

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte VILAN KOSOVER,
JESUS R. FABIAN,
ISTVAN LIPPAI,
BRIGITTE BENAGE and
GERALD J. ABRUSCATO

Appeal 2008-3011
Application 11/172,517
Technology Center 1700

Decided: May 22, 2008

Before EDWARD C. KIMLIN, THOMAS A. WALTZ, and
LINDA M. GAUDETTE, *Administrative Patent Judges*.

KIMLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-13. A copy of
illustrative claim 1 is appended to this decision.

The Examiner relies upon the following references as evidence of obviousness:

Ferrell	4,670,131	Jun. 2, 1987
Sargent	5,212,272	May 18, 1993
Arhancet	5,446,220	Aug. 29, 1995

Appellants' claimed invention is directed to a method for inhibiting the premature polymerization of ethylenically unsaturated monomers. The method comprises adding to the monomers a sulfonated phenol of the recited formula and a nitrophenol.

Appealed claims 1-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sargent in view of Arhancet and Ferrell.

Appellants have not separately argued any particular claim on appeal. Accordingly, all the appealed claims stand or fall together with claim 1, the broader of the two independent claims on appeal. *In re Wood*, 582 F.2d 638, 642 (CCPA 1978).

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.

There is no dispute that Sargent, like Appellants, discloses a method of adding a sulfonated phenol to a monomer composition. Sargent discloses that "[t]he choice of aromatic sulfonic acid or its salt and textile processing or cleansing agent will influence the aqueous solubility, wettability, ionic

character, surfactant capability, exhaustibility, soil and grease absorption, chelation ability, flame retardancy, and detergency of the polymer" (col. 2, ll. 41-46). As recognized by the Examiner, Sargent does not teach the addition of the presently claimed nitrophenol to the monomer composition. However, the Examiner accurately points out that "Arhancet (abstract; col. 4, Table 1) discloses a method for inhibiting the polymerization of vinyl monomers comprising the addition of a combination (or a mixture) of a dinitrophenol compound, and a hydroxylamine compound" (Ans. 6, second para.). Consequently, based on the collective teachings of Sargent and Arhancet, we find no error in the Examiner's legal conclusion that it would have been obvious for one of ordinary skill in the art to add a nitrophenol to the monomer composition of Sargent in order to prevent the premature polymerization of the reference monomer composition.

Appellants maintain that Sargent does not use the sulfonated phenol to inhibit polymerization of the monomer composition. However, it is well settled that the prior art need not disclose the same purpose for a claimed method in order to establish its obviousness under 35 U.S.C. § 103. *In re Dillon*, 919 F.2d 688, 693 (Fed. Cir. 1991). All that is necessary is that one of ordinary skill in the art would have had some reason for performing the claimed method step. See *In re Kamps*, 97 F.3d 1427, 1430 (Fed. Cir. 1996). In the present case, Sargent provides ample reasons for one of ordinary skill in the art to perform the claimed step of adding a sulfonated phenol to a monomer mixture.

Appellants also submit that Sargent discloses a preferred embodiment wherein all the reaction components are heated to a temperature no greater than 115°C, whereas "[t]he present invention is suitable for use of a range of

temperatures typically from about 60°C to about 180°C" (Br. 6, second paragraph). However, inasmuch as claim 1 on appeal, with which all the appealed claims stand or fall, recites no operating temperature, this argument is not germane to the claimed subject matter. Furthermore, Sargent's preferred maximum temperature of 115°C falls directly within the temperature range disclosed by Appellants.

Appellants also maintain that "there is no disclosure or suggestion in Arhancet of using the dinitrophenol, hydroxylamine, and phenylenediamine in combination with a sulfonated phenol or, for that matter, *any* other inhibitor" (Br. 7, second para.). However, as acknowledged by Appellants, Sargent teaches a variety of reasons for adding the sulfonated phenol to the monomer composition. Moreover, it is a matter of obviousness for one of ordinary skill in the art to combine two or more materials, such as inhibitors, when each is taught by the prior art to be useful for the same purpose. *In re Kerkhoven*, 626 F.2d 846, 850 (CCPA 1980).

Also, even though independent claim 6 stands or falls with claim 1, we concur with the Examiner that it would have been obvious for one with ordinary skill in the art to add the antifouling nitroxide compounds of Ferrell to the modified monomer composition of Sargent which comprises the dinitrophenol and hydroxylamine of Arhancet. Regarding Appellants' argument that Ferrell teaches a lower concentration of nitroxides than the claimed amount of from about 5 to about 1000 ppm, the Examiner properly notes that the claimed concentration range is for the total amount of inhibitor, not only the amount of nitroxides.

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As a final point, we note that Appellants base no argument upon objective evidence of nonobviousness, such as unexpected results, which would serve to rebut the *prima facie* case of obviousness established by the Examiner.

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 C.F.R. § 1.136(a)(1)(iv)(effective Sept. 13, 2004).

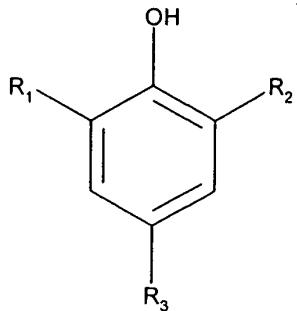
AFFIRMED

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APPENDIX

1. A method for inhibiting the premature polymerization and the polymer growth of ethylenically unsaturated monomers comprising adding to said monomers an effective amount of a combination of

- (A) at least one inhibitor that is a sulfonated phenol of the formula:



wherein

- (1) R₂ is selected from the group consisting of hydrogen and hydrocarbyl; and
- (2) R₁ and R₃ are independently selected from the group consisting of hydrogen and SO₃H, provided that at least one of R₁ and R₃ is SO₃H; and
- (B) at least one inhibitor that is a nitrophenol.

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