BL O/180/04

18th June 2004

PATENTS ACT 1977

APPLICANT Degussa-Huls AG

ISSUE Whether patent application number GB 0030863.5 complies with section 1(1)(b)

HEARING OFFICER R C Kennell

DECISION

This decision was given orally. The attached is the transcript of the decision as approved by the hearing officer.

THE PATENT OFFICE

Conference Room 2B32
Concept House
Cardiff Road
Fos: 22 Newport
Gwent, NP10 8QQ

Friday, 18th June, 2004

Before:
Mr Richard Kennell
(DEPUTY DIRECTOR)

(Sitting for the Comptroller-General of Patents, etc.)

In the Matter of THE PATENTS ACT 1977, section 1(1)(b)

And

In the Matter of THE APPLICATION of DEGUSSA-HULS AG
for Letters Patent No GB0030863.5

(Ex Parte Technical Hearing)

Transcript of the Shorthand Notes of Harry Counsell (Wales)
41, Llewellyn Park Drive, Morriston, Swansea, SA6 8PF
(Tel: 01792 773001 Fax: 01792 700815)
Verbatim Reporters

MR RICHARD GILLARD (of Messrs Elkington & Fife LLP, Patent & Trade Mark Attorneys, Beacon House, 113 Kingsway, London WC2B 6PN) appeared on behalf of the Applicants

MR COLIN CLARKE (Examiner, The Patent Office)

DECISION

A THE DEPUTY DIRECTOR: Application No GB0030863.5 in the name of Degussa-Huls AG (publication serial No GB 2,357,497) has been the subject of a number of official actions. Objections in respect of novelty have been overcome. The examiner has however maintained objection that the amended claims, which now

B read -

> "Claim 1. A hydrophobic, pyrogenically produced silica having a tamped density of 55 to 200g/l and which is hydrophobised by reaction with a halogen-free silane or siloxane and compacted by a roller compactor or by a belt filter press.
>
C Claim 2. The process of production of a hydrophobic, pyrogenically produced silica having a tamped density of 55 to 200 g/l which comprises subjecting pyrogenically produced silica to a hydrophobising treatment with a halogen-free silane or siloxane and compacting the treated silica by roller compactor or by a belt filter press.
>
D Claim 3. Use of hydrophobic, pyrogenically produced silica as claimed in Claim 1 for the production of dispersions".

do not involve an inventive step.

This matter was unresolved, and came before me at a hearing on 18th June

E 2004, when Mr Richard Gillard of Elkington & Fife LLP appeared as agent for the applicants.

The objection of the examiner was that either WO 92/13694 or US 4,680,173 could be combined with US 4,877,595, which is in fact equivalent to the

F document EP 0, 280, 851 referred to in the applicants' specification.

Mr Gillard made the point that the invention as now claimed required the specific combination of a halogen-free silane or siloxane for treating the silica and

G specific compression methods, as well as a tamped density of 55 to 200 g/l. He made the point that none of the documents disclosed all of these features, and thought that none of them suggested the combination of these features. He also made the point that a careful balance of properties is required in the art, and that

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A the skilled person would not expect to trawl through specifications in the art and just pick out features relating to one particular property without regard to other properties mentioned in the specification.

In discussing the cited documents it was noted that the specification appeared B to use the terms "bulk density" and "tamped density" interchangeably. As I understood him, Mr Gillard accepted that these were different, and I accepted in consequence that US 4,680,173 which refers just to bulk density could be C disregarded.

I have some sympathy with Mr Gillard's point that the skilled man would not necessarily light on the combination of WO 92/13694 and US 4,877,595. However, the terms in which WO 92/13694 are written suggest to me that the use D of a halogen-free silane or siloxane to hydrophobise silica is not something unusual. Furthermore, if I consider US 4,877,595 in isolation, to my mind it discloses all the features of claims 1 and 2 except the use of a halogen-free E silane or siloxane as a hydrophobising agent. I accept (as Mr Gillard pointed out) that the specification is directed principally to hydrophilic silica, and that a hydrophobic silica is mentioned only at the end - and might on one view be regarded as a somewhat "throw-away" reference in a document which seems to F be directed to avoiding disadvantages inherent in the use of hydrophilic materials. Nevertheless, the reference to hydrophobic materials is one of two examples of the invention, one hydrophilic and one hydrophobic. In the G hydrophilic example, stamping densities are increased from 100g/l using a roller compactor to 140 to 190 g/l using the belt filter device of the patent, and, in the hydrophobic example, from 64 g/l using a roller compactor to 90 to 120 g/l using the belt filter device. (It was accepted that "stamping" and "tamping" densities H

A are the same thing.) The hydrophobic material which is treated in example 2 is "Aerosil R 972", and I accept that this has been hydrophobised with a halogen-containing silane rather than a halogen-free one. Nevertheless the document is presented as applicable to the compression of pyrogenically prepared silicic acid B (which it was not disputed is for present purposes the same as silica), and it is directed to those materials in general.

I therefore believe that the skilled man reading US 4,877,595 would expect to C be able to achieve tamping densities within the claimed range for a hydrophobic silica, irrespective of the hydrophobising agent, at least by using a belt filter.

Mr Gillard drew my attention to the table in page 4 of the applicants' specification as illustrating the unexpected advantages to be achieved by the D specific combination of a halogen-free silane or siloxane and a specific treating method. As I understood it, he saw this as allowing tamping densities to be increased while the thickening action was maintained. It was raised by the E examiner at the hearing whether this combination was in fact clearly spelt out in the description, and many of the relevant materials in the table at page 4 appear to be outside the claimed range of tamped densities. I make no finding on this, but I do not think it affects the view that the skilled man would take of US F 4,877,595.

On the matter of increasing tamping density whilst maintaining thickening action, I drew Mr Gillard's attention to a passage at column 3 lines 37 to 49 G which, in describing the compression of the product and the advantages of the belt filter method, states -

> "This has the consequence that the properties of the powdery substance which render it suitable for application remain preserved to a greater extent than is the case in the known H compression methods".

Mr Gillard made the point that there was no mention here of halogen-free treating agents or of specific properties such as thickening action, which I accept; but this still does not affect my view of what the skilled man would take from the document.

I therefore find that claims 1 and 2 lack inventive step, certainly in the light of US 4,877,595 and possibly also in the light of the combination of that document with WO 92/13694 - although I think the latter is relevant only to illustrate that a halogen-free silane or siloxane is a conventional hydrophobising agent for silica. I do not think that the use of the material for the production of dispersions is anything other than a conventional feature, and I therefore find that claim 3 also lacks inventive step.

Bearing in mind that the rule 34 period would normally expire on 22nd June 2004 (it can be extended as of right under rule 110(3) to 22nd July 2004), I will allow the applicants a period of 14 days to make amendments to the claims and description to overcome my finding. If the applicants wish to amend, then in respect of the description:

(1) It is open to them to amend the table at page 4 to make clearer the connection with the invention as now claimed, although I do not think that would of itself remove the inventive step objection.

(2) It was noted during the hearing that the tests in the table on the "VV60" materials might be incorrect as regards the tamped density, and recent correspondence has indeed suggested a slightly higher figure that would shift some of these materials from outside the claimed range into that claimed range. I make no finding as to whether amendment in respect of this would be allowable.

(3) It would be desirable to avoid the confusion between "bulk density" and "tamped density" referred to above, to acknowledge the use of "Aerosil" as a registered trade mark, and possibly to clarify a small error at page 2, line 1 where two materials are repeated.

The period for appeal against this decision is 28 days. In the light of section 20(2) of the Patents Act 1977 the rule 34 period for putting the application in order is extended to expire at the same time as the appeal period, and so now expires on 16th July 2004. As explained in the "Manual of Patent Practice" at paragraph 20.10, this extension runs concurrently with any extension under rule 110(3) and not consecutively.

I have given a period of 14 days from the date of the decision for the applicants to submit amendments. Whilst it would not normally be desirable to set a period which is shorter than the appeal period, I do not really see any other option in this case if the examiner is to have time to consider any amendments that the applicants may submit.

Mr Gillard asked me whether I had in mind any particular amendment that I would be prepared to accept. I said that I did not.

THE DEPUTY DIRECTOR: Are there any other points that you want to raise? I have now given the decision.

MR GILLARD: No, not at the moment.

THE DEPUTY DIRECTOR: Right. Thank you.

MR CLARKE: Just a small discrepancy: the EP number is referred to as "854".

MR GILLARD: Yes. It is incorrect in one and correct in the other.

THE DEPUTY DIRECTOR: Very well. That concludes the hearing.

(Hearing concluded at 1.47 p.m.)
