United States District Court, S.D. California.

# HEWLETT-PACKARD COMPANY, a Delaware corporation,

Plaintiff.

v.

MUSTEK SYSTEMS, INC., a Taiwanese company, and Mustek, Inc., a California corporation, Defendants.

No. 99-CV-0351-RHW

June 28, 2001.

John Allcock, Gray Cary Ware and Freidenrich, San Diego, CA, for Plaintiff.

James F Lesniak, Frederick S Berretta, Knobbe Martens Olson and Bear, San Diego, CA, Joseph R Re, Knobbe Martens Olson and Bear, Irvine, CA, for Defendant.

### COURT'S CONSTRUCTION OF PATENT CLAIMS AT ISSUE

# WHALEY, J.

IT IS HEREBY ORDERED that the claims and limitations of the patents at issue are construed as follows. All terms that are not construed below are to be given their ordinary meaning.

#### **I.** '635 PATENT

### A. Claim 1

All terms in Claim 1 shall be given their ordinary meaning.

### B. Claim 2

All terms in Claim 2 shall be given their ordinary meaning.

### C. Claim 3

All terms in Claim 3 shall be given their ordinary meaning.

### D. Claim 4

"Calculating means for calculating the dimensions of the printed copy to be produced" means either: (a) computer hardware and software that determines numerical values for the height and width of the printed copy to be produced, or (b) the equivalent of such hardware and software. '635 patent, col. 2, ll. 21-26; '635

patent, col. 2, 1. 66 to col. 3, 1. 2.

"First display means, driven by the calculating means, for displaying the dimensions of the printed copy to be produced" means either (a) hardware and software configured to provide an area on a screen that states numerical values of the width and height of the printed copy to be produced, or (b) the equivalent of such hardware and software. '635 patent, col. 4, ll. 31-46; Fig. 8.

## E. Claim 5

"Second display means for displaying the ratio of the dimensions" means either (a) hardware and software configured to provide an area on a screen that states the percentage of the width and height of the printed copy to be produced to the original dimensions of the selected portion of the picture, or (b) the equivalent of such hardware and software. '635 patent, col. 4, ll. 29-31; Fig. 8.

## F. Claim 6

"Preview scan means for causing the scanner to perform a preview scan of the picture to produce a preview scan image and for causing the display means to display the preview scan image on the screen" means either (a) hardware and software configured to enable the scanner to perform a preview scan of the picture and to cause the preview scan image to be displayed, or (b) the equivalent of such hardware and software. '635 patent, col. 2, ll. 22-26, 55-62; Fig. 2.

"Selection means coupled to the display means for allowing a user to select a portion of the preview scan image for final scan" means either (a) a computer mouse, in conjunction with user interface software configured to permit the user to select a portion of the preview scan image for final scan by forming a box around the desired portion, or (b) the equivalent of such mouse and software. '635 patent, col. 3, 1. 52 to col. 4, 1. 2; Figs. 6 & 7.

"Final scan means for causing the scanner to perform a final scan of a portion of the picture which corresponds to the portion of the preview scan image to produce a final scan image and for causing the display means to display the final scan image on the screen" means either (a) hardware and software configured to perform the following steps: (1) ask the user for information as to scan parameters specifying: (i) intensity of the displayed image; (ii) resolution of the image; (iii) whether the image is to be displayed in gray scale or as line art; (iv) whether to display the negative of the image; (v) scaling factors; and (vi) what will be the image size when printed; (2) create a file buffer in computer memory which is the destination where the scanned image will be stored; (3) send formatted commands to scanner hardware, including the scan parameters, and direct the scanner hardware to scan the picture; (4) place the resultant obtained image of the picture in the file buffer; and (5) access the contents of the file buffer and display the captured image of the picture on the monitor, or (b) the equivalent of such hardware and software. '635 patent, col. 3, 1. 3-27.

#### G. Claim 7

"Means for allowing the user to specify an amount the portion of the picture will be enlarged or reduced in producing a printed copy of the portion of the picture" means either (a) hardware and software configured to accept an input from the user specifying a percentage by which the size of the selected portion of the picture will be enlarged or reduced in producing a printed copy of the selected portion, or (b) the equivalent of such hardware and software. '635 patent, col. 4, ll. 9-33.

"Dimension display means for displaying the dimensions of the printed copy" means either (a) hardware and software configured to provide an area on a screen that states numerical values of the width and the height of a printed copy of the selected portion to be produced, or (b) the equivalent of such hardware and software. '635 patent, col. 4, ll. 31-46; Fig. 8.

### H. Claim 8

"Ratio display means for displaying the ratio of the dimensions" means either (a) hardware and software configured to provide an area on a screen that states the percentage of the size of the printed copy to be produced to the original size of the selected portion of the picture, or (b) the equivalent of such hardware and software. '635 patent, col. 4, ll. 29-31; Fig. 8.

## **II. '878 PATENT**

### A. Claim 1

"An optical scanner device for producing machine-readable data representative of a color image of a scanned object" means a scanner that can scan color pictures, photographs or documents and can generate electronic data representing each color from the picture, photograph or document.

"Light source means for illuminating said object" means either (a) fluorescent light bulbs, or (b) an equivalent of such light bulbs. '878 patent, col. 6, ll. 4-6.

An "image" means an optically formed duplicate of the object being scanned formed at the image region.

An "image of the aligned portion of said object" means an image of the portion of the object which is focused onto the photosensor assembly at the image region.

An "image region" means the location where imaging light impinges on the photosensor arrays.

A "photosensor" is a device that senses or detects light and produces an electrical signal proportional to the amount or intensity of light detected.

The "aligned portion of said object" is the portion of the object which is focused onto the photosensor assembly at the image region. '878 patent, col. 5, ll. 7-12.

The "imaging means for focusing imaging light" means either (a) an optical lens or mirrors which direct imaging light reflected from the "aligned portion" of the scanned object to the "image region," or (b) its equivalent. '878 patent, col. 2, ll. 21-26; '878 patent, col. 3, ll. 30-33; '878 patent, col. 6, ll. 9-15.

A "photosensor assembly operable in successive sampling intervals for generating image data representative of a color image of said object" is an assembly that contains at least two linear photosensor arrays of the same width that are parallel to each other and separated by a gap.

A "sampling interval" is the period of time during which the photosensor collects light to generate a data signal for one scan line. '878 patent, col. 2, ll. 13-20; '878 patent, col. 5, ll. 13-14; '878 patent, col. 7, ll. 35-40.

First and second "linear photosensor means located in said image region and having predetermined line width" means either (a) a linear photosensor array, such as a CCD (charge-coupled device) array or its equivalent, which has a predetermined width, or (b) the equivalent of such photosensor. '878 patent, col. 2, ll. 6-14; '878 patent, col. 5, ll. 16-31; '878 patent, col. 6, ll. 61-63.

"First and second color filter means operatively associated with said first and second linear photosensor means respectively for filtering imaging light" means two color filters each of which passes light of a different preselected color, such as red and green, to the specific linear photosensor array with which it is associated.

"Displacement means for producing relative displacement" means either (a) a drive motor, drive belt, and carriage where the light source, imaging means, and photosensor assembly are moved across the original image, or (b) its equivalent. '878 patent, col. 3, ll. 51-56; '878 patent, col. 5, ll. 6-11, 66-68; '878 patent, col. 6, ll. 1-21.

A "sweeping scan image" is an image produced at the image region representing all native pixels of the object being scanned. A "native pixel" is the area on the object being scanned that corresponds at any given instant to a pixel in the photosensor array. '878 patent, col. 2, ll. 14-16, 41-45, 50-66; '878 patent, col. 3, ll. 54-56.

A "scan speed indicating means for generating a scan speed signal" means either (a) a scan speed selector which, based on the user's selection, generates a scan speed signal that indicates a selected one of different scan speeds, or (b) its equivalent. The scan speed selector may be comprised of a pushbutton selector and a conventional LCD display, or the equivalent of such pushbutton selector and display. '878 patent, col. 3, ll. 59-61; '878 patent, col. 6, ll. 31-42; Fig. 8.

A "scan speed signal" is an electrical signal indicative of the user's selected scan speed. '878 patent, col. 3, 11. 57-61; '878 patent, col. 6, 11. 40-42; '878 patent, col. 14, 11. 54-56.

"Correlating" means grouping the color data that came from the same location on the scanned object. '878 patent, col. 3, 1. 64 to col. 4, 1. 2; '878 patent, col. 8, 11. 1-6.

"Data processing means" are (a) the computer hardware disclosed in the specification that correlates the first and second data signals based on the photosensor gap distance, the photosensor line width, the photosensor sampling interval, and the current scan speed value, and which rounds any non-integer values to the nearest integer, (b) the computer software disclosed in the specification that correlates data from the first and second data signals based on the photosensor gap distance, the photosensor line width, the photosensor sampling interval, and the current scan speed value, and which rounds any non-integer values to the nearest integer, or (c) the equivalent of either (a) or (b). The data processing means is "responsive to said scan speed signal" when the data processing means uses the scan speed signal as the scan speed value used to correlate color data. '878 patent, col. 8, 1. 35 to col. 9, 1. 5; '878 patent, col. 9, 1. 16 to col. 12, 1. 63 & Appendix.

## B. Claim 4

"Third linear photosensor means ... having a line width equal to said predetermined photosensor line width" means a linear photosensor array, such as a CCD (charge-coupled device) or its equivalent, that is parallel to

the second linear photosensor array and separated by a second gap.

"Third color filter means operatively associated with said third linear photosensor means for filtering imaging light" means a third color filter which passes light of a different preselected color, such as blue, to the third linear photosensor array with which it is associated.

"Data processing means responsive to said scan speed signal for correlating data from said first data signal with data from said second data signal and said third data signal" has the same meaning as given above in Claim 1.

## C. Claim 10

"Correlating data ... as a function of the scan speed" means using the "scan speed of the optical scanner," as defined above, to correlate data from the first and second photosensor arrays.

IT IS SO ORDERED.

S.D.Cal.,2001.

Hewlett-Packard Co. v. Mustek Systems, Inc.

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