

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. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROGER R. BELANGER et al.

Appeal No. 2000-2032
Application No. 09/017,187

ON BRIEF

Before FRANKFORT, NASE, and BAHR, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1, 4, 5 and 7 to 14, which are all of the claims pending in this application.¹

We REVERSE.

¹ Claims 1, 7 and 12 were amended subsequent to the final rejection.

BACKGROUND

The appellants' invention relates generally to folders of printing presses (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

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

Reponty 1986	4,573,671	March 4,
Kalisiak 1992	5,172,907	Dec. 22,
Nakazato et al. 1996 (Nakazato)	5,482,265	Jan. 9,
Richards 1998	5,749,823	May 12,

Claims 1, 4, 5 and 7 to 10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Kalisiak in view of Richards and Reponty.

Claims 11 to 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over Kalisiak in view of Richards and Reponty, and further view of Nakazato.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (Paper No. 15, mailed March 10, 2000) for the examiner's complete reasoning in support of the rejections, and to the brief (Paper No. 14, filed February 18, 2000) and reply brief (Paper No. 16, filed May 15, 2000) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to the claims under appeal. Accordingly, we will

not sustain the examiner's rejection of claims 1, 4, 5 and 7 to 14 under 35 U.S.C. § 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Claims 1, 7 and 12, the independent claims under appeal, read as follows:

1. A folder for processing a stream of signatures having a desired path and each signature having a lead and a trail edge, the folder comprising:
a plurality of sensor sets, each of the plurality of sensor sets for measuring a deviation of one of the lead and trail edge of the signature from the desired path, one of the plurality of sensor sets being disposed

downstream of a cutting cylinder and another of the plurality of sensor sets being disposed upstream of a quarter fold region, each of the plurality of sensor sets including a first laser emitter associated with a first diode receiver and a second laser emitter associated with a second diode receiver, the first laser emitter and first diode receiver being disposed on a first side of a centerline of the desired path, the second laser emitter and the second diode receiver being disposed on a second side of the centerline.

7. A method for detecting deviations in a stream of signatures in a folder, each signature having a lead and trail edge, the method comprising the steps of:

sensing one of the lead edge and the trail edge by a first sensor disposed at a first location downstream of a cutting cylinder, the first location being on a first side of a centerline of a desired path of the stream of signatures;

sensing one of the lead edge and the trail edge by a second sensor disposed at a second location downstream of a cutting cylinder, the second location being on a second side of the centerline;

determining a first skew in the signature by comparing an output of the first sensor with an output of the second sensor;

sensing one of the lead edge and the trail edge by a third sensor disposed at a third location upstream of a quarter folder region, the third location being on the first side of the centerline;

sensing one of the lead edge and the trail edge by a fourth sensor disposed at a fourth location upstream of a quarter folder region, the fourth location being on the second side of the centerline; and

determining a second skew in the signature by comparing an output of the third sensor with an output of the fourth sensor.

12. A method for detecting deviations in a stream of signatures in a folder, the stream of signatures including a first signature having a first trail edge and

a second signature having a second lead edge, the method comprising the steps of:
 sensing the first trail edge;
 sensing the second lead edge; and
 determining a signature-to-signature spacing as a function of the sensing the first trail edge step and the sensing the second lead edge step;
 wherein the sensing and determining steps are performed both downstream of a cutting cylinder and upstream of a quarter folder region.

The pertinent teachings of the applied prior art are set forth on pages 4, 5 and 8 of the brief and pages 3-4 of the answer. However, we find no support in Reponty for the examiner's finding (answer, p. 3) that Reponty's sensors are located downstream of a cutting device since we fail to find any disclosure within Reponty of a cutting device.

The appellants argue that the applied prior art does not suggest the claimed subject matter. We agree.

Claims 1, 4, 5 and 7 to 11 require a folder to have one sensor set disposed downstream of a cutting cylinder to determine skew in a signature and a second sensor set disposed upstream of a quarter fold region to determine skew in a signature. However, it is our view that these limitations are not suggested by the applied prior art. In that regard, while Kalisiak does teach a sensor set to determine skew in a signature, Kalisiak does not teach or suggest using two sensor sets to determine skew in a signature with one sensor set disposed downstream of a cutting cylinder and the second

sensor set disposed upstream of a quarter fold region. To
supply the deficiencies in the teachings of

Kalisiak, the examiner made determinations (answer, p. 3) that these differences would have been obvious to an artisan from the teachings of Richards and Reponty. However, while Richards may have led an artisan to position Kalisiak's sensor set upstream of a quarter fold region, we see no teaching or suggestion in the applied prior art to have modified Kalisiak to provide one sensor set to determine skew in a signature upstream of a quarter fold region and another sensor set to determine skew in a signature downstream of a cutting cylinder.

Claims 12 to 14 require the performance of the step of determining a signature-to-signature spacing as a function of sensing the trail edge of a first signature and sensing the lead edge of a second signature both downstream of a cutting cylinder and upstream of a quarter folder region. However, it is our view that these limitations are not suggested by the applied prior art. In that regard, while Nakazato does teach a sensor to determine signature-to-signature spacing, it is our determination that Nakazato and the other applied prior art do not teach or suggest determining a

signature-to-signature spacing both downstream of a cutting cylinder and upstream of a quarter fold region.

In our view, the only suggestion for modifying Kalisiak in the manner proposed by the examiner to arrive at the subject matter of claim 1, 4, 5 and 7 to 14 stems from hindsight knowledge derived from the appellants' own disclosure. The use of such hindsight knowledge to support an obviousness rejection under 35 U.S.C. § 103 is, of course, impermissible. See, for example, W. L. Gore and Assocs., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). It follows that we cannot sustain the examiner's rejections of claims 1, 4, 5 and 7 to 14.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1, 4, 5 and 7 to 14 under 35 U.S.C. § 103 is reversed.

REVERSED

CHARLES E. FRANKFORT)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JEFFREY V. NASE)	APPEALS
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