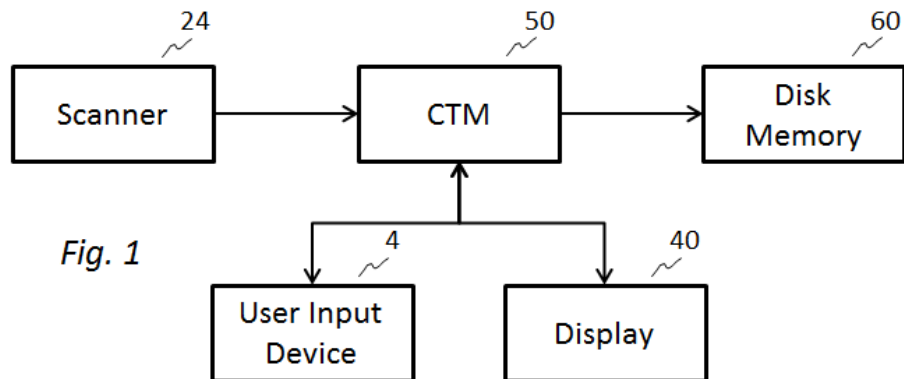**Analyzing Functional Language: EXAMPLE 3 COMPUTERIZED COLOR EDITING SYSTEM**

The invention is a computer-assisted color-editing system for editing and reproducing color images. A specification excerpt follows:

Fig. 1

Applicant invented a computer-assisted color-editing system for editing and reproducing color images. During use, a scanner 24 scans an original color image, and produces representative appearance signals (*e.g.*, RGB signals). The appearance signals are sent from the scanner to a color translation module (CTM) 50, which is described as hardware (such as aesthetic correction circuitry) or software (such as programming instructions) running on a microprocessor. The color translation module (CTM) 50 is programmed to transform the appearance signals into modified appearance signals representative of a reproduction image, by a user interacting with the system via user input device 4 to introduce aesthetically desired alterations (*e.g.*, user-selected adjustments to the hue, saturation and luminance) into the reproduction image as it is simultaneously shown on display 40. More specifically, user input device 4 receives 8-bit adjustment values (V_{ADA}) for each adjustment component (e.g., hue, saturation, luminance) which are added as vectors to the input appearance signals (V_A) in color translation module (CTM) 50 to produce the modified appearance signals as $V_{MA} = V_A + V_{ADA}$. Once the user is satisfied with the appearance of the reproduction image, the color translation module (CTM) 50 sends the modified appearance signals to disk memory 60. In one embodiment, the aesthetic correction circuitry is an electrical circuit having an input of the appearance signals produced by the scanner, a design that permits interactive introduction of aesthetically desired alterations into the appearance signals, and an output of modified appearance signals. The transformation of the appearance signals by the color translation module (CTM) 50 results in an improved reproduction image even when the reproduction image is formed from a smaller number of colorants than the original image (as is typical when a color photograph is reproduced for printing on an inexpensive inkjet printer).

The following set of hypothetical claims shows variations on the use of functional language.

Analyzing Functional Language: EXAMPLE 3 COMPUTERIZED COLOR EDITING SYSTEM

What is claimed is:

1.   A computer-assisted color-editing system, comprising:

a scanner that produces appearance signals representative of a color image;

a display on which modified appearance signals are displayed as the reproduction image; and

a disk memory in which the modified appearance signals are stored,

wherein the appearance signals are modified to produce the modified appearance signals representative of a reproduction image.

2.   A computer-assisted color-editing system, comprising:

a scanner that produces appearance signals representative of a color image;

aesthetic correction circuitry wherein modified appearance signals representative of a reproduction image are produced;

a display on which the modified appearance signals are displayed as the reproduction image; and

a disk memory in which the modified appearance signals are stored.

3.   A computer-assisted color-editing system for producing an aesthetically modified reproduction of a color image, comprising:

a scanner;

aesthetic correction circuitry in communication with the scanner;

a display in communication with the aesthetic correction circuitry; and

a disk memory in communication with the aesthetic correction circuitry.

4.   A computer-assisted color-editing system, comprising:

a scanner that produces appearance signals representative of a color image;

circuitry that produces modified appearance signals representative of a reproduction image based on user input introducing aesthetically desired alterations into the appearance signals;

a display on which the modified appearance signals are displayed as the reproduction image; and

a disk memory in which the modified appearance signals are stored.

5.   A computer-assisted color-editing system, comprising:

a scanner that produces appearance signals representative of a color image;

a color translation module for producing modified appearance signals representative of a reproduction image based on user input introducing aesthetically desired alterations into the appearance signals;

a display on which the modified appearance signals are displayed as the reproduction image; and

a disk memory in which the modified appearance signals are stored.