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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ORMCO CORPORATION
Inventors: Raymond F. Wong and Kevin Sean Corcoran

Appeal 2012-004375
Application 11/750,764
Technology Center 1700

Before FRED E. McKELVEY, RICHARD E. SCHAFER and
RICHARD TORCZON, *Administrative Patent Judges.*

McKELVEY, *Administrative Patent Judge.*

DECISION ON APPEAL

1 Statement of the case

2 Ormco Corporation (“applicant”), the real party in interest (Brief,
3 page 1), seeks review under 35 U.S.C. § 134(a) of a rejection dated
4 24 March 2011.

5 The application on appeal was filed in the USPTO on 18 May 2007.

6 The application has been published as U.S. Patent Application
7 Publication 2008/0286724 A1.

8 In support of prior art rejections, the Examiner relies on the following
9 evidence.

Appeal 2012-004375
Application 11/750,764

Allan et al. "Allan"	U.S. Patent 4,668,666	26 May 1987
Jia et al. "Jia 1"	U.S. Patent 5,684,103	04 Nov. 1997
Karmaker et al. "Karmaker"	U.S. Patent 6,362,250 B1	26 Mar. 2002
Nikutowski et al. "Nikutowski"	U.S. Patent 6,528,555 B1	04 Mar. 2003
Burgath et al. "Burgath"	U.S. Patent 6,670,436 B2	30 Dec. 2003
Ori et al. "Ori"	U.S. Patent Application Publication 2005/0123762 A1	09 June 2005
Jia et al. "Jia 2"	U.S. Patent Application Publication 2007/0197683 A1	23 Aug. 2007 PCT filed: 14 Oct. 2004

- 1 Applicant does not contest the prior art status of the Examiner's
- 2 evidence.
- 3 Applicant relies on the following evidence.

Jia Declaration	Declaration of Weitao Jia pursuant to 37 C.F.R. § 132	Dated: 25 Aug. 2010
Dreschsler Declaration	Declaration of Ulf Dreschsler, Ph.D. pursuant to 37 C.F.R. § 132	Dated: 25 Aug. 2010
PTO data	USPTO Patent Full-Text and Image Database, results of search in US Patent Collection db for: "ACLM/'\$-like"	Dated: 28 Feb. 2011
Quick Cure Bulletin	Quick Cure® Product Features, 4 pages, including Material Safety Data Sheet	January 2009
Light Bond	Reliance Orthodontic Products, Inc., Light cure sealant and bracket bonding system with our without fluoride, 3 pages, including Material Safety Data Sheet	January 2010
3M Unitek	Transbond™ XT light cure adhesive, 1 page	No date
Enlight	Enlight adhesive instructions, 1 page	No date

1 We mention the following additional evidence.

Angeletakis	U.S. Patent 6,020,395	01 Feb. 2000
Scholz et al. "Scholz"	European Patent Application EP 1 484 046 A1	12 Aug. 2004

2 We have jurisdiction under 35 U.S.C. § 134(a).

3 Claims on appeal

4 Claims 35-41, 43-54, 56, 59, 61-69 and 71-80 are on appeal. Brief,
5 page 2; Answer, page 3.

6 The rejections

7 In the Answer, the Examiner has maintained the following rejections:

8 Rejection A: Claims 35-41, 43-54, 56, 59, 61-68 and 71-74 under the
9 first paragraph of § 112 for failure to comply with the written description
10 requirement. Answer, pages 5-6.

11 Rejection B: Claims 63-68 and 75-80 under the second paragraph of
12 § 112 as being indefinite. Answer, pages 6-7.

13 Rejection C: Claims 35-40, 43-47, 50-54, 56, 61, 63-68, 71, 73-77
14 and 79 under § 102(b) as anticipated by or, alternatively as unpatentable
15 under § 103, over Karmaker. Answer, pages 7-9

16 Rejection D: Claims 35-41, 43-47, 50-54, 56, 59, 61-68 and 71-80 as
17 being unpatentable under § 103 over Karmaker and Allan. Answer,
18 page 9.

19 Rejection E: Claims 35-40, 43-47, 50-54, 56, 61, 63-68, 71, 73-77
20 and 79 as being unpatentable under § 103 over Jia 1 and Jia 2. Answer,
21 pages 9-10.

1 Rejection F: Claims 35-41, 43-47, 50-54, 56, 59, 61-68 and 71-80 as
2 being unpatentable over Jia 1, Jia 2 and Allan. Answer, page 11.

3 Rejection G: Claims 35-40, 44-47, 50-54, 56, 63-68, 71 and 73-77 as
4 being unpatentable under § 103 over (1) Jia 2 and (2) Ori *or* Nikutowski.
5 Answer, pages 11-12.

6 Rejection H: Claims 35-37, 40, 44-54, 63-66, 68, 71 and 73-77 as
7 unpatentable under § 103 over (1) Jia 2 and (2) Burgath *or* Nikutowski.
8 Answer, page 13.

9 Rejection I: Claims 35-41,44-47, 50-54, 56, 59, 63-68, 71 and 73-78
10 as unpatentable under § 103 over (1) Jia 2 and (2) Ori *or* Nikutowski and
11 (3) Allan. Answer, pages 13-14.

12 Rejection J: claims 35-40, 44, 50-54, 56, 63-68, 71 and 74-77 as
13 unpatentable under § 103 over Ori and Jia 2.

14 The following rejections have been withdrawn (Answer, page 4):

- 15 (1) Rejection K (Burgath and Jia 2),
16 (2) Rejection L (Burgath, Jia 2 and Nikutowski),
17 (3) Rejection M (Burgath and Karmaker) and
18 (4) Rejection N (Burgath, Karmaker and Allan).

19 The claims to which each rejection applies are visually apparent from
20 the following Table 1 (where x means claim is rejected):

Table 1										
Claim	Rejection									
	A	B	C	D	E	F	G	H	I	J
35	x		x	x	x	x	x	x	x	x
36	x		x	x	x	x	x	x	x	x
37	x		x	x	x	x	x	x	x	x
38	x		x	x	x	x	x		x	x
39	x		x	x	x	x	x		x	x
40	x		x	x	x	x	x	x	x	x
41	x			x		x			x	
43	x		x	x	x	x				
44	x		x	x	x	x	x	x	x	x
45	x		x	x	x	x	x	x	x	
46	x		x	x	x	x	x	x	x	
47	x		x	x	x	x	x	x	x	
48	x							x		
49	x							x		
50	x		x	x	x	x	x	x	x	x
51	x		x	x	x	x	x	x	x	x
52	x		x	x	x	x	x	x	x	x
53	x		x	x	x	x	x	x	x	x
54	x		x	x	x	x	x	x	x	x
56	x		x	x	x	x	x		x	x
59	x			x		x			x	
61	x		x	x	x	x				
62	x			x		x				
63	x	x	x	x	x	x	x	x	x	x
64	x	x	x	x	x	x	x	x	x	x
65	x	x	x	x	x	x	x	x	x	x
66	x	x	x	x	x	x	x	x	x	x
67	x	x	x	x	x	x	x		x	x
68	x	x	x	x	x	x	x	x	x	x
71	x		x	x	x	x	x	x	x	x
72	x			x		x				

73	x		x	x	x	x	x	x	x	
74	x		x	x	x	x	x	x	x	x
75		x	x	x	x	x	x	x	x	x
76		x	x	x	x	x	x	x	x	x
77		x	x	x	x	x	x	x	x	x
78		x		x		x			x	
79		x	x	x	x	x				
80		x		x		x				

1 Analysis

2 Rejection A

3 All the claims on appeal, except Claims 75-80, stand rejected under
 4 the first paragraph of § 112 for lack of a written description in the
 5 Specification as filed for the phrase “single paste”. Answer, pages 5-6.

6 The phrase “single paste” was added to Claim 35 on page 2 of an
 7 amendment dated 26 August 2010. According to applicant, the
 8 amendment was made to distinguish the invention defined by Claim 35
 9 from subject matter described by Jia 2. Brief, page 10.

10 The Examiner found that “‘single paste’ does not have support in the
 11 original specification . . .” Office Action (24 Mar. 2011), page 3. Applicant
 12 agrees that the explicit words “single paste” are not present in the
 13 Specification as filed. Brief, page 6, last paragraph. Once an Examiner
 14 cannot find the words in question, there is not much more the Examiner
 15 can do except ask applicant to point out where there is a written description
 16 in a specification to support those words. In this case, the absence of an
 17 explicit reference to “single paste” is *prima facie* evidence of lack of a

1 written description. Applicant therefore is under a burden to show that the
2 Specification, as filed, has a written description of “single paste”.

3 We are aware of potential post-issuance problems which can result
4 from claims with words not forming part of an original description in a
5 specification as filed. *See, e.g.,* Linn, *Perspectives on Becoming a*
6 *Successful Examiner*, 91 J. Pat. & Tm. Office Soc'y 418, 421 (June 2009):

7 In case after case before my court, the central debate revolves
8 around the meaning of claim terms that, for example, were
9 added during prosecution and do not appear anywhere in the
10 written description. For those cases, the meaning of the claim
11 limitation has to be inferred from other words, leaving the issue
12 open to unnecessary dispute and leading frequently to
13 protracted and costly litigation.

14 To avoid problems addressed by Judge Linn, every effort should be
15 made in the USPTO during prosecution to ensure that new words not
16 appearing in a specification as filed, but subsequently placed in claims, are
17 in fact clearly supported by a written description of those words.

18 We turn to applicant's arguments in support of its appeal of
19 Rejection A.

20 Applicant “submit[s] that no absolute requirement exists that light
21 curable orthodontic adhesives must be a single paste formulation in order
22 to work properly.” Brief, page 7. According to applicant, the Specification
23 describes two paste formulations: (1) an A/B formulation and (2) a “light-

1 cure” formulation. The Specification states ¶ [0072]:¹ “Orthodontic
2 adhesives typically are either self/chemical cure A/B types, or light cure
3 adhesives.” There is no detailed description of an A/B type adhesive. We
4 will assume for the purpose of deciding the appeal that an A/B type
5 adhesive is made up of an A component and a separate B component that
6 are mixed when an adhesive is needed. A similar well-known A/B-type
7 product would be a 2-component epoxy resin adhesive sold for many years
8 in hardware stores in the United States. Applicant follows up by pointing to
9 ¶ [0002] of the Specification which states: “[l]ight-curable adhesives are
10 most popular due to their single-component nature (*i.e.*, no mixing).”
11 Applicant then argues that a person of ordinary skill in the art would
12 properly understand that applicant’s light curable adhesives may be single
13 paste compositions. Brief, page 8. As a result, applicant indicates that by
14 inserting “single paste” into Claim 35 applicant has limited the claimed
15 invention to a light-curable adhesive to the exclusion of the A/B-type
16 adhesives. Brief, page 7, citing *In re Johnson*, 558 F.2d 1008, 1018 (CCPA
17 1977).

18 Applicant offered Rule 132 testimony by Weitao Jia. Mr. Jia has an
19 M.S. in Dental Materials Science. According to Mr. Jia, one skilled in the
20 art would understand “that the claimed ‘light-curable orthodontic adhesive’

¹ In the Brief, applicant refers to the originally filed application. Brief, page 3. We will do likewise even though amendments to the Specification and claims have been submitted and entered.

1 is a single past composition.” Jia Declaration, ¶ 10. Mr. Jia does not
2 address how (1) “single paste” is normally used, if at all, in the art or
3 (2) one skilled in the art would have interpreted “single paste” as of 18 May
4 2007.

5 Applicant also offered Rule 132 testimony of Ulf Drechsler.
6 Dr. Dreschler has a Ph.D. in organic chemistry and appears to be generally
7 knowledgeable in polymer materials. Dreschler Declaration, ¶ 3.

8 According to Dr. Dreschler:

9 as one skilled in the art of polymerizable dental compositions
10 having read the present specification, I understand that the
11 claimed “light-curable orthodontic adhesive” is a single paste
12 composition.”

13 Dreschler Declaration, ¶ 14. Dr. Dreschler does not address how
14 (1) “single paste” is normally used in the art or (2) one skilled in the art
15 would have interpreted “single paste” as of 18 May 2007.

16 Additional support for applicant’s position is said to be a description of
17 Compositions A and B in ¶¶ [0064] and [0069] of the Specification.

18 Lastly, applicant relies on “comparative commercial products
19 disclosed in the Specification.” Brief, page 8. Both Quick CureTM and Light
20 BondTM are said to be single past compositions made by Reliance
21 Orthodontic Products, Inc. Brief, page 9. Transbond[®] XT from 3M Unitek
22 Corporation and EnlightTM fromOrmco Corp. (applicant) are also said to be
23 single-paste compositions. *Id.*

1 Literature said to describe each of the commercial products has been
2 submitted. None of the literature has been shown to be available as of the
3 filing date of the application on appeal. Hence, the literature is not
4 evidence of the meaning of “single paste” as of applicant’s 18 May 2007
5 filing date. The Quick Cure Bulletin mentions “paste” but not “single paste”.
6 An accompanying Material Safety Data Sheet describes a “Quick Cure
7 Paste” but not a “single paste”. Light Bond describes a “paste” but not a
8 “single paste”. An accompanying Material Safety Data Sheet describes a
9 “Light-cure Resin Bond”. 3M Unitek literature describes Transbond™ XT
10 as a “Light Cure Adhesive”. Enlight literature describes what applicant
11 says is “Enlight” as a paste—not a single paste.

12 On the record before us, we do not know what “single paste” would
13 have meant to one skilled in the art as of 18 May 2007. While an A/B-type
14 product must be mixed, once mixed one obtains a mixture which would
15 appear to then be a single paste to be used as an adhesive.

16 Applicant did not elect to amend Claim 35 by reciting a “single-
17 component light-curable orthodontic adhesive” or a “single-component
18 light-curable orthodontic adhesive requiring no mixing”. See Specification
19 ¶0002. Either limitation would appear to be described in the Specification,
20 as filed and perhaps would serve to accomplish applicant’s stated objective

1 in distinguishing (1) 2-component systems said to be described by Jia 2
2 from (2) the subject matter of Claim 35.²

3 Since we do not know how skilled in the art would interpret “single
4 paste” and because a mixture of the A-component and B-component of an
5 A/B-type adhesive would appear to be a single paste once A and B are
6 mixed, we find that applicant’s intended meaning for “single paste” is not
7 supported by a written description in the Specification as filed.

8 Rejection A is *affirmed*.

9 Rejection B

10 Claims 75-80 stand rejected under the second paragraph of 35
11 U.S.C. § 112 as being indefinite. Answer, pages 6-7. The term causing
12 the indefiniteness is “crusty-like” which appears in Claim 75 (“wherein the
13 light-curable orthodontic adhesive will not harden to a crust-like consistency
14 for at least about 70 seconds . . .”). *Id.*

15 The word “like” gave the Examiner pause. *Ex parte Remark*,
16 15 USPQ2d 1498, 1500 (BPAI 1990) (“and the like” held to be indefinite
17 within the meaning of the second paragraph of 35 U.S.C. § 112) and
18 *Ex parte Caldwell*, 1906 C.D. 58 (Comm’r Pat. 1906), explain why the
19 Examiner had a problem with “like”. We also have a problem with “crusty”.

20 The Examiner is said to have indicated in an interview that “crusty-
21 like” is subjective. Brief, page 13. On the record before us, we agree with

² We voice no opinion on whether the mentioned limitations would in fact distinguish Claim 35 from Jia 2.

1 the Examiner that the term “crusty-like” can be viewed as “subjective” as
2 opposed to “objective.”

3 Dr. Dreschler testified that adhesives were tested. Dreschler
4 Declaration, ¶ 11. According to Dr. Dreschler, during tests a change
5 occurred from (1) what extruded from a syringe (which we take to be paste-
6 like) to (2) something with a surface which Dr. Breschler characterizes as
7 “fracture-like.” The physical change is said to be “objective.” Dreschler
8 Declaration, ¶ 13.

9 However, Dr. Dreschler’s Rule 132 testimony should be considered
10 vis-à-vis the Specification, which states the following ¶ 0045 (italics added):

11 For comparative purposes, the working time was noted as the
12 point at which the paste-like characteristic of the adhesive
13 sufficiently hardened to a crusty-like consistency, rounded to
14 the nearest 5-second interval. *This test is industry-specific for*
15 *the dental/orthodontic industry*, not one universally recognized,
16 and closely represents the actual circumstances experienced in
17 the clinical environment.

18 Our understanding of what is said in the Specification is that there
19 may be an industry-specific test standard for determining when a paste
20 becomes “crusty-like”. Neither Dr. Dreschler nor the Specification refers to
21 any published standard industry-specific test. No published standard has
22 been called to our attention. A published standard would be relevant to
23 resolution of the rejection before us and, if presented to the PTO, may

1 provide a sufficient description of the test and how those skilled in the art
2 understand the test functions.

3 The Specification also mentions a “brittle-like fracture result.” ¶ 0046.
4 We are not told where Dr. Dreschler addresses the language “brittle-like”
5 nor how “brittle-like” relates to the industry test.

6 Applicant relies on a search of the PTO data base for “-like” language
7 used in patents. Brief, page 13. There are many patents which use “-like”
8 language. However, each case is decided on the basis of its own facts.
9 Applicant has not called our attention to any patent in the dental field using
10 the language crusty-like. It is true that applicant mentions U.S. Patent
11 6,500,269 which is said to involve a method of cleaning gas turbine engine
12 components have crust-like debris. Assuming that those in the gas turbine
13 engine cleaning art would understand “crust-like” does not say much about
14 the dental field.

15 Many of post-patent issuance problems involving indefinite language
16 raise the same concerns addressed by Judge Linn. The preferred practice
17 is to clear up ambiguities during prosecution. *In re Zletz*, 893 F.2d 319,
18 322 (Fed. Cir. 1989) (an essential purpose of patent examination is to
19 fashion claims that are precise, clear, correct, and unambiguous; only in
20 this way can uncertainties of claim scope be removed, as much as
21 possible, during the administrative process). *See also Halliburton Energy*
22 *Svs., Inc. v. M-I LLC*, 514 F.3d 1244, 1255 (Fed. Cir. 2008).

23 For the reasons given, we believe that is has not been shown on this
24 record that the Examiner erred in holding “crusty-like” to be indefinite. We

1 would not foreclose a contrary result on a record containing a copy of an
2 industry test standard.

3 Rejection B is *affirmed*.

4 Rejection C

5 Claim 35 is an independent claim. In presenting the appeal as to
6 Rejection C, applicant addresses independent Claims 35, 63 and 75.
7 Applicant does not separately address claims which depend from Claims
8 35, 63, and 75. Accordingly, the appeal as to Rejection C will be decided
9 on the basis of Claims 35, 63 and 75. 37 C.F.R. § 41.37(c)(1)(vii) (2011).

10 *Claim 35*

11 Claim 35, which we reproduce from the Claim Appendix of the Brief
12 (page 33), reads:

13 A single paste light-curable orthodontic adhesive
14 comprising:

- 15 [1] a curable resin monomer component;
16 [2] a quaternary curing initiator system comprising:
17 [2.1] at least two sensitizers,
18 [2.2] an electron donor, and
19 [2.3] an azo compound; and
20 [3] filler.

21 Claim 35 stands rejected as anticipated by Karmaker, alternatively as
22 unpatentable under § 103 over Karmaker. Answer, pages 7-9. In
23 addressing Rejection C, we assume “single paste” means what applicant
24 says it means.

1 With reference to a procedure outlined in *Ex parte Braeken*,
2 54 USPQ2d 1110, 1112-13 (BPAI 1999), elements [1] through [3] of Claim
3 35 are described by Karmaker as follows:

4 A single paste light-curable orthodontic adhesive

5 { col. 6:6 } comprising:

6 [1] a curable resin monomer component { col. 9:1-2
7 and 11-12, ethoxylated bisphenol A dimethacrylate };

8 [2] a quaternary curing initiator system comprising:

9 [2.1] at least two sensitizers { (1) col. 9:18,
10 camphorquinone, and (2) col. 9:19-20, 2,4,6-trimethylbenzoyl-
11 diphenylphosphine oxide },

12 [2.2] an electron donor { col. 9:21-22,
13 diethylaminoethyl methacrylate }, and

14 [2.3] an azo compound { col. 9:22-23, 1,1'-azobis
15 (cyanocyclohexane) }; and

16 [3] filler { col. 9:58 to col. 10:50 }.

17 The arguments in support of the appeal appear on pages 15-17 of the
18 Brief.

19 An argument in the second full paragraph on page 15 is directed to a
20 procedural matter not related to the merits of the appeal. We therefore do
21 not need to consider the argument.

22 A statement in the third full paragraph on page 15 states what
23 applicant believes the Examiner found Karmaker to teach.

1 An argument in the first full paragraph on page 16 maintains that the
2 combination of recited components produces “an unexpected synergy
3 when combined with the cited quaternary curing system to yield a[n]
4 orthodontic adhesive composition that attains high bonding integrity by
5 providing a long working time and quick, high strength cure.” Unexpected
6 results are not relevant to an anticipation rejection. To the extent that the
7 rejection is based on § 103, at least two observations can be made. *First*,
8 Claim 35 makes no reference to “long working time” or any “high strength”
9 property.³ *Second*, the paragraphs of the Specification to which applicant
10 makes reference in the Brief are statements of what applicant believes the
11 invention achieves, but do not constitute proof that any W/C ratio is in fact
12 obtained. *In re Klosak*, 455 F.2d 1077, 1080 (CCPA 1972) (in order to rely
13 on unexpected results, an applicant must establish that the unexpected
14 results actually are obtained by the invention).

15 In the second full paragraph on page 16, applicant further discusses
16 subject matter described by Karmaker. Applicant then maintains that
17 “Karmaker does not provide any motivation to combine light sensitive
18 compounds, such as camphorquione and bis(2,4,6-timethylbenzoyl)-

³ According to applicant, “the W/C ratio of compositions of the invention are at least 10 and may range from about 14-20, or higher.” Specification, page 6 ¶ 0033. W = working time (Specification, ¶ 0003). C = curing time (*id.* at ¶ 0004). We do not address an issue of whether claims without the W/C ratio of at least 10 fail to claim what applicant regards as the invention. See 35 U.S.C. § 112, second paragraph. Nothing in this opinion should be construed as precluding consideration of the issue in the event of further prosecution.

1 phenolphosphine oxide and free-radical polymerization initiators, such as
2 azo compounds”. “Motivation” is not an issue relevant to anticipation. To
3 the extent the rejection is based on § 103, Karmaker describes an
4 embodiment including a combination of the compounds and initiator.
5 Col. 8:62 to col. 9:42. The embodiment described by Karmaker would
6 provide one more than enough reason to use the compounds and initiator
7 in combination.

8 In the last paragraph on page 16, applicant agrees that Karmaker
9 describes tertiary amine accelerators. However, according to counsel for
10 applicant, in visible light curable compositions the tertiary amines are
11 generally acrylate derivatives, such as dimethylaminoethyl methacrylate. In
12 self-curing compositions, the tertiary amines are said to be generally
13 aromatic tertiary amines. Applicant then goes on to say that Karmaker
14 does not provide any motivation to use octyldimethylaminobenzoate in
15 combination with light sensitive compounds and initiators. It may be true
16 that Karmaker does not mention octyldimethylaminobenzoate; but neither
17 does Claim 35.

18 *Claims 63 and 75*

19 In the last sentence of the last full paragraph on page 16, applicant
20 states that Karmaker does not teach or suggest that its combination would
21 provide “W/C ratios recited in [C]laims 63 and 75.”

22 Claim 63 calls for a W/C ratio of at least 10.

23 In Claim 75, we understand W to “at least about 70 seconds[.]”

1 C would appear to be “5 seconds or less” with hardening occurring
2 within 60 seconds after curing.

3 Based on our understanding of Claim 75, we further understand that
4 applicant may be claiming a W/C ratio of $70/5 = 14$ which is > 10 .⁴

5 The Examiner reasoned that because Karmaker describes use of the
6 same elements as those set out in Claim 35, the W/C ratios do not
7 distinguish the subject matter of Claim 35 vis-à-vis Karmaker. Answer,
8 page 8.

9 The PTO has no practical means to test compositions. *In re Best*,
10 562 F.2d 1252, 1255 (CCPA 1977) (PTO has no ability to manufacture
11 products or to obtain and compare prior art products); *Charles Pfizer & Co.*
12 *v. FTC*, 401 F.2d 574, 579 (6th Cir. 1968) (the PTO does not have testing
13 facilities of its own and therefore must rely upon information furnished by
14 applicants and their attorneys).

15 Applicant has not satisfactorily established the W/C ratio of the
16 embodiments described in cols. 9-10 of Karmaker vis-à-vis those claimed
17 by applicant.

18 Counsel for applicant, responding to the Examiner’s reasoning, states
19 that “prior to the submission of this Brief, . . . [applicant] tested
20 compositions that were prepared in accord with Karmaker.” See first full
21 paragraph on page 17 of the Brief.

⁴ A discussion in the first full paragraph on page 23 of the Brief relating to Rejection E appears to be consistent with our understanding.

1 According to counsel, the Karmaker compositions had a W/C ratio
2 of 2.8.

3 The tests are not reported in any Rule 132 testimony and no
4 reference is made to record which would support applicant's conclusions.

5 A statement of counsel is not evidence. *In re Walters*, 168 F.2d 79,
6 80 (CCPA 1948).

7 Like the Examiner (Answer, page 19), we decline to credit an
8 undocumented test.

9 We have reviewed Rejection C solely on the basis of the arguments
10 presented in the Brief. 37 C.F.R § 41.37(c)(1)(vii) (2011) ("The contentions
11 of the appellant with respect to each ground of rejection . . . [and] the basis
12 therefor" are to be presented in the Brief). None of the arguments
13 presented are persuasive.

14 Rejection C is *affirmed*.

15 Rejection D

16 The claims involved in Rejection C as well as Claims 41, 59, 62, 72,
17 78 and 80 stand rejected as being unpatentable under § 103 over
18 Karmaker and Allan. Answer, page 9.

19 In presenting the appeal, applicant does not single out any
20 particular claim for separate consideration. Accordingly, we elect to
21 decide the appeal as to Rejection D on the basis of Claim 41. 37 C.F.R.
22 § 41.37(c)(1)(vii).

23 Claim 41 depends from Claim 40 which depends from Claim 35
24 (reproduced above).

1 Claim 40 reads:

2 The orthodontic adhesive of claim 35, wherein said
3 electron donor is a tertiary amine compound.

4 The tertiary amine compound described by Karmaker is
5 diethylaminoethyl methacrylate. Col. 9:21-22.

6 Claim 41 reads:

7 The orthodontic adhesive of claim 40, wherein said
8 tertiary amine is octyldimethylaminobenzoate.

9 The Examiner recognized that Karmaker does not describe the
10 use of the tertiary amine octyldimethylaminobenzoate. Answer, page 9.
11 However, Karmaker teaches that it is “preferred to employ an ultraviolet
12 [light] [UV] absorber [*i.e.*, stabilizer] in these resinous adhesives . . . to
13 avoid discoloration of the resin” Col. 6:5-10.

14 To overcome the difference, the Examiner turned to Allan.

15 Allan teaches that “octyldimethyl-aminobenzoate” is a known UV
16 absorber. Col. 24:62.

17 Based on the prior art, the Examiner reasoned that one having skill in
18 the art would have found it obvious to use the Allan UV absorber as the UV
19 absorber taught by Karmaker. Applicant is using a known UV absorber for
20 its intended purpose—an indication that the use would have been obvious.
21 *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007).

22 Applicant’s argument in support of the appeal as to Rejection D
23 appears on pages 17-19 of the Brief.

1 In the last full paragraph on page 17 of the Brief, applicant
2 summarizes what the Examiner did. In that same paragraph, applicant
3 suggests that Allan is non-analogous art and therefore cannot be combined
4 with Karmaker.

5 In the paragraph bridging pages 17-18, applicant notes that an
6 analogous art analysis takes into consideration “two separate tests”:
7 (1) applicant’s field of endeavor and (2) the problem addressed by
8 applicant.

9 In the first full paragraph on page 18, applicant maintains that Allan is
10 not in applicant’s field of endeavor. Applicant’s field is said to be
11 orthodontic adhesives, whereas Allan’s field is insecticides. The problem
12 said be addressed by applicant is overcoming “shortcomings of adhesives
13 that suffer from short working times and/or extended curing times.” *Id.*

14 Applicant view of non-analogous art is too narrow. Attention is
15 directed to *Ex parte Talkowski*, Appeal 2012-002290 (PTAB June 22, 2013)
16 (informative opinion) explaining that analogous art is not necessarily limited
17 to “two separate tests.”

18 Also important is the objective reach of Claim 41. *KSR*, 550 U.S. at
19 419-20, where the Court observed that (*italics added*):

20 In determining whether the subject matter of a . . .
21 claim is obvious, neither the particular motivation
22 nor the avowed purpose of the patentee controls.
23 What matters is the objective reach of the claim. If
24 the claim extends to what is obvious, it is . . .

1 [unpatentable] under § 103. One of the ways in
2 which a patent's subject matter can be proved
3 obvious is by noting that there existed at the time of
4 the invention a known problem for which there was
5 an obvious solution *encompassed by the patent's*
6 *claims.*

7 At the time applicant made its invention, Karmaker had determined
8 that use of a UV absorber was desirable in connection with its adhesive
9 resins. Allan describes applicant's compound and identifies the compound
10 as a UV absorber. The combination of Karmaker's resinous adhesive and
11 applicant's known UV absorber, as shown by Allan, is encompassed by
12 Claim 41. In short, this is a variant on the "same-problem" analysis, where
13 the problem being solved is a problem identified in a reference rather than
14 a problem being solved by applicant. Since issuance in a patent of
15 Claim 41 would preclude use of an obvious composition made up of
16 Karmaker's adhesive with Allan's UV absorber, the claim is not patentable.
17 *In re Muchmore*, 433 F.2d 824, 826 (CCPA 1970) (claims which include
18 obvious subject matter are not patentable under § 103).

19 The problem facing Karmaker was stabilization of its resinous
20 adhesives with a UV absorber. Allan teaches that octyldimethylamino-

1 benzoate is a known UV absorber.⁵ When viewed from a prior art
2 perspective, the analogous art analysis is similar to one discussed in
3 *Graham v. John Deere Co.*, 383 U.S. 1, 35 (1966). The argument in
4 *Graham* was that a Livingston patent "is not in the pertinent prior art
5 because it relates to liquid containers having spouts rather than pump
6 sprayers." The Court's response was that the problem confronting Scoggin
7 and the insecticide industry were not insecticide problems: they were
8 mechanical closure problems. Karmaker's stabilization problem was a UV
9 stabilization problem.

10 Rejection D is *affirmed*.

11 Claims 48-49

12 Claim 46-49 are newly rejected as being unpatentable under § 103(a)
13 over Karmaker, Nikutowski and Burgath.

14 Claims 46-48 read:

15 46. The orthodontic adhesive of claim 35, further
16 comprising a colorant.

17 47. The orthodontic adhesive of claim 46, wherein said
18 colorant includes at least one reversible dye.

19 48. The orthodontic adhesive of claim 47, wherein said
20 reversible dye is thermochromatic.

⁵ Applicant uses octyldimethylaminobenzoate as an electron donor. We note that such a use is known in the art. See Ageletakis, col. 3:44 and col. 4:59 and Scholz, page 4:24 and page 6:17

1 *Cf. Beloit Corp. v. Valmet Oy*, 742 F.2d 1421 (Fed. Cir. 1984) (ITC having
2 decided a dispositive issue, there was no need for the Commission to
3 decide other issues decided by the presiding officer)

4 Decision

5 Upon consideration of the appeal, and for the reasons given herein, it
6 is

7 ORDERED that Rejection A (written description) is *affirmed*.

8 FURTHER ORDERED that Rejection B (indefiniteness) is
9 *affirmed*.

10 FURTHER ORDERED that Rejection C (anticipation and
11 obviousness--Karmaker) is *affirmed*.

12 FURTHER ORDERED that Rejection D (obviousness—
13 Karmaker and Allan to which we have added Angeletakis and Scholz) is
14 *affirmed*.

15 FURTHER ORDERED that we do not reach or consider on the
16 merits Rejections E through J.

17 FURTHER ORDERED that since we have expanded on the
18 rationale used by the Examiner and have referred to additional prior art, our
19 affirmances of Rejections A through D are designated as a new rejections.
20 37 C.F.R. § 41.50(b).

21 FURTHER ORDERED that our decision is not a final agency
22 action.

