

**Internal distribution code:**

- (A)  Publication in OJ  
(B)  To Chairmen and Members  
(C)  To Chairmen  
(D)  No distribution

**Datasheet for the decision  
of 24 August 2010**

**Case Number:** T 1010/08 - 3.2.06

**Application Number:** 01914060.7

**Publication Number:** 1268096

**IPC:** B21C 25/02

**Language of the proceedings:** EN

**Title of invention:**

Extrusion die

**Patentee:**

Preform Dies Limited

**Opponent:**

Boal Beheer B.V

**Headword:**

-

**Relevant legal provisions:**

RPBA Art. 13(1)

**Relevant legal provisions (EPC 1973):**

EPC Art. 54, 56

**Keyword:**

"Product claims - novelty, inventive step (yes)"

"New ground of opposition - not admitted - proprietor's consent refused"

"Declarations to prove general knowledge of skilled person - late filed - not admitted"

**Decisions cited:**

G 0009/91

**Catchword:**

-



Case Number: T 1010/08 - 3.2.06

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.06  
of 24 August 2010

**Appellant:** Boal Beheer B.V.  
(Opponent) De Hondert Margen 12  
NL-2678 ZH DE LIER (NL)

**Representative:** Aalbers, Arnt Reinier  
De Vries & Metman  
Overschiestraat 180  
NL-1062 XK Amsterdam (NL)

**Appellant:** Preform Dies Limited  
(Patent Proprietor) 7th Floor, Victory House  
Prospect Hill  
Douglas, Isle of Man IM1 1EQ (GB)

**Representative:** de Baat, Michiel Anton  
Arnold & Siedsma  
Sweelinckplein 1  
NL-2517 GK The Hague (NL)

**Decision under appeal:** Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
4 April 2008 concerning maintenance of European  
patent No. 1268096 in amended form.

**Composition of the Board:**

**Chairman:** W. Sekretaruk  
**Members:** M. Harrison  
G. Kadner

## Summary of Facts and Submissions

I. In its interlocutory decision dated 4 April 2008, the opposition division found that European patent number 1 268 096 in an amended form met the requirements of the European Patent Convention (EPC).

In reaching its decision, the opposition division found *inter alia* that the subject matter of claim 1 of the patent as granted lacked an inventive step and that the subject matter of claim 5 lacked novelty over the cited prior art.

II. The appellant/opponent filed an appeal against this decision and requested revocation of the patent, making reference to the following documents:

D1: WO-A-99/65622

D2: JP 5-7926

D2a: English translation of D2

D3: EP-A1-0 569 315

III. The appellant/proprietor also filed an appeal and requested that the decision under appeal be set aside and as a main request that the patent be maintained as granted. Seven auxiliary requests were also filed.

IV. In its submission dated 2 March 2009, the appellant/opponent submitted the following document:

D4: Deformation of a porthole die "Hollow square profile", Materials Innovation Institute, 26 February 2009.

- V. With its submission of 27 February 2009, the appellant/proprietor filed a further auxiliary request.
- VI. Following the issue of a summons to oral proceedings, the Board sent a communication indicating its provisional opinion. This stated *inter alia* that the subject matter of claim 1 of the main request appeared to be both novel and to involve an inventive step over the cited prior art, whilst the subject matter of claim 5 of the main request appeared to lack novelty with regard to D1.
- VII. With its submission dated 10 August 2010, the appellant/proprietor filed fourteen auxiliary requests replacing all previous auxiliary requests.
- VIII. With its submission dated 12 August 2010, the appellant/opponent filed eight declarations by various practitioners in the field.
- IX. In its submission dated 19 August 2010, the appellant/proprietor filed arguments as to why the eight declarations filed by the appellant/opponent should not be taken into account.
- X. During the oral proceedings held before the Board on 24 August 2010, the appellant/proprietor requested that the decision under appeal be set aside and that the European patent be maintained on the basis of a single request (labelled "fourth request"), which replaced all its previous requests. It further requested hearing as witnesses the authors of the eight declarations presented by the appellant/opponent on 12 August 2010,

in accordance with its written request entitled "Proprietor's request", which reads:

"In view of the allegations in the witness' declarations (filed August 12 by the Opponent) and also in view of earlier related witness hearing of Boal employees before the Hague Court in 2002, the patent proprietor has serious doubts about the correctness of the declarations and requests the witnesses, both of the witness' declarations as well as the Boal employees (or otherwise related to Boal) already summoned in 2002 (mr Nilsen and mr Boers) to be heard by the EPO, even if it would delay Appeal proceedings, within the discretion of the Board, so that the reputation of the inventor/proprietor is upheld"

XI. The appellant/opponent requested that the decision under appeal be set aside and that the European patent be revoked.

XII. Claim 1 of the appellant/proprietor's request reads as follows:

"1. An extrusion die comprising a die body having a die cavity (18) formed therein, the die body defining a male portion which projects into a female portion, wherein a leading edge (18a) of a part of the die cavity (18) defined by the male portion and a leading edge (18b) of an opposing part of the die cavity (18) defined by the female portion are out of alignment with one another when the die is not in use, the leading edge (18a) of the part of the die cavity (18) defined by the male portion being spaced, upstream in the extrusion direction, from the leading edge (18b) of the

part of the die cavity (18) defined by the female portion by a distance, the spacing being such that deflection of the male portion, in use, brings the leading edges (18a, 18b) substantially into alignment, a recess (22) of non-uniform depth being provided on the die, at least part of at least one of the leading edges (18a, 18b) being defined at the intersection between the die cavity and the recess, characterised in that the distance is not uniform around the cavity."

XIII. The arguments of the appellant/opponent may be summarised as follows:

The requirements of Article 123(2) EPC were not met since claim 1 defined that the distance by which the leading edges were spaced from each other in the direction of extrusion was not uniform around the die cavity, which was however not disclosed in the application as filed. The appellant/proprietor's consent to the introduction of this new ground of opposition was requested.

The eight declarations filed with letter of 12 August 2010 should be admitted into the proceedings. They were highly relevant since they showed that a skilled person at the priority date not only knew that the amount of deformation of the male and female die parts varied around the die cavity, but also that it was common practice to take measures to overcome this so that a perfect alignment of the edges during extrusion was obtained. The opposition division had acknowledged this in its decision; the declarations were merely confirmation of this fact. Only the Board's communication had put this into question and so the

declarations had been timely filed to address this; the declarations were also filed as soon as they had all been completed, rather than being filed one by one which would have been procedurally inefficient. A case of public prior use was not being made.

The subject matter of claim 1 lacked novelty over D1. In particular, the only feature of claim 1 which was not explicitly disclosed in D1 was that the distance by which the leading edges were spaced from one another in the direction of extrusion was not uniform around the die cavity. However, a skilled person reading D1 was aware from page 17, lines 14 to 19, that bringing of the bearing edges "into alignment" in the die structure of Figure 6 implicitly required a non-uniform spacing of the edges, because it was known that deformation was not uniform around the die cavity, as confirmed e.g. by D4.

If the aforementioned feature was not regarded as known implicitly from D1, then, with regard to inventive step, it had first to be noted that since this feature was not disclosed in the application as originally filed, it should be ignored when assessing inventive step. The coplanar relationship of the male and female leading edges during extrusion disclosed in the filed application was already known from D1. The subject matter of claim 1 was thus devoid of an inventive step. If the feature was however to be taken into account when assessing inventive step, this solved the problem, when starting from D1 as the closest prior art, of providing the required alignment of the edges in D1. A skilled person knew that deformation was non-uniform on the edges around the die cavity and D1 (e.g. page 17,

lines 14 to 20) disclosed an axially upstream location of the leading edge of the male part in order to bring the male and female edges into alignment during extrusion. It was therefore obvious for a skilled person that the amount of axial offset of the bearing edge of the male portion, with respect to the female bearing edge, had to be varied around the die cavity in order that alignment was obtained. Although D1 mentioned a "slight" axial movement, it would be understood by a skilled person that all axial movements in such dies were relatively "slight", but that within the slight movement a large degree of variation of the deformation was present when considering different parts of the die cavity.

D2 disclosed an axial separation of the trailing edges of the male and female parts by a distance "L". However, D2 (see e.g. D2a paragraph 0015) also disclosed that, during extrusion, the trailing edges "aligned without any level difference" and this was based on the "estimated strain of the bearing parts at the time of pressing". These sections only made sense if the distance "L" varied around the die cavity, whereby this feature was also known implicitly from D2. Even if there were a single distance "L" over most of the die cavity, the separation "L" at the ends of the die cavity had to alter around the die cavity because the male and female bearing edges merged into one. "L" was thus inevitably non-uniform around the die cavity in D2. The only difference with respect to claim 1 was that D2 concerned trailing edges whilst claim 1 concerned leading edges. In one approach, a skilled person wishing to avoid any lack of straightness in the resulting metal profile would not only correct the



trailing edges, but also the leading edges since any bearing edge misalignment during extrusion caused profile defects due to side loadings on the die. In another approach starting from D2 as the closest prior art, the skilled person wishing to speed up the process of production to obtain the efficient production as in paragraph [0016] of D2, would use a zero bearing die as known from e.g. D1, since this was well known to improve extrusion speeds. When adopting a zero bearing die structure, the trailing edges in D2 automatically became the leading edges whereby the non-uniform spacing (i.e. a varying distance "L") of the trailing edges became unavoidably a non-uniform spacing between the leading edges as defined in claim 1.

XIV. The appellant/proprietor's arguments may be summarised as follows:

Consent to the appellant/opponent's request to introduce a new ground of opposition was refused. It was also unfounded.

The filing of the eight declarations with the appellant/opponent's letter of 12 August 2010, shortly before oral proceedings, allowed insufficient opportunity for filing a complete response. At least some of the declarations had been available far earlier and should have been filed then. The factual content of the declarations was also disputed; hearing of at least the authors of the declarations as witnesses by the EPO was requested to assess and also challenge the accuracy of the statements, as per the proprietor's written request to this effect. The use of these declarations was further an inappropriate form of verifying a

skilled person's general knowledge at the priority date. If such knowledge would have existed at the priority date, evidence would have been available in a verifiable form such as detailed die drawings available to manufacturers, or in the form of textbooks. Since none of these were filed, the content of the declarations was unverifiable. Also, none of the statements helped to establish that the alleged common practice therein was general knowledge of a skilled person. The declarations should thus not be admitted into the proceedings.

With regard to the appellant/opponent's objection to lack of novelty of the subject matter of claim 1, at least the feature of a non-uniform spacing of the leading edges around the die cavity was lacking in D1.

When starting from D1 as the closest prior art, this did not disclose at least the feature of a non-uniform spacing of the bearing edges on the male and female portions around the die cavity. Additionally, the recess of claim 1 was not the same as a flow control pre-chamber as disclosed in D1, nor were the leading edges of the male and female "parts" in D1 the same as the leading edges of the male and female "portions" in claim 1. The problem to be solved when starting from D1 was to reduce splaying in extruded profiles. In D1, the male part of the die moved as a single unit by a slight amount. No disclosure could be found in any document of providing a non-uniform spacing of the leading edges. Thus, whilst deformation of dies *per se* was well known at the priority date, no teaching in the prior art disclosed the use of a non-uniform separation of the leading bearing edges to solve the stated problem.

Whilst a coplanar position of the bearing edges during extrusion was used to describe what occurred in the patent, it was evident from the description that this was unambiguously referring to the effect achieved by a non-uniform spacing; claim 1 defined precisely this.

D2 only concerned alignment of die cavity trailing edges. In the Figures thereof, the leading edges were deformed so as to be non-aligned during extrusion. No suggestion was present in D2 to rectify the non-alignment of the leading edges, let alone to prevent splaying thereby. The further argument that the trailing edges should become the leading edges by using a zero bearing die was not taught by D2 or any other document and was anyway factually incorrect, since zero bearing dies had a finite bearing length. Moreover, D2 relied on the trailing edge structure for its solution.

## **Reasons for the Decision**

### 1. *New ground of opposition*

The appellant/opponent argued that a feature of claim 1 was not disclosed in the application as originally filed. Even though the appellant/proprietor requested maintenance of the patent in an amended form, the amended form of claim 1 did not affect the subject matter of claim 1 compared to that as granted, since it differed only by being cast in a different two-part form. Since no objection under Article 100(c) EPC 1973 had been raised when filing the opposition, and the opposition division itself had not introduced this ground of opposition, the appellant/opponent's

objection constitutes a new ground of opposition extending outside the legal and factual framework of the opposition as filed. Because the appellant/proprietor refused its consent for introduction of the new ground of opposition into the proceedings, the new ground cannot be admitted or considered (see the decision of the Enlarged Board of Appeal G 9/91, item 18).

2. *Non-admittance of declarations into proceedings*

2.1 With its letter of 12 August 2010, the appellant/opponent filed eight declarations from different declarants regarding alleged knowledge of the skilled person at the priority date.

2.2 The filing of the declarations represents an amendment of the appellant/opponent's case in accordance with Article 13(1) of the Rules of Procedure of the Boards of Appeal (RPBA) and may be admitted and considered at the Board's discretion which "shall be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy."

2.3 The appellant/proprietor had already argued in its grounds of appeal that the skilled person did not have this knowledge (see e.g. page 30/47 of the grounds of appeal) and thus the appellant/opponent should have filed any evidence in support of the skilled person's knowledge already when filing its reply to the appellant/proprietor's grounds. Merely because the Board also took up this point when providing its provisional opinion, does not alter the foregoing. By

filing the declarations as close to the oral proceedings as they were, it is entirely credible to the Board that the appellant/proprietor was faced with a situation where it was unable to prepare and file a complete response without making lengthy investigations.

- 2.4 Turning to the contents of the declarations, the Board also finds that none of these is suitable to verify what was general knowledge of the skilled person at the priority date of the patent. Not only was no corroborating source of evidence mentioned or supplied by any of the declarants in support of their statements that a correction of a die with a non-uniform spacing of the leading edges was "common practice at that time", even though it appears credible that such evidence would have been available in the form of either detailed die drawings, handbooks or by other means, but it cannot be deduced from the declarations that such "common practice" was not limited to either in-house use or other proprietary knowledge. Indeed, whilst the declarants state that "In fact all practitioners in this field, called correctors, faced the problem of significant (elastic) deformations of the die during extrusion...", no basis is given upon which the knowledge of all other practitioners could be identified or verified.

The appellant/proprietor also contested the correctness of these statements.

- 2.5 Thus, in light of the appellant/proprietor's contestation of the contents of the declarations and the late filing thereof, and in light of the fact that without further verification which might confirm the

contents of the declarations, and without further evidence to indicate how such alleged "common practice" had become part of the general knowledge of the skilled person, the Board decided not to admit the declarations into proceedings, in accordance with Article 13(1) RPBA. In particular, the subject matter was not only filed at such a late stage of proceedings that a well-founded response could not be filed, but was also not sufficiently relevant on its own to justify introduction.

3. *Novelty*

3.1 The appellant/opponent argued that the features of the preamble of claim 1 were known explicitly from D1 and the feature in the characterising portion of claim 1 was known implicitly therefrom.

3.2 The characterizing feature of claim 1 requires that the distance (i.e. the distance by which the leading edge part of the part of the die cavity defined by the male portion is spaced, upstream in the extrusion direction, from the leading edge of the part of the die cavity defined by the female portion) is not uniform around the die cavity.

3.3 D1 discloses (see e.g. page 17, lines 2 to 20 and Figure 6) that to compensate for the slight axial movement of the male part relative to the female part that occurs during extrusion, the zero bearing edge on the male part may be located slightly upstream of the zero bearing edge on the female part and that the axial deflection of the male part during extrusion brings the bearing edges into alignment. However, the nature of

the alignment by any particular upstream placement of the zero bearing edge on the male part is not described in detail. Thus, the skilled person is left only with the knowledge from D1 that a "slight" axial movement of the male part needs to be compensated by a "slight" upstream location of the zero bearing edge on the male part. Whilst a skilled person would be aware from basic engineering principles that there would be some, albeit unstated and possibly very minimal amount of axial movement/deflection of some parts of the bearing edge on the male part of the die in D1 relative to other parts, nothing in D1 indicates that such differing amounts would be of a magnitude which would be of any consequence for the extruded metal profile, nor that the "slight upstream" location should in some way be varied around the die cavity to take any such differing amount into account. The test results regarding the degree of deformation in one particular type of die as shown by D4 are of no relevance in this regard, since D4 does not represent knowledge of a skilled person at the priority date of the opposed patent (it was first available in 2009), let alone relate to the specific situation in D1.

- 3.4 The appellant/opponent argued that the disclosure in D1 of a slight upstream placement which "brings the bearing edges into alignment" means that there must be a non-uniform separation of the male and female bearing edges. However the Board remains unconvinced by this argument, since beyond using the word "alignment", it is not specified in any way, or to what extent of accuracy, alignment is achieved, in particular not in any way that could justify a conclusion being reached

that alignment was achieved by use of a varying separation of the male and female bearing edges.

3.5 The appellant/opponent also argued that the term "slight" in D1 does not imply any generality in the degree of accuracy of alignment, since all deformations in such dies are relatively "slight". However, the Board concludes that even if all deformations are referred to as "slight", and even though deformations of the die may indeed vary in many cases within this "slight" amount, this does not alter the fact that D1 itself does not disclose any such variations that, for any reason, should be taken account of, let alone being taken account of by an adjustment of the leading edge spacing.

3.6 The subject matter of claim 1 is thus novel and the requirements of Article 54 EPC 1973 are thus met.

#### 4. *Inventive step*

4.1 The only feature of claim 1 which is not disclosed in D1 is that defined in the characterizing portion of the claim and which results in the subject matter of claim 1 being novel (see above).

4.1.1 The appellant/proprietor argued that further features of claim 1 were also considered as not known from D1, these being (1) that the recess defined in claim 1 could not be equated with the preform flow control chamber in D1 which was intended for an entirely different purpose and (2) that the leading edges on the male "part" 19 in D1 could not be equated with the leading edges on the male "portion" of claim 1.



- 4.1.2 In regard to item (1), and as indicated in the provisional opinion of the Board, the preform chamber of D1 is also a recess, irrespective of its alleged purpose. It is also located in the position defined in claim 1. Although the appellant/proprietor maintained that a preform chamber and a recess were different due to their function and arrangement, no feature of claim 1 defines any such difference and the Board therefore sees no reason to alter its original opinion.
- 4.1.3 In regard to item (2), the appellant/proprietor argued that the position of a leading edge on a male portion could not be established in D1 when considering that Figures 6 or 7 thereof only showed one plane of a sectional view, because a cavity shape with alternating curvature in the X-Y plane altered which parts of the die had to be considered as male and female portions in accordance with the claim. This argument is however unconvincing since not only does claim 1 not define the die shape more precisely than having a male portion and female portion with bearing edges, but Figure 6 of D1 relates to e.g. rectangular or circular cross-sections (see D1, page 17, lines 2 to 7) whereby the die cavity is annular. With an annular die cavity and e.g. a circular section, the male part in Fig. 6 is always the same as the male portion of claim 1 and the female part in D1 is always the same as the female portion in claim 1, irrespective of whether claim 1 might also include further die shapes with alternating male and female portions. The bearing edges on the male and female parts in (at least) Fig. 6 of D1 thus correspond entirely with the bearing edges on the male and female portions defined in claim 1.

- 4.1.4 In response to a question from the Board, no further differences than the above were identified by the appellant/proprietor as being present between the disclosure of D1 and those defined in claim 1, and none can be identified by the Board.
- 4.2 The problem to be solved by the subject matter of claim 1 when starting from D1 is to arrange an extrusion die such that splaying of an extruded profile may be reduced. This is achieved by the provision of a non-uniform spacing of the die leading edges, in the manner defined in claim 1.
- 4.3 Whilst D1 discloses (see e.g. page 17, lines 14 to 20 and page 19, line 14 to page 20, line 3) that the shape and orientation of the extrusion are affected by the width and/or depth of the recess (preform chamber) on different sides of the chamber, and whilst a correction for the axial deflection of the male part 19 relative to the female part 20 is made by a slight upstream location of the zero bearing edge on the male part relative to the female part, nothing in D1 indicates or teaches that splaying effects on an extruded profile can be reduced by providing a non-uniform separation of the leading edges around the die cavity. Indeed, whilst D1 discloses that "alignment" during extrusion is to be achieved by this slight upstream location, it is not stated or taught that any variations due to non-uniform deformation (e.g. bending) would have any particular significance for the extrusion, let alone as regards extrusion profile splaying, even if it is known generally to a skilled person that there would be some

degree of difference between the amounts of deformation at various parts around the die cavity.

- 4.4 The skilled person is therefore not taught by D1 or any other document in proceedings that a non-uniform spacing as defined in claim 1 would provide a solution to this problem.
- 4.5 The appellant/opponent argued that "alignment" in D1 can only be achieved if this difference in deformation around the die cavity is taken into account, and indeed that a skilled person aware of the different amounts of deformation occurring around the die cavity would do so. However, there is no teaching in the cited prior art supporting this allegation, since nowhere is any degree of variation of the leading edge deformation considered or solved. When starting from D1 as the closest prior art and considering the teaching of e.g. D2, the reduction of splaying addressed therein (see e.g. paragraph [0015] of D2a) relates to a particular position of the trailing edges of the die cavity, not the leading edges. No teaching is found in D2 or any other cited prior art which relates the effects occurring in trailing edge arrangements to other effects occurring due to leading edge arrangements.
- 4.6 The appellant/opponent also argued that the effect of non-uniform spacing of the leading edges around the die cavity should be ignored when considering inventive step, because the application as filed allegedly did not disclose such a non-uniform spacing. However, the objection to lack of inventive step relates to the patent rather than any alleged lack of disclosure in the filed application. The meaning of claim 1 as to how

the die is to be arranged and the effect achieved thereby is also clear; such meaning is also evident from paragraph [0027] of the patent, which, albeit in relation to specific embodiments, describes that the spacing of the leading edges varies smoothly and continuously which is undoubtedly a description of a non-uniform separation. Thus, in as far as the assessment of the subject matter of claim 1 is concerned for the purpose of inventive step, a non-uniform spacing of the leading edges and the effect of this in avoiding splaying of an extruded profile cannot be ignored when considering inventive step.

- 4.7 The appellant/opponent also argued that D2 could be considered as the closest prior art and that the only difference of claim 1 with respect to D2 was that claim 1 related to the leading edges, rather than the trailing edges, which were arranged with a spacing that was not uniform around the die cavity, noting that the spacing of the trailing edges in D2 was not uniform.
- 4.8 Accepting the appellant/opponent's view, for argument's sake, that the spacing of the trailing edges around the die cavity is not uniform in D2, this anyway does not provide a teaching to alter the spacing of the leading edges as defined in claim 1. D2 discloses that the alignment of the trailing edges, i.e. those edges at the downstream side of the die cavity, results in non-deformed profiles. However when examining Figures 2(b) and 5(b) of D2, these show the die in use during extrusion with the trailing edges in their aligned position, whereby the leading edges are clearly shown significantly out of alignment. D2 also gives no teaching that features applicable to the trailing edges

should, for any reason, be applicable to the leading edges.

4.8.1 The appellant/opponent argued, in one approach, that a skilled person wishing to avoid any lack of straightness in the resulting metal profile would not only correct the trailing edges, but also the leading edges since any bearing edge misalignment during extrusion caused profile defects due to side loadings on the die. However, this argument lacks any support in the prior art cited in the appeal proceedings. Moreover, the solution in D2 relies on a trailing edge alignment during extrusion, leaving (as shown in the Figures) the leading edges distinctly out of alignment. D2 thus provides no teaching to alter the spacing of the leading edges for any reason whatsoever, let alone for the achievement of non-splayed profiles. If anything, D2 teaches that the alignment of the leading edges during extrusion is not a matter of relevance when wishing to produce non-deformed profiles.

4.8.2 In a further approach, the appellant/opponent argued that a problem to be solved when starting from D2 as the closest prior art was to speed up the process of production, not least so as to obtain the efficient production in paragraph [0016] of D2, and that such an approach led to the use of a zero bearing die as known from e.g. D1 which was known to increase extrusion speeds. Further, the appellant/opponent argued that when using a zero bearing die structure from e.g. D1, in the die of D2, the trailing edges in D2 then became the leading edges, as there was only one bearing edge, whereby the non-uniform spacing of the trailing edges

became unavoidably a non-uniform spacing between the leading edges as defined in claim 1.

However, the Board finds this argument unconvincing, since the solution in D2 relies on the presence of trailing edges. Nowhere does D2 suggest the use of a zero bearing die. Thus it is irrelevant that it is known in the technical field to use zero bearing dies, because the solution in D2 relies on the presence of trailing edges in the die cavity. As also pointed out by the appellant/proprietor, the use of a zero bearing die would anyway not result in the leading and trailing edges in D2 becoming the same edge, because even zero bearing dies have a bearing length which is finite (see e.g. opposed patent paragraph [0002]), whereby even a zero bearing length die has differing leading and trailing edges. The appellant/opponent's argument in this respect is anyway purely hindsight based, because D2 is entirely reliant on the presence of, and the effect of, trailing edges and itself anyway imparts no significance to the fact that the leading edges, during extrusion, are significantly out of alignment.

4.9 Thus, starting from either D1 or D2 as the closest prior art, there is no teaching in the documents cited in the appeal proceedings which would lead a skilled person without using an inventive step to the subject matter of claim 1.

The Board thus concludes that, on the basis of the prior art cited and admitted into the appeal proceedings, and the arguments submitted by the appellant/opponent in respect thereof, the subject

matter of claim 1 involves an inventive step and that the requirement of Article 56 EPC 1973 is fulfilled.

5. Claims 2 to 4 are dependent on claim 1 and are identical to claims 2 to 4 as granted. No objections have been raised against these claims *per se* and the Board also sees no objection.
6. The description was adapted to the claims. No objections were raised by the appellant/opponent to the amendments made. The Board also sees no reason for objection to these amendments.
7. *Proprietor's written request*
  - 7.1 Although the appellant/proprietor filed a written request, which is recorded in the minutes as the "Proprietor's request", in which the hearing as witnesses the authors of the eight declarations and other persons was requested, the Board concludes that this request is of no relevance (which has to be ascertained before taking evidence, see Case Law of the Board of Appeal of the European Patent Office, 5<sup>th</sup> edition, VI.K.3.3.) to the decision taken by the Board, since the Board had already decided (see above) that the eight declarations filed on 12 August 2010 were not admitted into proceedings.
  - 7.2 The appellant/proprietor's request for hearing of witnesses, as recorded in the minutes, must therefore be rejected.

## Order

### For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the opposition division with the order to maintain the European patent on the basis of the following documents:  
  
claims 1 to 4 and description columns 1 to 4, both filed during the oral proceedings of 24 August 2010, description columns 5 to 7, and drawings Figures 1 to 12 as granted.
3. The appellant/proprietor's request for hearing of witnesses is rejected.

The Registrar:

The Chairman:

M. Patin

W. Sekretaruk