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**Datasheet for the decision
of 17 November 2014**

Case Number: T 1883/12 - 3.2.04

Application Number: 98943302.4

Publication Number: 1014839

IPC: A47G19/22

Language of the proceedings: EN

Title of invention:
NO-SPILL DRINKING CUP APPARATUS

Patent Proprietor:

Hakim, Nouri E.

Opponent:

Koninklijke Philips N.V.

Headword:

Relevant legal provisions:

EPC Art. 114(2), 54, 56

RPBA Art. 12(2), 12(4)

Keyword:

Late-filed document - admitted (no)

Novelty - (yes)

Inventive step - (yes)

Decisions cited:

G 0007/93, G 0009/91, G 0010/91, T 1002/92, T 1557/05,
T 0281/00, T 0214/01

Catchword:

Reasons 3.1.2 to 3.1.5, 3.2.1 to 3.2.3



**Beschwerdekammern
Boards of Appeal
Chambres de recours**

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Case Number: T 1883/12 - 3.2.04

D E C I S I O N
of Technical Board of Appeal 3.2.04
of 17 November 2014

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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 31 July 2012
rejecting the opposition filed against European
patent No. 1014839 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chairman C. Heath
Members: A. de Vries
E. Frank

Summary of Facts and Submissions

- I. The Appellant (Opponent) lodged an appeal, received 22 August 2012, against the decision of the Opposition Division posted 31 July 2012 to reject the opposition against European patent No. 1 014 839 and simultaneously paid the appeal fee. The statement of the grounds of appeal was received 3 October 2012.
- II. Opposition had been filed against the patent as a whole based inter alia on Article 100(a) EPC in combination with Articles 54 and 56 EPC for lack of novelty and inventive step.

The Opposition Division held that none of the raised grounds prejudiced the maintenance of the patent as granted, having regard in particular to the following documents:

D1: FR-A-1 191 181

D2: IT-A-594 286

D3: <http://dictionary.reference.com> : entry for "invert"

D4: GB-A-2 304 545,

It however did not consider the following late filed documents:

D5: US-A-5 890 621

D5b: WO-A-98/17157

D6: US-A-5 609 582

D7: US-A-5 250 266

D8: EP-A-0 388 828

D9: GB-A-2 258 860

D10: US-A-5 439 143

D11: US-A-5 542 670

D12: US-A-5 607 073

D14: WO-A-99/38423

D15: US-A-5 706 973

D16: US-A-4 226 342

D17: WO-A-97/37899

D18: US-A-4 414 973

III. Oral proceedings were duly held before the Board on 17 November 2014.

IV. The Appellant requests that the decision under appeal be set aside and the patent be revoked in its entirety.

The Respondent requests that the appeal be dismissed, alternatively, that the decision under appeal be set aside and the patent be maintained on the basis of one of auxiliary requests 1 to 7 with auxiliary requests 1 to 4, 6 and 7 filed with letter dated 29 August 2014, and auxiliary request 5 filed with letter dated 17 October 2014.

V. The wording of the claim 1 as granted is as follows:

"An apparatus for use with a no spill drinking cup, said cup comprising a cap having a spout (14,130, 140), said apparatus comprising a valve (42):

said valve (42) comprising a flexible material having an opening (70); characterised in that:

the apparatus further comprises a blocking element (52), said blocking element (52) comprising a portion (56) which is impermeable to the passage of liquid through said portion (56);

said valve (42) having a resting position wherein said flexible material sits against said portion of said blocking element (52) so as to seal off said opening

(70) against said portion and block the passage of liquid through said opening (70); wherein said flexible material lifts away from said portion (56) and begins to invert when a user applies negative pressure to said flexible material by sucking on said spout to drink from said cup, such that liquid in said cup passes through said opening (70)."

VI. The Appellant argued as follows:

In claim 1 "begins to invert" must be read broadly as meaning "lifts away". All embodiments relate to full inversion, but for specification paragraph [0039], which must relate to the possibility of no inversion considered in claim 2 of the original disclosure. D1 and D2 show flat valve members that lift away and these documents therefore destroy novelty. A flat disk may not invert, but that is not what is claimed.

Starting from D1 or D2, if there is any difference, it resides only in the feature that the flexible material "begins to invert". The associated problem to be solved is achieving a better sealing when the bottle is shaken, but this is only achieved with a slit. When the opening is a hole (covered by granted claim 1) the problem is not solved at all. Inventive step cannot therefore be based on this sole difference.

Alternatively, when starting from D1 or D2 the skilled person would look toward D4, which shows a valve that inverts and has a slit to improve sealing. Starting from D4, using a blocking element as in D1 or D2 solves the problem of the seal becoming less tight with age and wear.

The division should have admitted D5 to D12 and had exercised its discretion improperly in not admitting them. The criterion of "not more relevant than the evidence on file" was wrong. More particularly, for D8 the reasons were too short and "prima facie relevance" incorrectly assessed. Further criteria such as lateness or complexity should also be taken into account. The Board should itself always have the discretion to admit late documents, that are clearly prima facie relevant and might jeopardize the patent.

Of documents D14 to D18 not considered, D14 was particularly relevant and had already been cited against the main request in first instance. Even if it represented a fresh case, D14 should be admitted because it is prima facie novelty destroying. That was the standard to apply. Priority was also prima facie invalid. A remittal to first instance would unnecessarily prolong the procedure also in view of the simplicity of the issues involved.

VII. The Respondent argued as follows:

The term "invert", which means "move in an opposition direction", see D3, implies that the valve member is pre-shaped and has an associated direction of movement. This is not shown in D1 or D2 which show flat membrane which cannot invert.

D1 and D2 are also not suitable starting points for inventive step. But even if they were, there is no motivation for pre-shaping the valve, which already provides a seal. The claimed valve improves sealing because it is pressed or biased against the blocking element. In D4, on the other hand sealing is exclusively the result of the slit. Starting from D4,

which is designed to allow insertion of a straw through the slit, p.2, line 27, there is no motivation for putting in a blocking element as this would get in the way.

The division had correctly considered prima facie relevance of D5 to D12, particularly of D8, in not admitting them. Its relevance was discussed in detail. Moreover, D8 had only been cited as a combination document not as a starting point.

D14 was cited very late in first instance without any substantiation regarding either the lack of novelty vis-a-vis D14 or the invalid priority on which this hinged. Clearly, these issues should have been raised then already and in detail, considering also that D14 is the Appellant's own document. The issue of priority now raised is highly complex and warrants remittal if D14 is admitted.

Reasons for the Decision

1. The appeal is admissible.
2. Background of the Invention

The patent is concerned with a no-spill drinking cup (for infants or elderly) with a cap and a spout, see e.g. figures 1 and 2. Its main focus is the valve arrangement, as shown in detail in figures 3 and 8 and which has a valve element (42,45) of flexible material with an opening, which normally (fig 8(D)) sits against a blocking element (52,56) so as to seal the valve. Under suction the valve "lifts away and begins to invert" allowing flow through the opening, cf. figure 8(E).

In the patent as granted claim 1 is directed to the apparatus formed by valve and blocking element, i.e. the valve per se, with claim 32 directed at the cup including the apparatus.

3. Framework of the appeal
 - 3.1 The Appellant contests the non-admission by the opposition division of D5 to D12. The Appellant generally faults the use of the criterion "not more relevant than admitted evidence", but also argues the use of other criteria such as lateness and complexity. Finally, the Boards should be allowed to reassess relevance of late filed evidence not admitted in first instance.
 - 3.1.1 It is undisputed that D5 to D12 were submitted outside the statutory 9 month opposition period of Article

99(1) EPC, or that the division was therefore authorized to use its discretion under Article 114(2) EPC not to admit this evidence. Nor is it disputed that prima facie relevance is an important criterion in deciding whether or not to admit late filed documents.

3.1.2 Following established case law, see Case Law of the Boards of Appeal, 7th edition 2013 (or CLBA) IV.C. 1.3.3, 2nd paragraph citing G7/93 (OJ 1994, 775), reasons 2.6, a discretionary decision such as the admission or not of late filed evidence is open to review only to determine whether or not discretion was exercised properly, that is according to the proper principles. That a board of appeal reviews only the manner in which first instance discretion is exercised and does not reassess relevance and so repeat the exercise of discretion itself follows from the special nature of EPO appeal proceedings as judicial review proceedings, as is recognized in jurisprudence, see e.g. CLBA, IV.E.1. Thus, they do not provide for a simple re-examination of the facts and evidence submitted in first instance; rather they serve to assess the correctness of the decision under appeal which is its subject. For this reason in particular, where the admission or not of late filed evidence in first instance is concerned, the Board normally reviews only the proper exercise of discretion, but does not itself consider whether or not to admit the late filed evidence.

3.1.3 The relevant criteria for admitting or not late filed submissions are set out e.g. in the Guidelines, E-V.2, which mentions prima facie relevance as most important (but not exclusive) criterion. The approach outlined there follows from the principles set out in G9/91 (OJ 1993, 408) and G10/91 (OJ 1993, 420) for changing the

extent of opposition or introducing new grounds, which apply generally to late-filed facts, evidence and related arguments that go beyond the indication of the facts, evidence and arguments presented in the notice of opposition and which establish the legal and factual framework of the opposition, see T1002/92 (OJ 1995, 605), reasons 3.2 and 3.3. Prima facie relevance is ascertained on the face of the facts, i.e. with little investigative effort, which reflects the need for procedural expediency in considering, and admitting late filed facts and evidence.

The interest for procedural expediency is also expressed in the common approach of T1557/05, see reasons 2.4, not to admit late documents if prima facie not more relevant than what is already on file. In this regard the Board adds that relevance is decided in relation to facts to be proven, and if late documents, on the face of it, are not more relevant to that fact than admitted evidence and thus appear to add nothing, it is perfectly reasonable in the interest of procedural economy not to admit them. This approach strikes a fair balance between the principle of ex officio examination and the general interest of procedural expediency, which governs any judicial or administrative procedure (cf. G9/91, G10/91, reasons 14). Thus the Board sees no fault in the division's application of this criterion.

In relation to D5 and D5b the Board adds that the balance struck by the division is all the more reasonable as the relevance of these post-published documents hinged on a much later submission of invalid priority made in the oral proceedings before the division. A discussion of that relatively complex issue

at that very late stage would clearly have impacted on procedural economy.

3.1.4 The Guidelines E-V.2 and underlying T1002/92 also clearly allow for other criteria, such as the state of the procedure and the reasons for belated submission, in admitting late filed submissions. Furthermore, a prima facie assessment of the relevance of late filed evidence is necessarily a function of the complexity of its content and that of the questions at issue. Whatever criteria are applied, however, the exact manner in which they are applied or how they should be weighed cannot be prescribed as this would seriously undermine the freedom that is necessary to the exercise of discretion by a first instance. Consequently, a board reviewing a discretionary exercise can only consider whether criteria used are reasonable and have been applied reasonably. In this regard the Appellant provides no specific argument, nor is it apparent to the Board that the division applied wrong criteria or applied criteria in a wrong way. As stated "prima facie not more relevant than admitted evidence" is an accepted criterion which strikes a fair balance between opposing requirements.

3.1.5 The Board is open to the argument that when reviewing a first instance's decision not to admit late filed submissions it may also consider the underlying facts in so far as to establish whether the assessment of prima facie relevance is manifestly in error (as asserted specifically in regard of D8), even if discretion appears to have been exercised in an otherwise proper manner, that is after having heard the parties and reasoned its decision in an ostensibly comprehensible manner (CLBA IV.C.1.3.2 and T 281/00, T 214/01 cited therein). A reasonable exercise of

discretion by a competent authority should exclude blatant error and misrepresentation of fact.

The Board however has no reason to believe that there is any manifest error in the division's assessment of prima facie relevance regarding D5 to D7 and D9 to D12, nor has this been argued. For D8, the main focus of the Appellant's arguments, cursory examination of its abstract or its opening paragraphs does not reveal any manifest error in the decision's finding (page 4, 6th paragraph) that it "relates to a valve for containers in industrial use thus not a closely related field to drinking cups or bottles" and that "[the] membrane does not appear to begin to invert upon suction". That this finding, which refers only to its content to the extent that the document can be discounted as not relevant, is expressed in such summary terms lies in its prima facie nature.

- 3.1.6 In view of the above the Board therefore confirmed the division's decision that the documents D5 to D12 should not be admitted into the proceedings.

- 3.2 The Appellant also contends that D14 to D18, filed in first instance with letter of 1 June 2012, be admitted. As these documents were seen to be filed only against auxiliary requests, the division saw no need to introduce these documents (decision, page 5, 3rd paragraph). In the appeal proceedings the Appellant has to date made detailed submissions only with regard to D14. As no case, much less a complete one, was made in appeal for the other documents, the Board, pursuant to Article 12(4) with Article 12(2) RPBA, has disregarded these other documents D15 to D18 in the further procedure.

- 3.2.1 As for D14, this is a WO publication under Article 153(3) EPC with a priority date falling between that claimed by the patent and its filing date. The document was appended to the letter of 1 June 2012, but did not figure in any of the arguments in that letter (the reference to "D14" on pages 6 to 7 of that letter is to a different document, the WO publication of the patent's priority application). Though it had already been submitted in first instance, D14 is first discussed in any detail in the statement of grounds of the appeal (points F14 to F20) where it is cited under Article 54(3) EPC against granted claim 1.
- 3.2.2 The new novelty objection hinges on a submission also made for the first time in the statement of grounds of appeal that granted claim 1 does not benefit from the claimed priority, as it would not concern the same invention, and as a US provisional application cannot give rise to a valid priority. Invalid priority had been alleged in the 1 June 2012 letter on pages 6 and 7 but in a different context and without any supporting argument: "as a result of amendment made to claim 1 of the majority of ... the auxiliary requests the patentee is no longer entitled to [the claimed priority]".
- 3.2.3 These new submissions regarding priority and lack of novelty of granted claim 1's subject-matter over D14 pertain to new facts and evidence that lie outside the factual and evidentiary framework of the appeal decision, i.e. they relate to a fresh case. As D14 had already been submitted and the issue of priority mentioned in first instance, not only could this fresh case have been presented in first instance, it should have been presented then, if the Appellant had duly substantiated the contentions with argument. Nor has the Appellant provided any justification for these new

submissions at this late, appeal stage. Finally, the critical priority issue is far from straightforward, as is demonstrated by the 10 pages of submissions, and precludes any prima facie assessment of the relevance of this submission and D14.

3.2.4 For these reasons the Board decided not to admit D14 to D18 pursuant to Article 114(2) EPC in conjunction with Articles 12(2) and (4) RPBA.

4. Novelty

4.1 The Appellant contests novelty over D1 and D2. Figures 1 and 6 of D1 show a nursing bottle with teat at the bottom end and an air inlet at the top. The teat includes a valve arrangement with a flat flexible membrane or disk 22 with hole 24 clamped inside a cylindrical body element 14 that has a central cylindrical guide or pin 15 extending through the hole. The membrane sits against and is sealed by the pin 15 and the shoulder 19 at its base as blocking element, and lifts away under suction. A similar valve arrangement is shown in figure 1 of D2, featuring a flexible membrane 8 with a central opening 9 through which the head 7 of an element ("penduncle" in the English translation) protrudes. The head also provides an annular seat for the membrane, which is dished outwards in the resting position, see also figures 2, 3 and 5. Suction draws the membrane even further out and away from seat and head (figure 1).

4.2 Leaving aside whether these known valve arrangements are for use with a no spill drinking cup as claimed, D1 and D2 are seen to disclose almost all structural features of claim 1 as granted. The only structural feature in dispute is the final feature where it states

that the flexible material "begins to invert". The question of novelty hinges on what is meant by this expression.

- 4.3 In its normal meaning, see e.g. D3, but also Oxford or Cambridge dictionaries, the term "invert" means "to reverse in position or turn inside out". This is borne out by the patent, cf. specification paragraph [0012], lines 8 to 9 ("causing the valve to invert, or turn inside out, either partially or totally"); specification paragraph [0039], lines 48 to 49 ("to fully invert and turn inside out or begin to invert and turn inside out"), where "invert" and "turn inside out" are used synonymously. In this understanding of the term it implies in the Board's view that in the position from which it inverts the inverting element has some form of directionality that is reversed or turned inside out upon inversion. In the Board's understanding this means that it has a reversible shape as is indeed shown in figures 6,8,9 (D), (E) of the patent showing the valve 42 in normal (D) and reversed or inside-out states (E). This applies also for the requirement "begins to invert", which means that the reverse movement is started but not completed, i.e. that the inside-out movement or inversion is only partial, cf. column 2, lines 8 to 9, of the patent. Thus, an element that begins to invert (upon suction) necessarily also has a reversible shape from which it inverts.

Nor does the description allow for any other reading. In all embodiments the valve 42 has a reversible shape (see figures) and nowhere in the description is there a suggestion that it might be otherwise. For the skilled reader it is immediately clear that in the only passage that uses the expression "begin to invert", paragraph

[0039] cited above, "invert" and "turn inside out" are used interchangeably as synonyms (this is reinforced by the repetition of "invert and turn inside out"). It is then immaterial that originally filed claim 2 gave a broader definition of the invention without any form of inversion (which first appears in as filed claim 7). The point is that the original description, which was not substantially changed upon grant, and from which "begin to invert" was adopted, was more specific.

- 4.4 In D1 the membrane 22 is a flat disk with a through hole. There is no direction or directionality associated with the flat shape from which it must invert. Thus, if the membrane might be said to lift away under suction, it does not invert or begin to invert as understood above. Indeed the Appellant has acknowledged that a flat disk cannot invert.

If the outwardly dished membrane 8 of D2 does have an initial shape with associated direction, movement under suction is also outward, that is not in the reverse direction as would be necessary for the initial inverting movement implied by the term "begins to invert".

- 4.5 The Board concludes that neither document discloses the feature of the flexible material beginning to invert under suction. Therefore, it finds the subject-matter of granted claim 1 to be novel over D1 and D2, Articles 52(1) and 54 EPC.

5. Inventive step

- 5.1 Inventive step is challenged starting from either of D1 or D2 considered on their own, or combined with D4 or vice versa; or starting from D4 combined with common

general knowledge. In the Board's view none of these attacks are successful.

5.2 Starting from D1 or D2 these documents, see above, (and leaving aside the question whether these documents concern valve arrangements for non-spill cups), the subject-matter of claim 1 differs from either document by the feature of the flexible material beginning to invert under suction from an implied reversible shape. Neither the flat membrane of D1 nor the outwardly dished membrane of D2 can be said to begin to invert upon suction.

5.2.1 As explained in the opening lines of specification paragraph [0013], see also paragraph [0038], the valve made of the flexible material is pressed against the blocking element in its resting position. This provides a secure seal against fluid leakage in particular when subjected to shaking or turning the cup upside down, see the final lines of paragraph [0013]. This is a consequence of the elastic forces that are at play in the material when the valve begins to turn inside out from its reversible shape in the resting position. In D1 and D2 the elasticity of the membrane achieves a similar effect as here also suction must overcome elastic forces holding the membrane in place. As the effectiveness of the seal in either case must depend at least on the relative strength of the elastic forces in the membrane of D1 and D2 respectively the patent and these are not known, it is not possible for the Board to establish that the claimed valve gives improved sealing. Therefore, the Board sees the objective technical problem addressed by the claimed invention as providing an alternative secure seal rather than the more ambitious problem formulated by the Respondent, namely providing an improved seal.

The Board formulates the above problem on the basis of the difference of the flexible material beginning to invert and what that implies. These features are technically significant in that they directly affect the alternative sealing action, and are thus not arbitrary and to be disregarded for inventive step as argued by the Appellant. It is thus of no import that only the embodiment with a membrane having a slit actually improves sealing vis-a-vis D1 and D2.

5.2.2 D4, see its sole figure and page 1, line 34, to page 2, line 29, shows a valve arrangement with an inwardly dished membrane 7 that inverts upon suction. A slit or piercing 8 in membrane provides a seal in that it "closes up under its own resilience" in the normal (resting) position (page 2, lines 6 to 8), but which opens up when the membrane inverts under suction (page 2, lines 20 to 22).

5.2.3 The sealing action in D4 is inherently different from that of D1 or D2 where the seal is provided by the blocking element protruding through an opening in the membrane, the edges of the opening resting on a shoulder or flange of the element, see section 4.1 above. Because of the inherently different sealing actions the skilled person recognizes the two valve mechanisms to represent alternatives, from which he normally chooses either one or the other depending on the circumstances. The slit in D4, and the blocking protruding through a hole in D1 or D2, as intrinsic features of their respective sealing mechanisms also mean that they cannot be easily combined into a hybrid form. That would involve the realization that either the slit or the protruding element must be abandoned. In the Board's view this goes well beyond the normal

skills and abilities of the skilled person. For this reason the Board holds that the skilled person will not combine the teachings of D1 or D2 and of D4 as a matter of obviousness.

5.2.4 Nor is the Board convinced that the skilled person would draw on common general knowledge to lead him from D1 or D2 to the claimed combination of blocking element and flexible material that begins to invert. In particular, it does not believe that the skilled person would consider an inverting element as a simple functional equivalent to a flat or outwardly dished disk. More importantly, he would be deterred from replacing the holed disks of D1 or D2 with one that, for it to invert under suction, must be inwardly dished, as when such a disk would begin to invert the edges of its opening would move together and press against the protruding element reinforcing the seal rather than releasing it. Again, the idea of then dispensing with the protruding element altogether (leaving only the base of the blocking element) lies outside the normal skills and abilities of the skilled person.

5.3 The attacks that start from D4 as closest prior art also fail. Were the skilled person to look toward D1 or D2, he would be confronted with the same inherent incombinability of the teachings of D4 and of D1 or D2, see above. A similar argument applies for the adoption of a valve seat as known from simple mechanical valves with movable valve element. Here also valve action follows an inherently different concept, with the seat generally surrounding the opening blocked by the movable element. The Board holds it to be well beyond routine skills to combine such different concepts, in particular also as a seal with opening would not

contribute in any way to the sealing effect of the slit membrane valve as in D4.

- 5.4 In conclusion the Board finds that none of the argued combinations of D1 or D2 and D4 either with each other or with common general knowledge render the claimed invention obvious. Considered in the light of this prior art, the claimed valve arrangement, which by essentially combining a blocking element with a membrane that begins to invert provides an alternative secure seal, involves an inventive step, Articles 52(1) and 56 EPC.
6. In the light of the above the Board confirms the appealed decision's finding that none of grounds raised under Article 100 and maintained by the Appellant prejudice the maintenance of the granted patent.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



G. Magouliotis

C. Heath

Decision electronically authenticated