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**Datasheet for the decision
of 21 October 2024**

Case Number: T 0998/23 - 3.2.07

Application Number: 10834964.8

Publication Number: 2507016

IPC: B24D18/00, B24D3/28, B24D11/00,
C09K3/14, C09C1/68

Language of the proceedings: EN

Title of invention:

METHOD OF MAKING A COATED ABRASIVE ARTICLE HAVING SHAPED
ABRASIVE PARTICLES AND RESULTING PRODUCT

Patent Proprietor:

3M Innovative Properties Company

Opponent:

Saint-Gobain Abrasives, Inc.

Headword:

Relevant legal provisions:

EPC Art. 100(a), 100(b), 100(c), 123(2), 83, 54, 56
EPC R. 124(1)
RPBA 2020 Art. 12(6), 13(2), 15(1)

Keyword:

Late-filed objection - admitted in first-instance proceedings (no) - error in use of discretion at first instance (no) - admitted (no)
Grounds for opposition - insufficiency of disclosure (no) - lack of patentability (no)
Sufficiency of disclosure - (yes)
Novelty - (yes)
Inventive step - (yes)
Minutes of oral proceedings - essentials of oral proceedings - request to record statement in the minutes (refused)
Amendment after notification of Art. 15(1) RPBA communication (yes)
Amendment after notification of Art. 15(1) RPBA communication - cogent reasons (no) - exceptional circumstances (no) - taken into account (no)

Decisions cited:

T 0182/89, T 0019/90, T 0263/05, T 1690/22, T 0081/23,
T 0451/23, R 0014/09

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 0998/23 - 3.2.07

D E C I S I O N
of Technical Board of Appeal 3.2.07
of 21 October 2024

Appellant: 3M Innovative Properties Company
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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
12 April 2023 concerning maintenance of the
European Patent No. 2507016 in amended form.**

Composition of the Board:

Chairwoman A. Beckman
Members: A. Cano Palmero
S. Fernández de Córdoba

Summary of Facts and Submissions

- I. The patent proprietor and the opponent (appellants) lodged appeals within the prescribed period and in the prescribed form against the decision of the opposition division to maintain European patent No. 2 507 016 in amended form on the basis of the then auxiliary request 1.
- II. An opposition was filed against the patent in its entirety and based on the grounds for opposition pursuant to Articles 100(a), (b) and (c) EPC (novelty, inventive step, sufficiency of disclosure and added subject-matter).
- III. In preparation for oral proceedings, scheduled upon the appellants' requests, the board communicated its preliminary assessment of the case to the parties by means of a communication pursuant to Article 15(1) RPBA. The board indicated that the decision under appeal was likely to be set aside and that the patent could be maintained as granted.
- IV. In response to the communication under Article 15(1) RPBA, the opponent submitted arguments in the substance with letter dated 30 September 2024.
- V. Oral proceedings before the board took place on 21 October 2024. At the conclusion of the proceedings the decision was announced. Further details of the proceedings can be found in the minutes thereof.

VI. The following **documents** referred to in the decision under appeal are mentioned in the present decision:

D1: EP 0 615 816 A1;

D2: US 5,702,811 A;

D3: US 5,201,916 A;

D4: WO 2010/077519 A2.

VII. The opponent requested

that the decision under appeal be set aside

and

that the patent be revoked.

VIII. The patent proprietor requested

that the decision under appeal be set aside, and
that the patent be maintained as granted (main
request),

or, in the alternative,

that the appeal of the opponent be dismissed, *i.e.*
that the patent be maintained in the amended form
held by the opposition division to meet the
requirements of the EPC (auxiliary request 1),

or, in the alternative,

that the patent be maintained in amended form
according to one of the sets of claims filed as
auxiliary requests 1A to 1F, 2, 2A to 2F, 3, 3A to
3C, 4, 4A to 4C, 5, 5A to 5C, 6, 6A to 6C, 7, 7A to
7C, 8 and 8A with the patent proprietor's statement
setting out the grounds of appeal,

or, in the alternative,

that the patent be maintained in amended form
according to one of the sets of claims filed as
auxiliary requests 1', 1A', 1B', 1C', 2', 2A', 2B',
2C', 3', 3A', 3B', and 3C', 1'', 1A'', 1B'', 1C'',

2'', 2A'', 2B'', 2C'', 3'', 3A'', 3B'', and 3C''
filed for the first time with the patent
proprietor's reply to the opponent's statement
setting out the grounds of appeal.

IX. The lines of argument of the parties relevant for the
present decision are dealt with in detail in the
reasons for the decision.

X. **Claim 1** of the **main request** (*i.e.* according to the
patent as granted) with the feature labelling used by
the parties reads as follows:

"1. A method of making a coated abrasive article
comprising the step of:
1.1 applying a make coat (44) to a first major
surface of a backing (42);
1.2 applying shaped abrasive particles (20) to the
make coat to form a first abrasive layer
consisting essentially of shaped abrasive
particles;
1.3 applying diluent particles (48) to the make coat
over the shaped abrasive particles to form a
final abrasive layer;
1.4 applying a size coat (46) over the final
abrasive layer;
1.5 curing the make and size coats; and
1.6 wherein the shaped abrasive particles comprise a
vertex opposite a base and a width of the shaped
abrasive particle tapers from the base to the
vertex."

XI. **Claim 7** of the **main request** (*i.e.* according to the
patent as granted) with the feature labelling used by
the parties reads as follows:

- "7. A coated abrasive article comprising:
- 7.1 a backing (42) having a first major surface (41);
 - 7.2 a make coat (44) applied to the backing;
 - 7.3 a final abrasive layer attached to the make coat, the final abrasive layer comprising shaped abrasive particles (20) and diluent particles (48);
 - 7.3.1 the diluent particles being applied to the make coat over the shaped abrasive particles;
 - 7.4 a size coat (46) applied over the final abrasive layer;
 - 7.5 the shaped abrasive particles comprising a first face (24), a second face (26), and a sloping sidewall (22); the first face and the second face comprising a triangular perimeter (29); and
 - 7.6 wherein a majority of the shaped abrasive particles are leaning having an orientation angle β of less than 90 degrees relative to the first major surface (41)."

XII. Since the wording of the claims of the auxiliary requests is not relevant for the present case, there is no need to reproduce it here.

Reasons for the Decision

- 1. *Main request (patent as granted) - Admittance of the objection under Article 100(c) EPC, Article 12(6) RPBA*
- 1.1 The opponent argued that the opposition division erred in its decision not to admit the objection of unallowable extension of granted claim 7 (see point 4.1.2 of the reasons for the decision under appeal), which was "*based on a grievous legal error*".

1.2 The board notes that the opponent submitted no argument as to why the discretion exercised by the opposition division was not based on the correct principles; the opponent's arguments rather amounted to differences in opinion on the compliance of Article 123(2) EPC.

1.2.1 According to the established case law, which is now contemplated under Article 12(6), first sentence, RPBA, the way in which the opposition division exercised its discretion should only be overruled in the event that it suffered from an error in the use of discretion, *i.e.* if the opposition division exercised its discretion according to the wrong principles, or without taking into account the right principles, or in an unreasonable way (see Case Law of the Boards of Appeal [CLB], 10th edition 2022, V.A.3.4.1.b) or unless the circumstances of the appeal case justify their admittance. It is not the duty of the board to review all the facts and circumstances of the case as if it were in that department's place and decide whether or not it would have exercised discretion in the same way.

1.2.2 In this respect, the new objection was late-filed, namely after the opposition period and the principle of *prima facie* relevance of this objection was correctly applied and reasonably assessed. The board further sees no circumstance that could justify a late-filing of the objection, since this objection was directed to claim 7 as granted.

1.2.3 In sum, since the board sees no error in the use of the discretion exercised by the opposition division this objection on Article 100(c) EPC is not admitted into the appeal proceedings under Article 12(6), first sentence, RPBA.

2. *Main request (patent as granted) - Sufficiency of disclosure, Article 100(b) EPC*

2.1 The opponent argued that feature 7.5 of claim 7 contained a very broad geometric characterization of the shaped abrasive particles, which led to insufficiency of disclosure, in particular the shape of the shaped abrasive particles was defined so broadly that it cannot be manufactured over the whole scope of the claim.

2.2 The opponent further argued that the orientation angle β of feature 7.6 did not allow to determine whether a shaped abrasive particle was leaning or not, and was so ill-defined that the skilled person was not able to identify without undue burden the technical measures necessary to carry out the invention, also leading to insufficiency of disclosure. In addition, the opponent stressed that claim 7 could not be carried out over its whole claimed range, since thin, triangular-shaped abrasive particles with only one sloping sidewall and two straight sidewalls were also covered by the claim feature 7.5. Such particles were oriented by electrostatic deposition to land on one of the three sidewalls randomly, resulting in that statistically only 33 percent (and not the majority) would end up in the orientation as required by claim feature 7.6. The opponent also argued that the patent in suit required in paragraphs [0007] and [0008] further features, which were absent in the claims, in order to achieve the desired technical effects.

2.3 The board is not persuaded by the opponent's arguments for the following reasons. As correctly indicated by the patent proprietor, it is established jurisprudence

of the Boards of Appeal, that an objection of lack of disclosure presupposes that there are serious doubts substantiated by verifiable facts. **The burden of proof is upon the opponent** to establish on the balance of probabilities that a person skilled in the art, using its common general knowledge, would be unable to carry out the invention (see CLB, *supra*, II.C.9, first two paragraphs, in particular in relation to T 19/90 and T 182/89).

- 2.3.1 In the present case, the board concurs with the patent proprietor that the opponent has failed to provide any verifiable facts that could amount to serious doubts that features 7.5 and 7.6 cannot be carried out. Furthermore, the board concurs with the finding of the opposition division (see point 4.2.2 of the reasons for the decision under appeal) that even if claim 7 as granted could cover coated abrasive articles that would not be in place of delivering the claimed technical effects, the skilled person would immediately rule out these non-working embodiments. The board is of the view that the opponent's argument that under certain circumstances the skilled person would end up with coated abrasive articles which do not fall within the scope of claim 7 cannot amount to serious doubts that the claimed invention cannot be carried out thereby justifying a successful objection of lack of sufficiency of disclosure. In addition, as acknowledged by the opponent, at least one working example is provided in paragraphs [0043] to [0086] of the patent in suit which gives information on one geometric particle shape and on how to interpret the orientation angle β that enable the skilled person to carry out the invention. Finally, the asserted fact that allegedly necessary features are absent in the claim does also

not result in a lack of sufficiency of disclosure (see also T 0081/23, Reasons 4).

2.3.2 In view of the above, the board concludes that the subject-matter of claim 7 as granted is sufficiently disclosed and therefore the ground for opposition according to Article 100(b) EPC does not prejudice the maintenance of the patent as granted.

3. *Main request (patent as granted), claim 7 - Novelty, Articles 100(a) and 54 EPC*

3.1 The opposition division found in point 4.3 of the reasons for the decision under appeal that document D1 anticipated the subject-matter of claim 7 as granted, including features 7.3.1, 7.5 and 7.6.

3.1.1 With regard to feature 7.3.1, the board notes that this feature is a product-by-process feature. The board is of the view that this feature requires that the resulting product does not present any diluent particles underneath the shaped abrasive particles; *i.e.* a product in which diluent particles and shaped abrasive particles lie side-by-side would anticipate this feature.

3.1.2 The opposition division found in point 4.3.1 of the reasons for the decision under appeal that the "open-coat and open-coat" configuration would inevitably result in the shaped abrasive and the diluent particles being placed side-by-side, therefore anticipating this product-by-process feature. The opponent argued that D1 explicitly indicated on page 3, lines 25 and 26, a side-by-side configuration of shaped abrasive particles and diluent particles: *"In the first two configurations, the shaped abrasive particles reside*

substantially between the diluent particles", thereby anticipating feature 7.3.1. These first two configurations were presented in contrast to the "latter" two configurations in which the shaped abrasive particles resided substantially between and above the diluent particles (D1, page 3, lines 26 to 27).

3.1.3 The board disagrees. As correctly argued by the patent proprietor, D1 discloses that the diluent particles for the four disclosed configurations are applied either before or simultaneously with the shaped abrasive particles (D1, page 3, lines 28 to 29, and lines 37 to 38). The board concurs with the patent proprietor that none of these options directly and unambiguously results in a product in which none of the diluent particles are underneath the shaped abrasive particles. Furthermore, D1 lacks any disclosure of applying the diluent particles over the shaped abrasive particles. In addition, the board is of the view that the passage of D1 indicated by the opponent on page 3, lines 25 and 26, that in the first two configurations the shaped abrasive particles reside **substantially** between the diluent particles leaves open the possibility that diluent particles are underneath the shaped abrasive particles in the final product, so that this passage cannot be considered to be an explicit disclosure anticipating a side-by-side configuration. In summary, the board concludes that feature 7.3.1 is not directly and unambiguously disclosed by D1.

3.1.4 With regard to feature 7.6, the opposition division found in point 4.3.3 of the reasons for the decision under appeal that document D1 disclosed "on page 10 lines 32 to 34 that "35% to 65% of the shaped abrasive particles are oriented to the backing with a vertex of

the triangle pointing away from the backing", whereby (page 10 lines 38 to 41) "vertex pointing away from the backing also *includes* those situations in which the line corresponding to the altitude of the triangular-shaped particle is tilted from the perpendicular at a small angle, ...". Shaped abrasive particles with the "base pointing away from the backing" are also tilted (page 10 lines 41-45) and only up to 20% of the particles were laying flat (page 10 lines 34-37)." The opposition division considered that the cited passages on page 10 of D1 disclosing an embodiment with 65% of oriented particles, disclosed a majority of oriented particles.

The opponent concurred with the above finding and further argued that the triangular shaped particles of the embodiment on page 10 of D1 referred to the most preferred shape of the "thin" particles as detailed on page 8, lines 48 to 52, and that these particles presented a frusto-pyramidal shape on page 9, lines 14 to 19. The shaped particles of D1 thus met the requirements of feature 7.5 and a majority of these particles were oriented according to feature 7.6 as disclosed on page 10 of D1.

- 3.1.5 The board does neither concur with the finding of the opposition division, nor with the arguments of the opponent for the following reasons.
- 3.1.6 The board rather agrees with the patent proprietor that, all statements on page 10 of D1 relate to "triangular shaped" particles in general, and not to frusto-pyramidal shapes as required by feature 7.5, *i.e.* shaped abrasive particles comprising a first and second face comprising a triangular perimeter and a sloping sidewall. In particular, there is no indication

in D1 that the triangular shaped particles of the embodiment described on page 10 refer back to any frusto-pyramidal thin particles as allegedly disclosed on pages 8 and 9 of D1. Thus, the cited passages on page 10 do not disclose the shaped abrasive particles according to feature 7.6, which refers to the shaped abrasive particles as defined in feature 7.5.

- 3.1.7 Finally, the board considers that the statement of the opposition division (see point 4.3.3 of the reasons for the decision under appeal) that *"shaped abrasive particles deposited by electrostatic coating will never be perfectly oriented at 90° but will instead inevitably (even if just slightly) deviate from 90°"* and the opponent's argument that leaning of the shaped abrasive particles will happen automatically are unsubstantiated allegations. The board rather concurs with the patent proprietor that page 10, lines 50 to 55, of D1 precisely teaches away from tilting or tipping the particles during electrostatic deposition.
- 3.1.8 In sum, the patent proprietor has convincingly demonstrated the incorrectness of the decision under appeal that document D1 anticipates the subject-matter of claim 7 as granted, since features 7.3.1, and 7.6 are not directly and unambiguously disclosed by this document.
- 3.2 The opponent further disputed the reasoned finding of the opposition division in point 5.6 of the reasons for the decision under appeal, that **document D4** did not anticipate feature 7.3.1 of claim 7 of auxiliary request 1 (and of the patent as granted).
- 3.2.1 As already established in point 3.1.1, feature 7.3.1 is considered to require that the resulting product does

not present any diluent particles underneath the shaped abrasive particles; *i.e.* a product in which diluent particles and shaped abrasive particles lie side-by-side would anticipate feature 7.3.1.

3.2.2 The opponent argued that D4 disclosed an open coat that might present a mixture of shaped abrasive particles and diluent particles (which could be also conventional abrasive grains), see page 15, line 30, to page 16, line 11, of D4. According to the opponent, the way in which the shaped abrasive particles and the diluent particles are to be applied, be it diluent particles first (double coating process), be it together as a mixture/blend (single coating), or be it shaped abrasive particles first (reverse double coating), had no impact in the final product, which would result in the different particles being ultimately arranged side-by-side. The very few diluent particles, even if they were applied first or in a blend, would not interfere with the shaped abrasive particles, neither with the landing/deposition nor with the tipping/leaning of the shaped abrasive particles. The opponent further argued that conventional abrasive particles could be fused alumina zirconia (see page 16, line 10), while the shaped abrasive particles could be alpha alumina shaped abrasive particles (see page 24, lines 7 to 8). The different densities would make that the particles with shaped abrasive particle with lesser density would arrive first at the make coat when electro deposited from a mixture and would inevitably result in the structure required by feature 7.3.1.

3.2.3 The board is not persuaded by the opponent's arguments. As correctly pointed out by the patent proprietor, there is no indication in D4, specially not in the passages provided by the opponent, in which manner and

at which density the diluent particles are to be applied, which could result in a product where the diluent particles being arranged side-by-side or above the shaped abrasive particles. Contrary to the opponent's allegation the board sees that in the case that diluent particles are applied first or in a blend with shaped abrasive particles (in contrast to an open coat abrasive layer) can have an impact in the tipping (see paragraph [0036] of the patent in suit). As correctly found by the opposition division, there is not a single passage in D4 linking an open coat configuration with diluent particles. In sum, the board is convinced that D4 does not directly and unambiguously disclose feature 7.3.1.

3.3 In sum, the board is of the view that the subject-matter of claim 7 of the main request is new.

4. *Opponent's request to include a statement in the minutes of the oral proceedings before the board*

4.1 During the novelty discussion at the oral proceedings before the board, the opponent requested to include in the minutes a statement allegedly made orally by the patent proprietor on the interpretation of feature 7.3.1.

4.2 The board notes that Rule 124(1) EPC requires that the minutes contain the essentials of the oral proceedings and the relevant statements made by the parties. What is "essential" or "relevant" lies within the discretion of the minute writer. It is to be determined by reference to what the board has to decide, and is thus what is essential or relevant for the decision to be taken (CLB, *supra*, III.C.7.10.1; T 263/05, Reasons 8). Examples are an objection under Rule 106 EPC (R 14/09,

Reasons 4), the requests of the parties on which a decision is required and a relevant statement of surrender or abandonment of subject-matter (see e.g. T 263/05 Reasons 8.5 to 8.8).

4.3 By contrast, the arguments of the parties on patentability, including the interpretation of a claim feature, are usually not recorded; they are apparent from the written decision. In addition, there is no right of a party to have oral submissions recorded in the minutes (see e.g. T 1690/22, Reasons 4.12 with reference to several decisions and T 0451/23, Reasons 6). It is furthermore not the function of the minutes to record statements for national proceedings (CLB, *supra*, III.C.7.10.2).

4.4 In the present case, the alleged statement made by the patent proprietor was neither a request nor was it a statement of surrender or abandonment of subject-matter. It occurred in the context of the discussion on patentability and simply reflected the interpretation of a claim feature made by the patent proprietor. The board fails to see how this can be seen as "essential" or "relevant" within the meaning of Rule 124(1) EPC.

Therefore, the opponent's request to have a statement of the patent proprietor on the interpretation of feature 7.3.1 be recorded in the minutes of the oral proceedings is refused.

5. *Main request (patent as granted), claims 1 and 7 - Inventive step, Articles 100(a) and 56 EPC*

5.1 The opponent argued that the subject-matter of claims 7 and 1 as granted (and also according to auxiliary request 1) lacked inventive step **starting from document**

D2 as closest prior art in combination with the teaching of document D3.

5.1.1 The opponent indicated that the subject-matter of claims 1 and 7 as granted differed from the known method and coated abrasive article of D2 in features 1.2, 7.5 and 7.6. D2 spoke of "premium abrasive grains" while claim 1 as granted required shaped abrasive particles and claim 7 as granted further required that the shaped abrasive particles being of triangular shape with a sloped sidewall and presenting a particular orientation relative to the first major surface. Document D3 in its embodiment of figure 7 taught features 1.2, 7.5 and 7.6 and was suggested by D2, since D2 taught that the premium abrasive grains include alpha alumina-based ceramic materials such as those disclosed in D3. Furthermore, D2 directly indicated in column 8, lines 59 to 64, that the premium abrasive grains could be those disclosed in D3. According to the opponent, the skilled person, being instructed to use the triangular-shaped abrasive particles of D3 within the invention of D2 would not be dissuaded from using diluent particles. Therefore, use of the shaped abrasive particles of the embodiment of figure 7 of D3 as the premium abrasive grains of D2 would be obvious for the skilled person seeking to improve the abrasive performance, and in doing so, would arrive at the subject-matter of claims 1 and 7 as granted without exercising an inventive skill.

5.1.2 The board disagrees. Although there is a general reference in D2 to use as the premium abrasive grains the ones disclosed in D3, it is to be noted that document D3 teaches several embodiments, so that the question to be clarified that still remains is whether the skilled person would (and not only could) turn to

the specific embodiment of figure 7, as argued by the opponent, in an obvious manner. As correctly found by the opposition division in point 5.8 of the reasons for the decision under appeal, the embodiment of figure 7 of D3 seems to teach the distinguishing features with regard to the shape and orientation of the shaped abrasive particles. However, this embodiment of figure 7 is disclosed only in the absence of diluent particles. Therefore the board is convinced that, contrary to the allegation of the opponent, the skilled person, starting from D2, would refrain from using these specific shaped particles with that particular orientation of figure 7 of D3 as the abrasive articles and implement them in the method of D2. In other words, in the case that the skilled person would be hinted at all to find an alternative to the "premium abrasive grains" of D2 by using the shaped abrasive particles of the embodiment of figure 7 of D3, then the use of diluent particles would be also refrained from. In sum, starting from D2 in combination with the teaching of the embodiment of figure 7 of D3, the skilled person would only arrive at the subject-matter of claims 1 and 7 as granted as the result of an *ex post facto* analysis.

- 5.1.3 The opponent additionally argued on page 19 of its letter dated 30 September 2024 (*i.e.* after notification of the communication under Article 15(1) RPBA) that Example 7 of D3 disclosed a working example using a blend of triangular-shaped abrasive grains and diluent grains. During the oral proceedings before the board, the opponent also indicated that the embodiment of figure 3 of D3 also disclosed a blend of abrasive particles and diluent grains. With regard to this last reference to the embodiment of figure 3 of D3, the opponent argued that this did not amount to an

amendment to its appeal case, since this reference had already been raised in the opponent's statement setting out the grounds of appeal, namely on page 40, last paragraph and on the paragraph bridging pages 43 and 44.

5.1.4 The board however considers that both references to the teachings of Example 7 and to the embodiment of figure 3 of D3 constitute an amendment to the opponent's appeal case. In particular, the references to the embodiment of figure 3 made in the opponent's statement setting out the grounds of appeal were not an objection in which the teaching of this embodiment was considered, but rather were used to establish the alleged fact that the teaching of the embodiment of figure 7 of D3 could be combined with the teaching of document D2.

5.1.5 Article 13(2) RPBA stipulates that any amendment to a party's appeal case made after notification of the communication under Article 15(1) RPBA shall, in principle, not be taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned.

The opponent justified the filing of the objections based on the teachings of Example 7 and of the embodiment of figure 3 of D3 as a reaction to the preliminary opinion of the board, so that they could not have been submitted before.

This justification is not convincing, because the preliminary opinion of the board merely followed the reasoned findings of the decision under appeal or the arguments put forward by the patent proprietor in its statement setting out the grounds of appeal or its

reply. In addition, claims 1 and 7 of the main request correspond to those of the patent as granted. It follows that the opponent could and should have presented its complete appeal case at least with its reply to the patent proprietor's statement setting out the grounds of appeal.

As a consequence of the above, the opponent failed to justify with cogent reasons that the filing of the objections based on the teachings of Example 7 and of the embodiment of figure 3 of D3 was occasioned by exceptional circumstances.

The board therefore decides not to take into account the objections on inventive step starting from D2 as closest prior art in combination with the teachings of Example 7 and of the embodiment of figure 3 of D3 (Article 13(2) RPBA).

5.2 The opponent further argued in point I.6.1 of its statement setting out the grounds of appeal that the subject-matter of claim 7 of auxiliary request 1 (maintained version) was not inventive **starting from D1 as closest prior art in combination with the teaching of D3**. However, this objection was only directed to the features that were added to this request.

5.2.1 In particular, the opponent argued that the added features in claim 7 of auxiliary request 1 "electrostatically applied" (added to feature 7.3), "wherein the shaped abrasive particles (20) comprise a vertex (44) opposite a base (52) and a width of the shaped abrasive particles (20) tapers from the base (52) to the vertex (44)" (added feature 7.5.1) and "wherein the sloping sidewall (22) acts as the base (52)" (added feature 7.5.3) were anticipated by D1 and

that the only distinguishing feature 7.5.2 "wherein greater than 70 percent of the shaped abrasive particles (20) are attached by their base (52) to the make coat (44)" would be rendered obvious by the teaching of D3.

These arguments therefore were not directed against the subject-matter of claim 7 as granted, which was only objected in view of D1 as being not novel.

5.2.2 However, as already concluded in point 3.1.8 above, the board sees that the subject-matter of claim 7 as granted differs from the known article of D1 in features 7.3.1, and 7.6. In this sense, in the inventive step objections using the teaching of D3, the opponent argued that D3 could teach feature 7.6. However, in the absence of diluent particles in the embodiment of figure 7 of D3, there is no admissibly indicated teaching in D3 for feature 7.3.1. It follows that even under a forced combination of the teachings of D1 and the embodiment of figure 7 of D3, the skilled person would still not arrive at feature 7.3.1 in an obvious manner.

5.2.3 For the sake of completeness, the board is of the view that, starting from D1 as closest prior art, and even in the case that feature 7.3.1 was anticipated by D3 and could teach the distinguishing feature 7.6, the skilled person would only turn to the embodiment of figure 7 of D3 as the result of an *ex post facto* analysis, namely for the same reasons as when starting from D2 as closest prior art (see point 5.1.2 above).

5.3 Finally, the opponent made an objection based on document **D1 as closest prior art in combination with**

the common general knowledge for the first time during the oral proceedings before the board.

5.3.1 The board, for the same reasons as for the combination of D2 with the teachings of Example 7 or with the teaching of the embodiment of figure 3 of D3 (see points 5.1.3 to 5.1.5 above), considers this objection to be an amendment to the opponent's appeal case which, in the absence of cogent reasons that could justify exceptional circumstances, is not taken into account under Article 13(2) RPBA.

5.4 In sum, the board is of the view that the subject-matter of claims 1 and 7 of the main request is inventive.

6. *Conclusions*

It follows from the above that the patent proprietor has provided convincing arguments that could demonstrate the incorrectness of the decision under appeal that the ground for opposition pursuant to Article 100(a) EPC (novelty) prejudiced the maintenance of the patent as granted. The decision under appeal is thus to be set aside. Furthermore, the opponent has not provided convincing and/or admissible objections that any ground for opposition under Article 100 EPC could prejudice the maintenance of the patent as granted. Therefore, the patent could be maintained as granted.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is maintained as granted.

The Registrar:

The Chairwoman:



G. Nachtigall

A. Beckman

Decision electronically authenticated