

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DARYL J. CAREY, LYNN L. LADOUCEUR and
DANIEL W. MUSZYNSKI

Appeal No. 1997-0200
Application No. 08/202,860

ON BRIEF

Before THOMAS, MARTIN, and RUGGIERO, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 28, 33, 37, and 38. Claims 1-27 and 29 have been canceled. Claims 30-32 and 34-36 have been indicated by the Examiner as containing allowable subject matter.

The claimed invention relates to a method and apparatus for balancing an out-of-balance transaction in a check image

processing system. More particularly, Appellants indicate at pages 8 and 9 of the specification that a relative relationship between differing characteristics which may give rise to balancing errors is established by assigning weighted values to each characteristic. A set of items in an out-of-balance transaction is examined and ranked as to being a likely source of error in accordance with the weighted characteristics.

Claim 28 is illustrative of the invention and reads as follows:

28. An improved method for balancing an out-of balance transaction in a check image processing system, wherein one or more of the items in the out-of balance transaction has an associated amount and may be the source of the error, the method comprising the steps of:

associating a different one of a plurality of weights with each of a plurality of different characteristics, wherein each of said plurality of different characteristics indicates a different type of error which may be causing the out-of-balance condition, and each of said plurality of weights indicates a different relative likelihood that said each of said plurality of different characteristics from said associating step is the source of the error in the out-of-balance transaction;

identifying which of said plurality of different characteristics are exhibited by each of the items;

detecting which ones of the items are suspect items, wherein a suspect item is an item for which at least one of

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said plurality of different characteristics from said identifying step was identified;

ranking each of said suspect items to indicate the relative likelihood that each of said suspect items is the source of the error, wherein the relative likelihood of a suspect item being the source of the error is determined by a characteristic exhibited by said suspect item and said one of said plurality of weights associated with said characteristic;

reentering the amounts for the items in the out-of-balance transaction until the transaction balances, wherein said reentering step begins with said suspect item which is the most likely source of the error and progresses toward the item which is the least likely source of error; and

checking whether the transaction is balanced after each amount is reentered, whereby said reentering step is completed upon detection of the transaction being balanced.

The Examiner relies on the following prior art:

Elischer et al. (Elischer)	5,040,226	Aug. 13, 1991
Lyke et al. (Lyke)	5,151,948	Sep. 29, 1992

Claims 28, 33, 37, and 38 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over Lyke in view of Elischer.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Brief and Answer for the respective details thereof.

OPINION

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We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner and the evidence of obviousness relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Brief along with the Examiner's rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 28, 33, 37, and 38. Accordingly, we affirm.

As a general proposition in an appeal involving a rejection under 35 U.S.C. § 103, an Examiner is under a burden to make out a prima facie case of obviousness. If that burden is met, the burden of going forward then shifts to Appellant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d

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1443, 1444 (Fed. Cir. 1992); In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

Only those arguments actually made by Appellants have been considered in this decision. Arguments which Appellants could have made but chose not to make in the Brief have not been considered [see 37 CFR § 1.192(a)].

With respect to independent claim 28, the Examiner proposes to modify the check image processing system of Lyke which discloses an out-of-balance transaction feature which detects and highlights to an operator suspect items having a probable likelihood of being the cause of an out-of-balance error. As recognized by the Examiner, Lyke discloses that different characteristics are associated with different types of errors, but lacks a teaching of statistically quantifying or weighting the characteristics so as to indicate the relative likelihood that a particular type of error is the source of the out-of-balance event. To address this deficiency, the Examiner turns to the transaction balancing system of Elischer for a teaching of ranking suspect items by

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weighting the characteristics exhibited by detected errors. In the Examiner's line of reasoning (Answer, page 6), the skilled artisan would have found it obvious to utilize such a statistical ranking feature in Lyke in order to reduce reentry time by presenting suspect items to an operator in the order of their likelihood as the error source.

We note that, aside from a broad general assertion at page 20 of the Brief that lacks factual support, Appellants have not attacked the combinability of Lyke and Elischer. Rather, Appellants' detailed arguments in response (Brief, pages 12-14) center on the alleged deficiency of Elischer in disclosing the associating of weights with a plurality of characteristics with the plurality of characteristics being of different types. We refer to the language of claim 28, the relevant portion of which recites:

associating a different one of a plurality of weights with each of a plurality of different characteristics, wherein each of said plurality of different characteristics indicates a different type of error...

In addressing this limitation, the Examiner (Answer, page 5) points to the description at column 5 of the transaction balancing system of Elischer which describes the examination

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of the characteristics of each digit in a numeric field with such characteristics being assigned a confidence level (i.e. weight) based on the degree of confidence of a recognition result. In the Examiner's view (Answer, page 7), the digits within Elischer's numeric fields represent different characteristics which give rise to different types of recognition errors and which are assigned relative weights based on recognition confidence.

In response, Appellants attack the Examiner's establishment of a prima facie case of obviousness by contending that the Examiner's interpretation of the Elischer reference in light of the claim language of independent claim 28 is in error. Appellants assert (Brief, page 13) that, in contrast to the claimed establishment of a relative relationship among different types of characteristics, Elischer teaches only a single error characteristic, i.e. character recognition confidence level.

Upon careful review of the Elischer reference in light of Appellants' arguments, we are in agreement with the Examiner's stated position in the Answer. In our view, the Examiner, in giving the broadest reasonable interpretation to the claim

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language "...a plurality of different characteristics..." and "...different type of error...", is correct in concluding that the disclosure of Elischer meets the particular error weighting feature of the claim. Each digit in a numeric field in Elischer exhibits differing characteristics from other digits and a failure of recognition represents a different type of error. In other words, the characteristics of the digit "3" which may result in an improper substitution for the digit "8" are different from the characteristics of digits which may be more or less likely to be confused with other digits which would be indicative of a different type of error.

It is further our view that Appellants' own specification supports the Examiner's claim language interpretation discussed supra. At page 40 of Appellants' specification, a Characteristic Priority table is presented which indicates that in the High Risk Digit portion of the table described in the example on pages 43-44, differing relative weights are given to the recognition confidence factor of each digit. In our opinion, this table at least impliedly suggests that Appellants themselves considered the recognition factor of

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different digits to be a different type of error to which a differing relative weight was assigned.

In view of the above discussion, we are of the opinion that, since all of the claim limitations would be met by the Examiner's well reasoned proposed combination of Lyke and Elischer, the Examiner has established a prima facie case of obviousness which remains un rebutted by any persuasive arguments of Appellant. We remain convinced that, given Elischer's clear and unambiguous teaching of ranking suspect items based on the relative weighting of the characteristics of different types of error in a transaction balancing system, the skilled artisan would have found it obvious to modify the transaction balancing system of Lyke to include a statistical weighting feature for ranking suspect items as taught by Elischer. Further, it is our view that this obviousness would extend, not only to the different types of error present in character recognition discussed by both Lyke (e.g. column 7, lines 1-4) and Elischer, but as well to other categories or types of error such as transposition and misplaced items specifically discussed by Lyke. Accordingly, the Examiner's

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35 U.S.C. § 103 rejection of independent claim 28 is sustained.

We further find the Examiner's reasoning (Answer, page 6) with respect to dependent claim 37 to be persuasive and sustain the obviousness rejection of this claim as well. As pointed out by the Examiner, Elischer provides a clear teaching of combining the weights from the individual digit characteristics in a numeric field and ordering the suspect items beginning with the most likely to be the cause of the error (Elischer, column 5, lines 42-44).

We now turn to a discussion of apparatus claims 33 and 38 which are means-plus-function counterparts of method claims 28 and 37 discussed supra. We find that the Examiner's rationale for rejecting these claims is identical to that utilized in rejecting method claims 28 and 37 and, in our view, equally persuasive. We do note that, at pages 16-18 of the Brief, Appellants argue that In re Donaldson Co., 16 F.3d 1189, 1193, 29 USPQ2d 1845, 1848 (Fed. Cir. 1994) requires that the "means for" language occurring in the claims, in accordance with 35 U.S.C. 112, sixth paragraph, must be interpreted as covering the structure, material or acts set forth in the specification

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and equivalents thereof. Appellants, however, have pointed to nothing specific, within the specification, that we are to construe the claims to cover. Appellants have not directed us to any corresponding structure within the specification to which any of the claimed "means" refers nor have Appellants indicated what is to be construed as "equivalents thereof" or why the structure and steps disclosed by Lyke and Elischer may not be considered to be "equivalent." Accordingly, we are not persuaded by Appellants' Donaldson argument and, therefore, the Examiner's obviousness rejection of claims 33 and 38 is sustained.

In summary, we have sustained the Examiner's 35 U.S.C. § 103 rejection of all of the claims on appeal. Therefore, the decision of the Examiner rejecting claims 28, 33, 37, and 38 is affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

JAMES D. THOMAS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOHN C. MARTIN)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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APJ RUGGIERO

APJ THOMAS

APJ MARTIN

DECISION: AFFIRMED
Send Reference(s): Yes No
or Translation (s)
Panel Change: Yes No
Index Sheet-2901 Rejection(s):
Prepared: October 27, 2000

Draft Final

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PALM / ACTS 2 / BOOK
DISK (FOIA) / REPORT