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Datasheet for the decision of 2 May 2014

Case Number: T 2026/10 - 3.3.05

Application Number: 99937208.9

Publication Number: 1100752

IPC: C01B33/141

Language of the proceedings: EN

Title of invention:
DISPERSION OF FINE POROUS INORGANIC OXIDE PARTICLES AND PROCESSES FOR PREPARING SAME

Applicant:
W.R. GRACE & CO.-CONN.

Headword:
Porous inorganic oxide/W.R.GRACE & CO.-CONN.

Relevant legal provisions:
EPC Art. 54, 83, 111(1)

Keyword:
Novelty (yes)
Enabling disclosure of a prior art document (no)
Remittal to the department of first instance for further prosecution (yes)

Decisions cited:
T 0206/83, T 0158/91, T 0612/92, T 0694/92, T 1026/02

Catchword:

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Case Number: T 2026/10 - 3.3.05

D E C I S I O N
of Technical Board of Appeal 3.3.05
of 2 May 2014

Appellant: (Applicant)	W.R. GRACE & CO.-CONN. Grace Plaza, 1114 Avenue of the Americas New York, NY 10036 (US)
Representative:	UEXKÜLL & STOLBERG Patentanwälte Beselerstrasse 4 22607 Hamburg (DE)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 4 May 2010 refusing European patent application No. 99937208.9 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman: G. Raths
Members: H. Engl
C. Vallet

Summary of Facts and Submissions

I. European patent application EP 99937208.9, based on International application WO-A-2000/02814, is concerned with dispersions of fine porous inorganic oxide particles having a median particle size in the range of 0.05 to 3 µm and a defined porosity.

II. The European patent application was refused by a decision of the examining division, posted with letter dated 4 May 2010, on the ground of lack of novelty having regard to document

D1: US-A-4 235 716.

Said document disclosed in example 2 a porous silica gel having an average particle size (d_{50}) of 0.5 µm, a pore volume of 1.0 ml/g, a pore width of 10 nm, and a specific surface of 400 m^2/g (see column 5, lines 1 to 10). Although D1 discloses neither a method of manufacturing nor a supplier for said porous silica gel, the examining division argued that the inventors of D1 had either bought the product or produced it themselves. It was therefore considered as comprised in the state of the art and anticipated the subject-matter of claim 1.

III. The applicant's (appellant's) notice of appeal was received by letter dated 2 July 2010. The statement of grounds of appeal, dated 13 September 2010, was accompanied by fresh claims as a main request and auxiliary requests 1 to 5.

IV. Claim 1 of the main request reads as follows:

"1. A dispersion comprising porous inorganic oxide

particles, wherein the particles have

a) a median particle size in the range of 0.05 to 3 µm; and

b) porosity such that when an aqueous dispersion of the particles is dried at least 0.5 ml/g of pore volume as measured by BJH nitrogen porosimetry is from pores having a pore size of 50 nm (600 Å) or smaller."

V. The appellant argued essentially as follows:

The refusal was only based on D1. Said document disclosed in example 2 a porous silica gel having an average particle size (d_{50}) of 0.5 µm, a pore volume of 1.0 ml/g a pore width of 10 nm and a specific surface of 400 m^2/g.

D1 disclosed neither a method of manufacturing said porous silica gel nor another origin therefore. The appellant argued that the disclosure in D1 of the porous silica gel was not enabling (T 1026/02). Its preparation was non-trivial and beyond common knowledge, in particular not before the priority date of 25 November 1980. It had taken the appellant's experts numerous years of research to develop a process for manufacturing a product having the claimed properties and parameters.

In this context, the appellant pointed to claim 19 of the present application which defined a process for the preparation of the claimed dispersions of porous inorganic particles, which process includes the steps of forming a slurry, milling of said slurry, creating a supernatant phase and a settled phase and removing the supernatant phase to separate the two phases and to

obtain the settled phase as a final product having the specified parameter values. The appellant argued that in 1978 (date of filing of D1) no method was known which could have resulted in such a material.

The appellant was also not aware of a product such as the silica gel of example 2 of D1 being or having been offered or sold on the market. Consequently, such a porous silica gel could not have been obtained by purchase, contrary to the finding in the contested decision.

VI. Requests

The appellant requested that the decision under appeal be set aside and that the board decided that the subject-matter of the claims of the main request or alternatively of the claims of auxiliary requests 1 to 5, all filed with letter dated 13 September 2010, was novel having regard to the cited prior art, and that the case be remitted to the examining division for evaluation of inventive step.

Reasons for the Decision

1. Amendments

Claim 1 of the main request is identical to claim 1 as originally filed (published as WO-A-00/02814), except for the introduction of metric units (µm, nm and ml).

The requirements of Article 123(2) EPC are thus met.

2. Novelty

2.1 Relevant content of D1

2.1.1 It is undisputed that D1 discloses in column 5, lines 1 to 19 (example 2), a porous silica gel having an average particle size (d_{50}) of 0.5 µm, a pore volume of 1.0 ml/g a pore width of 10 nm and a specific surface of 400 m^2/g.

It is also an undisputed fact that D1 neither explicitly nor implicitly teaches how to manufacture said porous silica gel and that D1 does not mention an origin of or a supplier for said porous material.

2.1.2 In the contested decision the examining division decided that the product in question, namely the porous silica gel, belonged to the state of the art. The porous silica gel had possibly been bought or produced by the authors of D1. Since they used it only as a reagent in their process, they had no reason to disclose how to manufacture it.

2.1.3 This reasoning is partly based on the assumption that the mention of a particular product having specific physical and chemical properties was sufficient to make it available to the public.

2.1.4 However according to the appellant the availability of the porous silica product was not self-evident.

The appellant pointed to the publication date of D1 and argued that in 1978 no method was known which could have resulted in such a material. Preparing the claimed product was a non-trivial task. It had taken the appellant's experts numerous years of research to

develop a process for manufacturing it.

According to the appellant, claim 19 of the present application described for the first time a process for the preparation of the claimed dispersions of porous inorganic particles, which process includes the steps of forming a slurry, milling of said slurry, creating a supernatant phase and a settled phase and removing the supernatant phase to separate the two phases and to obtain the settled phase as a final product having the specified parameter values. The appellant stressed that in 1978 (date of filing of D1) no method was known which could have resulted in such a material. The appellant was also not aware of a product such as the silica gel of example 2 of D1 being offered or sold on the market. Consequently, the silica gel of D1 could not have been purchased.

As a consequence, D1 did not make available to the public a teaching helping the skilled person to manufacture said porous silica material.

2.2 Information gap in D1

2.2.1 Article 83 EPC states that a European patent application must disclose the invention in a manner sufficiently clear and complete to be carried out by a person skilled in the art. In accordance with the case law, for the requirement of Article 83 EPC to be met, the skilled person must be able to carry out the invention without undue burden and without the exercise of inventive skill, on the basis of what is disclosed in the application and by using the general knowledge, (see T 694/92, OJ EPO 1997, 408; and T 612/92 of 28 February 1996, Reasons points 11 to 13).

2.2.2 According to the jurisprudence (see for instance T 1026/02, of 5 March 2004, Reasons point 3; T 206/83, OJ EPO 1987, 5; and T 158/91 of 30 July 1991, Reasons point 2.2), the same criteria are to be applied for judging sufficiency of disclosure of a patent application or of a piece of prior art. A prior art document whose teaching does not meet the sufficiency criteria is not enabling and must be disregarded as a prior art (see T 1026/02 of 5 March 2004, Reasons point 10).

2.2.3 In the present case, the appellant put forward detailed arguments as to why at the priority date of D1 it would have been impossible for someone of skill in the art to obtain the porous silica gel described in example 2, either by way of purchase or by preparing it using general knowledge.

2.3 Objections against the interpretation of D1 by the examining division

2.3.1 Firstly, in the board's judgement, it is improper to brush aside the appellant's detailed arguments by saying that it was "most plausible" that the product in question was "simply purchased" (see the contested decision, page 4, lines 1 to 4). In the board's view, these statements are mere speculative assertions which are unsuited for refuting the appellant's arguments, which had been presented at the oral proceedings before the examining division and in earlier written submissions.

It would have been incumbent on the examining division to produce evidence for their assertions, for instance by showing that the product in question was indeed commonly available, or that its manufacture (or at

least the manufacture of porous inorganic particles having very similar characteristics) belonged to the general knowledge. A decision on novelty should not be taken on the basis of plausibility considerations and assumptions which are not supported by evidence or arguments.

2.3.2 Secondly, even assuming the product was bought - for which there is no evidence -, it is clear that in the absence of information about the source, the document would still not be enabling.

2.4 Consequences

In view of the above, and on the basis of the information available to the board and judging from its face value, document D1 only mentions the particular porous silica gel, but neither allows to conclude that the particular porous silica gel was available on the market nor is the skilled person taught its manufacture. Therefore, in this case, D1 is not enabling and said particular porous silica gel does not belong to the prior art.

As a consequence, the subject-matter of claim 1 in accordance with the main request must be considered to be novel having regard to D1 (Article 54 EPC). The contested decision must therefore be set aside.

3. Remittal

The contested decision is solely based on the finding of lack of novelty having regard to the disclosure of example 2 of document D1. Under these circumstances the board finds it appropriate to exercise its discretion under Article 111(1) EPC and to remit the case to the

department of first instance for further prosecution.

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.

The Registrar: The Chairman:

C. Vodz G. Raths

Decision electronically authenticated