

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

JOHNS MANVILLE CORPORATION,
Petitioner,

v.

KNAUF INSULATION, INC.,
Patent Owner.

Case IPR2015-01527
Patent 8,940,089 B2

Before FRED E. McKELVEY, JAMES T. MOORE, and
KRISTINA M. KALAN, *Administrative Patent Judges*.

McKELVEY, *Administrative Patent Judge*.

DECISION

Declining to Institute an Inter Partes Review
37 C.F.R. § 42.108(a)

I. Introduction

Pending before the Board is Petitioner's "Petition for *Inter Partes*
Review of U.S. Patent No. 8,940,089." Paper 1.

Patent Owner timely filed a Preliminary Response. Paper 12.

Petitioner was invited to file a Reply. Paper 13.

Petitioner timely filed a Reply. Paper 14.

II. Background

A. Parties

Petitioner is Johns Manville Corporation and Johns Manville, Inc.
Paper 1, page 1.

Patent Owner is Knauf Insulation, Inc. and Knauf Insulation SPRL.
Paper 5, page 1; Paper 7, page 1.

B. Involved Patent

The involved patent is U.S. Patent 8,940,089 B2 (“the ’089 patent”),
issued 27 January 2015 based on an application filed 30 December 2011.

Ex. 1001, page 1.

The ’089 patent contains claims 1–74. **Ex. 1001**, cols. 14–18.

In this IPR, Petitioner challenges the patentability of claims 1, 2, 4–15,
23–26, 28–31, 35–41, 50, 57, 62, 64–67, and 70–72. Paper 1, pages 1 and 5.

C. Litigation

The ’089 patent is involved in *Knauf Insulation, LLC v. Johns Manville Corp.*, Civil Action No. 1:15-cv-00111-WTL-MJD
(S.D. Ind. filed Jan. 27, 2015). Paper 7, page 1.

D. Related PTO Matters

The parties are involved in two other IPRs involving the ’089 patent:

(1) IPR2015-01569 where Petitioner challenges claims 3, 27,
32–34, 42–49, 51–55, 58–61, 63, 68, 69, and 73, and

(2) IPR2015-01598, where Petitioner challenges claims 3,
16–22, 27, 34, 43, 45–49, 51–56, 63, 73, and 74.

As Table 1 demonstrates (where X means challenged), Petitioner ultimately seeks cancellation of all claims of the '089 patent.

Table 1			
Claim	IPR2015-01527	IPR2015-01568	IPR2015-01598
1	X		
2	X		
3		X	X
4	X		
5	X		
6	X		
7	X		
8	X		
9	X		
10	X		
11	X		
12	X		
13	X		
14	X		
15	X		
16			X
17			X
18			X

19			X
20			X
21			X
22			X
23	X		
24	X		
25	X		
26	X		
27		X	X
28	X		
29	X		
30	X		
31	X		
32		X	
33		X	
34		X	X
35	X		
36	X		
37	X		
38	X		
39	X		
40	X		
41	X		

42		X	
43		X	X
44		X	
45		X	X
46		X	X
47		X	X
48		X	X
49		X	X
50	X		
51		X	X
52		X	X
53		X	X
54		X	X
55		X	X
56			X
57	X		
58		X	
59		X	
60		X	
61		X	
62	X		
63		X	X
64	X		

65	X		
66	X		
67	X		
68		X	
69		X	
70	X		
71	X		
72	X		
73		X	X
74			X

E. Prior Art

Petitioner relies on the following prior art.

Name	Document	Date	Exhibit
Gogek	U.S. Patent 2,965,504	20 Dec. 1960	1003

Gogek is prior art under 35 U.S.C. § 102(b).

F. Challenge

There is one (1) challenge (“Ground”). Paper 1, pages 5–6

Ground	Claims	Pre-AIA 35 U.S.C.	Prior Art
1	1, 2, 4–15, 23–26, 28–31, 35–41, 50, 57, 62, 64–67, and 70–72	§ 102(b)	Gogek

III. Ground 1

A. Claim 1

Independent claim 1, reproduced from the '089 patent, reads (matter in brackets and some indentation added):

A [1] finished material comprising

[2] a collection of nonwoven mineral fibers maintained together by a cured, substantially formaldehyde free melanoidin containing binder,

[3] wherein the finished material comprises [i] residual levels of more than 500 mg of ionic species per kg of finished material, [ii] said species selected from the group consisting of sulfates, phosphates, nitrates, carbonates, and combinations thereof [iii] in which the residual levels are assessed in a leach test.

Ex. 1001, col. 14:34–41.

The other challenged claims depend from independent claim 1.

B. Challenge

According to Petitioner, the challenged claims “are invalid under 35 U.S.C. § 102(b) as anticipated by Gogek.” Paper 1, page 9.

In the context of an IPR, what Petitioner means is that the challenged claims “are unpatentable under 35 U.S.C. § 102(b) as anticipated by Gogek.”

Why parties insist on using the language “invalid” as opposed to “unpatentable” in IPR proceedings escapes us. The language of the applicable statute is “cancel as unpatentable.” 35 U.S.C. § 311(b). See Markey, *Semantic Antics in Patent Cases*, 88 F.R.D. 103 (1980).

Petitioner alleges that Gogek inherently describes the subject matter of challenged independent claim 1.

The evidence said to support a finding that Gogek inherently describes the subject matter of claim 1 is based on three declarations outlining experimental work undertaken by Dr. Elam Leed (**Ex. 1006**) and Dr. Jonathan Vickers (**Ex. 1007**) under the supervision of Dr. Frederick J. Hirsekorn (**Ex. 1004**).

Specifically, “[t]o determine the inherent levels of residual ionic species in . . . finished [Gogek] insulating blocks, I [Dr. Hirsekorn] conducted and/or directed . . . experiments in which insulating blocks made according to Example 3 of Gogek [col. 2:62–72] were reproduced.”

Ex. 1004, page 18, ¶ 46. Test samples were prepared by Dr. Leed, assisted by Dr. Hirsekorn. **Ex. 1006**, page 1, ¶ 3. Analysis of test samples was undertaken by Dr. Vickers. **Ex. 1007**, page 1, ¶ 3.

C. Anticipation—Inherency

The applicable principles are set out in *In re Robertson*, 169 F.3d 743 (Fed. Cir. 1999):

If the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if that element is “inherent” in its disclosure. To establish inherency, the extrinsic evidence “must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.” *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268 . . . (Fed. Cir. 1991). “Inherency, however, may not be established by *probabilities* or *possibilities*. The mere fact that a certain thing may result from a given

set of circumstances is not sufficient.” *Id.* at 1269 . . .
(quoting *In re Oelrich*, 666 F.2d 578, 581 (CCPA 1981).

Id. at 745 (italics, except for case citations, added; USPQ citations omitted).

The burden of showing something by a preponderance of the evidence simply requires the trier of fact to believe that the existence of a fact is more *probable* than its nonexistence before the trier of fact may find in favor of the party who has the burden to persuade the trier of fact of the fact’s existence. *Concrete Pipe & Products of California, Inc. v. Construction Laborers Pension Trust for Southern California*, 508 U.S. 602, 622 (1993).

At first blush one might conclude that there is a tension between *Robertson’s* probabilities and *Concrete Pipe’s* probable. The tension is resolved if one considers *Robertson’s* probabilities to mean “may” and *Concrete Pipe’s* probable to mean “likely.”

D. The Example 3 Experiments

Gogek Example 3 describes a refractory block made from the following elements:

Element	Parts by weight
Rock wool	100
<i>Asbestos fines</i>	3
Bentonite	3
Molasses	6
Ammonium sulfate	0.8
Iron oxide	1

Ex. 1003, col. 2:60–72; **Ex. 1004**, page 18, ¶ 47.

In its experiments, Petitioner did not use asbestos fines. Rather, it used Superwool 607 in place of asbestos fines.

Dr. Hirsekorn explains:

I did not use asbestos fines because asbestos, which has carcinogenic properties, is no longer commercially available in the United States. Instead of *asbestos fines*, I used *Superwool 607*, which I understand was sourced from Thermal Ceramics. Superwool 607 was designed to replace asbestos and is equivalent to asbestos for purposes of the insulating blocks made according to Example 3 of Gogek. Using Superwool 607 instead of asbestos would not materially alter the physical properties of the insulating block and would not affect the amounts of residual ionic species of sulfates, phosphates, nitrates, carbonates, and combinations thereof that are assessed in a leach test.

Ex. 1004, page 19, ¶ 48 (italics added).

E. Preliminary Response

In its Preliminary Response, Patent Owner addresses the use of Superwool 607 in place of asbestos fines:

[Petitioner] replaced Gogek’s asbestos with *Superwool 607* (using glass wool). Even if [Petitioner] was motivated by laudable safety goals of avoiding the dangers of asbestos sources—Superwool 607 is not asbestos fines. By [its] own admission, [Petitioner] did not follow Gogek’s [Example 3] teachings.

Paper 12, page 13.

F. Reply

In its Reply, Petitioner states:

On page 13, lines 14-17 of the Preliminary Response, Patent Owner argues that “JM [i.e., Petitioner,] replaced Gogek’s asbestos with *Superwool 607* (using glass wool)” and “[b]y their own admission, JM did not follow Gogek’s teachings.” The response is: JM could not use actual asbestos because, for obvious reasons, it is no longer available. *Superwool 607*, however, is equivalent to asbestos for purposes of the refractory insulation blocks made according to Example 3 of Gogek. As Dr. Hirsekorn fully explained in his declaration, asbestos is no longer commercially available in the United States due to its carcinogenic properties and, because of that, Dr. Hirsekorn was forced to use a surrogate for asbestos. **Exhibit 1004** at ¶ 48. Dr. Hirsekorn selected *Superwool 607* because it “was designed to replace asbestos and is equivalent to asbestos for purposes of the insulating blocks made according to Example 3 of Gogek.” *Id.* Dr. Hirsekorn further explained that “[u]sing *Superwool 607* instead of asbestos would not materially alter the physical properties of the insulating block and would not affect the amounts of residual ionic species of sulfates, phosphates, nitrates, carbonates, and combinations thereof that are assessed in a leach test.” *Id.* *In the Preliminary Response, Patent Owner did not challenge Dr. Hirsekorn’s analysis and determination that Superwool 607 is equivalent to asbestos for purposes of the Gogek process. Nor did Patent Owner dispute Dr. Hirsekorn’s determination that the use of Superwool 607 would not materially alter the properties of the resulting insulating block. In other words, Patent Owner’s argument regarding the use of Superwool 607 instead of asbestos is a red herring, as the substitution of*

Superwool 607 for asbestos has no bearing whatsoever on the determination of the inherent characteristics of insulating blocks made according to Example 3 of Gogek. *See id.*

Paper 14, page 8:5–page 9:8 (italics added).

G. Discussion

Dr. Hirsekorn states that Superwool 607 was substituted for “asbestos fines.” Ex. 1004 ¶ 48.

However, Dr. Hirsekorn does not explain what one skilled in the art would have understood “fines” to mean in the phrase “asbestos *fines*” as of the filing date (1 April 1958) or issue date (20 December 1960) of Gogek.

Dr. Hirsekorn states that “Superwool 607 was designed to replace asbestos and is equivalent to asbestos for purposes of the insulating blocks made according to Example 3 of Gogek.” No contemporaneous documentation was offered by Petitioner in support of Dr. Hirsekorn’s statement. *Id.* For example, no literature supporting Dr. Hirsekorn’s belief that Superwool 607 was *designed* to replace asbestos has been called to our attention. No literature is cited to show that Superwool 607 is considered by those skilled in the art to be “equivalent to asbestos” for making insulating blocks. Certainly nothing in Gogek confirms the “equivalency” alleged by Petitioner. Nor is there any testimony that Superwool 607 is “fines” having particles sizes consistent with the meaning of “fines” as described in the Gogek patent.

Dr. Hirsekorn also states an opinion that “[u]sing Superwool 607 instead of asbestos [fines] would not materially alter the physical properties

of the insulating block and would not affect the amounts of residual ionic species of sulfates, phosphates, nitrates, carbonates, and combinations thereof that are assessed in a leach test.” **Ex. 1004 ¶ 48** (last sentence). No explanation is given as to why Dr. Hirsekorn is able to state his opinion, particularly since Dr. Hirsekorn does not address the differences, if any, between Gogek’s “asbestos fines” and Superwool 607.

We have broad discretion to assign weight to be accorded witness testimony. 37 C.F.R. § 42.65(a) (“Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.”); *In re American Academy of Sci. Tech. Ctr.*, 367 F.3d 1359, 1368 (Fed. Cir. 2004); *Velander v. Garner*, 348 F.3d 1359, 1370–71 (Fed. Cir. 2003); *Bronshtein v. Roser*, 61 USPQ2d 1745, 1756 (BPAI 2002) (opinion testimony given little weight where underlying basis has not been provided). Section 42.62(a) is applicable at any stage, including during a “preliminary proceeding” which (1) begins with the filing of a petition and (2) ends with a written decision as to whether a trial will be instituted.

Nothing in the Federal Rules of Evidence, which are applicable to IPRs (37 C.F.R. § 42.62(a)), or Federal Circuit jurisprudence, requires a fact finder to credit unsupported assertions of an expert witness. *Rohm and Haas Co. v. Brotech Corp.*, 127 F.3d 1089, 1092 (Fed. Cir. 1997). *See also Ashland Oil, Inc. v. Delta Resins and Refractories, Inc.*, 776 F.2d 281, 294 (Fed. Cir. 1985) (lack of factual support for expert opinion may render the testimony of little probative value in a validity determination).

Petitioner seems to argue that, at least at this stage, we should not doubt Dr. Hirsekorn's statement. But, Petitioner's argument cannot justify a lack of credible underlying support for its expert's opinions. A lack of credible underlying support is no justification to put a patent owner to the expense of defending an *inter partes* review trial. 37 C.F.R. § 42.1(b) ("This part shall be construed to secure the just, speedy, and inexpensive resolution of every proceeding.").

We have not overlooked Petitioner's reply argument that "Patent Owner did not challenge Dr. Hirsekorn's analysis and determination that Superwool 607 is equivalent to asbestos for purposes of the Gogek process." Paper 14, pages 8–9. The answer is that Patent Owner had no reason to mount a detailed challenge in its Preliminary Response given the lack of underlying support for Dr. Hirsekorn's opinions. In IPR proceedings, it is up to the petitioner to make out its case; it is not the responsibility of a patent owner to challenge a case which has not been made. Petitioner's failure to include documentary support for Dr. Hirsekorn's opinions is a self-imposed hardship created by Petitioner.

For the reasons given, we find that Petitioner has not made out a case that, after a trial on the merits, there is a reasonable likelihood that it will prevail with respect to claim 1. 35 U.S.C. § 314(a).

In view of our basis for declining to institute an *inter partes* review trial, it is not necessary for us to address other responsive arguments addressed in Patent Owner's Preliminary Response.

H. Other Challenged Claims

In addition to claim 1, Petitioner challenges other claims, *viz.*, claims 2, 4–15, 23–26, 28–31, 35–41, 50, 57, 62, 64–67, and 70–72.

Since these claims depend from claim 1, and Petitioner has not made out its case with respect to claim 1, it follows that Petitioner likewise has not made out its case with respect to the remaining challenged claims.

IV. Order

Upon consideration of the Petition (Paper 1), the Preliminary Response (Paper 12), the Reply (Paper 14), and the evidence presently before us, and for the reasons given, it is

ORDERED that the Petition (Paper 1) is *denied*.

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