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**Datasheet for the decision
of 7 January 2013**

Case Number: T 0554/10 - 3.3.05
Application Number: 04758776.1
Publication Number: 1613566
IPC: C04B 35/64, B29C 67/00
Language of the proceedings: EN

Title of invention:
Method for producing ceramic objects

Applicant:
SIEMENS AKTIENGESELLSCHAFT

Headword:
Laser sintering/SIEMENS

Relevant legal provisions:
EPC Art. 54(1)(2), 111(1)
EPC R. 103(1)(a)

Keyword:
"Main request: novelty: no"
"First and second auxiliary requests: Remittal for further prosecution"
"Reimbursement of the appeal fee (no)"

Decisions cited:
T 0065/07

Catchword:
-



Case Number: T 0554/10 - 3.3.05

D E C I S I O N
of the Technical Board of Appeal 3.3.05
of 7 January 2013

Appellant: SIEMENS AKTIENGESELLSCHAFT
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 6 November 2009
refusing European patent application
No. 04758776.1 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman: G. Raths
Members: J.-M. Schwaller
S. Hoffmann

Summary of Facts and Submissions

- I. This appeal lies from the decision of the examining division refusing European patent application No. 04 758 776.1 on the grounds that the requirements of Article 56 EPC were not complied with as regards claim 1 filed with letter dated 10 November 2006, reading as follows:

"1. A process for producing a ceramic shaped object from ceramic powder, providing a powder bed and a laser, scanning the laser over the powder bed and laser sintering the powder bed in such a way that the geometry of the component is produced from raw material powder bed, said process comprising forming a first region of the shaped object by laser sintering of a first ceramic powder and further comprising forming a second region of the shaped object integral with said first region by laser sintering of a second ceramic powder, wherein the forming of at least one of the first and second regions comprises controlling at least one parameter selected to provide a different material property in the first and second regions of the shaped object, the material property is selected from the group consisting of densification, porosity, surface roughness and any combination thereof, wherein additional layers of powder and additional steps of laser heating maybe added to form a ceramic shape in accordance with a shaped object."

- II. With the grounds of appeal dated 22 February 2010, the appellant maintained the claims filed on 10 November 2006 as a main request and submitted two amended sets

of claims as auxiliary requests 1 and 2, respectively. It also requested the reimbursement of the appeal fee.

III. In a communication dated 15 November 2012, the board submitted a new document:

D3: WO 02/40744

and informed the appellant that its content appeared to destroy the novelty of the subject-matter of claim 1 of the main request.

IV. With letter dated 20 November 2012, the appellant declared that it was maintaining the first and second auxiliary requests.

V. The main request having not been dropped, the appellant's requests are summarised as follows:

The appellant requests that the contested decision be set aside and a patent be granted on the basis of the claims according to the main request dated 10 November 2006, or alternatively on the basis of one of the sets of claims filed as first and second auxiliary requests, respectively, on 22 February 2010.

Reasons for the Decision

1. Main request - Novelty

In its claim 1, document D3 defines a method for constructing a high density ceramic part, the method comprising the steps of:

providing a substrate made of a metal, a metal alloy, or a ceramic;
depositing a ceramic powder on the substrate;
directing a laser at the substrate to heat the substrate and melt the powder during the depositing step, thereby shaping the powder as the laser follows a predetermined pattern over the powder and substrate;
and varying the power of the laser during the directing step to allow sufficient melting to form a highly dense structure.

The method is further characterised (dependent claims 13 and 14) in that the depositing step comprises separately feeding first and second types of ceramic particles and selectively forming layers of the first and second types of ceramic particles on the part.

In the specific embodiment depicted in Figure 7 and described at page 11, lines 11 to 20, a part gradually graded from 100% Al_2O_3 to 100% AlN is manufactured. The part consists of four sections, with the three first sections (100% Al_2O_3 , 50% Al_2O_3 /50% AlN , 75% Al_2O_3 /25% AlN) being produced using a laser power of 125W while the fourth (100% AlN) is produced under a laser power of 145W.

In the board's view, on the one hand, the use of raw materials (Al_2O_3 and AlN , respectively) having different densities and, on the other hand, the variation of the laser power in the production of the above graded part necessarily leads to the formation of at least two regions in the part having a different densification and/or porosity, thus anticipating the wording of

claim 1 at issue, which is therefore not allowable under Article 54 (1) and (2) EPC.

2. *First and second auxiliary requests*

The subject-matter of these requests having not yet been considered by the examining division, the board considers it appropriate to exercise its power as conferred by Article 111(1) EPC to remit the case to the department of first instance for further prosecution.

3. *Reimbursement of the appeal fee*

In essence, the appellant requested the reimbursement of the appeal fee because the examining division indicated in its summons that the discussion at the oral proceedings would focus on lack of clarity, although the board already decided positively - in T 0065/07 - on this aspect. Furthermore, the examining division did not express any substantial opinion on novelty and inventive step, so that the appellant was unable to prepare the oral proceedings.

The board cannot accept the appellant's arguments because even if the communication accompanying the summons emphasised aspects of Articles 83 and 84 EPC, the novelty and inventive step issues indisputably were addressed, too (see page 2 of the communication). It follows that the appellant could not be surprised that these issues were to be discussed. The oral proceedings having moreover been scheduled six months after the summons, it furthermore had plenty of time to prepare these issues. Since the appellant eventually decided

not to be represented at the oral proceedings, its right to be heard was not violated, since it knowingly decided not to defend itself. Under these circumstances and in the absence of a substantial procedural violation by the first instance department, the board sees no basis to grant the request for reimbursement of the appeal fee (Rule 103 (1) (a) EPC).

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 for further prosecution.
3. The reimbursement of the appeal fee is rejected.

The Registrar:

The Chairman

C. Vodz

G. Rath