

AMTC IP Coverage

Cable Systems Transmitting Media to
Set-top Boxes
(PPV, VOD, Broadcast of Prerecorded
Digital Content)
Compared to Yurt '992 Claim 1

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Patent 5,132,992 Claim 1:

1. A transmission system for providing information to be transmitted to remote locations, the transmission system comprising:

library means for storing items containing information;

identification encoding means for retrieving the information in the items from the library means and for assigning a unique identification code to the retrieved information;

conversion means, coupled to the identification encoding means, for placing the retrieved information into a predetermined format as formatted data;

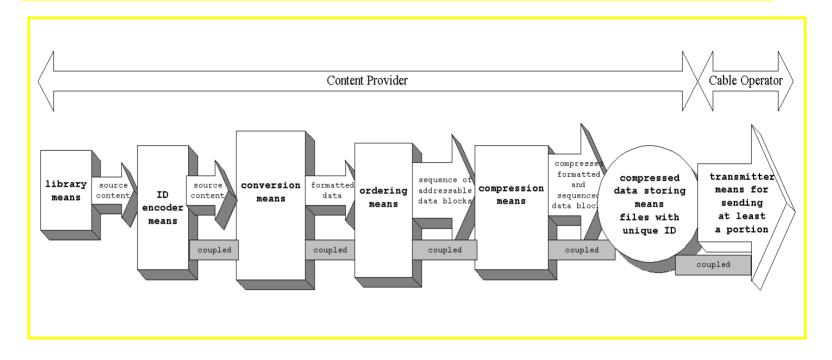
ordering means, coupled to the conversion means, for placing the formatted data into a sequence of addressable data blocks;

compression means, coupled to the ordering means, for compressing the formatted and sequenced data blocks;

compressed data storing means, coupled to the data compression means, for storing as files the compressed, sequenced data blocks received from the data compression means with the unique identification code assigned by the identification encoding means; and

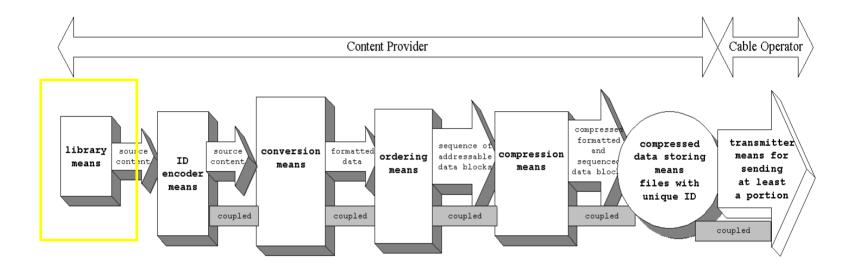
transmitter means, coupled to the compressed data storing means, for sending at least a portion of one of the files to one of the remote locations.

A transmission system for providing information to be transmitted to remote locations, the transmission system comprising:



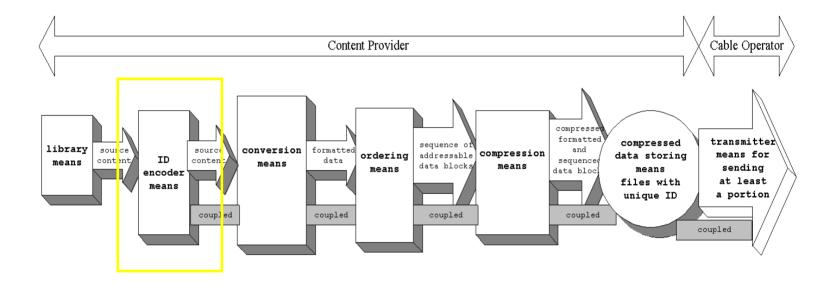
A cable system delivering media (e.g., movies, television shows) via video on demand or pay per view to set-top boxes and a cable system broadcasting prerecorded digital content (e.g., HBO, Showtime) in a digital or analog format to set-top boxes are examples of a transmission system for providing information to be transmitted to remote locations.

library means for storing items containing information :



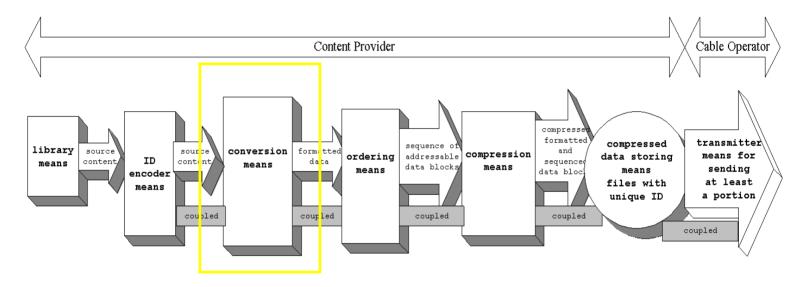
Physical media, such as a videotape, is received by a content provider, acting on behalf of the cable operator. This media is received by the content provider receiving department, logged in as received, and placed in the received media storage library. The media storage library is an example of a library means for storing items containing information.

identification encoding means for retrieving the information in the items from the library means and for assigning a unique identification code to the retrieved information:



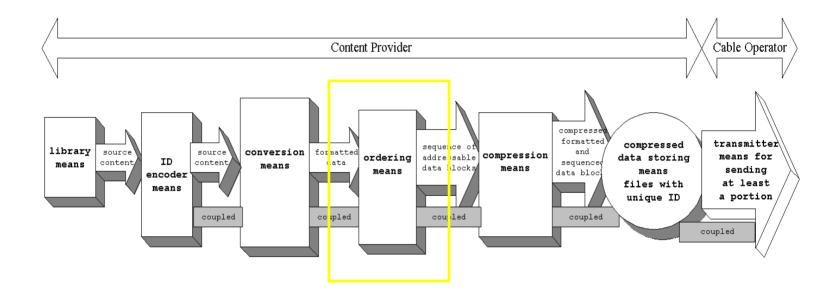
A tape operator(s) retrieves physical media from the tape library to be encoded. A unique file name will be used to identify the encoded media on a server after it has been encoded. The tape operator(s) and the encoding software are one example of an identification encoding means for retrieving information and for assigning a unique identification code to the retrieved information.

conversion means, coupled to the identification encoding means, for placing the retrieved information into a predetermined format as formatted data;



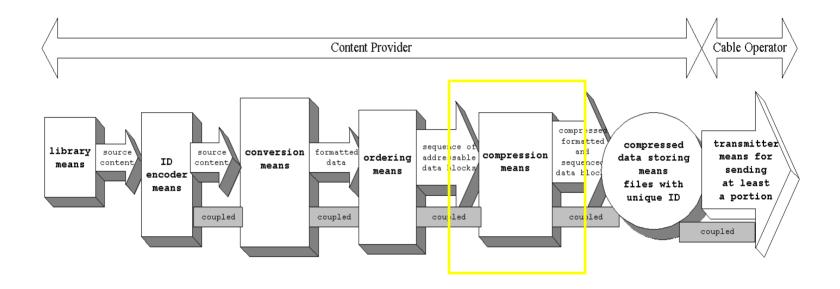
Physical media (e.g., a videotape) is placed in a tape player (i.e., an input receiver) where it is output from the player in either a digital or analog form. If in an analog form, the signal is applied to an analog input and converted to a standard digital format (such as an "AVI" file format) in an analog-digital converter. If in a digital form, the signal is input to a digital formatter and converted to a predetermined format (such as an "AVI" file format). The analog and/or digital receivers, converters, and formatters represent examples of a conversion means for placing retrieved information into a predetermined format as formatted data.

ordering means, coupled to the conversion means, for placing the formatted data into a sequence of addressable data blocks:



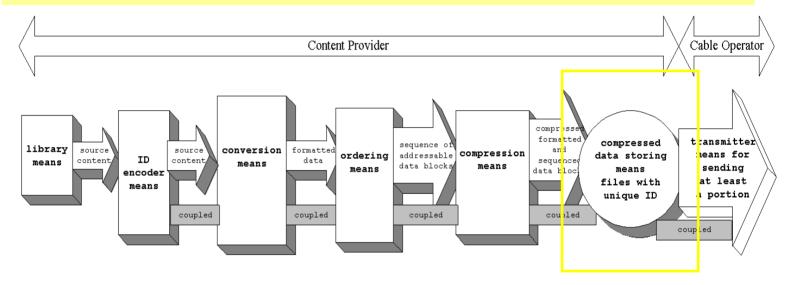
Video encoding methods organize frames into sequences of frames (data blocks) prior to compression. These frames are compressed and assigned relative time markers so that they are addressable by presentation time. The portion of the encoder that organizes the frames into sequences by assigning relative time markers (e.g., presentation time) is an example of an ordering means for placing the formatted data into a sequence of addressable data blocks.

compression means, coupled to the ordering means, for compressing the formatted and sequenced data blocks;



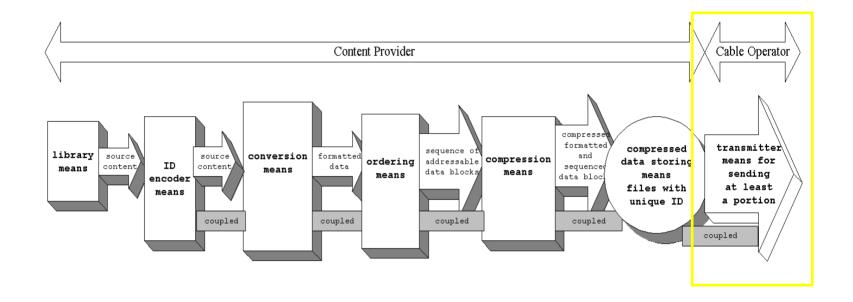
Video encoders, such as MPEG-2 encoders, compress video by operating on individual video frames and sequences of video frames. MPEG-2 encoders are examples of compression means.

compressed data storing means, coupled to the data compression means, for storing as files the compressed, sequenced data blocks received from the data compression means with the unique identification code assigned by the identification encoding means; and



Once compressed, media is stored as files on a server. Each file stored on the server with its unique identification code. A server is an example of a compressed data storing means.

transmitter means, coupled to the compressed data storing means, for sending at least a portion of one of the files to one of the remote locations.



Media is transmitted as files from the content provider to the cable operator via satellite or terrestrially. Once at the cable headend, the cable operator uses the cable plant to transmit the media (either in an MPEG-2 format or in an analog format) to the subscribers' set-top box via the cable network. The cable network is an example of a transmitter means.