 and 5 of D3 the material of the cover layer may be a natural product or plastic. The particular examples of a natural product as specified in column 3, lines 30 to 32, and in claim 5, ie moss, grass, water plants, reeds or modified peat, are neither structured nor suitable for supporting sand or mud and therefore appear to relate to the first embodiment.

3.4 According to the Respondent, the specific example defined in claim 5 of D3 by the German word "Grad", meaning degree, is clearly incorrect and should be read as "Gradl", meaning small gravel or stones which would be a suitable material for a cover layer of the second embodiment. This argument is not convincing. The word "Grad" appears only once in D3, whereas the German word "Gras", for grass, is mentioned several times (column 2, line 7, and column 3, lines 31 and 58) and even in connection with reeds which is a further specific example of a natural product also referred to in claim 5. Thus, the Board concludes that the skilled reader of D3 would certainly realise that the word "Grad" is a misprint, but would read it as "Gras", rather than as "Gradl", even on the assumption that such a word exists.

- 3.5 Document D8 depicts, on page 17, preformed rigid watercourses with an uncoated and smooth surface (the bottom four models "Mini", "Midi", "Maxi" and "Top") or with a sanded surface (the upper three models "Viktoria", "Stanley" and "Niagara") and further discloses, on pages 20 to 24, typical uncoated plastic sheets for ponds. A flexible plastic sheet with a layer of granular material thereon, for example a sheet having a sanded surface, cannot be derived from this document.
- 3.6 Since the further available documents are less relevant, it can be concluded that a prefabricated sheet of plastic film as defined in the independent claim 1 of the main request and of the auxiliary requests does not form part of the prior art, thereby meeting the requirements of Article 54 EPC.
- 4. Inventive activity
- 4.1 Concerning the issue of inventive step it was pointed out, in column 1 of the patent under appeal, that sand or stones intended to hide the edges of a conventional plastic pond liner either tend to shift with time or become washed away under the influence of rain, thereby rendering the edge visible again. This problem no longer exists if, as in document D1, the granular material, small gravels in this case, is bonded to the plastic sheet in the edge region above or slightly below the waterline. The protection of the plastic sheet from ultraviolet radiation, which document D1 aims at, corresponds to the object of hiding the edges from view, as set out in the patent under appeal, in that in both cases the edges of the plastic liner above and to some extent below the waterline have to be

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covered.

- 4.2 It is evident that the bonding of the small gravel to the edges of the pond liner after placing the liner into the pond hole, as taught in D1, solves the problems of rendering the edge of the plastic sheet permanently invisible as well as of protecting it from deteriorating radiation, but that this measure is cumbersome and inconvenient, especially if a uniform distribution of the gravel is desired in order to obtain a neat and natural appearance. There is an obvious need for improvement. Since the mentioned drawbacks are all caused by the application of the gravel layer by hand, the straightforward solution is to replace this step by a mechanical application of the gravel layer. This has to be done in a factory or workshop together with or after the manufacture of the plastic sheet and thereby results in a prefabrication of the sheet with the gravel layer thereon. Such a prefabrication, which is known in other areas of building technology, such as sanded roof sheetings, does not substantially complicate the fabrication of the plastic sheet but entirely eliminates the problems encountered in applying the gravel layer afterwards.
- 4.3 The Appellant argues that there was a prejudice against this solution because the skilled person would not expect the plastic sheet to retain its flexibility when coated with a gravel layer, and that evidence for this prejudice was provided by document D8 showing sanded and uncoated rigid watercourses but no sanded flexible foils. The Board cannot follow this argument. Document D8 cannot provide evidence for a prejudice concerning the flexibility of the foils because the reason for not offering sanded foils is not explained and one could

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imagine other reasons such as giving the user the freedom to choose the coating or avoiding an increased weight of the foil when supplied in rolls etc.

Moreover, the flexibility of the coated foil will depend on the thickness of the gravel layer and no relevant deterioration in this regard could be expected when applying a thin layer of granular material having a small grain size such as the sand applied to the watercourses shown on page 17 of D8. It appears, therefore, that document D8, disclosing sanded and uncoated watercourses as well as uncoated foils for ponds, may even provide a suggestion to try sanded foils in order to obviate the difficulties encountered when attempting to attach granular material afterwards, rather than teaching away from this solution.

- 4.4 Hence, the subject-matter of claim 1 of the main request cannot be considered as involving an inventive step.
- 4.5 The additional limitations included in the auxiliary requests cannot justify an inventive step either.

The strip of plastic film, as specified in the first auxiliary request, corresponds to the shape of the plastic foils marketed according to the table on page 24 of document D8, having a length of up to 50 meters and a width of 2 to 8 meters. Even if, in the event of a plastic sheet precoated with a granular layer, the length was decreased in order to reduce the weight of the sheet, it would still amount to several times the width, thereby forming a strip. Further, the shape of the plastic sheet will have to conform to the shape of the pond or watercourse to be lined and, therefore, a strip-shaped sheet will be selected for a

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long and narrow pond or watercourse. The argument of the Appellant referring to the particular flexibility required for folding the strip around the edges of an existing pond is irrelevant because the claim is directed to a product which is not restricted to this particular use.

Covering one side of the plastic sheet completely with the layer of granular material, as defined in the second auxiliary request, is a direct consequence of the industrial prefabrication of the plastic sheet with the layer of granular material thereon, and is furthermore dictated by the fact that the position of the edges to be covered depends on the shape of the pond which is not known when manufacturing the coated plastic sheet. It may be true that, as pointed out by the Appellant, the complete coating would not make sense since only the edges need to be covered if they are to be hidden from view or protected against ultraviolet radiation, as in D1. However, the unnessary additional coating at the central regions of the sheet, at little extra cost, does not affect the situation at the edges and can be accepted for ease of production and increased versatility of the final sheet.

5. Conclusion

In summary, the patent cannot be maintained on the basis of the claims of any of the requests.

Order

For these reasons it is decided that:

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The appeal is dismissed.

The Registrar: The Chairman:

A. Counillon C. T. Wilson