

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte GUERINO G. SACRIPANTE and RICHARD P.N. VEREGIN

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Appeal No. 1996-1371  
Application 08/221,595

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ON BRIEF

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

ROBINSON, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1, 7, 8, 10, 14-19, 25, and 29, all of the claims pending in the application. Claims 1, 15, and 19 are illustrative of the claims on appeal and are appended to this decision.

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The references relied upon by the examiner are:

Sacripante et al. (Sacripante)	5,348,832	Sept. 20, 1994
Alexandrovich et al. (Alexandrovich)	4,837,393	June 6, 1989

Handbook of Imaging Materials, Diamond, Ed., Marcel Dekker, Inc., New York, N.Y., pp. 163-176 (1991). (Diamond)

### **Grounds of Rejection**

Claims 1, 7, 8, 10, and 14-19 stand rejected under 35 U.S.C. § 102(e) and (f). As evidence of anticipation, the examiner relies upon Sacripante.

Claims 1, 7, 8, 10, 14-19, 25, and 29 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Sacripante.

Claims 1, 7, 8, 10, 14-19, 25, and 29 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Sacripante, Alexandrovich and Diamond.

We reverse.

### **Background**

The applicants' invention, as presently claimed, is described at pages 8-9 of the specification as being directed to toner and developer compositions which include a resin, pigment particles, and a polymer having chemically attached thereto a known charge functional moiety such as a sulfo group. As claimed, the charge enhancing additive is a polyester polymer with a charge enhancing moiety chemically attached to the polymer wherein the attached moiety is selected from a specified group of sulfoisophthalates.

### **Discussion:**

The rejections under 35 U.S.C. § 102

In rejecting claims 1, 7, 8, 10, and 14-19, the examiner cites Sacripante as disclosing (Answer, page 3):

the preparation of toner from resin such as given in the Examples and as discussed in column 10 which are mixed with pigment (col.9), and other optional surface additives (col.9). The toner may be mixed with coated carrier particles (see Examples) to produce a developer which is used in an imaging process where an electrostatic image is developed by the toner and the toner image transferred to a support (see Examples).

While acknowledging that Sacripante does not disclose a three component toner composition (Answer, paragraph bridging pages 3-4), the examiner urges that Sacripante does disclose a two component toner composition which includes a pigment and a charge enhancing additive, where the charge enhancing additive serves two functions, i.e. the charge enhancing additive is both the resin particles and the polymer which acts as the charge enhancing additive. (Answer, page 4).

We have carefully considered the evidence and reasoning presented by the examiner. However, on this record we are constrained to conclude that the examiner has failed to provide those facts or evidence which would reasonably support a conclusion that the rejected claims are anticipated by Sacripante. Simply put, functionality is not the test of anticipation. Here the claims require three components including a resin, a pigment and a charge enhancing additive which is a polyester having a charge enhancing moiety chemically attached thereto. The examiner

acknowledges that Sacripante does not disclose such a three component toner composition. We are aware of the disclosure at column 6, lines 10-16 which would appear to describe a three component toner composition. However, this described toner composition requires a charge control additive in addition to the sulfonated polyester polymer which serves as the charge control additive in the claimed composition. Further, this description fails to define the charge enhancing agent in a manner which would reasonably be read to encompass the polymer required by the claim. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.), cert. denied, 484 U.S. 827 (1987). Here, the reference does not disclose a three component toner composition wherein the charge enhancing polyester has a chemically attached moiety selected from the claim designated group of sulfoisophthalates. Thus, it fails to anticipate the rejected claims. Therefore the rejections under 35 U.S.C. § 102 are reversed.

The rejections under 35 U.S.C. § 103

Claims 1, 7, 8, 10, 14-19, 25, and 29 stand rejected under 35 U.S.C. § 103 as unpatentable over Sacripante alone or in combination with Alexandrovich and Diamond. Since the rejection of the claims over Sacripante alone is subsumed by the rejection over the combination of Sacripante, Alexandrovich, and Diamond, we will limit our discussion to

the rejection over the combination.

In rejecting the claims under 35 U.S.C. § 103 the examiner urges that it would have been obvious to modify the toner composition of Sacripante by adding ingredients, including an additional resin, and cites Alexandrovich as disclosing (Answer, page 7):

monomers for the production of the polyesters such as monomers having a benzenesulfonate groups and a phosphonium group so that the sulfonate group is covalently bonded to an ester group (col. 6, l. 67 -col. 7, l. 26). These polymers serve as both a charge control agent and a binder resin. These polymers are used with other polymers if desired (col. 8, l. 19-34) and colorants (col. 8, l. 35-36). The toners of the reference are mixed with carriers having a polymer coating such as poly(vinylidene fluoride) where the carrier core is made of ferrites (col. 9, l. 11-61). The developer is used to develop electrostatic latent images whereby the toner image is transferred to a support (col. 10, l. 6-25).

The examiner cites Diamond as disclosing (Answer, page 7):

that rheology is a known concern in the toner art (p. 170, §4.3.1). The reference states that the prime control of toner fusing is the toner resin (p.168, l. 5-7; p. 171, l. 17-24). The reference also states that mixtures of copolymers with varying composition and molecular weight controls rheology (p.171, l. 35-36).

The examiner concludes (id):

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine another resin with the polyester and colorant disclosed by Sacripante because Alexandrovich discloses that additional resins may be combined with charge controlling polymers and colorants in order to form particulate toners. The addition of the other polymers would control fixing property of the toner upon a suitable substrate (see Alexandrovich col. 10, l. 6-25; Sacripante examples showing development; Diamond citation). The additional resin would be particulate because it would be in the toner particle with the charged controller and the

colorant.

It is the initial burden of the patent examiner to establish that claims presented in an application for a patent are unpatentable. In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). We have carefully considered the evidence and discussion in support of the rejection presented by the examiner. However, a fair evaluation of the references, applicants' specification and consideration of the claimed subject matter as a whole, dictates a conclusion that the construction of the claimed subject matter from the prior art teachings provided by Sacripante, Alexandrovich and Diamond is not suggested by the record before us. To establish a prima facie case of obviousness, there must be more than the demonstrated existence of all of the components of the claimed subject matter. There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the substitutions required. That knowledge cannot come from the applicants' invention itself. Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 678-79, 7 USPQ2d 1315, 1318 (Fed. Cir. 1988); In re Geiger, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987); Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985). The extent to which such

suggestion must be explicit in or may be fairly inferred from, the references, is decided on

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the facts of each case, in light of the prior art and its relationship to the invention. It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed inventions using applicants' claimed invention as a template and selecting elements from references to fill the gaps. In re Gorman, 933 F.2d 983, 986-987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991). On the record before us, we find no reasonable suggestion for combining the disclosure of these three references in a manner which would result in the claimed toner or developer which includes a resin, a pigment and a charge enhancing polyester having chemically attached thereto a moiety selected from the group of sulfoisophthalates as claimed. The combination of an additional resin with the toner composition of Sacripante would appear to be in conflict with the patentee's stated intention as reflected in the statement at col. 4, lines 38-43 which provides:

With the process of the present invention addition type resins are avoided and sulfonated polyesters resin particles are selected thereby enabling low toner fusing temperatures and high gloss with nonvinyl offset properties, and without the use of charge control agents. (Emphasis added).

Where, as here, the examiner fails to establish a prima facie case, the rejection is improper and will be overturned. In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir.1988). We, therefore, reverse the rejections of claims 1, 7, 8, 10, 14-19, 25, and 29 under 35 U.S.C. § 103.

#### **SUMMARY**

To summarize, the rejections of claims 1, 7, 8, 10, and 14-19 under 35 U.S.C. §

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102 are reversed. The rejections of claims 1, 7, 8, 10, 14-19, 25, and 29 under 35 U.S.C.  
§ 103 are reversed.

**REVERSED**

SHERMAN D. WINTERS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
CHUNG K. PAK	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
DOUGLAS W. ROBINSON	)	
Administrative Patent Judge	)	

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APPENDIX

1. A toner composition consisting essentially of resin particles, pigment and a charge enhancing additive comprised of a polyester polymer with a charge enhancing moiety chemically attached thereto, and which charge enhancing additive is selected from the group consisting of poly(1,2-propylene-sodio 5-sulfoisophthalate), poly(1,2-propylene-calcio 5-sulfoisophthalate), poly(1,2-propylene-tetralkylammonium 5-sulfoisophthalate), poly(ethylene-sodio 5-sulfoisophthalate), poly(ethylene-calcio 5-sulfoisophthalate), poly(ethylene-dimethyldistearylammonio 5-sulfoisophthalate), copoly(1,2-propylene-diethylene sodio-5-sulfoisophthalate), copoly(1,2-propylene-diethylene calcio-5-sulfoisophthalate), and copoly(1,2-propylene-diethylene dimethyldistearylammonio-5-sulfoisophthalate).

15. A developer composition consisting of a toner composition comprised of resin particles, pigment and a charge enhancing additive selected from the group consisting of poly(1,2-propylene-sodio 5-sulfoisophthalate), poly(1,2-propylene-calcio 5-sulfoisophthalate), poly(1,2-propylene-tetralkylammonium 5-sulfoisophthalate), poly(ethylene-sodio 5-sulfoisophthalate), poly(ethylene-calcio 5-sulfoisophthalate), poly(ethylene-dimethyldistearylammonio 5-sulfoisophthalate), copoly(1,2-propylene-diethylene sodio-5-sulfoisophthalate), copoly(1,2-propylene-diethylene calcio-5-sulfoisophthalate), and copoly(1,2-propylene-diethylene dimethyldistearylammonio-5-

sulfoisophthalate); and carrier particles.

19. A method of imaging consisting essentially of formulating an electrostatic latent image on a photoreceptor, affecting development thereof with a toner composition comprised of resin particles, pigment and a charge enhancing additive comprised of a polymer of resin particles with a charge enhancing moiety chemically attached thereto, and which charge additive is selected from the group consisting of poly(1,2-propylene-sodio 5-sulfoisophthalate), poly(1,2-propylene-calcio 5-sulfoisophthalate), poly (1,2-propylene-tetralkylammonium 5-sulfoisophthalate), poly(ethylene-sodio 5-sulfoisophthalate), poly(ethylene-calcio 5-sulfoisophthalate), poly(ethylene-dimethyldistearylammonio 5-sulfoisophthalate), copoly(1,2-propylene-diethylene sodio-5-sulfoisophthalate), copoly(1,2-propylene-diethylene calcio-5-sulfoisophthalate), and copoly(1,2-propylene-diethylene dimethyldistearylammonio-5-sulfoisophthalate); and thereafter transferring the developed image to a suitable substrate.