

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 10

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte E. SCOTT HENKINS and JOHN C. WITTENAUER

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Appeal No. 1996-3937  
Application No. 08/319,702<sup>1</sup>

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ON BRIEF

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Before JOHN D. SMITH, WALTZ and LORIN, Administrative Patent Judges.

JOHN D. SMITH, Administrative Patent Judge.

**DECISION ON APPEAL**

This is an appeal pursuant to 35 U.S.C. § 134 from the final rejection of claims 1-5 and 7-12.

Claim 1 and 9 are representative and are reproduced below:

1. An additive dust free blend consisting essentially of compacted particles having a substantially circular cross-

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<sup>1</sup> Application for patent filed October 7, 1994.

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section and a diameter from about 1/16 to about 1/4 inch and  
consisting essentially of:

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(a) a pentaerythritol phosphite present at a level of from 10 to 90 percent by weight based on the total weight of the particles;

(b) a hindered phenolic isocyanurate present at a level of from 10 to 90 percent by weight based on the total weight of the particles;

(c) a metal salt of a fatty acid present at a level of from 2 to 60 percent by weight based on the total weight of the particles;

(d) a hydrotalcite present at a level of from 1 to 10 percent by weight based on the total weight of the particles; and

(e) less than one percent by weight additional materials.

9. A method for making a dust free compacted particle, comprising the steps of

hindered (a) blending a pentaerythritol diphosphite, a phenolic isocyanurate, a metal salt of a fatty acid and a hydrotalcite to form a stabilizer blend composition, comprising from 10 to 90 percent by weight of said phosphite, and from 10 to 90 percent by weight of said hindered phenolic isocyanurate, and from 2 to 60 percent by weight of said metal salt of a fatty acid, and from 1 to 10 percent by weight of said hydrotalcite; and

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- (b) compacting said composition to form a densified compact,
- (c) pelletizing the densified compact under pressure into particles.

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The references of record relied upon are:

Gilles	4,025,486	May 24, 1977
Pollock et al. (Pollock)	4,368,139	Jan. 11, 1983
Van Asbroeck et al. ( Van Asbroeck)	4,670,493	June 2,
1987		
Miyata	4,675,356	June 23, 1987
Matumura	5,015,679	May 14, 1991
Dunski	5,028,486	July 2, 1991

The appealed claims stand rejected under 35 U.S.C. § 103 in view of the combined teachings in the above cited references.

We cannot sustain the stated rejection.

The subject matter on appeal is directed to a dust free blend of compacted particles that consist essentially of a pentaerythritol phosphite, a hindered phenolic isocyanurate, a metal salt of a fatty acid (e.g., calcium stearate), and a hydrotalcite, and a method of making a dust free compacted particle from a blend of the above components by forming a densified compact of the blend and pelletizing the densified compact into particles. The compacted particles are said to exhibit reduced levels of dust, and are durable during handling. The compacted particles are useful as a stabilizing additive blend for polymeric compositions.

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The examiner's conclusion that the claimed subject matter herein would have been obvious to a person of ordinary skill in this art is based on the combined disclosures in six prior art references. Although appellants argue that the relied upon references provide no support for combining the claimed components of the blend of appellants' appealed claim 1 "in a single resin composition or in a single composition<sup>2</sup> of any kind" (brief, page 4), it is our view that a person of ordinary skill in this art would have been led to utilize the known "acid neutralizing stabilizers", i.e., calcium stearate (a metal salt of a fatty acid) and a hydrotalcite in combination (as taught in Matumura at column 3, lines 42-51) with the pentaerythritol phosphite/hydroxyphenylalkyleneyl isocyanurate (a hindered phenolic isocyanurate) stabilizer combination of Gilles invited by Gilles' statement at column 6, lines 5-8 that "other ingredients known in the art as thermal and/or oxidative stabilizers" may also be used in his compositions. See Gilles at column 4, lines 57-63. Also

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<sup>2</sup> Appellants cancelled originally presented composition claim 6 during prosecution. See the amendment filed May 8, 1995.

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compare example 1 of Giles wherein the stabilizers are added to a polypropylene polymer. The examiner's argument that the combination of the above prior art compounds would have been expected to produce a "cooperative effect" exceeding "any two or three component stabilizer" combination (answer, page 3) is factually supported by Van Asbroeck's teaching that such stabilizing systems typically contain additional stabilizing compounds that "frequently increase synergistically the efficiency (emphasis added)" of the phenolic antioxidant component. See Van Asbroeck at column 1, lines 25-27. Also see this reference at column 1, lines 27-37. Thus, in our view, the combined use of appellants' four stabilizing components in a polymeric composition such as polypropylene is fairly suggested by the applied prior art. The dispositive issue raised by the appealed subject matter, however, is whether one of ordinary skill in this art would have been led to combine the four stabilizing components in the form of an additive dust free blend of compacted particles as required by appealed claim 1. For the reasons advanced in the brief and below, we answer this question in the negative.

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In their brief at page 3, appellants emphasize that the addition of polymeric stabilizer additives of the kind claimed is usually made by separately adding each of the additives into the polymeric composition, in contrast to preformulating the additives into a single additive package in the form of dust free blend of compacted particles by a pelletizing process. For example, Matumura discloses the conventional method in which the additives are "premixed" with the polymer (see column 3, lines 49 and 50). Alternatively, we note that Gilles and Van Asbroeck form solutions or suspensions of the stabilizing compounds (in contrast to compacted particles) which are then mixed with the polymer. See Gilles at column 5, lines 53-58 and Van Asbroeck at column 4, lines 51-63.

With respect to the issue raised by the compacted particle claim language, the examiner emphasizes that Dunski discloses that fine powdery metallic stearates such as calcium stearate, which produce hazardous dust, may be combined with a binder to form a pellet which avoids dust formation. See Dunski at column 1, lines 26-28 and lines 63-68. The examiner further argues that the application of Dunski's pelletizing technique "to other

admittedly known dusting type additives for polymers (specification at page 1 and 2)" to reduce "dustiness" would have been obvious to a person of ordinary skill in this art. We observe, however, that the prior art admissions<sup>3</sup> in appellants' specification referred to by the examiner do not specifically identify appellants' claimed components, i.e., pentaerythritol phosphite compounds, hindered phenolic isocyanurate compounds, or hydrotalcites, as "known dusting type additives". In the absence of prior art knowledge of a potential dusting problem with appellants' composition, no reason exists to pelletize the composition to produce a "dust free blend of compacted particles" as claimed herein. In short, we agree with appellants that the relied upon references (inclusive of the prior art admissions) do not provide adequate motivation or suggestion for combining the claimed components in a compacted

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<sup>3</sup> With respect to prior art stabilizer blends of soft particles which are associated with substantial amounts of dust, appellants' admissions in the specification only generally refer to "[C]ertain blends of phosphites, hindered phenolics and neutralizers" without identification of the specific compounds in question. See the specification at page 1, lines 23-26.

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particulate form. Accordingly, we are constrained to reverse the stated rejection of the appealed claims.

The decision of the examiner is reversed.

REVERSED

	JOHN D. SMITH	)	
	Administrative Patent Judge	)	
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		)	
		)	
		)	BOARD OF PATENT
	THOMAS A. WALTZ	)	APPEALS
	Administrative Patent Judge	)	AND
		)	INTERFERENCES
		)	
		)	
	HUBERT C. LORIN	)	
jrg	Administrative Patent Judge	)	

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