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Datasheet for the decision of 18 January 2011

Case Number: T 0268/10 - 3.2.06

Application Number: 01113249.5

Publication Number: 1164261

IPC: F01M 11/03

Language of the proceedings: EN

Title of invention:
Plug for a machine

Patentee:
Bjarne Thorup Andreasen

Opponent:
SEDA Umwelttechnik GmbH

Headword:
-

Relevant legal provisions:
EPC Art. 123(2)(3)
RPBA Art. 13(1)

Relevant legal provisions (EPC 1973):
EPC Art. 84, 56

Keyword:
"Sole request - admittance into proceedings (yes); Art. 123 requirements fulfilled (yes); clarity (yes); inventive step (yes)"

Decisions cited:
-

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0268/10 - 3.2.06

D E C I S I O N
of the Technical Board of Appeal 3.2.06
of 18 January 2011

Appellant: (Opponent)
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Decision under appeal: **Interlocutory decision of the Opposition Division of the European Patent Office posted 8 December 2009 concerning maintenance of the European patent No. 1164261 in amended form.**

Composition of the Board:

Chairman: P. Alting van Geusau
Members: M. Harrison
R. Menapace

Summary of Facts and Submissions

I. In its interlocutory decision dated 8 December 2009, the opposition division found that European patent No. 1 164 261 in an amended form met the requirements of the European Patent Convention (EPC).

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

D1: KAPSTO brochure, "Kunststoff-Schutzelemente für alle Fälle", Pöppelmann, 03-98, 4 pages: front and back covers and two internal pages without numbering.

D2: KAPSTO catalogue, "Plastic Protective Fittings for all Applications", Pöppelmann, 10/98, 6 pages: front and back covers, pages 1, 60, 61 and an unnumbered page with the header "The Product Range".

D3: US-A-4 854 277.

III. In its letter of 19 August 2010, the respondent (proprietor) requested dismissal of the appeal. The public availability of D1 and D2 was also contested.

IV. In its submission of 5 October 2010, the appellant requested acceleration of the appeal proceedings on the basis of a request to cease alleged infringement in Denmark based *inter alia* on European patent No. 1 164 261.

V. The respondent stated in its letter of 28 October 2010 that it had no objection to the request for acceleration.

VI. Following the issue of a summons to oral proceedings, the Board sent a communication indicating its provisional opinion stating *inter alia* that certain features of claim 1 appeared not to be part of the content of the application as originally filed (Article 123(2) EPC). The Board also stated that any further written submissions should be at the disposal of the Board at the latest ten days prior to the date of oral proceedings.

VII. With its submission of 7 January 2011, the respondent filed four auxiliary requests containing amended claims together with arguments concerning the matter of Article 123(2) EPC. A request for remittal back to the opposition division was also made.

VIII. During the oral proceedings held before the Board on 18 January 2011, the appellant requested that the decision under appeal be set aside and that the European patent be revoked.

IX. The respondent requested that the decision under appeal be set aside and that the patent be maintained with claims 1 to 6 and an amended description columns 1 to 5, both as filed during the oral proceedings, together with Figures 1 to 10 as granted. All other requests were withdrawn.

X. Claim 1 of the sole request reads as follows:

"1. Use of a plug (1) for covering connection apertures with the purpose of preventing fluid leakage from a machine, where the plug (1) has a fastening means (3) for fastening the plug to the machine (M) in place of equipment that is connected to the connection apertures during normal operation of the machine (M), where the plug is provided with a sealing flange (4) which is arranged for sealingly covering at least two connection apertures simultaneously, and where the sealing flange (4), which is arranged to bear against the machine by the fastening of the plug, is profiled with at least one peripheral and annular elevation designed with two annular sealing lips (11) and integrally formed together with the plug being an injection moulded plug, by sealingly covering connection apertures (9, 10) on an engine (M) after dismounting the oil filter."

XI. The arguments of the appellant may be summarised as follows:

The sole request was late-filed and should not be admitted into proceedings. The set of auxiliary requests filed by the respondent before oral proceedings had arrived with the appellant only shortly before the oral proceedings and claim 1 of the sole request before the Board contained still further amendments.

The requirements of Article 123(2) EPC were not met since claim 1 defined "at least one peripheral and annular elevation" whereas Figure 8, which was the only embodiment with two sealing lips, had a plurality of

stepped elevations. Additionally, claims 5 and 6 of the filed application were no longer present in the granted patent whereby the formulation "profiled with at least one elevation comprising an annular elevation" and a sealing flange "designed with sealing lips" appearing in claims 5 and 6 could no longer be used since the content of the granted patent formed a cut-off point regarding which subject matter from the filed application was available for use.

The clarity requirement of Article 84 EPC 1973 was not met since the feature "annular elevation designed with two annular sealing lips" did not clearly describe the structural relationship of the lips and the elevation.

Article 123(3) EPC was contravened, since the features of claim 1 as granted defined that the peripheral elevation "constituted" an annular sealing lip. The expression "designed with" now used to define the relationship of the lips and elevation was broader.

Whilst the subject matter of claim 1 was novel, it lacked an inventive step when starting from D3. The use defined in claim 1 was to seal connection apertures on an engine and this use was already known from D3. No new effect on the "use" resulted from the different form of plug and it was case law that this meant a lack of inventive step for a use claim. If this was not accepted, the only problem to be solved when starting from D3 was to provide a simpler alternative form of plug compared to that in D3 which had two interconnected parts to form a sealing plug. A skilled person looking for a simpler plug would consult D2 which involved many plugs for covering and sealing as

described in the page headed "The Product Range". Further, the plugs in D2 were for "all applications", as indicated on the cover page. The use of a flange cover with one or two lips was not inventive as this still only provided the function of sealing, which was already known from D3 and from D2. The flange cover depicted on page 61 of D2, which could obviously be used as a seal, already had one annular lip. The presence of two lips could hardly imply an invention as this was merely an aggregation of features.

XII. The respondent's arguments may be summarised as follows:

The sole request should be admitted into proceedings as it dealt with the problems raised by the Board mentioned in its provisional opinion. Claim 1 was based on claim 1 of the previous fourth auxiliary request which had been filed in due time, but this request had to be adapted in oral proceedings to take account of the Board's objections.

The appellant's objection to lack of clarity was incorrect since the relationship of the "lips" and the "at least one elevation" was defined in the claim.

The requirements of Article 123(2) EPC were met, the introduced features having been taken from claims 5 and 6 of the application as filed, the feature of an injected moulded plug having been taken from paragraph [0022] (see the published application). There was no requirement to include a plurality of steps, as argued by the appellant, since it would be understood by a skilled person from claims 5 and 6 that the embodiment

shown in Figure 8 was not limited to that specific configuration.

The requirement of Article 123(3) EPC was met, because the sealing flange was now defined in a more limited manner.

Insufficient evidence had been filed by the appellant to establish that either D1 or D2 had been available to the public; D1 and D2 should thus be disregarded. Even if D1 and D2 were prior art, it was not possible to arrive at the use defined in claim 1 unless an inventive step were involved. Starting from D3, this disclosed a plug with a sealing ring fitted in a groove on its end face. When searching for an alternative plug which could also provide better sealing, the skilled person found no teaching in either D1 or D2 of a plug with any annular sealing lip for such a use. Contrary to the appellant's argument, the plugs in D2 designed for sealing were different to the plugs in D2 designed for covering. The plugs for covering, which were basically a means of protecting an underlying surface from damage, were the only plugs having an annular lip, whereas the plugs for sealing did not have an annular lip. Further, claim 1 defined a plug with not one but two annular sealing lips, which was a further feature not disclosed in any of the cited documents. The subject matter of claim 1 thus involved an inventive step.

Reasons for the Decision

1. *Admittance of the new request*

1.1 The appellant had argued that the request filed during oral proceedings was late-filed and should not be admitted, in particular since it was based on an auxiliary request filed shortly before oral proceedings and which had then been amended further.

1.2 In accordance with Article 13(1) of the Rules of Procedure of the Boards of Appeal (RPBA), any amendment to a party's case after it has filed its grounds of appeal or reply may be admitted and considered at the Board's discretion.

In the present case, the Board exercised its discretion to admit and consider the new request as explained below.

1.2.1 It should be noted that the Board had first informed the respondent with its communication containing the Board's provisional opinion that the matter of Article 123(2) EPC, although not specifically addressed by the appellant in its appeal grounds, gave rise to the need for further consideration. The issues about which the Board had concerns were also then addressed by the respondent by way of its auxiliary requests. The fact that these auxiliary requests were filed ten days before the oral proceedings and may have arrived shortly afterwards with the appellant does not alter the fact that the appellant was made aware of the issues to be discussed already with the Board's communication, whereby the filing of amendments by way of the auxiliary requests to meet the issues raised in the communication could indeed have been expected by the appellant.

1.2.2 However, since the Board had made further objections during oral proceedings to the form of the amendments made in those requests, and since the amendments made by the respondent in its sole request (i.e. the request filed during oral proceedings) addressed those specific objections without changing the underlying concept of the amendments already appearing in the requests as a result of the Board's communication, the filing of the amendments at that stage was indeed congruent with the course of proceedings.

Further, the need for procedural economy was not adversely affected, particularly given the state of proceedings; nor were the amendments particularly complex (Article 13(1) RPBA).

2. *Article 123(2) EPC*

2.1 Claim 1 of the sole request is based on the features in the product claims 1, 5 and 6 and use claim 10 of the application as originally filed, with the addition of the disclosure of the plug being injection moulded based on the disclosure in paragraph [0022] (see the published application).

2.1.1 In this regard, the feature "at least one peripheral and annular elevation designed with two annular sealing lips" is disclosed, albeit not explicitly, as being "integrally formed together with" an "injection moulded plug", since it is implicit for a skilled person, particularly in view of the fact that the injection moulded plug is to provide a cheap alternative (see paragraph [0022] of the published application), that

the elevation(s) and annular lips would be integrally formed with the plug when it is injection moulded.

2.2 Claims 5 and 6 of the application as filed are absent in the granted patent. The appellant objected that the disclosure in these claims could not be used as a basis for the features now added by way of the amendments to the claim, since the granted patent allegedly limited the amendments which could be used, as a result of the patent grant date allegedly being a cut-off date, only to subject matter still present in the granted patent.

In this regard it may however be noted that the appellant provided no support for its argument in this respect and the Board concludes that the wording of Article 123(2) EPC is specific in referring to "the content of the application as filed" and makes no further limitation as regards the source of any amendments therefrom.

2.3 The appellant also objected that two sealing lips were disclosed in Figure 8, whereby however also two annular elevations in the form of steps were disclosed in combination therewith. It is indeed correct that Figure 8 shows two elevations, as does Figure 7 (see the Figures and the brief description of the Figures in column 5, lines 5 to 8 of the published application) and paragraph [0032] of the published application does refer to these as being several steps. However, the presence of a plurality of elevations in a stepped form would be understood unambiguously by a skilled person as merely being a preferable feature, even though shown in the embodiment of Figure 8, when taking into account claim 5 as filed which defines the sealing flange being

profiled with "at least one elevation comprising an annular elevation", and when taking into account claim 6 as filed (which is dependent on claim 5) which states that the sealing flange is "designed with sealing lips". Hence the content of the application as filed does not require the definition of the elevation(s) to be in the form of several steps merely because two lips are defined.

2.4 The Board thus finds that the requirements of Article 123(2) EPC are fulfilled.

3. *Article 123(3) EPC*

3.1 Claim 1 as granted and as found allowable by the opposition division defines the structure of the sealing flange as follows:

"the sealing flange (4) ... is provided with a peripheral elevation constituting an annular sealing lip".

In claim 1 of the respondent's sole request, the structure of the sealing flange is defined as:

"the sealing flange (4) ... is profiled with at least one peripheral and annular elevation designed with two annular sealing lips".

3.2 Whilst the word "constituting" is no longer present, this has however been replaced by wording defining the flange in a more limited manner, in that the "at least one peripheral (and annular) elevation" is restricted to a form "designed with two annular sealing lips". The

scope of protection of the claim is thus narrower than the scope of protection of the claim as granted (and also narrower than that in the form found allowable by the opposition division).

3.3 The Board thus concludes that the requirement of Article 123(3) EPC is met.

4. *Article 84 EPC 1973*

4.1 The appellant argued that the feature "annular elevation designed with two annular sealing lips" did not clearly describe the structural relationship of the lips and the elevation. However, the Board finds otherwise.

4.2 Claim 1 defines that the sealing flange (4) is arranged to sealingly cover the connection apertures, and that the sealing flange bears against the machine (which in accordance with the claim is later defined as being an engine) by fastening the plug. Since the sealing lips (i.e. that part of the flange which provides the seal) are defined as being annular and since the at least one elevation which is profiled in the plug is defined as being both peripheral and annular, the location of the annular sealing lips with respect to the flange elevation is limited to these lips being located on the elevation in such a way as to be protrusions thereof causing sealing by bearing against the engine when the plug is fastened.

In as far as the appellant may have been objecting to the terminology "designed with", it should be noted that the claim in this part is referring to the

profiling of the sealing flange of the injection moulded plug. The term "designed with" would thus only be understood to mean that the sealing flange is formed with a profile including both the "at least one peripheral and annular elevation" and the "two annular sealing lips" as parts thereof.

4.3 The definition given in claim 1 thus defines the relationship between the annular elevation and the lips in a clear manner.

4.4 No other objection under Article 84 EPC 1973 was made by the appellant and no cause for objection to any other features of the claim resulting from an amendment can be seen by the Board. The Board thus finds that the requirements of Article 84 EPC 1973 are met.

5. *Inventive step*

The appellant argued that the subject matter of claim 1 of the respondent's sole request lacked an inventive step when starting from D3 as the closest prior art.

5.1 In its first line of attack, the appellant essentially argued that because the claim was a "use" claim and since the use of a plug for sealingly covering two connection apertures simultaneously was already known from D3, albeit in a different structural form, that the novel features of the plug relating to its construction could not make the subject matter of the use inventive, since these features did not alter the use as such.

The Board however is not convinced by the appellant's argument. The claim does not define merely a use of a plug, but is restricted to the use of a plug with specifically defined features of the plug's sealing structure which are used to sealingly cover connection apertures on an engine after dismounting an oil filter. Thus, whilst D3 discloses the use of a plug to sealingly cover connection apertures of an engine after dismounting an oil filter (see e.g. Fig. 4 and the description in column 2, lines 50 to 66; column 2, lines 5 to 9, and column 5, lines 28 to 46), which as such is not in dispute between the parties, this concerns a different use - namely a use concerning a different plug. The structural features of the plug are therefore to be taken into account when assessing the inventive step of the use defined in claim 1. It may however be noted anyway that the features of the plug which are defined in claim 1 are specifically directed to the sealing elements of the plug, i.e. those features which cause the sealing contact between the engine and the sealing flange when used.

5.2 In its second line of attack, the appellant essentially argued that a skilled person would arrive at the subject matter of claim 1 without requiring use of any inventive skill, when starting from D3 and combining this with the teaching derived from D2 or D1 and the general knowledge of a skilled person, noting that the provision of two annular sealing lips is allegedly nothing more than a mere aggregation of known features, and whereby the replacement of one lip by two was not inventive.

5.2.1 First, and since this has been disputed by the respondent, it will be assumed that D1 and D2 were made available to the public before the priority date of the patent. However, as will be apparent from the following, it is not necessary for the purposes of this decision to decide on whether or not D1 and/or D2 are indeed prior art.

5.2.2 The use in claim 1 is novel with respect to D3 in respect of the profiling of the sealing flange of the plug with at least one peripheral and annular elevation designed with two annular sealing lips, this being integrally formed together with the injection moulded plug.

In this regard it may also be noted that although D3 discloses a plug 46 which may be made of plastic (see column 5, lines 28 to 32), it is not disclosed that this plug is an injection moulded plug. Moreover, the sealing effect of the plug 46 in D3 is achieved by use of a separate annular seal 52 placed in a recess at its periphery (see Fig. 4 and column 5, lines 34 to 46).

5.2.3 In regard to the features of claim 1 not known from D3, the objective problem to be solved is the use of an alternative form of plug for sealingly covering connection apertures on an engine. In regard to the use defined in claim 1, the specific profiling of the plug as defined in claim 1 is found by the Board not to be obvious in light of the cited prior art.

5.2.4 A skilled person searching for a solution to the stated problem is not led to D2 first because the use to which the claim is directed is not in any way disclosed in D2.

D2 is a catalogue of plastic fittings which should be "for all applications" according to the cover page. Indeed, according to the page entitled "The Product Range" the plastic protective fittings are for a list of purposes listed in the bullet points as being "securing, protecting, covering, plugging, marking and sealing". However, none of these is directed towards the specific use defined in claim 1, nor is it even evident that these plugs are suitable for that use. When considering pages 60 and 61, these concern a flange cover GPN 670 which is for insertion into a flange with a drilling whereby the flange "provides protection against coarse contamination and damage to the sealing face". No mention of sealing the connection apertures is mentioned, let alone sealing apertures which have been previously used for an oil filter. Further, the examples on page 1 (which follows page 61 in the copies provided) include the flange cover GPN 670 as a distinct item compared to for example the "sealing plugs" GPN 730 and 735. Plug GPN 670 has not been disclosed for use in sealing, and the plugs disclosed for sealing have radial sealing elements as opposed to the axially oriented lip of the flange cover GPN 670. The flange cover GPN 670 is also depicted as serving to cover several individual and separate sealing faces of a valve arrangement (see e.g. page 61, uppermost pictures).

Thus, it is not apparent why a skilled person would resort to D2 when wishing to provide an alternative plug for the use defined in claim 1, because nothing in D2 would incite a person skilled in the art to consider the use of the annular lip elements in the way intended (i.e. for sealingly covering connection apertures after

removal of the oil filter). Indeed, any sealing function performed by the cover plugs in D2 appears to be restricted to a different plug type than one with an annular sealing lip.

Even if a skilled person were to take a first step by resorting to D2 to find a solution to the problem when starting from D3 in order for example to find a simple alternative to the two-part form of plug in D3, the solution as defined in claim 1 using a sealing flange with at least one annular elevation designed with two annular sealing lips would not be obvious without hindsight, since none of the flange covers in D2 discloses a plug arrangement with more than one annular sealing lip. The sealing plugs used in D2 have radial sealing lips.

5.2.5 The appellant argued that the use of one or two annular sealing lips was a mere aggregation of features, not requiring inventive skill. However, the use of two annular sealing lips is not a mere aggregation of features, since the use of two annular sealing lips allows a larger area of the engine face to be used to provide sealing which thus offers improved sealing in the defined use, particularly where the surface against which the sealing lips bear is uneven (see e.g. paragraph [0030] of the patent). Also, no support exists for the appellant's argument that one annular lip (in the flange cover of D2) should simply be substituted by two annular lips, let alone two annular sealing lips for the defined use. Instead, the only plugs with a plurality of lips in D2 which are disclosed for sealing have a plurality of radial sealing lips for internal sealing of an aperture, as

opposed to lips suitable for sealing by bearing against the engine by fastening of the plug (i.e. an axial sealing).

5.2.6 D1 discloses nothing of more relevance than D2 in regard to the subject matter of claim 1. Indeed no specific argument was made by the appellant starting from D3 and combining this with the teaching of D1.

5.2.7 Thus, starting from D3 and considering the teaching of D2 or D1, the skilled person cannot arrive at the subject matter of claim 1 unless an inventive step is involved.

5.3 The Board thus finds that the subject matter of claim 1 involves an inventive step, even if D1 and/or D2 are considered to be prior art, and consequently that the requirement of Article 56 EPC 1973 is fulfilled. This being the case, it is not necessary to decide whether D1 and/or D2 have actually been made available to the public within the meaning of Article 54(2) EPC 1973.

6. *Amendments to the description*

The description amendments filed during the oral proceedings were made so as to bring the description into conformity with the amended claims. The appellant had no objections to these amendments and no reason for objection to the amendments has been found by the Board.

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 with:

   claims 1 to 6 and the amended description columns 1 to 5, as filed during the oral proceedings before the Board of Appeal, together with Figures 1 to 10 as granted.

The Registrar: The Chairman:

M. Patin P. Alting van Geusau