

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RUTH A. MONTAG, GEORGE A. CORBIN
and DAVID W. GARRETT

Appeal No. 1996-3729
Application No. 08/253,839

ON BRIEF

Before CAROFF, PAK, and ROBINSON, Administrative Patent Judges.

CAROFF, Administrative Patent Judge.

DECISION ON APPEAL

This decision on appeal relates to the final rejection of all the claims pending in the involved application, claims 19-20 and 33-38. Claims 19 and 33 are independent claims. Appellants appeal only as to dependent claims 20 and 34-38

Appeal No. 1996-3729
Application No. 08/253,839

which, therefore, are the only claims before us for consideration.

The claims on appeal are directed to a filled polyamide composition including a polyphthalamide resin; a modified block copolymer, i.e. succinic anhydride-functionalized block copolymer; and a particulate filler or structural fiber.

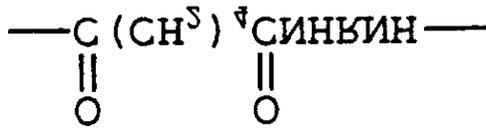
Appellants acknowledge on page 5 of their Brief that all of the appealed claims stand or fall together. Accordingly, we will limit our consideration to claim 20 which is illustrative of the appealed subject matter. Claim 20 is reproduced below along with independent claim 19 upon which it depends:¹

19. A filled polyamide composition comprising:

(a) from about 99 to about 70 wt% of a polyphthalamide consisting of recurring units represented by the formula:

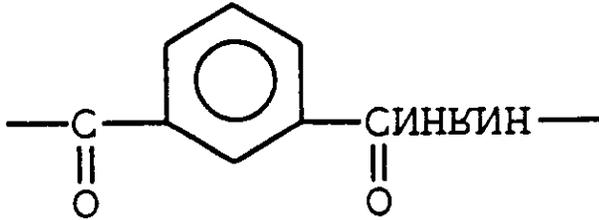
¹ Again we note that claim 19 is not an appealed claim and is reproduced here only because it is incorporated by reference in claim 20.

Appeal No. 1996-3729
Application No. 08/253,839

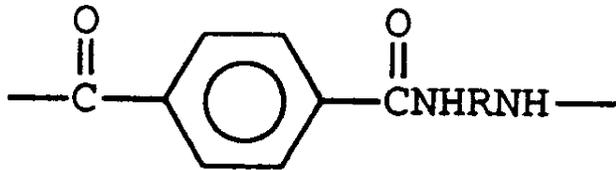


C

and



B



A

wherein the mole ratio of A:B:C units lies in range 100-50:0-35:0-50, and wherein R comprises at least one divalent aliphatic radical having from 4 to 14 carbon atoms;

Appeal No. 1996-3729
Application No. 08/253,839

(b) from about 1 to about 30 wt% based on resin components (a) and (b) of a pendant succinic anhydride-functionalized block copolymer comprising polymerized styrene blocks and rubber blocks comprising ethylene/propylene, ethylene/butylene, or ethylene/pentylene polymer blocks or a combination thereof; and

(c) from about 10 to about 60 wt%, based on total composition, structural fiber selected from glass fiber and carbon fiber.

20. The polyamide composition of claim 19 comprising from about 99 to about 90 wt% said polyphthalamide and from about 1 to about 10 wt% said functionalized block copolymer.

The following three prior art references are relied upon by the examiner as evidence of obviousness:

Saito et al (Saito)	4,849,471	July 18, 1989
Taubitz et al (Taubitz)	4,990,564	Feb. 5, 1991
Koch et al (Koch)	5,071,924	Dec. 10, 1991

Claims 20 and 34-38 stand rejected under 35 U.S.C. § 103 for obviousness in view of Saito in combination with Taubitz and Koch.²

We have carefully considered the entire record in light of the opposing positions presented on appeal. Having done so, we conclude that the examiner has established a prima

² We note that all of the pending claims were additionally rejected under 35 U.S.C. § 112, second paragraph, in the final rejection (Paper No. 14). Since that rejection is not maintained in the examiner's Answer, we presume that the 35 U.S.C. § 112 rejection has been withdrawn.

Appeal No. 1996-3729
Application No. 08/253,839

facie case of obviousness which is not outweighed by evidence relied upon by appellants. Accordingly, we shall affirm the rejection at issue.

As noted by the examiner, Saito discloses polyamide compositions inclusive of appellants' claimed formulation. Thus, the polyamide resin in the Saito composition may include a polyphthalamide. Additionally, the Saito composition contains a modified block copolymer. Appellants acknowledge in their Brief (page 6) that the modified block copolymer component of Saito is inclusive of appellants' succinic anhydride-functionalized block copolymer. Also, Saito contemplates inclusion of other components and, in particular, fillers and reinforcement materials (column 7, lines 61-65). We have little doubt that those of ordinary skill in the art would have found it prima facie obvious to include glass or carbon fibers in the Saito composition, as recited in appellants' claims, inasmuch as such fibers are conventionally used in the art as fillers or reinforcing agents as evidenced by Taubitz and Koch.

Appellants argue that they have supplied data to demonstrate that addition of modified block copolymers to

Appeal No. 1996-3729
Application No. 08/253,839

filled polyphthalamide formulations, as claimed, improves weldline strength of the resulting composition without the presence of an unmodified block copolymer, a third component taught by Saito as being necessary to obtain an improvement in weldline strength. This argument is unpersuasive since appellants' claims do not preclude addition of unmodified block copolymers and, thus, read on compositions which contain such components and which therefore would be expected to have improved weldline strength and a good balance of other properties in view of the teachings of Saito. In this regard, appellants' argument is not commensurate with the inclusive scope of their claims.

We have thoroughly reviewed all the data (appellants' specification: Tables VIII - XIII; Garrett Declaration, Paper No. 9: Table A) relied upon by appellants as evidence of nonobviousness. For the foregoing reasons, as well as for the additional reasons set forth below, we agree with the examiner that the data relied upon by appellants is not dispositive of nonobviousness with regard to the claimed composition.

As we have noted, the claims read on compositions including both modified and unmodified block copolymers which

Appeal No. 1996-3729
Application No. 08/253,839

would be expected to exhibit improved weldline strength and a good balance of other properties in accordance with the teachings of Saito.

Additionally, we take note of appellants' assertion that their data demonstrate a sharp reduction in tensile strength at modifier levels approaching 10 wt.% and above, particularly as seen in Tables X and XI. In Table XI, a sharp reduction in tensile strength appears to occur at a modifier level as low as

8 wt.%. There is no testimony of record establishing that these results would have been unexpected by those of ordinary skill in the art. Even assuming arguendo that such results would have been unexpected, the scope of the claims on appeal are not commensurate with the scope of the objective evidence of nonobviousness since the claims embrace modifier levels up to about 10 wt%. In any event, appellants have failed to establish that a skilled artisan would not have expected a reduction in tensile strength with the addition of significant quantities of rubbery modifiers to a polyamide formulation.

Further, in many instances the tabulated data relied upon by appellants do not appear to represent a comparison with the

Appeal No. 1996-3729
Application No. 08/253,839

closest prior art since the comparative formulations in these instances either do not include a modifier at all (Tables 8 and 12-13), or apparently do not include an aromatic polyamide (Table 9); whereas Saito (examples 9 and 34) exemplifies both of these components.

For the foregoing reasons, we agree with the examiner that the evidence of obviousness represented by the cited prior art references outweighs the evidence of nonobviousness relied upon by appellants. Accordingly, the decision of the examiner is affirmed.

Appeal No. 1996-3729
Application No. 08/253,839

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

AFFIRMED

MARC L. CAROFF)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
CHUNG K. PAK)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
DOUGLAS W. ROBINSON)	
Administrative Patent Judge)	

lp

Appeal No. 1996-3729
Application No. 08/253,839

AMOCO CORP.
PATENTS & LICENSING DEPT./MC1907A
200 EAST RANDOLPH DRIVE
P.O. BOX 87703
CHICAGO, IL 60680-0703

Leticia

Appeal No. 96-3729
Application No. 08/253,839

APJ CAROFF

APJ PAK

APJ ROBINSON

DECISION: AFFIRMED
Send Reference(s): Yes No
or Translation (s)
Panel Change: Yes No
Index Sheet-2901 Rejection(s):

Prepared: December 13, 2001

Draft Final

3 MEM. CONF. Y N

OB/HD GAU

PALM / ACTS 2 / BOOK
DISK (FOIA) / REPORT