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DATA ADDITION TO OPTICAL STORAGE CARDS USING INK DOTS

Field of the Invention

The present invention relates to an image processing method and apparatus and, in particular, discloses a Digital Instant Camera with Image Processing Capability.

The present invention further relates to the field of digital camera technology and, particularly, discloses a digital camera having an integral color printer.

Background of the Invention

Traditional camera technology has for many years relied upon the provision of an optical processing system which relies on a negative of an image which is projected onto a photosensitive film which is subsequently chemically processed so as to "fix" the film and to allow for positive prints to be produced which reproduce the original image. Such an image processing technology, although it has become a standard, can be unduly complex, as expensive and difficult technologies are involved in full color processing of images. Recently, digital cameras have become available. These cameras normally rely upon the utilization of a charged coupled device (CCD) to sense a particular image. The camera normally includes storage media for the storage of the sensed scenes in addition to a connector for the transfer of images to a computer device for subsequent manipulation and printing out.

Such devices are generally inconvenient in that all images must be stored by the camera and printed out at some later stage. Hence, the camera must have sufficient storage capabilities for the storing of multiple images and, additionally, the user of the camera must have access to a subsequent computer system for the downloading of the images and printing out by a computer printer or the like.

Further, Polaroid™ type instant cameras have been available for some time which allow for the production of instant images. However, this type of camera has limited utility producing only limited sized images and many problems exist with the chemicals utilised and, in particular, in the aging of photographs produced from these types of cameras.

When using devices and other image capture devices it will be desirable to be able to suitably deal with audio and other environmental information when taking a picture.

Further, the creation of stereoscopic views, with a first image being presented to the left eye and second image being presented to the right eye, thereby creating an illusion of a three dimensional surface is well known. However, previous systems have required complex preparation and high fidelity images have generally not been possible. Further, the general choice of images has been limited with the images normally only being specially prepared images.

There is a general need for being able to produce high fidelity stereoscopic images on demand and in particular for producing images by means of a portable camera device wherein the stereoscopic image can be taken at will.

Further, it would be highly convenient if such a camera picture image production system was able to create automatic customised postcards which, on a first surface contained the image captured by the camera device and, on a second surface, contains pre-paid postage marks and address details.

Recently, it has become more and more popular in respect of photographic reproduction techniques to produce longer and longer "panoramic" views of a image. These images can be produced on photographic paper or