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[54] **METHODS, APPARATUS AND PROGRAM STORAGE DEVICE FOR REMOVING SCRATCH OR WIRE NOISE, AND RECORDING MEDIA THEREFOR** 5,784,498 7/1998 Venable et al. 382/280
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[51] **Int. Cl.**⁶ **H04N 1/38**
 [52] **U.S. Cl.** **382/280; 382/204; 348/607**
 [58] **Field of Search** 348/616, 617; 382/275, 280, 282, 283, 257; 364/726.01

(List continued on next page.)

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[57] **ABSTRACT**

Methods and apparatus for removing scratch and wire noise from digitized images handle the difficult case of non-uniformly shaded images which is the common situation in real applications. The methods and apparatus also utilize a soft edge noise mask to allow a smoother blending of the reconstructed noise and the image around the noise. wire noise removal from digitized images wherein a scratched portion of a digitized image which requires repair or noise removal is identified and a binary mask is generated which distinguishes the defined scratched portion from the other portions of the digitized image. The methods and apparatus utilize both the spatial and frequency domains to effectively reconstruct many contiguous noisy pixels, reconstruct textures even when they are large featured, maintain sharpness and maintain continuity of features across a noisy region. A set of instructions for executing the methods is contained in a program storage device. Also, a recording media contains digital data generated using the methods.

100 Claims, 10 Drawing Sheets

