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D E C I S I O N
of 27 September 2005

Case Number: T 0776/02 - 3.2.5

Application Number: 94304530.2

Publication Number: 0664196

IPC: B29C 44/00

Language of the proceedings: EN

Title of invention:

A molding apparatus and method for molding a plastic article
of varying density

Patentee:

Hettinga, Siebolt

Opponent:

remaplan Anlagenbau GmbH
Battenfeld GmbH

Headword:

-

Relevant legal provisions:

EPC Art. 84, 123(2)

Keyword:

"Clarity - main request (no)"

"Extension beyond the content of the application as filed -
first and second auxiliary requests (yes)"

Decisions cited:

-

Catchword:

-



Case Number: T 0776/02 - 3.2.5

D E C I S I O N
of the Technical Board of Appeal 3.2.5
of 27 September 2005

Appellant: Hettinga, Siebolt
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Respondent I: remaplan Anlagenbau GmbH
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Respondent II: Battenfeld GmbH
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Representative: Gosdin, Michael, Dr.
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Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 21 May 2002
revoking European patent No. 0664196 pursuant
to Article 102(1) EPC.

Composition of the Board:

Chairman: W. Moser
Members: W. R. Zellhuber
P. E. Michel
W. Widmeier
R. T. Menapace

Summary of Facts and Submissions

- I. On 12 July 2002, the appellant (patent proprietor) gave notice of appeal against the decision of the Opposition Division posted on 21 May 2002 revoking the European patent No. 0 664 196. The appeal fee was paid on the same day. The statement setting out the grounds of appeal was received on 20 September 2002.
- II. The Opposition Division held that the grounds for opposition cited in the Article 100(a) EPC (inventive step, Article 56 EPC) prejudiced the maintenance of the patent.
- III. Oral proceedings were held before the Board of Appeal on 27 September 2005.

Neither the appellant nor respondent I (opponent 01), although duly summoned, were represented at these proceedings.

- IV. The appellant had requested in the statement setting out the grounds of appeal that the decision under appeal be set aside and that the patent in suit be maintained on the basis of the following version of the claims:

- (i) main request: claims 1 and 2 filed as "Main Request";
- (ii) first auxiliary request: claims 1 and 2 filed as "First Auxiliary Request";
- (iii) second auxiliary request: claim 2 according to the first auxiliary request, renumbered as (sole) claim 1.

The administrator in bankruptcy of respondent I has not made any request.

Respondent II (opponent 02) requested that the appeal be dismissed.

V. Claim 2 according to the main request reads as follows:

"A method of injection-molding, from a plastic injection material with a blowing agent, a plastic article with a dense outer skin and a rare uniform interior, the method comprising:

- a) providing a first mold section (42);
- b) providing a second mold section (44) which, when moved into sealed engagement with said first mold section (42), forms a mold cavity (46), for molding said plastic article;
- c) mixing a blowing agent with plastic injection material to form an injection mixture (52);
- d) clamping said first mold section (42) and said second mold section (44) together to form said mold cavity (46) of an initial volume;
- e) injecting said injection mixture (52) into said mold cavity (64);
- f) allowing said injection mixture (52) to cool and form a skin against the interior sides of said mold cavity (46);
- g) moving said first mold section (42) and said second mold section (44) apart whereby said initial volume of said mold cavity (46) is increased to an intermediate volume;
- h) allowing said injection mixture (52) to expand;
- i) moving said first mold section (42) and said second mold section (44) together whereby said

initial volume of said mold cavity (46) is decreased to a compression volume;

- j) allowing said injection mixture (52) to cool; and
- k) removing the finished plastic article from said mold cavity (52)."

VI. Claim 2 according to the first auxiliary request and claim 1 according to second auxiliary request, which is identical to claim 2 of the first auxiliary request, read as follows:

"A method of injection-molding, from a plastic injection material with a blowing agent, a plastic article with a dense outer skin and a rare uniform interior, the method comprising:

- a. providing a first mold section (42);
- b. providing a second mold section (44) which, when moved into sealed engagement with said first mold section (42), forms a mold cavity (46), for molding said plastic article;
- c. mixing a blowing agent with plastic injection material to form an injection mixture (52);
- d. clamping said first mold section (42) and said second mold section (44) together to form said mold cavity (46) of an initial volume;
- e. maintaining said mold cavity (46) at said initial volume as said injection mixture (52) is injected into said mold cavity (46) until said initial volume of said mold cavity (46) is substantially filled with said injection mixture (52);
- f. allowing said injection mixture (52) to cool and form a skin against the interior sides of said mold cavity (46);

- g. moving said first mold section (42) and said second mold section (44) apart whereby said initial volume of said mold cavity (46) is increased to an intermediate volume;
- h. allowing said injection mixture (52) to expand;
- i. moving said first mold section (42) and said second mold section (44) together whereby said intermediate volume of said mold cavity (46) is decreased to a compression volume;
- j. allowing said injection mixture (52) to cool; and
- k. removing the finished plastic article from said mold cavity (46)."

VII. In the communication dated 21 October 2004, cf. points 3 and 10, the Board took the preliminary view that, *inter alia*, claim 2 of the main request does not seem to meet the requirements of Article 84 EPC. By a further communication dated 6 September 2005, the Board informed the parties that it appeared to it that claims 1 and 2 according to the first auxiliary request as amended did not meet the requirements of Article 123(2) EPC.

VIII. On 30 August 2005, the representative of the appellant announced that neither the appellant nor the representative would attend the oral proceedings. No comments have been received from the appellant with regard to the objections raised in the aforementioned communications.

IX. During the oral proceedings, respondent II argued essentially as follows:

As regards claim 2 of the main request, it was not clear whether the moving step according to feature i) started from the "initial volume", as explicitly stated in that feature, or from an intermediate volume as it might be supposed when considering the moving step according to feature g) of claim 2.

Furthermore, feature e. of claim 2 of the first auxiliary request was not disclosed in the application as filed. The term "substantially" was only used in column 6, line 9 of the application as filed (published version), however, in a completely different context.

Reasons for the Decision

1. The appeal is admissible.
2. *Main request*

According to feature g) of claim 2, the first and second mould sections are moved apart, whereby the initial volume of the mould cavity is increased to an intermediate volume. According to the subsequently mentioned step i) of claim 2, however, these mould sections are moved together whereby "said initial volume of said mold cavity is decreased to a compression volume".

It is thus not clear, whether, in step i), the movement starts from said initial volume or said intermediate volume of the mould cavity, and it is further not clear whether the compression volume is smaller than the initial volume, which is a consequence of feature i),

or only smaller than the intermediate volume but not necessarily smaller than the initial volume.

Therefore, claim 2 of the main request does not meet the requirements of Article 84 EPC. Consequently, the main request of the appellant is not allowable.

3. *First and second auxiliary requests*

According to step e. of claim 2 of the first auxiliary request and claim 1 of the second auxiliary request, the mould cavity is maintained "... at said initial volume as said injection mixture (52) is injected into said mold cavity (46) until said initial volume of said mold cavity (46) is substantially filled with said injection mixture (52)".

The injection step is disclosed in column 4, lines 35 to 42, and column 5, lines 2 to 7, of the application as filed (published version). However, according to these passages, the mould cavity is maintained at the initial volume until it is completely filled rather than merely "substantially filled" as claimed in claim 2 of the first auxiliary request and claim 1 of the second auxiliary request.

Thus, the patent in suit has been amended in such a way that it contains subject-matter which extends beyond the content of the application as filed, contrary to the requirements of Article 123(2) EPC.

Consequently, the first and the second auxiliary requests of the appellant are not allowable either.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

M. Dainese

W. Moser