

CPC COOPERATIVE PATENT CLASSIFICATION

G PHYSICS (NOTES omitted)

INSTRUMENTS

G06 COMPUTING; CALCULATING; COUNTING (NOTES omitted)

G06T IMAGE DATA PROCESSING OR GENERATION, IN GENERAL

WARNINGS

- The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:
[G06T 1/40](#) covered by [G06T 1/20](#)
- In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

1/00 General purpose image data processing

- 1/0007 . {Image acquisition}
- 1/0014 . {Image feed-back for automatic industrial control, e.g. robot with camera ([robots B25J 19/023](#))}
- 1/0021 . {Image watermarking}
- 1/0028 . . {Adaptive watermarking, e.g. Human Visual System [HVS]-based watermarking}
- 1/0035 . . . {Output size adaptive watermarking}
- 1/0042 . . {Fragile watermarking, e.g. so as to detect tampering}
- 1/005 . . {Robust watermarking, e.g. average attack or collusion attack resistant}
- 1/0057 . . . {Compression invariant watermarking}
- 1/0064 . . . {Geometric transform invariant watermarking, e.g. affine transform invariant}
- 1/0071 . . . {using multiple or alternating watermarks}
- 1/0078 . . . {using multiple thresholds}
- 1/0085 . . {Time domain based watermarking, e.g. watermarks spread over several images}
- 1/0092 . . {Payload characteristic determination in a watermarking scheme, e.g. number of bits to be embedded}
- 1/20 . Processor architectures; Processor configuration, e.g. pipelining
- 1/60 . Memory management

3/00 Geometric image transformation in the plane of the image

- 3/0006 . {Affine transformations ([G06T 3/4038](#), [G06T 3/0068](#) take precedence)}
- 3/0012 . {Context preserving transformation, e.g. by using an importance map ([G06T 3/0062](#) takes precedence)}
- 3/0018 . . {Fisheye, wide-angle transformation}
- 3/0025 . . {Detail-in-context presentation ([G06T 3/0018](#) takes precedence)}
- 3/0031 . {for topological mapping of a higher dimensional structure on a lower dimensional surface}
- 3/0037 . . {Reshaping or unfolding a 3D tree structure onto a 2D plane}
- 3/0043 . . {Surface of revolution to planar image transformation}

- 3/005 . {for projecting an image on a non-planar surface, e.g. a geodetic screen}
- 3/0056 . {the transformation method being selected according to the characteristics of the input image}
- 3/0062 . {Panospheric to cylindrical image transformation}
- 3/0068 . {for image registration, e.g. elastic snapping}
- 3/0075 . . {using affine transformations}
- 3/0081 . . {by elastic snapping}
- 3/0087 . {Spatio-temporal transformations, e.g. video cubism}
- 3/0093 . {for image warping, i.e. transforming by individually repositioning each pixel}
- 3/20 . Linear translation of a whole image or part thereof, e.g. panning
- 3/40 . Scaling the whole image or part thereof
- 3/4007 . . {Interpolation-based scaling, e.g. bilinear interpolation ([G06T 3/4015](#), [G06T 3/403](#) take precedence)}
- 3/4015 . . {Demosaicing, e.g. colour filter array [CFA], Bayer pattern}
- 3/4023 . . {Decimation- or insertion-based scaling, e.g. pixel or line decimation}
- 3/403 . . {Edge-driven scaling}
- 3/4038 . . {for image mosaicing, i.e. plane images composed of plane sub-images}
- 3/4046 . . {using neural networks}
- 3/4053 . . {Super resolution, i.e. output image resolution higher than sensor resolution}
- 3/4061 . . . {by injecting details from a different spectral band}
- 3/4069 . . . {by subpixel displacement}
- 3/4076 . . . {by iteratively correcting the provisional high resolution image using the original low-resolution image}
- 3/4084 . . {Transform-based scaling, e.g. FFT domain scaling}
- 3/4092 . . {Image resolution transcoding, e.g. client/server architecture}
- 3/60 . Rotation of a whole image or part thereof
- 3/602 . . {Block rotation, e.g. by recursive reversing or rotating}

3/604	. . {using a CORDIC [COordinate Rotation Digital Compute] device}			by aspects covered by groups G06T 7/11 , G06T 7/12 or G06T 7/13 should also be classified in any of the relevant groups G06T 7/136 - G06T 7/194 .
3/606	. . {Rotation by memory addressing or mapping}			
3/608	. . {Skewing or deskewing, e.g. by two-pass or three-pass rotation}			
5/00	Image enhancement or restoration			
5/001	. {Image restoration}	7/11	. . Region-based segmentation	
5/002	. . {Denoising; Smoothing (noise processing or correction adapted to be used in an image pickup device containing an electronic image sensor H04N 5/217 , H04N 5/357 - H04N 5/365)}	7/12	. . Edge-based segmentation	
5/003	. . {Deblurring; Sharpening (vibration or motion blur correction for cameras comprising an electronic image sensor H04N 5/23264)}	7/13	. . Edge detection	
5/004	. . . {Unsharp masking}	7/136	. . involving thresholding	
5/005	. . {Retouching; Inpainting; Scratch removal (detecting, correction, reducing or removing defects, e.g. non-responsive pixels of solid state image sensors H04N 5/367 , scratch removal for cinematographic films scanned by electronic image sensor H04N 5/253)}	7/143	. . involving probabilistic approaches, e.g. Markov random field [MRF] modelling	
5/006	. {Geometric correction (detecting, correcting, reducing or removing artefacts resulting only from the lens unit, e.g. flare, shading, vignetting or "cos4" H04N 5/3572 ; correction of chromatic aberrations adapted to be used in an image pickup device containing an electronic image sensor H04N 9/045)}	7/149	. . involving deformable models, e.g. active contour models	
5/007	. {Dynamic range modification (applied in cameras using an electronic image sensor H04N 5/2355 , H04N 5/2356)}	7/155	. . involving morphological operators	
5/008	. . {Local, e.g. shadow enhancement}	7/162	. . involving graph-based methods	
5/009	. . {Global, i.e. based on properties of the image as a whole (applied in cameras using an electronic image sensor H04N 5/23229 , H04N 5/235)}	7/168	. . involving transform domain methods	
5/10	. by non-spatial domain filtering {(applied in cameras using an electronic image sensor H04N 5/23229 , H04N 5/235 , H04N 5/253 , H04N 5/367)}	7/174	. . involving the use of two or more images	
5/20	. by the use of local operators {(applied in cameras using an electronic image sensor H04N 5/23229 , H04N 5/235 , H04N 5/253 , H04N 5/367)}	7/181	. . involving edge growing; involving edge linking	
5/30	. . Erosion or dilatation, e.g. thinning	7/187	. . involving region growing; involving region merging; involving connected component labelling	
5/40	. by the use of histogram techniques {(applied in cameras using an electronic image sensor H04N 5/23229 , H04N 5/235)}	7/194	. . involving foreground-background segmentation	
5/50	. by the use of more than one image, e.g. averaging, subtraction {(applied in cameras using an electronic image sensor H04N 5/23229 , H04N 5/235)}	7/20	. Analysis of motion (motion estimation for coding, decoding, compressing or decompressing digital video signals H04N 19/43 , H04N 19/51)	
7/00	Image analysis	7/207	. . for motion estimation over a hierarchy of resolutions (multi-resolution motion estimation or hierarchical motion estimation for coding, decoding, compressing or decompressing digital video signals H04N 19/53)	
7/0002	. {Inspection of images, e.g. flaw detection}	7/215	. . Motion-based segmentation	
7/0004	. . {Industrial image inspection}	7/223	. . using block-matching	
7/0006	. . . {using a design-rule based approach}	7/231	. . . using full search	
7/0008	. . . {checking presence/absence}	7/238	. . . using non-full search, e.g. three-step search	
7/001	. . . {using an image reference approach}	7/246	. . using feature-based methods, e.g. the tracking of corners or segments	
7/0012	. . {Biomedical image inspection}	7/248	. . . {involving reference images or patches}	
7/0014	. . . {using an image reference approach}	7/251	. . . {involving models}	
7/0016	. . . . {involving temporal comparison}	7/254	. . involving subtraction of images	
7/10	. Segmentation; Edge detection (motion-based segmentation G06T 7/215)	7/262	. . using transform domain methods, e.g. Fourier domain methods	
	NOTE	7/269	. . using gradient-based methods	
	In this group, multi-aspect classification is applied, so that subject matter characterised	7/277	. . involving stochastic approaches, e.g. using Kalman filters	
		7/285	. . using a sequence of stereo image pairs	
		7/292	. . Multi-camera tracking	
		7/30	. Determination of transform parameters for the alignment of images, i.e. image registration	
		7/32	. . using correlation-based methods	
		7/33	. . using feature-based methods	
		7/337	. . . {involving reference images or patches}	
		7/344	. . . {involving models}	
		7/35	. . using statistical methods	
		7/37	. . using transform domain methods	
		7/38	. . Registration of image sequences	
		7/40	. Analysis of texture (depth or shape recovery from texture G06T 7/529)	
		7/41	. . based on statistical description of texture	
		7/42	. . . using transform domain methods	
		7/44	. . . using image operators, e.g. filters, edge density metrics or local histograms	
		7/45	. . . using co-occurrence matrix computation	
		7/46	. . . using random fields	

7/48	. . . using fractals	11/006	. . {Inverse problem, transformation from projection-space into object-space, e.g. transform methods, back-projection, algebraic methods}
7/49	. . based on structural texture description, e.g. using primitives or placement rules	11/008	. . {Specific post-processing after tomographic reconstruction, e.g. voxelisation, metal artifact correction}
7/50	. Depth or shape recovery	11/20	. Drawing from basic elements, e.g. lines or circles
7/507	. . from shading (G06T 7/586 takes precedence)	11/203	. . {Drawing of straight lines or curves}
7/514	. . from specularities	11/206	. . {Drawing of charts or graphs}
7/521	. . from laser ranging, e.g. using interferometry; from the projection of structured light	11/40	. Filling a planar surface by adding surface attributes, e.g. colour or texture
7/529	. . from texture	11/60	. Editing figures and text; Combining figures or text
7/536	. . from perspective effects, e.g. by using vanishing points	11/80	. Creating or modifying a manually drawn or painted image using a manual input device, e.g. mouse, light pen, direction keys on keyboard
7/543	. . from line drawings		
7/55	. . from multiple images	13/00	Animation
7/557	. . . from light fields, e.g. from plenoptic cameras	13/20	. 3D [Three Dimensional] animation
7/564	. . . from contours	13/205	. . {driven by audio data}
7/571	. . . from focus	13/40	. . of characters, e.g. humans, animals or virtual beings
7/579	. . . from motion	13/60	. . of natural phenomena, e.g. rain, snow, water or plants
7/586	. . . from multiple light sources, e.g. photometric stereo	13/80	. 2D [Two Dimensional] animation, e.g. using sprites
7/593	. . . from stereo images	15/00	3D [Three Dimensional] image rendering
7/596	. . . . {from three or more stereo images}	15/005	. {General purpose rendering architectures}
7/60	. Analysis of geometric attributes	15/02	. Non-photorealistic rendering
7/62	. . of area, perimeter, diameter or volume	15/04	. Texture mapping
7/64	. . of convexity or concavity	15/06	. Ray-tracing
7/66	. . of image moments or centre of gravity	15/08	. Volume rendering
7/68	. . of symmetry	15/10	. Geometric effects
7/70	. Determining position or orientation of objects or cameras (camera calibration G06T 7/80)	15/20	. . Perspective computation
7/73	. . using feature-based methods	15/205	. . . {Image-based rendering}
7/74	. . . {involving reference images or patches}	15/30	. . Clipping
7/75	. . . {involving models}	15/40	. . Hidden part removal
7/77	. . using statistical methods	15/405	. . . {using Z-buffer}
7/80	. Analysis of captured images to determine intrinsic or extrinsic camera parameters, i.e. camera calibration	15/50	. Lighting effects
7/85	. . {Stereo camera calibration}	15/503	. . {Blending, e.g. for anti-aliasing}
7/90	. Determination of colour characteristics	15/506	. . {Illumination models}
7/97	. {Determining parameters from multiple pictures (depth or shape recovery from multiple images G06T 7/55 ; stereo camera calibration G06T 7/85)}	15/55	. . Radiosity
9/00	Image coding (bandwidth or redundancy reduction for static pictures H04N 1/41; coding or decoding of static colour picture signals H04N 1/64; methods or arrangements for coding, decoding, compressing or decompressing digital video signals H04N 19/00)	15/60	. . Shadow generation
9/001	. {Model-based coding, e.g. wire frame}	15/80	. . Shading
9/002	. {using neural networks}	15/83	. . . Phong shading
9/004	. {Predictors, e.g. intraframe, interframe coding}	15/87	. . . Gouraud shading
9/005	. {Statistical coding, e.g. Huffman, run length coding}	17/00	Three dimensional [3D] modelling, e.g. data description of 3D objects
9/007	. {Transform coding, e.g. discrete cosine transform}	17/005	. {Tree description, e.g. octree, quadtree}
9/008	. {Vector quantisation}	17/05	. Geographic models
9/20	. Contour coding, e.g. using detection of edges	17/10	. Constructive solid geometry [CSG] using solid primitives, e.g. cylinders, cubes
9/40	. Tree coding, e.g. quadtree, octree	17/20	. Finite element generation, e.g. wire-frame surface description, {tessellation}
11/00	2D [Two Dimensional] image generation	17/205	. . {Re-meshing}
11/001	. {Texturing; Colouring; Generation of texture or colour}	17/30	. Polynomial surface description
11/003	. {Reconstruction from projections, e.g. tomography}	19/00	Manipulating 3D models or images for computer graphics
11/005	. . {Specific pre-processing for tomographic reconstruction, e.g. calibration, source positioning, rebinning, scatter correction, retrospective gating}	19/003	. {Navigation within 3D models or images}
		19/006	. {Mixed reality (object pose determination, tracking or camera calibration for mixed reality G06T 7/00)}
		19/20	. Editing of 3D images, e.g. changing shapes or colours, aligning objects or positioning parts

2200/00	Indexing scheme for image data processing or generation, in general	
2200/04	. involving 3D image data	
2200/08	. involving all processing steps from image acquisition to 3D model generation	
2200/12	. involving antialiasing	
2200/16	. involving adaptation to the client's capabilities	
2200/21	. involving computational photography	
2200/24	. involving graphical user interfaces [GUIs]	
2200/28	. involving image processing hardware	
2200/32	. involving image mosaicing	
2200/36	. Review paper; Tutorial; Survey	
2201/00	General purpose image data processing	
2201/005	. Image watermarking	
2201/0051	. . Embedding of the watermark in the spatial domain	
2201/0052	. . Embedding of the watermark in the frequency domain	
2201/0053	. . Embedding of the watermark in the coding stream, possibly without decoding; Embedding of the watermark in the compressed domain	
2201/0061	. . Embedding of the watermark in each block of the image, e.g. segmented watermarking	
2201/0062	. . Embedding of the watermark in text images, e.g. watermarking text documents using letter skew, letter distance or row distance	
2201/0063	. . in relation to collusion attacks, e.g. collusion attack resistant	
2201/0064	. . for copy protection or copy management, e.g. CGMS, copy only once, one-time copy	
2201/0065	. . Extraction of an embedded watermark; Reliable detection	
2201/0081	. . whereby both original and watermarked images are required at decoder, e.g. destination-based, non-blind, non-oblivious	
2201/0083	. . whereby only watermarked image required at decoder, e.g. source-based, blind, oblivious	
2201/0201	. . whereby only tamper or origin are detected and no embedding takes place	
2201/0202	. . whereby the quality of watermarked images is measured; Measuring quality or performance of watermarking methods; Balancing between quality and robustness	
2201/0203	. . whereby the image with embedded watermark is reverted to the original condition before embedding, e.g. lossless, distortion-free or invertible watermarking	
2201/0601	. . whereby calibration information is embedded in the watermark, e.g. a grid, a scale, a list of transformations	
2207/00	Indexing scheme for image analysis or image enhancement	
2207/10	. Image acquisition modality	
2207/10004	. . Still image; Photographic image	
2207/10008	. . . from scanner, fax or copier	
2207/10012	. . . Stereo images	
2207/10016	. . Video; Image sequence	
2207/10021	. . . Stereoscopic video; Stereoscopic image sequence	
2207/10024	. . Color image	
2207/10028	. . Range image; Depth image; 3D point clouds	
2207/10032	. . Satellite or aerial image; Remote sensing	
2207/10036	. . . Multispectral image; Hyperspectral image	
2207/10041	. . . Panchromatic image	
2207/10044	. . . Radar image	
2207/10048	. . Infrared image	
2207/10052	. . Images from lightfield camera	
2207/10056	. . Microscopic image	
2207/10061	. . . from scanning electron microscope	
2207/10064	. . Fluorescence image	
2207/10068	. . Endoscopic image	
2207/10072	. . Tomographic images	
2207/10076	. . . 4D tomography; Time-sequential 3D tomography	
2207/10081	. . . Computed x-ray tomography [CT]	
2207/10084	. . . Hybrid tomography; Concurrent acquisition with multiple different tomographic modalities	
2207/10088	. . . Magnetic resonance imaging [MRI]	
2207/10092	. . . . Diffusion tensor magnetic resonance imaging [DTI]	
2207/10096	. . . . Dynamic contrast-enhanced magnetic resonance imaging [DCE-MRI]	
2207/10101	. . . Optical tomography; Optical coherence tomography [OCT]	
2207/10104	. . . Positron emission tomography [PET]	
2207/10108	. . . Single photon emission computed tomography [SPECT]	
2207/10112	. . . Digital tomosynthesis [DTS]	
2207/10116	. . X-ray image	
2207/10121	. . . Fluoroscopy	
2207/10124	. . . Digitally reconstructed radiograph [DRR]	
2207/10128	. . . Scintigraphy	
2207/10132	. . Ultrasound image	
2207/10136	. . . 3D ultrasound image	
2207/10141	. . Special mode during image acquisition	
2207/10144	. . . Varying exposure	
2207/10148	. . . Varying focus	
2207/10152	. . . Varying illumination	
2207/20	. Special algorithmic details	
2207/20004	. . Adaptive image processing	
2207/20008	. . . Globally adaptive	
2207/20012	. . . Locally adaptive	
2207/20016	. . Hierarchical, coarse-to-fine, multiscale or multiresolution image processing; Pyramid transform	
2207/20021	. . Dividing image into blocks, subimages or windows	
2207/20024	. . Filtering details	
2207/20028	. . . Bilateral filtering	
2207/20032	. . . Median filtering	
2207/20036	. . Morphological image processing	
2207/20041	. . . Distance transform	
2207/20044	. . . Skeletonization; Medial axis transform	
2207/20048	. . Transform domain processing	
2207/20052	. . . Discrete cosine transform [DCT]	
2207/20056	. . . Discrete and fast Fourier transform, [DFT, FFT]	
2207/20061	. . . Hough transform	
2207/20064	. . . Wavelet transform [DWT]	
2207/20068	. . Projection on vertical or horizontal image axis	
2207/20072	. . Graph-based image processing	
2207/20076	. . Probabilistic image processing	
2207/20081	. . Training; Learning	
2207/20084	. . Artificial neural networks [ANN]	

2207/20088	. . . Trinocular vision calculations; trifocal tensor	2207/30116	. . . Casting
2207/20092	. . . Interactive image processing based on input by user	2207/30121	. . . CRT, LCD or plasma display
2207/20096	. . . Interactive definition of curve of interest	2207/30124	. . . Fabrics; Textile; Paper
2207/20101	. . . Interactive definition of point of interest, landmark or seed	2207/30128	. . . Food products
2207/20104	. . . Interactive definition of region of interest [ROI]	2207/30132	. . . Masonry; Concrete
2207/20108	. . . Interactive selection of 2D slice in a 3D data set	2207/30136	. . . Metal
2207/20112	. . . Image segmentation details	2207/30141	. . . Printed circuit board [PCB]
2207/20116	. . . Active contour; Active surface; Snakes	2207/30144	. . . Printing quality
2207/20121	. . . Active appearance model [AAM]	2207/30148	. . . Semiconductor; IC; Wafer
2207/20124	. . . Active shape model [ASM]	2207/30152	. . . Solder
2207/20128	. . . Atlas-based segmentation	2207/30156	. . . Vehicle coating
2207/20132	. . . Image cropping	2207/30161	. . . Wood; Lumber
2207/20152	. . . Watershed segmentation	2207/30164	. . . Workpiece; Machine component
2207/20156	. . . Automatic seed setting	2207/30168	. . . Image quality inspection
2207/20161	. . . Level set	2207/30172	. . . Centreline of tubular or elongated structure
2207/20164	. . . Salient point detection; Corner detection	2207/30176	. . . Document
2207/20168	. . . Radial search	2207/30181	. . . Earth observation
2207/20172	. . . Image enhancement details	2207/30184	. . . Infrastructure
2207/20182	. . . Noise reduction or smoothing in the temporal domain; Spatio-temporal filtering	2207/30188	. . . Vegetation; Agriculture
2207/20192	. . . Edge enhancement; Edge preservation	2207/30192	. . . Weather; Meteorology
2207/20201	. . . Motion blur correction	2207/30196	. . . Human being; Person
2207/20204	. . . Removing film grain; Adding simulated film grain	2207/30201	. . . Face
2207/20208	. . . High dynamic range [HDR] image processing	2207/30204	. . . Marker
2207/20212	. . . Image combination	2207/30208	. . . Marker matrix
2207/20216	. . . Image averaging	2207/30212	. . . Military
2207/20221	. . . Image fusion; Image merging	2207/30216	. . . Redeye defect
2207/20224	. . . Image subtraction	2207/30221	. . . Sports video; Sports image
2207/20228	. . . Disparity calculation for image-based rendering	2207/30224	. . . Ball; Puck
2207/30	. . . Subject of image; Context of image processing	2207/30228	. . . Playing field
2207/30004	. . . Biomedical image processing	2207/30232	. . . Surveillance
2207/30008	. . . Bone	2207/30236	. . . Traffic on road, railway or crossing
2207/30012	. . . . Spine; Backbone	2207/30241	. . . Trajectory
2207/30016	. . . Brain	2207/30242	. . . Counting objects in image
2207/30021	. . . Catheter; Guide wire	2207/30244	. . . Camera pose
2207/30024	. . . Cell structures <u>in vitro</u> ; Tissue sections <u>in vitro</u>	2207/30248	. . . Vehicle exterior or interior
2207/30028	. . . Colon; Small intestine	2207/30252	. . . . Vehicle exterior; Vicinity of vehicle
2207/30032	. . . . Colon polyp	2207/30256	. . . . Lane; Road marking
2207/30036	. . . Dental; Teeth	2207/30261	. . . . Obstacle
2207/30041	. . . Eye; Retina; Ophthalmic	2207/30264	. . . . Parking
2207/30044	. . . Fetus; Embryo	2207/30268	. . . . Vehicle interior
2207/30048	. . . Heart; Cardiac		
2207/30052	. . . Implant; Prosthesis	2210/00	Indexing scheme for image generation or computer graphics
2207/30056	. . . Liver; Hepatic	2210/04	. . . Architectural design, interior design
2207/30061	. . . Lung	2210/08	. . . Bandwidth reduction
2207/30064	. . . . Lung nodule	2210/12	. . . Bounding box
2207/30068	. . . Mammography; Breast	2210/16	. . . Cloth
2207/30072	. . . Microarray; Biochip, DNA array; Well plate	2210/21	. . . Collision detection, intersection
2207/30076	. . . Plethysmography	2210/22	. . . Cropping
2207/30081	. . . Prostate	2210/24	. . . Fluid dynamics
2207/30084	. . . Kidney; Renal	2210/28	. . . Force feedback
2207/30088	. . . Skin; Dermal	2210/32	. . . Image data format
2207/30092	. . . Stomach; Gastric	2210/36	. . . Level of detail
2207/30096	. . . Tumor; Lesion	2210/41	. . . Medical
2207/30101	. . . Blood vessel; Artery; Vein; Vascular	2210/44	. . . Morphing
2207/30104	. . . . Vascular flow; Blood flow; Perfusion	2210/52	. . . Parallel processing
2207/30108	. . . Industrial image inspection	2210/56	. . . Particle system, point based geometry or rendering
2207/30112	. . . Baggage; Luggage; Suitcase	2210/61	. . . Scene description
		2210/62	. . . Semi-transparency
		2210/64	. . . Weathering
		2211/00	Image generation

- 2211/40 . Computed tomography
- 2211/404 . . Angiography
- 2211/408 . . Dual energy
- 2211/412 . . Dynamic
- 2211/416 . . Exact reconstruction
- 2211/421 . . Filtered back projection [FBP]
- 2211/424 . . Iterative
- 2211/428 . . Real-time
- 2211/432 . . Truncation
- 2211/436 . . Limited angle

2213/00 Indexing scheme for animation

- 2213/04 . Animation description language
- 2213/08 . Animation software package
- 2213/12 . Rule based animation

2215/00 Indexing scheme for image rendering

- 2215/06 . Curved planar reformation of 3D line structures
- 2215/08 . Gnomonic or central projection
- 2215/12 . Shadow map, environment map
- 2215/16 . Using real world measurements to influence rendering

2219/00 Indexing scheme for manipulating 3D models or images for computer graphics

- 2219/004 . Annotating, labelling
- 2219/008 . Cut plane or projection plane definition
- 2219/012 . Dimensioning, tolerancing
- 2219/016 . Exploded view
- 2219/021 . Flattening
- 2219/024 . Multi-user, collaborative environment
- 2219/028 . Multiple view windows (top-side-front-sagittal-orthogonal)
- 2219/20 . Indexing scheme for editing of 3D models
- 2219/2004 . . Aligning objects, relative positioning of parts
- 2219/2008 . . Assembling, disassembling
- 2219/2012 . . Colour editing, changing, or manipulating; Use of colour codes
- 2219/2016 . . Rotation, translation, scaling
- 2219/2021 . . Shape modification
- 2219/2024 . . Style variation