U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

CLASSIFICATION ORDER 1864

JULY 3, 2007

PROJECT Y-7145

The following classification changes will be effected by this order:

	Class	Subclass	Art Unit	Ex'r Search Room
Abolished:	None			
Established:	375	E-Subclasses: E1.001-E1.009, E1.01, E1.011-E1.019, E1.02, E1.021-E1.029, E1.03, E1.031-E1.037, E7.001-E7.009, E7.01, E7.011-E7.019, E7.02, E7.021-E7.029, E7.03, E7.031-E7.039, E7.04, E7.041-E7.049, E7.05, E7.051-E7.059, E7.06, E7.061-E7.069, E7.07, E7.071-E7.079, E7.08, E7.081-E7.089, E7.09, E7.091-E7.099, E7.1, E7.101-E7.109, E7.11, E7.111-E7.119, E7.12, E7.121-E7.129, E7.13, E7.131-E7.139, E7.14, E7.141-E7.149, E7.15, E7.151-E7.159, E7.16, E7.161-E7.169, E7.17, E7.171-E7.179, E7.18, E7.181-E7.189, E7.19, E7.191-E7.199, E7.2, E7.201-E7.209, E7.21, E7.211-E7.219, E7.22, E7.221-E7.229, E7.23, E7.231-E7.239, E7.24, E7.241-E7.249, E7.25, E7.251-E7.259, E7.26, E7.261-E7.269, E7.27, E7.271-E7.279, E7.28, E7.281	2611, 2621	0S0001

No other classes were impacted by this order.

This order includes the following:
A. CLASSIFICATION MANUAL CHANGES

D. DEFINITION CHANGES AND NEW OR ADDITIONAL DEFINITIONS

CLASSIFICATION ORDER 1864

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PROJECT NO. Y7145

Project Leader: Yen M. Nguyen

Editor: Varona Stevens

Editorial Assistant: Yvonne Smith

130 SPREAD SPECTRUM
131 .Hybrid form
132 .Frequency hopping
133 ..End-to-end transmission system
134 ...Having specific code acquisition or tracking
135 ..Transmitter
136 ..Receiver
137 ...Having specific code acquisition or tracking
138 .Time hopping
139 .Chirp
140 .Direct sequence
141 ..End-to-end transmission system
142 ...Having correlation-type receiver
143 ...Having matched-filter-type receiver
144 ...Having multi-receiver or interference cancellation
145 ...Having specific signaling for code synchronization
146 ..Transmitter
147 ..Receiver
148 ...Multi-receiver or interference cancellation
149 ...Having specific code synchronization
150 ...Correlation-type receiver
151 ....Having SAW or charge-transfer device
152 ...Matched-filter-type receiver
153 ....Having SAW or charge-transfer device
211 REPEATERS
212 .Ring or star configuration
213 .Testing
214 .Including pulse regeneration or conversion
215 ..Phase locked loop
216 APPARATUS CONVERTIBLE TO ANALOG
217 .Muting circuit and squelch
218 EARTH OR WATER MEDIUM
219 TRANSCEIVERS
220 .Transmission interface between two stations or terminals
221 .Loopback mode
222 .Modems (data sets)
223 ..Angle modulation
224 TESTING
225 .Data rate
226 .Phase error or phase jitter
227 .Signal noise
228 .With indicator
229 EQUALIZERS
230 .Automatic
231 ..Training period or initial set up
232 ..Adaptive
233 ...Decision feedback equalizer
234 ...Fractionally spaced equalizer
235 ...Quadrature channels
236 ...Accumulator or up/down counter
237 PULSE NUMBER MODULATION
238 PULSE WIDTH MODULATION
239 PULSE POSITION, FREQUENCY, OR SPACING MODULATION
240 BANDWIDTH REDUCTION OR EXPANSION
240.01 .Television or motion video signal
240.02 ..Adaptive
240.03 ...Quantization
240.04 ....Feed forward
240.05 ....Feed back
240.06 ...Feed forward
240.07 ...Feed back
240.08 ..Feature based
240.09 ...Polygonal approximation
240.1 ...Separate coders
240.11 ....Subband coding
240.12 ..Predictive
240.13 ...Intra/inter selection
240.14 ...Plural
240.15 ...Bidirectional
240.16 ...Motion vector
240.17 ....Half-pixel refinement
240.18 ..Transform
240.19 ...Wavelet
240.2 ...Discrete cosine
240.21 ..Subsampling
240.22 ..Vector quantization
240.23 ..Variable length coding
240.24 ..Block coding
240.25 ..Specific decompression process
240.26 ..Associated signal processing
240.27 ...Error detection or correction
240.28 ...Synchronization
240.29 ...Pre/post filtering
241 .Pulse code modulation
242 PULSE CODE MODULATION
243 .Correcting or reducing quantizing errors
244 .Differential
245 ..Quantizer or inverse quantizer
246 ..Length coding
247 ..Single bit (delta)
248 ...Nonamplitude delta (area, etc.)
249 ...Compand (overload prevention)
250 ....Redundancy removal
251 ....Syllabic
252 ...Plural feedback loops
253 .Length coding
254 .Noise or distortion reduction
256 PULSE TRANSMISSION VIA RADIATED BASEBAND
257 CABLE SYSTEMS AND COMPONENTS
258 .Transformer coupling
259 SYSTEMS USING ALTERNATING OR PULSATING CURRENT
260 .Plural channels for transmission of a single pulse train
261 ..Quadrature amplitude modulation
262 ...Maximum likelihood decoder or viterbi decoder
263 ...Partial response
264 ...Multilevel
265 ...Trellis encoder or Trellis decoder
267 ..Diversity
268 .Amplitude modulation
269 ..With phase or frequency shift keying
270 ..Vestigial or single sideband or suppressed carrier

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SYSTEMS USING ALTERNATING OR PULSATING CURRENT
271 .Angle modulation
272 ..Frequency shift keying
273 ...Combined with phase shift keying
274 ...Minimum shift keying
275 ...More than two frequencies
276 ...One cycle or less per bit
277 ...Vestigial or single sideband, or suppressed carrier
278 ...Antinoise or distortion
279 ..Phase shift keying
280 ...More than two phases
281 ....Quaternary
282 ...Biphase (manchester codes)
283 ...Differential phase shift keying (diphase)
284 ...Antinoise or distortion
285 .Antinoise or distortion
286 MULTILEVEL
287 .With threshold level
288 .Transmission line
289 .Bipolar signal
290 .Partial response
291 ..Duobinary
292 .Disparity reduction
293 .Synchronized
294 ..Phase locked loop
295 TRANSMITTERS
296 .Antinoise or distortion (includes predistortion)
297 ..Power amplifier
298 .Quadrature amplitude modulation
299 .Plural diversity
300 .Amplitude modulation
301 ..Single or vestigial sideband or suppressed carrier
302 .Angle modulation
303 ..Frequency shift keying
304 ...Antenna tuning with frequency shift
305 ...Minimum shift keying
306 ...One oscillator
307 ...Two or more oscillators
308 ..Phase shift keying
309 .Keying circuits
310 ..Remote controlled
311 ..Automatic
312 ..Power or bias voltage supply keying
313 ..Key shock or click prevention
314 ..Including auxiliary control tube
315 ..Modulation by absorption of signal, changing antenna dimension or changing antenna impedance
316 RECEIVERS
317 .Automatic baseline or threshold adjustment
318 ..Differential amplifier
319 ..Automatic bias circuit for DC restoration
320 .Amplitude modulation
321 ..Single or vestigial sideband or suppressed carrier
322 .Angle modulation
323 ..Combined phase shift keyed and frequency shift keyed
324 ..Particular demodulator
325 ...Including coherent detector
326 ...Carrier recovery circuit or carrier tracking
327 ...Phase locked loop
328 ...Including switching or gating (digital circuits)
329 ..Phase shift keying
330 ...Differential (diphase)
331 ....More than two phases
332 ...Plural phase (>2)
333 ...Biphase (manchester code)
334 ..Frequency shift keying
335 ...More than two frequencies
336 ...Minimum shift keying
337 ...Separate mark and space channels
338 .Interrupted carrier wave
339 ..Carrier controlling local generator
340 .Particular pulse demodulator or detector
341 ..Maximum likelihood decoder or viterbi decoder
342 ..Locating predetermined portion of pulse
343 ..Correlative or matched filter
344 .Automatic frequency control
345 .Automatic gain control
346 .Interference or noise reduction
347 ..Diversity (frequency or time)
348 ..Intersymbol interference
349 ..Plural signal paths in receiver
350 ..By filtering (e.g., digital)
351 ..Gating, blanking, etc.
352 .With electromagnetic relay or solenoid
353 PULSE AMPLITUDE MODULATION
354 SYNCHRONIZERS
355 .Synchronizing the sampling time of digital data
356 .Network synchronizing more than two stations
357 .Synchronization failure prevention
358 .Feedback, receiver to transmitter
359 .Self-synchronizing signal (self-clocking codes, etc.)
360 ..With transition detector
361 ..Manchester code or biphase code
362 .Frequency or phase control using synchronizing signal
363 ..Synchronization bit insertion into artificially created gaps
364 ..Synchronization signals with unique amplitude, polarity, length, or frequency
365 ..Synchronization word
366 ...Plurality of synchronization words
367 ...Pseudo noise
368 ...Synchronizer pattern recognizers
369 ..Start - stop
370 ...With asynchronous data

SYNCHRONIZERS

371 .Phase displacement, slip or jitter correction
372 ..Elastic buffer
373 ..Phase locking
374 ...With charge pump or up and down counters
375 ...With frequency detector and phase detector
376 ...Phase locked loop
377 MISCELLANEOUS

E-SUBCLASSES

The following subclasses beginning with the letter E are E-subclasses. Each E-subclass corresponds in scope to a classification in a foreign classification system, for example, the European Classification system (ECLA). The foreign classification equivalent to an E-subclass is identified in the subclass definition. In additional to U.S. documents classified in E-subclasses by U.S. examiners, documents are regularly classified in E-subclasses according to the classification practices of any foreign Offices identified in parentheses at the end of the title. For example, "(EPO)" at the end of a title indicates both European and U.S. patent documents, as classified by the EPO, are regularly added to the subclass. E-subclasses may contain subject matter outside the scope of this class. Consult the E-subclass definitions, or the documents themselves, to clarify or interpret titles.

* E1.001 SPREAD SPECTRUM TECHNIQUES IN GENERAL (EPO)
* E1.002 .Using direct sequence modulation (EPO)
* E1.003 ..With code acquisition (EPO)
* E1.004 ...Setting of lock conditions, e.g., threshold (EPO)
* E1.005 ...Code identification (EPO)
* E1.006 ...Multimode search, i.e., using multiple search strategies (EPO)
* E1.007 ...Using partial detection (EPO)
* E1.008 ....Partial correlation (EPO)
* E1.009 ....Partial phase search (EPO)
* E1.01 ...Multistage acquisition (EPO)
* E1.011 ....Multidwell schemes, i.e., multiple accumulation times (EPO)
* E1.012 ....Parallel schemes (EPO)
* E1.013 ...Setting of search window, i.e., range of code offsets to be searched (EPO)
* E1.014 ...Masking/slewing, i.e., jumping within the code (EPO)
* E1.015 ...With increased resolution, i.e., higher than half a chip (EPO)
* E1.016 ..Using a code tracking loop, e.g., a delay locked loop (EPO)
* E1.017 ..With demodulation by means of convolvers, e.g., of the SAW type (EPO)
* E1.018 ..With demodulation by means of matched filters (EPO)
* E1.019 ..With asynchronous demodulation, i.e., not requiring code synchronisation (EPO)
* E1.02 ..Interference-related aspects (EPO)
* E1.021 ...The interference being narrowband (EPO)
* E1.022 ....With estimation filters (EPO)
* E1.023 ....With transform to frequency domain (EPO)
* E1.024 ...The interference being multiple access interference (EPO)
* E1.025 ....Using joint detection techniques, e.g., linear detectors (EPO)
* E1.026 .....Using decorrelation matrix (EPO)
* E1.027 .....Using minimum mean squared error (MMSE) detector (EPO)
* E1.028 .....Using maximum-likelihood sequence estimation (MLSE) (EPO)
* E1.029 ....Using subtractive interference cancellation (EPO)
* E1.03 .....Successive interference cancellation (EPO)
* E1.031 .....Parallel interference cancellation (EPO)
* E1.032 ...The interference being multi path interference, e.g., RAKE receivers (EPO)
* E1.033 .Using frequency hopping (EPO)
* E1.034 ..Arrangements for generation of hop frequencies (EPO)
* E1.035 ..Arrangements for generation of hop sequences (EPO)
* E1.036 ..Interference related aspects (EPO)
* E1.037 ..Arrangements for sequence synchronization (EPO)
* E7.001 SYSTEMS FOR THE TRANSMISSION OF TELEVISION SIGNALS USING PULSE CODE MODULATION (EPO)
* E7.002 .Arrangements for interfacing to the transmission channel or to the communication network (EPO)
* E7.003 .Bitstream control arrangements (EPO)
* E7.004 ..Involving pointers to the video stream (EPO)
* E7.005 ..Involving the control of media objects (EPO)
* E7.006 ...Presentation therefor, e.g., on the basis of a scene description (EPO)
* E7.007 ...User interaction therefor (EPO)
* E7.008 ....With hot-spots (EPO)
* E7.009 ...Intellectual Property Rights management and protection therefor (EPO)
* E7.01 ...Synchronization therefor, e.g., synchronization of elementary stream objects at the sync layer with time stamps (EPO)

SYSTEMS FOR THE TRANSMISSION OF TELEVISION SIGNALS USING PULSE CODE MODULATION (EPO)

.Bitstream control arrangements (EPO)

* E7.011 ..Involving control of the complexity properties of the video bitstream, e.g., spatial or temporal resolution, SNR, bit rate, region of interest selection (EPO)

* E7.012 ...Where the control is performed by the receiver of the video, e.g., active selection by the receiver from a scalable bitstream or selective multicast subscription (EPO)

* E7.013 ...Where the control is performed by the transmitter of the video, e.g., active selection by the transmitter of parts of scalable bitstream to be sent (EPO)

* E7.014 ..Involving buffer level management (EPO)

* E7.015 ..Involving a control signal to the decoder, e.g., from the medium specific interface unit, or from the network (EPO)

* E7.016 ..Involving a control signal to the encoder, e.g., from the medium specific interface unit, or from the network (EPO)

* E7.017 ..Involving an exchange of control commands (EPO)

* E7.018 .Bitstream embedding arrangements, e.g. arrangements for blending, replacing, hiding, compositing or associating at bitstream level (EPO)

* E7.019 .Bitstream network arrangements (EPO)

* E7.02 .Bitstream transport arrangements (EPO)

* E7.021 ..Bitstream processing (EPO)

* E7.022 ...Involving modification of bitstream parameters, e.g., restamping of time stamps, remapping of identifiers transmultiplexing (EPO)

* E7.023 ...Involving switching between bitstreams (EPO)

* E7.024 ..Involving transporting of additional information over the bitstream (EPO)

* E7.025 ..Involving transporting of the bitstream over a delivery medium (EPO)

* E7.026 .Using bandwidth reduction ; source coding or decoding of digital video signal, e.g., digital video signal compression; Pre- or postprocessing therefor (EPO)

* E7.027 ..Decoder-specific arrangements (EPO)

* E7.028 ...For compensating inverse transform mismatch, e.g., IDCT mismatch (EPO)

* E7.029 ..Involving sub-band coding (EPO)

* E7.03 ...In combination with temporal predictive coding, e.g., in 'inter' mode (EPO)

* E7.031 ....With motion compensated temporal filtering (EPO)

* E7.032 ....With at least one adaptive element (EPO)

* E7.033 .....Involving variable length or entropy coding, e.g., Huffmann or arithmetic coding (EPO)

* E7.034 .....Involving normalization or quantizing (EPO)

* E7.035 .....Involving a bit-rate or bit-amount target (EPO)

* E7.036 ......With adaptive target allocation among the components (EPO)

* E7.037 ....With interframe prediction not only of coefficient values (EPO)

* E7.038 ....Suited to an interframe bitstream syntax (EPO)

* E7.039 ....Using sub-band domain temporal integration (EPO)

* E7.04 ...Of a single image (EPO)

* E7.041 ....In more than two frequency dimensions (EPO)

* E7.042 ....Of arbitrarily shaped image segments (EPO)

* E7.043 ....With details relating to the sub-band filter (EPO)

* E7.044 .....Concerning filter definition (EPO)

* E7.045 .....Concerning filter implementation (EPO)

* E7.046 ....With at least one adaptive element (EPO)

* E7.047 .....Involving variable length or entropy coding, e.g., Huffmann or arithmetic coding (EPO)

* E7.048 .....Involving normalization or quantizing (EPO)

* E7.049 .....Involving a bit-rate or bit-amount target (EPO)

* E7.05 ......With adaptive target allocation among the components (EPO)

* E7.051 ....Control aspects therefor (EPO)

* E7.052 .....Controlled element (EPO)

* E7.053 ......Subband structure, e.g., number of subbands (EPO)

* E7.054 ......Filter type or filtering coefficients (EPO)

* E7.055 ......Error protection, detection or correction (EPO)

* E7.056 ......Scan or transmission order of coefficients or bitplanes (EPO)

* E7.057 ....Switching of direction, e.g., horizontal, diagonal, vertical (EPO)

* E7.058 .....Unit of control (EPO)

* E7.059 ......Relating to sub-band structure (EPO)

* E7.06 ....Hierarchical level (EPO)

* E7.061 ....Directional tree, e.g., low-high (LH), high-low (HL), high-high (HH) (EPO)

* E7.062 ......Object or region (EPO)

* E7.063 .....Element used for control (EPO)

SYSTEMS FOR THE TRANSMISSION OF TELEVISION SIGNALS USING PULSE CODE MODULATION (EPO)

.Using bandwidth reduction ; source coding or decoding of digital video signal, e.g., digital video signal compression; Pre- or postprocessing therefor (EPO)

..Involving sub-band coding (EPO)

...Of a single image (EPO)

....Control aspects therefor (EPO)

.....Element used for control (EPO)

* E7.064 ......Position or location within image, e.g., center or periphery of picture (EPO)

* E7.065 ......Involving user interaction or information input by receiving side (EPO)

* E7.066 ....With prediction other than mere runlength (EPO)

* E7.067 .....Intraband (EPO)

* E7.068 .....Interband (EPO)

* E7.069 ....Involving the arranging of coefficients or bits, e.g., for scalability or progressive transmission (EPO)

* E7.07 .....Involving scan according to levels, e.g., breath-first (EPO)

* E7.071 .....Involving scan according to trees, e.g., depth-first (EPO)

* E7.072 .....Coding of bitplanes or significance, e.g., zero tree (EPO)

* E7.073 ....Involving error protection, detection or correction (EPO)

* E7.074 ....Suited to a bitstream syntax (EPO)

* E7.075 ....With grouping into blocks (EPO)

* E7.076 ..Involving video objects (EPO)

* E7.077 ...Involving both synthetic and natural picture components, e.g., synthetic natural hybrid coding (SNHC) (EPO)

* E7.078 ...Scalability, e.g., involving base and at least one enhancement video object layers (VOL) (EPO)

* E7.079 ....Spatial scalability (EPO)

* E7.08 ....Temporal scalability, e.g., layered VOP frame rate (EPO)

* E7.081 ...Shape coding therefor (EPO)

* E7.082 ....Using binary alpha-plane coding, e.g., Context based Arithmetic Encoding (CAE) (EPO)

* E7.083 ...Model based coding therefor (EPO)

* E7.084 ....Using a three-dimensional model (EPO)

* E7.085 ...Coding of regions that are present throughout a whole video segment, e.g., sprites (EPO)

* E7.086 ....Of static sprites, e.g., background, mosaic (EPO)

* E7.087 ...Scene description coding, e.g., binary format for scenes (BIFS) compression (EPO)

* E7.088 ..Involving coding of different picture or data components (EPO)

* E7.089 ...Involving the insertion of extra data, e.g., in the video data, in the coding parameters or by modification of said video data or parameters (EPO)

* E7.09 ...Involving separate coding of the error signal, i.e., the difference between the original picture and the locally reconstructed one (EPO)

* E7.091 ...Involving arrangements for adaptive allocation of coded information to different channels (EPO)

* E7.092 ...Involving multi-layer decomposition; subsequent reconstruction (EPO)

* E7.093 ..Implementation arrangements, e.g., implementation by hardware of software (EPO)

* E7.094 ...Memory arrangements (EPO)

* E7.095 ....Memory downsizing methods (EPO)

* E7.096 .....Display on the fly, e.g., simultaneous writing to and reading from decoder memory (EPO)

* E7.097 ......With 3:2 pulldown (EPO)

* E7.098 .....Recompression (EPO)

* E7.099 ......Decimation (EPO)

* E7.1 ...Motion estimation and/or compensation hardware (EPO)

* E7.101 ....Data flow inside motion estimator (EPO)

* E7.102 ....Access to external memory (EPO)

* E7.103 ...Parallel arrangements (EPO)

* E7.104 ..Motion estimation therefor; processing of motion vectors for bandwidth reduction purposes (EPO)

* E7.105 ...Methods (EPO)

* E7.106 ....Global motion vector estimation (EPO)

* E7.107 ....Multiresolution or hierarchical method (EPO)

* E7.108 ....Multistep search method, e.g., 3-step, 2D-log, One-at-a-Time Search (OTS) (EPO)

* E7.109 ....Nonblock-based processing (EPO)

* E7.11 .....Using feature points or meshes (EPO)

* E7.111 .....Using regions (EPO)

* E7.112 ......Contour motion estimation (EPO)

* E7.113 ....Sub-pixel accuracy (EPO)

* E7.114 ....Transform domain motion estimation (EPO)

* E7.115 ...Details (EPO)

* E7.116 ....Spatially constrained motion estimation, e.g., at image or region borders (EPO)

* E7.117 ....Dealing with occlusions (EPO)

* E7.118 ....Early exit, i.e., stopping a systematic computation based on a certain criteria, e.g., error magnitude is too large (EPO)

SYSTEMS FOR THE TRANSMISSION OF TELEVISION SIGNALS USING PULSE CODE MODULATION (EPO)

.Using bandwidth reduction ; source coding or decoding of digital video signal, e.g., digital video signal compression; Pre- or postprocessing therefor (EPO)

..Motion estimation therefor; processing of motion vectors for bandwidth reduction purposes (EPO)

...Details (EPO)

* E7.119 ....Search initialization, i.e., estimating a good candidate to initiate a search (EPO)

* E7.12 ....Padding, i.e., filling nonobject values in an arbitrary shaped block for motion estimation purposes (EPO)

* E7.121 ....Rate-distortion criteria (EPO)

* E7.122 ....Variable search window size or shape (EPO)

* E7.123 ...Processing of motion vectors (EPO)

* E7.124 ....Encoding (EPO)

* E7.125 .....Predictive encoding (EPO)

* E7.126 ..Adaptive or control aspects therefor (EPO)

* E7.127 ...Methods, elements or tools for adaptive control (EPO)

* E7.128 ....LaGrangian method (EPO)

* E7.129 ....Side information (EPO)

* E7.13 ....Iterative methods (EPO)

* E7.131 .....Two pass methods (EPO)

* E7.132 ...Controlled element or parameter (EPO)

* E7.133 ....Predictor (EPO)

* E7.134 ....Target code amount (EPO)

* E7.135 ....Filtering, e.g., for pre- or post-processing (EPO)

* E7.136 ....Grid, i.e., regular pattern of elementary coding units in a picture, e.g., block grid (EPO)

* E7.137 ....Encoder, i.e., selection among a plurality of heterogeneous encoders (EPO)

* E7.138 ....Encoding parameters processing, e.g., initialization, alteration, compression (EPO)

* E7.139 ....Quantizer (EPO)

* E7.14 .....Details of quantization, normalization or weighting functions, e.g., normalization parameters or matrices, variable uniform quantizes, weighting matrices (EPO)

* E7.141 ....Resource allocation (EPO)

* E7.142 ....Transform coefficients scan, e.g., zig-zag scan (EPO)

* E7.143 ....Transformer, e.g., 8x8 or 2x4x8 DCT, selection among a plurality of different transform operations (EPO)

* E7.144 ....Variable length coding (VLC) or entropy coding, e.g., Huffmann or arithmetic coding (EPO)

* E7.145 ....Skipping or zeroing of coding units, e.g., adaptive decimation, frame skipping, transform coefficient masking (EPO)

* E7.146 ....Coding or prediction mode selection (EPO)

* E7.147 .....Intra coding, e.g., selection among a plurality of spatially predictive coding modes (EPO)

* E7.148 .....Refresh, i.e., intra-coding mode decision, e.g., at macroblock or picture level (EPO)

* E7.149 .....Inter coding, i.e., selection among a plurality of temporally predictive coding modes (EPO)

* E7.15 .....Picture structure, e.g., interlaced/progressive (EPO)

* E7.151 .....Group-of-pictures (GOP) structure (EPO)

* E7.152 ...Controlling element, parameter or criteria (EPO)

* E7.153 ....Rate distortion criteria (EPO)

* E7.154 ....Data rate or code amount (EPO)

* E7.155 .....Using a combination of feedforward and feedback control (EPO)

* E7.156 .....Using feedforward control (EPO)

* E7.157 ......Based on model-estimated code amount (EPO)

* E7.158 ......Based on off-line generated code amount (EPO)

* E7.159 .....Feedback control, i.e., control using output code amount, e.g., buffer fullness (EPO)

* E7.16 ......Single-pass constant bit rate (CBR) encoding (EPO)

* E7.161 ....Input video signal characteristics (EPO)

* E7.162 .....Complexity, e.g., activity, edges (EPO)

* E7.163 .....Motion, e.g., field or frame difference (EPO)

* E7.164 ......Using motion vectors (EPO)

* E7.165 .....Scene cut (EPO)

* E7.166 .....Chrominance (EPO)

* E7.167 ....Visual quality (EPO)

* E7.168 ....Resource availability (EPO)

* E7.169 ....Coding mode (EPO)

* E7.17 .....Picture or macroblock type, e.g., I,P,B (EPO)

* E7.171 .....Picture structure, e.g., interlaced/progressive (EPO)

* E7.172 ....User input (EPO)

* E7.173 ....Receiver or channel (EPO)

* E7.174 .....Transmission errors (EPO)

* E7.175 ...Unit of control, i.e., structural or semantic portion of the video signal being the object of the control (EPO)

* E7.176 ....Block or macroblock (EPO)

* E7.177 ....Transform coefficient (EPO)

* E7.178 ....Pixel (EPO)

SYSTEMS FOR THE TRANSMISSION OF TELEVISION SIGNALS USING PULSE CODE MODULATION (EPO)

.Using bandwidth reduction ; source coding or decoding of digital video signal, e.g., digital video signal compression; Pre- or postprocessing therefor (EPO)

..Adaptive or control aspects therefor (EPO)

...Unit of control, i.e., structural or semantic portion of the video signal being the object of the control (EPO)

* E7.179 ....Group-of-pictures (GOP) (EPO)

* E7.18 ....Slice, e.g., line of blocks, group of blocks (EPO)

* E7.181 ....Picture (EPO)

* E7.182 ....Image region, e.g., region of interest (ROI), object (EPO)

* E7.183 ....Scene or shot (EPO)

* E7.184 ....Bit (EPO)

* E7.185 ....Chrominance (EPO)

* E7.186 ....Layer (EPO)

* E7.187 ..Compressed domain processing (EPO)

* E7.188 ..Involving subsampling at the transmitter and restitution of the omitted samples by interpolation (EPO)

* E7.189 ..Involving preprocessing or postprocessing therefor (EPO)

* E7.19 ...Involving reduction of coding artifacts, e.g., of blockiness (EPO)

* E7.191 ...Involving cinematographic video sequences, e.g., sequences originated from film and converted to video through 3:2 pulldown (EPO)

* E7.192 ...Involving scene cut detection in conjunction with bandwidth reduction (EPO)

* E7.193 ..Filtering (EPO)

* E7.194 ...In a prediction loop (EPO)

* E7.195 ..Standard related document (EPO)

* E7.196 ...Normative references, e.g., working documents of standardization bodies like ISO/IEC, ITU-T, SMPTE in the domain of digital image and video coding (EPO)

* E7.197 ...Illustrative references, e.g., overviews, reviews (EPO)

* E7.198 ..Transcoding therefor, i.e., conversion of video data, coding parameters, syntax or the like in order to realize interoperability between different video coding standards (EPO)

* E7.199 ..Syntax aspects, e.g., source coding bistream syntax (EPO)

* E7.209 ..Using vector coding (EPO)

* E7.21 ..Involving pulse code modulation and predictive coding (EPO)

* E7.211 ..Involving transform and predictive coding , e.g., hybrid coding, Motion Picture Experts Group (MPEG) coding (EPO)

* E7.212 ...Involving the use of at least one adaptive element (EPO)

* E7.213 ....Involving variable length or entropy coding, e.g., Huffmann or arithmetic coding (EPO)

* E7.214 ....Quantization, normalization or weighting techniques therefor, e.g., normalization parameters or matrices, variable uniform quantizers, weighting matrices (EPO)

* E7.215 ....The output data rate being minimized down to or below the channel capacity (EPO)

* E7.216 .....With feedback control only of the data rate, e.g., buffer fullness being used (EPO)

* E7.217 .....With feedforward control only of the data rate, e.g., formation amount estimator or sorter being used (EPO)

* E7.218 .....With feedforward and feedback control of the data rate (EPO)

* E7.219 .....With iterative control of the data rate, e.g., multipass (EPO)

* E7.22 ....Involving adaptive allocation of the frame type, e.g., adaptive group-of-pictures (GOP) structure (EPO)

* E7.221 ....Motion adaptive (EPO)

* E7.222 ...Multiplexing arrangements therefor, e.g., suited to a video bitstream syntax (EPO)

* E7.223 ...Using nontransform coding for certain blocks (EPO)

* E7.224 ...Forced updating therefor, e.g., refresh techniques, intra/inter-coding mode selection at macroblock or picture level (EPO)

* E7.225 ...Using transform domain integration, i.e., the transform being operated outside the prediction loop (EPO)

* E7.226 ..Involving transform coding, e.g., using discrete cosine transform (DCT) (EPO)

* E7.227 ...Transforming in more than two dimensions (EPO)

* E7.228 ...Of arbitrarily shaped image segments (EPO)

* E7.229 ...Involving the use of at least one adaptive element, e.g., Joint Photographic Experts Group (JPEG) coding (EPO)

* E7.23 ....Adaptive scanning order of DCT coefficients, e.g., alternate scanning (EPO)

* E7.231 ....Involving variable length or entropy coding, e.g., Huffmann or arithmetic coding (EPO)

SYSTEMS FOR THE TRANSMISSION OF TELEVISION SIGNALS USING PULSE CODE MODULATION (EPO)

.Using bandwidth reduction ; source coding or decoding of digital video signal, e.g., digital video signal compression; Pre- or postprocessing therefor (EPO)

..Involving transform coding, e.g., using discrete cosine transform (DCT) (EPO)

...Involving the use of at least one adaptive element, e.g., Joint Photographic Experts Group (JPEG) coding (EPO)

* E7.232 ....Quantization, normalization or weighting techniques therefor, e.g., normalization parameters or matrices, variable uniform quantizes, weighting matrices (EPO)

* E7.233 ....The output data rate being minimized down to or below the channel capacity (EPO)

* E7.234 .....With feedback control only of the data rate, e.g., buffer fullness being used (EPO)

* E7.235 .....With feedforward control only of the data rate, e.g., information amount estimator or sorter being used (EPO)

* E7.236 .....With feedforward and feedback control of the data rate (EPO)

* E7.237 .....With iterative control of the data rate (EPO)

* E7.238 ....The output quality being above a minimum (EPO)

* E7.239 ...Involving hierarchical transmission of the transform coefficients, e.g., progressive JPEG (EPO)

* E7.24 ...Involving error detection or error correction (EPO)

* E7.241 ...Involving pre-processing of the picture element samples before transform coding or post-processing of the same after transform decoding (EPO)

* E7.242 ...Involving zonal sampling (EPO)

* E7.243 ..Involving predictive coding (EPO)

* E7.244 ...At least one coding element being controlled by the buffer fullness (EPO)

* E7.245 ...With an adaptive quantizer characteristic, e.g., controlled by forward or backward adaptation (EPO)

* E7.246 ...With error correction (EPO)

* E7.247 ...Involving delta modulation (EPO)

* E7.248 ...Using subsampling at the coder or sample restitution by interpolation at the coder or decoder (EPO)

* E7.249 ....With adaptive prediction (EPO)

* E7.25 ....With motion compensated interpolation, e.g., involving bidirectional frame interpolation, i.e., use of B-pictures (EPO)

* E7.251 .....Involving a generalized motion field, e.g., nonblock-based processing (EPO)

* E7.252 ....Involving spatial subsampling or upsampling; Alteration of picture size or resolution (EPO)

* E7.253 ....Involving temporal subsampling, e.g., frame decimation (EPO)

* E7.254 .....With control of frame rate, skipping or repetition at encoding or decoding side (EPO)

* E7.255 ...Using temporal prediction (EPO)

* E7.256 ....Using motion compensation, e.g., by means of motion vectors (EPO)

* E7.257 .....Long-term prediction (EPO)

* E7.258 .....Block-based (EPO)

* E7.259 ......Using overlapping blocks (EPO)

* E7.26 .....With sub-pixel accuracy (EPO)

* E7.261 .....Nonblock-based (EPO)

* E7.262 .....Multiple frame prediction (EPO)

* E7.263 ....Using motion detection, e.g., with detection of moving zones (EPO)

* E7.264 .....Involving conditional replenishment (EPO)

* E7.265 ...Using spatial prediction (EPO)

* E7.266 ....By separate coding of pixel blocks (EPO)

* E7.2 ..Specific techniques not provided for in other subgroups of E7.026 (EPO)

* E7.201 ...Involving N-Tree coding, e.g., quadtree, octree (EPO)

* E7.202 ...Involving run length coding (EPO)

* E7.203 ...Involving matching pursuit (EPO)

* E7.204 ...Involving fractal coding (EPO)

* E7.205 ...Adaptive dynamic range coding (ADRC) (EPO)

* E7.206 ...Involving both PCM encoding and DPCM encoding (EPO)

* E7.207 ...Using a dither signal (EPO)

* E7.208 ...Using noise or error feedback, e.g., quantization noise feedback (EPO)

* E7.267 .Systems for transmission of a pulse code modulated video signal with one or more other pulse code modulated signals, e.g., an audio signal, a synchronizing signal (EPO)

* E7.268 ..Involving more than one video signal (EPO)

* E7.269 ...The signals being asynchronous (EPO)

* E7.27 ...The signals being synchronous (EPO)

* E7.271 ..Said other signal being a related audio signal (EPO)

* E7.272 ..Said other signal being a private data stream, e.g., teletext, graphics (EPO)

* E7.273 ..According to geometrical constraints of the communication medium, e.g., data formatting for subsequent transmission to a digital storage medium (EPO)

SYSTEMS FOR THE TRANSMISSION OF TELEVISION SIGNALS USING PULSE CODE MODULATION (EPO)

.Systems for transmission of a pulse code modulated video signal with one or more other pulse code modulated signals, e.g., an audio signal, a synchronizing signal (EPO)

* E7.274 ..Isochronously with the horizontal video sync, e.g., according to bit-parallel or bit-serial interface formats, as SMPTE 259M (EPO)

* E7.275 ..The signals being synchronous (EPO)

* E7.276 ...Synchronizing systems therefor (EPO)

* E7.277 ..The signals being asynchronous (EPO)

* E7.278 ...Synchronizing systems therefor (EPO)

* E7.279 .Systems for detection or correction of transmission errors (EPO)

* E7.28 ..Using redundant codes (EPO)

* E7.281 ..Using error concealment (EPO)

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FOREIGN ART COLLECTIONS

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FOR 000 CLASS-RELATED FOREIGN DOCUMENTS

Any foreign patents or non-patent literature from subclasses that have been reclassified have been transferred directly to FOR Collections listed below. These Collections contain ONLY foreign patents or non-patent literature. The parenthetical references in the Collection titles refer to the abolished subclasses from which these Collections were derived.

FOR 100 SPREAD SPECTRUM (375/200)

FOR 101 .Hybrid forms (375/201)

FOR 102 .Frequency hopping (375/202)

FOR 103 .Time hopping (375/203)

FOR 104 .Pulsed FM or chirp (375/204)

FOR 105 .Direct sequence (375/206)

FOR 106 .Matched filter (375/207)

FOR 107 .Pseudo-noise correlation (375/208)

FOR 108 ..Auto-correlation (375/209)

FOR 109 ..Cross-correlation (375/210)

D. CHANGES TO THE DEFINITIONS

CLASS 375 – PULSE OR DIGITAL COMMUNICATIONS

E-subclasses

The E-subclasses in U.S. Class 375 provide for Spread Spectrum techniques in signal modulation for transmission and systems for the transmission of digital video signal using pulse code modulation.

E1.001 SPREAD SPECTRUM TECHNIQUES IN GENERAL (EPO):

This main group provides for subject matter utilizing a data modulated signal which has its energy spread over a transmitted bandwidth which is much greater than the bandwidth or rate of information being sent. This subclass is substantially the same in scope as ECLA classification H04B1/69.

E1.002 Using direct sequence modulation (EPO):

This subclass is indented under subclass E1.001. This subclass is substantially the same in scope as ECLA classification H04B1/707.

E1.003 With code acquisition (EPO):

This subclass is indented under subclass E1.002. This subclass is substantially the same in scope as ECLA classification H04B1/707A.

E1.004 Setting of lock conditions, e.g., threshold (EPO):

This subclass is indented under subclass E1.003. This subclass is substantially the same in scope as ECLA classification H04B1/707A7.

E1.005 Code identification (EPO):

This subclass is indented under subclass E1.003. This subclass is substantially the same in scope as ECLA classification H04B1/707A11.

E1.006 Multimode search, i.e., using multiple search strategies (EPO):

This subclass is indented under subclass E1.003. This subclass is substantially the same in scope as ECLA classification H04B1/707A15.

E1.007 Using partial detection (EPO):

This subclass is indented under subclass E1.003. This subclass is substantially the same in scope as ECLA classification H04B1/707A1.

E1.008 Partial correlation (EPO):

This subclass is indented under subclass E1.007. This subclass is substantially the same in scope as ECLA classification H04B1/707A1A.

E1.009 Partial phase search (EPO):

This subclass is indented under subclass E1.007. This subclass is substantially the same in scope as ECLA classification H04B1/707A1C.

E1.01 Multistage acquisition (EPO):

This subclass is indented under subclass E1.003. This subclass is substantially the same in scope as ECLA classification H04B1/707A3.

E1.011 Multidwell schemes, i.e., multiple accumulation times (EPO):

This subclass is indented under subclass E1.01. This subclass is substantially the same in scope as ECLA classification H04B1/707A3A.

E1.012 Parallel schemes (EPO):

This subclass is indented under subclass E1.01. This subclass is substantially the same in scope as ECLA classification H04B1/707A3C.

E1.013 Setting of search window, i.e., range of code offsets to be searched (EPO):

This subclass is indented under subclass E1.003. This subclass is substantially the same in scope as ECLA classification H04B1/707A5.

E1.014 Masking/slewing, i.e., jumping within the code (EPO):

This subclass is indented under subclass E1.003. This subclass is substantially the same in scope as ECLA classification H04B1/707A9.

E1.015 With increased resolution, i.e., higher than half a chip (EPO):

This subclass is indented under subclass E1.003. This subclass is substantially the same in scope as ECLA classification H04B1/707A13.

E1.016 Using a code tracking loop, e.g., a delay locked loop (EPO):

This subclass is indented under subclass E1.002. This subclass is substantially the same in scope as ECLA classification H04B1/707B.

E1.017 With demodulation by means of convolvers, e.g., of the SAW type, etc. (EPO):

This subclass is indented under subclass E1.002. This subclass is substantially the same in scope as ECLA classification H04B1/707C.

E1.018 With demodulation by means of matched filters (EPO):

This subclass is indented under subclass E1.002. This subclass is substantially the same in scope as ECLA classification H04B1/707D.

E1.019 With asynchronous demodulation, i.e., not requiring code synchronisation (EPO):

This subclass is indented under subclass E1.002. This subclass is substantially the same in scope as ECLA classification H04B1/707E.

E1.02 Interference-related aspects (EPO):

This subclass is indented under subclass E1.002. This subclass is substantially the same in scope as ECLA classification H04B1/707F.

E1.021 The interference being narrowband (EPO):

This subclass is indented under subclass E1.02. This subclass is substantially the same in scope as ECLA classification H04B1/707F1.

E1.022 With estimation filters (EPO):

This subclass is indented under subclass E1.021. This subclass is substantially the same in scope as ECLA classification H04B1/707F1E.

E1.023 With transform to frequency domain (EPO):

This subclass is indented under subclass E1.021. This subclass is substantially the same in scope as ECLA classification H04B1/707F1T.

E1.024 The interference being multiple access interference (EPO):

This subclass is indented under subclass E1.02. This subclass is substantially the same in scope as ECLA classification H04B1/707F2.

E1.025 Using joint detection techniques, e.g., linear detectors (EPO):

This subclass is indented under subclass E1.024. This subclass is substantially the same in scope as ECLA classification H04B1/707F2J.

E1.026 Using decorrelation matrix (EPO):

This subclass is indented under subclass E1.025. This subclass is substantially the same in scope as ECLA classification H04B1/707F2J1.

E1.027 Using minimum mean squared error (MMSE) detector (EPO):

This subclass is indented under subclass E1.025. This subclass is substantially the same in scope as ECLA classification H04B1/707F2J2.

E1.028 Using maximum-likelihood sequence estimation (MLSE) (EPO):

This subclass is indented under subclass E1.025. This subclass is substantially the same in scope as ECLA classification H04B1/707F2J3.

E1.029 Using subtractive interference cancellation (EPO):

This subclass is indented under subclass E1.024. This subclass is substantially the same in scope as ECLA classification H04B1/707F2S.

E1.03 Successive interference cancellation (EPO):

This subclass is indented under subclass E1.029. This subclass is substantially the same in scope as ECLA classification H04B1/707F2S1.

E1.031 Parallel interference cancellation (EPO):

This subclass is indented under subclass E1.029. This subclass is substantially the same in scope as ECLA classification H04B1/707F2S2.

E1.032 The interference being multi path interference, e.g., RAKE receivers (EPO):

This subclass is indented under subclass E1.02. This subclass is substantially the same in scope as ECLA classification H04B1/707F3.

E1.033 Using frequency hopping (EPO):

This subclass is indented under subclass E1.001. This subclass is substantially the same in scope as ECLA classification H04B1/713.

E1.034 Arrangements for generation of hop frequencies (EPO):

This subclass is indented under subclass E1.033. This subclass is substantially the same in scope as ECLA classification H04B1/713C.

E1.035 Arrangements for generation of hop sequences (EPO):

This subclass is indented under subclass E1.033. This subclass is substantially the same in scope as ECLA classification H04B1/713D.

E1.036 Interference related aspects (EPO):

This subclass is indented under subclass E1.033. This subclass is substantially the same in scope as ECLA classification H04B1/713F.

E1.037 Arrangements for sequence synchronization (EPO):

This subclass is indented under subclass E1.033. This subclass is substantially the same in scope as ECLA classification H04B1/713S.

E7.001 SYSTEMS FOR THE TRANSMISSION OF TELEVISION SIGNALS USING PULSE CODE MODULATION (EPO):

This main group provides for systems for the transmission of television signals using pulse code modulation, i.e. transmission systems wherein the television signal is a digital video signal or a bit stream carrying visual content; e.g., systems, devices and methods for video bit stream assembling, disassembling, transport, processing, delivery or control, for source coding or decoding of digital video signal, for error protection, detection or correction of digital video signal, for channel coding or decoding of digital video signal. This subclass is substantially the same in scope as ECLA classification H04N7/24.

E7.002 Arrangements for interfacing to the transmission channel or to the communication network (EPO):

This subclass is indented under subclass E7.001. This subclass is substantially the same in scope as ECLA classification H04N7/24A.

E7.003 Bitstream control arrangements (EPO):

This subclass is indented under subclass E7.001. This subclass is substantially the same in scope as ECLA classification H04N7/24C.

E7.004 Involving pointers to the video stream (EPO):

This subclass is indented under subclass E7.003. This subclass is substantially the same in scope as ECLA classification H04N7/24C10.

E7.005 Involving the control of media objects (EPO):

This subclass is indented under subclass E7.003. This subclass is substantially the same in scope as ECLA classification H04N7/24C12.

E7.006 Presentation therefor, e.g., on the basis of a scene description (EPO):

This subclass is indented under subclass E7.005. This subclass is substantially the same in scope as ECLA classification H04N7/24C12C.

E7.007 User interaction therefor (EPO):

This subclass is indented under subclass E7.005. This subclass is substantially the same in scope as ECLA classification H04N7/24C12M.

E7.008 With hot-spots (EPO):

This subclass is indented under subclass E7.007. This subclass is substantially the same in scope as ECLA classification H04N7/24C12M2.

E7.009 Intellectual Property Rights management and protection therefor (EPO):

This subclass is indented under subclass E7.005. This subclass is substantially the same in scope as ECLA classification H04N7/24C12P.

E7.01 Synchronization therefor, e.g., synchronization of elementary stream objects at the sync layer with time stamps (EPO):

This subclass is indented under subclass E7.005. This subclass is substantially the same in scope as ECLA classification H04N7/24C12S.

E7.011 Involving control of the complexity properties of the video bitstream, e.g., spatial or temporal resolution, SNR, bit rate, region of interest selection (EPO):

This subclass is indented under subclass E7.003. This subclass is substantially the same in scope as ECLA classification H04N7/24C14.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E7.09, E7.091 and E7.078 for scalable encoding of video.

E7.012 Where the control is performed by the receiver of the video, e.g., active selection by the receiver from a scalable bitstream or selective multicast subscription (EPO):

This subclass is indented under subclass E7.011. This subclass is substantially the same in scope as ECLA classification H04N7/24C14R.

E7.013 Where the control is performed by the transmitter of the video, e.g., active selection by the transmitter of parts of scalable bitstream to be sent (EPO):

This subclass is indented under subclass E7.011. This subclass is substantially the same in scope as ECLA classification H04N7/24C14T.

E7.014 Involving buffer level management (EPO):

This subclass is indented under subclass E7.003. This subclass is substantially the same in scope as ECLA classification H04N7/24C2.

E7.015 Involving a control signal to the decoder, e.g., from the medium specific interface unit, or from the network (EPO):

This subclass is indented under subclass E7.003. This subclass is substantially the same in scope as ECLA classification H04N7/24C4.

E7.016 Involving a control signal to the encoder, e.g., from the medium specific interface unit, or from the network (EPO):

This subclass is indented under subclass E7.003. This subclass is substantially the same in scope as ECLA classification H04N7/24C6.

E7.017 Involving an exchange of control commands (EPO):
This subclass is indented under subclass E7.003. This subclass is substantially the same in scope as ECLA classification H04N7/24C8.

E7.018 Bitstream embedding arrangements, e.g., arrangements for blending, replacing, hiding, compositing or associating at bitstream level (EPO):
This subclass is indented under subclass E7.001. This subclass is substantially the same in scope as ECLA classification H04N7/24E.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E7.089, for arrangements involving bandwidth reduction signal processing.

E7.019 Bitstream network arrangements (EPO):
This subclass is indented under subclass E7.001. This subclass is substantially the same in scope as ECLA classification H04N7/24N.

E7.02 Bitstream transport arrangements (EPO):
This subclass is indented under subclass E7.001. This subclass is substantially the same in scope as ECLA classification H04N7/24T.

E7.021 Bitstream processing (EPO):
This subclass is indented under subclass E7.02. This subclass is substantially the same in scope as ECLA classification H04N7/24T2.

E7.022 Involving modification of bitstream parameters, e.g., restamping of time stamps, remapping of identifiers transmultiplexing (EPO):
This subclass is indented under subclass E7.021. This subclass is substantially the same in scope as ECLA classification H04N7/24T2M.

E7.023 Involving switching between bitstreams (EPO):
This subclass is indented under subclass E7.021. This subclass is substantially the same in scope as ECLA classification H04N7/24T2S.

E7.024 Involving transporting of additional information over the bitstream (EPO):
This subclass is indented under subclass E7.02. This subclass is substantially the same in scope as ECLA classification H04N7/24T4.

E7.025 Involving transporting of the bitstream over a delivery medium (EPO):
This subclass is indented under subclass E7.02. This subclass is substantially the same in scope as ECLA classification H04N7/24T6.

E7.026 Using bandwidth reduction ; source coding or decoding of digital video signal, e.g., digital video signal compression; Pre- or postprocessing therefor (EPO):
This subclass is indented under subclass E7.001. This subclass is substantially the same in scope as ECLA classification H04N7/26.

E7.027 Decoder-specific arrangements (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26D.

E7.028 For compensating inverse transform mismatch, e.g., IDCT mismatch (EPO):

This subclass is indented under subclass E7.027. This subclass is substantially the same in scope as ECLA classification H04N7/26D2.

E7.029 Involving sub-band coding (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26H.

E7.03 In combination with temporal predictive coding, e.g., in 'inter' mode (EPO):

This subclass is indented under subclass E7.029. This subclass is substantially the same in scope as ECLA classification H04N7/26H50.

E7.031 With motion compensated temporal filtering (EPO):

This subclass is indented under subclass E7.03. This subclass is substantially the same in scope as ECLA classification H04N7/26H50A.

E7.032 With at least one adaptive element (EPO):

This subclass is indented under subclass E7.03. This subclass is substantially the same in scope as ECLA classification H04N7/26H50E.

E7.033 Involving variable length or entropy coding, e.g., Huffmann or arithmetic coding (EPO):

This subclass is indented under subclass E7.032. This subclass is substantially the same in scope as ECLA classification H04N7/26H50E2.

E7.034 Involving normalization or quantizing (EPO):

This subclass is indented under subclass E7.032. This subclass is substantially the same in scope as ECLA classification H04N7/26H50E4.

E7.035 Involving a bit-rate or bit-amount target (EPO):

This subclass is indented under subclass E7.032. This subclass is substantially the same in scope as ECLA classification H04N7/26H50E5.

E7.036 With adaptive target allocation among the components (EPO):

This subclass is indented under subclass E7.035. This subclass is substantially the same in scope as ECLA classification H04N7/26H50E5A.

E7.037 With interframe prediction not only of coefficient values (EPO):

This subclass is indented under subclass E7.03. This subclass is substantially the same in scope as ECLA classification H04N7/26H50F.

E7.038 Suited to an interframe bitstream syntax (EPO):

This subclass is indented under subclass E7.03. This subclass is substantially the same in scope as ECLA classification H04N7/26H50M.

E7.039 Using sub-band domain temporal integration (EPO):

This subclass is indented under subclass E7.03. This subclass is substantially the same in scope as ECLA classification H04N7/26H50T.

E7.04 Of a single image (EPO):

This subclass is indented under subclass E7.029. This subclass is substantially the same in scope as ECLA classification H04N7/26H30.

E7.041 In more than two frequency dimensions (EPO):

This subclass is indented under subclass E7.04. This subclass is substantially the same in scope as ECLA classification H04N7/26H30A.

E7.042 Of arbitrarily shaped image segments (EPO):

This subclass is indented under subclass E7.04. This subclass is substantially the same in scope as ECLA classification H04N7/26H30B.

E7.043 With details relating to the sub-band filter (EPO):

This subclass is indented under subclass E7.04. This subclass is substantially the same in scope as ECLA classification H04N7/26H30D.

E7.044 Concerning filter definition (EPO):

This subclass is indented under subclass E7.043. This subclass is substantially the same in scope as ECLA classification H04N7/26H30D1.

E7.045 Concerning filter implementation (EPO):

This subclass is indented under subclass E7.043. This subclass is substantially the same in scope as ECLA classification H04N7/26H30D2.

E7.046 With at least one adaptive element (EPO):

This subclass is indented under subclass E7.04. This subclass is substantially the same in scope as ECLA classification H04N7/26H30E.

E7.047 Involving variable length or entropy coding, e.g., Huffmann or arithmetic coding (EPO):

This subclass is indented under subclass E7.046. This subclass is substantially the same in scope as ECLA classification H04N7/26H30E2.

E7.048 Involving normalization or quantizing (EPO):

This subclass is indented under subclass E7.046. This subclass is substantially the same in scope as ECLA classification H04N7/26H30E4.

E7.049 Involving a bit-rate or bit-amount target (EPO):

This subclass is indented under subclass E7.046. This subclass is substantially the same in scope as ECLA classification H04N7/26H30E5.

E7.05 With adaptive target allocation among the components (EPO):
This subclass is indented under subclass E7.049. This subclass is substantially the same in scope as ECLA classification H04N7/26H30E5A.

E7.051 Control aspects therefor (EPO):
This subclass is indented under subclass E7.04. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C.

E7.052 Controlled element (EPO):
This subclass is indented under subclass E7.051. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C1.

E7.053 Subband structure, e.g., number of subbands (EPO):
This subclass is indented under subclass E7.052. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C1B.

E7.054 Filter type or filtering coefficients (EPO):
This subclass is indented under subclass E7.052. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C1D.

E7.055 Error protection, detection or correction (EPO):
This subclass is indented under subclass E7.052. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C1K.

E7.056 Scan or transmission order of coefficients or bitplanes (EPO):
This subclass is indented under subclass E7.052. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C1S.

E7.057 Switching of direction, e.g., horizontal, diagonal, vertical (EPO):
This subclass is indented under subclass E7.056. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C1S3.

E7.058 Unit of control (EPO):
This subclass is indented under subclass E7.051. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C2.

E7.059 Relating to sub-band structure (EPO):
This subclass is indented under subclass E7.058. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C2B.

E7.06 Hierarchical level (EPO):
This subclass is indented under subclass E7.059. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C2B6.

E7.061 Directional tree, e.g., low-high (LH), high-low (HL), high-high (HH) (EPO):
This subclass is indented under subclass E7.059. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C2B8.

E7.062 Object or region (EPO):

This subclass is indented under subclass E7.058. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C2J.

E7.063 Element used for control (EPO):

This subclass is indented under subclass E7.051. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C3.

E7.064 Position or location within image, e.g., center or periphery of picture (EPO):

This subclass is indented under subclass E7.063. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C3R.

E7.065 Involving user interaction or information input by receiving side (EPO):

This subclass is indented under subclass E7.063. This subclass is substantially the same in scope as ECLA classification H04N7/26H30C3V.

E7.066 With prediction other than mere runlength (EPO):

This subclass is indented under subclass E7.04. This subclass is substantially the same in scope as ECLA classification H04N7/26H30F.

E7.067 Intraband (EPO):

This subclass is indented under subclass E7.066. This subclass is substantially the same in scope as ECLA classification H04N7/26H30F1.

E7.068 Interband (EPO):

This subclass is indented under subclass E7.066. This subclass is substantially the same in scope as ECLA classification H04N7/26H30F2.

E7.069 Involving the arranging of coefficients or bits, e.g., for scalability or progressive transmission (EPO):

This subclass is indented under subclass E7.04. This subclass is substantially the same in scope as ECLA classification H04N7/26H30H.

E7.07 Involving scan according to levels, e.g., breadth-first (EPO):

This subclass is indented under subclass E7.069. This subclass is substantially the same in scope as ECLA classification H04N7/26H30H1.

E7.071 Involving scan according to trees, e.g., depth-first (EPO):

This subclass is indented under subclass E7.069. This subclass is substantially the same in scope as ECLA classification H04N7/26H30H2.

E7.072 Coding of bitplanes or significance, e.g., zero tree (EPO):

This subclass is indented under subclass E7.069. This subclass is substantially the same in scope as ECLA classification H04N7/26H30H6.

E7.073 Involving error protection, detection or correction (EPO):

This subclass is indented under subclass E7.04. This subclass is substantially the same in scope as ECLA classification H04N7/26H30K.

E7.074 Suited to a bitstream syntax (EPO):

This subclass is indented under subclass E7.04. This subclass is substantially the same in scope as ECLA classification H04N7/26H30M.

E7.075 With grouping into blocks (EPO):

This subclass is indented under subclass E7.04. This subclass is substantially the same in scope as ECLA classification H04N7/26H30Q.

E7.076 Involving video objects (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26J.

E7.077 Involving both synthetic and natural picture components, e.g., synthetic natural hybrid coding (SNHC) (EPO):

This subclass is indented under subclass E7.076. This subclass is substantially the same in scope as ECLA classification H04N7/26J10.

E7.078 Scalability, e.g., involving base and at least one enhancement video object layers (VOL) (EPO):

This subclass is indented under subclass E7.076. This subclass is substantially the same in scope as ECLA classification H04N7/26J14.

E7.079 Spatial scalability (EPO):

This subclass is indented under subclass E7.078. This subclass is substantially the same in scope as ECLA classification H04N7/26J14S.

E7.08 Temporal scalability, e.g., layered VOP frame rate (EPO):

This subclass is indented under subclass E7.078. This subclass is substantially the same in scope as ECLA classification H04N7/26J14T.

E7.081 Shape coding therefor (EPO):

This subclass is indented under subclass E7.076. This subclass is substantially the same in scope as ECLA classification H04N7/26J2.

E7.082 Using binary alpha-plane coding, e.g., Context based Arithmetic Encoding (CAE) (EPO):

This subclass is indented under subclass E7.081. This subclass is substantially the same in scope as ECLA classification H04N7/26J2A.

E7.083 Model based coding therefor (EPO):

This subclass is indented under subclass E7.076. This subclass is substantially the same in scope as ECLA classification H04N7/26J4.

E7.084 Using a three-dimensional model (EPO):

This subclass is indented under subclass E7.083. This subclass is substantially the same in scope as ECLA classification H04N7/26J4T.

E7.085 Coding of regions that are present throughout a whole video segment, e.g., sprites (EPO):

This subclass is indented under subclass E7.076. This subclass is substantially the same in scope as ECLA classification H04N7/26J6.

E7.086 Of static sprites, e.g., background, mosaic (EPO):

This subclass is indented under subclass E7.085. This subclass is substantially the same in scope as ECLA classification H04N7/26J6B.

E7.087 Scene description coding, e.g., binary format for scenes (BIFS) compression (EPO):

This subclass is indented under subclass E7.076. This subclass is substantially the same in scope as ECLA classification H04N7/26J8.

SEE OR SEARCH THIS CLASS SUBCLASS:

E7.003, for command descriptors and the like.

E7.088 Involving coding of different picture or data components (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26E.

E7.089 Involving the insertion of extra data, e.g., in the video data, in the coding parameters or by modification of said video data or parameters (EPO):

This subclass is indented under subclass E7.088. This subclass is substantially the same in scope as ECLA classification H04N7/26E10.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E7:018 for arrangements for embedding at bitstream level.

E7.09 Involving separate coding of the error signal, i.e., the difference between the original picture and the locally reconstructed one (EPO):

This subclass is indented under subclass E7.088. This subclass is substantially the same in scope as ECLA classification H04N7/26E2.

E7.091 Involving arrangements for adaptive allocation of coded information to different channels (EPO):

This subclass is indented under subclass E7.088. This subclass is substantially the same in scope as ECLA classification H04N7/26E4.

E7.092 Involving multi-layer decomposition; subsequent reconstruction (EPO):

This subclass is indented under subclass E7.088. This subclass is substantially the same in scope as ECLA classification H04N7/26E6.

E7.093 Implementation arrangements, e.g., implementation by hardware of software (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26L.

E7.094 Memory arrangements (EPO):

This subclass is indented under subclass E7.093. This subclass is substantially the same in scope as ECLA classification H04N7/26L2.

E7.095 Memory downsizing methods (EPO):

This subclass is indented under subclass E7.094. This subclass is substantially the same in scope as ECLA classification H04N7/26L2D.

E7.096 Display on the fly, e.g., simultaneous writing to and reading from decoder memory (EPO):

This subclass is indented under subclass E7.095. This subclass is substantially the same in scope as ECLA classification H04N7/26L2D2.

E7.097 With 3:2 pulldown (EPO):

This subclass is indented under subclass E7.096. This subclass is substantially the same in scope as ECLA classification H04N7/26L2D2P.

E7.098 Recompression (EPO):

This subclass is indented under subclass E7.095. This subclass is substantially the same in scope as ECLA classification H04N7/26L2D4.

E7.099 Decimation (EPO):

This subclass is indented under subclass E7.098. This subclass is substantially the same in scope as ECLA classification H04N7/26L2D4D.

E71.1 Motion estimation and/or compensation hardware (EPO):

This subclass is indented under subclass E7.093. This subclass is substantially the same in scope as ECLA classification H04N7/26L4.

E7.101 Data flow inside motion estimator (EPO):

This subclass is indented under subclass E7.1. This subclass is substantially the same in scope as ECLA classification H04N7/26L4A.

E7.102 Access to external memory (EPO):

This subclass is indented under subclass E7.1. This subclass is substantially the same in scope as ECLA classification H04N7/26L4B.

E7.103 Parallel arrangements (EPO):

This subclass is indented under subclass E7.093. This subclass is substantially the same in scope as ECLA classification H04N7/26L6.

E7.104 Motion estimation therefor; processing of motion vectors for bandwidth reduction purposes (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26M.

E7.105 Methods (EPO):

This subclass is indented under subclass E7.104. This subclass is substantially the same in scope as ECLA classification H04N7/26M2.

E7.106 Global motion vector estimation (EPO):

This subclass is indented under subclass E7.105. This subclass is substantially the same in scope as ECLA classification H04N7/26M2G.

E7.107 Multiresolution or hierarchical method (EPO):

This subclass is indented under subclass E7.105. This subclass is substantially the same in scope as ECLA classification H04N7/26M2H.

E7.108 Multistep search method, e.g., 3-step, 2D-log, One-at-a-Time Search (OTS) (EPO):

This subclass is indented under subclass E7.105. This subclass is substantially the same in scope as ECLA classification H04N7/26M2M.

E7.109 Non block-based processing (EPO):

This subclass is indented under subclass E7.105. This subclass is substantially the same in scope as ECLA classification H04N7/26M2N.

E7.11 Using feature points or meshes (EPO):

This subclass is indented under subclass E7.109. This subclass is substantially the same in scope as ECLA classification H04N7/26M2N2.

E7.111 Using regions (EPO):

This subclass is indented under subclass E7.109. This subclass is substantially the same in scope as ECLA classification H04N7/26M2N4.

E7.112 Contour motion estimation (EPO):

This subclass is indented under subclass E7.111. This subclass is substantially the same in scope as ECLA classification H04N7/26M2N4C.

E7.113 Sub-pixel accuracy (EPO):

This subclass is indented under subclass E7.105. This subclass is substantially the same in scope as ECLA classification H04N7/26M2S.

E7.114 Transform domain motion estimation (EPO):

This subclass is indented under subclass E7.105. This subclass is substantially the same in scope as ECLA classification H04N7/26M2T.

E7.115 Details (EPO):

This subclass is indented under subclass E7.104. This subclass is substantially the same in scope as ECLA classification H04N7/26M4.

E7.116 Spatially constrained motion estimation, e.g., at image or region borders (EPO):

This subclass is indented under subclass E7.115. This subclass is substantially the same in scope as ECLA classification H04N7/26M4C.

E7.117 Dealing with occlusions (EPO):

This subclass is indented under subclass E7.115. This subclass is substantially the same in scope as ECLA classification H04N7/26M4D.

E7.118 Early exit, i.e., stopping a systematic computation based on a certain criteria, e.g., error magnitude is too large (EPO):

This subclass is indented under subclass E7.115. This subclass is substantially the same in scope as ECLA classification H04N7/26M4E.

E7.119 Search initialization, i.e., estimating a good candidate to initiate a search (EPO):

This subclass is indented under subclass E7.115. This subclass is substantially the same in scope as ECLA classification H04N7/26M4I.

E7.12 Padding, i.e., filling non object values in an arbitrary shaped block for motion estimation purposes (EPO):

This subclass is indented under subclass E7.115. This subclass is substantially the same in scope as ECLA classification H04N7/26M4P.

E7.121 Rate-distortion criteria (EPO):

This subclass is indented under subclass E7.115. This subclass is substantially the same in scope as ECLA classification H04N7/26M4R.

E7.122 Variable search window size or shape (EPO):

This subclass is indented under subclass E7.115. This subclass is substantially the same in scope as ECLA classification H04N7/26M4V.

E7.123 Processing of motion vectors (EPO):

This subclass is indented under subclass E7.104. This subclass is substantially the same in scope as ECLA classification H04N7/26M6.

E7.124 Encoding (EPO):

This subclass is indented under subclass E7.123. This subclass is substantially the same in scope as ECLA classification H04N7/26M6E.

E7.125 Predictive encoding (EPO):

This subclass is indented under subclass E7.124. This subclass is substantially the same in scope as ECLA classification H04N7/26M6E2.

E7.126 Adaptive or control aspects therefor (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26A.

E7.127 Methods, elements or tools for adaptive control (EPO):

This subclass is indented under subclass E7.126. This subclass is substantially the same in scope as ECLA classification H04N7/26A10.

E7.128 LaGrangian method (EPO):

This subclass is indented under subclass E7.127. This subclass is substantially the same in scope as ECLA classification H04N7/26A10L.

E7.129 Side information (EPO):

This subclass is indented under subclass E7.127. This subclass is substantially the same in scope as ECLA classification H04N7/26A10S.

E7.13 Iterative methods (EPO):

This subclass is indented under subclass E7.127. This subclass is substantially the same in scope as ECLA classification H04N7/26A10T.

E7.131 Two pass methods (EPO):

This subclass is indented under subclass E7.13. This subclass is substantially the same in scope as ECLA classification H04N7/26A10T2.

E7.132 Controlled element or parameter (EPO):

This subclass is indented under subclass E7.126. This subclass is substantially the same in scope as ECLA classification H04N7/26A4.

E7.133 Predictor (EPO):

This subclass is indented under subclass E7.132. This subclass is substantially the same in scope as ECLA classification H04N7/26A4B.

E7.134 Target code amount (EPO):

This subclass is indented under subclass E7.132. This subclass is substantially the same in scope as ECLA classification H04N7/26A4E.

E7.135 Filtering, e.g., for pre- or post-processing (EPO):

This subclass is indented under subclass E7.132. This subclass is substantially the same in scope as ECLA classification H04N7/26A4F.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E7.054, for subband or wavelet filter banks.

E7.136 Grid, i.e., regular pattern of elementary coding units in a picture, e.g., block grid (EPO):

This subclass is indented under subclass E7.132. This subclass is substantially the same in scope as ECLA classification H04N7/26A4G.

E7.137 Encoder, i.e., selection among a plurality of heterogeneous encoders (EPO):

This subclass is indented under subclass E7.132. This subclass is substantially the same in scope as ECLA classification H04N7/26A4K.

E7.138 Encoding parameters processing, e.g., initialization, alteration, compression (EPO):

This subclass is indented under subclass E7.132. This subclass is substantially the same in scope as ECLA classification H04N7/26A4P.

E7.139 Quantizer (EPO):

This subclass is indented under subclass E7.132. This subclass is substantially the same in scope as ECLA classification H04N7/26A4Q.

E7.14 Details of quantization, normalization or weighting functions, e.g., normalization parameters or matrices, variable uniform quantizes, weighting matrices (EPO):

This subclass is indented under subclass E7.139. This subclass is substantially the same in scope as ECLA classification H04N7/26A4Q2.

E7.141 Resource allocation (EPO):

This subclass is indented under subclass E7.132. This subclass is substantially the same in scope as ECLA classification H04N7/26A4R.

E7.142 Transform coefficients scan, e.g., zig-zag scan (EPO):

This subclass is indented under subclass E7.132. This subclass is substantially the same in scope as ECLA classification H04N7/26A4S.

E7.143 Transformer, e.g., 8x8 or 2x4x8 DCT, selection among a plurality of different transform operations (EPO):

This subclass is indented under subclass E7.132. This subclass is substantially the same in scope as ECLA classification H04N7/26A4T.

E7.144 Variable length coding (VLC) or entropy coding, e.g., Huffmann or arithmetic coding (EPO):

This subclass is indented under subclass E7.132. This subclass is substantially the same in scope as ECLA classification H04N7/26A4V.

E7.145 Skipping or zeroing of coding units, e.g., adaptive decimation, frame skipping, transform coefficient masking (EPO):

This subclass is indented under subclass E7.132. This subclass is substantially the same in scope as ECLA classification H04N7/26A4Z.

E7.146 Coding or prediction mode selection (EPO):

This subclass is indented under subclass E7.132. This subclass is substantially the same in scope as ECLA classification H04N7/26A4C.

E7.147 Intra coding, e.g., selection among a plurality of spatially predictive coding modes (EPO):

This subclass is indented under subclass E7.146. This subclass is substantially the same in scope as ECLA classification H04N7/26A4C1.

E7.148 Refresh, i.e., intra-coding mode decision, e.g., at macroblock or picture level (EPO):

This subclass is indented under subclass E7.146. This subclass is substantially the same in scope as ECLA classification H04N7/26A4C2.

E7.149 Inter coding, i.e., selection among a plurality of temporally predictive coding modes (EPO):

This subclass is indented under subclass E7.146. This subclass is substantially the same in scope as ECLA classification H04N7/26A4C3.

E7.15 Picture structure, e.g., interlaced/progressive (EPO):
This subclass is indented under subclass E7.146. This subclass is substantially the same in scope as ECLA classification H04N7/26A4C4.

E7.151 Group-of-pictures (GOP) structure (EPO):
This subclass is indented under subclass E7.146. This subclass is substantially the same in scope as ECLA classification H04N7/26A4C6.

E7.152 Controlling element, parameter or criteria (EPO):
This subclass is indented under subclass E7.126. This subclass is substantially the same in scope as ECLA classification H04N7/26A6

E7.153 Rate distortion criteria (EPO):
This subclass is indented under subclass E7.152. This subclass is substantially the same in scope as ECLA classification H04N7/26A6D.

E7.154 Data rate or code amount (EPO):
This subclass is indented under subclass E7.152. This subclass is substantially the same in scope as ECLA classification H04N7/26A6E.

E7.155 using a combination of feed forward and feedback control (EPO):
This subclass is indented under subclass E7.154. This subclass is substantially the same in scope as ECLA classification H04N7/26A6E2.

E7.156 using feed forward control (EPO):
This subclass is indented under subclass E7.154. This subclass is substantially the same in scope as ECLA classification H04N7/26A6E4.

E7.157 based on model-estimated code amount (EPO):
This subclass is indented under subclass E7.156. This subclass is substantially the same in scope as ECLA classification H04N7/26A6E4E.

E7.158 based on off-line generated code amount (EPO):
This subclass is indented under subclass E7.156. This subclass is substantially the same in scope as ECLA classification H04N7/26A6E4G.

E7.159 Feedback control, i.e. control using output code amount, e.g., buffer fullness (EPO):
This subclass is indented under subclass E7.154. This subclass is substantially the same in scope as ECLA classification H04N7/26A6E6.

E7.16 Single-pass constant bit rate (CBR) encoding (EPO):
This subclass is indented under subclass E7.159. This subclass is substantially the same in scope as ECLA classification H04N7/26A6E6S.

E7.161 Input video signal characteristics (EPO):
This subclass is indented under subclass E7.152. This subclass is substantially the same in scope as ECLA classification H04N7/26A6C.

E7.162 Complexity, e.g., activity, edges (EPO):

This subclass is indented under subclass E7.161. This subclass is substantially the same in scope as ECLA classification H04N7/26A6C2.

E7.163 Motion, e.g., field or frame difference (EPO):

This subclass is indented under subclass E7.161. This subclass is substantially the same in scope as ECLA classification H04N7/26A6C4.

E7.164 Using motion vectors (EPO):

This subclass is indented under subclass E7.163. This subclass is substantially the same in scope as ECLA classification H04N7/26A6C4C.

E7.165 Scene cut (EPO):

This subclass is indented under subclass E7.161. This subclass is substantially the same in scope as ECLA classification H04N7/26A6C6.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E7.192, scene cut detection in conjunction with bandwidth reduction.

E7.166 Chrominance (EPO):

This subclass is indented under subclass E7.161. This subclass is substantially the same in scope as ECLA classification H04N7/26A6C8.

E7.167 Visual quality (EPO):

This subclass is indented under subclass E7.152. This subclass is substantially the same in scope as ECLA classification H04N7/26A6Q.

E7.168 Resource availability (EPO):

This subclass is indented under subclass E7.152. This subclass is substantially the same in scope as ECLA classification H04N7/26A6R.

E7.169 Coding mode (EPO):

This subclass is indented under subclass E7.152. This subclass is substantially the same in scope as ECLA classification H04N7/26A6S.

E7.17 Picture or macroblock type, e.g., I,P,B (EPO):

This subclass is indented under subclass E7.169. This subclass is substantially the same in scope as ECLA classification H04N7/26A6S2.

E7.171 Picture structure, e.g., interlaced/progressive (EPO):

This subclass is indented under subclass E7.169. This subclass is substantially the same in scope as ECLA classification H04N7/26A6S4.

E7.172 User input (EPO):

This subclass is indented under subclass E7.152. This subclass is substantially the same in scope as ECLA classification H04N7/26A6U.

E7.173 Receiver or channel (EPO):

This subclass is indented under subclass E7.152. This subclass is substantially the same in scope as ECLA classification H04N7/26A6W.

E7.174 Transmission errors (EPO):

This subclass is indented under subclass E7.173. This subclass is substantially the same in scope as ECLA classification H04N7/26A6W2.

E7.175 Unit of control, i.e., structural or semantic portion of the video signal being the object of the control (EPO):

This subclass is indented under subclass E7.126. This subclass is substantially the same in scope as ECLA classification H04N7/26A8.

E7.176 Block or macroblock (EPO):

This subclass is indented under subclass E7.175. This subclass is substantially the same in scope as ECLA classification H04N7/26A8B.

E7.177 Transform coefficient (EPO):

This subclass is indented under subclass E7.175. This subclass is substantially the same in scope as ECLA classification H04N7/26A8C.

E7.178 Pixel (EPO):

This subclass is indented under subclass E7.175. This subclass is substantially the same in scope as ECLA classification H04N7/26A8E.

E7.179 Group-of-pictures (GOP) (EPO):

This subclass is indented under subclass E7.175. This subclass is substantially the same in scope as ECLA classification H04N7/26A8G.

E7.18 Slice, e.g., line of blocks, group of blocks (EPO):

This subclass is indented under subclass E7.175. This subclass is substantially the same in scope as ECLA classification H04N7/26A8L.

E7.181 Picture (EPO):

This subclass is indented under subclass E7.175. This subclass is substantially the same in scope as ECLA classification H04N7/26A8P.

E7.182 Image region, e.g., region of interest (ROI), object (EPO):

This subclass is indented under subclass E7.175. This subclass is substantially the same in scope as ECLA classification H04N7/26A8R.

E7.183 Scene or shot (EPO):

This subclass is indented under subclass E7.175. This subclass is substantially the same in scope as ECLA classification H04N7/26A8S.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E7.192, for scene cut detection in conjunction with bandwidth reduction.

E7.184 Bit (EPO):

This subclass is indented under subclass E7.175. This subclass is substantially the same in scope as ECLA classification H04N7/26A8T.

E7.185 Chrominance (EPO):

This subclass is indented under subclass E7.175. This subclass is substantially the same in scope as ECLA classification H04N7/26A8U.

E7.186 Layer (EPO):

This subclass is indented under subclass E7.175. This subclass is substantially the same in scope as ECLA classification H04N7/26A8Y.

E7.187 Compressed domain processing (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26C.

E7.188 Involving subsampling at the transmitter and restitution of the omitted samples by interpolation (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26N.

E7.189 Involving preprocessing or postprocessing therefor (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26P.

E7.19 Involving reduction of coding artifacts, e.g., of blockiness (EPO):

This subclass is indented under subclass E7.189. This subclass is substantially the same in scope as ECLA classification H04N7/26P4.

E7.191 Involving cinematographic video sequences, e.g., sequences originated from film and converted to video through 3:2 pulldown (EPO):

This subclass is indented under subclass E7.189. This subclass is substantially the same in scope as ECLA classification H04N7/26P6.

E7.192 Involving scene cut detection in conjunction with bandwidth reduction (EPO):

This subclass is indented under subclass E7.189. This subclass is substantially the same in scope as ECLA classification H04N7/26P8.

E7.193 Filtering (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26F.

E7.194 In a prediction loop (EPO):

This subclass is indented under subclass E7.193. This subclass is substantially the same in scope as ECLA classification H04N7/26F2.

E7.195 Standard related documents (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26S.

E7.196 Normative references, e.g., working documents of standardization bodies like ISO/IEC, ITU-T, SMPTE in the domain of digital image and video coding (EPO):

This subclass is indented under subclass E7.195. This subclass is substantially the same in scope as ECLA classification H04N7/26S1.

E7.197 Illustrative references, e.g., overviews, reviews (EPO):

This subclass is indented under subclass E7.195. This subclass is substantially the same in scope as ECLA classification H04N7/26S2.

E7.198 Transcoding therefor, i.e., conversion of video data, coding parameters, syntax or the like in order to realize interoperability between different video coding standards (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26T.

E7.199 Syntax aspects, e.g., source coding bistream syntax (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26Y.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E7.001+ and E7.267+, for syntax aspects related to a packetized or transport video stream.

E7.2 Miscellaneous of specific spread spectrum techniques using bandwidth reduction; source coding or decoding of digital video signal, e.g., digital video signal compression; or p re- or post processing therefor (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/26Z.

SEARCH THIS CLASS, SUBCLASS:

E7.026, includes specific techniques for spread spectrum using bandwidth reduction not provided elsewhere.

E7.201 Involving N-Tree coding, e.g., quadtree, octree (EPO):

This subclass is indented under subclass E7.2. This subclass is substantially the same in scope as ECLA classification H04N7/26Z10.

E7.202 Involving run length coding (EPO):

This subclass is indented under subclass E7.2. This subclass is substantially the same in scope as ECLA classification H04N7/26Z12.

E7.203 Involving matching pursuit (EPO):

This subclass is indented under subclass E7.2. This subclass is substantially the same in scope as ECLA classification H04N7/26Z14.

E7.204 Involving fractal coding (EPO):

This subclass is indented under subclass E7.2. This subclass is substantially the same in scope as ECLA classification H04N7/26Z16.

E7.205 Adaptive dynamic range coding (ADRC) (EPO):

This subclass is indented under subclass E7.2. This subclass is substantially the same in scope as ECLA classification H04N7/26Z2.

E7.206 Involving both PCM encoding and DPCM encoding (EPO):

This subclass is indented under subclass E7.2. This subclass is substantially the same in scope as ECLA classification H04N7/26Z4.

E7.207 Using a dither signal (EPO):

This subclass is indented under subclass E7.2. This subclass is substantially the same in scope as ECLA classification H04N7/26Z6.

E7.208 Using noise or error feedback, e.g., quantization noise feedback, etc. (EPO):

This subclass is indented under subclass E7.2. This subclass is substantially the same in scope as ECLA classification H04N7/26Z8.

E7.209 Using vector coding (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/28.

E7.21 Involving pulse code modulation and predictive coding (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/48.

E7.211 Involving transform and predictive coding , e.g., hybrid coding, Motion Picture Experts Group (MPEG) coding (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/50.

E7.212 Involving the use of at least one adaptive element (EPO):

This subclass is indented under subclass E7.211. This subclass is substantially the same in scope as ECLA classification H04N7/50E.

E7.213 Involving variable length or entropy coding, e.g., Huffmann or arithmetic coding (EPO):

This subclass is indented under subclass E7.212. This subclass is substantially the same in scope as ECLA classification H04N7/50E2.

E7.214 Quantization, normalization or weighting techniques therefor, e.g., normalization parameters or matrices, variable uniform quantizers, weighting matrices (EPO):

This subclass is indented under subclass E7.212. This subclass is substantially the same in scope as ECLA classification H04N7/50E4.

E7.215 The output data rate being minimized down to or below the channel capacity (EPO):

This subclass is indented under subclass E7.212. This subclass is substantially the same in scope as ECLA classification H04N7/50E5.

E7.216 With feedback control only of the data rate, e.g., buffer fullness being used (EPO):

This subclass is indented under subclass E7.215. This subclass is substantially the same in scope as ECLA classification H04N7/50E5B.

E7.217 With feed forward control only of the data rate, e.g., formation amount estimator or sorter being used (EPO):

This subclass is indented under subclass E7.215. This subclass is substantially the same in scope as ECLA classification H04N7/50E5F.

E7.218 With feed forward and feedback control of the data rate (EPO):

This subclass is indented under subclass E7.215. This subclass is substantially the same in scope as ECLA classification H04N7/50E5H.

E7.219 With iterative control of the data rate, e.g., multipass (EPO):

This subclass is indented under subclass E7.215. This subclass is substantially the same in scope as ECLA classification H04N7/50E5L.

E7.22 Involving adaptive allocation of the frame type, e.g., adaptive group-of-pictures (GOP) structure (EPO):

This subclass is indented under subclass E7.212. This subclass is substantially the same in scope as ECLA classification H04N7/50E6.

E7.221 Motion adaptive (EPO):

This subclass is indented under subclass E7.212. This subclass is substantially the same in scope as ECLA classification H04N7/50E8.

E7.222 Multiplexing arrangements therefor, e.g., suited to a video bitstream syntax (EPO):

This subclass is indented under subclass E7.211. This subclass is substantially the same in scope as ECLA classification H04N7/50M.

E7.223 Using nontransform coding for certain blocks (EPO):

This subclass is indented under subclass E7.211. This subclass is substantially the same in scope as ECLA classification H04N7/50N.

E7.224 Forced updating therefor, e.g., refresh techniques, intra/inter-coding mode selection at macroblock or picture level (EPO):

This subclass is indented under subclass E7.211. This subclass is substantially the same in scope as ECLA classification H04N7/50R.

E7.225 Using transform domain integration, i.e., the transform being operated outside the prediction loop (EPO):

This subclass is indented under subclass E7.211. This subclass is substantially the same in scope as ECLA classification H04N7/50T.

E7.226 Involving transform coding , e.g., using discrete cosine transform (DCT) (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/30.

E7.227 Transforming in more than two dimensions (EPO):

This subclass is indented under subclass E7.226. This subclass is substantially the same in scope as ECLA classification H04N7/30A.

E7.228 Of arbitrarily shaped image segments (EPO):

This subclass is indented under subclass E7.226. This subclass is substantially the same in scope as ECLA classification H04N7/30B.

E7.229 Involving the use of at least one adaptive element, e.g., Joint Photographic Experts Group (JPEG) coding (EPO):

This subclass is indented under subclass E7.226. This subclass is substantially the same in scope as ECLA classification H04N7/30E.

E7.23 Adaptive scanning order of DCT coefficients, e.g., alternate scanning (EPO):

This subclass is indented under subclass E7.229. This subclass is substantially the same in scope as ECLA classification H04N7/30E10.

E7.231 Involving variable length or entropy coding, e.g., Huffmann or arithmetic coding (EPO):

This subclass is indented under subclass E7.229. This subclass is substantially the same in scope as ECLA classification H04N7/30E2.

E7.232 Quantization, normalization or weighting techniques therefor, e.g., normalization parameters or matrices, variable uniform quantizers, weighting matrices (EPO):

This subclass is indented under subclass E7.229. This subclass is substantially the same in scope as ECLA classification H04N7/30E4.

E7.233 The output data rate being minimized down to or below the channel capacity (EPO):

This subclass is indented under subclass E7.229. This subclass is substantially the same in scope as ECLA classification H04N7/30E5.

E7.234 With feedback control only of the data rate, e.g., buffer fullness being used (EPO):

This subclass is indented under subclass E7.233. This subclass is substantially the same in scope as ECLA classification H04N7/30E5B.

E7.235 With feed forward control only of the data rate, e.g., information amount estimator or sorter being used (EPO):

This subclass is indented under subclass E7.233. This subclass is substantially the same in scope as ECLA classification H04N7/30E5F.

E7.236 With feed forward and feedback control of the data rate (EPO):

This subclass is indented under subclass E7.233. This subclass is substantially the same in scope as ECLA classification H04N7/30E5H.

E7.237 With iterative control of the data rate (EPO):

This subclass is indented under subclass E7.233. This subclass is substantially the same in scope as ECLA classification H04N7/30E5L.

E7.238 The output quality being above a minimum (EPO):

This subclass is indented under subclass E7.229. This subclass is substantially the same in scope as ECLA classification H04N7/30E7.

E7.239 Involving hierarchical transmission of the transform coefficients, e.g., progressive JPEG (EPO):

This subclass is indented under subclass E7.226. This subclass is substantially the same in scope as ECLA classification H04N7/30H.

E7.24 Involving error detection or error correction (EPO):

This subclass is indented under subclass E7.226. This subclass is substantially the same in scope as ECLA classification H04N7/30K.

E7.241 Involving pre-processing of the picture element samples before transform coding or post-processing of the same after transform decoding (EPO):

This subclass is indented under subclass E7.226. This subclass is substantially the same in scope as ECLA classification H04N7/30P.

E7.242 Involving zonal sampling (EPO):

This subclass is indented under subclass E7.226. This subclass is substantially the same in scope as ECLA classification H04N7/30S.

E7.243 Involving predictive coding (EPO):

This subclass is indented under subclass E7.026. This subclass is substantially the same in scope as ECLA classification H04N7/32.

E7.244 At least one coding element being controlled by the buffer fullness (EPO):

This subclass is indented under subclass E7.243. This subclass is substantially the same in scope as ECLA classification H04N7/32B.

E7.245 With an adaptive quantizer characteristic, e.g., controlled by forward or backward adaptation (EPO):

This subclass is indented under subclass E7.243. This subclass is substantially the same in scope as ECLA classification H04N7/32E.

E7.246 With error correction (EPO):

This subclass is indented under subclass E7.243. This subclass is substantially the same in scope as ECLA classification H04N7/32K.

E7.247 Involving delta modulation (EPO):

This subclass is indented under subclass E7.243. This subclass is substantially the same in scope as ECLA classification H04N7/38.

E7.248 Using subsampling at the coder or sample restitution by interpolation at the coder or decoder (EPO):

This subclass is indented under subclass E7.243. This subclass is substantially the same in scope as ECLA classification H04N7/46.

E7.249 With adaptive prediction (EPO):

This subclass is indented under subclass E7.248. This subclass is substantially the same in scope as ECLA classification H04N7/46A.

E7.25 With motion compensated interpolation, e.g., involving bidirectional frame interpolation, i.e., use of B-pictures (EPO):

This subclass is indented under subclass E7.248. This subclass is substantially the same in scope as ECLA classification H04N7/46E.

E7.251 Involving a generalized motion field, e.g., nonblock-based processing (EPO):

This subclass is indented under subclass E7.25. This subclass is substantially the same in scope as ECLA classification H04N7/46E6.

E7.252 Involving spatial subsampling or upsampling; Alteration of picture size or resolution (EPO):

This subclass is indented under subclass E7.248. This subclass is substantially the same in scope as ECLA classification H04N7/46S.

E7.253 Involving temporal subsampling, e.g., frame decimation (EPO):

This subclass is indented under subclass E7.248. This subclass is substantially the same in scope as ECLA classification H04N7/46T.

E7.254 With control of frame rate, skipping or repetition at encoding or decoding side (EPO):

This subclass is indented under subclass E7.253. This subclass is substantially the same in scope as ECLA classification H04N7/46T2.

E7.255 Using temporal prediction (EPO):

This subclass is indented under subclass E7.243. This subclass is substantially the same in scope as ECLA classification H04N7/36.

E7.256 Using motion compensation, e.g., by means of motion vectors (EPO):

This subclass is indented under subclass E7.255. This subclass is substantially the same in scope as ECLA classification H04N7/36C.

SEE OR SEARCH THIS CLASS, SUBCLASS:

E7.1, for hardware implementations of the subject matter of this subclass type.

E7.257 Long-term prediction (EPO):

This subclass is indented under subclass E7.256. This subclass is substantially the same in scope as ECLA classification H04N7/36C10.

E7.258 Block-based (EPO):

This subclass is indented under subclass E7.256. This subclass is substantially the same in scope as ECLA classification H04N7/36C2.

E7.259 Using overlapping blocks (EPO):

This subclass is indented under subclass E7.258. This subclass is substantially the same in scope as ECLA classification H04N7/36C2V.

E7.26 With sub-pixel accuracy (EPO):

This subclass is indented under subclass E7.256. This subclass is substantially the same in scope as ECLA classification H04N7/36C4.

E7.261 Nonblock-based (EPO):

This subclass is indented under subclass E7.256. This subclass is substantially the same in scope as ECLA classification H04N7/36C6.

E7.262 Multiple frame prediction (EPO):

This subclass is indented under subclass E7.256. This subclass is substantially the same in scope as ECLA classification H04N7/36C8.

E7.263 Using motion detection, e.g., with detection of moving zones (EPO):

This subclass is indented under subclass E7.255. This subclass is substantially the same in scope as ECLA classification H04N7/36D.

E7.264 Involving conditional replenishment (EPO):

This subclass is indented under subclass E7.263. This subclass is substantially the same in scope as ECLA classification H04N7/36D2.

E7.265 Using spatial prediction (EPO):

This subclass is indented under subclass E7.243. This subclass is substantially the same in scope as ECLA classification H04N7/34.

E7.266 By separate coding of pixel blocks (EPO):

This subclass is indented under subclass E7.265. This subclass is substantially the same in scope as ECLA classification H04N7/34B.

E7.267 Systems for transmission of a pulse code modulated video signal with one or more other pulse code modulated signals, e.g., an audio signal, a synchronizing signal (EPO):

This subclass is indented under subclass E7.001. This subclass is substantially the same in scope as ECLA classification H04N7/52.

(1) Note: Subject matter of this subclass includes assembling of a system multiplex stream from mono-media streams or disassembling of a system multiplex stream into mono-media streams.

E7.268 Involving more than one video signal (EPO):

This subclass is indented under subclass E7.267. This subclass is substantially the same in scope as ECLA classification H04N7/58.

E7.269 The signals being asynchronous (EPO):

This subclass is indented under subclass E7.268. This subclass is substantially the same in scope as ECLA classification H04N7/58A.

E7.27 The signals being synchronous (EPO):

This subclass is indented under subclass E7.268. This subclass is substantially the same in scope as ECLA classification H04N7/58S.

E7.271 Said other signal being a related audio signal (EPO):

This subclass is indented under subclass E7.267. This subclass is substantially the same in scope as ECLA classification H04N7/52A.

E7.272 Said other signal being a private data stream, e.g., teletext, graphics (EPO):

This subclass is indented under subclass E7.267. This subclass is substantially the same in scope as ECLA classification H04N7/52D.

E7.273 According to geometrical constraints of the communication medium, e.g., data formatting for subsequent transmission to a digital storage medium (EPO):

This subclass is indented under subclass E7.267. This subclass is substantially the same in scope as ECLA classification H04N7/52R.

E7.274 Isochronously with the horizontal video sync, e.g., according to bit-parallel or bit-serial interface formats, as SMPTE 259M (EPO):

This subclass is indented under subclass E7.267. This subclass is substantially the same in scope as ECLA classification H04N7/52S.

E7.275 The signals being synchronous (EPO):

This subclass is indented under subclass E7.267. This subclass is substantially the same in scope as ECLA classification H04N7/54.

E7.276 Synchronizing systems therefor (EPO):

This subclass is indented under subclass E7.275. This subclass is substantially the same in scope as ECLA classification H04N7/56.

E7.277 The signals being asynchronous (EPO):

This subclass is indented under subclass E7.267. This subclass is substantially the same in scope as ECLA classification H04N7/60.

E7.278 Synchronizing systems therefor (EPO):

This subclass is indented under subclass E7.277. This subclass is substantially the same in scope as ECLA classification H04N7/62.

E7.279 Systems for detection or correction of transmission errors (EPO):

This subclass is indented under subclass E7.001. This subclass is substantially the same in scope as ECLA classification H04N7/64.

E7.28 Using redundant codes (EPO):

This subclass is indented under subclass E7.279. This subclass is substantially the same in scope as ECLA classification H04N7/66.

E7.281 Using error concealment (EPO):

This subclass is indented under subclass E7.279. This subclass is substantially the same in scope as ECLA classification H04N7/68.