BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPEEN DES BREVETS

Internal distribution code:
(A) [ ] Publication in OJ
(B) [ ] To Chairmen and Members
(C) [X] To Chairmen

D E C I S I O N
of 29 May 1998

Case Number: T 0799/94 - 3.3.4

Application Number: 89105043.7

Publication Number: 0334293

IPC: B32B 27/08

Language of the proceedings: EN

Title of invention:
Shrink film

Applicant:
Viskase Corporation

Opponent:
-

Headword:
Shrink film/VISKASE

Relevant legal provisions:
EPC Art. 84, 123(2)

Keyword:
"Amended claims - allowable"

Decisions cited:
T 0094/82

Catchword:
-

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0799/94 - 3.3.4

D E C I S I O N
of the Technical Board of Appeal 3.3.4
of 29 May 1998

Appellant: Viskase Corporation
6855 West 65th Street
Chigago, Illinois 60638 (US)

Representative: Eggert, Hans-Gunther, Dr.
Räderscheidtstrasse 1
50935 Köln (DE)

Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 17 May 1994 refusing European patent application No. 89 105 043.7 pursuant to Article 97(1) EPC.**

Composition of the Board:

Chairman: U. M. Kinkeldey
Members: D. D. Harkness
S. C. Perryman

Summary of Facts and Submissions

I. European patent application No. 89 105 043.7 was refused by the Examining Division on the grounds that claims 1 and 29 filed on 14 April 1994 are not clear and therefore do not meet the requirements of Article 84 EPC. Claim 1 reads as follows

"1. A four layer shrink film of 50.8 to 88.9 mm (2.0 to 3.5 mils) comprising:

(a) a first or meat contact layer of up to 30 mm (1.2 mils) comprising an ethylene-propylene random copolymer which are copolymers of ethylene and propylene having ethylene units randomly distributed along the polymer backbone which may contain up to 20 wt.% of very low density polyethylene, which polyethylene is a copolymer of ethylene and α-olefines containing from 3 to 8 carbon atoms, having a density below 0.91 g/cm^3 and a 1% secant modulus below 140,000 kPa,

(b) a second or inner core layer of at least 19.05 mm (0.75 mils), directly adhered to one side of said first layer comprising a blend of between 20 and 60 wt.%, anhydride-modified ethylene copolymer adhesive having a Vicat softening point (ASTM D-1525) of at least 90°C and between 40 and 80 wt.% ethylene vinyl acetate containing between 4 and 15 wt.% vinyl acetate, said blend having a melt index up to and including 0.9;

(c) a third or barrier layer of up to 7.62 mm (0.3 mils) directly adhered to the opposite side of said second layer from said first layer having an oxygen transmission rate through the entire multi-layer film below 90 cm^3/m^2/25.5 mm thickness/24h/1.01 bar (90 cm^3/m^2/mil thickness/24h/atm) and comprising a blend of between 60 to 90 wt.% hydrolyzed ethylene vinyl acetate copolymer (EVOH) hydrolyzed to at least 50% containing between 32 and 52 wt% ethylene, and between 10 to 40 wt.% amide polymer of a nylon including polycaproamide, poly(hexamethylene adipamide), poly(hexamethylene sebacamide), poly(hexamethylenediamine dodecanedioic acid), polycaprylactam, poly(ω-aminoundecanoic acid), and poly(ω-dodecanolactam), Nylon 6,6 and the copolymer manufactured by the copolymerisation of ε-caprolactone and ω-lacrolactame having a melting point within 25°C of the EVOH melting point; and

(d) a fourth or abuse layer of at least 12.7 mm, (0.5 mils) directly adhered to the opposite side of third layer from said second layer comprising a blend of between 10 to 40 wt.% anhydride-modified ethylene copolymer adhesive having a Vicat softening point (ASTM D-1525) of at least 90°C and between 60 and 90 wt.% ethylene vinyl acetate containing between 4 and 15 wt.% vinyl acetate, said blend having a melt index up to and including 0.9."

Claims 2 to 28 are directly or indirectly dependant on

claim 1. Claim 29 being an independant claim makes reference to claim 1 (paragraphs (a) and (c)) or to claim 4 (paragraphs (b) and (d)).

II. The original claims related to a 4-layer laminate, layers 2 and 4 making reference to "melt index" and layer 3 to "an oxygen transmission rate". These features were objected to by the Examining Division in a first communication as being not clear. The methods by which they were determined had not been included in the claims. The applicant then amended the claim by making reference to certain ASTM standards and filed evidence as Annexes A to F that ASTM standards were common general knowledge. The Examining Division then objected in a second communication under Article 123(2) EPC that by incorprating the ASTM standards into claims 1 and 29 subject-matter had been added as the description did not refer to such standards in respect of these features although ASTM standards appeared elsewhere in the application. In paragraph (b) on page 5 of the decision the Examining Division argued that even if it was agreed that a procedure according to the ASTM standard had been used this would still not overcome the objection as on reading the standard (ASTM-D 1238) various conditions are specified for temperature and load, thus the actual conditions were not made available by the reference. In response to this objection references to ASTM standards were deleted from the claims. Further it was requested that an interview was to be held. The Examining Division's next reaction on the amended claims was the refusal of them with the arguments stated in the first communication that these claims did not fulfil the

requirements of Article 84 EPC. To hold an interview was considered not necessary since the reasons for refusing the application were put foreward to the applicant already in the first communication to which the applicant had the possibility to react.

III. The appellant lodged an appeal, paid the fees and filed a statement of grounds for the appeal together with new claims 1 and 29.

IV. Claims 1 and 29 filed with the grounds of appeal correspond with those refused by the Examining Division except that the ASTM standards objected to as being added subject-matter and previously withdrawn have been reinstated these being ASTM D 1525 in claim 1(b) and (d) and claim 29(b) for the Vicat softening point, ASTM D 1238 in claim 1(b) and (d) and claim 29(b) and (d) for the melt index, ASTM D 3985 for oxygen transmission rate in claim 1(c), ASTM D 2457 and ASTM D 1003 in claim 29(e) for gloss and haze respectively. Further, all units "mm" were replaced by units "µm".

V. The appellant has argued that the application is directed to the skilled person and that on a plain reading of the application the skilled person would know what was intended by the information given.

The appellant referred to various documents filed already during examination proceedings as Annexes A to F and newly filed Annexes G to I. In particular Annex B, an ASTM-D 1238 Standard Test Method for Flow Rates of Thermoplastics by Extrusion Plastomer, indicated at page 569 that "flow rates" are measured in

terms of grams/10 mins which were the units specified in Example 1 of the application. Incorporating this ASTM standard in the claims now on file could thus not extend in an unallowable way the subject matter originally filed.

Further evidence that "melt index" is an established term of art was given by Annex G "Hawley's Condensed Chemical Dictionary" 1987, page 738 where "melt index" is defined as "the number of grams of such a polymer that can be forced through a 0.0825 inch orifice in 10 mins at 190C by a pressure of 2160g." Thus this definition in the standard work was consistent with the quoted ASTM standard.

With regard to the "oxygen transmission rate" which qualified the barrier layer of the laminate, the appellant argued that the skilled person would understand that ASTM-D 3985 as defined in Annex C had been used because the units of measurement specified on original page 13 line 2 corresponded with those of the standard. From Annex I "Einheitenlexikon" pages 181 to 182, it was clear that NTP or STP was used to determine and standardise the volume of oxygen measured and this was the norm used in many countries including the USA. In general the appellant stated that an American company would always employ ASTM standards as these were in current use in the USA, there was no reason to employ other standards.

VI. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims filed on 25 September 1994. As an

auxiliary request it is requested to grant a patent on a set of claims wherein in claim 1(c) the feature "oxygen transmission rate" is deleted.

Reasons for the Decision

1. To overcome the reasons for the refusal of the patent application that the terms "melt index" and "oxygen transmission rate", without mention of the particular conditions applied when determining these features, are not clear as required by Article 84 EPC, the appellant included the appropriate ASTM standards in relation to these terms in claims 1 and 29 (see section II above).

Article 123(2) EPC.

2. The arguments of the Examining Division in its second communication (see section II above) concerning these ASTM standards were that the amendments were not allowable because they related to new subject matter. The first issue to be decided by the Board is thus the allowability of the inclusion of specific ASTM standards into the claims in the light of the requirement of Article 123(2) EPC.

2.1 As far as the ASTM standards 1525 for the softening point, 2457 for gloss and 1003 for haze (see section II above) are concerned, the Board remarks that they found direct and unambiguous support in the description of the patent application, (see pages 11 and 18, also

Table B respectively).

2.2 It remains to be decided whether or not the amendments to the claims by inclusion of ASTM standards 1238 for melt index and 3985 for oxygen transmission, which standards were not mentioned in the application as filed, constitute subject-matter which extends beyond the content of the application as filed. (Article 123(2) EPC).

2.3 As far as ASTM standard 1238 is concerned it is significant that Annex B, the "1984 Annual Book of ASTM standards - Designation D 1238-82" has written into it at page 576 column 1 Note 16, that a "melt index" is another designation of "flow rate", and is specifically applied to "flow rates" or "melt indexes" measured by method E listed on page 576, i.e., a method which is carried out at 190 degrees centigrade and 2.16 kg pressure. Thus, there is a direct link between ASTM-D 1238 and "melt index" and has this specific meaning coupled with the method by which it is determined. As pointed out in Note 16 (see above)"It has become customary to refer to the flow rate of polyethylene as "melt index" when obtained under condition 190/2.16." Since the publication year of Annex B is 1984, i.e. four years before the priority year 1988 of the patent application, the Board accepts that ASTM standard 1238 as a definition for "melt index" with technical terms of the conditions of the measurement was a well known standard for the person skilled in the art who would have read "melt index" as ASTM 1238 standard. The fact that this is so is further demonstrated by the information concerning Plexar PX 169 (Annex E), a

commercial adhesive referred to in Table A of the description. This evidence shows that Plexar has a "melt index" of 2.5 gms/10 mins measured by ASTM-D 1238 (method E at 190 degrees centigrade and 2.16 kg pressure), such information being sufficient to define this characteristic for the purposes of the skilled person. Thus, there is no added subject matter leading to a violation of Article 123(2) EPC in relation to the inclusion of ASTM 1238 standard in the claims.

2.4 The ASTM 3985 standard also does not appear in the application as filed. In an application emanating from the United States of America and in which several ASTM numbers have already been quoted, it is more than likely that any other tests would have been carried out according to the appropriate ASTM standards. It would be unusual if a mixture of standards were quoted.

The argument is that for ASTM 3985 STP conditions are specified and were used, ie, ambient temperature. The applicant has merely forgotten to state this in the original document.

The ASTM 3985 standard states that measurements are generally made at ambient temperature, see paragraphs 7.1.1.4 and 14.10 and there is no doubt that the applicant did this.

It is not uncommon that scientists perform tests at ambient temperature which is the usual thing to do and then forget to state that this was so. ASTM 3985 at paragraph 15 shows that the pure calculation for oxygen transmission rate is independant of temperature, thus the figures produced by the applicant remain the same. Therefore there is no reason to deny the applicant the opportunity to state that ambient temperature was used, it alters nothing and does not add subject-matter. Accordingly the amendment is a clarification which is allowable under Article 123(2) EPC.

This decision is in line with the established jurisprudence of the Boards of Appeal. In Decision T 94/82 (OJ EPO 1984 page 75 paragraph 2.3) the use of parameters was approved provided that they are usual in the art and may be determined according to a given standard, in this case a DIN norm was specified.

3. *Article 84 EPC*

The amendments made by way of references to ASTM standards are not objectionable for lack of clarity, certainly not in the sense that the language is unclear. These references relate to well known standard technical definitions of tests and parameters conventional in the art. The reader of the description and claims need only refer to the specific ASTM number publication for a full technical explanation of the test or parameter in question. ASTM standards are recognised and accepted throughout the technical community, therefore there exists no reason why the skilled person would fail to understand the claims and

description for lack of clarity consequent upon the use of ASTM standard references.

4. *Articles 54 and 56 EPC*

Since the Examining Division did not consider these matters at all and has not indicated that it had formed a positive or negative opinion with regard to patentability, the application is to be remitted to the first instance in accordance with Article 111(1) EPC. The appellant's further rights of appeal are thereby protected.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The application is remitted to the first instance for further examination on the basis of claims 1 and 29 filed with the appeal and claims 2 to 28 filed on 14 April 1994.

The Registrar: The Chairwoman:

D. Spigarelli U. Kinkeldey