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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte ALICE JOSEPH, ALAIN LE MARCHAND
and PIERRE-NOEL ROLLIN

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Appeal No. 1997-0432
Application No. 08/200,951

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HEARD: April 5, 2000

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Before KIMLIN, WARREN and LIEBERMAN, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-6 and 9-11, all the claims remaining in the present application.

Claim 1 is illustrative:

1. The improvement in the process for coating metallic structures consisting of assembled wires, wherein an external coating is applied by electrostatic spraying of a

thermosetting powder of a polyester resin, an epoxy resin or a mixture of the two, and the external coating is then polymerized in a furnace; the improvement wherein, before the spraying of said powder, the method includes:

a) applying an initial coating consisting of zinc to the metallic structure by an electrolytic process;

b) applying a layer consisting essentially of an acrylic coating onto the zinc coating; and

c) drying the layer of acrylic coating to define an intermediate acrylic coating serving as a bonding sublayer between said metallic structure and said external coating and onto which sublayer said powder is sprayed.

In addition to the admitted state of the prior art presented in appellants' specification, the examiner relies upon the following references as evidence of obviousness:

Camelon et al. (Camelon) 3,953,644 Apr. 27, 1976

H. Silman et al. (Silman), Protective and Decorative Coatings for Metals 416-35 (Finishing Publications Ltd., Teddington, Middlesex, England 1978)

Appellants' claimed invention is directed to coated metallic structures, and a process for producing the same, comprising a coating of zinc adhered to the metallic surface, and a polymerized acrylic coating between the zinc and an outer coating of a thermosetting powder comprising a polyester resin, an epoxy resin or a mixture of the two. According to appellants, "[t]he coating process of the present invention

has the advantage of providing improved resistance to corrosion and damage caused by impact or abrasion" (page 2 of Brief).

Appellants submit at page 4 of the Brief that claims 1-3, 5, 6 and 9 stand or fall together, as do claims 4, 5 and 6.

Appealed claims 1-6 and 9-11 stand rejected under 35 U.S.C. § 103 as being unpatentable over the admitted prior art in view of Camelon and Silman.

We have thoroughly reviewed each of appellants' arguments for patentability. However, we are in complete agreement with the examiner that the claimed subject matter would have been obvious to one of ordinary skill in the art within the meaning of § 103 in view of the applied prior art. Accordingly, we will sustain the examiner's rejection for essentially those reasons expressed in the Answer, and we add the following primarily for emphasis.

As indicated by the Jepson format of appealed claim 1, appellants acknowledge that it was known in the art to coat metallic structures consisting of assembled wires with an external coating that is applied by the electrostatic spraying of a thermosetting powder of a polyester resin, an epoxy resin

or a mixture of the two. Also, there is apparently no dispute that Silman evidences that it was known in the art to provide an electrodeposited coating of zinc on metal structures for the purpose of protecting against corrosion. Hence, we find no error in the examiner's reasoning that it would have been a matter of obviousness for one of ordinary skill in the art to provide a protective zinc coating on the metallic surface before performing the admittedly prior art process of electrostatically spraying a thermosetting powder of a polyester resin or an epoxy resin. As for the claimed step of inserting an acrylic coating as a bonding sublayer between the zinc-coated metallic structure and the thermosetting powder, Camelon discloses the provision of such an acrylic coating as an intermediate layer between a metallic structure and a thermosetting powder of an epoxy resin for the purpose of obtaining improved chemical resistance and durability. Consequently, we agree with the examiner that it would have been obvious for one of ordinary skill in the art to include the presently claimed acrylic coating as an intermediate layer between a zinc-coated metallic structure and an

electrostatically sprayed thermosetting powder of a polyester or epoxy resin.

From a somewhat different perspective, we note that appellants acknowledge that it was known in the art to first coat a metallic structure with zinc and then apply an acrylic coating. To wit, appellants state at page 5 of the Brief that they "were also aware of such prior constructions in which the metal substrate had first been coated with zinc and then had an acrylic varnish coating applied to the zinc." Accordingly, the question arises whether it would have been obvious for one of ordinary skill in the art to electrostatically spray an external coating of a thermosetting powder of a polyester or epoxy resin to the prior art metal substrate having consecutive coatings of zinc and an acrylic varnish. Since appellants acknowledge that it was known in the art to electrostatically spray an external coating of such a thermosetting powder on a metallic structure for the purpose of improving the "esthetic appearance" and "to assure their protection against the dangers of corrosion" (page 1 of specification), and Camelon expressly discloses the provision of an external coating of a thermosetting powder of the type

claimed on an acrylic-coated metallic substrate, we are convinced that the answer to the question is in the affirmative.

The arguments advanced by appellants have, in our view, been adequately answered by the examiner in the Answer, including the arguments relating to coating thicknesses and amounts of solvents present in the coating compositions. We will add, however, that appellants' argument regarding Camelon's "marked preference for the use of water over organic solvents" (page 9 of Brief) is without merit. We are satisfied that Camelon's preference for an aqueous solvent over an environmentally problematic organic solvent does not militate against the obviousness of employing an organic solvent to one of ordinary skill in the art.

As a final point, we note that appellants base no argument upon objective evidence of nonobviousness, such as unexpected results. In particular, as noted by the examiner, appellants have proffered no objective evidence which establishes the criticality of the argued limitations relating to coating thicknesses, particular solvents and amounts thereof.

In conclusion, based on the foregoing and the reasons well-stated by the examiner, the examiner's decision rejecting the appealed claims 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

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| EDWARD C. KIMLIN<br>Administrative Patent Judge | ) | |
| CHARLES F. WARREN<br>Administrative Patent Judge | ) | BOARD OF PATENT APPEALS AND INTERFERENCES |
| PAUL LIEBERMAN<br>Administrative Patent Judge | ) | |

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