Paper No. 16

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte LINDA R. ROBERTSON
and
MICHAEL R. ST. JOHN

_____

Appeal No. 1996-4170
Application 08/413,657[1]

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ON BRIEF

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Before WINTERS and WILLIAM F. SMITH, Administrative Patent Judges, and FRED MCKELVEY, Senior Administrative Patent Judge.

WILLIAM F. SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 1,

[1] Application for patent filed March 30, 1995. According to applicants, this application is a continuation-in-part of Application 08/305,521, filed September 6, 1994.

5-10. Subsequently, claim 8 was canceled leaving claims 1, 5-7, 9 and 10 for our consideration.

Claim 1 is representative of the subject matter on appeal and reads as follows:

1. A process for inhibiting the adhesion of bacterial cells to solids surfaces and controlling biological fouling in a paper machine aqueous system which comprises adding to the aqueous system from about 0.01 to about 45 parts per million, based on the weight of the aqueous liquid in the system of a vinyl cationic polymer selected from the group consisting of poly(diallyldimethylammonium chloride),

poly(dimethylaminoethylacrylate methylchloride quat),

poly(dimethylaminoethylymethacrylate [sic] methylchloride quat),

poly(acrylamido-N-propyltrimethylammonium chloride) and

poly(methacrylamido-N-propyltrimethylammonium chloride).

The references relied upon by the examiner are:

Shair et al. (Shair)	4,111,679	Sept. 5, 1978
Finck et al. (Finck)	5,246,547	Sept. 21, 1993

Claims 1, 5-7, 9 and 10 stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner relies upon Finck and Shair. We reverse.

DISCUSSION

Claim 1 requires the addition of a specified polymer to a paper machine aqueous system in an amount from about 0.01 to about 45 ppm, based on the weight of the aqueous liquid in the system. The purpose for doing so is specified in claim 1, viz, to

inhibit adhesion of bacterial cells to solid surfaces and inhibiting biological fouling in the paper machine aqueous system.

In rejecting claim 1 under 35 U.S.C. § 103, the examiner relies upon Finck for its disclosure of using one of the polymers required by claim 1 on appeal, poly(diallyl-dimethylammonium chloride) (poly-DADMAC), in a process where the polymer is added to paper machine water in order to control pitch. The examiner indicates at page 4 of the Examiner's Answer that "The claims differ from Finck ... in adding the agents to specifically inhibit the growth of bacteria and in recited amounts." Shair is relied upon for its teaching that polyquaternary compounds are known in the art as effective biocides in aqueous systems in dosages as low as 1 ppm, based on the water in the aqueous system. The examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of the instant invention to add poly-DADMAC to paper machine water as a biocide since the compounds were already being added to the paper machine water in Finck for a separate purpose in view of the teaching of Shair. The examiner urges that, since Shair teaches polyquaternary compounds can serve as an effective biocide, poly-DADMAC will inherently function as a biocide in Finck in addition to controlling pitch. The examiner also urges that the amounts of the polymers required by claim 1 on appeal do not patentably distinguish over the amounts disclosed by Finck and Shair.

Our review of the examiner's position leads us to conclude that the examiner has not considered the disclosure of poly-DADMAC in Finck in the proper context. In Finck, poly-DADMAC is not one of the polymers which are part of the invention described in that patent. Rather, poly-DADMAC is described in Finck as a conventional pitch control agent and is used only as a comparison in order to show that the copolymers used in the Finck invention provide an improvement over such previously known pitch control agents. See column 5, lines 61-64 of Finck. Thus, one reading Finck must read its disclosure of poly-DADMAC in the context of its description as a comparative compound, not part of of Finck's invention. This is important in this case since the examples of Finck were performed in a laboratory setting (column 5, lines 4-59), not in a papermaking machine, which is the environment required by the claim 1 on appeal.

The examiner has also misdescribed the disclosure of Shair as teaching the use of "polyquaternary compounds" as biocides. Shair actually teaches that specified polyquaternary amines function as biocides, not polyquaternary compounds in general. See column 1, lines 5-16 of Shair, disclosing polyquaternary amines having a specified formula.

When Finck and Shair are read in the correct context, the examiner's case falls short. While Finck indicates that poly-DADMAC is a conventional pitch control agent in papermaking, the examiner has not relied upon references which actually describe adding

that polymer to a papermaking process. Rather, the reference which is relied upon by the examiner, Finck, describes the addition of copolymers which are not within the scope of claim 1 on appeal to a papermaking process. Any modification of Finck based upon its use of poly-DADMAC necessarily would be a modification of the laboratory procedure used in performing the comparative examples. Such a modification would not result in the subject matter of claim 1.

We again emphasize that the examiner is not relying upon prior art references which actually teach or describe the addition of poly-DADMAC to a papermaking process.[2] Assuming for the sake of discussion that the amount of poly-DADMAC used as a "conventional pitch control agent" does not fall within the amount required by claim 1 on appeal, as is apparently the examiner's assumption,[3] we do not find that Shair provides the needed suggestion to use poly-DADMAC in a "biocide amount." As set forth above, Shair does not teach that polyquaternary compounds in general are effective as biocides.

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[2] If a reference exists that adds poly-DADMAC, or any of the other polymers listed in claim 1 on appeal, to a paper machine aqueous system in the amount required by claim 1 on appeal for any purpose, that reference would anticipate claim 1. See In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990) ("It is a general rule that merely discovering and claiming a new benefit of an old process cannot render the process again patentable.").

[3] The examiner has not calculated the amount of poly-DADMAC used in Table 1 of Finck on the basis required by claim 1 on appeal--ppm based on the weight of the aqueous liquid. Note that Finck states at column 5, lines 8-10 that the consistency of the pulp used in the examples was 1.4%.

Rather, Shair's disclosure is limited to a defined group of polyquaternary amines. The examiner has not explained why it is reasonable to extrapolate or expand the relatively narrow disclosure of Shair as has been done in the rejection.

The decision of the examiner is reversed.

REVERSED

Sherman D. Winters Administrative Patent Judge	)
William F. Smith Administrative Patent Judge	) BOARD OF PATENT) APPEALS AND) INTERFERENCES
Fred McKelvey Administrative Patent Judge	)

WFS/cam

Robert A. Miller
Patent & Licensing Department
Nalco Chemical Compan
One Nalco Center
Naperville, IL 60563-1198