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The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN S. MICHELMAN

Appeal No. 1997-4310
Application No. 08/371,362

HEARD: February 08, 2001

Before WALTZ, KRATZ and PAWLIKOWSKI, Administrative Patent Judges.

KRATZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 23, 46 and 57-64, which are all of the claims pending in this application.

BACKGROUND

Appellant's invention relates to a method of treating paper coated with a hot melt wax to disperse the wax and converting the paper to pulp form. An understanding of the invention can be derived from a reading of exemplary claims 46 and 57, which are reproduced below.

46. A method of repulping a paper coated with a hot melt wax coating comprising the steps of:

(1) preparing a mixture of:

said (a) a paper coated with said hot melt wax coating,
coating comprising:

(1) at least one wax; and

in (2) at least one chemical compound incorporated
said at least one wax, said at least one
chemical compound capable of dispersing said
at least one wax in a substantially aqueous
environment; and

(b) water; and

(2) applying to said mixture an amount of mechanical
energy sufficient to convert said paper to a pulp form.

57. A method of dispersing wax from a hot melt wax-coated paper, comprising the steps of:

introducing into a substantially aqueous environment a paper having a hot melt coating thereon, said hot melt coating comprising a wax and a chemical compound incorporated in said wax which is capable of undergoing chemical modification so as to be capable of dispersing said wax in said substantially aqueous environment;

introducing into said substantially aqueous environment a chemical agent to modify said chemical compound to render said chemical compound capable of dispersing said wax;

agitating said paper having said hot melt coating thereon in said substantially aqueous environment; and

dispersing said wax from said paper.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Savage 1960	2,959,513	Nov. 08,
Laumann 1976	3,950,578	Apr. 13,
Gotoh et al. (Gotoh) 1978	4,177,199	Sep. 26,

Appellant also cites the following references:

Goto et al. (Goto) 1996	JP 61-47896	Mar. 08,
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Michelman et al. (Michelman), "Repulpability of coated corrugated paperboard," Tappi Journal, Vol. 74, No. 10, pp. 79-82 (Oct. 1991).

Claims 23 and 57-61 stand rejected under 35 U.S.C. § 103 as being unpatentable over Laumann in view of Savage. Claims 23, 46 and 57-64 stand rejected under 35 U.S.C. § 103 as being unpatentable over Gotoh in view of Savage and Laumann.

OPINION

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

Section 103 Rejection over Laumann in view of Savage

Laumann discloses a coated paper that is not wet-strength grade, such as a tissue or toilet paper and that will disintegrate upon toilet flushing disposal thereof. Laumann teaches a coating that includes a paraffin or microcrystalline wax and wax modifiers such as ethyl vinyl acetate or other copolymers or synthetic rubbers that may be used together with a lining for coating that type of paper (column 1, lines 9-34). Laumann discloses that "[t]he wax may be further modified by the inclusion of stearic acid or other stearates and softened by the inclusion of lanolin, petrolatum or other wax softeners" (column 1, lines 34-37).

Savage discloses a method of defibering waxed paper stock utilizing sodium hydroxide and sodium silicate together with other optional chemical compounds in a pulper that contains hot water (column 2, line 36 through column 3, line 37).

According to the examiner,

it would have been obvious to modify the Laumann process by providing a strong base in an aqueous bath as well as providing sufficient mechanical energy to convert the paper into a pulp since Savage teaches recycling waxes [sic, waxed] coating paper in such a manner for the obvious cost advantages of recycling wastepaper.

We disagree. When an examiner is determining whether a claim should be rejected under 35 U.S.C. § 103, the claimed subject matter as a whole must be considered. See In re Ochiai, 71 F.3d 1565, 1569, 37 USPQ2d 1127, 1131 (Fed. Cir. 1995). The subject matter as a whole of process claims includes the starting materials and product made. When the starting and/or product materials of the prior art differ from those of the claimed invention, the examiner has the burden of explaining why the prior art would have motivated one of ordinary skill in the art to modify or select from the materials of the prior art processes so as to arrive at the claimed invention. See Ochiai, 71 F.3d at 1570, 37 USPQ2d at 1131. In the present case, the examiner has not carried this burden.

As developed in appellant's brief (pages 9-11), Laumann is not directed to a repulping process or forming a wax coated paper product that would be a suitable starting material for repulping. Rather, Laumann is concerned with the formation of disposable paper products such as toilet or facial tissue, diaper liners, etc. that may be disposed of by flushing into a sewer system after use. Here, the examiner simply has not offered a convincing explanation as to why one of ordinary skill in the art would have been led to apply the repulping method of Savage to the sewage pipeline disposable product of Laumann in a manner so as to arrive at the herein claimed subject matter.

Section 103 Rejection over Gotoh in view of Savage and Laumann

Regarding the rejection of claims 23, 46 and 57-64 under 35 U.S.C. § 103 as being unpatentable over Gotoh in view of Savage and Laumann, we observe that Gotoh is concerned with a wax emulsion coating and does not suggest a method of treating a hot melt wax coated paper of the type all of the appealed

claims require treating.¹ It is significant that a wax emulsion coated paper, including the type of coating and paper product that Gotoh describes, has been distinguished from the hot melt wax coated paper that is treated by the subject process on the record before us. See, e.g., pages 12 and 13 of the brief, pages 1-6 of the reply brief, and the carryover paragraph bridging pages 6 and 7 of the specification.

The examiner does not seem to take issue with the aforementioned distinction between such coatings and papers so coated, but rather the examiner's position appears to be premised on considering the hot melt wax coated paper limitation as inconsequential (answer, page 5 and supplemental answer, paragraph bridging pages 1 and 2). That position runs afoul of the basic premise that a sustainable rejection under § 103 must address the claimed subject matter as a whole including all of the limitations thereof. Here, the examiner's failure to adequately address the hot melt wax coated paper limitation is fatal to the stated rejection. In

¹ Laumann and Savage are described above with regard to the rejection of claims 23 and 57-61 over only those references.

other words, even if we could have agreed with the examiner that it would have been obvious to one of ordinary skill in the art to somehow apply the teachings of Laumann and Savage to a repulping of the emulsion coated paper of Gotoh, such a combination would not result in the herein claimed process which requires treating hot melt wax coated paper.

CONCLUSION

The decision of the examiner to reject claims 23 and 57-61 under 35 U.S.C. § 103 as being unpatentable over Laumann in view of Savage and to reject claims 23, 46 and 57-64 under 35 U.S.C.

§ 103 as being unpatentable over Gotoh in view of Savage and Laumann is reversed.

REVERSED

Thomas A. Waltz)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
Peter F. Kratz)	APPEALS
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