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Datasheet for the decision of 27 April 2018

Case Number: T 1095/13 - 3.2.04

Application Number: 07254472.9

Publication Number: 1972242

IPC: A47J43/22, A47J43/24

Language of the proceedings: ΕN

Title of invention:

Collapsible colander & bowl

Patent Proprietor:

Progressive International Corp.

Opponents:

Future Haushaltsprodukte GmbH Emsa GmbH

Headword:

Relevant legal provisions:

RPBA Art. 12(4), 13(1) EPC Art. 54(2), 56

Keyword:

Late-filed evidence - admitted (yes)
Novelty - (yes)
Inventive step - main request (no) - auxiliary request (yes)

Decisions cited:

Catchword:



Beschwerdekammern **Boards of Appeal** Chambres de recours

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Case Number: T 1095/13 - 3.2.04

DECISION Technical Board of Appeal 3.2.04 of 27 April 2018

Appellant: Emsa GmbH

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48282 Emsdetten (DE)

Tarvenkorn, Oliver Representative:

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Respondent: Progressive International Corp.

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K2 IP Limited Representative:

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Decision under appeal: Decision of the Opposition Division of the

> European Patent Office posted on 20 February 2013 rejecting the opposition filed against European patent No. 1972242 pursuant to Article

101(2) EPC.

Composition of the Board:

Chairman A. de Vries

G. Martin Gonzalez Members:

W. Van der Eijk

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Summary of Facts and Submissions

- I. The appellant-opponent 2 lodged an appeal ,received on 30 April 2013, against the decision of the Opposition Division of the European Patent Office posted on 20 February 2013 rejecting the opposition filed against European patent No. 1972242 pursuant to Article 101(2) EPC, and simultaneously paid the appeal fee. The statement setting out the grounds of appeal was received on 2 July 2013.
- II. Two oppositions were filed against the patent as a whole and based on Article 100(a), lack of novelty and inventive step in view of *inter alia* the following evidence
 - (E9) US 2006/0096929 A1
 - (E10) Progressive catalog 2007 "Colanders and Mixing Bowls" Black and white copy.
 - (E10a) Letter from representative of the respondent-proprietor concerning the public availability of document catalog E10.
 - (E10bis) EP 1 544 118 A1

Opponent 1 withdrew their opposition with letter of 16 September 2011.

In its written decision the Opposition Division held that the subject-matter of claim 1 was neither anticipated nor made obvious by the available prior art and maintained the patent as granted.

III. In the appeal proceedings the Board considered the following further document filed with letter of 28 February 2014 by the appellant-opponent 2

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(E10d) colour copy of E10.

- IV. Oral proceedings before the Board were held on 27 April 2018.
- V. The appellant-opponent 2 requests that the decision of the Opposition Division be set aside and the patent revoked.

The respondent-proprietor requests that the appeal be dismissed, auxiliarily to maintain the patent in amended form according to either of auxiliary requests 1 or 2 filed on 20 November 2013.

- VI. The wording of claim 1 of the requests relevant to this decision is as follows:
 - (a) Main request as granted
 - "A collapsible container, comprising:
 - a substantially rigid rim (12);
 - a base (20) comprising a plurality of bores (30) configured to allow liquids to drain from the container through the base (20); and
 - a flexible membrane (14) having an upper end secured to the rim (12) and a lower end secured to the base (20), the flexible membrane having a central section (23) of substantially uniform thickness, a first living hinge (22) relatively ad jacent the rim (12), and a second living hinge (24) relatively adjacent the base (20), characterized in that the base (20) is substantially rigid."
 - (b) Auxiliary request 1

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Vis-avis claim 1 of the main request claim 1 is amended as follows (emphasis added by the Board to indicate added text):

"...characterized in that the base (20) is substantially rigid and the flexible membrane (14) is devoid of holes".

(c) Auxiliary request 2

Emphasis added by the Board to indicate added text visa-vis claim 1 of the main request:

"A collapsible container, comprising:

- a substantially rigid rim (12);
- a base (20) comprising a plurality of bores (30) configured to allow liquids to drain from the container through the base (20); and
- a flexible membrane (14) formed from silicone, having an upper end secured to the rim (12) and a lower end secured to the base (20), the flexible membrane having a central section (23) of substantially uniform thickness, a first living hinge (22) relatively adjacent the rim (12), and a second living hinge (24) relatively adjacent the base (20), characterized in that the base (20) is substantially rigid, and the base and rim are formed from plastic, with the membrane being over-molded onto the rim and the base."

VII. The appellant-opponent 2 argued as follows:

Subject-matter of claim 1 of the main and of the auxiliary request is not new in the light of catalog E10d. It is alternatively not inventive starting from E10d in combination with either common general knowledge, E9 or E10bis.

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VIII. The respondent-proprietor argued as follows:

Document E10d is late filed evidence and should not be admitted into the proceedings. The subject-matter of claim 1 according to all requests is new and inventive over the adduced evidence.

Reasons for the Decision

1. The appeal is admissible.

2. Background

The invention relates to a collapsible colander. The colander consists of three parts, namely a rigid top rim, a rigid base with bores and an intermediate flexible membrane with two living hinges near the base and the rim. This combination of sections allows the container to easily collapse to about one third of its original size while being also quite stable and self-supporting when expanded, see paragraph [0005] of the specification. It is thus not only a practical arrangement for storage but also for using, as it can be easily extended-collapsed and is also self-supporting in extended configuration, see paragraphs [0002]-[0003].

3. Admissibility of E10d

With letter of 28 February 2014 the appellant-opponent 2 filed new evidence, *inter alia* E10d, neither filed before the Opposition Division nor with the statement of grounds of appeal. All relevant factors for the exercise of the Board's discretion under Article 12(4) and Article 13(1) RPBA to admit or not this late filed

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evidence should be considered, see also in this regard Case Law of the Boards of Appeal, 8. Edition 2016 (CLBA), IV.C.1.3.2 and IV.C.1.3.3.

In respect of relevance, the new evidence E10d is a better quality copy of catalogue E10 which was in turn very relevant for novelty in the written decision, see pages 3-4 of the impugned decision. A crucial issue in the assessment of the Opposition Division was whether certain features were derivable by the skilled person from photographs in E10, i.e. the different sections of the membrane or the presence of bores on the base. The new better quality colour photographs shed more light on the disputed features, so that prima facie E10d is thus more relevant than the black and white copy E10. Furthermore, the original catalogue itself is the respondent-proprietor's own publication, which he acknowledges was made available at the trade fair before the priority date, see letter of reply of 20 November 2013 and letter El0a. Thus admission of E10d can hardly be said to take the respondentproprietor by surprise and thus be unequitable.

In consideration of the above factors, the Board decided to admit E10d into the proceedings.

4. Novelty with respect to E10d - main request

The Board considers that E10d discloses all features of granted claim 1 with the exception of the uniform thickness of the membrane central section.

4.1 It is undisputed that E10d, see the photographs on the cover, pages 4 and 11 and the text on page 11, discloses a collapsible colander with a white rim, a white base comprising bores and a blue membrane

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connecting them, see figure "Collapsible Colanders" on page 11. The colander is described as collapsible on page 11, and shown collapsed on the cover page (top left) and the inserts in the blue section top right on page 11.

As is clearly visible from those photographs of the collapsed colanders, the blue membrane has two regions or sections where the membrane folds back on itself, one relatively adjacent the rim and the second one relatively adjacent the base with a central membrane section between them.

- 4.2 The respondent-proprietor disputes that the skilled person can directly and unambiguously derive from the photographs and text in E10d that the white base and rim of the colander depicted in E10d are rigid, that the folding regions are living hinges and that the central section of the membrane is of substantially uniform thickness.
- 4.3 With respect to the rigidity of base and rim, the function of the rim and base of the colander to provide a firm hold, respectively a firm support on which the colander rests in extended condition can only be properly achieved if these parts are rigid. This is all the more so as controlled flexing or folding of the membrane as shown requires these sections, which between them contain the membrane, to retain their shape and form. Indeed the photographs show the rim and base as unchanged in shape in collapsed or extended condition. Finally, the text on page 11 mentions TPE and polypropylene for the colander. TPE or thermoplastic elastomer, which is typically used for its elastic properties, will be readily associated with the elastically flexible blue membrane of the photos,

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leaving polypropylene, a common plastic used in a wide variety of applications such a packaging, furniture or piping for inter alia its high stiffness, for the remaining white areas of the rim and base. All this information taken together will inevitably lead the skilled person to unequivocally conclude that base and rim of the container disclosed in E10d are rigid.

- 4.4 The skilled person also directly and unambiguously recognizes in E10d that the folding regions must be achieved by way of "living hinges".
- 4.4.1 The photographs (inserts on page 11, cover page) show the colander in a precisely collapsed condition, with the blue membrane folding back on itself in a well defined manner, the membrane near base and rim forming a smooth, narrow and circular crest concentric with rim and base. In extended condition (cover, page 4) the membrane presents on the inner and outer surfaces circumferential ridges or furrows that run close to the base and rim edge. In between the membrane appears relatively smooth and uniform. The colander as a whole is shown to be self-supporting as would be expected of a colander. Furthermore, the folding must be reversible, i.e the colander must be able to change back and forth between the two conditions.
- 4.4.2 From the above the skilled person using his knowledge of folds will be able to reverse engineer how these preferential folds are realized in a flexible TPE membrane. Thus, from the fact that the colander is self-supporting the skilled person deduces that the flexible TPE membrane is sufficiently stiff when extended, i.e. must be thick enough. He will further infer from the position of the ridges/furrows close to the rim and base, where in collapsed condition the

membrane folds back upon itself, that this folding action is linked to the ridges/furrows, in particular that it is somehow conditioned by them.

From amongst the various known ways of realizing a fold that the skilled person will consider to realize such a well-defined reversible folding of an otherwise sufficiently stiff membrane, he will conclude that the only conceivable way he can possibly produce a fold having the above features and properties (circumferential ridges/furrows on the inside and outside near base and rim; smooth membrane in between; membrane sufficiently thick to make the colander selfsupporting) is by reducing the thickness along one or more rings or bands close to the rim and base. This corresponds to what is commonly known as a living hinge, see also paragraphs [0033] and [0045] of the patent, a folding mechanism which is frequently used in plastics. One or two such rings or bands of thinner material would produce the ridges or furrows visible on the inside and outside of the membrane in the photographs of E10d.

4.4.3 The respondent-proprietor has been unable to provide any examples of other folding mechanisms that do not involve living hinges to realize the reversible, well defined folds of the appearance of the photographs of E10d. All the concrete examples mentioned in paragraph [0033] involve different thickness sections (ridges, scoring, thinner regions, thicker regions) to define the folding section, thus constituting living hinges as also expressly stated in its final sentence. The further cited example of the stiffening rings 20, 22 shown in figure 4 of E9, are set between living hinges 32, 34, 36 and 38, see lines 12-13 of paragraph [0017].

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- 4.4.4 From the above the Board concludes that the skilled person will infer directly and unambiguously from the photographs of E10d that the reversible, preferential foldings near base and rim are realized in the membrane as living hinges in the sense of the contested patent.
- 4.5 With respect to the first hinge adjacent the rim the respondent-proprietor argues that its bending form is not visible on the figures. It may thus be e.g. a progressive bend without a well defined fold.

The Board disagrees. In the photographs on the cover page and page 11 showing the colanders in extended configuration, the two zones with ridges or furrows corresponding to the first and second hinges have a very similar appearance. The skilled person will conclude that the two folding sections are realized in the same manner.

- The Board however finds that the only feature the skilled person cannot directly and unambiguously derive from E10d, is that the central section of the membrane is of substantially uniform thickness. The photographs show only the outer and inner surface of the membrane and that it is smooth in between the folding zones. Though the features visible in the photographs allow the skilled person to infer reduced thickness in the folding zones, the photographs do not offer sufficient detail to be able to infer the thickness profile of the central section. The Board therefore holds granted claim 1 to be new with respect to E10d.
- 5. Inventive step main request

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- 5.1 Starting from E10d, the only difference of the contested claim is that the central section of the membrane is substantially uniform in thickness, see previous section. Although it can be inferred from E10d that the central section must be sufficiently thick to make the colander self-supporting, E10d provides no information as to the exact thickness profile of the membrane in the central section. No particular technical effect can be associated with this difference, other than that it represents a concrete way of realizing a colander as shown in the photographs of E10d. The corresponding technical problem can thus be formulated as how to realise the colander of E10d.
- In the Board's view, the skilled person, when trying to realise the colander of E10d, is compelled to define a membrane wall thickness profile either drawing on common general knowledge or on other known prior art. For the skilled person it is immediately apparent from straightforward considerations that using a uniform thickness is, in the absence of indications on the contrary, the designer's first choice for embodying a wall. Therefore he would consider carrying out the central section of the lateral wall membrane of the colander in E10d with a substantially uniform thickness as a matter of obviousness, thereby arriving at the subject-matter of granted claim 1 without the need of inventive skill.
- 5.3 The respondent-proprietor argues that uniform thickness would ensure that the structure of the claimed invention is self-supporting. The Board is not convinced by this argument. For the colander to be self-supporting the particular value of the thickness would appear critical, which is however not featured in claim 1. In any case it is immediately apparent from

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the structure of the colander in E10d that it is, in extended configuration, also a self-supporting container, and must therefore have sufficient thickness to self-support the container, see also above.

5.4 The Board therefore holds that the subject-matter of granted claim 1 does not involve an inventive step in the sense of Article 56 EPC.

6. Auxiliary request 1

Claim 1 according to this request only adds that the flexible membrane is devoid of holes. This further feature is also clearly disclosed by E10d, see the photographs, where no holes are visible in the blue, membrane area either in collapsed or extended condition. Thus the above lack of inventive step conclusion is also valid for claim 1 of this auxiliary request for similar reasons.

7. Auxiliary request 2

7.1 Added subject-matter

Claim 1 is amended to specify that the base and rim are formed from plastic over-molded with a silicone flexible membrane. As there is a clear basis in paragraph [0027] of the published application (paragraph [0028] of the specification description) and it is a limitation to granted claim 1, this claim is unobjectionable under Article 123(2) and (3) EPC.

Nor does the board see an unallowable intermediate generalization of the cited passage as all its features, including that of silicone, have been incorporated.

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7.2 Inventive step

- 7.2.1 E10d can be considered as starting point for assessing inventive step. E10d discloses a collapsible colander with the same combination of parts base, rim and membrane featuring the same sections that is also self-supported in expanded configuration. The claimed container differs from E10d in that the membrane is formed from silicone instead of from TPE (thermoplastic elastomer), that the membrane has a central section of substantially uniform thickness, and that the base and rim are over-molded with the silicone flexible membrane. The Board considers the effect of these differences to provide an alternative membrane for the colander of E10d. The corresponding technical problem can thus be formulated as how to realise the colander of E10d with an alternative membrane.
- 7.2.2 Applying the problem-solution approach, the critical question is whether it would be obvious in the light of the prior art to realise the membrane of E10d with silicone instead of TPE. It is immediately apparent from E10d that the known colander is, in extended configuration, also a self-supporting structure. Thus the membrane must not only be sufficiently flexible to build living hinges and to allow the folding process, it must also meet the corresponding sufficient degree of rigidity to obtain a self-supporting extended structure. Absent any argument or supporting evidence, based either on prior art disclosures or on common general knowledge, that a flexible silicone membrane meets such conditions, the Board has no reason to find that the skilled person would consider a flexible silicone membrane as an obvious alternative. The skilled person would thus not seriously contemplate

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substituting the thermoplastic elastomer (TPE) membrane for the realisation of the colander of E10d as a matter of obviousness.

- 7.2.3 The Board thus concludes that the subject-matter of claim 1 according to auxiliary request involves an inventive step.
- 8. For the above reasons the Board holds that the claims as amended according to auxiliary request 2 meet the requirements of the EPC. The Board is satisfied that the consequential amendments to the description bringing it into line with the amended claims are unobjectionable. These were also not objected to by the appellant-opponent 2. The Board concludes that the patent is to be maintained as amended pursuant to Article 101(3)(a) EPC.

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Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- The case is remitted to the department of first instance with the order to maintain European patent No. 1 972 242 as follows:
 - <u>Claims</u>: 1-9 of auxiliary request 2, filed on 20 November 2013
 - <u>Description</u>:

Pages 2 and 3 as filed during oral proceedings before the Board

Pages 4 and 5 of the patent specification as published

- <u>Figures</u>: 1-17 of the patent specification as published.

The Registrar:

The Chairman:



C. Rodríguez Rodríguez

A. de Vries

Decision electronically authenticated