

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(2) is not binding precedent of the Board.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 TOSHIO IGA

Appeal No. 1998-0414
Application 08/202,422

HEARD: FEBRUARY 10, 2000

Before HAIRSTON, RUGGIERO and HECKER, **Administrative Patent Judges.**

HECKER, **Administrative Patent Judge.**

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 through 7, all of the claims pending in the application.

The invention relates to a method and apparatus for displaying graphics on a display device. In the prior art, a

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graphic management facility receives graphic element data, including data specifying, for example, line width, etc., from the application program and stores the graphic element data into memory. When a draw request is input from the application program, the stored data are retrieved, and screen drawing is performed by sending an attribute specifying command and a draw command to the display device. Instead of outputting an attribute specifying command prior to a draw command each time the command is invoked, the graphic management facility outputs an attribute specifying command only when the attributes of the graphic element to be output are different from those of the previously output graphic element. However, the prior art described graphic management facility requires that the attribute data be compared each time the graphic element data are retrieved from memory. When processing a large number of line drawing data generated in a computer aid design system, a large amount of time is required for comparison, which is a major obstacle in speeding up the drawing process.

The present invention solves this problem by providing a graphic display method and an apparatus which

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classifies graphic data into groups according to the attributes of the graphic data and stores the groups into memory. When a display request is issued, the graphic data are output into a display device, one group at a time, thereby reducing the amount of attribute judging and attribute changing processing, which causes a substantial increase in the display processing speed.

Representative independent claim 1 is reproduced as follows:

1. A graphic display method comprising the steps of:

generating data for graphic elements having a plurality of attributes;

classifying the generated graphic element data into groups according to the attributes of the graphic elements and arranging the groups into memory according to classification; and

outputting the graphic element data arranged in memory onto a display device, one group at a time.

The references relied on by the Examiner are as follows:

Shimada	4,847,788	July 11, 1989
Alexander	5,257,349	Oct. 26, 1993
		(filed Dec. 18, 1990)

Claims 1 through 7 stand rejected under 35 U.S.C. §

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103 as being unpatentable over Alexander in view of Shimada.

Rather than repeat the arguments of Appellant or the Examiner, we make reference to the brief, reply brief and the answer for the details thereof.

OPINION

After a careful review of the evidence before us, we agree with the Examiner that claims 1 through 7 are properly rejected under 35 U.S.C. § 103.

At the outset, we note that Appellant has indicated on page 3 of the brief the claims stand or fall together. We will consider claim 1 as the representative claim.

The central issue revolves around what is meant by the claim language "graphic element data" and classifying this data into groups according to their "attributes." Appellant insists that attributes of maps (Shimada) are not attributes of graphic elements (reply brief-page 2). Appellant would have us limit our understanding of "graphic element" to mean

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such things as a "line", with the line attribute being line color or line width, etc. Thus, Appellant would like us to read the specific disclosed embodiment into the claim. We will not do this. Claims are to be given their broadest reasonable interpretation during prosecution. ***In re Zletz***, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); ***In re Prater***, 415 F.2d 1393, 1404, 162 USPQ 541, 550 (CCPA 1969). It is improper to narrow the scope of the claim by implicitly reading in disclosed limitations from

the specification which have no express basis in the claims.

See Id.

The Examiner cites Alexander as displaying graphic element data in groups related to physical attributes stored in a memory. However, Alexander's example of graphic element data is data relating to, for example, one truck in a fleet of trucks. And, the "attributes" include accordingly, present location, total capacity of truck, percent capacity, etc.

Note column 4, lines 4-19, where Alexander states:

If, for example, the data object
is one of a fleet of trucks

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belonging to a trucking company, physical attributes stored in memory may include present location, total capacity of truck, percent of capacity represented by present load, fuel supply, distance from next drop-off point, distance to a proposed new pick-up point, mechanical status of truck, number of hours the driver has been on the road, highway conditions between current location and next drop-off point, driving conditions between next drop-off point and proposed new pick-up point, fuel availability between various drop-off and pick-up points, replacement driver availability, and so on. At least some of these physical attributes may be continually changing with time as up-dated information is supplied to computer memory.

Thus, the Examiner has interpreted the claim language of "graphic element data" to be such things as displayed truck data, and the corresponding groups of attributes to be such things as fuel supply, truck capacity, etc. Alexander takes an additional step by displaying the graphic element data in the form of an icon. The icon, treated by Alexander as a visual attribute, is linked to a physical attribute (e.g. truck fuel), for display purposes

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(note column 6, lines 38-42). We agree with the Examiner that Alexander provides a reasonable interpretation of Appellant's claim language.

Assuming that Alexander does not disclose "classifying the generated graphic element data into groups according to the attributes of the graphic data and arranging the groups into memory according to classification" (answer-page 4), the Examiner relies on Shimada. Shimada processes graphic data relating to maps, for example, instead of the lines of Appellant or the truck data of Alexander. The Examiner indicates that page boundaries of broken lines and solid lines constitute the classified groups as an example in Shimada (answer-page 4). Other examples of classified map data groups in Shimada could be city or town boundaries, or major buildings. Each of these attributes are classified, stored and displayed in groups (note column 12, lines 48-58). Since Alexander displays attribute groups, one group at a time (via a visual attribute icon, representing, e.g. fuel), and Shimada displays attribute groups, one group at a time (representing, e.g. buildings), the Examiner contends it would have been obvious to use Shimada's classification and storing

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of groups to "enhance" Alexander's display by using "readily organized" groups as taught by Shimada.

We agree with the Examiner that it would have been obvious to refine one graphic display system, Alexander, with an improvement from another graphic display system. Moreover, we believe Shimada's "readily organized" groups already exist in Alexander, and Shimada could be considered a cumulative teaching. Alexander collects information related to a data object and builds a physical attribute object (column 6, lines 49 and 56), this could be considered as "classifying" and placing in groups. Also, Alexander creates tagged sets of objects (column 8, lines 30-44), this could also be considered as "classifying" and placing in groups.

Thus, we find that the Examiner's combination of Alexander and Shimada reads on the claim language of claim 1, as well as the references being cumulative to each other.

Appellant also argues that his invention shortens processing time (brief-bottom of pages 5 and 10), whereas the applied references do not. This argument fails at the outset because it is not based on limitations appearing in the

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claims. Thus, enhanced speed is immaterial. See *In re Self*,
671 F.2d 1344, 1350, 213 USPQ 1, 5 ((CCPA 1982).

In view of the foregoing, the decision of the
Examiner rejecting claims 1 through 7 under 35 U.S.C. § 103 is
affirmed.

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

AFFIRMED

	Kenneth W. Hairston)	
	Administrative Patent Judge)	
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)	
	Joseph F. Ruggiero)	BOARD OF
PATENT)	
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