DECISION
of 23 June 2005

Case Number: T 0510/01 - 3.2.6
Application Number: 91918764.1
Publication Number: 0547176
IPC: D01D 5/253
Language of the proceedings: EN

Title of invention:
Carpet yarns and carpets with improved balance of newness retention and bulk

Patentee:
E.I. DU PONT DE NEMOURS AND COMPANY

Opponent:
BASF Corp.

Headword:
-

Relevant legal provisions:
EPC Art. 54(2)

Keyword:
"Novelty (no) - prior public use (yes)"

Decisions cited:
T 0114/95

Catchword:
-
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DECISION
of the Technical Board of Appeal 3.2.6
of 23 June 2005

Appellant: E.I. DU PONT DE NEMOURS AND COMPANY
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 1 March 2001 revoking European patent No. 0547176 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: P. Alting van Geusau
Members: G. Pricolo
J. H. Van Moer
G. C. Kadner
K. M. Garnett
Summary of Facts and Submissions

I. The appeal is from the decision of the Opposition Division posted on 1 March 2001, to revoke European patent No. 0 547 176, granted in respect of European patent application No. 91 918 764.1.

Claim 1 of the patent as granted reads as follows:

"1. Bulked continuous filament nylon yarns comprised of filaments having a denier per filament of 10-25 and a trilobal filament cross-section of modification ratio between 1.4 and 4.0, the yarn having a relationship between bulk level and modification ratio wherein bulk level equals or exceeds 33 minus the product of 2.35 times the modification ratio for modification ratios between 1.0 and 5.0".

II. In the decision under appeal the Opposition Division considered that the opposition, based solely on grounds of prior use, was admissible and that the subject-matter of claim 1 was not novel over the prior art represented by yarns designated "1115/58 Raven Black" made available to the public by sale by BASF Corporation (the opponent). The Opposition Division came to the conclusion that these yarns fell under the definition of claim 1 on the basis of the following evidence:

Exhibit A: "Product Evaluation, %YCE and Modification Ratio (M)";
Exhibit B: invoice of BASF Corporation Fibers Division made out to Howard Carpet Mills Inc, dated 31 August 1989;

Oral testimonies of the witnesses Wilson, Caswell, Wikman and Marshall, heard before the Opposition Division on 15 November 2000.

III. The appellant (patentee) lodged an appeal, received at the EPO on 27 April 2001, against this decision and paid the appeal fee on the same date. With the statement setting out the grounds of appeal, received at the EPO on 6 July 2001, the appellant requested that the impugned decision be set aside and the patent be maintained as granted, and that the appeal fee be refunded in view of a substantial procedural violation committed by the Opposition Division.

IV. In a communication accompanying the summons to oral proceedings pursuant to Article 11(1) of the Rules of Procedure of the Boards of Appeal, the Board issued a reasoned preliminary opinion according to which the notice of opposition was admissible and the appealed decision was not affected by a substantial procedural violation. As regards the question of novelty, the Board pointed out that the witness testimonies made it credible that the data of Exhibit A were representative of the properties of yarns Raven Black sold in 1989 in accordance with Exhibit B.

V. Oral proceedings, at the end of which the decision of the Board was announced, took place on 23 June 2005.
As announced with letter dated 6 June 2005, the appellant did not attend the oral proceedings, which thus was continued in its absence pursuant to Rule 71(2) EPC.

The respondent (opponent) requested that the appeal be dismissed.

VI. The arguments submitted in writing by the appellant in support of its requests can be summarized as follows.

Within the opposition period the opponent failed to file or offer evidence in support of the fact that the yarns used for obtaining the data of Exhibit A were identical to those sold to Howard Carpet Mills according to Exhibit B. It was therefore not possible to evaluate "what" was the object of the prior use by sale opposed to the patentability of claim 1. Therefore, the opposition was not admissible in respect of claim 1. It was also not admissible in respect of independent claims 4 and 8 because the opponent did not file or offer any evidence within the opposition period in support of the sale of the yarns cited against these claims.

The Raven Black yarn 1115/58 used for the measurements of Exhibit A was produced in 1993 and differed from the product sold in 1989 to Howard Carpet Mills. As admitted by the witness Caswell, the yarns of Exhibits A and B were produced with different processes. In the absence of information concerning the process parameters, which it is admitted changed over the years and influenced the bulk of the yarns, and also concerning the quality and property control
requirements in the manufacturing plants, there was uncertainty as to the identity of properties between the 1989 and 1993 products. Accordingly, the measurement results of Exhibit A could not be regarded as being representative of the properties of the prior used yarns of Exhibit B.

In admitting and considering a prior use which was filed only after the end of the opposition period, namely the alleged prior use of yarns designated "267-xx", and in failing to give reasons in the decision as to why the late filed prior use was admitted, the Opposition Division committed procedural violations which justified the refund of the appeal fee. It further committed a serious mistake in disregarding the serious doubts raised by the patentee and the case law according to which, where public prior use was cited, a patent could be revoked only if there was a degree of certainty which was beyond all reasonable doubt.

VII. The respondent essentially argued as follows.

The notice of opposition indicated the date of prior use, what was used, and all the circumstances relating to the prior use. The evaluation of the evidence produced in support of the fact that the data of Exhibit A were effectively representative of the properties of the yarns sold to Howard Carpet Mills according to Exhibit B was not a matter of admissibility but of substantiation of the opposition. Furthermore, for the opposition to be admissible it was only necessary to substantiate a ground of opposition against at least one claim. Therefore, the opposition was admissible as a whole.
All the witnesses confirmed that the yarns 1115/58 were produced with substantially the same properties over time. The fact that different processes were used for the manufacture of the yarns used for the measurements in Exhibit A and the yarns sold according to Exhibit B did not imply that different products were obtained. In fact, the witnesses convincingly explained that controls were constantly carried out in production to ensure, over time, the manufacture of products having - within close tolerances - identical properties.

When assessing the degree of certainty in the present case of public prior use, it should be borne in mind that it was impossible for the opponent to make measurements on the actual products sold in 1989, the subject of Exhibit B. It was only possible to check whether the prior used yarns fell under the definition of claim 1 by reproducing identical yarns and testing them. This situation was due to the decision by the patentee to define the claimed subject-matter by means of parameters, and therefore it was not equitable to request from the opponent an absolute degree of identity between the yarns actually sold and those reproduced for the tests. Although unavoidable variations in manufacturing conditions could result in changes of the properties of a given yarn over the years, these changes were statistical fluctuations which could not be regarded as providing a real distinction between essentially the same products. Moreover, the measurement of the parameter bulk level used in the patent in suit for characterising the claimed yarn was in itself very approximate, as evident from:

Accordingly, there was no reasonable doubt that the results of the measurements set out in Exhibit A were effectively representative of the properties of yarns 1115/58 Raven Black as sold according to Exhibit B.

Reasons for the Decision

1. The appeal is admissible.

2. Admissibility of the opposition

2.1 In the communication annexed to the summons to oral proceedings the Board explained in detail why in its preliminary opinion the opposition was admissible. The appellant did not avail itself of the opportunity to reply to the preliminary view of the Board expressed in the communication. In particular, it did not attend the oral proceedings, which were held in its absence pursuant to Rule 71(2) EPC. The Board is therefore justified in basing its decision on that opinion, which it sees no reason to change, and in solely emphasising hereinbelow its essential aspects.

2.2 As correctly pointed out by the Opposition Division in the decision under appeal (point 1), in the present case, in which the opposition is based solely on prior use, the requirements of Rule 55(c) are met because, at least in respect of the prior use of yarns 1115/58 by
BASF Corporation, the notice of opposition enables the establishment of all the facts which make it possible to determine the date of prior use, what has been used, and the circumstances relating to the prior use. In particular, it is specified in the notice of opposition that the data of Exhibit A are representative of the properties of the yarns 1115/58 sold to Howard Carpet Mills according to Exhibit B, and an indication is also given of the evidence which it is intended to give in support of this allegation, namely the hearing of the witnesses Wikman, Caswell and Wilson.

2.3 Since the requirements of Rule 55(c) EPC are met if a ground of opposition is substantiated in respect of at least one claim of the patent in suit (see e.g. T 114/95), and this is the case in respect of claim 1, the opposition as a whole is admissible, irrespective of whether the ground of opposition is insufficiently substantiated in respect of claims 4 and 8.

3. Prior art - novelty

3.1 The appellant does not contest that yarns of the kind 1115/58, in particular yarns 1115/58 Raven Black, became available to the public by sale in 1989, before the priority date of the patent in suit, as documented by the invoice Exhibit B, and that these were bulked continuous filament nylon yarns comprised of filaments having a denier of 19.2 per filament (obtained by dividing 1115, which is the denier of the yarn, by 58, which is the number of filaments per yarn) having a trilobal filament cross-section.
The appellant however contests that the data in Exhibit A are representative of the properties, in particular of the bulk level, of the yarns 1115/58 which were sold in 1989, in view of the fact that the yarns used for the measurements, the results of which are listed in Exhibit A, were manufactured in 1993 under different process conditions.

3.2 Exhibit A refers to a yarn "Raven Black 2 step", which is indicative of the undisputed fact that the yarn referred to in Exhibit A was made by a 2-step rather than a 1-step method, which latter method was the one used for the 1115/58 Raven Black yarn sold in 1989 according to Exhibit B. According to the testimony of the witness Caswell, it is in fact not possible to make a 2-step product which is exactly the same as the 1-step product (see page 7 of the minutes of taking of evidence, first paragraph). However, the witnesses Caswell and Wikman confirm (see the minutes of taking of evidence, page 6, 3rd paragraph; page 7, last paragraph; page 8, second paragraph; page 9, last paragraph) that irrespective of the different process parameters, the finished product is always the same at least in terms of bulk and modification ratio (and clearly also in terms of denier), the process being adapted where necessary to obtain always the same end product (see the minutes of taking of evidence, page 7, last two lines). In fact, the bulk level is a parameter which in production is measured on a regular basis (as confirmed by Mr Caswell, see page 5 of the minutes of taking of evidence, last full paragraph).

Moreover, in the Board's view there is no doubt that the measurement itself of the bulk level (either in
terms of bulk crimp elongation %BCE, which is the measurement unit of reference in the patent in suit, see page 5, lines 29, 30 and 56, or yarn crimp elongation %YCE) is subject to large variations, as submitted by the respondent and as evident from the indication of the confidence intervals for the measurements of the %BCE in Exhibit 2. Moreover, US-A-4 295 252, which discloses a preferred method used in the patent in suit (see page 5, lines 28 to 30) for measuring the %BCE and is cited in the notice of opposition, discloses (see column 4, lines 14 to 17) that the measurement error of the process for measuring the %BCE is 10 to 15% of the total variance, whilst a 60-70% measurement error is normal with conventional methods. It is emphasised that such conventional methods are not excluded by the patent in suit.

Therefore, the Board takes the view that, although in the production of yarns of the same kind, such as e.g. yarns 1115/58 Raven Black, some variations of yarn properties arise over time due to different process conditions (in particular depending on whether a 1-step or 2-step process is employed), these variations are however irrelevant in respect of the bulk level and of the modification ratio. In fact, if the process conditions are such as to provide substantial changes of the bulk level, then the process is adapted to restore the desired bulk level. Furthermore, since the methods for measuring the bulk level themselves provide substantial variations due to measurement errors inherent to these methods, changes due to variations of process conditions only become relevant when they are greater than the measurement errors. In the Board's judgment there is therefore no reasonable doubt that
the value of 67 for the %BCE given in Exhibit A for a yarn 1115/58 Raven Black as measured in 1993 is, at least within the range of measurement error, representative of the bulk level of the yarn having the same designation sold in 1989 to Howard Carpet Mills according to Exhibit B. The same conclusion applies to the modification ratio, which is an essential parameter of the yarn specification for the end user and is determined solely by the geometry of the filament cross-section (it means the ratio of the radius of the circumscribed circle to the radius of the inscribed circle as seen in the trilobal filament cross-section), which should accordingly remain constant.

3.3 Hence the Board agrees with the view of the Opposition Division (point 2 of the decision under appeal) that the yarns of the kind 1115/58 that became available to the public by sale in 1989, as documented by the invoice Exhibit B, have the properties described in Exhibit A, in particular, that the 1115/8 Raven Black yarn sold in 1989 had a modification ratio of about 2.45 and a %BCED of about 67.

3.4 Therefore, by means of the sale of a 1115/58 Raven Black yarn in 1989, a yarn having the following features became available to the public and therefore forms part of the state of the art for the patent in suit according to Article 54(2) EPC: bulked continuous filament nylon yarns comprised of filaments having a denier per filament of 19.2 and a trilobal filament cross-section of modification ratio of 2.45 and bulk level (%BCE) of 67. For this yarn, the result of 33 minus the product of 2.35 times the modification ratio is equal to 27.24. The bulk level of
the yarn thus substantially exceeds this value of 27.24, even taking into account possible (large) errors in the measurement of the bulk level. Accordingly, the prior used yarn meets the requirements of claim 1 of the patent in suit in respect of the denier, bulk level and modification ratio. It follows therefore that the prior used yarn fully anticipates the subject-matter of claim 1.

3.5 Since the appellant's sole request therefore fails for lack of novelty of the subject-matter of claim 1 over the prior art represented by a yarn 1115/58 Raven Black, it is neither necessary to consider the other allegations of prior use nor the other independent claims.

4. Reimbursement of the appeal fee

4.1 In its submissions the appellant requested a refund of the appeal fee because of omissions in the written decision, these being viewed as a substantial procedural violation justifying a refund. According to Rule 67 EPC reimbursement may only be ordered in the event that the Board of Appeal deems an appeal to be allowable. This is not the case. Thus the request for reimbursement is rejected. The Board would add that the reasons as to why it was of the view that the proceedings before the Opposition Division were not affected by any substantial procedural violations were previously given in the communication annexed to the summons to oral proceedings, to which the appellant did not reply.
Order

For these reasons it is decided that:

1. The appeal is dismissed.

2. The request for reimbursement of the appeal fee is rejected.

The Registrar: The Chairman:

M. Patin P. Alting Van Geusau