DECISION
of 17 December 2002

Case Number: T 0041/01 - 3.2.7
Application Number: 94117191.0
Publication Number: 0653355
IPC: B65D 21/02

Language of the proceedings: EN

Title of invention: Container for small objects, with mutual coupling means

Patentee: Conconi, Luigi

Opponent: Ferrero oHG mbH

Headword: -

Relevant legal provisions: EPC Art. 123, 56

Keyword: "Inventive step (no)"

Decisions cited: -

Catchword: -
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DECISION
of the Technical Board of Appeal 3.2.7
of 17 December 2002

Appellant: Conconi, Luigi
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 20 November 2000 revoking European patent No. 0 653 355 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: A. Burkhart
Members: H. E. Felgenhauer
J. H. P. Willems
Summary of Facts of Submissions

I. The appellant (patentee) filed an appeal against the decision of the Opposition Division revoking European patent No. 0 653 355.

The opposition had been filed against the patent as a whole based on the grounds of opposition according to Article 100(a) EPC (lack of novelty and inventive step).

The Opposition Division revoked the patent due to claim 1 lacking inventive step, having regard to the following prior art documents:

D1: FR-A-2 595 667
D2: FR-A-2 537 096

II. Within the annex to summons to attend oral proceedings the Board expressed its provisional opinion, that amended claim 1 filed with the grounds of appeal lacked inventive step. The oral proceedings to be held before the Board of Appeal were cancelled upon notification by the appellant, that he would not attend the oral proceedings.

(i) The appellant requested that the decision under appeal be set aside and that the patent be maintained with amended claim 1 and an amended claim 2, likewise filed with the grounds of appeal.
(ii) The respondent requested that the appeal be rejected.

(iii) Amended claim 1 reads as follows:

"A container for small surprise or game objects, with mutual coupling elements, comprising first (2) and second (3) half-shells which can be mutually coupled to form a container (1) for removably accommodating the surprise or game, the container further comprising, on at least one of said half-shells (2, 3), engagement means (10, 11) for coupling engagement means (10, 11) formed on the half-shell (2, 3) of an adjacent container, a protruding lip (4) being formed on one of the first and second half-shells (2, 3) and a corresponding groove (5) being formed on the other of the first and second half-shells (2, 3), said first and second half-shells (2, 3) coupling in a snap together manner by means of the coupling of said lip (4) in said groove (5), said engagement means comprising male engagement protrusions (10) and female engagement seats (11) which have a dovetail shape, said first and second half-shells (2, 3) having a hexagonal cross-section, characterized in that each one of said male protrusions (10) and each one of said female seats (11) alternate on the same half-shell (2, 3), each one of said male protrusions (10) and each one of said female seats (11) being arranged on a respective face of said half-shells (2, 3), so that one male protrusion (10) on one face of said half-shell (2, 3) alternates with one female seat (11) on an adjacent face if said half-shell (2, 3), to
allow mutual connection of a plurality of containers, along any one of said faces, each said female seat (11) being defined in the thickness of the wall of said half-shell (2, 3) so that the edges of each said female seat (11) are flush with the external surface of the half-shell (2, 3), each said male protrusion (10) protruding from the external surface of the half-shell (2, 3)".

III. The appellant argued essentially as follows:

(i) Claim 1 is novel in view of document D3 considered as constituting the closest prior art.

(ii) Document D3 specifies a container having circular cross-section, giving the indication that the container could also have other cross-sections, including a polygonal one.

Being provided with a polygonal cross-section, the container according to document D3 would have a plurality of male protrusions and of female seats on its respective faces. In comparison the container according to claim 1 has a simpler structure since each face either has only one male protrusion or only one female seat.

Containers of such kind could furthermore not be connected without a gap occurring between their adjacent faces. Consequently document D3 also fails to give an indication concerning the extension of each female seat and each protrusion according to the last features of claim 1, which lead to such a gap being
eliminated.

The problems resulting from these two effects have to be considered as being correlated, since only in case each face is provided with either one seat or one protrusion the occurrence of a gap between adjacent faces of connected containers can be avoided.

The solution to a problem, combining these two problems, as defined in claim 1 of the patent in suit has neither been suggested considering document D3 by itself nor in combination with any or both of documents D1 and D2.

IV. The respondent argued essentially as follows:

(i) Referring to containers of polygonal cross-section document D3 relates to containers the individual faces of which can be so small that space remains for one seat or for one protrusion only.

(ii) The problem according to which the occurrence of a gap between adjacent faces of connected containers is to be avoided is not correlated to the one being solved by arranging only one seat and only one protrusion on a respective face.

(iii) Consequently the subject-matter of claim 1 does not involve an inventive step in view of documents D1, D2 and D3.

Reasons for the Decision
1. Amendments

Amended claim 1 differs from claim 1 as granted essentially by the introduction of the following:

- addition of the expression "surprise or game" to the term "small objects";

- addition of the features of claims 2 and 4 and of part of the features of claim 5 as granted; and

- addition of the features according to which "each one of said male protrusions (10) and each one of said female seats (11) being arranged on a respective face of said half-shells (2, 3), so that one male protrusion (10) on one face of said half-shell (2, 3) alternates with one female seat (11) on an adjacent face if said half-shell (2, 3), to allow mutual connection of a plurality of containers, along any one of said faces, each said female seat (11) being defined in the thickness of the wall of said half-shell (2, 3) so that the edges of each said female seat (11) are flush with the external surface of the half-shell (2, 3), each said male protrusion (10) protruding from the external surface of the half-shell (2, 3)".

The objection raised in the opposition proceedings, that amended claim 1 extends beyond the content of the application as filed has not been maintained by the respondent.

Reference to containers for surprise or game objects is made in the application as filed (cf. e.g. column 1,
lines 3 to 5). The features last mentioned above are disclosed by the figures of the application as filed, such that amended claim 1 satisfies the requirement of Article 123(2) EPC.

Since claim 1 has been amended in a manner limiting its scope of protection, no objection with respect to Article 123(3) EPC arises.

2. **Novelty**

Novelty of claim 1 remains correctly undisputed.

3. **Inventive step**

3.1 **Closest prior art**

From the documents available, document D3 has been correctly and uncontestedly considered as constituting the closest prior art.

Document D3 discloses with respect to the subject-matter of claim 1 of the patent in suit:

A container for small surprise or game objects, with mutual coupling elements, comprising first 2 and second 3 half-shells which can be mutually coupled to form a container 1 for removably accommodating the surprise or game, the container further comprising, on at least one of said half-shells 2, 3, engagement means 4, 8 for coupling engagement means 4, 8 formed on the half-shell 2, 3 of an adjacent container, a protruding lip 9 being formed on one of the first and second half-shells 2, 3 and a corresponding groove 10 being formed on the other of the first and second half-shells 2, 3, said first
and second half-shells 2, 3 coupling in a snap together manner by means of the coupling of said lip 9 in said groove 10, said engagement means comprising male engagement protrusions 8 and female engagement seats 11 which have a dovetail shape, ..., wherein each one of said male protrusions 8 and each one of said female seats 11 alternate on the same half-shell 2, 3" (cf. e.g. claims 1, 7; Figures 7, 8).

The container according to claim 1 thus differs from the container according to document D3 in that

(a) said first and second half-shells have a hexagonal cross-section,

(b) each one of said male protrusions and each one of said female seats being arranged on a respective face of one of said half-shells, so that one male protrusion on one face on said half-shell alternates with one female seat on an adjacent face of said half-shell, to allow mutual connection of a plurality of containers, along any one of said faces, and

(c) each said female seat being defined in the thickness of the wall of said half-shell so that the edges of each said female seat are flush with the external surface of the half-shell, each said male protrusion protruding from the external surface of the half-shell.

The embodiments disclosed in document D3 relate to first and second half-shells having circular cross-sections. Concerning the shape of the cross-section it is furthermore indicated that instead of the shown
circular cross-section other shapes leading to a rectangular, square or polygonal cross-section are possible. Consequently it is the result of an obvious choice for the container according to document D3 to have, corresponding to feature (a), as one type of a polygonal cross-section a hexagonal one.

3.2 Problem underlying the invention

Document D3 remains silent on how - in case of the non-circular cross-sections referred to - the protrusions and seats are arranged on the then given distinctive faces of each container.

Considering document D3 for containers having first and second half-shells of hexagonal cross-section, the problem to be solved thus consists in arranging the protrusions and seats on the faces the container then has.

3.3 Obviousness

Starting from the disclosure of document D3 the person skilled in the art thus has to decide in which amount and sequence and to which extent the protrusions and seats, which for the cylindrical surface according to the embodiments are provided alternatingly, are to be provided on the particular faces of a container having a hexagonal cross-section.

Since document D3 gives no further information as to the provision of the engagement means in case the cross-sections are not circular but e.g. hexagonal, it is most likely for the person skilled in the art to follow the approach disclosed for containers of
circular cross-section as closely as possible.

Concerning the arrangement of protrusions and seats within document D3 for the embodiments having circular cross-section, male protrusions and likewise female seats are shown as alternatingly provided over the whole circumference of each container (cf. Figures 7, 8). Concerning the mutual connection of containers it is indicated (cf. claims 1, 7; the paragraph bridging pages 2, 3; page 6, last paragraph) that two adjacent containers are connected by engagement of at least a single protrusion of the one container with at least a single seat of the other container; (Figures 7, 8). According to Figures 7, 8 a single protrusion cooperates with a single seat.

Following the last mentioned alternative as the only one disclosed with respect to the embodiments, a container having a hexagonal cross-section will thus be provided with either a single protrusion or a single seat on each of its faces, the single protrusions and seats being provided in alternating manner.

Arrangement of protrusions and seats according to feature (b) thus results in an obvious manner in using the approach most extensively disclosed in document D3 for containers of circular cross-section, in case the shape of the cross-section is changed to a hexagonal one.

To be complete it shall be pointed out that the arrangement of protrusions and seats according to feature (b), for which, besides the change of the shape of the cross-section, no further modification of the approach according to document D3 is required, is also
the natural choice in case, as referred to by the respondent, the containers and consequently their faces are small leaving space for only one protrusion or seat.

For the sake of completeness it shall further be indicated that within document D2, which is directed to containers for tablets, which corresponding to the containers according to claim 1 can be suited to contain small surprise or game objects, the same approach is disclosed (cf. Figure 3). Consideration of document D2 in changing the cross-section of the containers according to document D3 from a cylindrical to a hexagonal shape thus likewise leads to the arrangement of protrusions and seats according to feature (b) being obvious.

Concerning the extension of each protrusion and each seat relative to the wall and the external surface of a half-shell of the container, respectively, which according to feature (c) results in no gap being created between mutually connected containers, the person skilled in the art likewise follows the approach taken according to document D3.

As shown in Figures 7, 8 for circular cross-sections the protrusions and seats extend such that a protrusion of one container engages a seat of an adjacent container in a manner according to which the two containers are closely connected. Thus, within the limit imposed by the circular cross-section and the resulting cylindrical container wall, a gap arises between these containers.

Consequently considering the extent of the protrusion
and of the seat being shown in engagement in Figures 7, 8, in the case of hexagonal containers having only one protrusion or seat on each face as indicated above, it follows that these protrusions and seats extend relative to the external surface as defined by feature (c), since only then, for containers with hexagonal cross-section, the close arrangement of adjacent containers, as shown in Figures 7, 8 for containers with circular cross-section, will be obtained.

For the sake of completeness it should be indicated that this result is likewise obtained if, without having regard to whether a gap will be created or not, the engagement between the protrusion and the seat as shown for the cylindrical face of a container with circular cross-section in Figures 7, 8 is considered under the aspect, that the opposite portions of the cylindrical faces of the two coupled containers are flattened as it is the case for containers of hexagonal cross-section. In this situation, with only one protrusion engaging one seat, corresponding to feature (c) the protrusion protrudes from the external surface of a half-shell, while the female seat is defined in the thickness of the wall of the other half-shell, so that its edges are flush with the external surface with this half-shell.

It is evident that the approach suggested by document D3 for the protrusion and the seat shown in engagement likewise applies, as can directly be derived from Figures 7, 8, with respect to the protrusions and seats arranged on the remaining faces of containers having hexagonal cross-section.
3.4 Consequently, starting from a container having polygonal cross-section as referred to in document D3 and taking - due to lack of further information - the arrangement of protrusions and seats disclosed in detail for containers of circular cross-section into account, the subject-matter of claim 1 can be arrived at without inventive step, to solve the above mentioned problem (cf. section 3.2).

From the reasoning given above it follows that the solution according to claim 1 is suggested by document D3 alone and without any hindsight from the solution according to claim 1 of the patent in suit.

Finally, since the subject-matter of claim 1 results, as indicated above, in an obvious manner considering document D3 alone, it is immaterial whether or not the effects obtained by features (b) and (c) can be considered as strictly correlated ones.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:  

The Chairman:

D. Spigarelli  

A. Burkhart