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Hotel VOD System Transmitting Media to In-Room Users
Compared to
Yurt '992 Claim 41

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Patent 5,132,992 Claim 41:

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41. A method of transmitting information to remote locations,
the transmission method comprising the steps,
performed by a transmission system, of:

    storing items having information in a source material library;

    retrieving the information in the items from the source material library;

    assigning a unique identification code to the retrieved information;

    placing the retrieved information into a predetermined format as formatted data;

    placing the formatted data into a sequence of addressable data blocks;

    compressing the formatted and sequenced data blocks;

    storing, as a file, the compressed, formatted, and sequenced data blocks
    with the assigned unique identification code; and

    sending at least a portion of the file to one of the remote locations.
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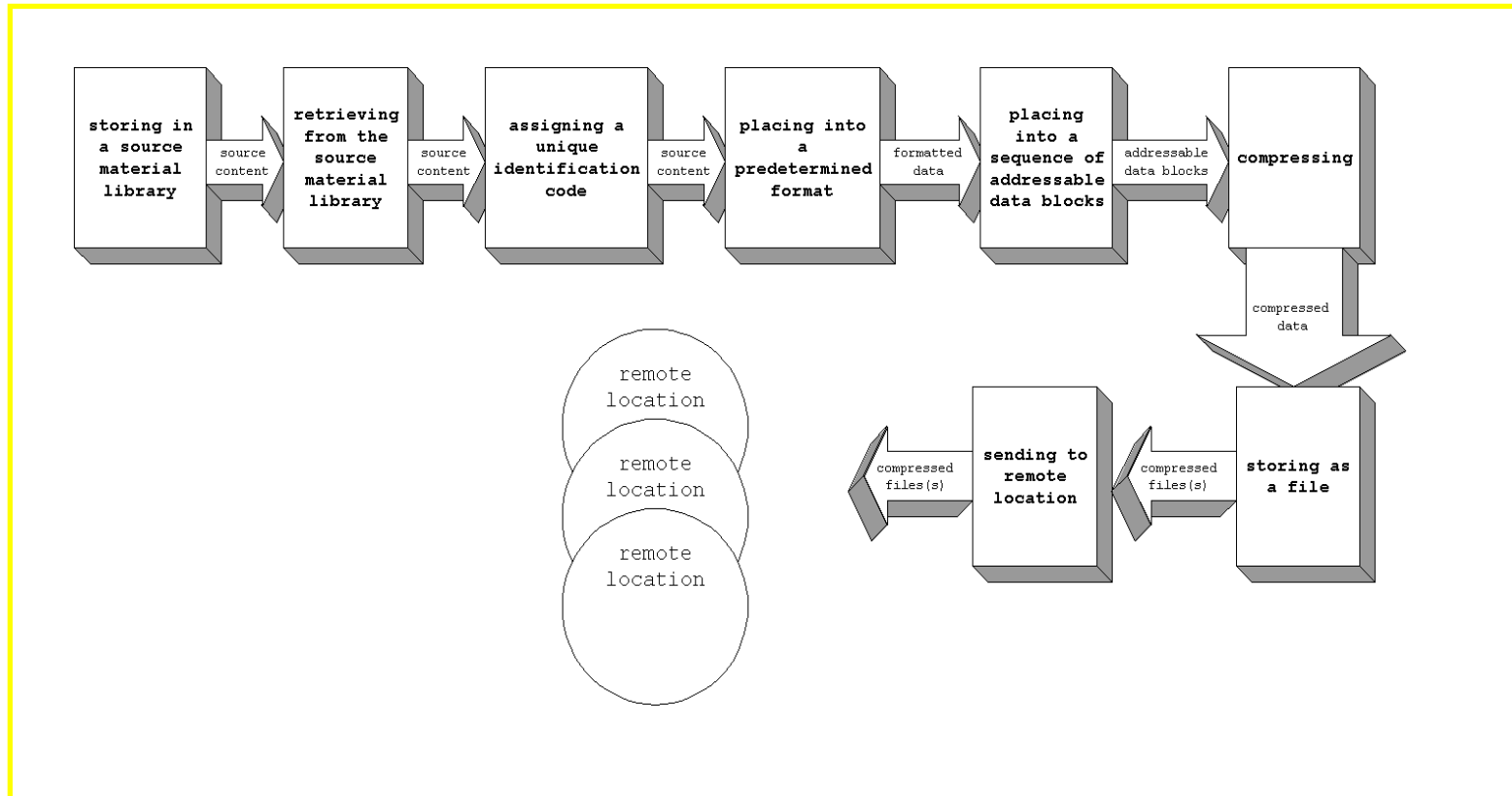
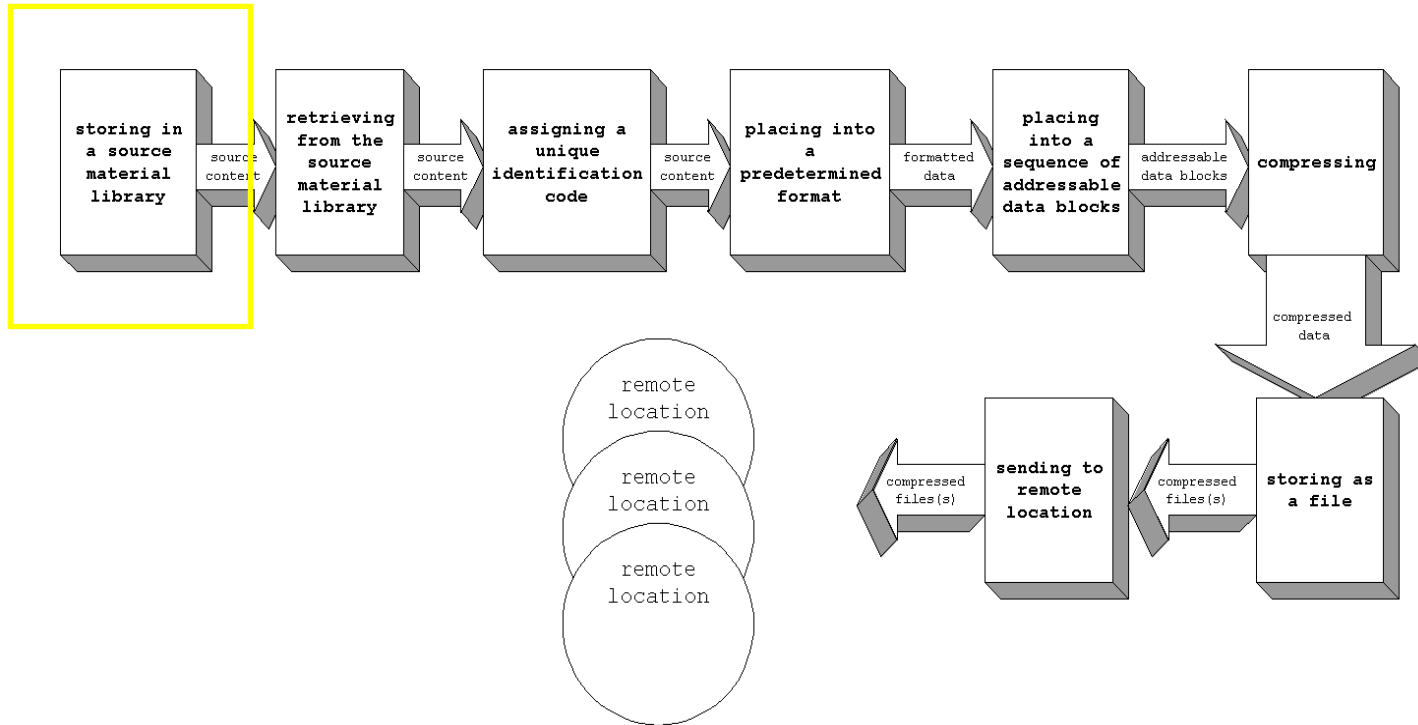# Hotel VOD System Transmitting Media to In-Room Users Compared to the '992 Patent Claim 41:

A method of transmitting information to remote locations, the transmission method comprising the steps, performed by a transmission system, of:

storing in a source material library → source content → retrieving from the source material library → source content → assigning a unique identification code → source content → placing into a predetermined format → formatted data → placing into a sequence of addressable data blocks → addressable data blocks → compressing → compressed data → storing as a file → compressed files(s) → sending to remote location → compressed files(s) →

remote location
remote location
remote location

A hotel video on demand system receiving media (e.g., movies) from content providers and subsequently delivering media to in-room users is an example of a method of transmitting information to remote locations.

Hotel VOD System Transmitting Media to In-Room Users Compared to the '992 Patent Claim 41:
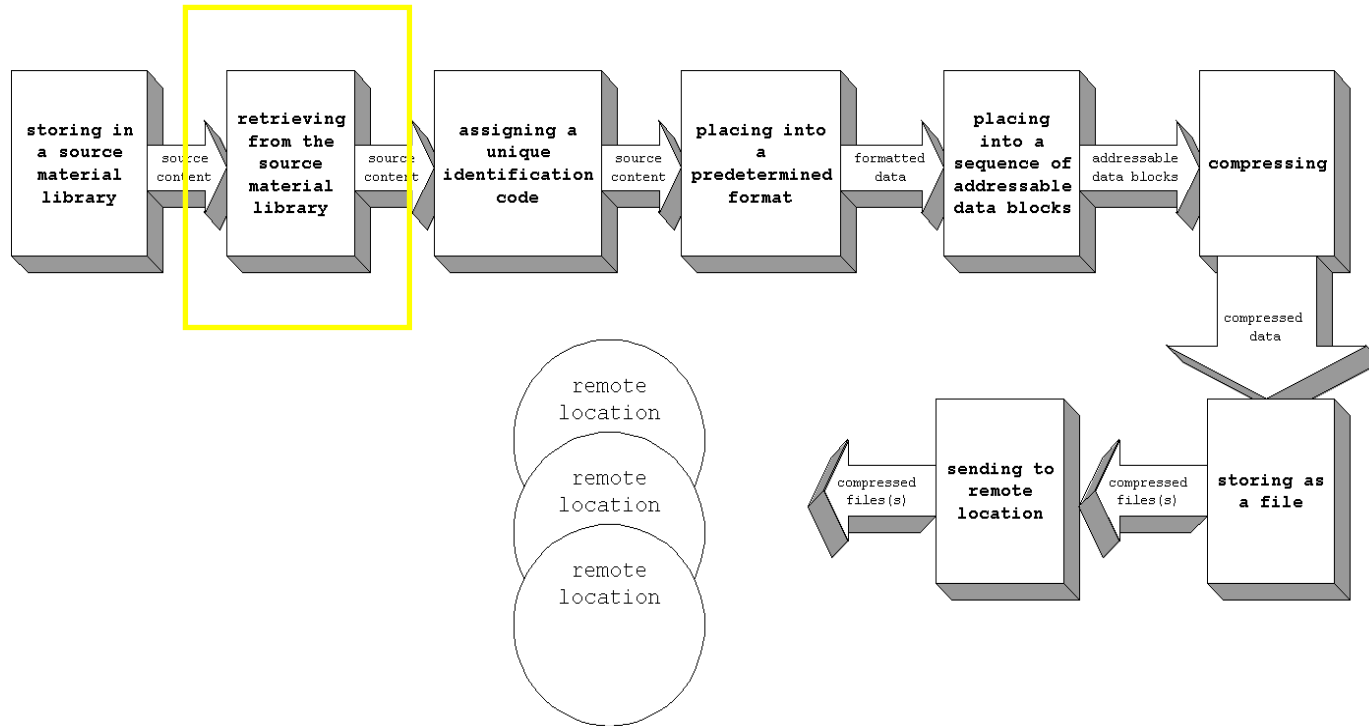
storing items having information in a source material library

Prior to distribution to the in-room users, media is digitized and compressed by an encoding lab acting on behalf of the content providers. The encoding lab receives physical media (e.g., videotape) from the content providers. Each of these content providers maintains a library in which this physical media is stored. Additionally, the encoding lab may maintain its own library of media. These libraries represent an example of storing items having information in a source material library.

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retrieving the information in the items from the source material library;


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storing in          retrieving                                    placing
a source            from the        assigning a     placing into  into a
material            source          unique          a             sequence of     compressing
library    source   material  source identification predetermined addressable
           content  library   content code   source format        data blocks  addressable
                                           content                              data blocks
                                                          formatted                          addressable
                                                          data                               data blocks

                                                                                                    compressed
                                                                                                    data

remote
location

remote              compressed      sending to      compressed    storing as
location            files(s)        remote          files(s)      a file
                                    location
remote
location
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A tape operator(s) retrieves physical media (e.g., a videotape) from the library to be encoded. The tape operator(s) retrieving the media from the library is an example of retrieving the information in the items from the source material library.

Hotel VOD System Transmitting Media to In-Room Users Compared to the '992 Patent Claim 41:

assigning a unique identification code to the retrieved information
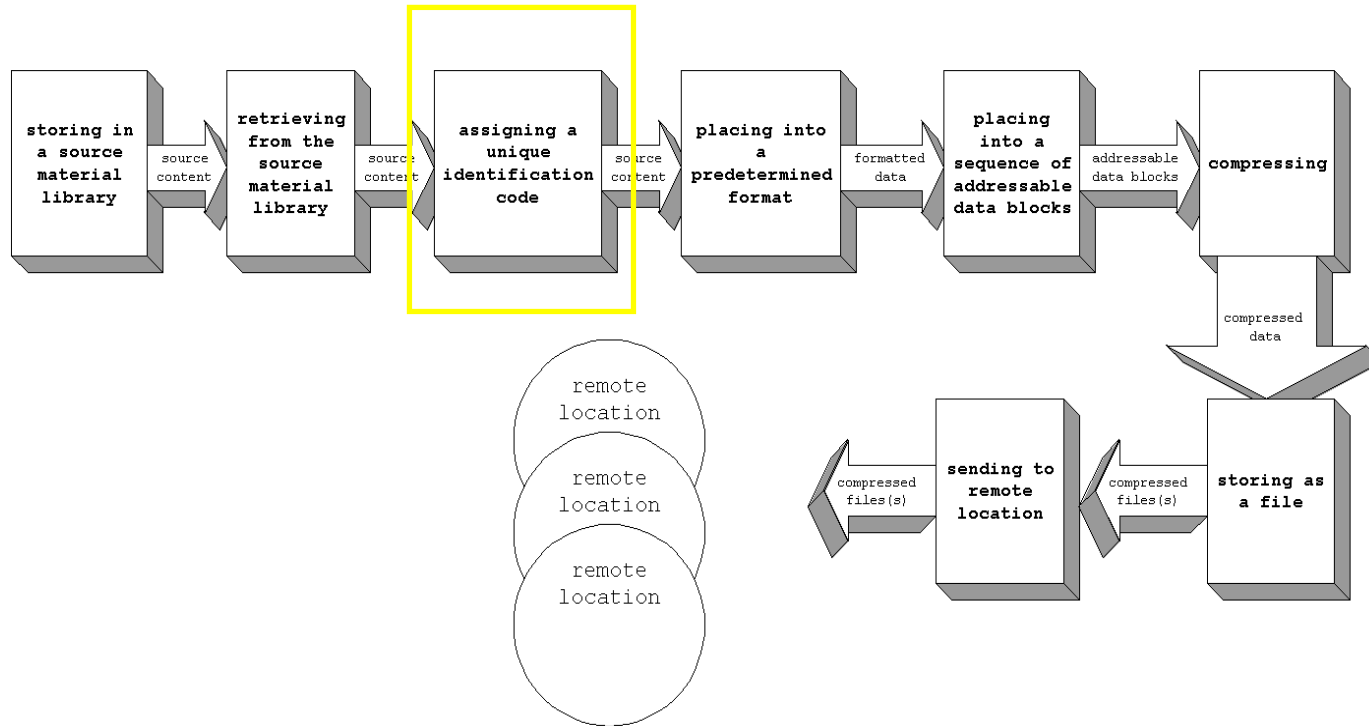
A unique file name will be assigned to identify the encoded media on a server after it has been encoded. This is an example of assigning a unique identification code to the retrieved information.

Hotel VOD System Transmitting Media to In-Room Users
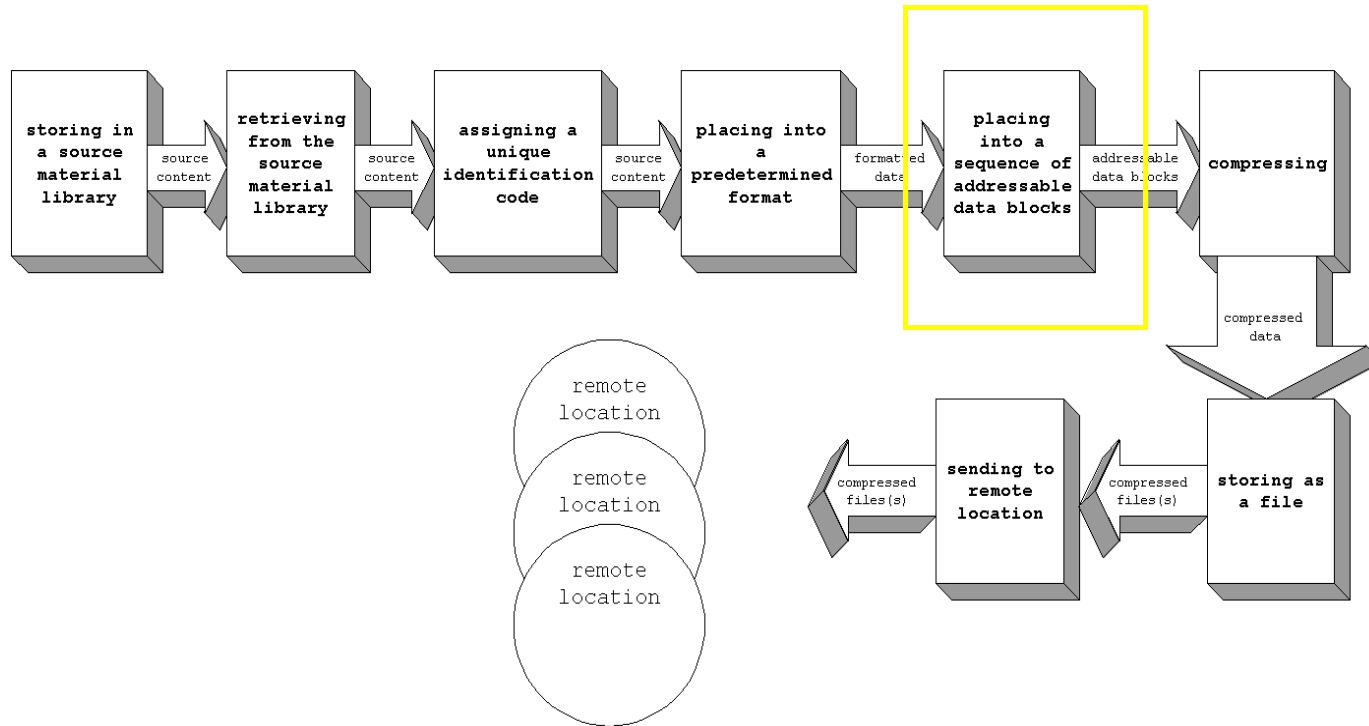# Compared to the '992 Patent Claim 41:

placing the retrieved information into a predetermined format as formatted data
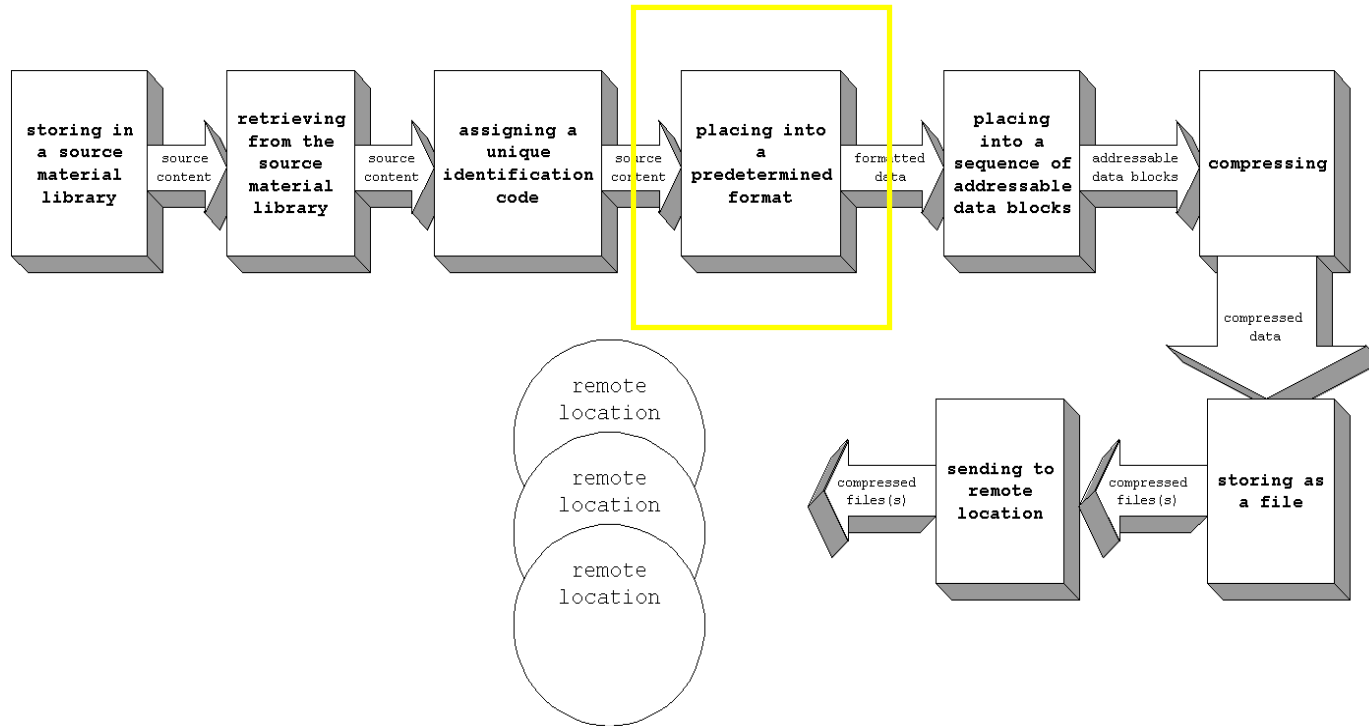
Physical media (e.g., a videotape) is placed in a tape player (i.e., an input receiver) where it is output from the player in either a digital or analog form. If in an analog form, the signal is applied to an analog input and converted to a standard digital format (such as an "AVI" file format) in an 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). This is an example of placing the retrieved information into a predetermined format as formatted data.

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`placing the formatted data into a sequence of addressable data blocks;`

storing in a source material library	→ source content →	retrieving from the source material library	→ source content →	assigning a unique identification code	→ source content →	placing into a predetermined format	→ formatted data →	placing into a sequence of addressable data blocks	→ addressable data blocks →	compressing

compressed data

remote location

remote location

remote location

← compressed files(s) ←	sending to remote location	← compressed files(s) ←	storing as a file

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. Organizing the frames into sequences and assigning relative time markers is an example of placing the formatted data into a sequence of addressable data blocks.

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compressing the formatted and sequenced data blocks;
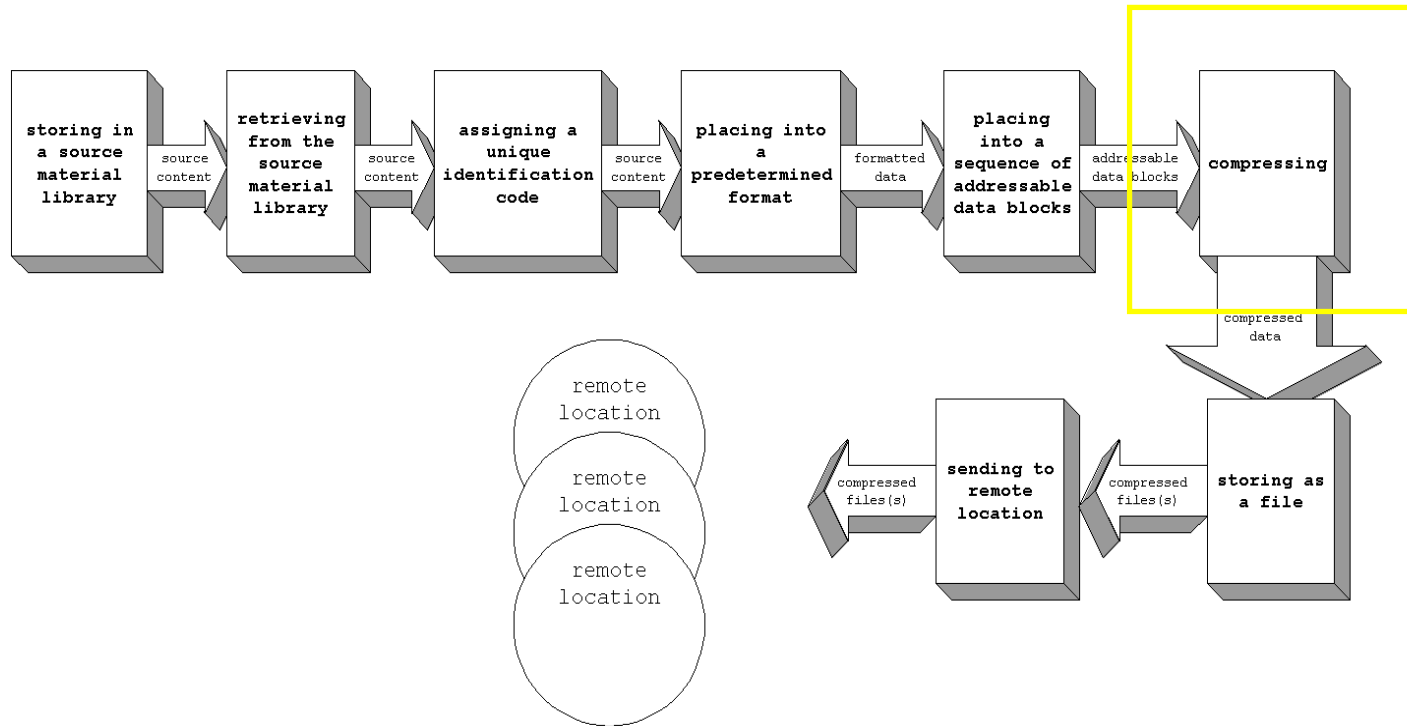
Video encoders, such as MPEG-2 encoders, compress video by operating on individual video frames and sequences of video frames. Using MPEG-2 encoders is an example of compressing the formatted and sequenced data blocks.

# Hotel VOD System Transmitting Media to In-Room Users Compared to the '992 Patent Claim 41:

> storing, as a file, the compressed, formatted, and sequenced data blocks with the assigned unique identification code; and
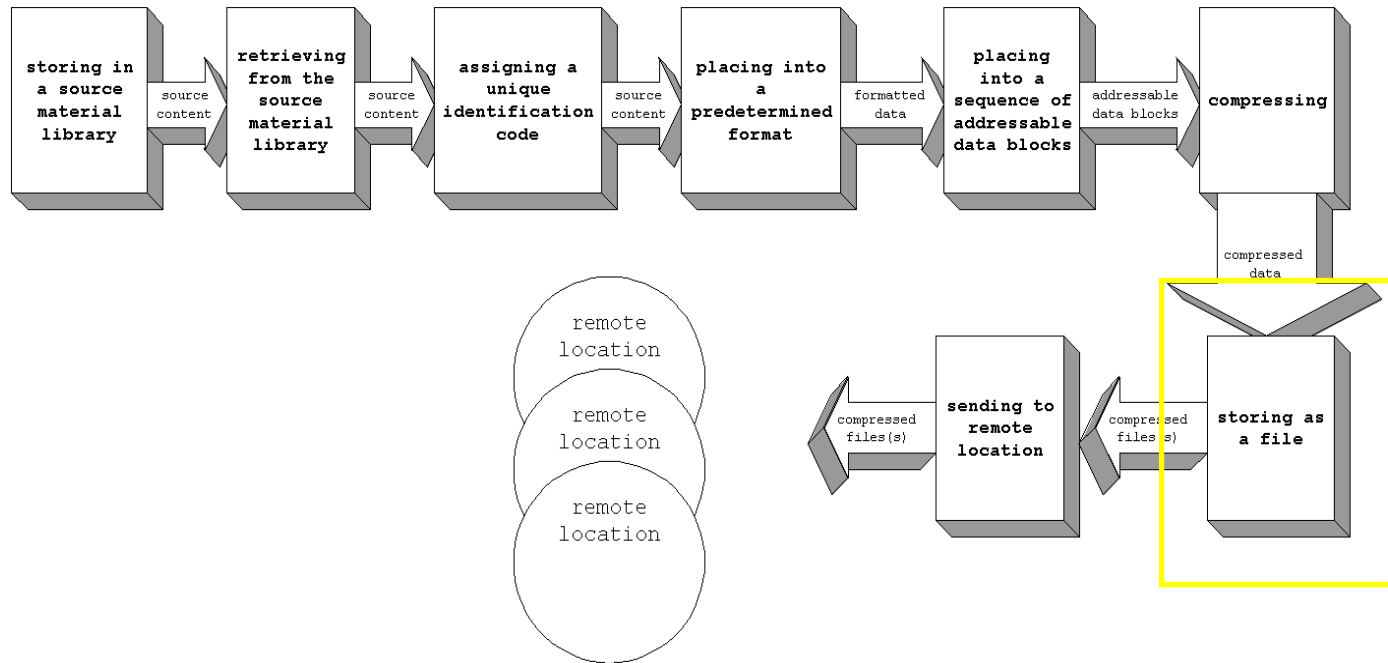
Once compressed, the media is delivered to the central operations center of the Hotel VOD system operator where it is stored on an array of storage devices. Each file stored on the storage device is stored with its unique identification code. This is an example of storing, as a file, the compressed, formatted, and sequenced data blocks with the assigned unique identification code.

Hotel VOD System Transmitting Media to In-Room Users Compared to the '992 Patent Claim 41:

sending at least a portion of the file to one of the remote locations.
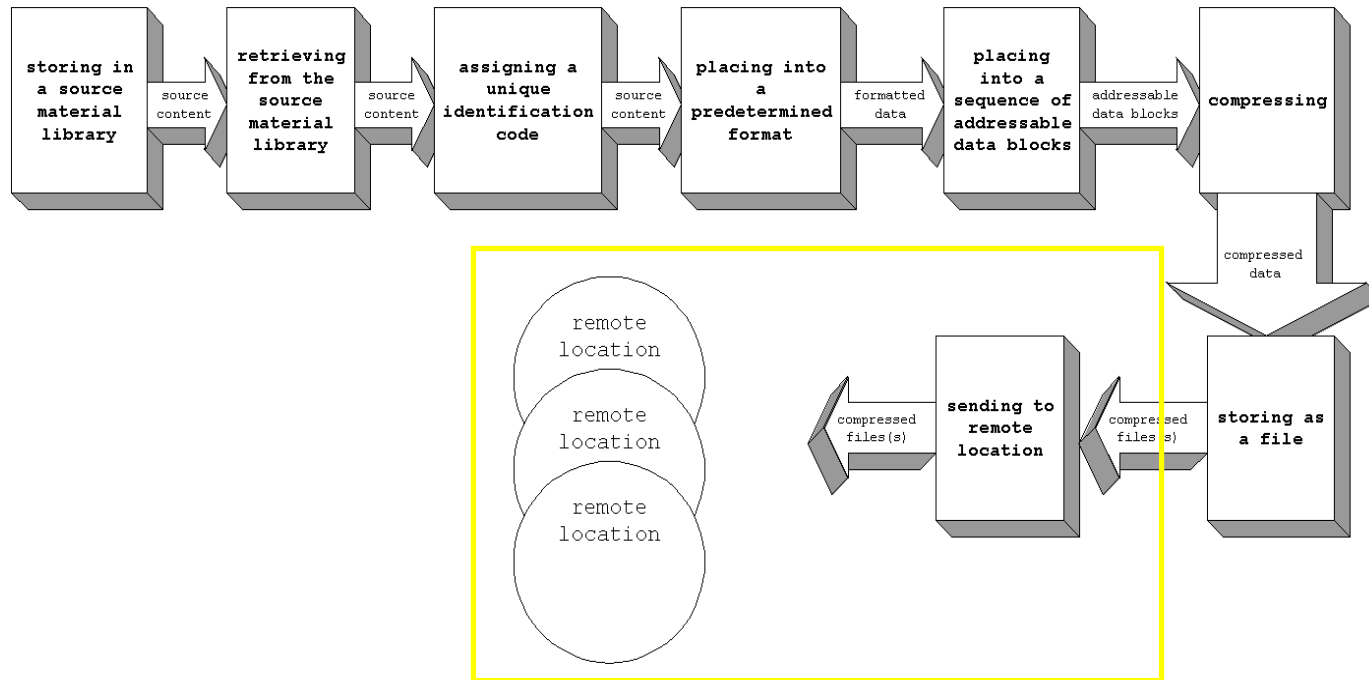
The Hotel VOD system operator distributes the media from their central operations center to hotels where it is then stored on VOD servers. A copy of the media that has been stored can now be delivered by the VOD server to the in-room equipment, which is remote from the video closet containing the VOD server. The media can be sent in compressed MPEG format, or may be decompressed and NTSC encoded, and sent as a standard television signal. This is an example of sending at least a portion of the file to a remote location.