

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

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* LOTHAR PFALZER

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Appeal 2006-2016  
Application 10/347,345  
Technology Center 3700

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Decided: April 30, 2006

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Before BRADLEY R. GARRIS, CHUNG K. PAK and  
JEFFREY T. SMITH, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals the final rejection of claims 1-43 under 35 U.S.C. § 134. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

We AFFIRM.

## INTRODUCTION

Appellant invented a process and apparatus for slushing contaminated recovered paper by feeding contaminated recovered paper (S) into a horizontal drum (1) on its first face (5) and moving the contaminated recovered paper from the first face (5) to a second face (5') of the horizontal drum and discharging the contents of the drum from the second face (5') using a “rotating coil” (4) (Specification ¶¶ [0002], [0006], Figure 1). The horizontal drum has a displacement body (2) extending through the drum (1) so that a processing channel (3) is formed. (Specification ¶ [0002], Figures 1 and 2). The contaminated recovered paper (S) is mechanically processed in the processing channel (3) and expelled as pulp (S') from the second face (5') of the horizontal drum (1) (Specification ¶¶ [0002], [0004], Figures 1 and 2). Appellant states that problems can occur with the discharge of the pulp from the horizontal drum (Specification ¶ [0004]). To address these problems, Appellant uses a “rotating coil” (4) to transport the pulp (S') produced from the contaminated recovered paper (S) treated in the drum (1) out at the second face (5') together with the contained impurities (Specification ¶¶ [0006], [0039], [0040], Figure 1). Claims 1, 22, and 43 are illustrative:

1. A process for slushing contaminated recovered paper in a slushing device that includes a rotatable drum having a first and second face on opposite axial ends and at least one displacement body having an outside wall curved at least in sections located inside the drum and held from outside of the drum, such that a processing channel is formed between at least the curved section of the outside wall of the displacement body and at least a part of an inside wall of the drum in order to mechanically process the recovered paper, said process comprising:

feeding recovered paper contaminated with impurities into the drum on the first face;

moving the recovered paper and impurities within the drum from the first to the second face;

discharging the recovered paper and impurities out of the drum at the second face with a rotating coil.

22. An apparatus for slushing contaminated recovered paper comprising:

a rotatable drum having a first and second face on opposite axial ends, wherein said first face is structured and arranged to receive recovered paper contaminated with impurities;

at least one displacement body having an outside wall curved at least in sections, said at least one displacement body being located inside said drum and arranged to form a processing channel between at least said curved section of said outside wall of the displacement body and at least a part of an inside wall of the drum in order to mechanically process the recovered paper;

said at least one displacement body being held within said drum from outside of said drum; and

a rotatable coil positioned at the second face of said drum and arranged to discharge the recovered paper and impurities out of said drum.

43. An apparatus for slushing contaminated recovered paper comprising:

a rotatable drum having a first and second face on opposite axial ends, wherein said first face is structured and arranged to receive recovered paper contaminated with impurities;

at least one displacement body having an outside wall curved at least in sections, said at least one displacement body being located inside said drum and arranged to form a processing channel between at least said curved section of said outside wall of the displacement body and at least a part of an

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inside wall of the drum in order to mechanically process the recovered paper;

a rotatable coil positioned at the second face of said drum and arranged to discharge the recovered paper and impurities out of said drum; and

said at least one displacement body being arranged to extend through said rotatable coil and being held within said drum from outside of said drum.

The Examiner relies on the following prior art references as evidence of unpatentability:

Tremolada	US 3,614,003	Oct. 19, 1971
Krebs	US 6,000,640	Dec. 14, 1999

The rejections as presented by the Examiner are as follows:

1. Claims 1, 3, 5, 9-14, 17, 18, 21, 22, 24, 26, 30-35, 38, 39, 42, and 43 are rejected under 35 U.S.C. § 102(b) as being unpatentable over Krebs.<sup>1</sup>
2. Claims 2, 6-8, 15, 16, 19, 20, 23, 27-29, 36, 37, 40, and 41 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Krebs.<sup>1</sup>
3. Claims 4 and 25 are rejected under § 103(a) as being unpatentable over Krebs in view of Tremolada.

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<sup>1</sup> Claims 14 and 35 (the § 102(b) rejection), and 8 and 29 (§ 103(a) rejection over Krebs alone) were not included in the Examiner's statement of the rejection (Answer 3, 4), however, the Examiner included such claims in his explanation of the rejection (Answer 4, 5). Appellant understood that these claims (i.e., claims 8, 14, 29, and 35) were under rejection by his statement that “[c]laims 1-43 . . . stand finally rejected” (Br. 4). Therefore, the Examiner's inadvertent oversight regarding these claims is harmless.

Rather than reiterate the respective positions advocated by the Appellant and by the Examiner concerning these rejections, we refer to the Brief and to the Answer respectively for a complete exposition thereof.

## OPINION

### 35 U.S.C. § 102(b) REJECTION OVER KREBS CLAIMS 1, 22, AND 43

Appellant's only argued distinction regarding claims 1, 22, and 43 is the "coil" claim feature (Br. 10-11). Specifically, Appellant argues that the claim features "discharging the recovered paper and impurities out of the drum at the second face with a rotating coil" (claim 1) and "a rotatable coil positioned at the second face of said drum and arranged to discharge the recovered paper and impurities out of said drum" (claims 22 and 43) are not disclosed by Krebs (Br. 10-11).

We agree with the Examiner's finding that Appellant's "coil" claim feature is disclosed by Krebs.

Krebs' Figure 2 embodiment shows a screw conveyor (i.e., "rotating coil" or "rotatable coil") that extends through the drum (1) to discharge the separated "finer fraction" 13 of fibrous material F at the second end (5') of the drum (1) (col. 6, ll. 18-39). The Examiner indicates that Krebs' Figure 2 embodiment discloses such a feature in his rejection of claims 1, 22, and 43 (Answer 3). Moreover, Appellant does not dispute that Krebs discloses using the screw conveyor to remove a "finer fraction" 13 from the drum (Br. 12). Rather, Appellant argues that Krebs' "finer fraction" 13 removed by the screw conveyor would not have impurities such that the claim features "discharging the recovered paper and impurities" (claim 1) or "to discharge

the recovered paper and impurities” (claims 22 and 43) are not satisfied by Krebs’ disclosure (Br. 12).

We are unpersuaded by Appellant’s argument regarding the impurities in Krebs’ “finer fraction” 13. Appellant has not provided a definition of “impurities” in his Specification that would govern the Examiner’s interpretation of such claim term. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005). Hence, we find it reasonable that the claim term “impurities” may include impurities commonly found on used paper, for example, toner particles or ink residue on the “contaminated, used paper” (Krebs, col. 1, ll. 32). Accordingly, we find that Krebs’ “finer fraction” 13 of the “contaminated, used paper” reasonably contains impurities, such as toner particles or ink residue, that satisfies Appellant’s claim recitations of “discharging the recovered paper and impurities” (claim 1) and “to discharge the recovered paper and impurities” (claims 22 and 43).

Having determined that Krebs Figure 2 embodiment discloses Appellant’s argued distinctions, we affirm the Examiner’s § 102(b) rejection of argued claims 1, 22, and 43.

### CLAIMS 3, 5, 24, AND 26

The Examiner’s § 102 rejection of claims 3, 5, 24, and 26 is based on the doctrine of inherency (Answer 3). However, Appellant’s arguments regarding these claims fail to address the Examiner’s inherency determination. For example, Appellant’s arguments regarding claims 5 and 26 merely state that “. . . KREBS fail[s] to positively disclose rotating the drum and the coil at the same rotational speed . . .” (claim 5) or “. . . KREBS

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fail[s] to positively disclose said drum and said coil are rotatable at a same rotational speed . . .” (claim 26) without proffering any reasons why the Examiner’s inherency determination is incorrect (Br. 14, 19).

Moreover, regarding method claim 5, for example, we determine that the Examiner’s inherency position is reasonable because at either start-up or shut-down of the device, the speeds of the “rotating coil” and the drum would at some point be the same. Additionally, regarding apparatus claim 26, for example, the Examiner’s inherency position is reasonable because Krebs’ screw conveyor (i.e., “rotatable coil”) and drum are inherently functionally capable of rotating at the same speed. *In re Schreiber*, 128 F.3d 1473, 1478, 44 USPQ2d 1429, 1432 (Fed. Cir. 1997).

For the above reasons, we affirm the Examiner’s § 102(b) rejection of argued claims 3, 5, 24, and 26.

CLAIMS 9-14, 17, 18, 21, 30-35, 38, 39, AND 42

Appellant’s arguments regarding claims 9-14, 17, 18, 21, 30-35, 38, 39, and 42 are without persuasive merit.

For example, regarding claim 9 Appellant argues that “. . . KREBS fail[s] to positively disclose the drum is oriented horizontally . . .” (Br. 14). However, Krebs clearly discloses that the drum is oriented horizontally (Krebs, col. 8, ll. 16).

Similarly, regarding claim 12, for example, Appellant argues “. . . KREBS fail[s] to positively disclose the combination of features recited in claim 12 [i.e., “the drum includes transporting bars attached to the inside wall that are arranged to lift the pulp inside the drum”] . . .” (Br. 15-16). However, this limitation is satisfied by Krebs’ disclosure of “carrier strips”

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9 that move with the rotation of the drum to lift the fibrous material F (Krebs, col. 5, ll. 29-33).

We have considered each of the argued claims under review but, like the Examiner, find them to be anticipated by Krebs.

Accordingly, we affirm the Examiner's rejection of argued claims 9-14, 17, 18, 21, 30-35, 38, 39, and 42.

35 U.S.C. § 103(a) OVER KREBS

Appellant's arguments regarding claims 2, 6-8, 15, 16, 19, 20, 23, 27-29, 36, 37, 40, and 41 are directed to whether Krebs anticipates, rather than renders obvious, the subject matter defined by these claims. Moreover, Appellant's arguments fail to show any error on the part of the Examiner in concluding that the subject matter of claims 2, 6-8, 15, 16, 19, 20, 23, 27-29, 36, 37, 40, and 41 would have been obvious over Krebs.

For example, Appellant argues that the Examiner's rejection of claim 2 is improper because "... KREBS fail[s] to positively disclose rotating the inside wall of the drum at at least 20 cm/sec in the circumferential direction ..." (Br. 24). Based on this statement, Appellant contends that "the Examiner has failed to provide an adequate evidentiary basis to support a rejection of *anticipation under 35 U.S.C. § 102(b)*" (emphasis added) (Br. 24-25).

Because Appellant's arguments are directed to anticipation, not obviousness, they are unquestionably inadequate to establish error on the Examiner's part in making the § 103 rejection under review.

In this regard, it is clear that the Examiner has made no error in reaching an obviousness conclusion with respect to, for example, claim 2.

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The rotational speed of the drum is recognized by Krebs as being a control variable (col. 5, ll. 60-63; col. 7, ll. 58-62). From such disclosure, we determine rotational speed is a result effective variable such that it would have been obvious for an artisan with ordinary skill to develop workable or even optimum ranges for such art-recognized, result-effective parameters.

*In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-1937 (Fed. Cir. 1990); *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980); *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Similar reasoning may be applied to claims 6-8, 15, 16, 19, 20, 23, 27-29, 36, 37, 40, and 41.

For the above reasons, we affirm the Examiner § 103(a) rejection over Krebs of argued claims 2, 6-8, 15, 16, 19, 20, 23, 27-29, 36, 37, 40, and 41.

#### 35 U.S.C. § 103(a) OVER KREBS IN VIEW OF TREMOLADA

Appellant's arguments regarding claims 4 and 25 are directed to whether Krebs in view of Tremolada anticipate, rather than render obvious, the claimed invention. For example, Appellant argues regarding claim 4 that “. . . KREBS fails to positively disclose. . .” the coil feature recited in claim 4. Based on that argument, Appellant determines that “the Examiner has failed to provide an adequate evidentiary basis to support a rejection of *anticipation under 35 U.S.C. § 102(b)*” (emphasis added) (Br. 31-32). Appellant makes the same arguments regarding claim 25.

However, such arguments fail to address the Examiner's obviousness conclusion. In fact, Appellant fails to show any error on the part of the Examiner in concluding that the claimed invention would have been obvious over Krebs in view of Tremolada.

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For the foregoing reasons, we affirm the Examiner's § 103(a) rejection of claims 4 and 25 over Krebs in view Tremolada.

## DECISION

The Examiner's rejection of claims 1, 3, 5, 9-14, 17, 18, 21, 22, 24, 26, 30-35, 38, 39, 42, and 43 under § 102(b) over Krebs is AFFIRMED.

The Examiner's rejection of claims 2, 6-8, 15, 16, 19, 20, 23, 27-29, 36, 37, 40, and 41 under § 103(a) over Krebs is AFFIRMED.

The Examiner's rejection of claims 4 and 25 under § 103(a) over Krebs in view of Tremolada 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)(2006).

AFFIRMED

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