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Datasheet for the decision of 1 April 2019

Case Number: T 0265/15 - 3.2.07

Application Number: 03767964.4

Publication Number: 1697224

IPC: B65D39/08, B65D41/58

Language of the proceedings: EN

Title of invention:
CLOSURE PLUG AND OVERSEAL

Patent Proprietor:
American Flange & MFG Co Inc.

Opponent:
Schütz GmbH & Co. KGaA

Headword:

Relevant legal provisions:
EPC Art. 56

Keyword:

Decisions cited:

Catchword:

Europäisches Patentamt
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Case Number: T 0265/15 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 1 April 2019

Appellant: (Opponent)	Schütz GmbH & Co. KGaA Schützstrasse 56242 Selters (DE)
Representative:	advotec. Patent- und Rechtsanwälte Bahnhofstrasse 4 57072 Siegen (DE)
Respondent: (Patent Proprietor)	American Flange & MFG Co Inc. 290 E. Fullerton Avenue, P.O.Box 88688 Carol Stream, IL 60188-0688 (US)
Representative:	Phillips & Leigh LLP Temple Chambers 3-7 Temple Avenue London EC4Y 0DA (GB)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 2 December 2014 concerning maintenance of the European Patent No. 1697224 in amended form.**

Composition of the Board:

Chairman	I. Beckedorf
Members:	V. Bevilacqua
	A. Pieracci

Summary of Facts and Submissions

I. The appellant (opponent) and the respondent (patent proprietor) both filed appeals against the decision of the opposition division maintaining the European patent No. 1 697 224 in amended form.

II. The appellant requested

that the decision under appeal be set aside and that the European patent No. 1 697 224 be revoked.

III. With letter dated 25 February 2019, the patent proprietor, withdrew their appeal (thereby losing their status of appellant) together with all previously filed requests, and requested

that, when setting aside the decision under appeal, the patent be maintained in amended form on the basis of one of the sets of claims filed with letter dated 25 February 2019 as main request and as auxiliary request.

IV. The following documents are referred to in the present decision:

D1: DE 36 37 644 A;
D4: DE 200 11 618 U1
D4': US 7 380 683 B1.

V. **Claim 1** the main request reads as follows (amendments over claim 1 as maintained according to the appealed decision are highlighted by the Board):

"A closure plug and tamper evident closure overseal combination for shipping containers comprising:

a cup-shaped closure plug (6) having:
a plug sidewall (8), axially-extending, wrench-engaging lugs (12) about the inner periphery of the plug sidewall (8), and an inner, segmented locking groove (17),
wherein the closure plug (6) has **a** bottom wall (7); and
an overseal (20) having:
axially extending, resilient legs (23), each with a radially-extending foot (24) for hidden, ~~**complimentary**~~ **complementary**, snap-fit, interlocking engagement with locking groove segments (17) and
a visible frangible portion (26) to permit removal of the overseal from the plug;
characterised in that
the base of each lug (12), where it joins the plug bottom wall (7), is radially undercut to form the locking groove segments (17)."

VI. Oral proceedings before the Board took place on 1 April 2019, to which both parties had been duly summoned and in preparation of which the Board had issued a communication pursuant to Article 15(1) RPBA setting out its preliminary opinion on the appeal case.

For the course of the oral proceedings, reference is made to the minutes thereof.

At the end of the oral proceedings, the order of the decision was announced.

VII. The parties' submissions can be summarised as follows and are discussed in more detail in the Reasons for the Decisions.

VII.1 The appellant had no objections to the respondent's

main request other than lack of inventive step of the subject-matter of claim 1 in view of the teaching of document D1 chosen as closest prior art in combination with the teaching of document D4 (or of the equivalent document, in English language, D4').

VII.2 The respondent argued that inventive step should be acknowledged for the reasons set out in point 3.4 of the appealed decision where the combination of D1 and D4 was discussed.

Reasons for the Decision

1. D1 as a starting point

Both parties concur that D1 is a suitable starting point to discuss inventive step of the subject-matter of claim 1 of the main request.

2. Difference

2.1 The parties also agree that, starting from D1, the distinguishing features of claim 1 of the main request are those identified in point 3.4.2 of the appealed decision, i.e. those of the characterizing portion of claim 1 as maintained by the opposition division.

2.2 In this context the Board notes that none of the parties identifies a difference between the subject-matter of claim 1 of the main request and the subject-matter of claim 1 on the basis of which the patent was maintained according to the appealed decision.

3. Effect - Problem to be solved

While the respondent puts forward that inventive step of claim 1 of the main request should be acknowledged for the reasons set out in the appealed decision (see point 3.4 thereof), the appellant disagrees.

The technical effect formulated by the appellant is that by moving the undercut from the plug sidewall to the bottom of the lug the plug sidewall becomes torsionally stiffer.

Based on this effect the appellant formulates the problem to be solved as how to increase torsional stiffness of the closure plug of D1.

4. Discussion of inventive step - teaching of D4

4.1 The Board concurs with the appellant when they argue that the above identified distinguishing features are shown in figures 5 and 6 of D4.

This is because the geometry shown in figures 5 and 6 of D4 encompasses the feature that the base of each lug (under element 42), where the lug joins the plug bottom wall, is radially undercut to form groove segments, which are suitable to perform a locking function for an overseal as the one shown in figure 1 of D1.

4.2 The appellant acknowledges that D4 does not explicitly mention any increase in torsional stiffness of the plug achieved by the distinguishing features, but argues that such an increase would be evident to a skilled person.

This was, so the appellant, because a skilled person would have immediately realized that the plug of D4, acting as a valve, was particularly rigid, as torsional deformation thereof would have prevented a correct alignment between the pressure equalization channel 26, the outer groove 30 and groove 60, wich is necessary for pressure compensation (as explained in the third paragraph at page 12 of D4, as well as in column 5, lines 1-15 of D4').

Following this teaching, the skilled person would have studied the geometry of the plug of D4, and would have immediately understood that when the plug sidewall is not radially undercut at its base, where it joins the plug bottom wall (as it is in D1, see figures 1 and 2), the plug is torsionally stiffer.

As a consequence of that the skilled person would have eliminated the radial undercut of the plug sidewall of D1, and moved it from the base of the plug sidewall to the base of the lugs 5, which, as visible in figures 1 and 2 of D1, are particularly thick and stiff.

In this way he would have arrived at the subject-matter of claim 1 of the main request, so the appellant, without having to exercise any inventive skill.

4.3 The Board disagrees.

There is no teaching in D4 leading a skilled person to modify the plug of D1 by moving the undercut from the sidewall to the bottom of the lug.

Even if a skilled person, looking for a way to improve torsional stiffness of the plug shown in D1, would have recognized the high torsional stiffness of the plug

shown in D4, he would not have directly linked this characteristic to the particular position of the undercuts/groove segments shown in figures 5 and 6 of this document.

The reason therefor is that there is no generally valid answer to the question whether the decrease in torsional stiffness caused by the presence of an undercut at the base of the torque transmitting lugs 5 of D1, where they join the plug bottom wall, would be more than compensated by the increase in torsional stiffness achieved when the plug sidewall of D1 is not any longer radially undercut at its base.

Whether an increase in torsional stiffness is achieved or not depends on the circumstances of each particular case.

4.4 Based on the above, the Board concludes that the appellant failed to persuade the Board that inventive step was not correctly assessed at point 3.4 of the appealed decision, and that the combination of the teachings of documents D1 and D4 (or D4') is not detrimental to inventive step of the subject-matter of claim 1 of the main request.

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 patent as amended in the following version:

claims

1 to 4	filed as main request with letter dated 25 February 2019

description

paragraphs 1 to 6 and 10 to 18	of the patent specification
paragraphs 7 to 9	filed during the oral proceedings before before the opposition division on 14 November 2014

drawings

1 to 3	of the patent specification.

The Registrar: The Chairman:

G. Nachtigall I. Beckedorf

Decision electronically authenticated