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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RONALD E. GOCHT
and LEON A. PINSTOV

Appeal No. 1997-0012
Application No. 08/174,901[1]

ON BRIEF

Before HAIRSTON, FLEMING and RUGGIERO, Administrative Patent Judges

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1

[1] Application for patent filed December 29, 1993.

through 10. In a Amendment After Final (paper number 6), claims 1 through 10 were amended. According to the examiner (paper number 7), the amendment had the effect of overcoming the indefiniteness rejection of claims 1 through 10.

The disclosed invention relates to an apparatus for determining the location and content of data blocks on an outer surface of mailpieces. The apparatus includes a computer electrically connected to an imaging structure for obtaining a digital bit map image of the outer surface of the mailpieces. The computer has a structure programmed for finding individual runs of a plurality of black bits of each scan line and determining whether any bit of each run neighbors at least one black bit of another scan line, combining the found run with each neighboring bit to form a character, assigning a descriptive value to a block having at least one character, and comparing the descriptive value to a list of values to identify a particular data block.

Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. Apparatus for processing mailpieces comprising:

a. means for sequentially feeding a plurality of

mailpieces in a predetermined path of travel having a downstream direction, each of the mailpiece[s] having a leading edge and a trailing edge in the path of travel, each of the mailpieces including an outer surface having a plurality of blocks of data marked thereon, each of the mailpiece outer surfaces having a longitudinal length thereof extending upstream from the leading to the trailing edge thereof [and] having a transverse length thereof extending transversely of the longitudinal length;

b. a digital computer;

c. means electrically connected to the computer for obtaining a digital bit map image of the outer surface of at least one of the mailpieces, the image obtaining means including means for unidirectionally raster scanning the mailpiece outer surface under the control of the computer, the image obtaining means including means for sequentially providing a plurality of scan lines of data to the computer, the scan lines respectively extending parallel to one another and transversely of the longitudinal length of the mailpiece outer surface, each of the scan lines including a sequence of a plurality of pixels of data respectively corresponding to a bit of a black and white scale of bits, each of the scan lines having a different first coordinate code assigned thereto for identifying a location thereof longitudinally of the length of the mailpiece outer surface, each of the pixels of any given scan line having a different second coordinate code assigned thereto for identifying a location thereof transversely of the longitudinal length of the mailpiece outer surface, whereby each pixel has a different combination of first and second coordinate codes uniquely identifying the location thereof on the mailpiece outer surface and all of the pixels correspond to a bit map image thereof; and

d. the computer including means programmed for:

i. finding individual runs of a plurality of black bits of each scan line and determining whether any bit of each individual run neighbors at least one black bit of another scan line;

ii. combining each of the found individual runs of each scan line which neighbor at least one black bit of the another scan line with each neighboring black bit of the another scan line to form at least one character;

iii. determining the first and second coordinates defining a location on the mailpiece outer surface of a block having at least one character and assigning a descriptive value to the block as a function of a plurality of features thereof; and

iv. comparing the descriptive value assigned to the block having at lest [sic, least] one character to a list of values identifying the location of a plurality of blocks of data and identifying the block having at least one character as a particular one of the plurality of blocks of data if the descriptive value is the same as one of the values in the list of values.

The references relied on by the examiner are:

Kizu et al. (Kizu)	4,516,265	May 7, 1985
Radl et al. (Radl)	4,782,238	Nov. 1, 1988
Pizano et al. (Pizano)	5,293,429	Mar. 8, 1994
		(filed Aug. 6, 1991)

Claims 1 through 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Radl in view of Pizano and Kizu.

Reference is made to the brief and the answer for the respective positions of the appellants and the examiner.

OPINION

We have carefully considered the entire record before us, and we will reverse the rejection of claims 1 through 10.

To establish a prima facie case of obviousness based on a combination of the content of various references, there must be some teaching, suggestion or motivation in the prior art to make the specific combination that was made by the applicants. In re Raynes, 7 F.3d 1037, 1039, 28 USPQ2d 1630, 1631 (Fed. Cir. 1993); In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). Obviousness cannot be established by hindsight combination to produce the claimed invention. In re Gorman, 933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991). Here, the examiner has failed to establish a prima facie case of obviousness.

The primary reference to Radl, discloses an apparatus for generating a signal representing edge positions of address labels and apertures located on a mailpiece. The edge location signals may be used in determining the positions of the address labels and apertures on the mailpiece for scanning by an optical character reader. As shown in Figure 1, Radl

discloses a conveyor 10 for transporting mailpieces 13 having lengthwise edges 13a and 13b, which mailpieces include address labels or apertures 14 having lengthwise edges 20a and 20b. The address labels and apertures 14 are illuminated by lamps 24, focused by lens system 25, scanned by image sensor 26 and processed and enhanced by signal processor 28 for determining the locations of the address labels and apertures on the mailpiece.

As shown in Figures 4A through 7 of Radl, light sources S1 and S2 are alternately utilized in order to detect the edges of the mailpieces, and the edges of the address labels and apertures. The signals representing the edges are enhanced; the signals representing the remaining flat areas, including text information, cancel each other out (column 5, lines 35-45 and column 6, lines 22-31).

The secondary reference to Pizano relates to a business form recognition system, means and "method for automatically classifying streams of heterogeneous business forms" (column 1, lines 44-47). As noted by the examiner (Answer, page 10), Pizano includes a disclosure of "*extraction of characters*

utilizing connected component analysis" (emphasis added).

Kizu, another secondary reference relied upon by the examiner, is directed to an optical character reader for reading a postal code *written or typed (thus including characters)* on a postal item. Kizu's system divides patterns of a postal item into a plurality of blocks, detects the positions of such blocks, scans a desired block, distinguishes written or typed postal codes from the names and addresses on the postal item, locates the postal codes, and reads and recognizes the postal codes (column 1, lines 40-51).

The examiner, in rejecting independent claim 1 under 35 U.S.C. § 103(a), states that Radl utilizes the conventional eight-connectedness criteria, but "fails to explicitly disclose the means for: finding a run of black bits in each scan line and determining whether any bit thereof neighbors at least one black bit of another scan line; combining each of the found runs of each scan line with each neighboring black bit of the another scan line" (Answer, page 4). The examiner then takes Official Notice (Answer, pages 4-5) of the fact that appellants' "claimed steps are considered to be an art

recognized equivalent of the Radl et al. teaching [i.e., eight-connectedness criteria]," and offers Pizano as an example of an art-recognized equivalent. The examiner has concluded that "[i]t would have been obvious to one of ordinary skill in the art to utilize the claimed steps in place of the steps taught by Radl et al. since they are art recognized equivalents, and since the claimed steps are old and well known in the art" (Answer, page 5), and that "the replacement of Radl's technique with Pizano's would merely constitute a substitution of art recognized equivalents" (Answer, page 10).

The examiner has further stated that Radl "fails to disclose identifying the block as a particular one of a plurality of blocks" (Answer, page 6). Citing Kizu as an example of the use of a plurality of blocks on mailpieces, the examiner has determined that "it would have been obvious to one of ordinary skill in the art to use Radl et al. technique to identify other blocks on the mailpiece, if other blocks were desired to be identified. The need for locating various blocks on a mailpiece is well established in the field." (Answer, page 6).

Appellants argue that the examiner has misread the Radl reference. It is appellants' position that:

> [I]n Radl there is clearly no need to extract the exact content of the text information. All that is required is that the contrast intensity signals associated therewith be canceled out so that the remaining edge signals can be clearly determined. Accordingly, the Examiners' position that the text information must be extracted out is not correct. Therefore, since the extracting of the exact text information is not required there would simply be no motivation for one possessing ordinary skill in the art to combine the teachings of Radl and Pizano as the Examiners have stated (Brief, pages 5-6).

We agree with appellants. The purpose of Radl's invention is *to determine the locations* of the address labels and apertures for optical character reading (column 1, lines 10-11), not "to extract the addresses in order to perform optical character reading on them," as asserted by the examiner (Answer, page 10). Radl discloses the conventional procedure of eight-connectedness criteria (column 8, lines 38-39), which procedure has been determined by the examiner as an art-recognized equivalent of those of Pizano and appellants' claimed steps, and appellants have not disputed such a determination. Radl, however, utilizes this procedure not to read address characters or contents, but "[t]o better

determine where the edges [of address labels and apertures] lie" (column 8, line 28). Radl's invention is to enhance the signals representing the edge positions of address labels and apertures, and at the same time, to cancel out the signals representing the remaining flat areas of the envelope and the address labels and apertures, as well as text information (column 5, lines 37-42 and column 6, lines 22-30).

We fail to perceive any teaching, suggestion or motivation in the applied prior art which would have led one of ordinary skill in the art to substitute Pizano's procedure (or its equivalents) for that of Radl to arrive at the claimed invention. It is our view that the examiner's determination of obviousness is based on impermissible hindsight analysis "wherein that which only the inventor taught is used against its teacher." W. L. Gore *& Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Without appellants' teachings, one of ordinary skill in the art would not have been led to substitute Pizano's and Kizu's procedures (or their equivalents), which extract address characters and contents,

for Radl's procedure, which cancels out address text information (e.g., address characters and contents) and locates the address labels and apertures in order to arrive at the claimed invention.

Accordingly, we do not sustain the examiner's rejection under 35 U.S.C. § 103(a) of claim 1. It follows that we do not sustain the obviousness rejection of claims 2 through 5, which directly or indirectly depend from claim 1.

As to claims 6 through 10, the examiner has stated that they "recite a method which corresponds to apparatus claims 1-5, and therefore arguments analogous to those applied above to claims 1-5 are applicable to claims 6-10" (Answer, page 8). As a result, we do not sustain the examiner's rejection under 35 U.S.C.
§ 103(a) of claims 6 through 10.

DECISION

The decision of the examiner rejecting claims 1 through 10 under 35 U.S.C. § 103(a) is reversed.

REVERSED

KENNETH W. HAIRSTON Administrative Patent Judge	)	
MICHAEL R. FLEMING Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JOSEPH F. RUGGIERO Administrative Patent Judge	)	

KWH/dal

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