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**Datasheet for the decision  
of 18 March 2015**

**Case Number:** T 0756/09 - 3.5.07

**Application Number:** 98905149.5

**Publication Number:** 0968473

**IPC:** G06F17/13, G06F17/50,  
B29C33/00, B29C45/02,  
B29C45/76, G06T17/20

**Language of the proceedings:** EN

**Title of invention:**

Method for modelling three-dimensional objects and simulation  
of fluid flow

**Patent Proprietor:**

Moldflow Pty. Ltd.

**Opponent:**

Dassault Systèmes SA

**Headword:**

Fluid flow simulation/MOLDFLOW

**Relevant legal provisions:**

EPC Art. 100(c), 123(2), 123(3), 83, 84, 56, 104(1)  
EPC R. 88(1)  
RPBA Art. 16

**Keyword:**

Late-filed argument - admitted (yes)  
Grounds for opposition - added subject-matter (yes)  
Oral proceedings - request for continuation of proceedings in writing - request for further oral proceedings  
Amendment occasioned by ground for opposition - late-filed request (admitted) - amendments allowable (yes)  
Apportionment of costs - (no)

**Decisions cited:**

G 0002/94, G 0004/95, T 0334/94

**Catchword:**



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Case Number: T 0756/09 - 3.5.07

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.07**  
**of 18 March 2015**

**Appellant:** Dassault Systèmes SA  
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**Representative:** Derambure, Christian  
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**Respondent:** Moldflow Pty. Ltd.  
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**Representative:** Fleuchaus, Michael A.  
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**Decision under appeal:** **Decision of the Opposition Division of the European Patent Office posted on 9 February 2009 rejecting the opposition filed against European patent No. 0968473 pursuant to Article 101(2) EPC.**

**Composition of the Board:**

**Chairman** R. Moufang  
**Members:** M. Rognoni  
P. San-Bento Furtado

## **Summary of Facts and Submissions**

I. The original opponent Simpoe SAS who is the legal predecessor of the current opponent/appellant (see below section XIII and point 1) filed an appeal against the decision of the Opposition Division rejecting the opposition against the European patent no. 0 968 47. In the present decision the terms "the opponent" or "the appellant" will generally be used without making a distinction between the current opponent/appellant and its predecessor.

II. Claim 1 of the patent in suit reads as follows:

"A computer-implemented method for producing simulations of fluid flow within a three dimensional object, the method comprising:

specifying first and second generally opposed surfaces of said object,

matching pairs of elements of said first and second surfaces between which a reasonable thickness may be defined,

specifying a fluid injection point, and

performing a flow analysis whereby resulting flow fronts along said first and second surfaces are synchronized."

II. In the contested decision, the Opposition Division arrived at the conclusion that none of the grounds for opposition under Article 100(a), (b) and (c) EPC referred to by the opponent prejudiced the maintenance of the patent as granted.

III. In course of the opposition and appeal proceedings, the parties had referred to a number of documents. However, in their submissions directed to the request considered in the present decision, the parties cited only the following prior art:

D2: L.S. Turng and V. W. Wang: "On the Simulation of Microelectronic Encapsulation with Epoxy Molding Compound", ANTEC '92, pages 84 to 88.

IV. In the statement of grounds of appeal, the appellant essentially requested that the patent be revoked on the ground that the claimed invention was not sufficiently disclosed (Article 100(b) and Article 83 EPC) and that the claimed subject-matter was neither new nor inventive (Article 100(a) and Articles 54 and 56 EPC).

V. In its reply dated 28 December 2009, the patent proprietor (respondent) rejected the appellant's objections and requested that the appeal be dismissed.

VI. In a communication dated 30 June 2014, accompanying the summons to oral proceedings scheduled for 14 November 2014, the Board summarised the arguments put forward by the parties and addressed some of the questions to be discussed.

VII. In a letter dated 2 September 2014, the appellant objected that claim 1 of the patent in suit contained subject-matter which extended beyond the content of the application as filed and thus violated Article 123(2) EPC. According to the appellant, the ground for opposition under Article 100(c) EPC had been raised before the Opposition Division and thus was still in the proceedings. Furthermore, the appellant pointed out

that the new substantiation of this ground had been occasioned by the interpretation of claim 1 given by the patent proprietor in the infringement proceedings which were pending in Germany.

- VIII. In reply to the appellant's new submissions, the respondent requested with letter dated 14 October 2014 that the appellant's new arguments and evidence be dismissed, or alternatively that the case be remitted to the department of first instance for further prosecution, in case the Board considered the new arguments and evidence allowable.
- IX. With letter dated 28 October 2014, the appellant acknowledged that the new objection under Article 123(2) EPC raised after the submission of the statement of grounds of appeal was late-filed. However, its relevance justified its admission into the appeal proceedings.
- X. On 14 November 2014 oral proceedings were held as scheduled before the Board.

The parties were heard on the question of whether the new line of attack under Article 100(c) EPC, put forward by the appellant for the first time in the letter dated 2 September 2014, should be admitted into the appeal proceedings.

After an interruption, the Board informed the parties that the new line of attack under Article 100(c) EPC was admitted into the appeal proceedings.

Having heard the parties on the question of whether the subject-matter of claim 1 of the contested patent extended beyond the content of the application as filed

(Articles 100(c) and 123(2) EPC), the Board, after deliberation, expressed the opinion that the patent could not be maintained as granted because claim 1 violated Article 123(2) EPC. The respondent's representative then declared that he intended to file an auxiliary request. However, this required a prior consultation with the patent proprietor and its Australian representative.

The Board informed the parties that, having taken into account the admission of the appellant's new line of attack at a very late stage in the proceedings and the need to give the respondent a fair chance to defend its patent, it was willing to continue in writing and exceptionally conduct second oral proceedings in the present case.

Both parties agreed to hold second oral proceedings after the second week of March 2015.

The Chairman of the Board then announced that the appeal proceedings would be continued in writing.

- XI. With letter dated 26 November 2014, the parties were summoned to oral proceedings to be held on 18 March 2015.
- XII. With letter dated 27 January 2015, the respondent submitted a new main request and new first to seventh auxiliary requests. Furthermore, an apportionment of costs was requested.
- XIII. With letter dated 26 February 2015, the appellant informed the Board that Dassault Systèmes SA had become the universal successor of the original opponent Simpo SAS, and submitted evidence in this respect.

XIV. In reply to the respondent's new submissions, the appellant, with letter dated 2 March 2015, raised objections under Articles 123(2) and (3), 83, 84 and 56 EPC.

XV. On 18 March 2015, second oral proceedings were held as scheduled before the Board.

During these proceedings, the respondent replaced all previous requests with a new main request filed at 15:00 hours.

At the end of the oral proceedings, the Chairman pronounced the Board's decision.

XVI. The appellant requested that the decision under appeal be set aside and that the patent be revoked. It also requested that the respondent's request for apportionment of costs be refused.

The respondent requested that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of claims 1 to 34 of the main request submitted at 15:00 in oral proceedings before the Board, description pages 2 and 6 to 9 of the patent as published and pages 3 to 5 as submitted in oral proceedings before the Board, as well as drawings of figures 1 to 17 of the published patent specification. The respondent further requested an apportionment of costs.

XVII. Claim 1 of the respondent's request reads as follows:

"A computer-implemented method for producing simulations of fluid flow within a three dimensional object, the method comprising:



specifying first and second generally opposed surfaces of said object,

matching each element of said first surface with an element of said second surface between which a reasonable thickness may be defined, wherein matched elements of said first surface constitute a first set of matched elements and matched elements of said second surface constitute a second set of matched elements,

specifying a fluid injection point,

performing a flow analysis using each set of said matched elements, and

synchronizing flow fronts resulting from said flow analysis along said first and second surfaces,

whereby the resulting flow fronts along said first and second surfaces are synchronized."

Claims 2 to 31 are directly or indirectly dependent on claim 1.

Claim 32 reads as follows:

"A method of manufacturing an object having first and second generally opposed surfaces, including simulating fluid flow within said object according to the method of any one of the preceding claims."

Claim 33 reads as follows:

"A computer program product stored on a computer readable medium adapted for causing a computer to perform the steps of the method of any one of claims 1 to 32."

Claim 34 reads as follows:

"A computer readable medium, having a program recorded thereon, where the program is to make a computer execute a method defined in any one of claims 1 to 32."

XVIII. Against the patentability of claim 1 of the respondent's request, the appellant essentially argued that document D2 represented the closest prior art and that the only feature of claim 1 which was not anticipated by the known method was the step of synchronising the flow fronts resulting from the flow analysis along the first and second surfaces. However, document D2 acknowledged that there was a lag between the flow front along the first surface and the flow front along the second surface. Although it was not explicitly taught by document D2, it would have been obvious to the skilled person to synchronise these fronts if the desynchronisation resulting from the flow analysis was not negligible.

XIX. In response to the appellant's objection of lack of inventive step, the respondent essentially stressed that the two surfaces referred to in the method for simulation of microelectronic encapsulation with an epoxy moulding compound disclosed in document D2 were not the outer surfaces of a three dimensional object, but mid-planes of the two sub-cavities used to model the mould cavity due to the presence of a leadframe

which split the flow of the epoxy compound into two separate flow fronts. Hence, the method disclosed in document D2 was essentially different from the present invention and thus would not have led the skilled person to the subject-matter of claim 1.

## **Reasons for the Decision**

### *Admissibility of appeal and status of appellant*

1. The appeal is admissible. Dassault Systèmes SA has validly acquired the status of opponent and appellant from the original opponent Simpoe SAS through universal succession, as shown by the written evidence submitted with the letter dated 26 February 2015.

### *Oral submissions by an accompanying person*

2. By fax dated 9 March 2015, the respondent informed the Board that Dr. Andrew Morton, an Australian patent attorney, would join the respondent's representative in attending the oral proceedings on 18 March 2015. The respondent asked that Dr. Morton be allowed to speak in its name under the supervision of its representative.
  - 2.1 With letter dated 10 March 2015, the appellant declared that Dr. Morton should not be allowed to speak at the oral proceedings because the respondent had requested permission for oral submissions by an accompanying person only ten days before the oral proceedings and thus had failed to meet the one-month deadline for making such a request. In this respect, the appellant referred to the case law of the boards of appeal and in particular to G 0002/94 (OJ EPO 1996, 401), G 0004/95

(OJ EPO 1996, 412) and T 0334/94 of 25 September 1997. Furthermore, the appellant noted that Dr. Morton was not a technical expert, but an Australian patent attorney.

3. As held by the Enlarged Board of Appeal in G 0004/95, oral submissions by a person accompanying the professional representative cannot be made as a matter of right, but only with the permission of and at the discretion of the EPO. According to one of the criteria to be considered by the EPO when exercising its discretion, a request made shortly before the oral proceedings should, in the absence of exceptional circumstances, be refused unless the opposing party has agreed to the making of the oral submissions requested.

3.1 In the present case, the request for oral submissions was made only ten days before the oral proceedings and the appellant had denied its agreement both in writing and at the beginning of the oral proceedings. Hence, according to the case law of the boards of appeal, a person accompanying the professional representative should not be allowed to make oral submissions unless exceptional circumstances could be identified.

3.2 In support of its request, the respondent essentially submitted that Dr. Morton would not make submissions in the capacity of a technical expert, but as a patent attorney who was very familiar with the case, had advised the professional representative before the oral proceedings and would continue to do so during the oral proceedings.

3.3 Taking into account the circumstances of the case, in particular that Dr. Morton was not a technical expert and thus was not expected to elaborate on technical

aspects of the case in a manner which might take the appellant by surprise, the Board concluded that submissions made directly by Dr. Morton under the supervision of the professional representative would not put the appellant at a disadvantage and might contribute to an efficient debate. Hence, despite its late filing, the Board decided to accede to the respondent's request for oral submissions by an accompanying person with the proviso that such submissions would be stopped if new technical facts or arguments were introduced into the debate.

*Admissibility of new request*

4. The respondent's only remaining request was filed at the oral proceedings in response to a number of objections raised by the appellant with respect to the previous requests.
  - 4.1 Noting that the appellant was not opposed to the introduction of the respondent's request into the proceedings and that this request *prima facie* dealt with outstanding objections, the Board decided to admit it into the proceedings.

*Respondent's request*

5. Claim 1 according to the respondent's request relates to a computer-implemented method for producing simulations of fluid flow within a three dimensional object. The claimed method comprises the following features itemised by the Board:
  - (a) specifying first and second generally opposed surfaces of said object,

- (b) matching each element of the said first surface with an element of said second surface between which a reasonable thickness may be defined,
  - (i) wherein matched elements of said first surface constitute a first set of matched elements and
  - (ii) matched elements of said second surface constitute a second set of matched elements,
- (c) specifying a fluid injection point,
- (d) performing a flow analysis using each set of said matched elements, and
- (e) synchronizing flow fronts resulting from said flow analysis along said first and second surfaces,
- (f) whereby the resulting flow fronts along said first and second surfaces are synchronized.

*Article 123(2) EPC*

- 6. Claim 1 of the respondent's request is based on claim 47 of the application as originally filed and differs from the latter essentially in that it is directed to a "*computer-implemented method*" and further comprises features (a) and (f).
- 6.1 The appellant has raised no objection under Article 123(2) EPC against claim 1.
- 6.2 As to feature (a), claim 47 as originally filed refers in its first paragraph to a "*method for simulating fluid flow within a three dimensional object having first and second generally opposed surfaces*". The step

of specifying "*first and second generally opposed surfaces*" in claim 1 of the present request necessarily implies that the claimed method relates to objects which have first and second generally opposed surfaces.

6.3 It is uncontested that the method according to claim 47 of the original application is meant to be performed by a computer (see claim 73 of the application as published).

6.4 Feature (f), which was recited in claim 1 of the patent in suit, merely underscores, in the Board's view, the central idea of the invention and the result achieved by the claimed method, *i.e.* a fluid flow simulation with synchronised flow fronts along two opposed surfaces of a three dimensional object. It is mentioned in several passages of the original application (*e.g.* page 4, lines 33 to 37, page 5, lines 29 to 31, page 14, lines 1 to 3 *etc.*).

6.5 In summary, the Board is satisfied that claim 1 of the respondent's request does not extend beyond the content of the application as originally filed (Article 123(2) EPC).

*Article 123(3) EPC*

7. Claim 1 of the contested patent relates to a "*computer-implemented method for producing simulations of fluid flow within a three dimensional object*", and comprises the following features itemized by the Board:

- (j) specifying first and second generally opposed surfaces of said object,

- (k) matching pairs of elements of said first and second surfaces between which a reasonable thickness may be defined,
- (l) specifying a fluid injection point,
- (m) performing a flow analysis,
  - (i) whereby resulting flow fronts along said first and second surfaces are synchronized.

7.2 Feature (k) specifies the matching of pairs of elements of the first and second surfaces and limits the matching to elements between which a reasonable thickness can be defined. It leaves, however, open whether the matching actually involves all matchable pairs.

On the other hand, feature (b) of claim 1 on file recites that "each element" of the first surface is matched "with an element" of the second surface, the choice of elements being subject to the condition that a reasonable thickness may be defined between them. Hence, feature (b) implies that "each element" of the first surface for which "an element" on the second surface exists, so that a reasonable thickness may be defined between them, is to be matched with such element. In other words, all matchable elements of the first surface are used to form, with elements of the second surface, pairs of elements between which a reasonable thickness may be defined. Therefore, feature (b) is covered by feature (k).

In this context, the Board notes that matching each element of the first surface with an element of the second surface, as specified by feature (b), does not imply a one-to-one relationship between elements of the



first and second surfaces, as claim 1 is not limited to first and second surfaces having the same number of elements.

7.3 By specifying in feature (d) that the flow analysis is performed "*using each set of said matched elements*", claim 1 of the request on file restricts step (m) of the granted claim to the use of the matched elements defined in features (b)(i) and (ii).

7.4 Feature (m)(i) of claim 1 as granted can be interpreted as relating to the result achieved by the flow analysis or to some unspecified measures for the synchronisation of the flow fronts resulting from the flow analysis.

In other words, features (m) and (m)(i) cover both the possibility that the flow analysis is performed so that the flow fronts resulting from it are synchronized, and the active synchronisation of the flow fronts by means of steps taken before, during or after the performance of the flow analysis.

On the other hand, feature (e) of claim 1 on file implies an active synchronisation of the flow fronts which result from the flow analysis, whereby the synchronisation may take place at any time after the commencement of the flow analysis, *i.e.* also during or after it.

Feature (e) hence restricts the subject-matter covered by feature (m).

7.5 The Board is therefore satisfied that claim 1 now on file does not extend the scope of protection of claim 1 as granted (Article 123(3) EPC).

*Article 84 EPC*

8. The appellant did not raise any objections under Article 84 EPC against claim 1 of the respondent's request. However, it pointed out that the wording of claim 6 was not compatible with that of claim 1. In fact, claim 1 specified that flow analysis was performed using each set of matched elements, whereas according to claim 6 flow analysis was performed using the first set of matched elements and the result was then adapted to the second set of matched elements.
  
9. The Board sees no intrinsic contradiction between the meaning of "flow analysis" according to claims 1 and 6. Claim 1 makes clear that the determination of the flow fronts makes use of the first set and of the second set of matched elements. Claim 6 then qualifies the flow analysis using both sets of elements as a (standard) flow analysis to be performed on the first set of elements and as a flow analysis obtained by adapting the first flow analysis to the second set of elements. In both cases two sets of matched elements are used and two fronts are obtained.
  
- 9.1 In summary, the Board considers that the amendments made to the claims as granted do not give rise to any objections under Article 84 EPC.

*Article 83 EPC*

10. With respect to the respondent's new request, the appellant withdrew all objections under Article 83 EPC raised in the course of the appeal proceedings.

Article 56 EPC

11. As pointed out in the description of the published application (page 2, second full paragraph) the *"flow of melt in an injection mold is determined by the familiar conservation laws of fluid mechanics. Solution of the equations in their full generality presents several practical problems. Owing to the characteristically thin walls of molded components, however, it is possible to make some reasonable assumptions that lead to a simplification of the governing equations. These simplified equations describe what is called Hele-Shaw flow and may be readily solved in complex geometries using an appropriate numerical technique such as the finite element and/or finite difference method"*.
- 11.1 As pointed out in the paragraph bridging pages 2 and 3, flow analysis using the Hele-Shaw approximation *"requires the use of a surface model, representing the midplane of the real component, which is then meshed with triangular or quadrilateral elements to which suitable thicknesses are ascribed. The preparation of such a mesh can take a considerable amount of time, and requires substantial user input ..."*.
- 11.2 According to the paragraph bridging page 3 and 4, *"[o]ne solution to the above shortcomings is to avoid the use of the Hele-Shaw equations and solve the governing equations in their full generality. ... To perform such an analysis, the region representing the mold cavity into which molten polymer will be injected must be divided into small subdomains called elements. ... The thin walled nature of injection molded objects and parts means that the plastic is subject to a huge thermal gradient in the thickness*

*direction of the component. This requires that there be a reasonable number of elements through the thickness. Using existing meshing technology, the result is a mesh consisting of hundreds of thousands or even millions of elements. The high number of elements makes the problem intractable for any but the fastest super computers. ... Thus, although three dimensional simulation provides a solution that avoids the requirement of a midplane model, it is not as yet a practical solution".*

12. Thus, an object of the invention is to provide a method for the simulation of flow in a three dimensional object that can produce simulations substantially automatically, without requiring the solution of the governing equations in their full generality.

12.1 According to the first full paragraph on page 6 of the application as published, the method of the present invention utilises only the outer surfaces defining the three dimensional object to create a computational domain. These surfaces correspond to the representations of the domain in which flow is to be simulated and would comprise for example meshed representations of the top and bottom surfaces of a part. Thus, *"the invention could be said to utilize an outer skin mesh rather than a midplane mesh. Elements of the two surfaces are matched, based on the ability to identify a thickness between such elements. An analysis, substantially along conventional lines (by means, for example, of the Hele-Shaw equations), is then performed of the flow in each of these domains in which flow is to be simulated, but linked to ensure fidelity with the physical reality being modelled".*

- 12.2 In other words, the gist of the present invention consists essentially in replacing the midplane representation of an object, conventionally used when the Hele-Shaw approximation is applied, with a mesh representation of the top and bottom surfaces of a part, whereby the two simulated flows are linked to reflect the physical reality of a flow in a cavity delimited by the part's top and bottom surfaces.
13. In the Board's opinion, the essential aspects of the invention are clearly set out in claim 1 of the respondent's request. In particular, claim 1 requires that the two opposed surfaces be identified and that each element of the first surface be matched with an element of the second surface, whereby the only condition to be satisfied when selecting the surface elements is that a "reasonable thickness" can be determined between them. The reference to "elements" implies a mesh representation of the surfaces. The step of performing a flow analysis is thus based on a two-dimensional representation of the outer surfaces and it is implicit that the flow analysis should be carried out by means of the well-known Hele-Shaw equations, as pointed out in the description (see for example paragraph [0025] of the patent specification). Furthermore, claim 1 requires that the fronts resulting from this analysis be synchronised.
14. According to the appellant, document D2 related to a computer implemented method for producing a simulation of fluid flow within a three-dimensional object and showed that the simulation was performed using mesh elements of two surfaces separated by a certain thickness.

The appellant has acknowledged that the resulting flow fronts associated with the top and the bottom cavities were not synchronised, as shown in figure 4. In fact, in the appellant's view, the only difference between document D2 and the claimed method was that the prior art did not show an active step of flow front synchronisation. However, even if a certain lack of synchronisation between the two fronts was acceptable in the teaching of D2, it was immediately evident according to the appellant that, should the "lead-lag" become too important, the skilled person would take measures to ensure front synchronisation. Therefore, in the appellant's opinion, it would have been obvious to a person skilled in the art, starting from the teaching of document D2, to arrive at the subject-matter of claim 1 without involving any inventive step.

- 14.1 In the respondent's view, however, document D2 dealt with a completely different situation. In fact, the corresponding model was based on two cavities because the mould was indeed divided into two cavities by a leadframe.
  
15. According to point 4. of the section "CASE STUDY" in document D2, which presents simulation results, figure 2 shows a series of short-shot sequences showing the melt front positions at three successive time instants. Experimental results during filling are shown in figure 3 for the purpose of comparison. Document D2 (page 85, right-hand column, lines 2 to 7) specifies that *"the prediction of melt-front position generally reproduces the experimental results. Figure 4 displays the top view of the melt-front positions at the time of 10.4 seconds, which depicts the "lead-lag" phenomenon of the separate melt fronts (above and below the leadframe) within the partly-filled cavities. These "lead-lag"*

*melt fronts above and below the leadframe may have significant effects on the molding yield ...".*

- 15.1 In other words, document D2 specifies that the lead-lag shown in figure 4 represents a physical reality, which corresponds to the results provided by the simulation, and not an imperfect simulation of the physical reality which required some corrective measure. In fact, adding a flow front synchronising step to the flow simulation method described in D2 would be contrary to the teaching of this document, as it would not lead to a result compatible with the representation of the physical flow fronts of epoxy melt injected into the two cavities delimited in the mould by the leadframe.
  
- 15.2 Furthermore, the Board agrees with the respondent that in the particular case considered in document D2 the two surfaces are not the outer surfaces of an object that should be modelled for the purpose of injection moulding. The surfaces referred to in document D2 appear indeed to represent a plane on either side of the leadframe which divides the mould into two cavities with separate flows of the injected melt. For lack of evidence to the contrary, it seems reasonable to assume, as argued by the respondent, that the simulation referred to in document D2 uses the midplane representation or at the most the three-dimensional simulation acknowledged as prior art in the contested patent.
  
- 15.3 Hence, the Board considers that it would not have been obvious to a person skilled in the art starting from the teaching of document D2 to arrive at a method falling within the terms of claim 1 of the respondent's request (Article 56 EPC).

15.4 Dependent claims 2 to 31 are directed to various embodiments of the method according to claim 1. Claims 32 to 34 relate to subject-matter which involves the method of the invention. Hence, also the subject-matter of claims 2 to 34 satisfies the requirements of Article 56 EPC.

16. In summary, the Board finds that none of the grounds of opposition relied upon by the appellant prevents the maintenance of the patent in amended form on the basis of the respondent's request.

*Apportionment of costs*

17. The respondent has requested under Article 104(1) EPC in combination with Rule 88(1) EPC that the appellant bear the full cost incurred by the respondent's representative in relation to the further oral proceedings held on 18 March 2015 and to the work of the representative leading up to said proceedings. In particular, the respondent argued that the second oral proceedings were compelled solely from the negligent behaviour of the appellant, namely the late introduction of the ground for opposition under Article 100(c) EPC into the appeal proceedings. This ground had never been substantiated in the statement of grounds of appeal filed on 9 June 2009.

17.1 Additionally, the respondent pointed out that the introduction of this new ground was made more than three years after the expiration of the period for filing the statement of grounds on 19 June 2009 which according to Article 12(2) RPBA should include an appellant's complete case. In particular the new reasoning relative to Article 123(2) EPC brought forward by the appellant was not even raised in the



first instance proceedings, so that Article 12(4) RPBA empowered the Board not to admit the new line of attack.

17.2 Finally, the respondent argued that, even if it were assumed that the appellant could only grasp the relevance of this new argument under Article 100(c) EPC in the course of the pending infringement proceedings, no justification whatsoever had been given as to the reasons why submission of the arguments was only made significantly more than three years after it could have been made, had the case been diligently treated. Thus, the late filing on the part of the appellant was the sole cause for the requirement to conduct further oral proceedings. The appellant's behaviour had put the patent proprietor in a significantly adverse position and such behaviour clearly represented a reason for the apportionment of costs under Article 104(1) EPC.

18. In a reply to the respondent's request for apportionment of costs, the appellant argued essentially that the reason for requiring second oral proceedings was the interpretation of claim 1 of the patent in suit which the patent proprietor had given in infringement proceedings and which showed that the claim wording was not in conformity with Article 123(2) EPC. Furthermore, it was due to the behaviour of the respondent who despite having been informed about the objections raised against claim 1 of the contested patent more than two months in advance of the first oral proceedings, attended these proceedings without having prepared any auxiliary request. Therefore there was no reason for the appellant to bear the costs of the respondent.

19. Under Article 104(1) EPC, each party to opposition proceedings must as a rule meet the costs it has incurred. However, the opposition division or a board of appeal (see Article 16 RPBA) may, for reasons of equity, order a different apportionment of costs incurred during taking of evidence and attending oral proceedings (cf. Case Law of the Boards of Appeal, 7th edition 2013, IV.C.7.1).

According to the case law of the boards of appeal (*ibid.* IV.C.7.2.1, last paragraph), if a party introduces important facts or evidence at a late stage of the proceedings, without cogent reasons for the delay, this may be taken into account in the apportionment of costs. If the reasons for the late citing of a document do not point towards negligence or other circumstances that would amount to an abuse of procedure, there is no reason of equity which would justify an apportionment of costs in the other party's favour. However, in the absence of cogent reasons to justify the late submission, a different apportionment of costs will usually be ordered unless the late submission is shown not to have been disadvantageous to the other party (cf. *ibid.*, IV.C.7.2.1a)).

- 19.1 In the statement of ground of opposition, the opponent relied, *inter alia*, on Article 100(c) EPC and argued that the claimed subject-matter extended beyond the content of the application as originally filed because it did not contain one of the essential characteristics of the invention. Hence, Article 100(c) EPC was a ground for opposition, but the reasons adduced differed substantially from the ones given in the appellant's letter dated 2 September 2014.

19.2 In the Board's opinion, the necessity to continue the proceedings in writing and to hold oral proceedings a second time can be imputed not only to the appellant's very late submission of a new line of attack under Article 100(c) EPC, but also to the fact that the respondent, albeit ready to counter the appellant's arguments in writing and orally at the first oral proceedings, had not prepared any auxiliary requests that could have overcome the Article 100(c) objection. Hence, in this case the Board considers that both parties bear some responsibility for the continuation of the appeal proceedings after the first oral proceedings and consequently sees no reason to order a different apportionment of costs under Article 104(1) EPC and Article 16 RPBA.

## **Order**

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

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance with the order to maintain the patent in amended form on the basis of the following documents:

#### Description:

pages 3, 4 and 5 as submitted in the oral proceedings on 18 March 2015,  
pages 2, 6, 7, 8 and 9 of the patent specification;

#### Claims:

1 to 34 of the main request submitted at 15:00 in the oral proceedings on 18 March 2015;

Drawings:

figures 1 to 17 of the patent specification.

3. The respondent's request for an apportionment of costs is refused.

The Registrar:

The Chairman:



I. Aperribay

R. Moufang

Decision electronically authenticated