THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 31

UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

Ex parte NILES R. ROSENQUIST and ANGELIKA H. CLARK

_____

Appeal No. 95-4300
Application No. 08/165,565[1]

_____

ON BRIEF

_____

Before WINTERS, GRON, and ROBINSON, Administrative Patent Judges.

ROBINSON, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-13 and 15-17. Independent claims 1 and 15 are illustrative of the subject matter on appeal and are appended to this decision.

[1] Application for patent filed December 10, 1993. According to appellants, the application is a continuation of Application 07/957,495, filed October 7, 1992, now abandoned.

The references relied upon by the examiner are:[2]

Kelly et al. (Kelly)	5,204,400	April 20, 1993
Lupinski et al. (Lupinski)	5,153,251	Oct. 6, 1992
Curry	4,923,933	May 8, 1990
Mark ('245)	4,104,245	Aug. 1, 1978
Mark ('366)	3,940,366	Feb. 24, 1976

GROUNDS OF REJECTION

Claims 1-13 and 15-17 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Curry, and Mark ('245) or Mark ('366).

Claims 1-13 and 15-17 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Curry, Mark ('245) or Mark ('366), Lupinski, and Kelly.

We affirm-in-part.

[2] The Examiner's Answer also lists U.S. Patent 5,032,639 to Buchert. However, the rejection under 35 U.S.C. § 103 which relied upon Buchert was withdrawn in Paper No. 26, mailed July 13, 1995. We find no other reliance on this reference.

BACKGROUND

At pages 1-2 of the specification, applicants describe the invention as relating to a flame resistant thermoplastic composition comprising a blend of aromatic brominated polycarbonate, polyester carbonate and silicone polyimide which may optionally comprise an unsubstituted aromatic polycarbonate. Applicants describe improvements in flame resistance, drippage and heat release rate obtained by adding a metal salt of a monomeric or polymeric halogenated aromatic sulfonic acid, a filler or pigment to the composition.

GROUPING OF THE CLAIMS

At page 3 of the Appeal Brief (Brief), appellants indicate that all claims stand or fall together. Therefore, we will limit our consideration of the rejections in this appeal as they apply to claim 1, as representative of claims 2-13 and 16-17. While appellants have not separately argued claim 15 in either the Brief or the Reply Brief, we note that the claim was amended June 26, 1995, at the time of filing of the Reply Brief, in response to a new ground of rejection and other comments made by the examiner in the Examiner's Answer of April 26, 1995 (Answer). Claim 15, now before us on appeal differs from the claim 15 pending at the time of appellants' statement concerning the grouping of the claims on appeal. We elect to separately consider claim 15.

DISCUSSION:

The Claims

Claim 1 is directed to a composition comprising an aromatic brominated polycarbonate resin, a polyester carbonate resin and a silicone-polyimide resin. The composition may additionally contain an aromatic polycarbonate having a molecular weight of about 40,000 to about 90,000. In addition, the composition is further comprised of a metal salt of a monomeric or polymeric halogenated aromatic sulfonic acid and a filler or a pigment selected from the group consisting of treated clay, talc, titanium dioxide, glass particulate, glass fibers, treated silica and carbon black. Claim 15 differs from claim 1 in requiring the presence of about 10 parts of an aromatic polycarbonate (Component D) and 0.1 to 5.0 parts by weight of titanium dioxide or carbon black.

The rejections under 35 U.S.C. § 103

Claims 1-13 and 15-17 stand rejected under 35 U.S.C. § 103 as unpatentable over the combination of Curry, and alternatively Mark '245 or Mark '366.

Claims 1-13 and 15-17 stand rejected under 35 U.S.C. § 103 as unpatentable over the combination of Curry, alternatively Mark '245 or Mark '366 in further view of Lupinski or Kelly.

We have chosen to group the grounds of rejection before us under

35 U.S.C. § 103, since each rejection over Curry and the individual Mark patents alone is subsumed by the comprehensive rejection over the combination of Curry, Mark, Lupinski and Kelly. With regard to the newly cited Mark ('366) patent, the examiner states (Answer, page 8); "The new rejection based on Curry in view of Mark '366 avoids the transparency issue." The examiner has relied on both of the Mark patents for the same disclosure; compare page 3 and page 5 of the Answer. We are not persuaded that the question of the non-opaque nature of the composition of Mark '245 is a relevant factor. The claims before us contain no limitation relating to the opaque or non-opaque nature of the claimed composition. We therefore address our remarks only to Mark '245 as representative of both patents.

The rejection of Claims 1-13 and 16-17:

In describing his reliance on Curry, the examiner states (Answer, page 3):

> Curry discloses blends of brominated PC, polyester-carbonate and silicone-polyimide. Fillers, pigments and flame retardants (col. 14, line 7) may be added.

The examiner acknowledges (Answer, page 3) that Curry does not name any particular flame retardants, but cites Mark '245, and subsequently Mark '366, as teaching flame retardants such as sodium trichlorobenzene sulfonate as being useful in polycarbonate, brominated PC and polyester-carbonate compositions.

In describing the disclosure of Lupinski and Kelly the examiner states (Answer,

page 4):

> Lupinski shows treated carbon black, clay and titanium dioxide lower heat release of polycarbonate (example 1). Kelly shows (comp. ex. 11 vs. comp. ex. 12) that titanium dioxide lowers heat release.

It is the initial burden of the patent examiner to establish that claims presented in an application for patent are unpatentable. In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). On the record before us, we conclude that the examiner has made out a prima facie case of unpatentability over the combination of the cited patents. Curry discloses a combination of resins which correspond to components A, B, and C of the claimed composition. Further, Curry suggests that it is appropriate to include, in this compositions, other additives including fillers, pigments and flame retardants. The secondary references disclose, as old for use in similar compositions, the use of aromatic sulfonic acid (Mark '245 or 'Mark ';366) as a flame retardant, the use of treated clay or carbon black (Lupinski - col. 1, line 35) or the use of titanium dioxide or glass fibers (Kelly col. 5, lines 14-16 and col. 22, lines 41-43). Each of the secondary references provide a clear suggestion or reason for incorporating the described additives into such a composition. Where, as here, a prima facie case of obviousness has been

established, the burden of going forward shifts to the appellant. In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984), In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147, (CCPA 1976).

In rebuttal, appellants initially argue that the Curry patent fails to teach that fillers and pigments in general lower the heat release of compositions or reduce drippage. (Brief, p. 3)

Appellants next note (Brief, page 4):

> While Curry may teach the first three components of the present invention, there is no teaching of components D, E and F. The teaching at Column 14, line 7, cited by the Examiner does not relate to components D, E, or F but rather is a general laundry list of known additives for known properties. Curry has no appreciation for the surprising results achieved in the present inventive combination of components A-F; there is no recognition of the synergy exhibited when components E and F are present in the composition at the claimed levels.

Appellants conclude (Brief, page 5):

> Since neither Curry nor Mark '245 contain any teaching of a filler or pigment effective to lower the heat release of the claimed composition, unless such an unsubstantiated position, as has been taken by the Examiner, is accepted as fact, there is no basis for this ground of rejection.

In addressing the Mark reference, appellants note (Brief, page 6):

> Mark contains no teaching that the alkali metal salts and alkali earth metal salts of substituted aromatic sulfonic acid and mixtures thereof would reduce drippage in a blend of polymers containing fillers or pigments nor any inkling that such a result would be possible.

Yet, the patent clearly intends the incorporation of the disclosed flame retardant as well as other additives (See col. 4, lines 35-39) into this very type of composition. While the examiner has added the Mark '366 reference to avoid the transparency question raised by

appellants, we read the patents as both providing the same suggestion to the use of the sulfonic acid salts as flame retardants in the type of composition claimed.

In discussing Lupinski, appellants argue (Brief, page 10) "Lupinski does not teach that 'treated carbon black, clay and titanium dioxide lower heat release of polycarbonate.'" As to Kelly, appellants acknowledge that the reference discloses numerous examples containing titanium dioxide (Brief, page 11), yet argues (Brief, par.bridging pages 11 and 12) "Kelly . . . would not lead the skilled artisan to use this filler in a different polymer system employing different additives to single out titanium dioxide as a (sic) additive to give a composition with reduced heat release and reduced drippage."

While we find ourselves in agreement with the appellant that the Mark references, Lupinski and Kelly do not clearly describe the addition of ingredients taught by each as likely to result in a lower heat release rate or reduce drippage, we conclude that the examiner has established that it would have been within the purview of those skilled in this art, at the time of the invention, to incorporate the designated ingredients into a polycarbonate composition to serve as flame retardants, fillers and pigments.

We do not find appellant's arguments persuasive of error as to the examiner's prima facie case of obviousness. That appellants may advocate the use of these ingredients in a polycarbonate composition for a different reason, does not distract from the prima facie case established by the examiner. Although the motivation to combine here differs from that of the applicants, the motivation in the prior art to combine the references

does not have to be identical to that of the applicants to establish obviousness. In re Kemps, 97 F.3d 1427, 1430, 40 USPQ2d 1309, 1311 (Fed. Cir. 1996).

In addition to arguments, appellants urge (Brief, pages 6-7) that the data in the specification, particularly Tables 1 and 2 at pages 15-16, demonstrate surprising differences in properties between compositions containing all 5 of the components when compared with compositions which contain only 4 of the 5. We find it sufficient to note that the showing is not commensurate in scope with the claimed subject matter. As the examiner has noted (Answer, page 7):

> The claims do not require the presence of component d, do not require titanium dioxide/carbon black, do not require high amounts of STB and claim a wide variety of flame retardants.

The showing of the specification is not commensurate in scope with the claims and is therefore insufficient to overcome the prima facie case of obviousness. In re Grasselli, 713 F.2d 731, 743, 218 USPQ 769, 778-779 (Fed. Cir. 1983) ; In re Clemens, 622 F.2d 1029, 1035, 206 USPQ 289, 296 (CCPA 1980).

We conclude that, with regard to claims 1-13 and 16-17, the examiner has established that it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the composition of Curry in such a manner as to arrive at the claimed

composition. Appellants have failed to overcome the case against patentability, either by arguments or evidence. The rejection of claims 1-13 and 16-17 is affirmed.

The rejection of Claim 15:

In explaining the rejection of amended Claim 15, the examiner states (page 1 of Paper No. 26):

> In regards to these other rejections of claim 15, Cury's(sic) brominated polycarbonate simultaneously meets (A) and (D) or appellant's claims. Curry's brominated polycarbonate has a molecular weight of 20,000-80,000 (col. 1, line 53). Curry's example 4 for instance can be considered to have 60 parts polyestercarbonate, 6 parts silicon-imide, 35 parts brominated polycarbonate and 5 parts of appellant's polycarbonate (D) by arbitrarily dividing up the 40 parts of brominated polycarbonate.

It is axiomatic that, in proceedings before the PTO, claims in an application are to be given their broadest reasonable interpretation consistent with the specification and that claims language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art. In re Sneed, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (CAFC 1983). We do not find the examiner's interpretation of the term "polycarbonate" as used in defining to component "(D)" of claim 15 as reasonable in light of the specification and as one of ordinary skill would read the noted claim language. At page 8 of the specification applicants describe the polycarbonate component (D) stating: "Preferably, the compositions of this invention further contain (D) an aromatic unsubstituted polycarbonate". (Emphasis added). The specification continues on pages 8-9 to describe the preparation of

suitable polycarbonates representative of the component (D). Nothing reasonable suggests that the polycarbonate component of the claim should be read so broadly as to encompass an aromatic brominated polycarbonate.

The examiner has provided no other information which would suggest the incorporation of a polycarbonate, within the meaning of this application, as an additional component to the claimed composition as claimed in claim 15. We therefore conclude, that with respect to the subject matter of claim 15, the examiner has failed to establish that it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the composition of Curry in such a manner as to arrive at the claimed composition. Therefore the rejection of claim 15 under 35 U.S.C. § 103 is reversed.

SUMMARY

The rejections under 35 U.S.C. § 103 of claims 1-13 and 16-17 is affirmed. The rejection under 35 U.S.C. § 103 of claim 15 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

SHERMAN D. WINTERS)

Administrative Patent Judge	)	
	)	
	)	
	)	
TEDDY S. GRON	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
DOUGLAS W. ROBINSON	)	
Administrative Patent Judge	)	

John L. Young
GE Plastics
One Plastics Avenue
Pittsfield, MA 01201

DWR/ki

APPENDIX

1. An aromatic brominated polycarbonate/polyester carbonate/silicone polyimide composition having improved flame resistance and reduced drippage and heat release rate, comprising by weight:

(A) from about 20 to about 77 parts of an aromatic brominated polycarbonate resin;

(B) from about 20 to about 77 parts of a polyester carbonate resin;

(C) from about 0.5 to about 10 parts of a silicone-polyimide resin;

(D) from about 0 to about 25 parts of an aromatic polycarbonate having a molecular weight of from about 40,000 to about 90,000; the sum of (A)-(D) being 100 parts by weight;

(E) from about 0.05 to about 2.0 parts by weight per 100 parts by weight (A)-(D) of a metal salt of a monomeric or polymeric halogenated aromatic sulfonic acid or mixtures thereof, wherein the metal salt is selected from the group consisting of alkali metal salts, alkaline earth metal salts, and mixtures of the metal salts; and

(F) from about 0.1 to about 5 parts by weight of filler or a pigment effective to lower the heat release of the composition selected from the group consisting of treated clays, talc, titanium dioxide, glass particulates, glass fibers, treated silica and carbon black, the parts by weight of (F) being per 100 parts by weight of the combined parts by weight of (A)-(D).

15. An aromatic brominated polycarbonate/polyester carbonate/silicone polyimide composition having improved flame resistance and reduced drippage and heat release rate, consisting essentially of:

(A) from about 20 to about 77 parts by weight of an aromatic brominated polycarbonate resin;

(B) from about 20 to about 77 parts by weight of a polyester carbonate resin;

(C) from about 0.5 to about 10 parts by weight of a silicone-polyimide resin;

(D) about 10 parts of an aromatic polycarbonate having a molecular weight of from about 40,000 to about 90,000; the sum of (A)-(D) being 100 parts by weight;

(E) from about 0.08 to about 0.4 parts of the sodium salt of 2,3,5-trichlorobenzene sulfonic acid; and

(F) from about 0.1 to about 5.0 parts by weight of titanium dioxide or carbon black.