



[54] **METHOD AND APPARATUS FOR COPY PROTECTION OF IMAGES IN A COMPUTER SYSTEM**

“Programming Windows 3.1”, by Charles Petzold, 1992, pp. 175–193, 907–929.

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[57] **ABSTRACT**

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**Related U.S. Application Data**

A method and apparatus for securing images from unlicensed appropriation on a computer system. Prior art graphics security measures, such as encryption, cease to protect the images once the images are deciphered and loaded into the video adapter memory. In the present invention, unlicensed transfers of image data from the video adapter to other storage means are substantially prevented by intercepting data transfer requests to the operating system and identifying whether the image is one to be protected. If the image is one that is marked for protection, the region of the data transfer incorporating the protected image is blacked out or replaced with a specified pattern or message. A preferred embodiment provides a library of software routines that are utilized by image display applications. These routines interface with the computer memory and the video display memory to block the copying of designated images by means of “hooks” into the operating system or operating environment. By means of these hooks and routines, the present invention identifies all regions on the video device that contain a protected image and exclude these regions from any operation that transfers data from the video display memory. Any attempts to transfer the designated regions result in an image containing “blacked out” regions in their place. The preferred embodiment includes an encryption scheme for image security prior to display.

[63] Continuation of Ser. No. 289,529, Aug. 12, 1994, abandoned.

[51] **Int. Cl.**<sup>6</sup> ..... **G06F 12/14**; H04L 9/00

[52] **U.S. Cl.** ..... **395/701**; 395/712; 380/4; 380/5; 380/3; 380/25; 711/100

[58] **Field of Search** ..... 395/701, 712, 395/705, 653; 380/3–5, 9, 25, 23; 711/164, 100; 345/133, 326

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**58 Claims, 7 Drawing Sheets**

