

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAN W.E. MOOS,
JASON D. WEAVER, and
TRACI L. CRUTCHFIELD
ANTONIS H. G. VAN ENGELEN

Appeal No. 2001-0857
Application No. 09/012,166

ON BRIEF

Before DELMENDO, PAWLIKOWSKI, and MOORE, Administrative Patent Judges.

PAWLIKOWSKI, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the examiner's final rejection of claims 1 through 17, which are all the claims pending in the application.

The subject matter on appeal is represented by claim 1, set forth below:

1. A coating composition comprising:
 - (a) at least one oxazolidine functional compound,

- (b) at least one isocyanate functional compound,
and
- (c) at least one mercapto functional compound.

Claims 1 through 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over Liebel in view of De Santis.

Claims 1 through 17 also stand rejected under the judicially created doctrine of obvious-type double patenting as being unpatentable over claims 1 through 10 of U.S. Patent No. 5,977,285 in view of De Santis.

On page 4 of the brief, appellants state that all the claims stand or fall together. We therefore consider claim 1 on appeal. 37 CFR § 1.192(c)(7)(2000).

For the reasons set forth in the brief, in the reply brief, and below, we **reverse** the rejection of claims 1 through 17 under 35 U.S.C. § 103 as being obvious over Liebel in view of De Santis.

We **affirm** the rejection under the judicially created doctrine of obvious-type double patenting over claims 1 through 10 of U.S. Patent No. 5,977,285 in view of De Santis, because appellants have not contested this rejection, and because appellants have stated they will file a terminal disclaimer to remove this rejection. Hence, upon return of this application to the jurisdiction of the examiner, appellants must file a terminal disclaimer to remove this rejection.

OPINION

In Paper No. 18, the examiner indicates that the independent claims have been interpreted to mean a coating comprising components A, B, and C. The examiner states that, in other words, when this coating is on a substrate, it somehow involves components A, B, and C. The examiner

states that the claims do not specify how the components are combined, in what order they are combined, when they are combined, and how much of each component is used, or whether or not the components react with each other. The examiner states that independent claims 13 and 14 only recite that these components are mixed.

On page 3 of the answer, the examiner's basic position is that Liebl discloses coatings comprising polyisocyanates, polyols, oxazolidine, and toluene sulfonic acid. The examiner states that Liebl differs from appellants' claims by not listing polyisocyanurates, and by not adding mercapto propyl trimethoxy silane to the coating composition.

The examiner relies upon De Santis for teaching to add mercapto propyl trimethoxy silane to polyurethane primers, and for including polyisocyanurate in the primer. (answer, page 3).

The examiner states that it would have been obvious to one of ordinary skill in the art to have included mercapto propyl trimethoxy silane in the coating of Liebl in view of De Santis, and to include polyisocyanurate in view of De Santis. (answer, pages 3-4, Paper No. 18 pages 2-3).

On page 6 of the brief, appellants point out that Liebl concerns elastic floor coverings and inner surfaces of molds and refers to column 1, lines 7 through 11.

On page 7 of the brief, appellants point out that De Santis relates to the construction of glass wall buildings and to the mounting of windshields, rear windows, and taillights. Appellants also state that De Santis relates to primer/sealant systems useful as sealing, caulking, and patching compositions, and as adhesives.

On page 8 of the brief, appellants state "[f]aced with the problem of how to combine good drying rate with good potlife, a skilled person reading Liebl would not be motivated by De Santis to use a mercapto functional compound, especially since ... "[t]he De Santis primer composition does not comprise a mercapto functional compound, but the reaction product of a mercapto functional compound and an isocyanate."

On page 9 of the brief, appellants state that obviousness cannot be established merely by locating references which describe various aspects of appellants' invention without also providing evidence of the motivating force which would impel one skilled in the art to do what the patent appellant has done. Appellants submit that it is clear that the applied references, taken as a whole, fail to provide such motivating force and that such force is only provided by appellants' disclosure.

We agree with appellants' position as summarized above. That is, we have carefully reviewed Liebl and De Santis and determine that hindsight has played a role in the examiner's rejection, in view of the disparate systems and teachings of Liebl and De Santis, demonstrated below.

Liebl concerns a process for the preparation of coatings by reacting polyurethane single component systems and water, wherein at least one polyurethane single component system is mixed with steam and sprayed. See column 2, lines 31 through 35.

The polyurethane single component system for forming the coatings is comprised of conventional polyurethane prepolymers. The products are prepared by reacting excess quantities of organic polyisocyanates, with higher molecular weight polyols or mixtures of higher molecular weight

polyols and lower molecular weight chain-extending agents or crosslinking agents. See column 3, lines 29 through 40.

When preparing the product according to the invention of Liebl, the polyurethane single component systems are preferably mixed with steam and sprayed on to a substrate. Moreover, in addition to comprising a prepolymer, the system comprises at least one latent hardener selected from the group consisting of oxazolidine, enamine, and azomethines and preferably ketimines and/or most preferably aldimines. See column 6, lines 36 through 44.

As pointed out by appellants, the polyurethane systems are widely used as coatings and in the preparation of elastic floor coverings. See column 1, lines 6 through 10. One of the objects of Liebl is to quickly and reliably prepare polyurethane single component systems as coatings without having a polyurethane mass run off of vertical surfaces, rear sections or sharp corners before curing or without having a polyurethane mass form undesirable droplets. See column 2, lines 17 through 24.

On the other hand, De Santis concerns a polyurethane sealant-primer system comprising an isocyanate-reactive surface primer compositions and a moisture-curable polyurethane sealant composition. See column 1, lines 13 through 20.

De Santis indicates that although the sealants of the invention can be directly applied and will adhere to certain surfaces, priming a surface with an isocyanate-reactive material, gives the best adherence, as well as improving other properties of the bond formed. This is particularly true if the sealants of the invention are employed on glass, when, for example, the composition is employed as a windshield sealant. See column 4, lines 65-75. Priming

also improves bonding to metals, for example, when the sealant-primer system is used as a metal-to-metal adhesive. See column 4, line 75 through column 5, line 2.

The bond between the polyurethane sealant and glass or metal is improved by the use of a primer having an affinity both to glass or metal and for the polyurethane polymer. Materials of this type include a gamma-mercapto propyl trimethoxy silane. See column 5, lines 12 through 35. The examiner relies upon this disclosure of De Santis, and concludes that it would have been obvious to include gamma-mercapto propyl trimethoxy silane in the composition of Liebl because De Santis teaches that this is a way of improving adhesion of polyisocyanate coatings to a substrate.

However, we find this logic and combination of references are not well founded. That is, we are unable to accept that one of ordinary skill in the art, when working in the art concerning coatings in connection with preparation of elastic floor coverings, as in Liebl, would look to De Santis for a teaching to improve bonding between a polyurethane and glass or metal. The examiner has not shown where, in Liebl, that it is desirable to improve a bond between a polyurethane and glass or metal.

Hence, we determine that the examiner has fallen victim to hindsight in making the prior art rejection in view of the disparate teachings of Liebl and De Santis.

Therefore, we reverse the 35 U.S.C. § 103 rejection of claims 1 through 17 as being unpatentable over Liebl in view of De Santis.

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

Conclusion

The rejection of claims 1 through 17 under 35 U.S.C. § 103 as being unpatentable over Liebel in view of De Santis is **reversed**.

The rejection of claims 1 through 17 under the judicially created doctrine of obvious-type double patenting as being unpatentable over claims 1 through 10 of U.S. Patent No. 5,977,285 in view of De Santis is **affirmed**.

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

AFFIRMED

ROMULO H. DELMENDO)
Administrative Patent Judge)
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) BOARD OF PATENT
BEVERLY A. PAWLIKOWSKI)
Administrative Patent Judge) APPEALS AND
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) INTERFERENCES
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JAMES T. MOORE)
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