

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(2) is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SAMUEL J. WAGNER
AND BRENT D. TAFT

Appeal No. 95-3714
Application 07/866,613¹

ON BRIEF

Before THOMAS, HAIRSTON, and BARRETT, Administrative Patent
Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's
final rejection of claims 1 to 10, which constitute all of the
claims in the application before us.

Representative claim 1 is reproduced below:

¹ Application for patent filed April 10, 1992.

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PAT.&T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

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1. A method of recording a handwritten signature entered into a digitizer comprising the steps of:

-----providing a handwriting capture device including the digitizer and a hand-held stylus for capturing the handwritten signature;

sensing the location of a series of signature points progressively traversed by the stylus during strokewise movement thereof by the digitizer;

generating a stream of digital position data from the analog position data from the digitizer indicating the location of the signature points on the surface of the digitizer for use by a digital computer;

storing the position data in an ordered arrangement corresponding to the strokewise sequence of the data within the stream;

retrieving the position data from storage in a sequence related to the storage order thereof;

operating the digital computer in synchronism with the retrieving of position data from storage to compute the locations of the signature points relative to a series of strokewise oriented guide lines, wherein each guide line has two end points, including a start point and a stop point, and wherein the guide lines are arranged end-to-end along the stroke-wise sequence of the data;

operating the digital computer to generate a rectangle about a corresponding single guide line, including the substeps of generating a first line through the start point and perpendicular to the guide line, a second line through the stop point and perpendicular to the guide line, a third on one side of the guide line and parallel to it, and a fourth line on the other side of the guide line and parallel to it;

selecting only the position data corresponding to those of the signature points which do not fall within the rectangle; and

storing the selected position data.

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The following references are relied on by the examiner: .

Hardin, Sr. et al. (Hardin)	4,817,034	Mar. 28, 1989
Takasaki et al. (Takasaki)	4,969,201	Nov. 6, 1990

Claims 1 to 10 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner relies upon Hardin in view of Takasaki.

Rather than repeat the positions of the appellants and the examiner, reference is made to the Brief and the Answer for the respective details thereof.

OPINION

For all of the reasons expressed by the examiner in the Answer, and for the additional reasons set forth here, we will sustain the examiner's decision rejecting claims 1 to 9 under 35 U.S.C. § 103. For the reasons set forth here, we will also reverse the examiner's decision rejecting claim 10 under 35 U.S.C. § 103.

REJECTION OF CLAIMS 1 TO 9 UNDER 35 U.S.C. § 103

At the outset, we note that appellants have not presented any rebuttal as to the examiner's position that Hardin teaches a "method of recording a handwritten signature entered into a digitizer comprising the steps of" claim 1 of "providing . . .,"

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"sensing . . .," "generating . . .," "storing . . .," and "retrieving . . .". In addition, we find that Hardin teaches - operating a computer to compute signature point locations relative to strokewise oriented guidelines, selecting data points based on a determination that points fall in a defined area, and storing only selected data (see Answer, pages 3 to 4). In addition, we observe that appellants recognize a co-pending application to Crooks et al. (appellants' specification, page 1). Crooks et al. appear to teach all of the same features of claim 1 that Hardin does as just discussed (see appellants' specification, Background of the Invention section, pages 1 to 2). Since the co-pending Crooks et al. reference, now U. S. Patent No. 5,285,506, has a different inventive entity and has a filing date of April 30, 1991, this implies that the reference is prior art as to appellants' claims.

We generally agree with the examiner's statement of the rejection of claim 1 as set forth at pages 3 to 5 of the Answer. We find that Hardin teaches or suggests the invention recited in claim 1, short of the generation of a "rectangle" for use in selecting position data. We also find that Takasaki teaches or suggests such a "rectangle" feature at least at figure 3 and the accompanying text, to the extent that such a feature is broadly claimed. Thus, we find that the combination of Hardin and

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Takasaki would have taught or suggested appellants' invention of at least claim 1 to one of ordinary skill in the art at the time of appellants' invention.

As to claim 1 appellants present two lines of argument. First, that Takasaki does not teach or suggest "an end-to-end arrangement of guide lines" (see Brief, page 6) or compressing data (see Brief, page 5). Second, that "there is no teaching or suggestion in either reference to combine" Hardin and Takasaki since Takasaki has no application to the "storage of signatures, or compression of signatures" (Brief, pages 7 to 8). We disagree.

As to appellants' first argument concerning the teachings or suggestions of Takasaki, we note that the test for obviousness is what the combined teachings of the references would have suggested to a person having ordinary skill in the art. In re Young, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). With this background in mind, we conclude that the combination of Hardin and Takasaki teaches both an end-to-end arrangement of guidelines and compression, to the extent that such features are broadly claimed.

Specifically, we find that Hardin teaches an end-to-end arrangement of guidelines as posited by the examiner in the

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Answer (Answer, page 4). That is, Hardin teaches a strokewise analysis of signature data where the guidelines are arranged end-to-end (see Hardin: column 16, lines 44 to 56 and figure 3E). In addition, Hardin expressly teaches that data points are discarded in order to perform compression: "The raw coordinate data is also compressed by the computer program by deleting coordinates that are not relevant" (Hardin: column 2, lines 27 to 29). We also find that Takasaki teaches compression, to the extent broadly claimed, of line data since points determined to be outside of the rectangle shown in figure 3 are stored, while points determined to be inside of the rectangle are not stored (i.e., they are discarded). See Takasaki: figure 3 and column 4, lines 28 to 60.

As to appellants' second argument concerning the combinability of Hardin and Takasaki, we find there to be ample motivation for making the combination. We generally agree with the examiner's statement of the reasons for combining the teachings of Hardin and Takasaki as set forth in the Answer (see Answer, pages 5 and 8 to 9). We expand the examiner's reasoning by finding that both Hardin and Takasaki pertain to the storage and compression of line images.

Specifically, Hardin teaches recording, storing, and compressing signature image data using linear tests for

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guidelines (see Hardin at least at: figures 1, 3D, and 3E; column 2, lines 27 to 29; column 10, lines 50 to 57; and column 16, line 44 to column 17, line 2), and Takasaki teaches storing and compressing line image data using a rectangular test for guidelines (see Takasaki at least at: figure 3 and column 4, lines 28 to 60). We find that it would have been obvious to one of ordinary skill in the art at the time of appellants' invention to have modified Hardin's teaching of a linear signature image data method with Takasaki's teaching of a rectangular line image data method. The motivation would have been to improve Hardin's linear method for recording, storing, and compressing a signature entered into a digitizer by providing the rectangular method of storing and compressing line image data taught by Takasaki, which would improve operation on circular arc segments of the data.

Since both Hardin and Takasaki perform image data compression, and since line image data inherently includes signature data, one of ordinary skill in the art looking at the reference to Hardin logically would have been led to the teachings of Takasaki. We conclude that the artisan would have found it highly desirable to improve Hardin's method of operating on signature data with Takasaki's method of operating on line data since Takasaki's method improves operations on line data

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having circular arc segments, such as those common in
"handwritten signatures" as in claim 1 and in Hardin.

We note that appellants do not argue the particulars of claims 2 to 9. We also note that appellants appear to group claims 1 to 9 as standing or falling together (Brief, page 4), and appellants assert that "claims 2-9 are allowable since they depend from claim 1" (Brief, page 9). Thus, in light of the absence of any particular arguments of patentability, claims 2 to 9 fall together with our consideration of independent parent claim 1. See In re Nielson, 816 F.2d 1567, 1570, 2 USPQ2d 1525, 1526-27 (Fed. Cir. 1987); In re Kaslow, 707 F.2d 1366, 1376, 217 USPQ 1089, 1096-97 (Fed. Cir. 1983); and In re Wiseman, 596 F.2d 1019, 1021-22, 201 USPQ 658, 660 (CCPA 1979).

Accordingly, we must affirm the examiner's rejection of claims 1 to 9 under § 103.

REJECTION OF CLAIM 10 UNDER 35 U.S.C. § 103

Turning now to the rejection of claim 10 under § 103, appellants generally argue that neither Hardin nor Takasaki teach or suggest "delta values" as that term is used and defined in the claim. Despite the paucity of appellants' arguments (Brief, page 6), and in view of the examiner's tenuous attempt to extrapolate the claimed features from the teachings of the references

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(Answer, pages 5 to 6 and 8 to 9), we are constrained to agree that neither Hardin nor Takasaki teaches or suggests "first and second delta values" which affect compression or error propagation "as those terms are used by [a]pplicants" in claim 10 (Brief, page 6). Thus, we find that the features of claim 10 of "determining first and second delta values for each guide line," "discarding . . . lower bits from each delta value," and "readjusting each delta value to limit error propagation" are neither taught nor suggested by the operation of delta values of Hardin (epsilon and l3 in figure 3) or of Takasaki (delta d in figure 3E) when taken in context.

Accordingly, we must reverse the § 103 rejection of claim 10.

DECISION

In view of the foregoing, the decision of the examiner rejecting claims 1 to 9 under 35 U.S.C. § 103 is affirmed, and the decision of the examiner rejecting claim 10 under 35 U.S.C. § 103 is reversed. Accordingly, the decision of the examiner is affirmed-in-part.

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