

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 37

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RAYMOND ANDRE,
JEAN-YVES BARRAUD, GERMAINE BINDER,
JEAN-FRANCOIS FAUVARQUE,
PIERRE-YVES LE TIEC and LAURENT PREUX

Appeal No. 1997-0530
Application 08/312,493

HEARD: AUGUST 15, 2000

Before GARRIS, OWENS, and LIEBERMAN, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the examiner's final rejection of claims 1, 4, 7-11 and 13-22, which are all of the claims remaining in the application.

THE INVENTION

Appellants claim an insulating enameling lacquer for use in making enameled conductors, comprised of a blend of two recited polymers and a compatibilizing copolymer. Appellants also claim a process for making the lacquer, and claim an enameled wire comprising an external layer of an enamel obtained by reticulation of the lacquer. Claim 1, which is directed toward the lacquer composition, is illustrative and reads as follows:

1. An insulating enameling lacquer for enameled conductors comprising a polymer blend of a base first polymer, a second polymer and a copolymer, wherein:

the base first polymer is selected from the group consisting of:

polyurethane, polyamide, polyamide imide, polyester, polyester imide, polyester amide-imide, polyamide, acetal of polyvinyl alcohol, polyepoxy compounds and polyphenoxy compounds;

the second polymer is selected from the group consisting of polysiloxanes;

said second polymer is present in the blend in a quantity of at least 0.3% but less than 30% by weight;
and

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the copolymer is compatible with said first polymer, is distinct from the first and second polymers, and contains polymeric chains selected from polysiloxanes, said copolymer is present in the blend in a quantity between 0.5% and 20% by weight and acts as a compatibilizing agent between the first and second polymer to thereby create said polymer blend.

THE REFERENCES

Preston 1972	3,632,440	Jan. 4,
Takekoshi et al. (Takekoshi) 1988	4,769,424	Sep. 6,
Haubennestel et al. (Haubennestel) 1989	4,812,518	Mar. 14,

THE REJECTIONS

Claims 1, 4, 7-11 and 13-22 stand rejected under 35 U.S.C. § 112, first paragraph, written description requirement. Claims stand rejected under 35 U.S.C. § 103 as follows: claims 1, 4, 10, 11, 13 and 15-22 over Haubennestel and also over Haubennestel in view of Takekoshi, and claim 14 over Haubennestel in view of Preston and also over Haubennestel in view of Takekoshi and Preston.¹

OPINION

¹ The rejections of claims 7-9 over prior art are withdrawn in the examiner's answer (pages 2 and 15).

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We have carefully considered all of the arguments advanced by appellants and the examiner and agree with appellants that the aforementioned rejections are not well founded. Accordingly, we reverse these rejections.

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Rejections under 35 U.S.C. § 112, first paragraph

A specification complies with the 35 U.S.C. § 112, first paragraph, written description requirement if it conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, the inventor was in possession of the invention. See *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991); *In re Kaslow*, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983); *In re Edwards*, 568 F.2d 1349, 1351-52, 196 USPQ 465, 467 (CCPA 1978); *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976).

The examiner argues that there is no written descriptive support in appellants' originally filed specification for the recitation in the independent claims, i.e., claims 1, 7 and 10, that the copolymer "is distinct from the first and second polymers" (answer, pages 2-3 and 8-10). This argument is not well taken in view of the statement in the original specification (page 3, lines 9-10) that "[t]he copolymer acts as a compatibil-izing agent between the first and second polymers." In order for the copolymer to be effective as a

compatibilizing agent for the first and second polymers it must have a composition which is different from the compositions of these polymers. Thus, even if, as argued by the examiner (answer, page 9), appellants' second polymer can be a polysiloxane copolymer, the compatibilizing copolymer must have a composition which is different from that of the second polymer in order for the compatibilizing copolymer to be effective as a compatibilizing agent.

The examiner argues that appellants' originally filed specification does not provide written descriptive support for "at least 0.3%" of the second polymer as recited in independent claims 1 and 10 (answer, pages 4 and 10-11). These claims actually recite a range of the amount of the second copolymer in the blend of "at least 0.3% but less than 30% by weight." Appellants' original specification states (page 2, lines 11-23) that in a prior art lacquer, which contained less than 0.3% of an internal solid lubricant, there was mutual incompatibility of the lubricant and base polymer which prevented incorporation of a sufficient quantity of lubricant.

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Appellants' original specification subsequently states (page 3, lines 6-9) that in appellants' polymer blend, "[t]he presence of the copolymer means that up to 30% by weight of said second polymer can be incorporated into the mixture instead of the previous maximum of 0.3%." These disclosures would have conveyed with reasonable clarity to one of ordinary skill in the art that appellants were in possession, as of their filing date, of a polymer blend in which the second polymer is present in an amount of at least 0.3% but less than 30% by weight of the blend.

The examiner argues that there is no written descriptive support in appellants' originally filed specification for an amount of second polymer of "at least about 7.2%" as recited in claims 21 and 22 (answer, pages 4 and 11). Appellants' originally filed specification unquestionably has support for an amount of second polymer of up to 30% by weight (page 3, lines 6-7). This range, along with the disclosure in the originally filed specification of an amount of second copolymer of 7.2%

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(page 16, lines 37-38) within that range, reasonably would have conveyed to one of ordinary skill in the art that appellants were in possession of an invention in which the amount of second polymer is at least 7.2% by weight up to the upper limit of less than 30% by weight recited in claims 1 and 10 from which claims 21 and 22, respectively, depend. See *Wertheim*, 541 F.2d at 265, 191 USPQ at 98.

For the above reasons, we reverse the rejection under 35 U.S.C. § 112, first paragraph.

*Rejection under 35 U.S.C. § 103
over Haubennestel*

Haubennestel discloses a lacquer which can be used for coating coils and which includes a polyester-containing polysiloxane to impart anti-adhesive character and increased lubricity to the lacquer (abstract; col. 5, line 68 - col. 6, line 1; col. 24, line 27). The amount of the polyester-containing polysiloxane is at least about 0.1 wt% and particularly preferably at least about 0.5 wt% of the lacquer composition (col. 6, lines 19-23). The lacquer includes a binder which can be a polyester (col. 4, lines 64-65; col. 11,

line 33). Thus, Haubennestel's lacquer includes a base first polymer within the Markush group recited in appellants' claim 1, and a copolymer having polymeric units selected from polysiloxanes.

Regarding appellants' second polymer, which is a polysiloxane, the examiner argues that Haubennestel discloses including in the lacquer a polyester-modified siloxane as a binder (answer, pages 5 and 12-14). In the portion of Haubennestel relied upon by the examiner (col. 11, lines 24-36), the reference teaches that varying the constitution of the polyester in the polyester-containing polysiloxane permits a desired degree of compatibility to be achieved with the polymers used as binders for the lacquer, and teaches that "phthalic acid polyester-modified siloxanes are, for example, advantageously utilized for binders based on phthalate esters" (col. 11, lines 31-33). This is a teaching that phthalic acid polyester-modified polysiloxanes of the invention are used in combination with binders based on phthalate esters. Contrary to the examiner's argument (answer, page 14), it is not a

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teaching of using polyester-modified siloxanes as binders in combination with non-siloxane based binders.

The examiner argues that Haubennestel's polyester-containing polysiloxane may be considered to be either appellants' copolymer or appellants' polysiloxane second polymer (answer, page 13). For the following reason, this argument is not persuasive. As discussed above regarding the rejection under 35 U.S.C. § 112, first paragraph, appellants' claims require a copolymer which is distinct from the polysiloxane second polymer. Thus, in order to meet appellants' claim requirements, two of Haubennestel's polyester-containing polysiloxanes would have to be used together. Haubennestel does not disclose using his polyester-containing polysiloxanes in combination, and the examiner has not explained why, in view of Haubennestel's above-discussed teaching that the constitution of the polyester is selected so that the desired degree of compatibility is obtained with the polymeric binder, one of ordinary skill in the art would have been led by the reference to use a combination of polyester-containing polysiloxanes.

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For the above reasons, we conclude that the examiner has not carried the burden of establishing a *prima facie* case of obviousness of appellants' claimed invention over Haubennestel.² We therefore reverse the rejection under 35 U.S.C. § 103 over this reference.

*Rejection under 35 U.S.C. § 103
over Haubennestel in view of Takekoshi*

Takekoshi discloses block copolymers of polyarylene sulfides and polyetherimides or polydiorganosiloxanes and teaches that they are useful as compatibilizers for blends of polyarylene sulfides with other polymers such as polyetherimides and polydiorganosiloxanes (col. 1, lines 7-16).

The examiner argues that Takekoshi would have motivated one of ordinary skill in the art to use two distinct siloxanes in Haubennestel's polymer blend in order to improve the heat distortion properties of the lacquer (answer, pages 6 and 17).

² The examiner applies Haubennestel in view of Preston to dependent claim 14, but does not rely upon any teaching in Preston which remedies the above-discussed deficiency in Haubennestel.

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Takekoshi's teaching regarding heat distortion is that the disclosed polyarylene sulfide block copolymers have a significantly improved heat distortion temperature compared to polyarylene sulfide homopolymers (col. 1, lines 35-41). Thus, contrary to the examiner's argument, the reference does not teach that use of two distinct polysiloxanes in combination improves heat distortion properties.

Because the examiner has not provided a convincing explanation as to why Takekoshi would have fairly suggested, to one of ordinary skill in the art, modifying Haubennestel so as to arrive at appellants' claimed invention, we reverse the rejection under 35 U.S.C. § 103 over this combination of references.³

DECISION

The rejections of claims 1, 4, 7-11 and 13-22 under

³ The examiner applies Haubennestel in view of Takekoshi and Preston to dependent claim 14, but does not rely upon any teaching in Preston which remedies the above-discussed deficiency in the combined teachings of Haubennestel and Takekoshi.

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35 U.S.C. § 112, first paragraph, written description requirement, and the rejections under 35 U.S.C. § 103 of claims 1, 4, 10, 11, 13 and 15-22 over Haubennestel and also over Haubennestel in view of Takekoshi, and claim 14 over Haubennestel in view of Preston and also over Haubennestel in view of Takekoshi and Preston, are reversed.

REVERSED

	Bradley R. Garris)	
	Administrative Patent Judge)	
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)	
	Terry J. Owens)	BOARD OF
PATENT)	
	Administrative Patent Judge)	APPEALS AND
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	Paul Lieberman)	
	Administrative Patent Judge)	

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