This Sheet Has Been Replaced



ABSTRACT OF THE DISCLOSURE

A preprocessor for conditioning interlace-scan video signals for frame based compression, includes apparatus (40) to accept fields of interlace-scanned video and provide fields of interlace-scanned luminance and chrominance component signals. The fields of interlace-scanned luminance component are combined (45) into respective frames of luminance signal and applied to compressor apparatus for further processing. The fields of interlace scanned chrominance components are independently processed (41,42) at the field level to generate lines of chrominance values which are interstitial to the lines of the original chrominance values and at a lesser pixel and line density. The independently processed fields of interlace-scanned chrominance signals are combined (43,44) into respective frames of chrominance component signals and applied to compressor circuitry (46) for further processing. Performing the chrominance signal interpolation and subsampling (41,42) at the field level tends to eliminate a majority of color distortions around moving images. Receiver apparatus (50) is configured to perform post decompression processing to generate frame data having the original pixel and line density.