AUTOMATIC IMAGE SCANNING FORMAT CONVERTER WITH SEAMLESS SWITCHING

Abstract

An adaptive scan format converter (14, Fig. 1; Fig. 2) at a transmitter/encoder of a video signal processing system such as a high definition television (HDTV) system, as a function of what format is desired for coding and transmission via an output channel. Similarly, at a receiver, a received scan format is automatically converted (36, Fig. 1; Fig. 2) to a desired format for display as needed. For example, a received interlaced signal (I) will be automatically converted to progressive (P) format to be compatible with a progressive scan display device (39). A received progressive signal will be passed to the display device without format conversion. Automatic scan conversion is performed seamlessly so that, for example, the conversion between progressive main television program material and interlaced commercial material is produced without artifacts and is essentially invisible to a viewer.

FIG. 2