

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

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BERT MIECZNIK

Appeal 2006-2667
Application 10/257,952
Technology Center 1700

Decided: April 20, 2007

Before BRADLEY R. GARRIS, CHARLES F. WARREN, and PETER F. KRATZ, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

We REVERSE.

Statement of the case

This is an appeal under 35 U.S.C. § 134 from a final rejection of claims 1-6 and 11-13. We have jurisdiction under 35 U.S.C. § 6.

Appellant invented a method for inhibiting scale formation and/or corrosion in systems conveying or in contact with liquids wherein the liquid

is treated such that the molar distribution of the hardening constituents in the liquid is influenced such that a proportion of magnesium and/or magnesium compounds is increased at the expense of the proportion of the other hardening constituents. Further details of this method are set forth in representative claims 1 and 11 which read as follows:

1. A method for inhibiting scale formation and/or corrosion in systems conveying or in contact with liquids, whereby the liquid has a hardness and is treated such that the molar distribution of the hardening constituents in the liquid to be treated is influenced such that a proportion of magnesium and/or magnesium compounds is increased at the expense of the proportion of the other hardening constituents, wherein only a partial flow of the liquid is treated and then the treated partial flow is mixed with an untreated main flow.

11. The method as claimed in Claim 1, wherein the hardness of the liquid is not changed.

The references set forth below are relied upon by the Examiner as evidence of obviousness:

Hann	US 5,277,823	Jan. 11, 1994
Mackintosh	US 5,993,737	Nov. 30, 1999

Claim 11 stands rejected under the first paragraph of 35 U.S.C. § 112 as failing to comply with the written description requirement. According to the Examiner, the claim 11 limitation "the hardness of the liquid is not changed" lacks clear antecedent basis in the Specification as originally filed and is drawn to new matter (Answer 3).

Claims 1-4, 6, and 11-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Mackintosh. In the paragraph bridging pages 3-4 of the Answer, the Examiner describes his position as follows:

Mackintosh et al. disclose (see col. 2 line 5 through col. 4 line 52, and col. 6 line 29 through col. 8 line 14) a method of stabilizing water or inhibiting corrosion in water systems substantially as claimed. The claims differ from Mackintosh et al. by reciting that a proportion of the magnesium compounds is increased at the expense of the other hardening constituents. It is submitted that the bed utilized in Mackintosh et al. can include magnesium carbonate or dolomite, which would appear to increase the magnesium compound proportion of the raw water passing through the bed, and substitute or replace hardening constituents with the proportion of magnesium. It would have been obvious to one skilled in the art to modify the method of Mackintosh et al. by increasing the recited proportion of magnesium compounds in the liquid, to aid in stabilizing the liquid. The specific partial flow and proportion utilized, would have been an obvious matter of process optimization to one skilled in the art, depending on the specific liquid treated and results desired, absent a sufficient showing of unexpected results.

Claim 5 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Mackintosh as applied above and further in view of Hann. The Examiner concludes that "[i]t would have been obvious to one skilled in the art to modify the method of Mackintosh ... by addition of the recited magnesium salt in view of the teachings of Hann ... to aid in inhibiting scale deposition in the liquid" (Answer 4).

Concerning the § 112 rejection, the Appellant argues that the claim 11 feature under consideration "is clearly set forth in the specification" at a number of places (Br. 3).

The Appellant argues that each of the § 103 rejections is improper because Mackintosh contains no teaching or suggestion of increasing a proportion of magnesium and/or magnesium compounds at the expense of

the proportion of the other hardening constituents as required by independent claim 1 as well as by each of the other claims on appeal which ultimately depend from claim 1 (Br. 4-5).

The § 112 Issue

Has the Examiner presented evidence or reasons why persons skilled in the art would not recognize in the Specification disclosure a description of the invention defined by claim 1?

Principal of Law for the § 112 Issue

It is the Examiner's burden to establish a *prima facie* case of unpatentability based on the written description requirement, and that burden is discharged by presenting evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims. *In re Alton*, 76 F.3d 1168, 1175, 37 USPQ2d 1578, 1583 (Fed. Cir. 1996).

Analysis of the § 112 Issue

On the record of this appeal, the Examiner has not presented any such evidence or reasons. On the other hand, the Appellant has correctly argued that the claim 11 feature is clearly described in the Specification at a number of places. For example, *see* the Specification at the Abstract ("without reducing the quantity of hardness constituents contained in the liquid overall"), ¶ 0013 ("without unavoidably increasing the hardness of the liquid"), ¶ 0022 ("the hardness of the liquid does not increase"), ¶ 0024 ("the overall hardness in the liquid is left unchanged by the device").

Conclusion of Law for the § 112 Issue

The Examiner has not presented evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by claim 11, and the aforementioned Specification disclosures evince that such persons would recognize a description of the claim 11 invention. Therefore, we cannot sustain the Examiner's § 112, first paragraph, rejection of claim 11.

The § 103 Issue

Has the Examiner established a prima facie case of obviousness by pointing to disclosure in Mackintosh which teaches or would have suggested increasing a proportion of magnesium and/or magnesium compounds at the expense of the proportion of the other hardening constituents as required by each of the appealed claims?

Principal of Law for the § 103 Issue

The Examiner bears the initial burden, on review of prior art or on any other ground, of presenting a prima facie case of unpatentability. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

Analysis of the § 103 Issue

As previously indicated, the Examiner has acknowledged that "[t]he claims differ from Mackintosh ... by reciting that a proportion of the magnesium compounds is increased at the expense of the other hardening constituents" (Answer 3) but states that "the bed utilized in Mackintosh ... can include magnesium carbonate or dolomite, which would appear to

increase the magnesium compound proportion of the raw water passing through the bed, and substitute or replace hardening constituents with the proportion of magnesium" (*id.*). There is reasonableness in the Examiner's position that the magnesium compound proportion would increase in water passing through Mackintosh's bed of calcium carbonate or dolomite. Indeed, this result would appear to be a necessary consequence, and the Appellant does not argue otherwise. On the other hand, there is no apparent support whatsoever, and the Examiner proffers none, for the Examiner's position that other hardening constituents in the water would be replaced by the increased portion of magnesium. To the contrary, Mackintosh expressly teaches as his desired goal increasing a non-magnesium hardening constituent, namely, the calcium content in the water passing through his treatment bed (col. 2, ll. 11-32).

Conclusion of Law for the § 103 Issue

The Examiner has failed to carry his initial burden of establishing a *prima facie* case of obviousness by pointing to some teaching or suggestion in Mackintosh for the appealed claim limitation that a proportion of magnesium and/or magnesium compounds is increased at the expense of the proportion of the other hardening constituents. We cannot sustain, therefore, the § 103 rejections of claims 1-4, 6, and 11-13 as being unpatentable over Mackintosh or of claim 5 as being unpatentable over Mackintosh in view of Hann.

Appeal 2006-2667
Application 10/257,952

Order

The decision of the Examiner is REVERSED.

BRG/cam

Stewart L. Gitler
Suite 522
2361 Jefferson Davis Hwy.
Arlington, VA 22202-3876