CLAIMS:

1. Apparatus for encoding a television signal representing images, comprising:

compression means (10) for compressing video signal on a field/frame basis and providing a sequence of hierarchically layered codewords representing compressed video signal;

first means (11), coupled to said compression means and responsive to said codewords for adaptively separating on a sub field/frame basis, as a function of the amount of video signal data representing respective predetermined subimage areas, said sequence of hierarchically layered codewords into a high priority codeword sequence and a low priority codeword sequence according to the relative importance of respective codewords for image reproduction, and providing control indicia associated with respective subimages for reconstructing said high and low priority sequences into a single sequence;

second means (12), coupled to said first means, for forming transport blocks of said high priority codeword sequence, and transport blocks of said low priority codeword sequence, each transport block including a predetermined bit capacity occupied by codewords of high priority or low priority data, transport block header information, including said control indicia, and error check bits generated with respect to both said data and said transport block header information, said second means providing a first transport block sequence including transport blocks of said high priority codewords, and a second transport block sequence including transport blocks of said low priority codewords;

forward error check means (15,16), for developing error correction data with respect to mutually exclusive portions of said first transport block sequence and mutually exclusive portion of said second transport block sequence and appending the corresponding error correction data to the respective first transport block sequence and second transport block sequence.

2. The apparatus set forth in claim 1, including;

first and second rate buffers respectively coupled to receive said first and second transport block sequences, for accepting transport block codewords at varying intervals and outputting transport block codewords at a substantially constant rate; and means coupled to said rate buffers for separately modulating first and second carriers with said first and second transport block sequences.

3. The apparatus set forth in claim 2, wherein;

said source includes means responsive to a control signal for adaptively controlling the volume of said compressed version of said video signals; and

wherein said rate buffers include, means for providing a signal indicating the relative fullness of said rate buffers, and

means responsive to said signal indicating the relative fullness of said rate buffers for generating said control signal.

4. The apparatus set forth in claim 1, wherein;

said source includes means for adaptively controlling the volume of said compressed version of said video signals.

5. The apparatus set forth in claim 1, wherein;

said source includes means for selectively providing frames of intra-frame compressed video data interspersed with frames of motion-compensated-predictive compressed data, said providing means including;

discrete cosine transform means for providing transform coefficients representing blocks of pixels; and

quantizing means for adaptively quantizing of said transform coefficients.

6. The apparatus set forth in claim 1, wherein;

said source includes means for providing a compressed version of said video signals, said compressed version including a first sequence of codewords of varying types defining said compressed video signal and a second sequence of codewords associated with said first sequence and indicating said types; and

said first means is responsive to said second sequence of codewords for variably separating, on a subimage area by subimage area basis, said first sequence of codewords into a high priority codeword sequence and a low priority codeword sequence according to the type of respective codewords of said first sequence.

7. The apparatus set forth in claim 1, including;

means for separately modulating first and second carriers with said first and second transport block sequences and appended error correction data.

8. The apparatus set forth in claim 1, wherein;

said second means includes means for providing transport block header information which points to specific data within respective transport blocks.

9. The apparatus set forth in claim 8, wherein;

said specific data is further transport block header information.

10. The apparatus set forth in claim 1, wherein;

respective frames of said compressed video signal are compressed according to intraframe or interframe coding methods; and

said first means separates said sequence of codewords as a function of the amount of video signal data representing respective predetermined image areas, and as a function of whether the current frame is intraframe or interframe encoded.

11. In a receiver for receiving a television signal of the type including compressed video data variably separated on a subimage area by subimage area basis into high and low priority channels, the data in said high and low priority channels occurring in transport blocks of predetermined data capacity, said transport blocks including transport header information having control indicia related to said variable separating, signal data, and error check data related to the transport header information and signal data contained in respective blocks, the signal data in each transport block corresponding to an exclusive type of data (e.g., to high priority video data, or low priority video data); apparatus comprising:

first means (20-24) for receiving said television signal and providing first and second data streams corresponding to transport blocks from said high and low priority channels respectively;

second means (25), coupled to said first means, for providing first and second sequences of codewords corresponding to high priority video data and low priority video data respectively with said transport block header information excised therefrom, and providing a further sequence of codewords corresponding to said transport block header information;

third means (26), coupled to said second means, and responsive to said transport block header information, including said control indicia, for combining said first and second sequences

of codewords into a further sequence of codewords representing hierarchically layered compressed video date; and

fourth means (27), coupled to said third means, for decompressing said further sequence of codewords representing compressed video data to produce a noncompressed video signal.

12. The apparatus set forth in claim 11, wherein;

said first means further includes first and second rate buffers for providing said first and second data streams at variable rates.

13. The apparatus set forth in claim 11, wherein;

said hierarchically layered compressed video data corresponds, in part, to codewords related to discrete cosine transfer(DCT) coefficients, said DCT coefficients occurring in blocks, the coefficients of each block occurring in descending order of importance with respect to reconstructing images, and wherein codewords of greater importance for each block are included in said high priority channel and codewords of lesser importance for each block are included in said low priority channel; and

said third means includes means to recombine the codewords of greater and lesser importance for each block in descending order of importance.

14. The apparatus set forth in claim 11, wherein;

said television video signal includes forward error correction codes; and

said first means includes means, responsive to said forward error correction codes, for performing error correction on said television signal.

15. The apparatus set forth in claim 11, wherein;

said further sequence of codewords represent compressed video data in the form of variable length encoded intra-frame compressed data interleaved with variable length encoded motion-compensated-predictive-frame compressed data; and

said fourth means includes;

variable length decoding means, responsive to said further sequence, for variable length decoding said further sequence, and

decompression means, coupled to said variable length decoding means, for selectively decoding intra-frame compressed data and motion-compensated-predictive-frame compressed data.